



AGENDA

RETIREMENT BOARD MEETING

REGULAR MEETING
September 14, 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. Recognition of Kelli Ingersoll for 25 years of service and Francisca Citero for 20 years of service.
3. Accept comments from the public.
4. Approve minutes from the July 13, 27 and August 10, 2016 meetings.
5. Routine items for September 14, 2016.
 - a. Approve certifications of membership.
 - b. Approve service and disability allowances.
 - c. Accept disability applications and authorize subpoenas as required.
 - d. Approve death benefits.
 - e. Accept Asset Allocation Report

CLOSED SESSION

6. The Board will continue in closed session to consider the Hearing Officer's recommendation regarding the disability application for Nidia Santos.
7. The Board will continue in closed session to consider the Hearing Officer's recommendation regarding the disability application for Debra Fernandez.
8. The Board will continue in closed session to consider the Hearing Officer's recommendation regarding the disability application for DiAngela Davis-Russell.
9. The Board will continue in closed session to consider the Hearing Officer's recommendation regarding the disability application for David Reese.
10. The Board will continue in closed session to consider the Hearing Officer's recommendation regarding the disability application for Matthew Wastenev.

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.

11. CONFERENCE WITH LABOR NEGOTIATORS
(Government Code Section 54957.6)

Agency designated representatives:
Gail Strohl, Retirement Chief Executive Officer
Christina Dunn, Retirement Admin/HR Manager
Joe Wiley/Masa Shiohira, CCCERA's Chief Negotiator

Employee Organization: AFSCME Local 2700
Unrepresented Employees: All CCCERA unrepresented positions

12. The Board will continue in closed session pursuant to Govt. Code Section 54956.9(d)(1) to confer with legal counsel regarding pending litigation:
Marianne Irvin v. CCCERA, et. al., Contra Costa Superior Court, Case No. N15-1024

OPEN SESSION

13. Presentation from staff and Verus on recommended structure and manager lineup for liquidity sub-portfolio.
14. Presentation from finalist liquidity managers proposing to serve CCCERA:
a) Insight Investment
b) Dimensional Fund Advisors
c) Sit Investment Associates
15. Consider and take possible action to retain one or more liquidity managers and establish proposed liquidity sub-portfolio structure and procedures.
16. Consider and take possible action to authorize the CEO to renew a maintenance and support agreement with CPAS Systems, Inc.
17. Consider and take possible action to authorize the CEO to renew insurance policies for fiduciary and excess fiduciary liability insurance.
18. Consider and take possible action to issue a Request for Proposal for pension administration information management and reporting audit services.
19. Consider and take possible action on SACRS Voting Proxy Form.
20. Consider and take possible action to temporarily suspend the use of Vertas in the transition manager pool.
21. Consider authorizing the attendance of Board and/or staff:
a. Milliman Investment Consulting Educational Conference, October 12-14, 2016, San Francisco, CA. (Note: Conflict with meeting)
b. SACRS Fall Conference, SACRS, November 8-11, 2016, Indian Wells, CA.
c. Long Wharf Real Estate Partners Annual Meeting, November 16-17, 2016, Dallas, TX.
22. Miscellaneous
a. Staff Report
b. Outside Professionals' Report
c. Trustees' comments

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.



Meeting Date
09/14/16
Agenda Item
#4

MINUTES

RETIREMENT BOARD MEETING MINUTES

REGULAR MEETING
July 13, 2016
9:00 a.m.

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

Present: Debora Allen, Candace Andersen, Scott Gordon, Jerry Holcombe, John Phillips, Gabe Rodrigues, Todd Smithey, Jerry Telles and Russell Watts

Absent: Louie Kroll, David MacDonald and William Pigeon

Staff: Gail Strohl, Chief Executive Officer; Timothy Price, Chief Investment Officer; Wrally Dutkiewicz, Compliance Officer; Christina Dunn, Administrative/HR Manager; Henry Gudino, Accounting Manager; and Tim Hoppe, Retirement Services Manager

Outside Professional Support: Harvey Leiderman
Representing: Reed Smith LLP

1. Pledge of Allegiance

Smithey led all in the *Pledge of Allegiance*.

2. Accept comments from the public

No member of the public offered comment.

3. Board Reorganization

It was M/S to nominate John Phillips as Board Chairperson and Todd Smithey as Board Vice-Chairperson.

A substitute motion was M/S/C to nominate John Phillips as Board Chairperson, Todd Smithey as Board Vice-Chairperson, and Scott Gordon as Board Secretary. (Yes: Allen, Gordon, Holcombe, Phillips, Rodrigues, Smithey, Telles and Watts).

The original motion and second were withdrawn.

4. Routine Items

It was M/S/C to approve the routine items of the July 13, 2016 meeting. (Yes: Allen, Gordon, Holcombe, Phillips, Rodrigues, Smithey, Telles and Watts)

CLOSED SESSION

The Board moved into closed session pursuant to Govt. Code Section 54957 and 54956.9(d)(1).

The Board moved into open session.

5. It was M/S/C to accept the Medical Advisor's recommendation and grant the following disability benefits:
 - a. Guy Worth – Service Connected (Yes: Allen, Gordon, Holcombe, Phillips, Rodrigues, Smithey, Telles and Watts)
6. There was no reportable action related to Gov. Code Section 54956.9(d)(1).
7. **Presentation from Brown Armstrong on the audit of the December 31, 2015 financial statements**
– Rosalva Flores, Ashley Casey

Flores gave an overview of the purpose of the audit, the significant audit areas, and the scope of the audit work noting they used a risk based approach. She discussed the audit process noting an important part of the process are the confirmations that are sent and received from the independent third party participants.

There was a lengthy discussion on private equity investments and how the values are reconciled and audited. Flores noted since private equity investments are considered higher risk they audited 80-90% of those CCCERA investments.

Flores reported Brown Armstrong gave CCCERA a clean audit and congratulated the organization. She also reported there were no material weaknesses.

Flores discussed GASB 72 noting it will provide additional disclosures on private equity investments in next year's financial statements.

Andersen was present for subsequent discussion and voting.

She noted they completed a review of the CAFR but do not provide an opinion on all of the sections of the CAFR. GASB 67 requires additional disclosures which are included in the CAFR. She commended staff on the work that was put into the CAFR and the audit.

Strohl thanked the accounting department for all of their hard work.

There was discussion on the audit completed on internal controls and options for providing a focused audit into particular procedures.

It was M/S to accept the audit report and 1) request the Audit Committee to consider the issue of GASB 72 and the valuation of non-market assets and 2) the Audit Committee consider amending the agreed upon procedures with the external auditor to review internal controls.

The Chair provided direction to the Audit Committee to 1) consider the issue of GASB 72, 2) consider amending the agreed upon procedures with the external auditor to review internal controls and 3) to focus the internal control review on the process for identifying deceased retirees.

The motion was amended and M/S/C to accept the audit report. (Yes: Allen, Andersen, Gordon, Phillips, Rodrigues, Smithey, Telles and Watts)

Strohl noted GASB 68 information was included in the 2014 CAFR but due to the timing of the GASB 68 report in the future it will not be included in the CAFR.

8. **Consider authorizing the attendance of Board and/or staff:**

- a. It was M/S/C to authorize the attendance of 1 additional Board member at the 2016 Public Funds Forum, Robbins Geller Rudman & Dowd, September 6-8, 2016, Park City, UT. (Yes: Allen, Andersen, Gordon, Phillips, Rodrigues, Smithey, Telles and Watts)
- b. It was M/S/C to authorize the attendance of 1 Board member at the Roundtable for Consultants & Institutional Investors, Institutional Investor, October 19-21, 2016, Chicago, IL. (Yes: Allen, Andersen, Gordon, Phillips, Rodrigues, Smithey, Telles and Watts)

9. Miscellaneous

(a) Staff Report –

Strohl reported on the second annual Staff Development Day; and there will be a recognition celebration for Brian Hast after the meeting.

Dutkiewicz discussed the memo included in the packet regarding an update on the recoupment of panel management pay pension overpayments from Contra Costa County; he reported he has received confirmation of two speakers at the next Audit Committee meeting to speak on internal and external auditors; and he will provide an informational memo on GASB 72.

Price gave an update on the liquidity search.

(b) Outside Professionals' Report -

Leiderman reported on a decision from the Court of Appeals on CALPERS against the City Manager of Vallejo related to publicly available pay schedules; and he attended CALAPRS Trustees Roundtable and stated Dutkiewicz gave an excellent presentation.

(c) Trustees' comments –

Phillips reported on an article that Andersen was mentioned in.

Gordon welcomed the City of Concord Police Officers to the meeting.

Rodrigues gave an update on SACRS noting the next conference will begin on Tuesday, November 5, 2016.

Phillips thanked Hast for his 18 years of service to the Board. Hast thanked the Board and staff and noted he enjoyed his time on the Board.

It was M/S/C to adjourn the meeting in honor of former Trustee Brian Hast. (Yes: Allen, Andersen, Gordon, Phillips, Rodrigues, Smithey, Telles and Watts)

John Phillips, Chairman

Scott Gordon, Secretary



Meeting Date
09/14/16
Agenda Item
#4

MINUTES

RETIREMENT BOARD MEETING MINUTES

SECOND MONTHLY MEETING
July 27, 2016
9:00 a.m.

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

Present: Debora Allen, Candace Andersen, Scott Gordon, Jerry Holcombe, David MacDonald, John Phillips, William Pigeon, Todd Smithey, Jerry Telles and Russell Watts

Absent: Louie Kroll and Gabe Rodrigues

Staff: Gail Strohl, Chief Executive Officer; Timothy Price, Chief Investment Officer; Karen Levy, General Counsel; Wrally Dutkiewicz, Compliance Officer; Christina Dunn, Administrative/HR Manager; Timothy Hoppe, Retirement Services Manager; and Alexis Cox, Member Services Manager

Outside Professional Support: Harvey Leiderman
Representing: Reed Smith LLP

1. **Pledge of Allegiance**

Holcombe led all in the *Pledge of Allegiance*.

2. **Accept comments from the public**

Phillips welcomed trustee David MacDonald.

No members of the public offered comment.

3. **Approval of Minutes**

It was M/S/C to approve the minutes of the April 27, 2016 Board meeting. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Smithey, Telles and Watts)

It was M/S/C to approve the minutes of the May 4, 2016 Board meeting with a correction to page 3, paragraph 3, changing the word volunteer to voluntary. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Smithey, Telles and Watts)

Pigeon was present for subsequent discussion and voting.

It was M/S/C to approve the minutes of the May 25, 2016 Board meeting. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Pigeon, Smithey, Telles and Watts)

CLOSED SESSION

The Board moved into closed session pursuant to Govt. Code Section 54956.9(d)(2).

MacDonald recused himself and was no longer present for subsequent discussion and voting.

The Board moved into open session.

4. There was no reportable action related to Govt. Code Section 54956.9(d)(2).

Smithey was no longer present for subsequent discuss and voting.

MacDonald was present for subsequent discussion and voting.

5. Consider authorizing the attendance of Board and/or staff:

- a. It was M/S/C to authorize the attendance of all Board members (if open to the public) and 3 staff members at the Public Retirement Seminar, The Public Retirement Journal, September 8, 2016, Sacramento, CA. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Pigeon, Telles and Watts)
- b. It was M/S/C to authorize the attendance of 4 Board members and 3 staff members at the Torchlight Investment Summit, Torchlight Investors, October 5-6, 2016, New York, NY. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Pigeon, Telles and Watts)
- c. It was M/S/C to authorize the attendance of 1 Board member and 2 staff members at the Wastewater Opportunity Fund Annual and Advisory Committee Meetings, Wastewater Capital Management, October 24-25, 2016, Columbus, OH. (Yes: Allen, Andersen, Macdonald, Phillips, Pigeon, Telles and Watts. Abs: Gordon)

6. Miscellaneous

(a) Staff Report –

Strohl reported the CCCERA picnic is on Saturday; a draft Investment Policy Statement will be presented at the August 24th meeting; and an Audit Committee meeting will be held after the August 24th Board meeting.

Price gave an update on PIMCO stating they have announced a new CEO will start in November and staff has had preliminary discussions with them.

(b) Outside Professionals' Report -

None

(c) Trustees' comments –

Telles asked for an update on Jackson Square. Price stated will get an update for him.

MacDonald stated he was glad to be on the Board.

It was M/S/C to adjourn the meeting. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Pigeon, Telles and Watts)

John Phillips, Chairman

Scott Gordon, Secretary



Meeting Date
09/14/16
Agenda Item
#4

MINUTES

RETIREMENT BOARD MEETING MINUTES

REGULAR MEETING
August 10, 2016
8:00 a.m.

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

Present: Debora Allen, Candace Andersen, Scott Gordon, Jerry Holcombe, Louie Kroll, David MacDonald, John Phillips, Gabe Rodrigues, Todd Smithey, Jerry Telles and Russell Watts

Absent: William Pigeon

Staff: Gail Strohl, Chief Executive Officer; Timothy Price, Chief Investment Officer; Karen Levy, General Counsel; Christina Dunn, Administrative/HR Manager; Henry Gudino, Accounting Manager and Tim Hoppe, Retirement Services Manager

Outside Professional Support:	Representing:
Harvey Leiderman	Reed Smith LLP
Susan Hastings	Laughlin, Falbo, Levy & Moresi LLP
Ed Hoffman	Verus Investments

1. Pledge of Allegiance

MacDonald led all in the *Pledge of Allegiance*.

2. Accept comments from the public

No member of the public offered comment.

3. Routine Items

It was M/S/C to approve the routine items of the August 10, 2016 meeting. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Rodrigues, Smithey, Telles and Watts)

Gordon was no longer present for subsequent discussion and voting.

CLOSED SESSION

The Board moved into closed session pursuant to Govt. Code Section 54957.

The Board moved into open session.

4. It was M/S/C to accept the Medical Advisor's recommendation and grant the following disability benefits:

- a. Debra Hooper-Britton – Non-Service Connected (Yes: Allen, Andersen, Holcombe, MacDonald, Phillips, Rodrigues, Smithey, Telles and Watts)
- b. Graciela Olveda – Service Connected (Yes: Allen, Andersen, Holcombe, MacDonald, Phillips, Rodrigues, Smithey, Telles and Watts)

Gordon was present for subsequent discussion and voting.

5. It was M/S/C to accept the Administrative Law Judge's recommendation and deny the service connected disability retirement for Nancy Michelli. (Yes: Andersen, Gordon, Phillips, Rodrigues, Smithey and Watts. No: Telles. Abs.: Allen and MacDonald)

Gordon was no longer present for subsequent discussion and voting.

6. It was M/S/C to accept the Administrative Law Judge's recommendation and deny the non-service connected disability retirement for Gail Clark. (Yes: Allen, Andersen, Holcombe, MacDonald, Phillips, Rodrigues, Smithey, Telles and Watts)

Gordon was present for subsequent discussion and voting.

7. Update from Verus and Staff regarding Draft Investment Policy Statement

Hoffman reviewed the goals of the project noting the areas of focus are the governance structure, asset allocation, and Board-level policy issues. He also reviewed the process in drafting the new Investment Policy Statement (IPS) noting the new IPS focuses solely on policy issues. Procedural and operational items were moved from the IPS to 2 new documents, Investment Directives and Investment Procedures, in order to update and edit procedures and operational items without revising the IPS.

He stated further direction is needed from the Board on the placement of the Asset Allocation Table. The Table has been moved to the Investment Directives and will be updated annually (to account for the changing size of the liquidity program) instead of every 3-5 years.

Hoffman defined private equity and private credit asset classes noting a consultant will be hired to monitor them and an independent auditor will value them.

The Board also reviewed language in the current IPS on Economically Targeted Investing; Emerging Managers; and Tobacco. The Board directed staff and consultant to exclude specific language around these factors from the final draft of the new Investment Policy Statement. It was noted that the Board is not re-investing in tobacco.

The Draft Investment Policy Statement was reviewed and requested changes were discussed.

Watts was no longer present for subsequent discussion and voting.

Price reported the next step will be to incorporate the Board's requested changes and come back possibly at the end of September with a draft document for consideration and possible approval.

8. Recommendation from Verus to retain Zeno Consulting for Transaction Cost Analysis services

Hoffman reported on why we need to do a transaction cost analysis (TCA) noting there has to be follow up by managers. He reviewed the background of the Zeno Consulting Group. Hoffman reviewed the three step process they will perform in their analysis. He noted they also offer soft-dollar audit services.

August 10, 2016

Two proposed options and their fees were reviewed; a Multi-Asset Class TCA without manager follow-up and a Multi-Asset Class TCA including manager follow-up. Hoffman and Price recommended Option 2 with the optional soft-dollar audit add-on service.

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

After a discussion on the options, the terms of contract, when they are evaluated, it was M/S/C to retain Zeno Consulting for Option 2 for a 2-year term to be reviewed after 1 year and to include the soft-dollar audit option in the scope of services. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Rodrigues, Smithey and Telles)

10. **Report from CIO on semi-annual rebalancing**

Price reviewed his memo noting the rebalancing was done a little differently because we will be implementing the new asset allocation in the next few months. He reported \$330 million was reallocated generally into fixed income.

11. **Presentation of semi-annual disability retirement report**

Hoppe distributed a revised report noting these are the applications that have come to the department in the first 6 months of 2016. He reviewed the applications received by year, department, type of injury and illness, and by employer.

12. **Consider authorizing the attendance of Board and/or staff:**

- a. It was M/S/C to authorize the attendance of 4 Board members at the CALAPRS Trustees Roundtable, September 30, 2016, Burbank, CA. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Rodrigues, Smithey, Telles)

13. **Miscellaneous**

(a) Staff Report –

Strohl thanked Dunn for her hard work with NeoGov. She stated we have 3 new hires that started this week, an Office Specialist, a Member Services Supervisor, and a Member Services Technician. A Compliance Business Analyst will start next week. She reminded the Board there will be an Audit Committee meeting after the August 24 Board meeting.

Dunn gave an update on using NeoGov noting we have done 8 recruitments and hired 5 new staff members.

Gudino reported he is looking for an Accounting Supervisor and an Accountant. He is also looking at our banking policies and banking relationships to make sure we are getting the best value for the money.

(b) Outside Professionals' Report -

None

(c) Trustees' comments –

August 10, 2016

Andersen asked when the new contribution rates will be available. Strohl stated we hope to have the Valuation Report in September.

Telles asked about the date of death for member Laura Hill stating it shows October 2014. Hoppe will look into it and get back to him. Also, he would like CCCERA to look into a program that may support widowed members at their homes.

It was **M/S/C** to adjourn the meeting. (Yes: Allen, Andersen, Gordon, MacDonald, Phillips, Rodrigues, Smithey, Telles)

John Phillips, Chairman

Scott Gordon, Secretary

CONTRA COSTA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

<p><u>Meeting Date</u> 09/14/16 <u>Agenda Item</u> #5</p>
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September 14, 2016

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Items requiring Board Action

A. Certifications of Membership – see list and classification forms.

B. Service and Disability Retirement Allowances:

<u>Name</u>	<u>Number</u>	<u>Effective Date</u>	<u>Option Type</u>	<u>Group</u>	<u>Selected</u>
Balbas, Lisa	9236A/P	6/13/16	SR	Tier II and III	Unmod
Barnes, Jacqueline	D9500	6/18/16	SR	Tier III	Unmod
Bellard, Carol	60651	6/6/16	SR	Tier II and III	Unmod
Catalano, Sam	70868	6/1/16	SR	Tier III	Unmod
Caughlin, Lisa	45343	9/1/13	SR	Tier II	Unmod
Chaiyasit, Vilaivanh	55677	6/1/16	SR	Tier II and III	Unmod
Cockerham, Barbara	D9500	5/14/16	SR	Tier I	Option 1
Darden, William	D9500	6/14/16	SR	Tier III	Unmod
Esclovon, Wynn	64155	6/17/16	SR	Tier II and III	Unmod
Ferrara, Debra	37541	6/1/16	SR	Tier II and III	Unmod
Fliemann, Jessica	64903	10/21/15	SCD	Safety A	Unmod
Foster, Carol	62297	3/31/16	SR	Tier II and III	Unmod
Hewitt, Linda	61510	10/31/15	SCD	Safety A	Unmod
Hoover, Tonya	D7274	7/16/16	SR	Safety A	Unmod
Imada, Nadine	30878	6/11/16	SR	Tier I	Unmod
Lowenthal, Anna	D9990	6/4/16	SR	Tier I	Unmod
Medeiros, Sherrie	63863	6/22/16	SR	Tier II and III	Option 1
Medina, Anthony	41451	7/1/16	SR	Tier II and III	Unmod
Mellott, Rebecca	33652	5/3/16	SR	Tier II and III	Unmod
Michaud, Bryan	66456	2/18/16	SCD	Safety A	Unmod
Moses, Kevin	64027	6/1/16	SR	Tier I	Unmod
Nakell, Linda	49460	5/1/16	SR	Tier III	Unmod
Picard, Robert	46756	3/31/16	SR	Tier III	Unmod
Rey, Diosidita	D9500	6/1/16	SR	Tier II	Option 2
Tao, Henry	51182	7/1/16	SR	Safety A	Unmod
Williams, Brian	55479	5/27/16	SR	Safety A	Unmod

C. Disability Retirement Applications: The Board's Hearing Officer is hereby authorized to issue subpoenas in the following cases involving disability applications:

<u>Name</u>	<u>Number</u>	<u>Filed</u>	<u>Type</u>
None			

KEY:

Group
 I = Tier I
 II = Tier II
 III = Tier III
 S/A = Safety Tier A
 S/C = Safety Tier C

Option
 * = County Advance
 Selected w/option

Type
 NSP = Non-Specified
 SCD = Service Connected Disability
 SR = Service Retirement
 NSCD = Non-Service Connected Disability

CONTRA COSTA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

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September 14, 2016

D. Deaths:

<u>Name</u>	<u>Date of Death</u>	<u>Employer as of Date of Death</u>
Myhrer, Margaret	06/20/15	Contra Costa County
Nordeman, Audrey	08/29/16	Central Contra Costa Sanitary District
Peterson, John	08/06/16	Contra Costa County
Purchase, Betty	06/12/16	Beneficiary
Sidari, Dominic	07/14/16	Beneficiary
Webster, Ardyce	07/24/16	Beneficiary
Whatford, Robert	07/25/16	Contra Costa County

KEY:

Group
I = Tier I
II = Tier II
III = Tier III
S/A = Safety Tier A
S/C = Safety Tier C

Option
* = County Advance
Selected w/option

Type
NSP = Non-Specified
SCD = Service Connected Disability
SR = Service Retirement
NSCD = Non-Service Connected Disability

CERTIFICATION OF MEMBERSHIPS

Meeting Date
09/14/16
Agenda Item
#5a.

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Adalat, David	83443	P5.2	07/01/16	Contra Costa County
Alderman, Ronald	80945	P5.2	07/01/16	Contra Costa County
Amador, Christina	83388	P5.2	07/01/16	Contra Costa County
Anaya, Gabriel	83423	P5.2	07/01/16	Contra Costa County
Apilado, Gabriela	83313	P5.2	07/01/16	Contra Costa County
Arroyo Leiva, Fabiola	80367	P5.2	07/01/16	Contra Costa County
Bancroft, Arlene Marie	81489	P5.2	07/01/16	Contra Costa County
Brandt, Catherine	56506	P5.2	07/01/16	Contra Costa County
Brinton, Sarah	75935	III	07/01/16	Contra Costa County
Callaway, Caleigh Ann	83458	P5.2	07/01/16	Contra Costa County
Chea, William	83064	S/E	07/01/16	Contra Costa County
Clark, Terri	82756	P5.2	07/01/16	Contra Costa County
Cobol, Juvelyn	83435	P5.2	07/01/16	Contra Costa County
Connolly, Christina	81490	P5.2	07/01/16	Contra Costa County
Conrad, Margaret	82565	P5.2	07/01/16	Contra Costa County
Cushing, Cynthia	83390	P5.2	07/01/16	Contra Costa County
Demerin, Krystal	81756	P5.2	07/01/16	Contra Costa County
Dolezal, Kevin	83424	P5.2	07/01/16	Contra Costa County
Dubois, Shemika	83459	P5.2	07/01/16	Contra Costa County
Dudziak, Haley	81818	S/E	07/01/16	Contra Costa County
Eminue, Glory	83468	P5.2	07/01/16	Contra Costa County
Estrada-Melgar, Jennifer	83480	P5.2	07/01/16	Contra Costa County
Galten, Frederick	D9500	P5.3	07/01/16	Superior Court
Gamma, Genevieve	67189	P5.2	07/01/16	Contra Costa County
Griffin, Joseph	82449	P5.2	07/01/16	Contra Costa County
Hallare, Christina	81633	P5.2	07/01/16	Contra Costa County
Harden, Melanie	82655	P5.2	07/01/16	Contra Costa County
Harsha, Alex	83481	P5.2	07/01/16	Contra Costa County
Hendrix, Bakari	83062	S/E	07/01/16	Contra Costa County
Hirt, Corynn	83385	P5.2	07/01/16	Contra Costa County
Hsieh, Janet	83389	P5.2	07/01/16	Contra Costa County
Huie, Bennie	D3406	I	07/01/16	Central Contra Costa Sanitary District
Jackson, David	D9500	P5.3	07/01/16	Superior Court
Keeg, Keisha	83527	S/E	07/01/16	Contra Costa County
Kong, Melinda	83425	P5.2	07/01/16	Contra Costa County
Leung, Edward	83444	P5.2	07/01/16	Contra Costa County
London, Jody	83381	P5.2	07/01/16	Contra Costa County
Lucey, Jessica	83427	P5.2	07/01/16	Contra Costa County
Miller, Nakia	83377	P5.2	07/01/16	Contra Costa County
Miller, Rebecca	83489	P5.2	07/01/16	Contra Costa County

Key:

I = Tier I	P4.2 = PEPR Tier 4 (2% COLA)	S/A = Safety Tier A
II = Tier II	P4.3 = PEPR Tier 4 (3% COLA)	S/C = Safety Tier C
III = Tier III	P5.2 = PEPR Tier 5 (2% COLA)	S/D = Safety Tier D
	P5.3 = PEPR Tier 5 (3% COLA)	S/E = Safety Tier E

CERTIFICATION OF MEMBERSHIPS

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Mleccko, Victor	83483	P5.2	07/01/16	Contra Costa County
Mone, Adam	83438	P5.2	07/01/16	Contra Costa County
Montelongo, Emma	83430	P5.2	07/01/16	Contra Costa County
Moore, Mathew	79535	P5.2	07/01/16	Contra Costa County
Nguyen, Catherine	83479	P5.2	07/01/16	Contra Costa County
O'Connor, Sherry	83382	P5.2	07/01/16	Contra Costa County
Ocasio, Chandra	76055	P5.2	07/01/16	Contra Costa County
Ortiz Jr, Jose	83391	P5.2	07/01/16	Contra Costa County
Paez, Vivian	80429	P5.2	07/01/16	Contra Costa County
Pagal, Paul	83490	P5.2	07/01/16	Contra Costa County
Parella, Marc	83508	P5.2	07/01/16	Contra Costa County
Parungao, April	83368	P5.2	07/01/16	Contra Costa County
Patberg, Jonathan	83426	P5.2	07/01/16	Contra Costa County
Perez, Veronica	81465	P5.2	07/01/16	Contra Costa County
Perrin, Elizabeth	83370	P5.2	07/01/16	Contra Costa County
Perry, Regina	82098	P5.2	07/01/16	Contra Costa County
Pettibone, Sarah	83429	P5.2	07/01/16	Contra Costa County
Phillips, Damon	83387	P5.2	07/01/16	Contra Costa County
Prado, Janice	81773	P5.2	07/01/16	Contra Costa County
Preston, Cherise	83521	P5.2	07/01/16	Contra Costa County
Ramirez, Mariana	83384	P5.2	07/01/16	Contra Costa County
Ramos, Maria	83437	P5.2	07/01/16	Contra Costa County
Rodgers, Angela	83478	P5.2	07/01/16	Contra Costa County
Rogers, Elizabeth	D9500	P5.3	07/01/16	Superior Court
Rojas-Cortez, Elizabeth	81043	P5.2	07/01/16	Contra Costa County
Sandoval, Marcela	83512	P5.2	07/01/16	Contra Costa County
Sivilay, Susan	77195	P5.2	07/01/16	Contra Costa County
Sparks, Andrea	81634	P5.2	07/01/16	Contra Costa County
Tolentino, Maribel	80803	P5.2	07/01/16	Contra Costa County
Tyson, Celestein	76270	P5.2	07/01/16	Contra Costa County
Untal, Charissa	83476	P5.2	07/01/16	Contra Costa County
Varas, David	83448	P5.2	07/01/16	Contra Costa County
Vazquez, Vanessa	83436	P5.2	07/01/16	Contra Costa County
Ventura, Fanabella	76880	P5.2	07/01/16	Contra Costa County
Weinbaum, Karen	83482	P5.2	07/01/16	Contra Costa County
Wellcome, Davin	81524	P5.2	07/01/16	Contra Costa County
Woolever, Richard	83038	P5.2	07/01/16	Contra Costa County
Young, Christopher	83383	P5.2	07/01/16	Contra Costa County
Zamora, Bernice	83386	P5.2	07/01/16	Contra Costa County

Key:

I = Tier I	P4.2 = PEPR Tier 4 (2% COLA)	S/A = Safety Tier A
II = Tier II	P4.3 = PEPR Tier 4 (3% COLA)	S/C = Safety Tier C
III = Tier III	P5.2 = PEPR Tier 5 (2% COLA)	S/D = Safety Tier D
	P5.3 = PEPR Tier 5 (3% COLA)	S/E = Safety Tier E

TIER CHANGES

<i>Name</i>	<i>Employee Number</i>	<i>Old Tier</i>	<i>New Tier</i>	<i>Effective Date</i>	<i>Employer</i>	<i>Reason for Change</i>
Hiteshew, Timothy	D3406	P4.3	I	7/1/16	Central Contra Costa Sanitary District	Reciprocity

Key:

I = Tier I	P4.2 = PEPR A Tier 4 (2% COLA)	S/A = Safety Tier A
II = Tier II	P4.3 = PEPR A Tier 4 (3% COLA)	S/C = Safety Tier C
III = Tier III	P5.2 = PEPR A Tier 5 (2% COLA)	S/D = Safety Tier D
	P5.3 = PEPR A Tier 5 (3% COLA)	S/E = Safety Tier E

ASSET ALLOCATION

Current Assets (Market Value)

\$7,664,315,000

Reporting Month End: July 31, 2016

Prepared By: Chih-Chi Chu

Robeco

Jackson Square Partners (fka Delaware)

Emerald Advisors

Intech (Core)

PIMCO Stocks+ Absolute Return

Ceredex

Total Domestic Equity

Pyrford (BMO)

William Blair

Total International Equity

JPMorgan Global Opportunities

First Eagle

Artisan Global Opportunities

Intech (Global Low Volatility)

Total Global Equity

Total Equity

AFL-CIO Housing Investment Trust

PIMCO Total Return

GSAM "Park" Portfolio

Goldman Sachs Asset Management

Lord Abbett

Torchlight Debt Opportunity Funds

Total Domestic Fixed Income

Lazard Asset Management

Total Global Fixed Income

Allianz Global Investors (fka Nicholas Applegate)

Total High Yield Fixed Income

Wellington Real Total Return

PIMCO All Asset

Private Real Asset

Total Real Asset

Total Real Estate

Total Alternative Investments

State Street Bank

Total Cash & Equivalents

Total Market Opportunities

TOTAL ASSETS

Meeting Date
09/14/16
Agenda Item
#5e.

A	B	C	D	C-B	D-A	Range
% of Target	Target Assets	Market Value	Actual Assets	Over (Under)	Over (Under)	
4.1%	314,236,915	332,499,000	4.34%	18,262,085	0.24%	
4.1%	314,236,915	312,274,000	4.07%	(1,962,915)	(0.03%)	
2.9%	222,265,135	233,515,000	3.05%	11,249,865	0.15%	
3.8%	291,243,970	294,145,000	3.84%	2,901,030	0.04%	
3.8%	291,243,970	267,487,000	3.49%	(23,756,970)	(0.31%)	
2.9%	222,265,135	263,703,000	3.44%	41,437,865	0.54%	
21.6%	1,655,492,040	1,703,623,000	22.23%	48,130,960	0.63%	
5.3%	406,208,695	414,510,000	5.41%	8,301,305	0.11%	
5.3%	406,208,695	412,362,000	5.38%	6,153,305	0.08%	
10.6%	812,417,390	826,872,000	10.79%	14,454,610	0.19%	
4.0%	306,572,600	274,781,000	3.59%	(31,791,600)	(0.41%)	
4.0%	306,572,600	323,381,000	4.22%	16,808,400	0.22%	
4.0%	306,572,600	328,794,000	4.29%	22,221,400	0.29%	
0.3%	22,992,945	24,620,000	0.32%	1,627,055	0.02%	
12.3%	942,710,745	951,576,000	12.42%	8,865,255	0.12%	
44.5%	3,410,620,175	3,482,071,000	45.43%	71,450,825	0.93%	40% TO 55%
3.3%	252,922,395	245,962,000	3.21%	(6,960,395)	(0.09%)	
5.6%	429,201,640	355,118,000	4.63%	(74,083,640)	(0.97%)	
0.0%	0	4,000	0.00%	4,000	0.00%	
4.6%	352,558,490	330,095,000	4.31%	(22,463,490)	(0.29%)	
4.6%	352,558,490	333,729,000	4.35%	(18,829,490)	(0.25%)	
1.9%	145,621,985	135,689,000	1.77%	(9,932,985)	(0.13%)	
20.0%	1,532,863,000	1,400,597,000	18.27%	(132,266,000)	(1.73%)	
4.0%	306,572,600	245,178,000	3.20%	(61,394,600)	(0.80%)	
24.0%	1,839,435,600	1,645,775,000	21.47%	(193,660,600)	(2.53%)	20% TO 30%
5.0%	383,215,750	332,246,000	4.33%	(50,969,750)	(0.67%)	
5.0%	383,215,750	332,246,000	4.33%	(50,969,750)	(0.67%)	2% TO 9%
0.8%	57,482,363	185,144,000	2.42%	127,661,638	1.67%	
1.8%	134,125,513	127,404,000	1.66%	(6,721,513)	(0.09%)	
2.5%	191,607,875	76,664,000	1.00%	(114,943,875)	(1.50%)	
5.0%	383,215,750	389,212,000	5.08%	5,996,250	0.08%	0% TO 10%
12.5%	958,039,375	863,705,000	11.27%	(94,334,375)	(1.23%)	10% TO 16%
8.0%	613,145,200	613,287,000	8.00%	141,800	0.00%	5% TO 12%
		304,564,000	3.97%			
0.5%	38,321,575	304,564,000	3.97%	266,242,425	3.47%	0% TO 1%
0.5%	38,321,575	33,455,000	0.44%	(4,866,575)	(0.06%)	0% TO 5%
100.0%	7,664,315,000	7,664,315,000	100%	0	0%	

UNDER REVIEW:

Nogales Investors - Performance, Board Action 5/28/08

Wellington - Personnel Change, Board Action 4/13/16

Private Market Investments
As of July 31, 2016

ALTERNATIVE INVESTMENTS

Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
12/22/95	INDEFINITE				180,000,000	132,124,000	1.72%	90,952,000
12/31/08	12/31/20				30,000,000	19,395,000	0.25%	12,637,000
10/31/12	10/31/22				40,000,000	16,840,000	0.22%	21,884,000
03/09/16	03/09/28				75,000,000	0	0.00%	75,000,000
11/09/98	05/31/21				125,000,000	46,268,000	0.60%	18,249,000
12/26/08	12/26/23				30,000,000	24,360,000	0.32%	6,931,000
05/24/11	05/24/26				40,000,000	28,725,000	0.37%	15,231,000
02/07/13	02/07/23				70,000,000	30,591,000	0.40%	38,607,000
11/23/15	11/23/25				50,000,000	5,256,000	0.07%	45,925,000
06/03/14	05/31/25				200,000,000	60,932,000	0.80%	145,858,000
11/08/02	11/08/12	3rd 1YR	LP	11/08/15	30,000,000	807,000	0.01%	0
06/15/05	06/15/15				50,000,000	43,389,000	0.57%	0
02/28/07	02/28/17				65,000,000	62,813,000	0.82%	0
06/28/10	06/28/20				50,000,000	50,086,000	0.65%	2,519,000
06/14/04	01/15/13				10,000,000	5,584,000	0.07%	0
2/29/09	12/31/17	1st 2 YR	LP	1/15/2015	10,000,000	10,753,000	0.14%	514,000
11/30/07	12/31/17				25,000,000	25,374,000	0.33%	0
01/31/08	01/31/16				30,000,000	27,135,000	0.35%	1,479,000
06/11/14	05/31/24				30,000,000	17,885,000	0.23%	14,884,000
06/11/14	05/31/24				50,000,000	5,000,000	0.07%	45,000,000
Outstanding Commitments					1,155,000,000	613,287,000	7.94%	535,670,000
Total					535,670,000	1,145,957,000		

MARKET OPPORTUNITIES

Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
02/28/10	01/31/17				40,000,000	18,455,000	0.24%	5,163,000
09/10/15	09/10/20				75,000,000	15,000,000	0.20%	60,000,000
Outstanding Commitments					115,000,000	33,455,000	0.44%	65,163,000
Total					65,163,000	98,618,000		

REAL ASSET INVESTMENTS

Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
06/30/13	06/30/20				50,000,000	24,073,000	0.31%	25,000,000
12/31/15	11/30/22				25,000,000	1,165,000	0.02%	23,835,000
11/30/13	11/30/20				75,000,000	46,670,000	0.61%	34,806,000
01/01/15	01/01/28				50,000,000	4,756,000	0.06%	45,244,000
09/09/15	09/09/25				50,000,000	0	0.00%	50,000,000
Outstanding Commitments					250,000,000	76,664,000	1.00%	178,885,000
Total					178,885,000	255,549,000		

Market value column is the latest ending quarter plus any additional capital calls after the ending quarter.
The Target Termination column is the beginning of liquidation of the fund, however, some funds may be extended for an additional two or three years.

**Private Market Investments
As of July 31, 2016**

REAL ESTATE INVESTMENTS									
Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment	
06/30/05	06/30/14	1st 2 YR	GP	6/30/2016	75,000,000	41,782,000	0.55%	18,958,000	
12/31/07	09/30/16				100,000,000	82,551,000	1.08%	19,113,000	
07/31/13	12/31/22				75,000,000	45,214,000	0.59%	39,072,000	
06/17/98	12/31/09				6,250,000	1,000	0.00%		
10/22/03	04/30/11	3rd 1 YR	GP	4/30/2014	50,000,000	6,532,000	0.09%		
05/30/07	12/31/15				85,000,000	14,861,000	0.19%	20,305,000	
Invesco IREF II					35,000,000	19,281,000	0.25%	19,223,000	
Invesco IREF III	08/01/13				35,000,000	17,574,000	0.23%		
Invesco IREF IV	12/01/21				35,000,000	17,574,000	0.23%		
Long Wharf FREG III	12/30/15				75,000,000	12,558,000	0.16%		
Long Wharf FREG IV	09/30/21				25,000,000	24,671,000	0.32%		
Oaktree Real Estate Opportunities Fund V	12/31/16				50,000,000	33,370,000	0.44%		
Oaktree Real Estate Opportunities Fund VI	09/30/20				80,000,000	89,579,000	1.17%	5,682,000	
Oaktree Real Estate Opportunities Fund VII	02/28/15				65,000,000	0	0.00%	65,000,000	
Oaktree Real Estate Opportunities Fund VIII	12/31/11				75,000,000	67,994,000	0.89%	11,993,000	
Siguler Guff Distressed Real Estate Opp. Fund	09/30/13				70,000,000	47,719,000	0.62%	44,905,000	
Siguler Guff Distressed Real Estate Opp. Fund II	08/31/13				25,000,000	11,000,000	0.14%	14,000,000	
Siguler Guff Distressed Real Estate Opp. II Co-Inv	01/31/16				20,000,000	20,213,000	0.26%	3,574,000	
Paulson Real Estate Fund II	11/10/13				80,000,000	65,987,000	0.86%	18,145,000	
Angelo Gordon Realty Fund IX	12/31/18				65,000,000	17,756,000	0.23%	52,000,000	
Angelo Gordon Realty Fund IX	10/10/14				75,000,000	83,633,000	1.09%	3,946,000	
LaSalle Income & Growth Fund VI	01/31/12				0	101,709,000	1.33%		
Adelante Capital Management (REIT)					0	59,720,000	0.78%		
INVESCO International REIT					0	863,705,000	11.27%	335,916,000	
Outstanding Commitments					1,361,250,000	863,705,000	11.27%	335,916,000	
Total						335,916,000			
						1,199,621,000			

PRIVATE DEBT INVESTMENTS									
Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment	
09/28/06	09/30/16				128,000,000	48,577,000	0.63%		
Torchlight Debt Opportunity Fund II					75,000,000	10,513,000	0.14%		
Torchlight Debt Opportunity Fund III	09/30/16				60,000,000	61,858,000	0.81%	0	
Torchlight Debt Opportunity Fund IV	08/01/12				75,000,000	14,741,000	0.19%	71,250,000	
Torchlight Debt Opportunity Fund V	09/17/22				338,000,000	135,689,000	1.77%	71,250,000	
Outstanding Commitments						71,250,000			
Total						206,939,000			



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



SEPTEMBER 14, 2016

Liquidity Portfolio Design Presentation to

Contra Costa County Employees' Retirement Association

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VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

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Liquidity portfolio process update

Liquidity portfolio update

- With the Board’s December 2015 approval to adopt the Functionally Focused Portfolio (FFP) asset allocation, CCCERA will be allocating approximately 24% to a customized short-term government/credit fixed income portfolio.
- Because this mandate will be customized to meet the unique needs of the Plan, a standard product offering from fixed income managers would not be optimal. As a result, the Board approved the following process in February 2016:
 - Conduct a Request For Information (RFI) to the general investment community to understand the full range of approaches and innovative solutions available; and
 - Conduct a formal Request For Proposal (RFP) to conduct in-depth analysis of those firms demonstrating unique capabilities in their RFI responses.
- Following the June Board meeting, Verus and Staff have performed extensive due diligence on the twelve semi-finalists including:
 - In-depth review of the RFP responses;
 - Strategy due diligence (on-site meetings and conference calls); and
 - Quantitative analysis of proposed manager portfolios and various portfolio “mixes”.

Liquidity portfolio update

Request for Information

- Completed March 2016
- Open to all interested parties; no minimum selection criteria
- High-level, open ended questions
- 52 firms responded

Request for Proposal

- 12 firms selected from pool of RFI respondents
- Managers provided detailed information on their firm, investment process, team, capabilities, approach to the mandate, etc.
- Date of issuance: May 18th
- Submission deadline: June 8th

Due Diligence

- Completed during June and July 2016
- CCCERA Staff & Verus performed due-diligence (on-site & conference calls) on semi-finalists following review of RFP responses
- Quantitative analysis performed on proposed manager portfolios and various portfolio “mixes”

Finalist Presentations & Recommendation

- September 14th Board Meeting:
 - Staff / Verus to make recommendation to the Board; and
 - Finalists to present to Board

Semi-finalist evaluations

Evaluation criteria

Topic	Evaluation Criteria
Firm	History, structure, ownership, stability
Investment Team	Structure, biographies, stability / turnover, delegation of responsibilities, succession planning, compensation
Investment Process	Philosophy, strategy objectives, security selection, research & analysis methodology, portfolio construction, sell discipline, appropriateness for this customized mandate
Performance	Historical track record, attribution, drivers of performance, performance evaluation methodology
Risk Management	Volatility analysis, tracking error decomposition, style consistency, risk management process & philosophy, specific risk capabilities as needed for this mandate
Operations	Client service, daily reporting and data capabilities, back office processes, audits / certifications, expected interaction with Staff to manage cash flow considerations
Fees	Managers provided proposed fee schedule

Solutions vs. products

Strategies proposed by managers fell into two categories:

- “Solutions” Combine investment strategies with liability modeling and cash flow management capabilities. Some also include the ability to coordinate cash flows from other managers.
- “Products” Investment strategies only.
- Combining a solutions manager with product managers captures firms’ areas of expertise.

Using a solutions manager with product managers provides desirable benefits:

- Efficiency. A solutions manager that can coordinate cash flows across managers reduces the operational burden on Staff.
- Robustness. The solutions manager builds its portfolio around the other managers to ensure the liquidity needs are met. Also, if any one manager needs to be removed from the program, the others can manage the assets while a long-term solution is developed.
- Flexibility. Specialized products can be integrated or removed from the program without disrupting cash flow management and the overall investment strategy.

Solutions vs. products (cont'd)

Potential drawbacks of combining a solutions manager with product managers:

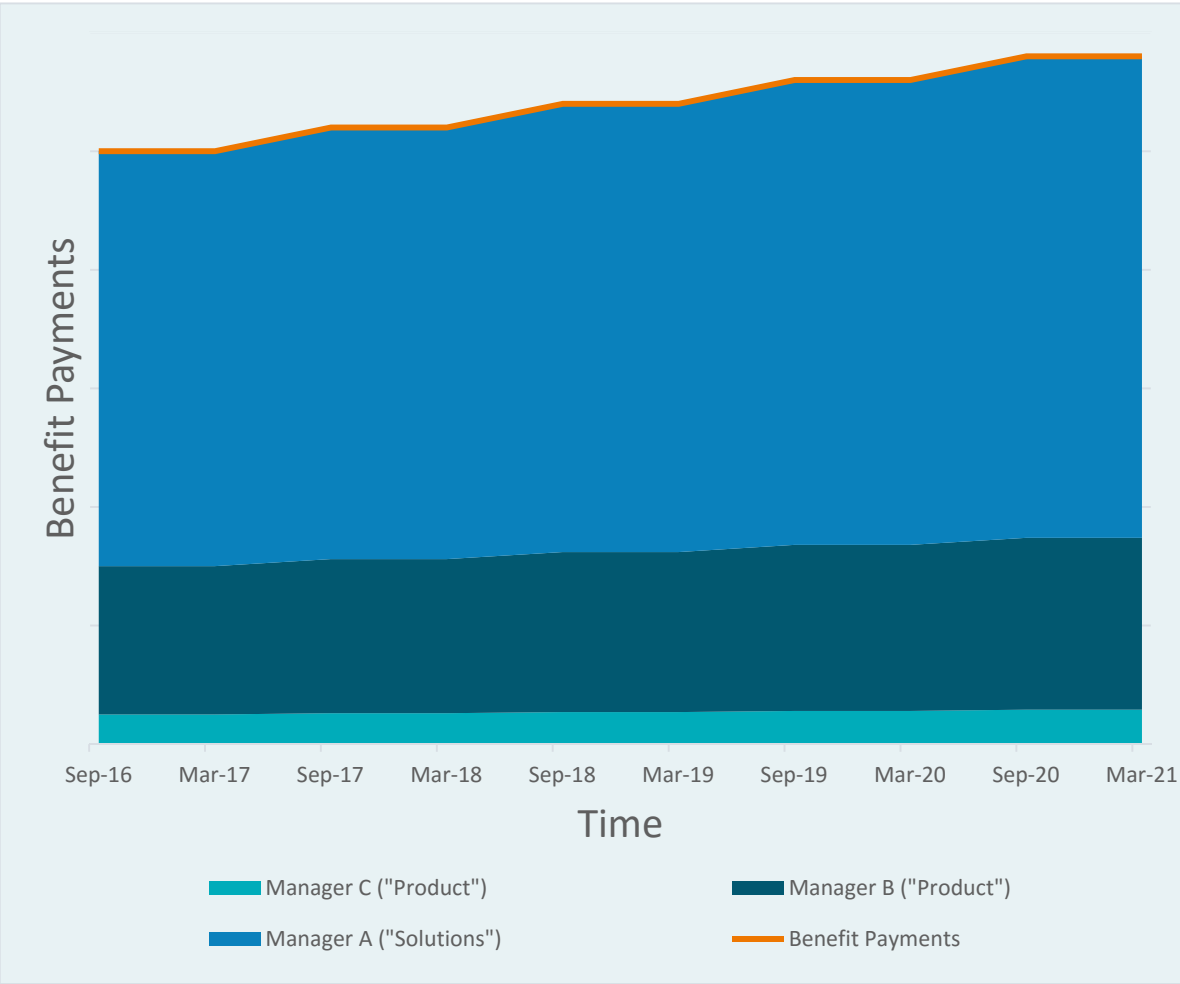
- Dependency on the solutions manager
 - This is partially offset by selecting product managers capable of managing the entire program in combination with Staff stepping in to provide cash flow management while a new solutions manager is identified.

- Non-traditional performance metrics
 - While traditional benchmarking and universe comparisons exist, the effectiveness of the program depends on cash management against liabilities, downside risk mitigation, and incremental yield.

- Cost
 - Combining solutions and product managers will not result in the lowest cost solution but does provide value to the Plan overall.

Combining solutions with products

LIQUIDITY PORTFOLIO: SOURCES OF BENEFIT PAYMENT CASH FLOWS



Manager A (solutions):

- Will cash flow match a majority of the benefit payments through interest & principal received upon maturity of bonds
- Need to replenish allocation over time with additional contributions

Manager B (product):

- ~25% of benefit payments funded through sale of securities and yield
- Need to replenish allocation over time with additional contributions

Manager C (product):

- ~5% of benefit payments funded through the yield generated by the portfolio
- No need to replenish allocation over time

Finalist summary

	Insight	DFA	Sit
Headquarters / Team location	New York, NY	Austin, TX (HQ) & Santa Monica, CA	Minneapolis, MN
Ownership structure	Wholly owned subsidiary of BNY Mellon	Privately owned (majority co-founders, board members, current & former employees)	Majority owned by founding family, employees, and directors
Firm inception	2002	1981	1981
Firm assets	\$632 bn	\$409 bn	\$14.7 bn
Proposed strategy description	Customized, high quality, multi-sector portfolio designed to tightly match the Plan's liabilities. "Buy and maintain" strategy aims to achieve target yield with low turnover.	US Short Credit Strategy: Short duration (max 3 years) portfolio comprised of Treasuries, Agencies, and IG corporates.	Sit Short Duration Strategy: Focused on seasoned, high coupon, Agency mortgages
Experience managing short duration	20 years (including team's experience at predecessor firm)	33 years	26 years
Short duration assets	\$76 bn	\$24 bn	\$4.0 bn
Key investment professionals (years experience / at firm)	Jesse Fogerty, Sr. PM (23/20) Jason Celente, Sr. PM (19/19) Peter Bentley, Head of Global Credit (20/8) Terry Henrickson, Head of Quant. Client Solutions (16/16)	David Plecha, Head of Fixed Income (28/26) Joseph Kolerich, Sr. PM (23/15) Gerard O'Reilly, Co-CIO, Head of Research (11/11) Eduardo Repetto, Co-CEO & Co-CIO (15/15)	Bryce Doty, Sr. PM (25/20) Mark Book, PM (29/15) Chris Rasmussen, PM (15/16)
Proposed fee schedule	6 bps on first \$500 mm 5 bps thereafter	20 bps on first \$25 mm 10 bps thereafter	15 bps (flat fee)

Insight overview

Strategy description: High quality, multi-sector portfolio comprised of Treasuries, Agencies, investment grade corporates, and asset-backed securities (i.e., auto loans and credit card receivables).

Philosophy: “Liability aware” solution, designed specifically to meet CCCERA’s liabilities. Insight to optimize the “provide” portfolio around the other managers’ portfolios in order to ensure cash flows are tightly matched with the Plan’s liabilities.

Process: “Buy and maintain” process designed to achieve target yield with low turnover and minimal volatility and downside risk. Rigorous credit research process focuses on high credit quality securities in order to avoid defaults and ensure stability and certainty of cash flows. Optimization model capturing cash flows against liabilities to design the complete solution.

Thesis for selection: Strong credit research capabilities, experience “quarterbacking” similar mandates, a thorough understanding of CCCERA’s liabilities and the function of the “provide” portfolio, and low fees.

Recommended allocation of Liquidity sub-portfolio assets: 50%

Portfolio Characteristics:

Sector Allocation						Characteristics		
Treasury	Gov't Related / Agency	Corporate	ABS	MBS	Cash & Short Term	Avg. Credit Quality	Yield	Duration
25%	12%	39%	23%	--	2%	AA+	1.2%	1.25 years
Credit Quality					Below Inv. Grade			
AAA	AA	A	BBB					
52%	18%	30%	0%		--			

Portfolio characteristics provided by Insight as of July 29, 2016

DFA overview

Strategy description: Short duration (max 3 years) portfolio comprised of Treasuries, Agencies, and IG corporates.

Philosophy: Dimensional’s fixed income philosophy, based on the academic research of Professor Eugene Fama, is that the market efficiently prices securities. Therefore, DFA uses market data rather than a traditional credit research team, to determine the risk associated with specific securities.

Process: DFA’s systematic process positions the portfolio such that when term spreads are wide (narrow), portfolio duration is increased (reduced). Similarly, when credit spreads are wide (narrow), the allocation to lower credit quality bonds is increased (decreased). DFA’s process employs a flexible, patient trading strategy to minimize trading costs.

Thesis for selection: Systematic investment process fully customizable to CCCERA’s parameters, strong track record, stable organization, and low fees.

Recommended allocation of Liquidity sub-portfolio assets: 25%

Portfolio Characteristics:

Sector Allocation					
Treasury	Gov't Related / Agency	Corporate	ABS	MBS	Cash & Short Term
0%	16%	84%	0%	0%	0%
Credit Quality					Below Inv. Grade
AAA	AA	A	BBB		
12%	20%	30%	39%	0%	

Characteristics		
Avg. Credit Quality	Yield	Duration
A	1.7%	2.76 years

Portfolio characteristics provided by DFA as of June 30th, 2016. Characteristics are illustrative of DFA’s “US Short Credit” strategy and can be customized.

Sit overview

Strategy description: Short duration, Agency mortgage backed security strategy, focused on high coupon, seasoned mortgages.

Philosophy: High coupon seasoned mortgages exhibit the most stable prepayments within the mortgage market.

Process: “Bottom up” investment process is focused on identifying relative value opportunities within the mortgage market based on geography, underlying loan size, and prepayment levels. The short duration of the portfolio minimizes interest rate risk, while the US Government guarantee associated with Agency mortgages mitigates default risk.

Thesis for selection: Specialized manager focusing on a niche, less-efficient segment of the fixed income market with very strong risk-adjust performance.

Recommended allocation of Liquidity sub-portfolio assets: 25%

Portfolio Characteristics:

Sector Allocation					
Treasury	Gov't Related / Agency	Corporate	ABS	MBS	Cash & Short Term
0%	0%	1%	1%	97%	1%
Credit Quality					Below Inv. Grade
AAA	AA	A	BBB		
100%	0%	0%	0%	0%	0%

Characteristics		
Avg. Credit Quality	Yield	Duration
AAA	2.1%	2.50 years

Portfolio characteristics provided by Sit as of June 30th, 2016

Program performance

	Trailing Period Returns - Through Q2 2016					
	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
DFA US Short Duration Credit	3.13	3.52	2.51	2.36	3.37	---
Insight US Short Term Fixed Income	1.40	1.56	1.34	1.19	1.44	2.72
Sit Short Duration	3.28	4.01	3.54	3.16	4.39	5.15
50% Insight / 25% DFA / 25% Sit	2.30	2.66	2.18	1.97	2.66	---
Barclays US 1-3 Yr Gov't/Credit Index	1.65	1.59	1.22	1.10	1.59	2.80

	Calendar Year Returns									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
DFA US Short Duration Credit	1.38	1.90	0.62	3.86	3.15	5.38	---	---	---	---
Insight US Short Term Fixed Income	0.87	1.15	0.27	1.44	1.79	2.04	2.27	6.12	6.84	4.71
Sit Short Duration	2.86	3.99	-0.25	4.11	5.10	6.92	9.80	5.18	7.30	4.91
50% Insight / 25% DFA / 25% Sit	1.49	2.05	0.23	2.71	2.95	4.08	---	---	---	---
Barclays US 1-3 Yr Gov't/Credit Index	0.65	0.77	0.64	1.26	1.59	2.80	3.83	4.97	6.83	4.25

Source: eVestment. All manager performance is gross of fees.

DFA Short Credit strategy inception date is 4/2009. As a result, no 10 year or calendar year 2006-2009 returns are available for the strategy or combined portfolio.

Manager and combined portfolio fees

The analysis below assumes the following:

- \$1.7 bn liquidity portfolio (24% of CCCERA's June 30th market value of \$7.1 bn); and
- A \$850 mm allocation to Insight (50%), and \$425 mm each to DFA (25%) and Sit (25%).

Manager Fee Schedules						Combined Portfolio	
<u>DFA</u>		<u>Insight</u>		<u>Sit</u>		Fee	Manager
Fee	Range (\$mm)	Fee	Range (\$mm)	Fee	Range (\$mm)		
If assets exceed \$300 mm:		0.06%	0 - 500	If assets exceed \$400 mm:		0.10%	DFA
0.10%	Flat	0.05%	500 - 1000	0.15%	Flat	0.06%	Insight
If assets below \$300 mm:				If assets below \$400 mm:		0.15%	Sit
0.20%	0 - 25			0.40%	0 - 20	0.09%	Blended
0.10%	> 25			0.30%	20 - 50		
				0.20%	> 50		

Portfolio design

Liquidity portfolio design

In assessing the various potential combinations of managers from the pool of semi-finalists, Insight, DFA, and Sit were selected for the following reasons:

- Insight, acting as quarterback, should minimize the operational burden on staff, and optimize the full liquidity portfolio around the exposures of the other managers.
- DFA and Sit's strategies focus on distinct segments of the bond market, providing diversified exposure.
- While all three managers run substantively different strategies, having three manager provides flexibility and redundancy to the liquidity program.
- Based on the quantitative analysis performed on various portfolio mixes, the Insight/DFA/Sit combination provides a balance of good long-term performance with minimal volatility and draw-down risk.

Liquidity portfolio characteristics

The table below shows the characteristics of a 50% Insight/25% DFA/25% Sit portfolio.

- Key characteristics include:
 - High quality: Over half the portfolio is AAA rated, with an average credit quality of AA
 - Minimal interest rate risk: Portfolio duration < 2 years
 - Diversified sector exposure

Sector Allocation					
Treasury	Gov't Related / Agency	Corporate	ABS	MBS	Cash & Short Term
13%	10%	41%	12%	24%	1%
Credit Quality					Below Inv. Grade
AAA	AA	A	BBB		
54%	14%	22%	10%	0%	

Characteristics		
Avg. Credit Quality	Yield	Duration
AA	1.5%	1.94 years

Sources: Insight, Sit, DFA

Next steps

Next steps

- Finalists to present to the Board immediately following this presentation;
- Board to authorize CEO to negotiate and execute final contracts with managers; and
- Implementation to commence following the Board's approval of the selected managers.

Notices & disclosures

Past performance is no guarantee of future results. *The information presented in this report is provided pursuant to the contractual agreement (the “Contract”) by and between Contra Costa Employees’ Retirement Association (“Client”) and Verus Advisory, Inc. (“Company”). In the event of conflict between the terms of this disclosure and the Contract, the Contract shall take precedence. Client is an institutional counter-party and in no event should the information presented be relied upon by a retail investor.*

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The material may include estimates, outlooks, projections and other “forward-looking statements.” Such statements can be identified by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “anticipates,” or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward-looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.

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Contra Costa County Employees' Retirement Association (CCCERA)

Liquidity management strategy

September 2016

➤ A BNY MELLON COMPANYSM



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Performance presented is that of Insight Investment Management (Global) Limited, an affiliate of Pareto Investment Management Limited, both of which are part of Insight. Please refer to the disclosures and index definitions at the back of this document.

Agenda

- Introduction to Insight Investment
- Our proposed investment approach
- Appendix

Your Insight team

The team is based in New York, unless noted otherwise

CCCERA client team



Victoria May, CFA

- Head of Institutional, North America
- Victoria.May@insightinvestment.com*



Robert Alan

- Co-Head Consultant Relations, North America
- Robert.Alan@insightinvestment.com*



Samira Mattin

- Senior Portfolio Specialist
- Samira.Mattin@insightinvestment.com*

Investment team



Jesse Fogarty, CFA

- Senior Portfolio Manager (Lead PM)
- Jesse.Fogarty@insightinvestment.com*



Gerard Berrigan

- Head of US Fixed Income
- Gerry.Berrigan@insightinvestment.com*



Jason Celente, CFA

- Senior Portfolio Manager
- Jason.Celente@insightinvestment.com*



Terry Henrickson

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- Terry.Henrickson@insightinvestment.com*



Peter Bentley

- Head of Global Credit (Based in London)
- Peter.Bentley@insightinvestment.com*



Kevin Loescher

- Asset Liability Specialist
- Kevin.Loescher@insightinvestment.com*

Client service and support



Sarah Marks

- Global Head of Client Service
- Sarah.Marks@insightinvestment.com*



Bertha Lui-McKee

- Senior Client Service Specialist
- Bertha.Lui-McKee@insightinvestment.com*

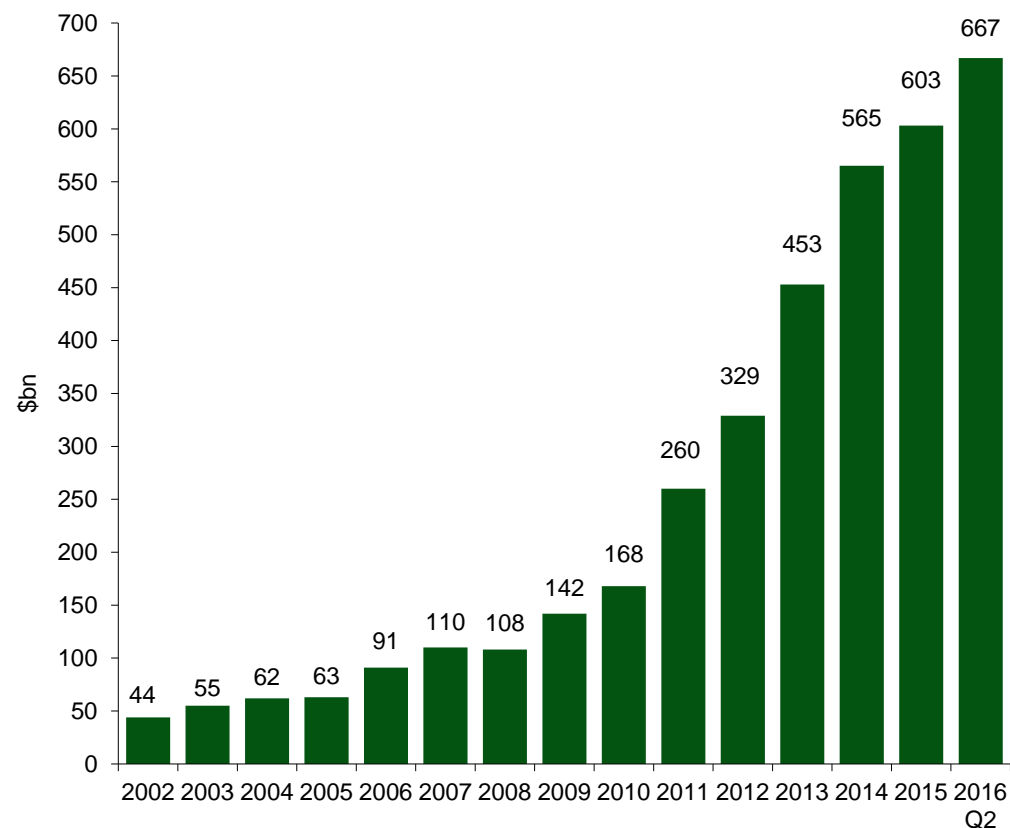
686 investment and support staff¹

¹ As of June 30, 2016.

Our credentials

- Asset manager owned by BNY Mellon:
 - based in New York, London, Sydney and Tokyo
 - over \$667bn in assets under management
 - 203 investment professionals, 686 total staff
 - 34 investment professionals, 80 total US based staff
- Key ingredients of our success:
 - differentiated investment proposition
 - focusing on our strengths
 - partnering with our clients
 - a culture of ownership
- Key areas of specialization:
 - risk management solutions
 - fixed income
 - absolute return

Assets under management¹

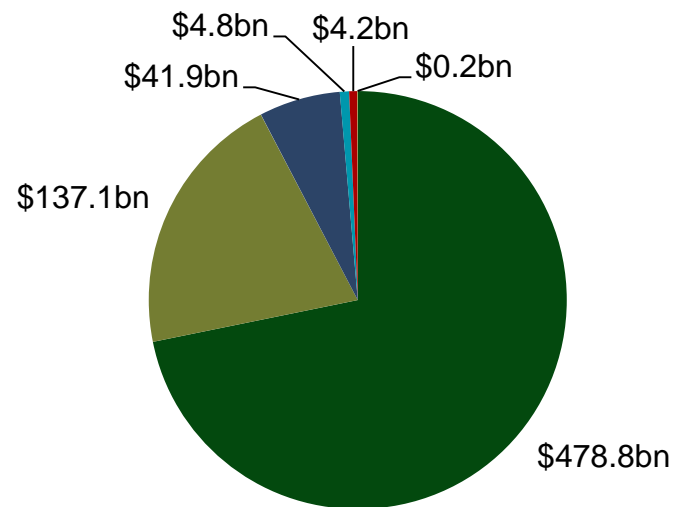


As of June 30, 2016. Assets under management (AUM) are represented by the value of cash securities and other economic exposure managed for clients. Figures shown in USD. FX rates as per WM Reuters 4pm Spot Rates. Reflects the AUM of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML). Insight includes, among others, Insight Investment Management (Global) Limited (IIMG), Pareto Investment Management Limited (PIML), Cutwater Asset Management Corp. (CAMC), Cutwater Investor Services Corp. (CISC) and Pareto New York LLC (PNY), each of which provides asset management services. ¹ Excludes previous parent introduced assets prior to 2009.

Assets under management

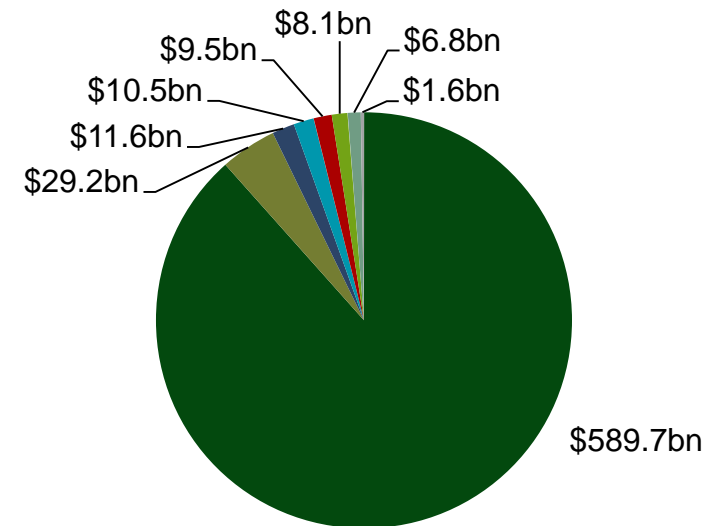
Total assets under management: \$667.0bn

By investment area



- Financial solutions
- Fixed income
- Currency management
- Multi-asset strategies
- Specialist equity
- Real assets

By client type



- Pension
- Insurance
- Corporate
- Wholesale
- Financial institutions
- Sovereign wealth
- Local authorities
- NFP: endowments/charities

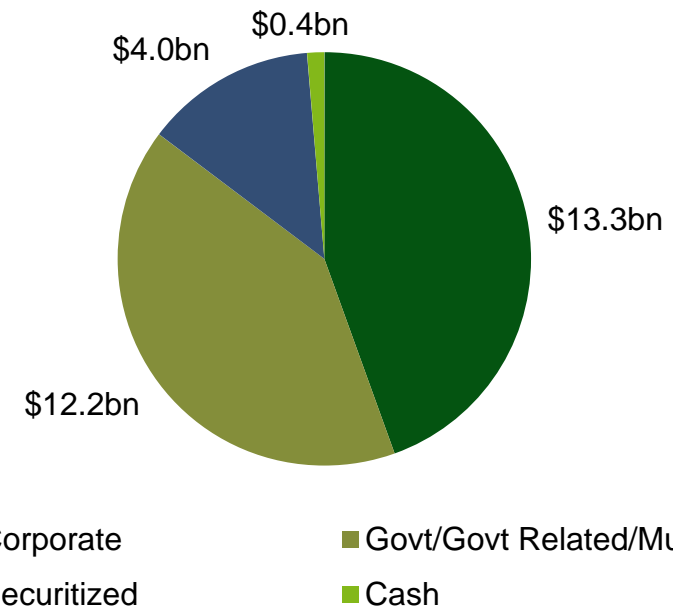
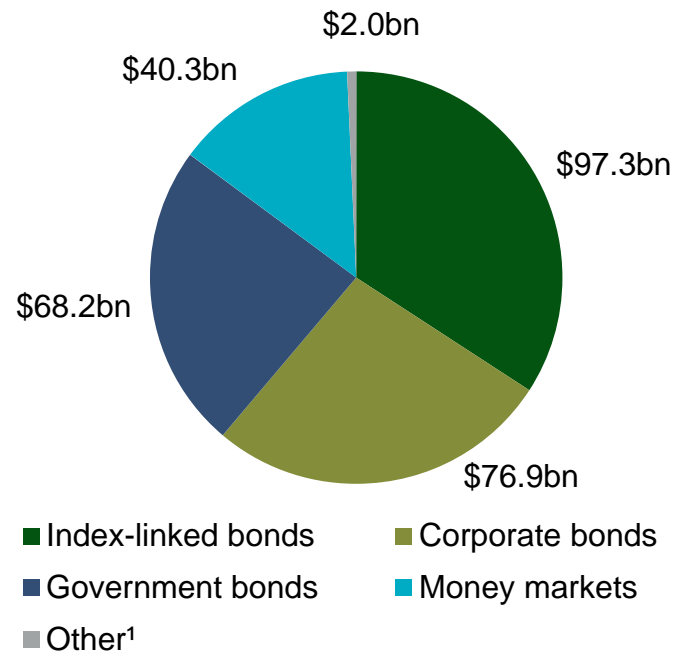
As of June 30, 2016. Assets under management (AUM) are represented by the value of cash securities and other economic exposure managed for clients. Figures shown in USD. FX rates as per WM Reuters 4pm Spot Rates. Reflects the AUM of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML). Insight includes, amongst others, Insight Investment Management (Global) Limited (IIMG), Pareto Investment Management Limited (PIML), Cutwater Asset Management Corp. (CAMC), Cutwater Investor Services Corp. (CISC) and Pareto New York LLC (PNY), each of which provides asset management services.

Fixed income assets under management

Firm wide fixed income assets: \$284.7bn

USD fixed income assets: \$29.9bn

By asset type



As of June 30, 2016. Assets under management (AUM) are represented by the value of cash securities and other economic exposure managed for clients. Figures shown in USD. FX rates as per WM Reuters 4pm Spot Rates. Reflects the AUM of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML). Insight includes, amongst others, Insight Investment Management (Global) Limited (IIMG), Pareto Investment Management Limited (PIML), Cutwater Asset Management Corp. (CAMC), Cutwater Investor Services Corp. (CISC) and Pareto New York LLC (PNY), each of which provides asset management services. ¹ Other includes foreign exchange derivatives and equities.

Abdallah Nauphal
CHIEF EXECUTIVE OFFICER

Clifford Corso
CHIEF EXECUTIVE OFFICER, NORTH AMERICA

RISK AND COMPLIANCE (4)	DISTRIBUTION (15)	FINANCE (3)	INVESTMENT AND CREDIT (34)	LEGAL (1)	OPERATIONS AND ADMIN SUPPORT (23)
Robin Shulman CHIEF COMPLIANCE OFFICER	Victoria May HEAD OF INSTITUTIONAL	John Ariola HEAD OF FINANCIAL ANALYSIS	Gerard Berrigan HEAD OF US FIXED INCOME	Jim D'Sidocky SENIOR COUNSEL	Tom Stabile HEAD OF DISTRIBUTION OPERATIONS
Alexander Ng HEAD OF QUANT	Svein Floden HEAD OF LIQUID ALTERNATIVES		Alex Veroude HEAD OF CREDIT		Eric McAlley HEAD OF INVESTMENT OPERATIONS
Emma Spicer MANDATE CONTROL ANALYST	Sarah Marks HEAD OF CLIENT SERVICES		Jamie Anderson HEAD OF TRADING		Paul Cohen INFORMATION TECHNOLOGY
	Robert Alan / Kyle Theodore CO-HEADS OF CONSULTANT RELATIONS				

80 staff members in the US, which includes 34 investment professionals¹

As of August 2016.

¹ Quarterly data as of June 30, 2016. Numbers in parentheses denotes total staff in group.

Fixed income Specialist teams



Adrian Grey CIO ACTIVE MANAGEMENT HEAD OF FIXED INCOME

Andrew Wickham GLOBAL RATES	Peter Bentley GLOBAL CREDIT	Lucy Speake EUROPEAN CREDIT	David Averre CREDIT ANALYSIS		Alex Veroude (NY) HEAD OF CREDIT	Colm McDonagh EMD
Harvey Bradley Gareth Colesmith Isobel Lee	Shaun Casey Jesse Fogarty ¹ Jonathan Hurst Toby Kung Adam Mossakowski Adam Whiteley	Bonnie Abdul Aziz Damien Hill Robert Sawbridge	LONDON	NEW YORK	Pierre-Louis Fulhaber	Rodica Glavan Thibaut Nocella Robert Simpson Oliver Williams
INFLATION LINKED		Gerard Berrigan¹ US	Aaiza Ali Charles-Henri Boivin Cathy Braganza Simon Cooke Giles Haworth David Herrington Toby Hunston Teo Lasarte Nikolay Menteshashvili Alex Moss Lionel Trigalou	Jeff Bernstein ¹ John Bluemke ¹ Lars Boman ¹ Brian Carlson ¹ Robert Claiborne ¹ Tim Doherty ¹ Christopher Hagens ¹ Jack Hale ¹ David Hamilton ¹ Rachel Plevinsky ¹ Catherine Welfer ¹	HIGH YIELD	
David Hooker					Uli Gerhard Gautam Khanna ¹	Paul Lambert CURRENCY
IMPLEMENTATION AND OPERATIONS	Colin Cave MONEY MARKETS	Craig Armstrong ¹ Jason Celente ¹ James DiChiaro ¹ Mary Donovan ¹ Kevin Loescher ¹ Nitin Mathew ¹ Scott Rueterholz ¹ David Witthohn ¹			Alex Jackson¹ LOANS	Richard Nibloe Max Wahl
Rory Anderson Carl Burdett Peter Joslin Alison Shine	Chris Brown Kevin Coney Jamie Freshwater Patrick Goodall				Joseph Nelson ¹ David Chow ¹	Paul Rochester Jamie Anderson (NY) DEALING
April LaRusse PRODUCT MANAGEMENT			RESPONSIBLE INVESTMENT		Shaheer Guirguis SECURED FINANCE	Matthew Bodo ¹ Angie Hart Joe Hazelwood Emilia Hunter (m) Jon Lake Paul Sharp Thomas Vandermark ¹
Andy Burgess Monique Carter Emma du Haney Lutz Engberding Carl Mastroianni ¹			Joshua Kendall Rory Sullivan*		Jason Cameron ¹ Jeremy Deacon Justyna Kochanska Ranbir Singh Lakhpuri Melissa Niu ¹ Pritesh Solanki Seema Sopal Lorraine Specketer Richard Talmadge ¹ Tristan Teoh Patrick Wacker ¹ Duncan Westbrook	

As of August 2016. * Strategic advisor. (m) maternity leave. ¹ Includes non-UK employees of our affiliates Pareto New York LLC (PNY), Cutwater Asset Management Corp. (CAMC) and Cutwater Investor Services Corp. (CISC), each of which provides asset management services as part of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML).

Credit research resources

Corporates



US ¹				Europe				
David Hamilton	Jeff Bernstein	Brian Carlson	John Bluemke	Cathy Braganza	Lionel Trigalou	Alex Moss	Charles-Henri Boivin	David Averde
Consumer Cyclical and Non-cyclical Industrials	Financials	Energy Industrials TMT Utilities	Consumer Cyclical and Non-cyclical Industrials	Basics Energy	Financials	Basics Real Estate	Transport Utilities	Supras Sub-sovereigns Agencies
17 years	28 years	21 years	16 years	23 years	19 years	28 years	11 years	28 years
Catherine Welfer	Robert Claiborne	Lars Boman	Jack Hale	Teo Lasarte	David Herrington	Toby Hunston	Giles Haworth	Joshua Kendall
Energy Utilities	Consumer Non-cyclical TMT	Basics Industrials	Industrials	Consumer Cyclical and Non-cyclical Industrials	Financials	Consumer Cyclical and Non-cyclical	Consumer Cyclical Industrials	ESG
20 years	33 years	7 years	5 years	11 years	5 years	3 years	7 years	7 years
Tim Doherty	TBA	Christopher Hagens		Simon Cooke	TBA	Nikolay Menteshashvili	Aaiza Ali	Pierre-Louis Fulhaber
Energy	Industrials	Industrials		TMT	Financials	Basics Energy	TMT	Credit Strategy
15 years		5 years		5 years		2 years	2 years	6 years

As of August 2016. Year(s) of industry experience as of June 2016.

¹ US includes employees of our affiliates Pareto New York LLC (PNY), Cutwater Asset Management Corp. (CAMC) and Cutwater Investor Services Corp. (CISC), each of which provides asset management services as part of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML).



Our liquidity management proposal

Our proposed approach: Buy and maintain strategy with cash flow matching



Liability aware solution

- Designed to deliver an optimized means of cash flow matching
- Aim to achieve target yield with low turnover and flexibility to provide liquidity when needed
- Focus on credit quality, avoidance of default, stability of cash flows and certainty of income
- Seek to capture yield in line with investment objectives and constraints, with minimal volatility and drawdown risk

Paired processes

- Well-established “buy and maintain” credit investment process focused on rigorous security selection
- Cash flow optimization and targeted maturities embedded within portfolio construction
- Able to incorporate external manager portfolios within portfolio optimization
- Result intends to produce a cash match with high degree of transparency and predictability of cash flows

Partnership model

- Close interaction and partnership approach with CCCERA
- Incorporate unique business objectives and constraints
- Infrastructure and resources in place to deliver on specific requirements, including customizable reporting

Buy and Maintain

Starting principles

- 1 Invest only in companies with robust fundamentals, not biggest % of index**
- 2 Invest for the long term**
- 3 Match sector exposure to tenor of bond**
- 4 Diversified portfolio**

Portfolio implications

- Security selection using best value companies to achieve custom objectives
- No constraints/distractions from short-term performance/tracking error
- Do not invest past an issuer's debt serviceability
- Strict issuer and sector limits

On-going management

- Acknowledge low market liquidity**
Low trading and transaction costs
- Seek to avoid default and material loss**
Intense and forward looking credit research and portfolio management

What are the advantages?

- Custom portfolio construction
- Avoid defaults and distressed sales
- Reduced turnover and costs
- Capture higher spread premia in the long term

For illustrative purposes only.

US investment grade corporate bond Buy and Maintain default track record



- Our **'landmine checklist'** focuses on identifying issues which have a higher risk of default
- Our track record covers the most severe market and credit cycle, e.g., 2008/09
- The information shown below represents defaults and distressed sales of corporate bonds in one or more portfolios managed in a Buy and Maintain style by Insight's US Fixed Income Team. For these purposes, a distressed sale is defined as the sale of a bond at a price equal to or less than \$50 (excluding zero coupon bonds).

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Insight US defaults	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insight US distressed sales	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Moody defaults	1	0	0	1	4	4	8	18	4	0	2	0	0	11	8	3	3	1	4	1	0	73

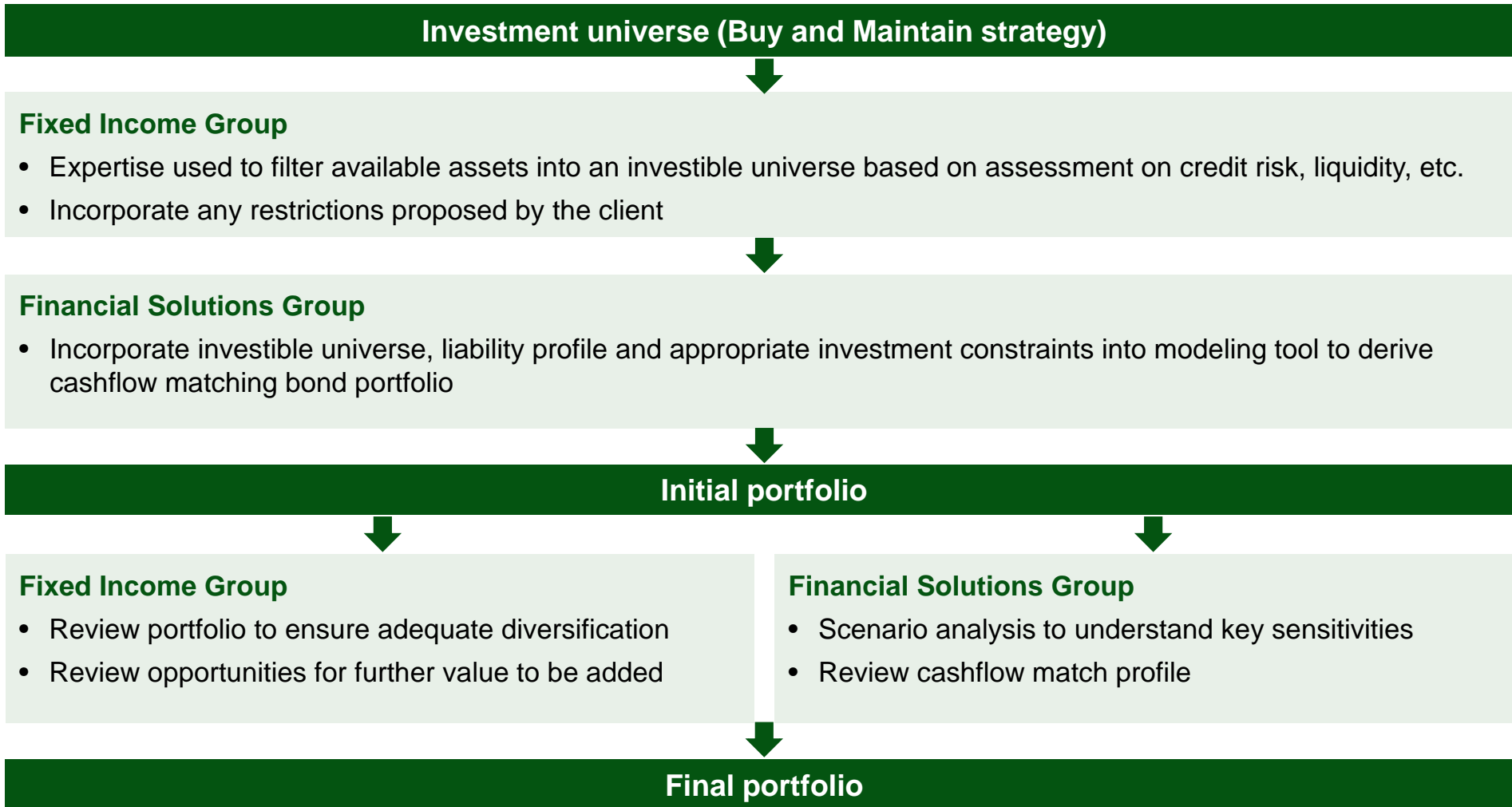
Source: Moody's, Insight, as of December 31, 2015. Moody's investment grade defaults are initial bond defaults where the issuer held an investment grade within one year prior to default. Portfolios may hold securities that are not included in the Moody's universe

The information contained in the table above represents defaults and distressed sales of corporate bonds in one or more portfolios managed in a Buy and Maintain style by Insight's US Fixed Income Team since inception. The portfolios included in this analysis are a subset of client accounts having broader investment mandates and each portfolio was included in the analysis only during periods when that portfolio met the manager's definition of a Buy and Maintain style. The track record excludes client-directed portfolios or those where we do not have full discretion. The US Fixed Income Team joined Insight in January 2015 when Cutwater Asset Management Corp. and Cutwater Investor Services Corp. were acquired by BNY Mellon. Assets managed by the US Fixed Income Team in a Buy and Maintain style prior to the acquisition date are not included in Insight's global Buy and Maintain AUM or default track record, nor were they managed in line with Insight's global Buy and Maintain strategy and investment process. Prior to January 2015, Insight's US Fixed Income Team's Buy and Maintain style was focused on capital preservation and income generation, with various constraints, including quality restrictions, duration targets and low turnover.

The information presented is supplemental information for GIPS purposes. A fully compliant GIPS composite is not included since the portfolios referenced on this page are not required to be included in a GIPS composite. Additional information about the portfolios in the Buy and Maintain strategy, as well as a list of the firm's GIPS composites, are available upon request. For illustrative purposes only.

Portfolio construction

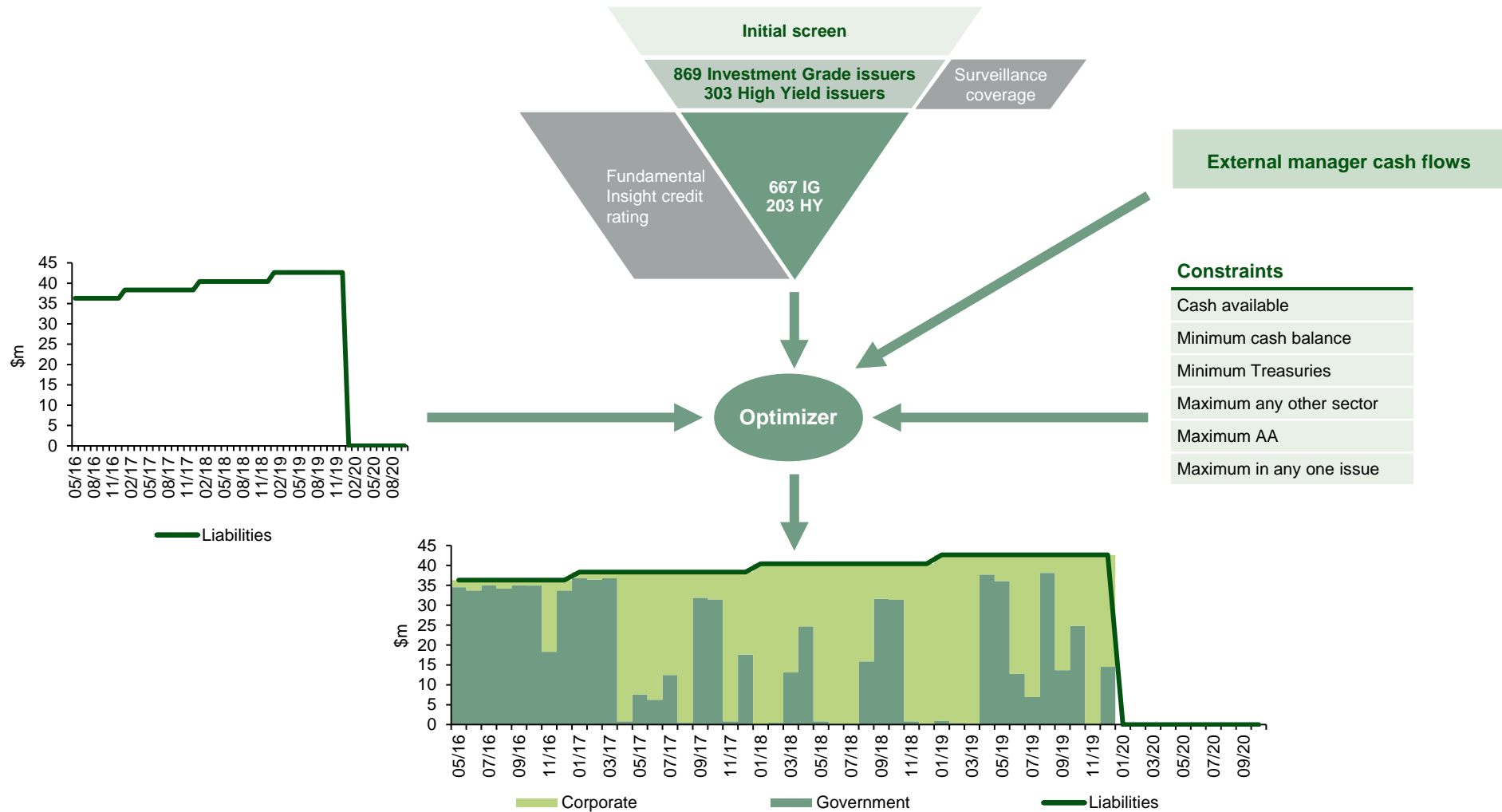
Buy and Maintain with cash flow matching strategy



For illustrative purposes only.

Portfolio construction diagram

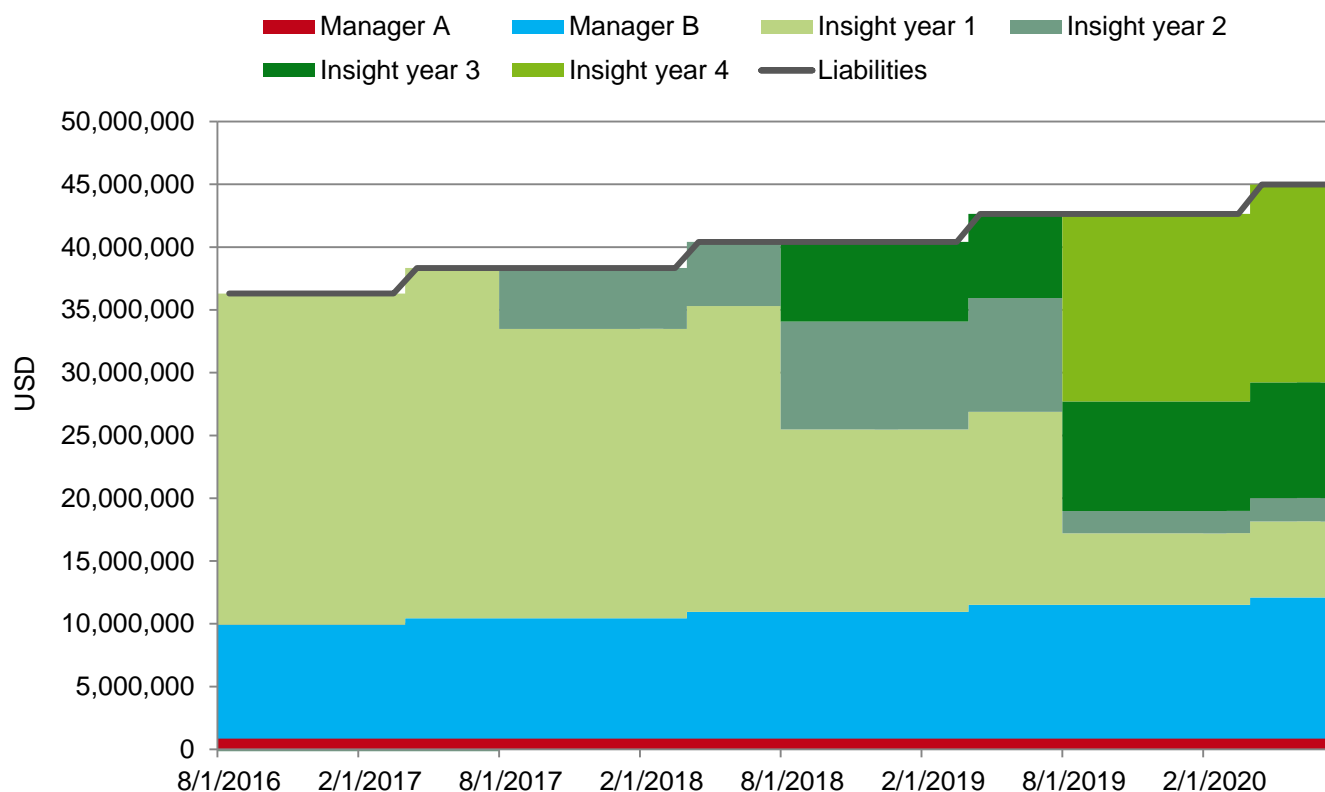
Buy and Maintain with cash flow matching



For illustrative purposes only.

Cash flow profile analysis: Combined liquidity portfolio model

Combined portfolio (50/25/25) versus CCCERA liabilities



Combined portfolio summary

- Allocation: 50% Insight
25% Manager A
25% Manager B
- Assumptions
 - 2.4% earning strip from Manager A portfolio available to meet liability payments (red)
 - Manager B meets 25% of liability cash flows (blue)
 - Assumes contributions to the liquidity portfolio (\$280mm annual for 4 years, 67% Insight/33% Manager B)
 - Insight portfolio re-optimized to meet remaining liabilities for as long as possible
 - Cash flows matched for an estimated 48 months

As of July 29, 2016. For illustrative purposes only. **WHERE MODEL OR SIMULATED RESULTS ARE PRESENTED, THEY HAVE MANY INHERENT LIMITATIONS. CLIENTS' ACTUAL RESULTS MAY BE MATERIALLY DIFFERENT THAN THE RESULTS PRESENTED. MODEL RESULTS REPRESENT FUTURE CASH FLOWS FROM A PORTFOLIO DEVELOPED BY INSIGHT WHICH TAKES INTO ACCOUNT PROJECTED, HYPOTHETICAL CASH FLOWS FROM MANAGERS A AND B AND MAY NOT REFLECT THE IMPACT THAT MATERIAL ECONOMIC AND MARKET FACTORS MIGHT HAVE ON FUTURE CASH FLOWS AND ON CASH FLOW RESULTS FROM INSIGHT'S PORTFOLIO OPTIMIZATION. THE CASH FLOW RESULTS FROM THE OPTIMIZED PORTFOLIO MAY UNDER OR OVER-COMPENSATE FOR THE IMPACT, IN ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. MODEL RESULTS SHOWN REFLECT THE REINVESTMENT OF DIVIDENDS AND OTHER EARNINGS BUT DO NOT REFLECT MANAGEMENT FEES, TRANSACTION COSTS AND OTHER EXPENSES FROM THE OPTIMIZATION OF AN ACTUAL PORTFOLIO THAT WOULD REDUCE FUTURE CASH FLOWS.**

Summary

Established investment and solutions platform

- Insight's platform is well-suited to custom solutions for large institutional clients
- Established investment process focused on rigorous security selection

Liability aware investment solution

- Cash flow optimization with focus on stability of cash flows
- Target yield with low turnover and flexibility to provide liquidity when needed

Partnership model

- Close interaction and partnership approach with CCCERA and Verus
- Incorporate external manager cash flows within portfolio optimization



Thank you

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Victoria.May@insightinvestment.com

www.insightinvestment.com 

[@insightinvestim](https://twitter.com/insightinvestim) 

[company/insight-investment](https://www.linkedin.com/company/insight-investment) 



Appendix

Biographies



Victoria May, CFA® – Head of Institutional, North America

Victoria joined Insight in November 2014 to lead the firm's entry into the North America institutional market. Previously, Victoria spent over 15 years as a senior client portfolio manager and institutional client team leader at JP Morgan Asset Management. Victoria was responsible for a range of institutional client portfolio relationships in the JP Morgan Global Fixed Income Group and, most recently, the Asset Management Solutions – Global Multi-Asset Group. Prior to JP Morgan, she spent three years at PIMCO, four years at Becker and Rooney and two years at Prudential. Victoria holds a BA from Cornell University, an MBA in Finance and International Business from Columbia University's Graduate School of Business and she is a CFA charterholder.



Robert Alan – Co-Head of Consultant Relations, North America

Robert joined Insight's Consultant Relationship Team in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). He joined Cutwater in October 2011 and has worked in the financial services industry since 1991. Previously, Robert served as Head of North America Consultant Relations at Putnam Investments where he had national coverage of consultant relationships. Prior to Putnam, Robert held similar roles at Babson Capital Management and Fidelity Institutional Asset Management (formerly Fidelity Management Trust Company). He holds a BS degree in Finance from Bentley University and an MBA in Management from New York University's Leonard N. Stern School of Business. Robert holds Series 6, 7, 24 and 63 licenses from the Financial Industry Regulatory Authority (FINRA).



Samira Mattin – Senior Portfolio Specialist

Samira joined Insight in January 2015, as a Senior Portfolio Specialist, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). She originally joined Cutwater in 2004 and has worked in the financial services industry since 2002. Samira works closely with the investment teams and focuses on portfolio strategy and business development. Prior to her current role, Samira was a portfolio manager responsible for the management of several broad, multi-sector short duration portfolios. Before joining Cutwater, she was a surety bond underwriter for St. Paul Travelers. Samira has a BS degree (Hons) in Finance from George Mason University.



Jesse Fogarty, CFA®, FRM – Senior Portfolio Manager

Jesse joined Insight's Fixed Income Group in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). He initially joined Cutwater in 1996 as a credit research analyst covering investment grade companies in basic industries, capital goods, and consumer sectors. He is now a senior portfolio manager responsible for the US investment grade corporate sector with lead portfolio management responsibilities for the dedicated US focused credit mandates including the firm's flagship US long duration strategy. Prior to joining Cutwater, Jesse was a senior accountant with PwC LLP, where he focused on mutual funds registered under the 1940 Investment Company Act and offshore limited partnerships. He holds a bachelor's degree in accounting from Fordham University and an MBA (Hons) from Columbia University. Jesse is a CFA charterholder and a Financial Risk Manager (FRM) – Certified by the Global Association of Risk Professionals (GARP). He also holds the Series 7 and 63 licenses from the Financial Industry Regulatory Authority (FINRA).



Jason Celente, CFA – Senior Portfolio Manager

Jason joined Insight's Fixed Income Group as a senior portfolio manager in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). He originally began his financial services career at Cutwater in 1997 and has been part of the investment management team since 1999. Jason's responsibilities include participating in bi-weekly corporate credit and portfolio strategy meetings and then implementing those strategies by determining credit selection and sector allocation. Prior to this, Jason was an investment accountant for Cutwater's asset-liability portfolios and short-term mutual funds. He has a BS degree from Colgate University and an MBA from the Stern School of Business at New York University. Jason holds Series 7 and 63 licenses from the Financial Industry Regulatory Authority (FINRA) and is a CFA charterholder.

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Biographies



Peter Bentley – Head of UK and Global Credit

Peter joined Insight in January 2008. Prior to joining Insight, Peter spent four years at Pimco Europe where he was a Senior Vice President Portfolio Manager responsible for the management and strategy of both long only and long-short credit funds. He began his investment career with four years at the Bank of England as a graduate Analyst in the Financial Market Division before progressing to the role of Supervisory Manager, regulating gilt and money market institutions. This was followed by three years at Schroders as a Portfolio Manager and then four years at Morley Investment Management as a Portfolio Manager responsible for the management and strategy of institutional credit funds. Peter holds a BA honours in Economics and Econometrics from Nottingham University and is an Associate of the CFA Society of the UK.



Gerard Berrigan – Head of US Fixed Income

Gerard joined Insight's Fixed Income Group as Head of US Fixed Income in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). He originally joined Cutwater in June 1994 and has worked in the financial services industry since 1984 with specific experience in securities and trading. Gerard's responsibilities include overseeing all aspects of portfolio management for North America. Previously, he worked at the Federal National Mortgage Association as a member of the Portfolio Management and Treasury Groups where he developed and applied expertise in ABS, MBS and portfolio hedging. Gerard also worked at First Boston Corp. developing and implementing investment strategies for the firm's public finance clients. He has a BS degree from Bucknell University and an MBA from Columbia University. Gerard holds Series 7 and 63 licenses from the Financial Industry Regulatory Authority (FINRA).



Terry Henrickson – Head of Quantitative Client Solutions

Terry joined Insight in July 2012 as a Senior Quantitative Analyst in the Financial Solutions Group. Prior to joining Insight, Terry spent two years at Mercer as a Principal. He has also held financial analytical roles at Milliman and WestLB. Terry began his career in 2000 as a pensions consultant at Lane, Clark & Peacock. Terry graduated from Churchill College, Cambridge an MA (Hons) in Mathematics. Terry also holds the Investment Management Certificate from the CFA Society of the UK and is a Fellow of the Institute of Actuaries in the UK.



Kevin Loescher – Asset Liability Solutions

Kevin joined Insight as an LDI portfolio manager in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). He began his financial services career at Cutwater in 1994. Kevin's responsibilities include developing and implementing LDI strategies for the Customised Strategy Group. In addition, he has extensive experience in designing derivative hedging and overlay strategies for institutional clients. Kevin's prior experience includes managing asset-liability programmes with an extensive focus on risk management and treasury functions. He holds a BA degree from Manhattanville College and an MBA from Pace University.



Sarah Marks – Global Head of Client Service

Sarah joined Insight in December 2002 as Head of Customer Service. She became Global Head of Client Service in March 2015. Sarah joined from NDF Opal Limited where she was a Client Relationship Director for five years. Prior to this Sarah spent two years at Pricoa Relocation Management Limited where she was a Client Service Manager, responsible for managing service delivery to corporate clients. Sarah holds the Investment Management Certificate from the CFA Society of the UK.



Bertha Lui-McKee, CPA – Senior Client Service Specialist

Bertha joined Insight's Client Service Team in January 2015, following BNY Mellon's acquisition of Cutwater Asset Management (Cutwater). As a senior client service specialist, she assists in the creation of a robust client service platform in the US which will have the flexibility and ability to manage global service across the Insight product range. Bertha originally joined Cutwater in 1998 and has over 20 years of experience in the financial services industry. Since 2010, Bertha has been focused on client services, special projects and new product execution. She was also responsible for contract and RFP reviews. Prior to this role, Bertha structured and executed commercial paper and medium-term note transactions for Cutwater's asset-backed conduits. She also supervised the operations for MBIA's 11 funding vehicles. Bertha holds a BS degree in Finance and Accounting from New York University and is a Certified Public Accountant.



Important disclosures

Past performance is not a guide to future performance. The value of investments and any income from them will fluctuate and is not guaranteed (this may partly be due to exchange rate changes) and investors may not get back the amount invested. Transactions in foreign securities may be executed and settled in local markets. Performance comparisons will be affected by changes in interest rates. Investment returns fluctuate due to changes in market conditions. Investment involves risk, including the possible loss of principal. No assurance can be given that the performance objectives of a given strategy will be achieved. The information contained herein is for your reference only and is being provided in response to your specific request and has been obtained from sources believed to be reliable; however, no representation is made regarding its accuracy or completeness. This document must not be used for the purpose of an offer or solicitation in any jurisdiction or in any circumstances in which such offer or solicitation is unlawful or otherwise not permitted. This document should not be duplicated, amended, or forwarded to a third party without consent from Insight. This is a marketing document intended for professional clients only and should not be made available to or relied upon by retail clients.

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The investment advisers offering these advisory services are Pareto Investment Management Limited (PIML) and Cutwater Investor Services Corp. (CISC), investment advisers registered with the SEC, under the Investment Advisers Act of 1940, as amended. CISC is also registered with the Commodity Futures Trading Commission (CFTC) as a Commodity Trading Advisor and Commodity Pool Adviser. Registration with either the SEC or the CFTC does not imply a certain level of skill or training. You may request, without charge, additional information about Insight. Moreover, specific information relating to Insight's strategies, including investment advisory fees, may be obtained from PIML's and CISC's Forms ADV Part 2A, which are available without charge upon request.

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Insight does not provide tax or legal advice to its clients and all investors are strongly urged to consult their tax and legal advisors regarding any potential strategy or investment.

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Contra Costa County Employees Retirement Association

September 14, 2016

David Plecha, CFA, Global Head of Fixed Income and Vice President

Ted Simpson, CFA, Vice President

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Agenda

1. Dimensional
2. Fixed Income Platform Overview
3. Investment Philosophy
4. Portfolio Implementation
5. Strategy Summary
6. Appendix



Dimensional

Dimensional Fund Advisors

Putting financial science to work for clients

We use information in market prices throughout our investment process to build solutions that pursue higher expected returns.

We add value by identifying relevant dimensions of expected returns and continually balancing the tradeoffs among competing premiums, diversification, and costs.

We work with clients to understand their long-term needs and to add to their success.

Global Investment Team, One Dynamic Process

- Investment Personnel
- Client Service

Founded in 1981



\$415B in global AUM

More than 1,000 employees globally

In USD. Dimensional Fund Advisors LP founded in 1981. Global AUM and number of employees as of June 30, 2016. Locations with offices operated by Dimensional. "Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., and Dimensional Japan Ltd.

Leading Financial Economists and Researchers

Academics on Dimensional Fund Advisors LP's Board

Eugene Fama¹, PhD, Nobel laureate University of Chicago

Kenneth French¹, PhD Dartmouth College

Academics Who Serve as Independent Directors on Dimensional's US Mutual Fund Board²

George Constantinides, PhD University of Chicago

John Gould, PhD University of Chicago

Edward Lazear, PhD Stanford University

Roger Ibbotson, PhD Yale University

Myron Scholes, PhD, Nobel laureate Stanford University

Abbie Smith, PhD University of Chicago

Academics Providing Ongoing Consulting Services to Dimensional

Robert Merton¹, PhD, Nobel laureate Massachusetts Institute of Technology

Robert Novy-Marx, PhD University of Rochester

Sunil Wahal, PhD Arizona State University

Leaders of Dimensional's³ Internal Research Staff

Eduardo Repetto, PhD, Director,
Co-Chief Executive Officer,
and Co-Chief Investment Officer

Gerard O'Reilly, PhD, Co-Chief Investment
Officer and Head of Research

Stanley Black, PhD, Vice President

Wes Crill, PhD, Vice President

James Davis, PhD, Vice President

Massi De Santis, PhD, Vice President

Marlena Lee, PhD, Vice President

Savina Rizova, PhD, Vice President

Dave Twardowski, PhD, Vice President

As of May 16, 2016.

1. Provide consulting services to Dimensional Fund Advisors LP.

2. "Dimensional's US Mutual Fund Board" refers to The DFA Investment Trust Company, DFA Investment Dimensions Group Inc., Dimensional Investment Group Inc. and Dimensional Emerging Markets Value Fund Inc.

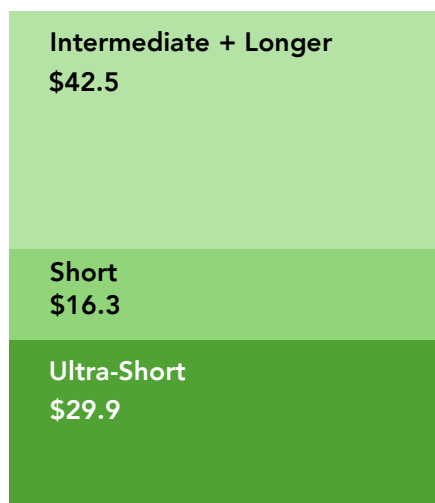
3. "Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., and Dimensional Japan Ltd.

Fixed Income Platform Overview

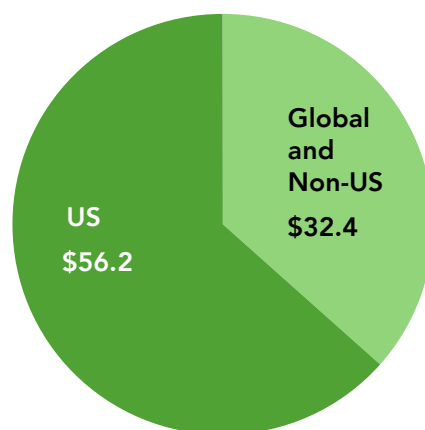
Extensive Fixed Income Capabilities

More than 30 years of experience and \$88.6 billion in global fixed income assets under management¹

STRATEGIES BY DURATION

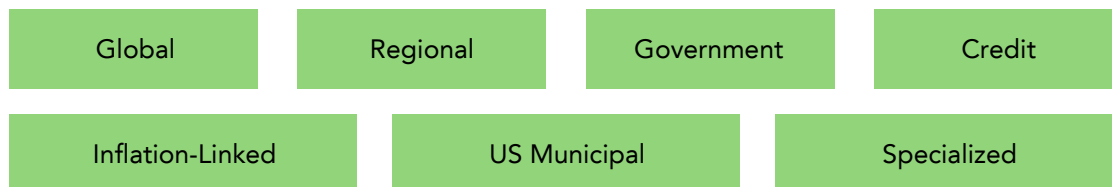


STRATEGIES BY REGION OF INVESTMENT



- Earliest strategy inception in 1983
- Multidisciplinary franchise with global reach
- Based upon rigorous academic research
- Experienced investment team
- Consistent portfolio management and execution
- Value-added execution
- Competitively priced solutions

MANDATE CATEGORIES



1. Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., and Dimensional Japan Ltd.
As of June 30, 2016.
All assets in US dollars. Numbers may not total 100% due to rounding.

Global Fixed Income Team

Dedicated to consistent implementation of investment strategies

PORTFOLIO MANAGEMENT

	Years of Experience	
	Industry	Firm
Austin		
Joseph Kolerich, ¹ Senior PM	23	15
Pamela Noble, CFA	24	8
Alan Hutchison	9	9
Lacey Huebel, CFA	4	3
Charlotte		
Kipp Cummins, CFA	10	4
Travis Meldau	12	4
Santa Monica		
David Plecha, ¹ CFA, Global Head	29	27
David Shao, CFA	9	9
Ryan Haselton	8	1
London		
Alexander Fridman, PhD, CFA, FRM	11	3
Didier Haenecour, MSc, CIIA	23	3
Sydney		
Stephen Garth, PhD	15	15
Gillian Wilson	14	8
David Schnell, CFA	5	5
Tokyo		
Kotaro Hama, CFA, FRM	6	3

TRADING

	Years of Experience	
	Industry	Firm
Austin		
David LaRusso, Senior Trader	15	15
Robert Richardson	18	4
Elizabeth Van Pelt	6	5
Charlotte		
Polly Weiss, CFA, FRM, Senior Trader	11	8
Santa Monica		
Claudette Higdon	16	16
London		
Archit Soni	6	1

PRODUCT MANAGEMENT & STRATEGY

	Years of Experience	
	Industry	Firm
Austin		
Tom Goodrum, CFA	21	4
Douglas Longo	14	2

Investment Policy Committee

- Long-term, strategic focus
- 18 members, including 2 Nobel laureates

Investment Committee

- Implementation and daily oversight
- 10 members
- Average 19 years of firm experience

Research

- Synthesis of client needs and financial theory into investment solutions
- 40+ professionals, including 15 PhDs

Investment Philosophy

Term Spreads and Expected Term Premiums

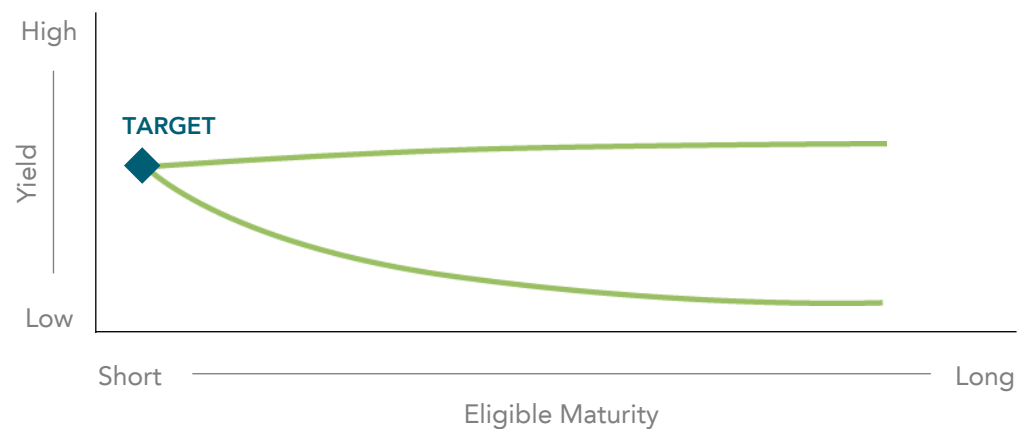
Using information in spreads to seek higher expected returns

NORMAL YIELD CURVE



- On average, wide term spreads are associated with higher term premiums.
 - Lengthen duration, target highest/steepest segments of yield curve.
- On average, narrow term spreads are associated with lower term premiums.
 - Shorten duration, target shorter maturities.

FLAT/INVERTED YIELD CURVE



Credit Spreads and Expected Credit Premiums

Using information in spreads to seek higher expected returns



- Narrow credit spreads generally lead to lower credit premiums.
 - Increase allocation to higher credit quality bonds.
- Wide credit spreads generally lead to higher credit premiums.
 - Increase allocation to lower credit quality bonds.

Integrated, Market-Driven Approach

Pursuing expected term and credit premiums in a broadly diversified portfolio

		Term: Yield Curve Shape	
		NORMAL	FLAT/INVERTED
Credit Spreads	WIDE	<ul style="list-style-type: none"> • Longer duration • Lower credit quality 	<ul style="list-style-type: none"> • Shorter duration • Lower credit quality
	NARROW	<ul style="list-style-type: none"> • Longer duration • Higher credit quality 	<ul style="list-style-type: none"> • Shorter duration • Higher credit quality

Portfolio Implementation

Integrated Fixed Income Portfolio Management and Trading

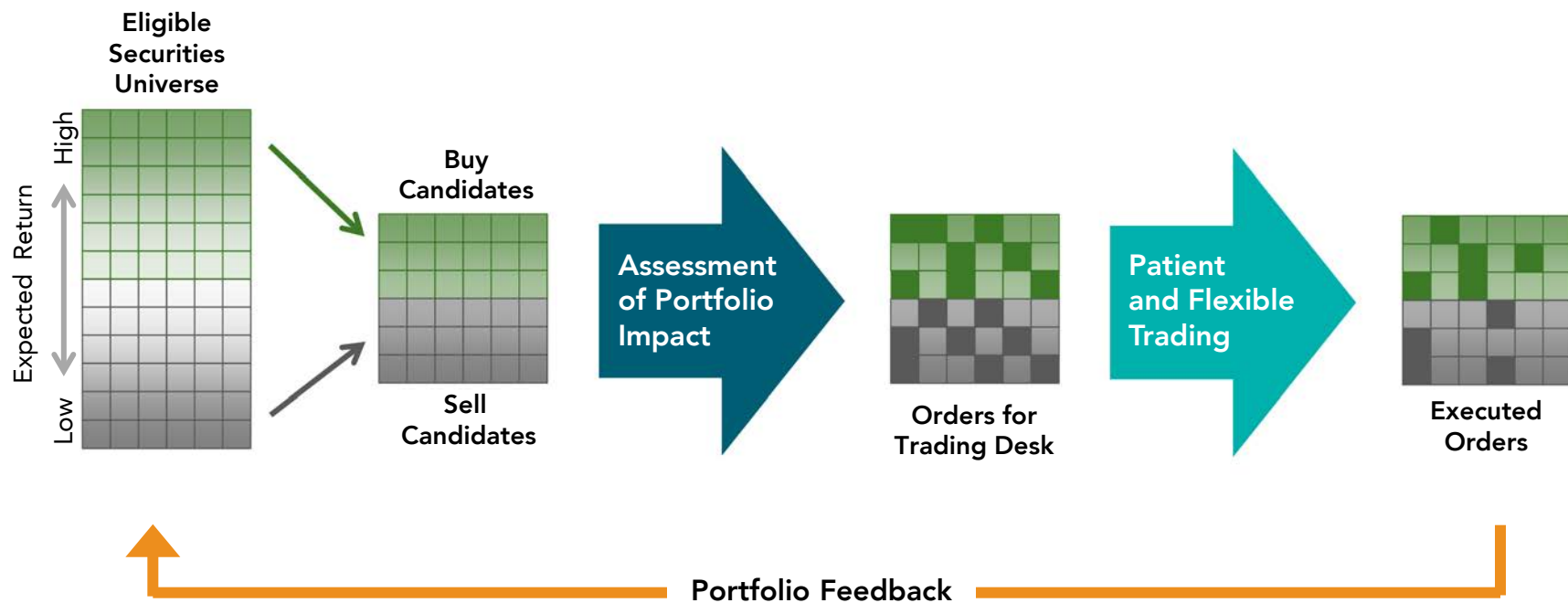
Pursuing higher expected returns and cost-effective execution

PORTFOLIO MANAGEMENT

Assesses Trading Cost-Adjusted Opportunities

TRADING

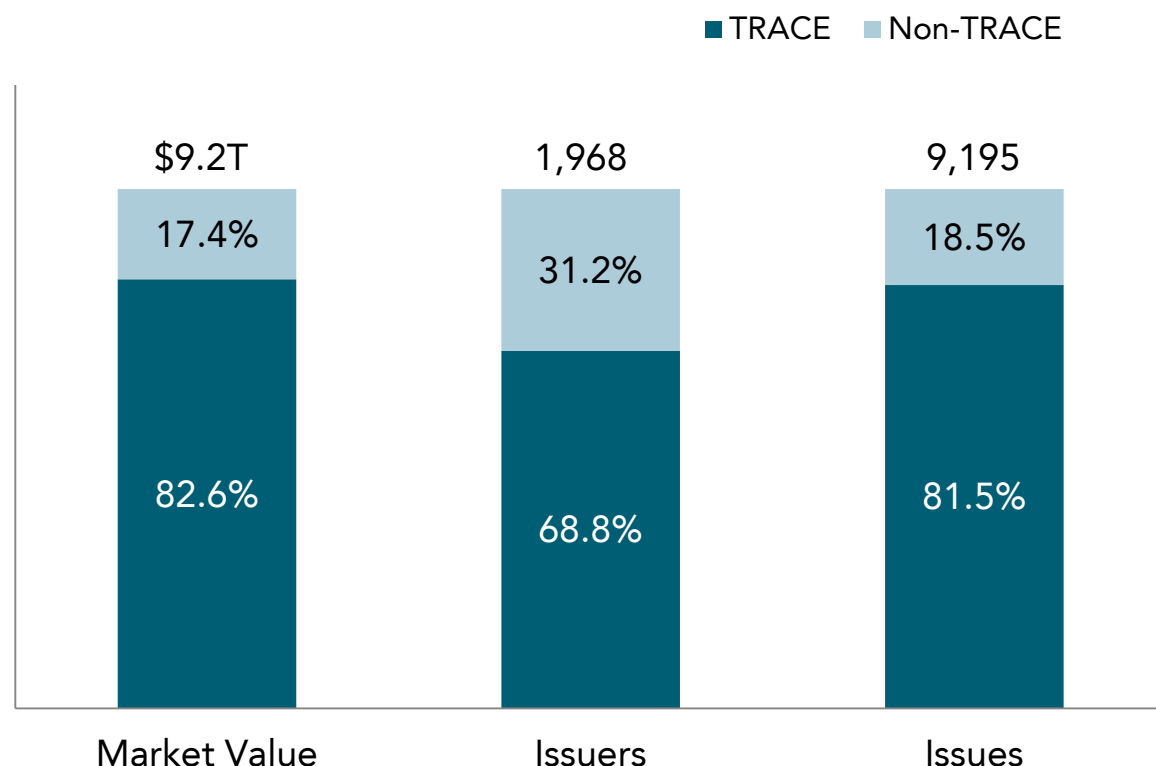
Interacts with Markets



Market-Informed Credit Research

Dimensional uses the power of markets to evaluate risk, affirm prices, and extend reach

GLOBAL INVESTMENT GRADE CREDIT (21 Eligible Countries)



- Market prices incorporate information compiled and assessed by all participants
- Global credit market coverage is robust
- Used efficiently and effectively, TRACE provides:
 - ✓ Superior observation of credit markets and issuers
 - ✓ Up-to-the-minute credit quality assessment for portfolios and bonds
 - ✓ Improved information symmetry when trading

As of 5/15/2014.

Source: Barclays. 12 developed markets curves; 21 developed markets countries; subject to change at Investment Committee discretion.

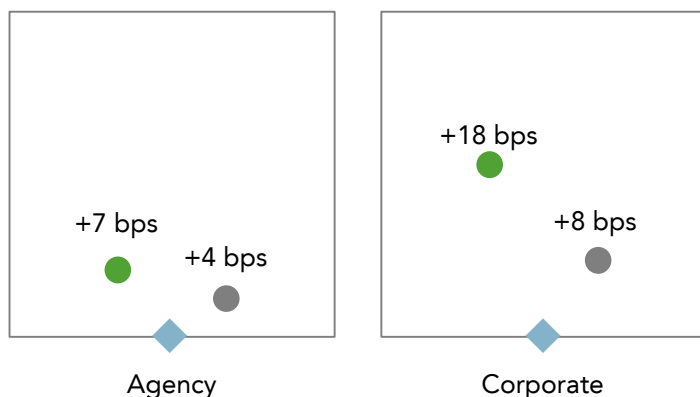
The Trade Reporting and Compliance Engine (TRACE) is the Financial Industry Regulatory Authority, Inc. (FINRA) developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed income securities. All broker-dealers who are FINRA member firms have an obligation to report transactions in corporate bonds to TRACE under a Securities & Exchange Commission (SEC) approved set of rules..

Relative Price Advantage of Patient Trading

Dimensional seeks to avoid demanding immediacy when trading

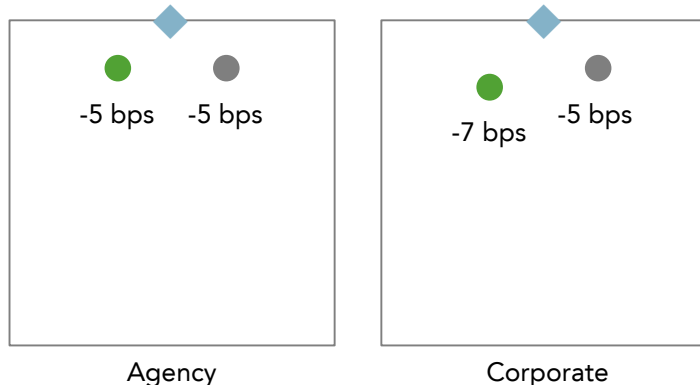
◆ Dimensional Trade¹ ● Trade Before ● Trade After

PURCHASE PRICE LOWER THAN ADJACENT TRADES (minimum \$100K trade size)



- Approach based on flexibility among issues/issuers of like term and credit characteristics.
- On the buy side, the average adjacent buy price is higher than Dimensional's buy price.

SALE PRICE HIGHER THAN ADJACENT TRADES (minimum \$100K trade size)



- On the sell side, the average adjacent sell price is lower than Dimensional's sell price.
- Flexible approach helps reduce costs

Source: TRACE. The Trade Reporting and Compliance Engine (TRACE) is the Financial Industry Regulatory Authority, Inc. (FINRA) developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed income securities.

1. "Dimensional" refers to Dimensional Fund Advisors LP.

bps (basis point): One hundredth of a percentage point (0.01%). Data compiled by Dimensional. TRACE-eligible corporate and agency bond trades from January 1, 2015 to December 31, 2015.

Comparative trades (prior and post) are filtered on trade size (excluding trades with size less than 100K par). This could have a considerable effect on the relative trade prices.

Past performance is no guarantee of future results. The performance returns calculated for the Dimensional strategies already reflect trading costs.

Risk Management Measures and Resources

Fixed Income Strategies

Liquidity Management	<ul style="list-style-type: none"> • Emphasis on liquid securities • Flexibility in issue selection • Real-time monitoring
Systematic Risk	<ul style="list-style-type: none"> • Monitor duration and credit quality of individual issues and overall portfolio • Monitor market prices and term/credit spreads
Concentration Risk	<p>Emphasis on diversification across multiple facets (as applicable):</p> <ul style="list-style-type: none"> • Issuer • Guarantor • Industry • Country • Currency

Counterparty Risk	<ul style="list-style-type: none"> • Emphasis on diversification • Governance oversight of Investment Committee, Portfolio Management, and Compliance groups
Implementation Risk	<ul style="list-style-type: none"> • Team managed • Systematic adjustments based on market activity • Governance oversight of Investment Committee, Portfolio Management, and Compliance groups
Operational Risk	<ul style="list-style-type: none"> • Customized Charles River Order Management System • Proprietary and third-party risk tools (e.g., Barclays POINT, Bloomberg) • Comprehensive pre- and post-trade compliance • Independent accountant, custodian bank, and auditors • Independent SSAE 16 audit performed annually

Strategy Summary

US Short Credit Strategy

Overview as of June 30, 2016¹

STRATEGY OVERVIEW						
Inception Date	April 2009					
Assets Under Management	\$4.3 billion					
Eligible Investments ²	Treasuries	Agencies		Corporates		
	Non-US sovereigns and corporates (USD-hedged)	Supranationals		Cash equivalents		
Credit Quality Eligibility	Treasury	◆	AAA	◆	A	◆
	Agency	◆	AA	◆	BBB	◆
Primary Investment Parameters ²						
Average Duration	Maximum of 3 years for portfolio, 5 years for individual security					
Industry Constraints	Maximum of 25%					
Guarantor Constraints	5% maximum in AAA + AA, 1% in A + BBB; no limit on US guaranteed bonds					
Issuer Constraints	3% maximum in AAA + AA, 1% in A + BBB; no limit on US government-backed securities					
Currency/Country Exposure	Fully-hedged, 12 currencies and 21 countries allowed					
Non-USD Constraints	Maximum of 30%					
Hedging Instruments	Forward contracts to hedge currency risk					
Leverage	None					
Benchmark						
BofA Merrill Lynch	1–5 Year US Corporate and Government Index					

In USD.

Information is supplemental to the compliant presentation. See Appendix.

1. Subject to change.

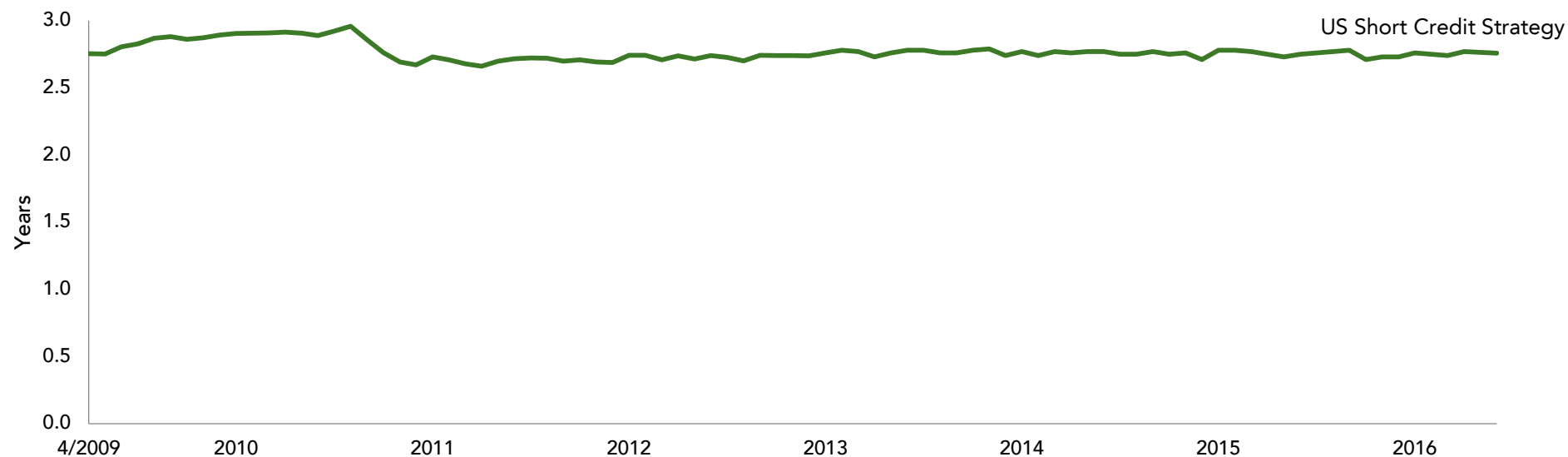
2. Not comprehensive.

US Short Credit Strategy

Characteristics as of June 30, 2016

	Average Duration (Years)	Average Maturity (Years)	Average Coupon	Yield to Maturity
US SHORT CREDIT STRATEGY	2.76	2.90	2.64	1.66
BofA Merrill Lynch 1–5 Year US Corporate and Government Index	2.73	2.87	2.47	1.09

AVERAGE DURATION (MONTHLY: APRIL 2009–JUNE 2016)



Representative account, information is supplemental to the compliant presentation. See Appendix.

Holdings are subject to change. The BofA Merrill Lynch Indices are used with permission; copyright 2016 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Merrill Lynch, Pierce, Fenner & Smith Incorporated is a wholly owned subsidiary of Bank of America Corporation. Indices are not available for direct investment.

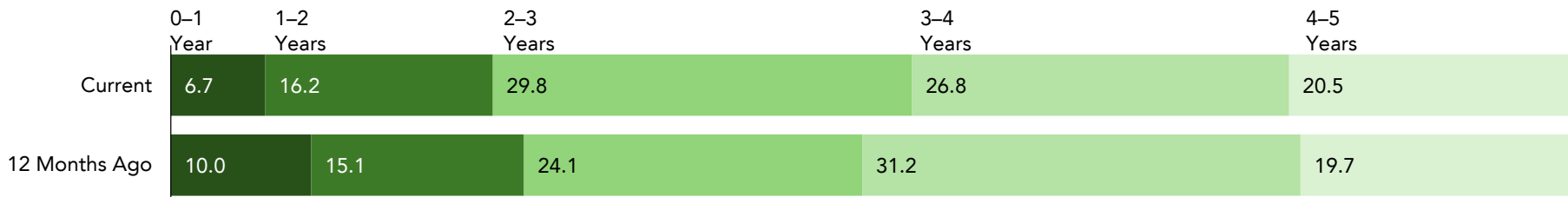
US Short Credit Strategy

Characteristics as of June 30, 2016

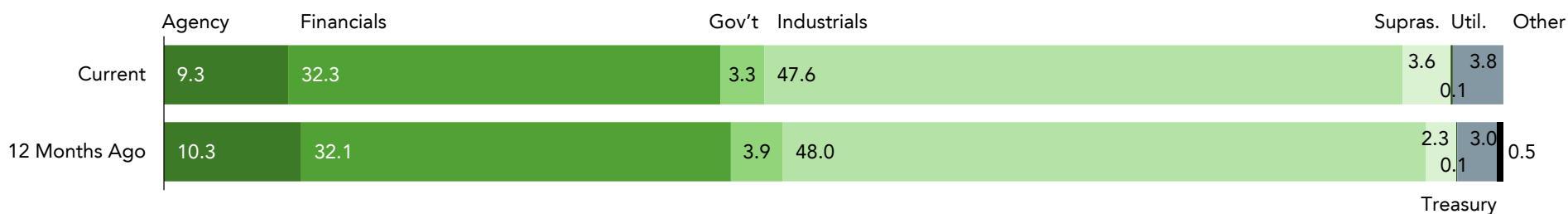
DISTRIBUTION BY CREDIT RATING¹ (%)



DISTRIBUTION BY MATURITY (%)



DISTRIBUTION BY SECTOR TYPE (%)



Representative account, information is supplemental to the compliant presentation. See Appendix.

1. Credit rating agencies Moody's Investors Service and Standard & Poor's Corporation rate the credit quality of debt issues. When the agencies' ratings differ for a security, the lower rating is applied for reporting purposes. The representative account did not hold any unrated securities.

Holdings are subject to change.

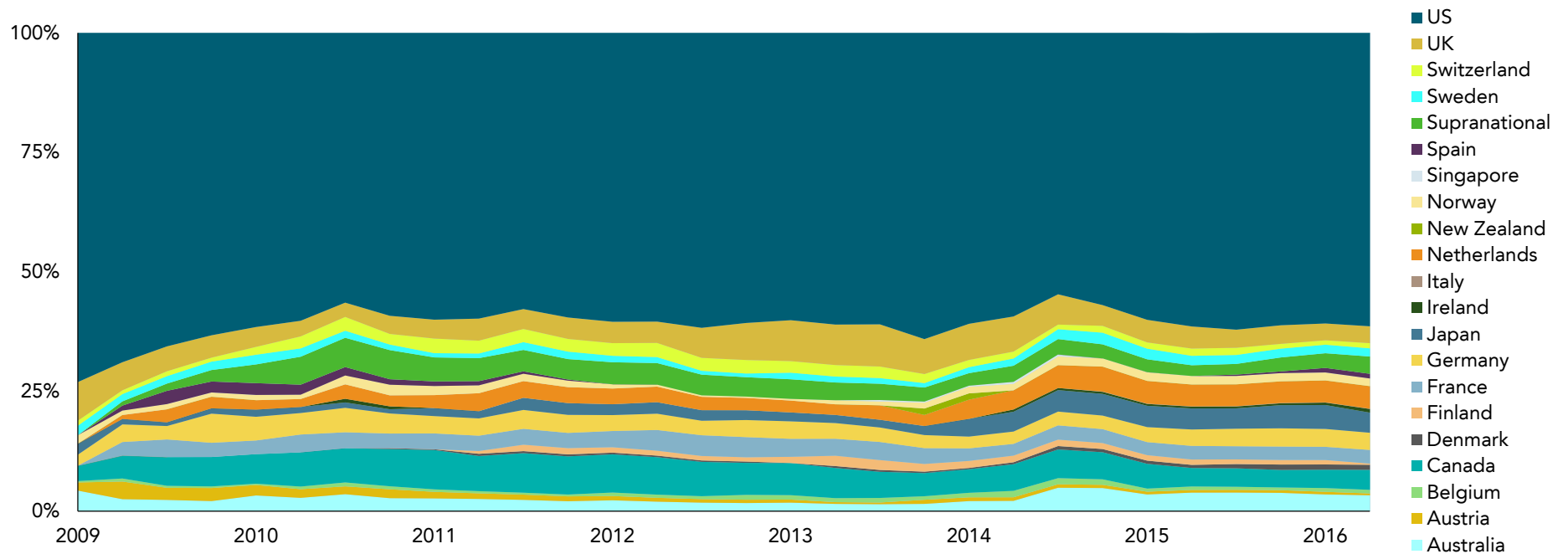
US Short Credit Strategy

Characteristics as of June 30, 2016

DISTRIBUTION BY COUNTRY OF ISSUANCE (%)



DISTRIBUTION OF COUNTRY OF ISSUANCE (QUARTERLY: APRIL 2009–JUNE 2016)



Representative account, information is supplemental to the compliant presentation. See Appendix. Holdings are subject to change.

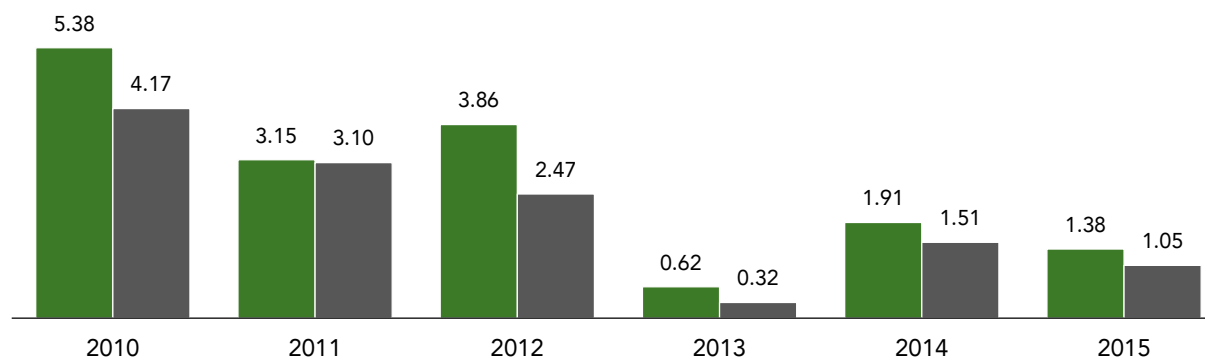
US Short Duration Credit Fixed Income Composite

Performance as of June 30, 2016

Annualized Returns ¹ (%)	2nd Quarter 2016	Year to Date	1 Year	3 Years	5 Years	Since 4/1/2009 Composite Inception
US SHORT DURATION CREDIT FIXED INCOME COMPOSITE	1.31	3.13	3.52	2.51	2.36	3.71
BofA Merrill Lynch 1–5 Year US Corporate and Government Index	0.98	2.61	2.65	2.00	1.85	2.70

CALENDAR YEAR RETURNS (%)

● US Short Duration Credit Fixed Income Composite ● BofA Merrill Lynch 1–5 Year US Corporate and Government Index



Information is supplemental to the Compliant Presentation for the composite. See Appendix.

Performance data shown represents past performance and is no guarantee of future results. Composite performance is presented gross of fees. Gross composite returns include the reinvestment of dividends and other earnings, and include the deduction of all trading expenses, but do not reflect the deduction of investment advisory fees or any other expenses that will be incurred in the management of the account. A client's investment return will be reduced by the advisory fees and other expenses it will incur in the management of its advisory account. Performance is presented in USD.

1. Returns for periods shorter than one year are not annualized.

The BofA Merrill Lynch Indices are used with permission; copyright 2016 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Merrill Lynch, Pierce, Fenner & Smith Incorporated is a wholly owned subsidiary of Bank of America Corporation. Indices are not available for direct investment.



Appendix

Fees

	If average balance remains above \$300mm	If average balance is below \$300mm	
	Fee on all assets	Fee on assets up to \$25 million	Fee on assets above \$25 million
Contra Costa County Employees Retirement Association Separate Account	0.10	0.20	0.10

Dimensional Global Investment Solutions

\$415 billion in global AUM as of June 30, 2016

(in billions)

US \$141.7

All Cap Core	\$44.3
All Cap Value	\$5.4
Growth	\$1.3
Large Cap	\$13.1
Large Cap Value	\$22.0
SMID Cap Value	\$13.7
Small Cap	\$19.0
Small Cap Value	\$16.4
Micro Cap	\$6.5

Emerging Markets \$58.5

All Cap Core	\$21.4
Value	\$26.2
Large Cap	\$5.6
Small Cap	\$5.4

Global Equity \$25.1

All Cap/Large Cap	\$16.7
Value	\$6.3
Small/SMID Cap	\$2.2

Developed ex US \$77.0

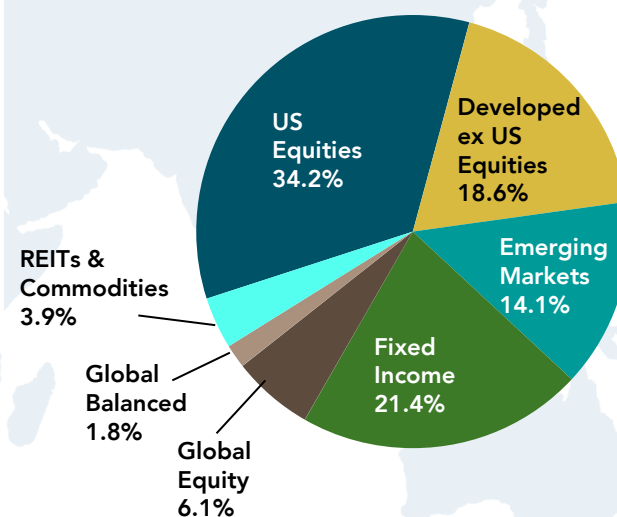
All Cap Core	\$21.9
All Cap Value	\$3.2
Growth	\$0.3
Large Cap	\$6.5
Large Cap Value	\$15.6
Small Cap	\$15.5
Small Cap Value	\$14.0

Other \$23.6

Real Estate	\$14.4
Commodities	\$1.6
Global Balanced	\$7.3
Target Date	\$0.2

Fixed Income \$88.6

US	\$47.5
US Tax-Exempt	\$5.0
Non-US & Global	\$31.8
Inflation-Protected	\$4.4

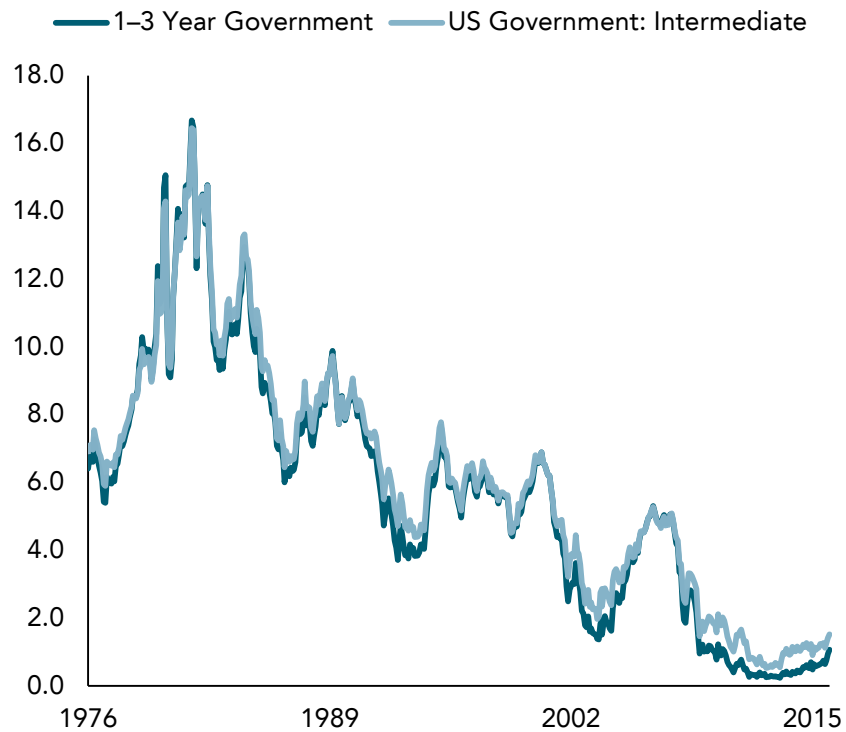


"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., and Dimensional Japan Ltd. All assets in US dollars. Numbers may not total 100% due to rounding.

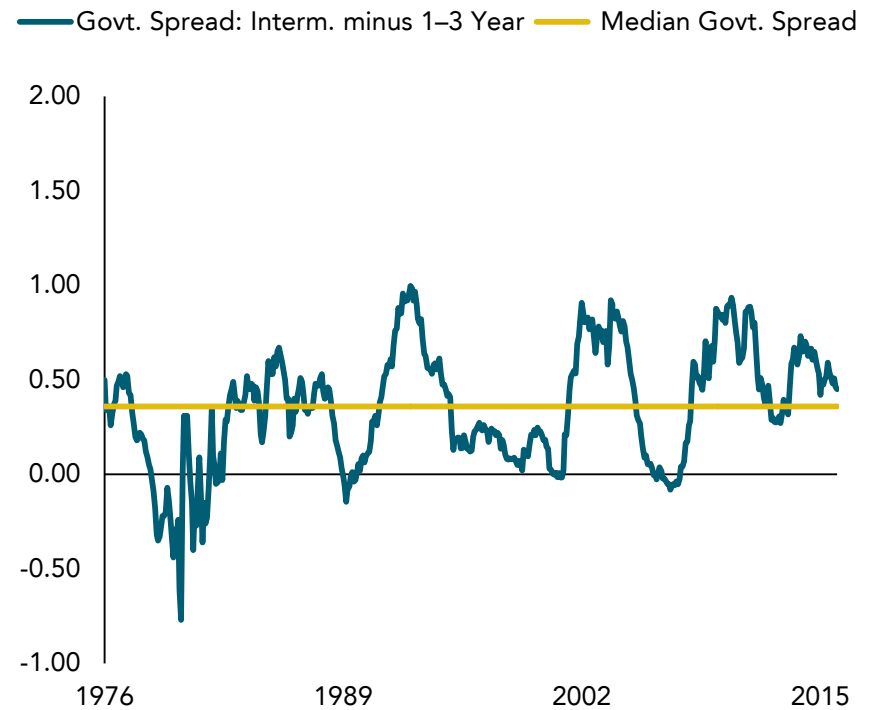
Variable Maturity

Term spreads have not been constant, 1976–2015

YIELDS:¹ INTERMEDIATE AND 1–3 YEARS



TERM SPREADS: INTERMEDIATE MINUS 1–3 YEARS

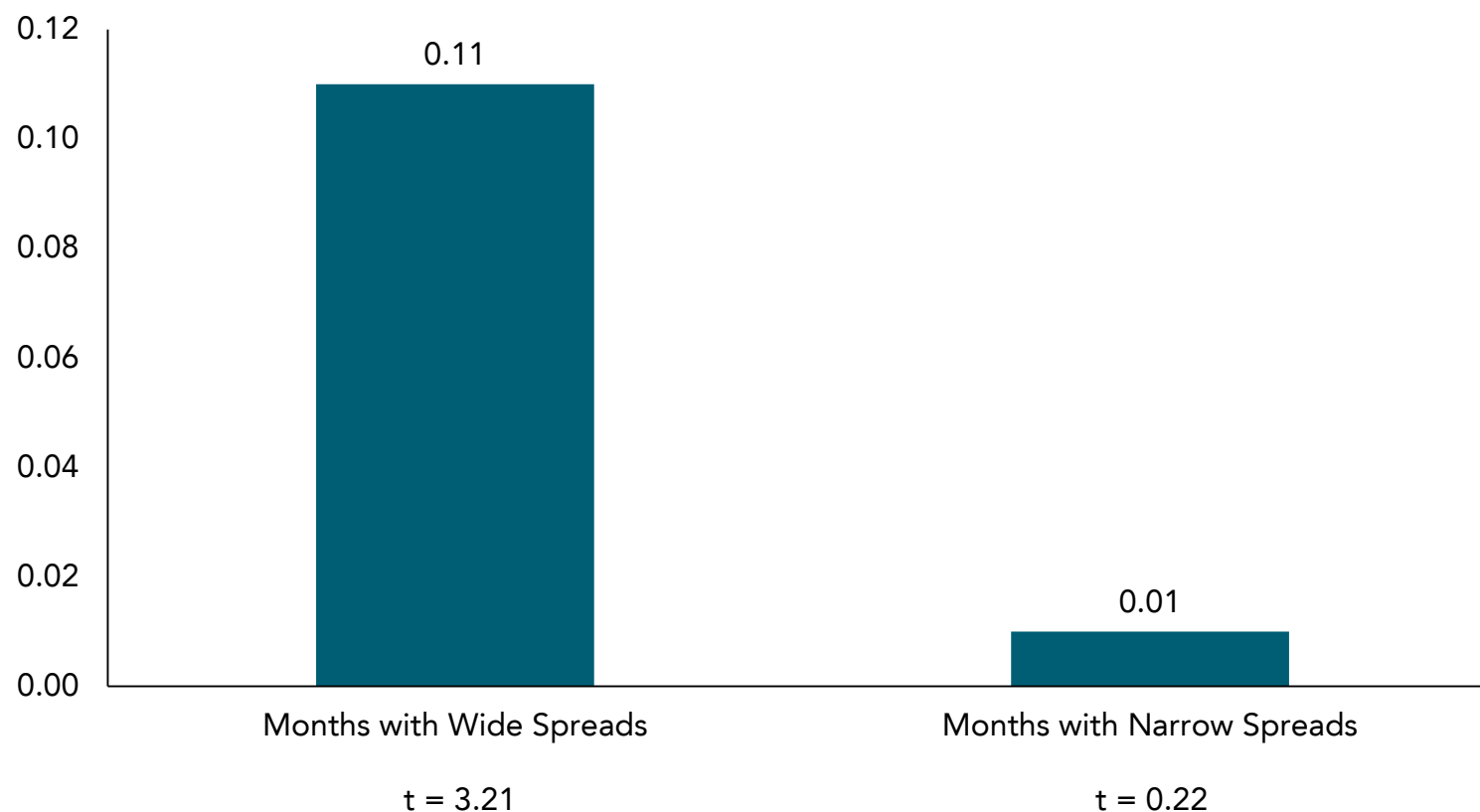


Monthly data in US dollars. Barclays 1–3 Year and Intermediate Indices.
 1. Yield to worst: Intermediate and 1–3 Years.

Variable Maturity

There is a relationship between current term spreads and future term premiums

AVERAGE MONTHLY RETURN DIFFERENCE: US GOVT. (INTERMEDIATE MINUS 1-3 YEARS), 1976-2015



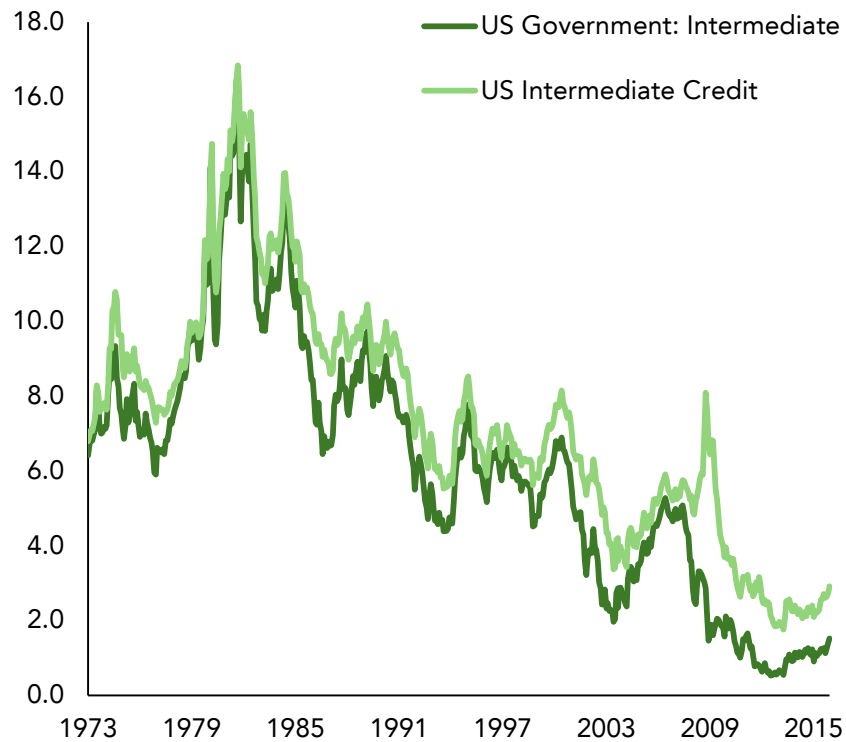
Information is supplemental to the compliant presentation. See Appendix.

Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Monthly data in US dollars. Barclays US Government 1-3 Year and Intermediate Indices. Wide spreads defined as when month-begin spreads are greater than the median spread. Narrow spreads defined as when month-begin spreads are less than the median spread.

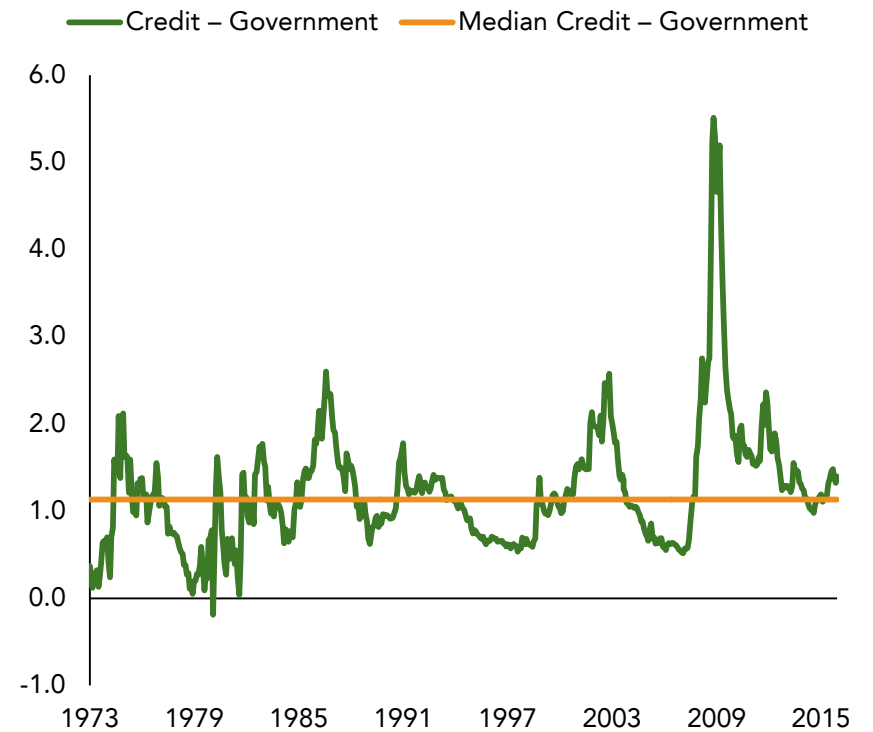
Variable Credit

Credit spreads have not been constant, 1973–2015

YIELDS: CREDIT AND GOVERNMENT

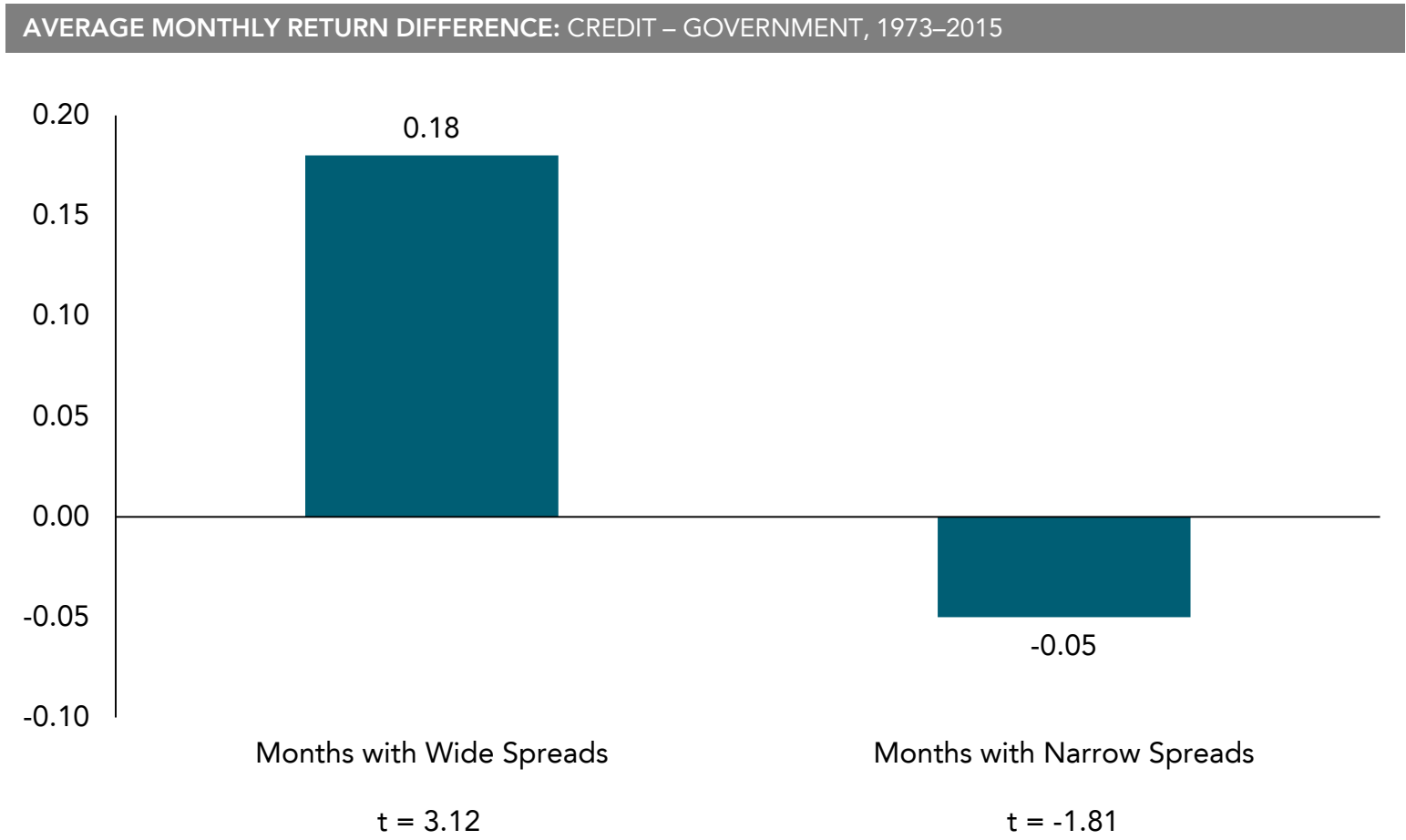


CREDIT SPREADS: CREDIT MINUS GOVERNMENT



Variable Credit

There is a relationship between current credit spreads and future credit premiums



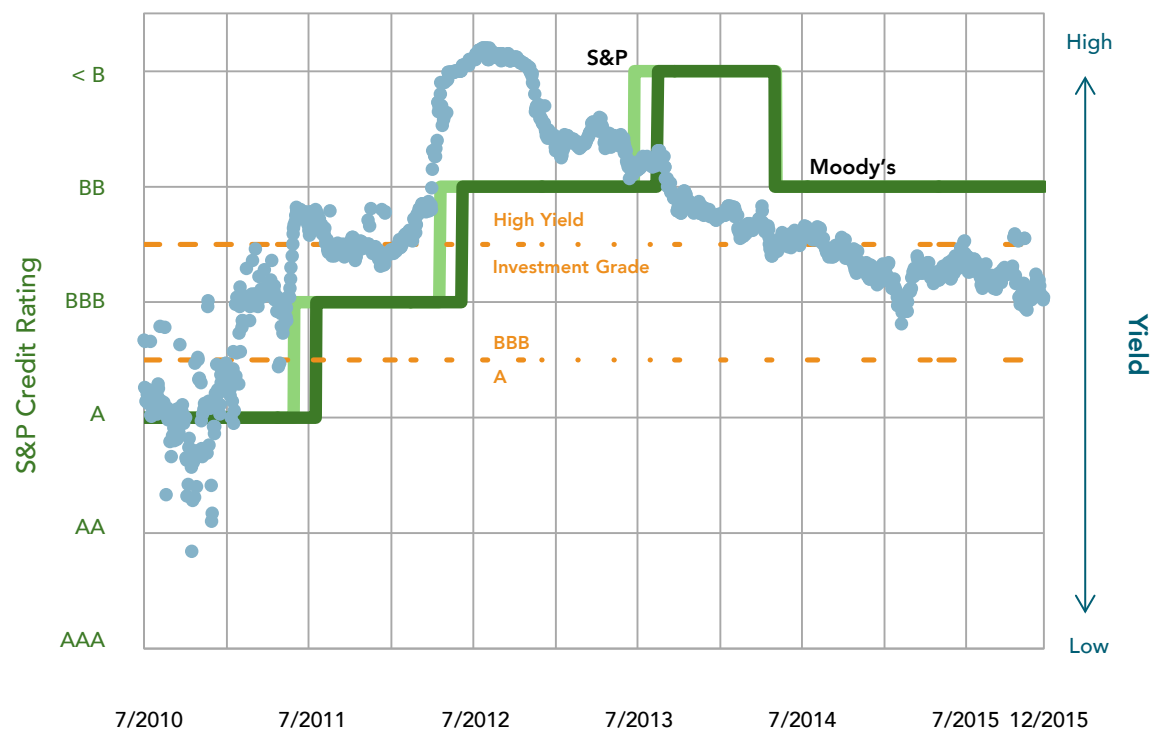
Information is supplemental to the compliant presentation. See Appendix.

Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Monthly data in US dollars. Government: Barclays US Government Intermediate Indices. Credit: Barclays US Intermediate Credit Aaa, Aa, A and Baa Indices. Wide spreads defined as when month-begin spreads are greater than the median spread. Narrow spreads defined as when month-begin spreads are less than the median spread.

Market-Based Credit Ratings vs. NRSROs¹

Market information can be used to evaluate issuer credit quality

SAMPLE SECURITY: TRACE PRINTS (JULY 2010–DECEMBER 2015)



- Dimensional believes that market prices for liquid bonds reflect all relevant information, risk, expected returns, and market participants' expectations.
- Given that, we rely upon prices/yields to reflect risk of individual issuers.
- Outlier analysis using TRACE data can identify riskier bonds ahead of NRSROs.
- Dimensional takes action to maintain risk profile of strategy holdings consistent with mandate.

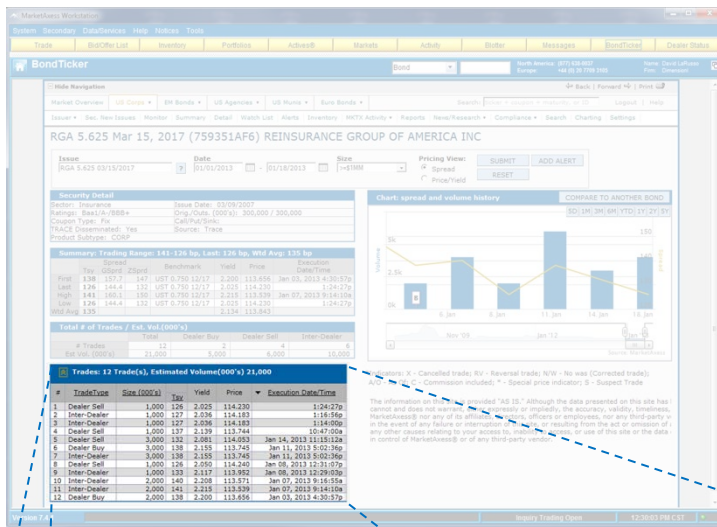
1. Credit rating agencies registered as such with the Securities and Exchange Commission (SEC) are known as Nationally Recognized Statistical Rating Organizations (NRSROs).

Source: TRACE. The Trade Reporting and Compliance Engine (TRACE) is the Financial Industry Regulatory Authority, Inc. (FINRA) developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed income securities. All broker-dealers who are FINRA member firms have an obligation to report transactions in corporate bonds to TRACE under a Securities & Exchange Commission (SEC) approved set of rules.

Past performance is no guarantee of future results.

Inventory Models and Locating Bonds

Transparency facilitates patient and flexible trading to add value



- TRACE allows Dimensional to:
 - Verify current prices
 - Evaluate credit quality
 - Interpret dealer inventory
- Dimensional uses robust inventory models to locate bonds and capitalize on possible counterparty motivations

Illustration: Sample Data Elements from TRACE

Example Interpretations

	Trade Type	Size (000's)	Spread to Tsy	Yield	Price	Execution Date	Time
1	Dealer Buy	2,000	138	2.200	113.656	Jan 03	4:30:57p
2	Dealer Sell	1,000	126	2.050	114.210	Jan 08	12:31:07p
3	Dealer Sell	1,000	137	2.139	113.744	Jan 14	10:47:00a
4	Dealer Sell	1,000	126	2.025	114.230	Jan 14	1:24:27p

- Dealers' inventory rises by \$2MM face value
- Customer buys bond at a higher price than dealer purchase; dealers' inventory reduced by \$1MM face
- Dealer has been holding remaining inventory for 6 days; we see an opportunity to capitalize on dealer's motivation and buy \$1MM at a lower price than previous customer
- Another customer purchases \$1MM at a higher price; dealer likely short \$1MM inventory

TRACE data is integral to strategy implementation

Purely illustrative examples. Interpretations and results may differ.

The Trade Reporting and Compliance Engine is the Financial Industry Regulatory Authority, Inc. (FINRA) developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed income securities. All broker-dealers who are FINRA member firms have an obligation to report transactions in corporate bonds to TRACE under a Securities & Exchange Commission (SEC) approved set of rules.

Presenters' Biographies

David Plecha, CFA

Global Head of Fixed Income and Vice President

David A. Plecha is Dimensional's global head of fixed income. Dave is an enthusiastic and incisive communicator at the firm's conferences and seminars. A member of the Investment Committee and Investment Policy Committee, he not only manages US and global portfolios but also maintains much of the fixed income research and client communications. Dave has been instrumental in the planning and execution of Dimensional's tax-managed separate account strategies in the US.

Dave received his Chartered Financial Analyst designation in 1996. Prior to joining Dimensional in 1989, he managed stock index futures and options for Leland O'Brien Rubinstein Associates and was an operations planner for Texas Instruments. He holds an MBA from the University of California, Los Angeles, and a BS in industrial and operations engineering from the University of Michigan.

Ted Simpson, CFA

Vice President

Ted Simpson, a vice president on the Institutional Services team, is responsible for developing and maintaining relationships with public pension funds, foundations, endowments, Taft-Hartley plan sponsors, and corporate pension and defined contribution plans.

Since joining Dimensional in 2002, Ted has held a number of positions within the firm. He began as a marketing consultant before taking a leadership role in the firm's defined contribution market initiative. Later, Ted got involved with Dimensional's consultant relations effort and eventually helped manage the group. Most recently, he has shifted his attention to working directly with clients.

Prior to joining Dimensional, Ted worked for Salomon Brothers, Legal & General, Mattel, Lion Nathan, and a fee-only RIA. He earned an MBA in marketing, strategy, and organizational behavior from the Kellogg School of Management at Northwestern University, and a BA in politics and economics from Princeton University. Ted is a CFA Charterholder and holds FINRA licenses 24, 7, and 63.

Risk Disclosures

Risks include loss of principal and fluctuating value.

Small and micro cap securities are subject to greater volatility than those in other asset categories.

International and emerging markets investing involves special risks such as currency fluctuation and political instability. Investing in emerging markets may accentuate these risks.

Sector-specific investments focus on a specific segment of the market, which can increase investment risks.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks, including changes in credit quality, liquidity, prepayments, call risk, and other factors. Inflation-protected securities may react differently from other debt securities to changes in interest rates.

Real estate investment risks include changes in real estate values and property taxes, interest rates, cash flow of underlying real estate assets, supply and demand, and the management skill and creditworthiness of the issuer.

Sustainability strategies use environmental and social screens that may limit investment opportunities for the strategy.

US Short Duration Credit Fixed Income Composite

Performance Presented in USD for the Period April 1, 2009 – December 31, 2015

Composite Inception: April 1, 2009

	Composite Gross Return (%)	Composite Net Return (%)	Benchmark Return (%)	Composite 3-Yr Std Dev. (%)	Benchmark 3-Yr Std Dev. (%)	Number of Portfolios	Internal Dispersion (%)	Composite Assets (M)	Firm AUM (M)
2015	1.38	1.18	1.05	1.41	1.23	≤5	-	3,943	388,263
2014	1.91	1.70	1.51	1.34	1.11	≤5	-	3,961	380,636
2013	0.62	0.42	0.32	1.52	1.19	≤5	-	3,355	337,523
2012	3.86	3.65	2.47	1.69	1.33	≤5	-	2,049	262,095
2011	3.15	2.95	3.10	-	-	≤5	-	1,367	213,749
2010	5.38	5.17	4.17	-	-	≤5	-	908	206,553
2009 Apr-Dec	7.59	7.43	4.41	-	-	≤5	-	424	164,539

Dimensional Fund Advisors claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Dimensional Fund Advisors has been independently verified for the period January 1, 2007 through December 31, 2015. 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 Firm: Dimensional Fund Advisors LP is an investment advisor registered with the U.S. Securities and Exchange Commission under the Investment Advisers Act of 1940, as amended. Effective November 2014, the firm was redefined to include all of Dimensional's global offices and subsidiaries that offer discretionary investment advisory services. Registration does not imply a certain level of skill or training. A list of composite descriptions and policies for valuing portfolios, calculating performance, and preparing compliant presentations, is available upon request.

Composite Description: The US Short Duration Credit Fixed Income Composite includes portfolios that invest in US-dollar denominated, high credit quality, investment-grade corporate bonds with a portfolio effective duration of three years or less. Prior to January 1, 2015, the minimum investment for inclusion in the composite was \$2,000,000. As of January 1, 2015, the minimum investment for inclusion in the composite is \$25,000,000. This composite is reported in USD terms. Composite holdings may differ significantly from benchmark holdings. The composite was created on June 30, 2012. The minimum investment for inclusion in the composite is \$25,000,000.

Benchmark Description: The benchmark for the US Short Duration Credit Fixed Income Composite is the BofA Merrill Lynch 1-5 Year US Corporate and Government Index. The index includes issues of US government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have a remaining term to final maturity of between one and five years. Index constituents are capitalization-weighted based on their current amount outstanding. It is not possible to invest in an index, which is unmanaged and does not reflect management expenses.

Fees & Performance: Composite returns reflect the deduction of all trading expenses. Gross returns do not reflect the deduction of investment advisory fees or any other expenses that may be incurred in the management of the account. Net of model fee returns are calculated by subtracting one twelfth of the model management fee from the monthly gross of fee composite return. The model management fee of 0.20% is equivalent to the highest standard fee currently offered to US institutional investors. Fees are described in Part 2A of Form ADV. Fee schedules for non-US Institutional investors may differ and are available upon request. Actual fees may vary. Performance is presented in USD. Past performance is no guarantee of future results. All returns reflect the reinvestment of dividends and other earnings. Composite returns are gross of reclaimable withholding taxes and net of non-reclaimable withholding taxes, where applicable.

Dispersion: The internal dispersion of annual gross returns is measured by the equal weighted standard deviation of portfolio returns included in the composite for the entire year. For those years when less than six portfolios were included in the composite for the full year, no dispersion measure is presented.

Standard Deviation: Three year ex post standard deviation is only presented for those periods that have 36 prior consecutive monthly composite returns. The three year annualized ex post standard deviation measures the variability of composite gross returns and benchmark returns over the preceding 36 months.

n INVESTMENT PRESENTATION n

TAXABLE SHORT DURATION

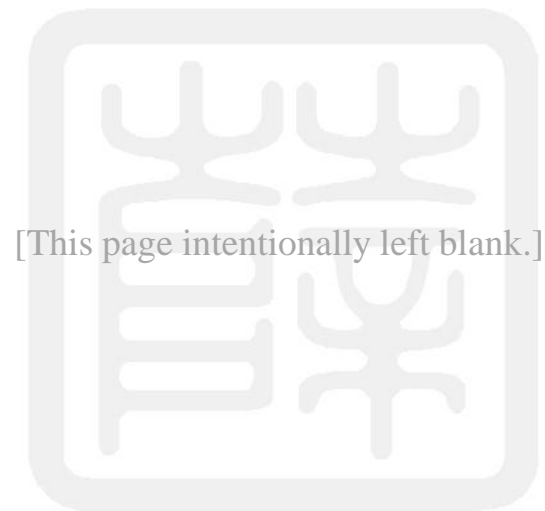
PREPARED FOR:



SEPTEMBER 14, 2016

Bryce Doty, CFA, Senior Vice President, Senior Portfolio Manager
Mark Book, CFA, CMA, Vice President, Portfolio Manager
Chris Rasmussen, CFA, Vice President, Portfolio Manager
John Gibas, Vice President, Institutional Relationships
Direct: (612) 359-2539
jjg@sitinvest.com

Sit Investment Associates, Inc.
3300 IDS Center
80 South Eighth Street
Minneapolis, MN 55402-2211
Phone: 612-332-3223
Web Site: www.sitinvest.com



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OVERVIEW

SIT INVESTMENT ASSOCIATES, INC.

Independent and Employee-owned Firm

- Founded by Eugene Sit in 1981
- Sit family and employee ownership
- A history of regulatory compliance
- The Sit Mutual Fund Group Rated #1 by Barron's*

Experienced and Motivated Team

- 75 total employees; 36 investment professionals
- Culture is driven by investment results
- Clients have direct access to the portfolio management team

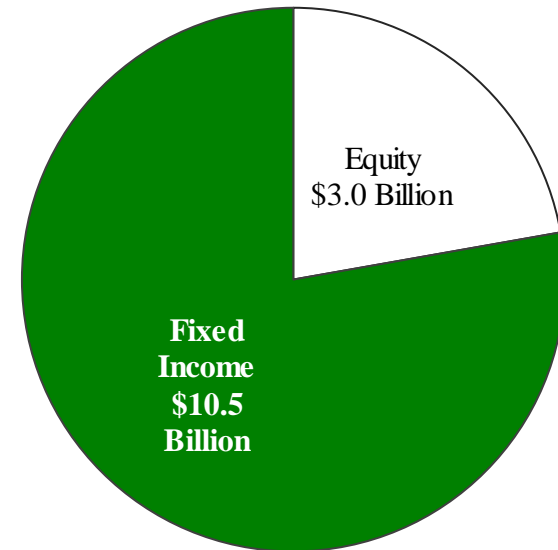
Successful Investment Performance Record

- Disciplined investment process that adds value
- Commitment to building a superior record through ongoing enhancements to our investment processes and resources

* Barron's rating #1 for 2015: 2/8/16 Edition

**TOTAL GROSS ASSETS UNDER MANAGEMENT:
\$ 13.5 BILLION**

June 30, 2016



OVERVIEW OF SIT INVESTMENT ASSOCIATES, INC.

Sit Investment Provides an Array of Product Offerings

Fixed Income		Custom Alpha (Absolute Return)	Growth Equity	
<p><u>Taxable</u></p> <p>Short Duration*</p> <p>Quality Income</p> <p>Intermediate Duration</p> <p>Total Return</p> <p>Taxable Municipal Bond</p> <p>Taxable Return Plus*</p> <p>High Income Return Plus</p> <p>Client Directed</p> <p>-----</p> <p><u>Mutual Funds</u></p> <p>U.S. Gov't Securities</p> <p>Quality Income</p>	<p><u>Municipal</u></p> <p>Short Duration</p> <p>Intermediate Duration</p> <p>Total Return</p> <p>Municipal Return Plus*</p> <p>Client Directed</p> <p>-----</p> <p><u>Mutual Funds</u></p> <p>Tax-Free Income</p> <p>Minnesota Tax-Free</p>	<p>Bond Only*</p> <p>Rising Interest Rates *</p> <p>S&P 500 *</p> <p>EAFE *</p> <p>5-Year Treasury *</p> <p>30-Year Treasury *</p> <p>Inflation Protected *</p> <p>Targeted Opportunity*</p> <p>Energy Return Plus</p> <p>Client Directed</p>	<p><u>Domestic</u></p> <p>Large Capitalization*</p> <p>Medium/Small Capitalization</p> <p>Small Capitalization*</p> <p>Dividend Growth</p> <p>-----</p> <p><u>Mutual Funds</u></p> <p>Balanced</p> <p>Dividend Growth</p> <p>Mid Cap Growth</p> <p>Small Cap Growth</p>	<p><u>International</u></p> <p>EAFE+*</p> <p>Pacific Basin*</p> <p>Global*</p> <p>Developing Markets</p> <p>-----</p> <p><u>Mutual Funds</u></p> <p>International Growth</p> <p>Developing Markets Growth</p> <p>Global Dividend Growth</p>

* Private Funds are available only to qualified investors

CORPORATE VALUES AND GOALS

Established with the Founding of the Firm in 1981

Corporate Values

- To operate under the highest ethical and professional standards
- To put our clients first in everything we do. We realize the success of our clients results in our success
- To maintain our uncompromising commitment and adherence to our investment philosophy and style; while continually seeking ways to enhance our successful investment process
- To always work hard for our clients, expending the effort they deserve in all aspects of the investment management and client reporting process

Corporate Goals

- To provide superior investment management products for discriminating investors
- To act as a true “extension” of the client’s own operations, providing highly individualized services in an increasingly challenging investment environment
- To control effectively our own destiny, avoiding imposed pressures for “growth,” thereby allowing us to provide the services we believe our clients require and deserve
- To have fun, on a partnership basis, with our clients

STRONG COMMITMENT TO CLIENT SERVICE

- Direct access to “hands-on” portfolio managers
- Assistance with preparation of investment guidelines and objectives
- Timely monthly reporting includes:
 - portfolio manager commentary
 - summary and detailed portfolio reporting
- Quarterly Investment Outlook and Strategy paper
- Annual client workshop
- Specialized reporting available
- Regularly scheduled client review meetings
- Custodial liaison and transaction reconciliation
- Confidentiality

FIXED INCOME INVESTMENT PHILOSOPHY

Sit Investment's fixed income philosophy stresses the consistent attainment of superior risk-adjusted returns using a conservative investment management approach with:

- Investment grade securities
- Special emphasis on interest income
- Significant stability of principal value

FIXED INCOME INVESTMENT OBJECTIVES

- Provide superior risk-adjusted returns compared to appropriate benchmarks and managers of a similar style
- Avoid excessive return volatility and generate consistent results over an economic cycle
- Customize portfolios to meet specific client needs

KEY PERSONNEL – FIXED INCOME MANAGEMENT

Policy and Oversight - *Sit Investment*

Roger J. Sit – Chairman, CEO, President and Global CIO

Years of Investment. Exp.

26

Years with SIA

18

Policy, Oversight and Portfolio Management – *Sit Fixed Income*

Michael C. Brilley – President, Senior Fixed Income Officer, Senior Portfolio Manager

48

31

Bryce A. Doty, CFA – Senior Vice President, Senior Portfolio Manager

26

20

Mark H. Book, CFA, CMA – Vice President, Portfolio Manager

30

15

Christopher M. Rasmussen, CFA – Vice President, Portfolio Manager

16

16

Paul J. Jungquist, CFA, CPA – Senior Vice President, Senior Portfolio Manager

22

22

Credit Analysis

Todd S. Emerson, CFA – Vice President, Research Analyst

21

9

Matthew T. Hilliard, CFA – Vice President, Research Analyst

12

8

Jessica A. Ersfeld, CFA – Research Analyst

9

8

Michael J. Reich, CFA – Research Analyst

9

11

Michael C. Hubbard, CFA – Research Analyst

10

4

Andrew J. Tich, CFA – Research Associate

8

9

Jason B. Miller, CFA - Research Associate

9

2

Peter A. Ellingboe - Research Associate

6

2

Charles D. Officer, III, CFA - Research Associate

7

1

Trading and Support

Kevin P. O'Brien, CFA– Municipal Bond Trader

13

15

Brian R. Gilbert – Computer Decision Support Associate

21

21

SIT TAXABLE FIXED INCOME STRATEGIES - TRADITIONAL AND ALTERNATIVES

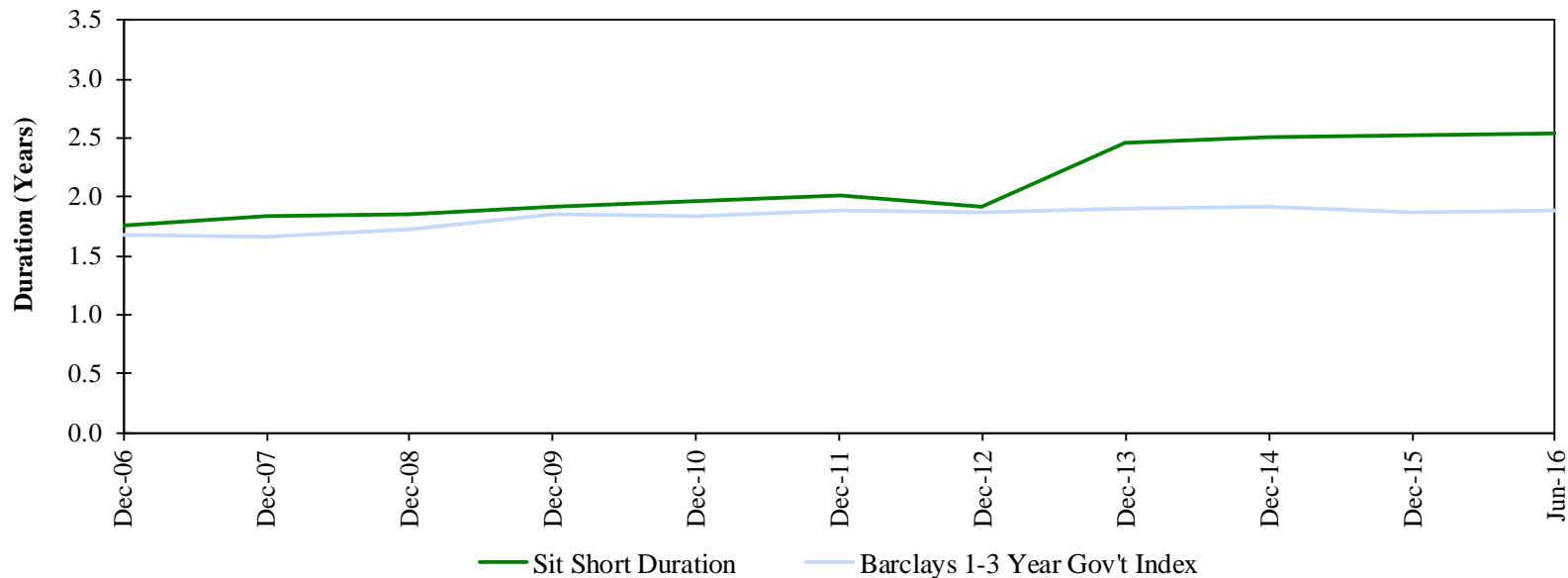
Strategy	Duration (Years)		Yield (6/30/16)		Benchmark
	Range	6/30/16	Sit	Benchmark	
Traditional					
Short Duration	0 – 3	2.5	2.12%	0.63%	Barclays 1-3 Year Gov't Bond Index
Quality Income	0 - 2	0.4	1.86%	0.89%	Barclays 1-3 Year Gov't/Credit Bond Index
Intermediate Duration (Government)	2 – 5	0.8	2.09%	0.91%	Barclays Intermediate Gov't Bond Index
Intermediate Duration	2 – 5	3.3	2.46%	1.41%	Barclays Intermediate Gov't/Credit Bond Index
Total Return	3 – 6	4.8	3.31%	1.91%	Barclays Aggregate Bond Index
Alternatives					
Liability Driven Investment (LDI)	Client Driven	15.1	6.79%	2.88%	Barclays Corporate Bond Index
Energy Return Plus (Closed-End Bond Funds)	Not Applicable		11.35%	7.48%	Alerian AMZ Index
High Yield Return Plus (Closed-End Bond Funds)	3 – 6	4.2	10.68%*	8.18%	Barclays U.S. Corporate High Yield Index
Taxable Municipal Bonds	4 – 7	5.1	3.34%	1.91%	Barclays Aggregate Bond Index
Targeted Opportunity (Closed-End Bond/Equity Funds)	Not Applicable (Equity/Fixed Income Blend)		7.59% Distribution Rate	N/A	8% Absolute Return
Return Plus (Closed-End Bond Funds)	3 – 6	4.7	6.33%	1.91%	Barclays Aggregate Bond Index
Custom Alpha (Absolute Return)	-1 to +1	0.6	5.61%	0.65%	Merrill Lynch 3 Month Libor

* Returns from a sample portfolio.

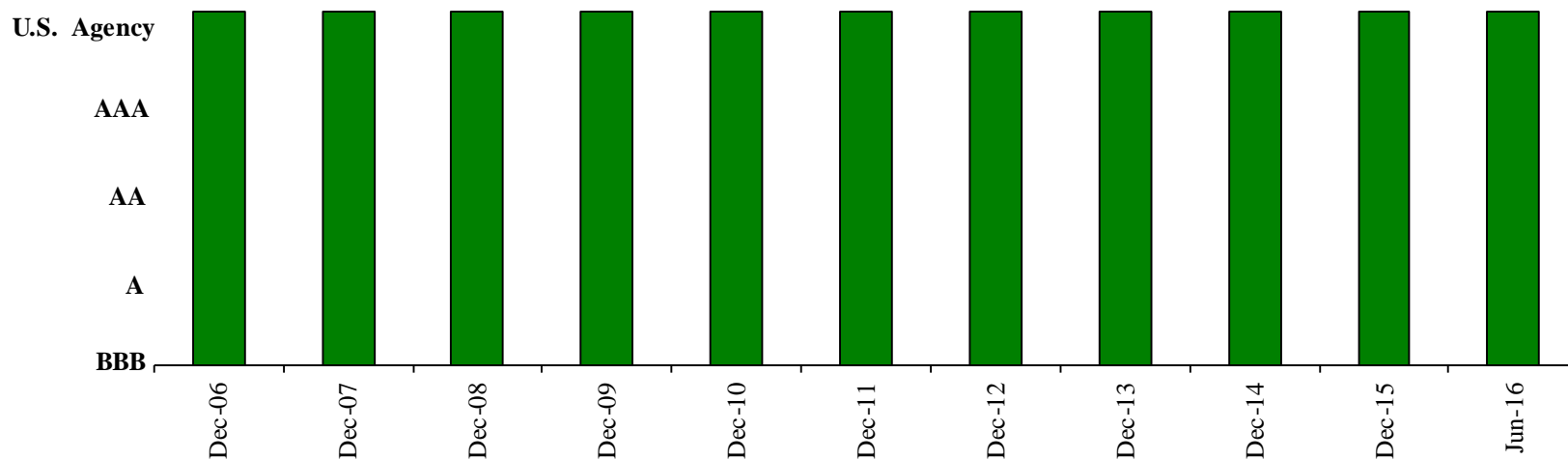
SIT SHORT DURATION

Strategy	Duration (years)		Yield (6/30/2016)		Benchmark
	Range	6/30/16	Sit	Benchmark	
Short Duration	0 – 3	2.5	2.12%	0.63%	Barclays 1-3 Year Gov't Bond Index

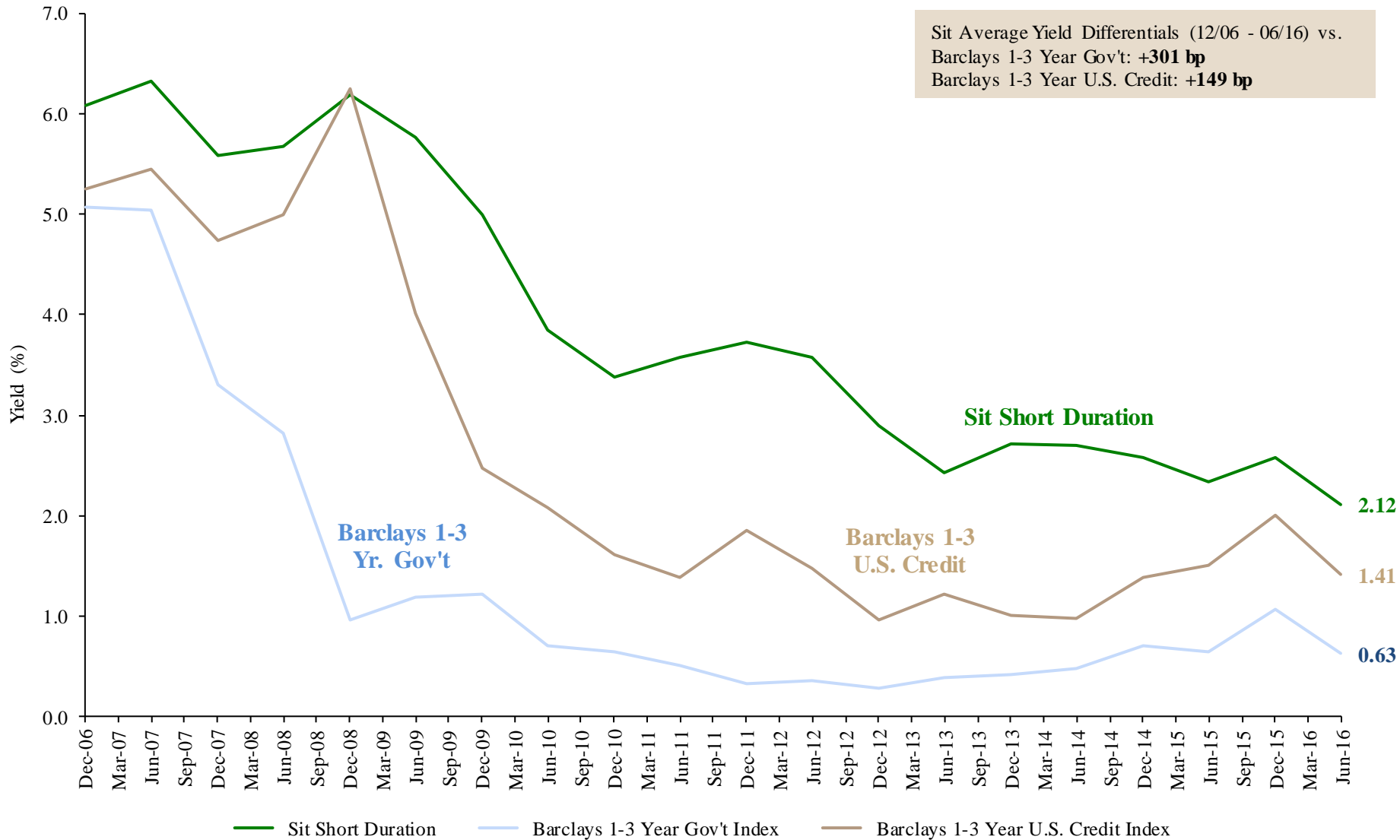
SHORT DURATION MINIMIZES INTEREST RATE RISK



HIGH AVERAGE QUALITY IS MAINTAINED



SIT SHORT DURATION PRODUCES STRONG CONSISTENT YIELD ADVANTAGE



SEASONED MORTGAGES DRIVE SECTOR WEIGHTINGS

As of June 30, 2016

Sit Short Duration	<u>Dec-06</u>	<u>Dec-07</u>	<u>Dec-08</u>	<u>Dec-09</u>	<u>Dec-10</u>	<u>Dec-11</u>	<u>Dec-12</u>	<u>Dec-13</u>	<u>Dec-14</u>	<u>Dec-15</u>	<u>Jun-16</u>
Government & Agencies	0 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Corporates	2	2	1	2	3	1	2	2	4	2	1
Asset-Backed Securities	3	2	1	1	1	0	1	1	1	1	1
Mortgage Pass-Throughs	81	74	77	78	75	79	71	63	60	56	58
Agency CMO's	12	14	18	18	18	17	22	31	33	38	39
Cash Equivalents	4	2	4	1	2	3	4	3	2	3	1
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

SIMPLIFIED MORTGAGE EXAMPLE

Sit invests primarily in seasoned high coupon mortgages.

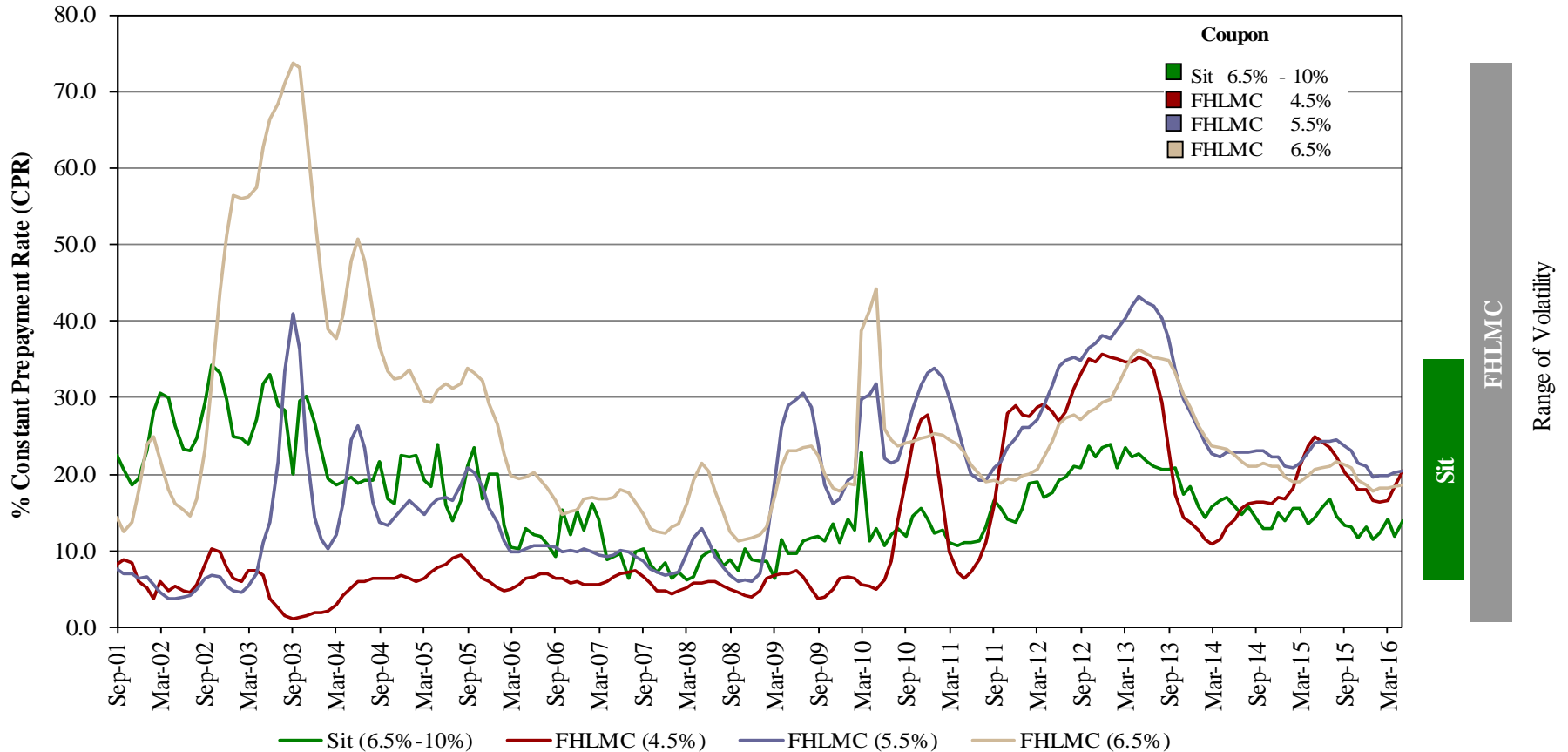
Coupon	Purchase Cost	—	Par	=	Premium Paid
7.00%	\$114,000		\$100,000		\$14,000

ONE YEAR PROFIT / LOSS SCENARIOS

	Interest Received	—	Premium Loss	=	Profit	Profit / Cost
1) Nobody refinances	\$7,000		\$0		\$7,000	6.14%
2) One-fifth is refinanced after 6 months	\$6,300		\$2,800		\$3,500	3.07%
3) Half is refinanced after 6 months	\$5,250		\$7,000		-\$1,750	-1.54%
4) All is refinanced after 6 months	\$3,500		\$14,000		-\$10,500	-9.21%

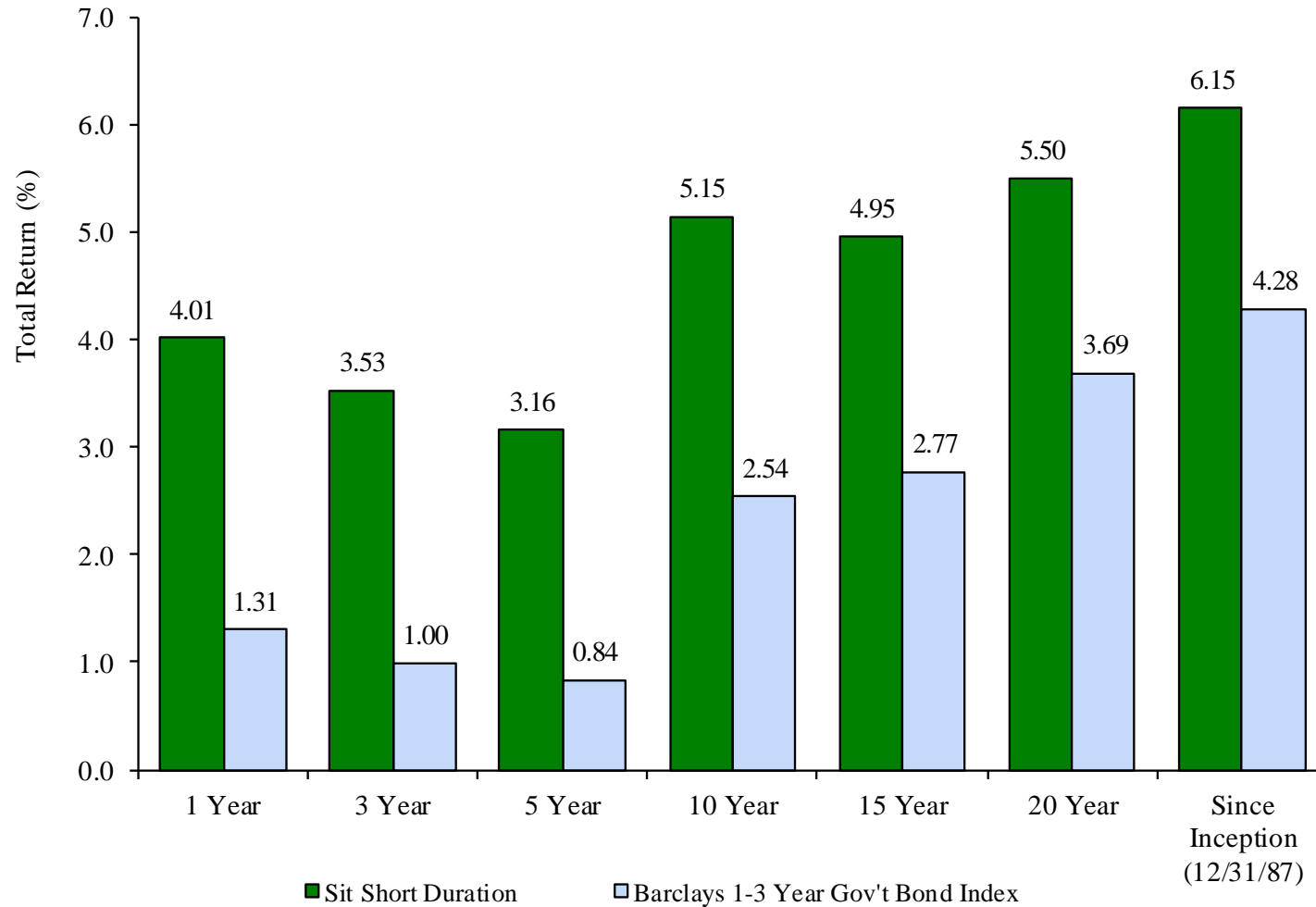
SIT SEASONED MORTGAGES HAVE LOWER PREPAYMENT EXPERIENCE

HIGH COUPON SEASONED MORTGAGES EXHIBIT THE MOST STABLE PREPAYMENTS.



SHORT DURATION ANNUALIZED RETURNS

As of June 30, 2016

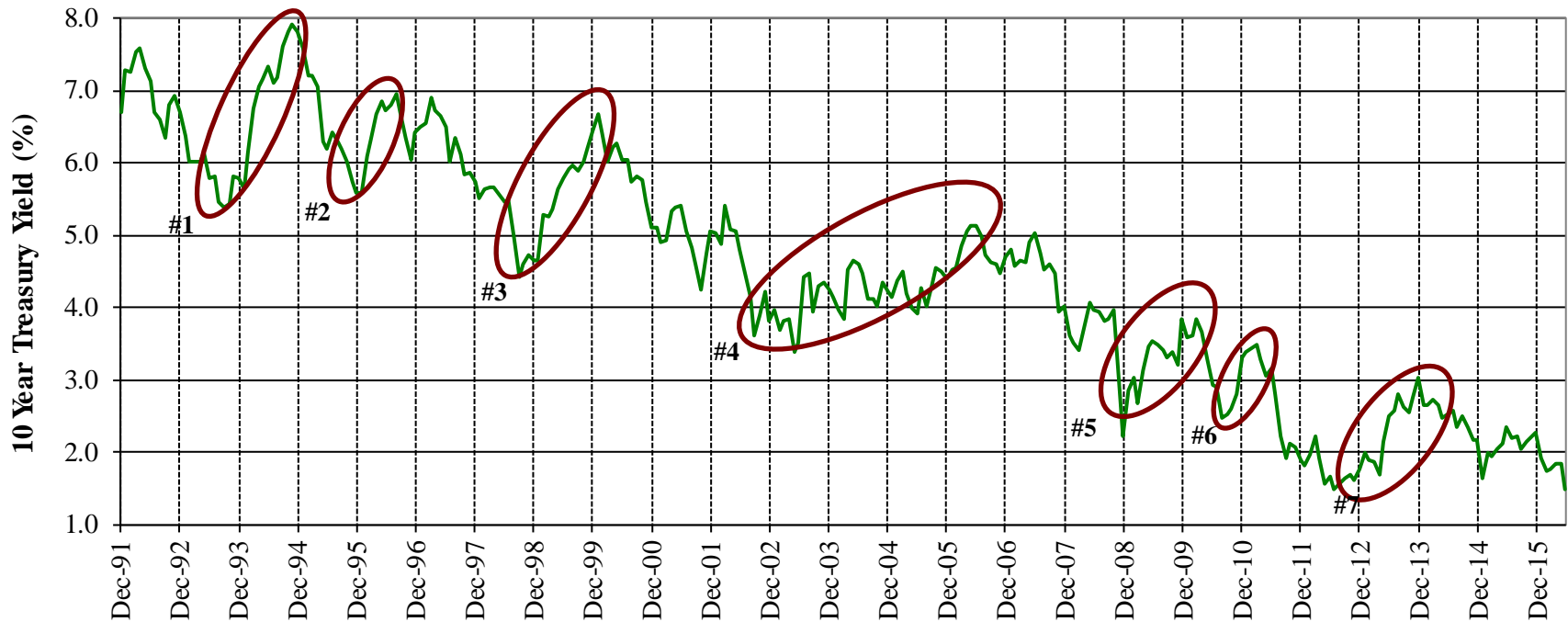


SIT SHORT DURATION PERFORMANCE COMPOSITE

<u>Year</u>	<u>1 Qtr.</u>	<u>2 Qtr.</u>	<u>3 Qtr.</u>	<u>4 Qtr.</u>	<u>Annual</u>	<i>Barclays 1-3 Yr. Gov't. Index</i>
1991	2.80%	2.60%	3.55%	3.47%	13.01%	11.67%
1992	1.02	3.99	2.48	0.97	8.70	6.24
1993	2.63	1.85	1.65	1.84	8.21	5.38
1994	0.92	1.26	1.50	0.90	4.66	0.52
1995	2.90	2.88	1.87	1.99	9.99	10.84
1996	1.69	1.08	1.94	2.08	6.96	5.08
1997	1.41	2.20	1.97	1.51	7.28	6.65
1998	1.62	1.71	1.85	1.49	6.84	6.97
1999	1.58	1.01	1.31	1.30	5.30	2.97
2000	1.24	1.78	2.45	2.34	8.04	8.17
2001	2.24	1.77	2.58	1.69	8.54	8.53
2002	1.42	2.30	1.97	1.33	7.20	6.01
2003	0.95	0.94	0.66	0.85	3.44	2.01
2004	1.61	-0.14	1.18	0.63	3.31	1.07
2005	0.54	1.30	0.46	0.79	3.12	1.73
2006	0.68	0.73	1.90	1.52	4.91	4.12
2007	1.81	1.10	2.01	2.19	7.30	7.10
2008	2.81	0.55	1.18	0.57	5.19	6.66
2009	2.18	2.53	2.94	1.81	9.80	1.41
2010	1.82	1.33	1.89	1.57	6.77	2.40
2011	1.38	1.77	0.93	0.93	5.10	1.56
2012	1.07	1.42	1.19	0.36	4.10	0.51
2013	0.42	-1.14	0.44	0.03	-0.26	0.37
2014	0.76	1.08	0.92	1.17	3.98	0.64
2015	2.11	0.02	0.95	-0.24	2.86	0.57
2016	2.19	1.06	---	---	3.28	1.42
Annualized Return (Inception - 2Q16):					6.15	4.28

STRONG TOTAL RETURN OUTPERFORMANCE IN BEAR MARKETS

10 Year Treasury Yield (Highlighting 7 Bear Markets) - 12/31/91 - 6/30/16



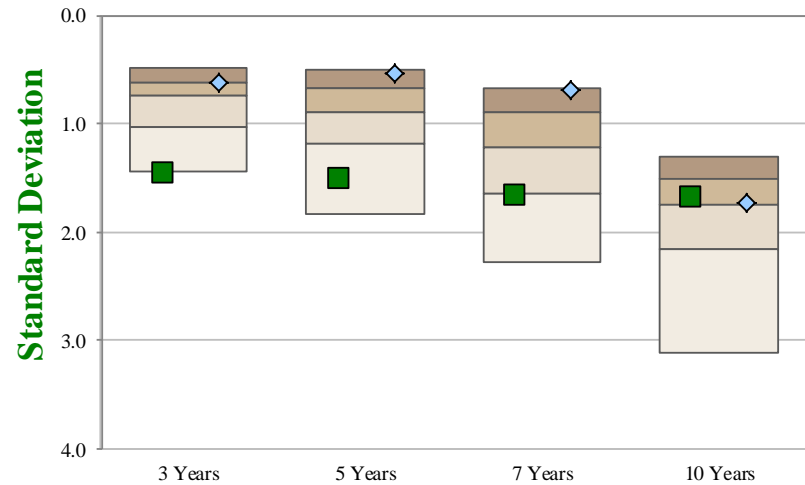
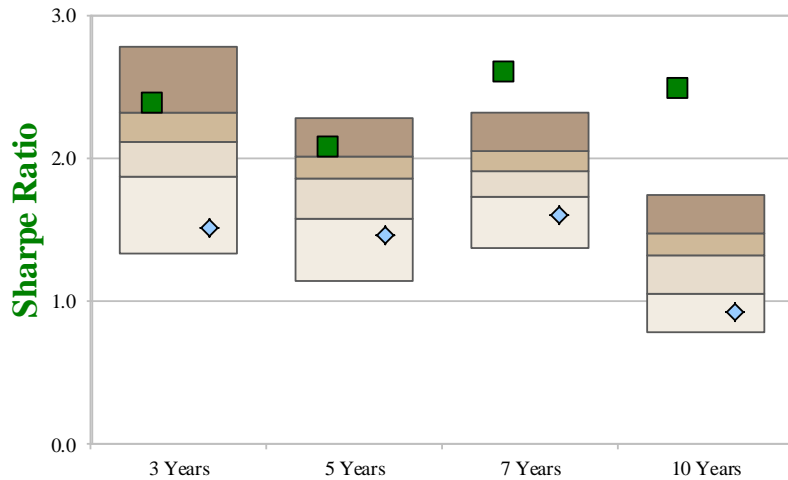
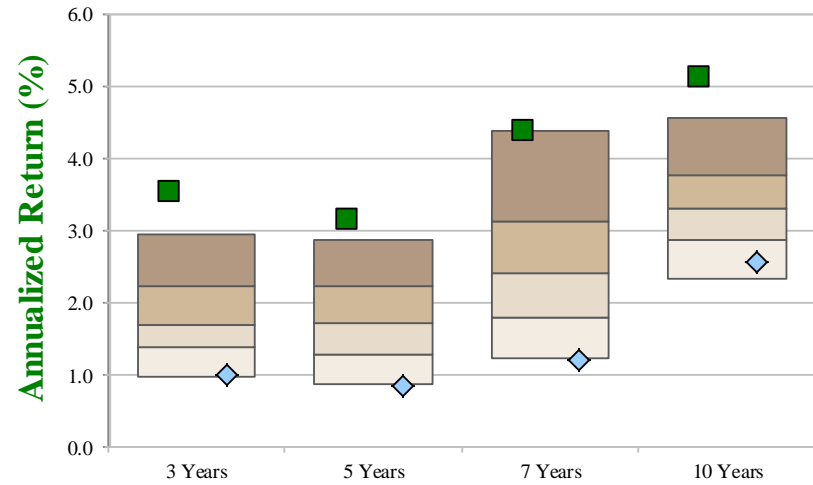
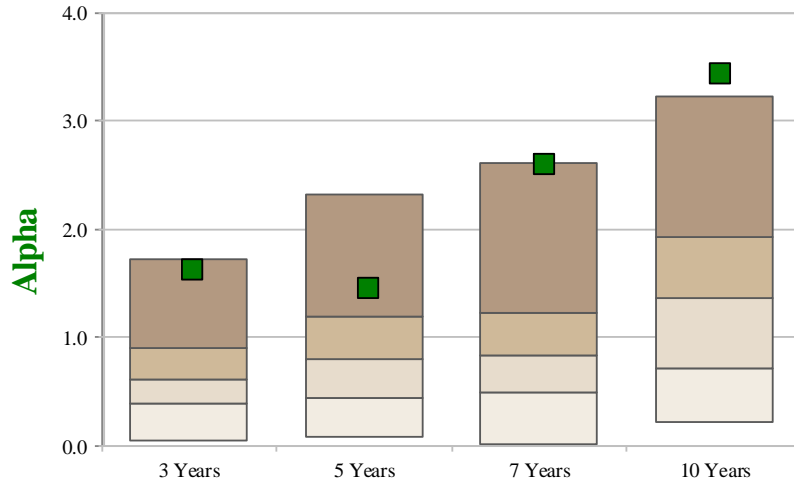
Sit Short Duration – Total Return Outperformance*

#1 Sit	+503	basis points vs. Barclays 1-3 Year Gov't (10/31/93 – 12/31/94)
#2 Sit	+160	basis points vs. Barclays 1-3 Year Gov't (1/31/96 – 8/31/96)
#3 Sit	+318	basis points vs. Barclays 1-3 Year Gov't (9/30/98 – 1/31/00)
#4 Sit	+523	basis points vs. Barclays 1-3 Year Gov't (5/31/03 – 06/30/06)
#5 Sit	+838	basis points vs. Barclays 1-3 Year Gov't (12/31/08 – 12/31/09)
#6 Sit	+317	basis points vs. Barclays 1-3 Year Gov't (9/30/10 – 3/31/11)
#7 Sit	+027	basis points vs. Barclays 1-3 Year Gov't (7/31/12 – 12/31/13)

*Outperformance is cumulative by period



SIT SHORT DURATION STRATEGY VS. UNIVERSE – As of 6/30/16



■ Sit Short Duration ◆ Barclays 1-3 Yr. Gov't

Universe: eVestment US Short Duration Fixed Income. (Observations on 7/29/2016: 3yr=206; 5yr=194; 7yr=183; 10yr=170). eVestment Alliance and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable; however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. All categories not necessarily included, and totals may not equal 100%. Copyright: 2012-2015 eVestment Alliance, LLC. All Rights Reserved.

INVESTMENT PROFESSIONALS ORGANIZATION CHART

Roger J. Sit – Chairman, CEO, President and Global CIO

Fixed Income Management

Michael C. Brilley
 Bryce A. Doty
 Mark H. Book
 Paul J. Jungquist
 Christopher M. Rasmussen
 Kevin O'Brien
 Todd S. Emerson
 Matthew T. Hilliard
 Jessica A. Ersfeld
 Michael J. Reich
 Michael C. Hubbard
 Brian R. Gilbert
 Andrew J. Tich
 Peter A. Ellingboe
 Jason B. Miller
 Charles D. Officer

Global Equity Management

Roger J. Sit
 Kent L. Johnson
 Ronald D. Sit
 Robert W. Sit
 David A. Brown
 Mark A. Pepper
 Michael J. Stellmacher
 Denise A. Anderson
 Michael T. Manns
 Mike R. Marzolf
 Stacey M. Curme
 Joseph R. Eshoo
 Raymond E. Sit
 Tasha M. Murdoff
 Ningning Tang
 Bradley W. Meyer
 Eric M. Manthe
 Nicholas D. Tich
 Lee J. Feltman
 Sam K. Krawczyk

Administrative, Marketing and Client Reporting

Paul E. Rasmussen
 Scott A. Spalding
 Robert B. Harrigan
 Philip J. Fiskow
 John J. Gibas
 Debra K. Beaudet
 Carla J. Rose
 Mark D. Madden
 Christopher C. Sour
 Crawford M. Campbell
 Kelly K. Boston
 Paula H. Fields

Mutual Fund Investor Services

Steven P. Benjamin
 Rick B. Schuett
 Scott M. Lambrecht
 Kathleen D. Larkin
 Paul S. Hsueh
 Joe H. Lepinski
 John J. Ro
 Kevin R. McFadyen
 Conner Murnighan

BIOGRAPHIES



Roger J. Sit

CEO and Global Chief Investment Officer
26 years investment experience

1998 - Present Sit Investment Associates, Inc.
1991 - 1998 Goldman Sachs & Co., Vice President
1984 - 1990 Captain, United States Air Force

Harvard Business School, MBA (1991)
University of Southern California, MS (1987)
United States Air Force Academy, BS (1984)

rjs@sitinvest.com



Paul J. Jungquist, CFA, CPA, CGMA

Senior Vice President, Senior Portfolio Manager
22 years investment experience

1994 - Present Sit Investment Associates, Inc.
1990 - 1994 Twin Cities Testing, Assistant Controller
1984 - 1990 Grant Thornton, Auditor

University of Minnesota, MBA (1993)
University of Notre Dame, BBA (1984)

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Michael C. Brilley

President, Sit Fixed Income, Senior Fixed Income Officer
48 years investment experience

1984 - Present Sit Investment Associates, Inc.
1974 - 1984 First Bank, N.A., Vice President
1970 - 1974 Merchant National Bank of Indianapolis,
Investment Officer
1968 - 1970 Continental Illinois National Bank of Chicago,
Investment Advisor

Milliken University, BS (1967)

mcb@sitinvest.com



Mark H. Book, CFA, CMA

Vice President, Portfolio Manager
30 years investment experience

2000 - Present Sit Investment Associates, Inc.
1998 - 2000 US Bancorp Piper Jaffray, Corp., VP, Strategist
1997 Norwest Investment Mgmt., Portfolio Manager
1991 - 1996 Insight Investment Mgmt., Portfolio Manager
1986 - 1991 Reliastar Financial Corp., Security Trader

University of Minnesota, MBA (1992)
University of Minnesota, BA (1986)

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Bryce A. Doty, CFA

Senior Vice President, Senior Portfolio Manager
26 years investment experience

1995 - Present Sit Investment Associates, Inc.
1988 - 1995 Minnesota Mutual Life Insurance Company,
Investment Analyst

University of Minnesota, MBA (1992)
Hamline University, BA (1988)

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Christopher M. Rasmussen, CFA

Vice President, Portfolio Manager
16 years of investment experience

1999 - Present Sit Investment Associates, Inc.

University of Minnesota, MBA (2004), BSB (2001)

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FIXED INCOME BIOGRAPHIES



Todd S. Emerson, CFA

Vice President

21 years investment experience

2006 - Present Sit Investment Associates, Inc.
2002 - 2006 Thomson West, Finance Manager
1998 - 2001 U.S. Bank, Senior Financial Analyst
1994 - 1998 RBC Dain Rauscher, Public Finance Associate
1991 - 1993 Avco Financial Services, Assistant Manager

University of Minnesota, MBA (1994)
University of Wisconsin - Eau Claire, BBA (1991)

tse@sitinvest.com



Matthew T. Hilliard, CFA

Vice President

12 years investment experience

2007 - Present Sit Investment Associates, Inc.
2005 - 2007 Stonehill Group, Valuation Analyst
2004 - 2005 U.S. Bank, Corporate, Trust Analyst

University of Minnesota, MBA (2008)
University of Wisconsin - La Crosse, BA (2002)

mth@sitinvest.com



Jessica A. Ersfeld, CFA

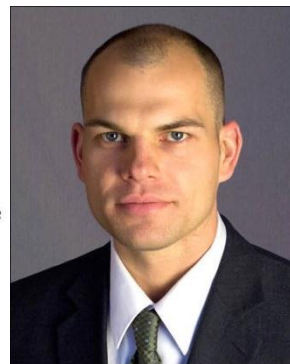
Research Analyst

9 years of investment experience

2007 - Present Sit Investment Associates, Inc.
2002 - 2007 Wells Fargo Bank, Relationship Specialist II

University of Minnesota, MBA (2006)
University of St. Thomas, BA (2000)

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Michael J. Reich, CFA

Research Analyst

9 years investment experience

2004 - Present Sit Investment Associates, Inc.

University of Minnesota, MBA (2009)
University of St. Thomas, BA (2005)

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Kevin P. O'Brien, CFA

Municipal Bond Trader

13 years investment experience

2008 - Present Sit Investment Associates, Inc.
2005 - 2008 Captain, Minnesota Army National Guard
1997 - 2005 Sit Investment Associates, Inc.

University of Maryland University College, MS (2015)
University of St. Thomas, BA (1997)

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Andrew J. Tich, CFA

Research Associate

8 years investment experience

2006 - Present Sit Investment Associates, Inc.

University of St. Thomas, BS (2009)

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FIXED INCOME BIOGRAPHIES



Michael C. Hubbard, CFA

Research Analyst
10 years investment experience

2011 - Present Sit Investment Associates, Inc.
2008 - 2011 State Street Investment Analytics, Consultant
2005 - 2008 Adviser Investments, Analyst

Boston College, BS (2001)

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Peter A. Ellingboe

Research Associate
6 years investment experience

2013 - Present Sit Investment Associates, Inc.
2011 - 2013 Q Investments, L.P., Investment Analyst
2006 - 2009 The Boston Consulting Group, Consultant

Northwestern University, MBA (2011)
Pomona College, BA (2006)

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Jason B. Miller, CFA

Research Associate
9 years investment experience

2013 - Present Sit Investment Associates, Inc.
2011 - 2013 Alerus Financial, Investment Research Analyst
2007 - 2011 Edward Jones, Investment Advisor

Minnesota State University, BS (2007)

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Charles D. Officer, CFA

Research Associate
7 years investment experience

2014 - Present Sit Investment Associates, Inc.
2012 - 2014 Hartford Investment Management,
Research Associate
2009 - 2012 The Hartford, Marketing Analyst

Concordia College, BA (2009)

cdo@sitinvest.com



Brian R. Gilbert

Decision Support Systems
21 years investment experience

1994 - Present Sit Investment Associates, Inc.
1992 - 1994 Norwest Mortgage, Inc.,
Conventional Post-Closing Coordinator
1990 - 1992 Carlson Companies, T5 Project Coordinator

Northwestern College, BA and BS (1990)

brg@sitinvest.com



John J. Gibas

Vice President - Institutional Marketing

2012 - Present Sit Investment Associates, Inc.
2010 - 2012 RBC Global Asset Management,
Institutional Marketing
2008 - 2010 Piper Jaffray Investment Management,
Institutional Marketing
1998 - 2008 USBancorp, FAF Advisors,
Institutional Marketing
1979 - 1998 Piper Jaffray, Institutional
University of Minnesota, MBA (1981), BS (1977)

jjg@sitinvest.com

IMPORTANT DISCLOSURES

Performance Results – Gross of Fees

Gross returns were calculated on a time-weighted total return basis, including all dividends and interest, accrued income, realized and unrealized gains or losses. Returns for periods greater than one year are annualized. Gross of fees performance is presented net of brokerage commissions and execution costs, but does not reflect deduction for custodial and investment advisory fees, or the impact of income taxes. These expenses will reduce a client's return. For example, a \$5 million portfolio earning a 10% annualized return over 5 years would be valued at \$8.1 million. The same portfolio with an annual fee of 0.75% would be valued at \$7.8 million net of investment management fees. Advisory fees are described in Form ADV part 2. Please see the composite presentation including net of fees results at the end of the disclosure section.

The composite presentation includes a description of the securities held in the composite portfolio.

Index returns are presented as total returns, reflecting both price performance and income from dividend payments. The indexes are unmanaged and reflect no fees or expenses.

Past performance is not indicative of future performance. Investment return and principal value of an investment will fluctuate so that the value of an account may be worth more or less than the original invested cost.

This gross performance presentation is intended for use in meetings with certain investors, or to be provided to consultants who are instructed to provide this information only on a one-on-one basis with qualified clients with the above disclosures.

Supplemental Information

Portfolio characteristic information is supplemental to and complements the composite presentation at the end of the disclosure section. The account characteristic information presented is for the composite and is provided for illustrative purposes only. Characteristics of the composite may differ from other accounts in the composite. Allocations and security selection are subject to change. There is no assurance that any security discussed herein will remain in an account's portfolio.

The information provided in this report should not be considered a recommendation of any particular security or strategy.

eVestment Alliance Peer Ranks

Peer rankings represent percentile rankings which are based on monthly gross of fee returns and reflect where the Sit Investment composite returns fall within the indicated eVestment Alliance, LLC ("eVestment") universe. eVestment provides the institutional investment database which consists of institutional managers, investment consultants, plan sponsors and other similar financial institutions reporting on investment products. Performance figures are provided to eVestment by individual investment management firms for informational purposes only. eVestment does not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. Additional information regarding eVestment rankings is available on eVestment's website. This presentation is intended for institutional investor use only.

SIT INVESTMENT ASSOCIATES, INC.
TAXABLE SHORT DURATION COMPOSITE
ANNUAL DISCLOSURE PRESENTATION

Year End	Total Firm Assets (millions)	Composite Assets (USD) (millions)	Number of Accounts	Composite 3-Yr. Standard Dev. (%)	Benchmark 3-Yr. Standard Dev. (%)	Barclays 1-3 Year Govt Bond Index	Annual Performance Results Composite		Composite Dispersion
							Gross	Net	
2015	13,350.6	1,852.4	42	1.6%	0.6%	0.57%	2.86%	2.45%	0.48%
2014	13,505.0	1,534.0	41	1.4%	0.4%	0.64%	3.98%	3.57%	0.36%
2013	13,103.3	1,709.6	40	1.3%	0.5%	0.37%	-0.26%	-0.66%	0.63%
2012	13,081.6	1,305.2	32	1.0%	0.7%	0.51%	4.10%	3.69%	0.39%
2011	10,895.1	994.6	32	1.2%	0.9%	1.56%	5.10%	4.69%	0.52%
2010	9,873.4	766.0	27	1.6%	1.7%	2.40%	6.92%	6.50%	0.48%
2009	8,694.6	764.4	18	1.5%	1.8%	1.41%	9.80%	9.37%	0.81%
2008	6,697.0	324.6	14	1.4%	1.6%	6.66%	5.19%	4.78%	1.17%
2007	7,808.6	434.1	15	0.8%	1.3%	7.10%	7.30%	6.88%	0.49%
2006	6,939.6	773.8	16	0.9%	1.3%	4.12%	4.91%	4.50%	0.49%
2005	6,595.0	841.3	21	0.9%	1.4%	1.73%	3.12%	2.72%	0.40%
2004	6,175.4	476.6	14	1.1%	1.8%	1.07%	3.31%	2.90%	0.43%
2003	6,307.3	405.1	10	1.1%	1.9%	2.01%	3.44%	3.03%	0.74%
2002	6,242.4	210.5	6	1.0%	1.7%	6.01%	7.20%	6.78%	0.21%
2001	8,041.2	41.8	2	0.9%	1.5%	8.53%	8.54%	8.11%	0.22%
2000	9,626.4	32.5	2	0.7%	1.3%	8.17%	8.04%	7.61%	0.07%
1999	9,182.0	36.9	3	0.5%	1.3%	2.97%	5.30%	4.89%	0.26%
1998	7,199.5	27.3	3	0.7%	1.4%	6.96%	6.84%	6.42%	0.46%

Sit Investment Associates, Inc. is an independent registered investment adviser which includes the following subsidiaries: Sit Investment Fixed Income Advisors, Inc.; and Sit Investment Fixed Income Advisors II, Inc. On December 31, 2007, Sit/Kim International Investment Associates, Inc. and Sit/Kim International Investment Associates II, LLC were liquidated into Sit Investment Associates, Inc. Prior to 2000, Sit Investment Associates, Inc. and Sit/Kim International Investment Associates, Inc. issued separate GIPS reports, including disclosure of each entity's assets under management. Beginning in 2000 the two entities issued a combined GIPS report to reflect the entities' current operational and management affiliation. Total assets for all years presented in the table above reflect the combined total assets of all subsidiaries. The firm maintains a complete list and description of composites, which is available upon request.

The U.S. Dollar is the currency used to express performance. Returns are presented gross and net of management fees and include the reinvestment of all income. Net of fee performance was calculated using the highest fee applicable annual management fee of 0.40% applied quarterly. The annual composite dispersion presented is an equal-weighted standard deviation calculated for the accounts in the composite the entire year. Beginning April 1, 2006, SIA calculates a true Time Weighted Return (TWR) for each portfolio within the composite and asset weights their returns to come up with a composite return. Prior to April 1, 2006, SIA uses SunCard Portfolio One which uses an aggregate portfolio method which appropriately uses an Average Capital Balance (ACB) and an Internal Rate of Return (IRR) based on a discounted cash flow between revaluations for significant external cash flows. Periods are geometrically linked together. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The investment management fee schedule for the composite is 0.40% on the first \$20 million, 0.30% on the next \$30 million, 0.25% on the next \$50 million, and negotiable over \$100 million. Actual investment advisory fees incurred by clients may vary.

On previous reports the composite assets for the year ended December 31, 2012 were erroneously reported as 1,012.8 million which has been revised to 766.0 million due to the exclusion of one account.

The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period.

Past performance is not indicative of future results.

Sit Investment Associates, Inc. claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Sit Investment Associates, Inc. has been independently verified for the period January 1, 2007 to December 31, 2014 by Ashland Partners & Company LLP and for the period January 1, 1997 through December 31, 2006 by KPMG LLP.

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. The Taxable Short Duration composite has been examined for the period January 1, 1997 through December 31, 2014 by Ashland Partners & Company LLP. The verification and performance examination reports are available upon request.

The Taxable Short Duration Composite was created December 31, 1990. Taxable Short Duration Composite contains fully discretionary accounts and for comparison purposes is measured against the Barclays 1-3 Year Govt Bond Index. The composite contains portfolios generally emphasizing investing in investment grade taxable bonds with intermediate durations. Value is achieved through an emphasis on seasoned Agency mortgage pass-through securities. Gradual shifts in portfolio duration are made within a range of one to three years. The Barclays 1-3 Year Government Index includes securities in the U.S. Government Index with a maturity from 1 up to (but not including) 3 years. Including public obligations of the U.S. Treasury with a remaining maturity of one year or more and publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government.

THE SIT FIXED INCOME ADVANTAGE

- Disciplined investment philosophy
- Enthusiastic client base
- Comprehensive monthly reporting
- Strong commitment to client service
- Demonstrated track record
- Compelling risk-adjusted returns
- Highly motivated investment team
- Independently owned — Financially sound
- Strategies tailored to client needs
- Consistent return



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e-mail address: jjg@sitinvest.com



Meeting Date
09/14/16
Agenda Item
#16

MEMORANDUM

Date: September 14, 2016
To: CCCERA Board of Retirement
From: Gail Strohl, Chief Executive Officer
Subject: Consider and take possible action to authorize the CEO to renew a maintenance and support agreement with CPAS Systems, Inc.

Background

Since 2009, CCCERA has had a maintenance and system software support services agreement with CPAS Systems, Inc. for its pension administration system. It is typically renewed on an annual basis. These services include correction services, legislative compliance updates, maintenance updates, and overall system support services. The maintenance and support is necessary for continued operation of the system. The annual renewal amounts are \$33,304 for maintenance and \$79,090 for system support services. This is a 1.3% increase compared to the prior year.

Recommendation

Consider and take possible action to authorize the CEO to renew a one year maintenance and support agreement with CPAS.



Meeting Date
09/14/16
Agenda Item
#17

MEMORANDUM

Date: September 14, 2016
To: CCCERA Board of Retirement
From: Gail Strohl, Chief Executive Officer
Subject: Consider and take possible action to authorize the CEO to renew insurance policies for fiduciary and excess fiduciary liability insurance.

Background

CCCERA has carried fiduciary liability insurance for several years. The policy is typically renewed on an annual basis. Hudson Insurance Company and RLI Insurance Company are the current and proposed providers for fiduciary and excess fiduciary liability insurance, respectively. The premium for the proposed fiduciary and excess fiduciary liability insurance renewal policy is \$110,000 and \$30,000, respectively, for the period of October 28, 2016 to October 28, 2017. These are the same premium amounts and same levels of coverage as the prior year.

Recommendation

Consider and take possible action to authorize the CEO to renew insurance policies for fiduciary and excess fiduciary liability insurance.



Meeting Date
09/14/16
Agenda Item
#18

MEMORANDUM

Date: September 14, 2016

To: Board of Retirement

From: Wrally Dutkiewicz
Compliance Officer

Subject: Consider and Take Possible Action to Issue a Request for Proposal (RFP) for Pension Administration Information Management and Reporting Audit Services

Background:

Currently, the Subledger (SL) is a system which performs pension administration reporting functions for CCCERA. SL is a collection of algorithmic reporting programs written in COBOL that run on Contra Costa County's mainframe computer system and reports are generated using Sequel Server (SQL). Due to the scarcity of programming support, and limitations of the COBOL programming language with respect to data querying and scalability, the retirement system will benefit from decommissioning SL and reallocating internal resources to support and maintain the CPAS system. It is for this reason that an internal decommissioning review of SL was implemented. In 2006, CCCERA deployed CPAS, a pension administration system. The CPAS deployment occurred on a rolling basis between 2006 and 2009. The intent of the deployment was to eventually replace and decommission SL.

The purpose of the Subledger decommissioning review is to provide a basis for the formulation of the Subledger Decommissioning Plan and retirement of the reporting functions performed by Subledger (SL). CCCERA staff are conducting an internal review of data points found within SL programmed reports and CPAS queries and reports, and will incorporate observations into the Subledger Decommissioning Plan.

In order for CCCERA to finalize the Subledger Decommissioning Plan, we recommend retaining an independent external auditor to perform an audit of key data points, processes and reports to provide the retirement system with assurance that its pension administration information and reporting capabilities will fully operate as intended on CPAS when Subledger becomes fully decommissioned.

Scope:

The audit would provide independent assurance that when Subledger is decommissioned that:

- the pension administration functions within CPAS will perform as intended and fulfill CCCERA's requirements going forward;
- the reporting functions performed by Subledger have been mapped to equivalent reporting processes in CPAS;
- the reporting functions performed by Subledger have been operating as intended and without defect;
- the reporting functions in CPAS will accurately report on the underlying data going forward.

Key Data To Be Tested:

- Compensation records including specific components of pensionable compensation;
- Pension contributions;
- Service credit;
- Pension benefit payee information.

Key Reports To Be Tested:

- Actuarial extract;
- Benefit statements.

Recommendation:

Consider and take possible action to issue a request for proposal (RFP) for pension administration information management and reporting audit services



Meeting Date
09/14/16
Agenda Item
#19

SACRS VOTING PROXY FORM

The following are authorized by the _____ County Retirement Board to vote on behalf of the County Retirement System at the upcoming SACRS Conference (*if you have more than one alternate, please attach the list of alternates in priority order*):

_____ Voting Delegate
_____ Alternate Voting Delegate

These delegates were approved by the Retirement Board on ____ / ____ / ____.

The person authorized to fill out this form on behalf of the Retirement Board:

Signature: _____
Print Name: _____
Position: _____
Date: _____

Please send your system's voting proxy by **October 1, 2016** to:

SACRS
Attn: Sulema H. Peterson, SACRS Administrator
1415 L Street, Suite 1000
Sacramento, CA 95814

E-mail: sacrs@sacrs.org

Memorandum

To: Contra Costa County Employees' Retirement Association
From: Edward Hoffman, CFA, FRM
Subject: Vertas Brokerage Consulting - Transition Management
Date: September 1, 2016

<i>Meeting Date</i> 09/14/16 <i>Agenda Item</i> #20
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Executive Summary

Vertas, a unit of Percival Financial Partners, Ltd., is an advisory firm providing brokerage and transition management services to institutional investors, primarily in the public plan space. The firm was founded in 2014 when a majority of the transition management team left GTS. The exact reasons for their departure are not known, but GTS ultimately ceased all business activity soon thereafter.

On August 8, 2016 the SEC filed a securities enforcement action Complaint ("Complaint") against GTS and three of its executive level employees—John T. Place, Paul G. Kirk, and John P. Kirk—claiming a longstanding scheme to defraud their customers through excessive fees and mark-ups charged in connection with transition management services provided during the period from 2006 to 2014. None of the transition management team that had previously departed from GTS are named in the Complaint nor has any of the three persons named in the Complaint ever been employed by Vertas.

Given the prior employment of the Vertas transition management team at GTS, the current SEC Enforcement action with the potential discovery of additional information, and the availability of alternative solutions in the marketplace, we recommend excluding Vertas from transition management activity at least until the SEC has concluded its case against GTS and each of the three listed employees.

Summary of securities enforcement action

Global Transition Solutions, Inc. ("GTS, Inc."), Global Transition Solutions, LLC ("GTS, LLC") and three of its executive level employees (John T. Place, Paul G. Kirk, and John P. Kirk) are the defendants in an enforcement action brought by the SEC for an alleged long-standing scheme to defraud their customers regarding fees and mark-ups charged in connection with transition management services. GTS, Inc. was a registered broker-dealer operating from January 1998 until November, 2014. GTS, LLC was founded in 2004 by John T. Place and John P. Kirk. GTS, Inc. and GTS, LLC collectively operated as GTS. GTS provided brokerage and transition management services to over 100 clients, largely public pension funds in the U.S. The SEC Complaint alleges that GTS and the individuals named placed trades through CovergEx and two other registered

broker-dealers over a period covering 2006 – 2014 and that GTS reaped undisclosed proceeds by collaborating with each of the three firms to charge mark-ups or mark-downs. In summary, the Complaint alleges that the defendants did not disclose the arrangements to their clients, knowingly misled clients and prospects about their sources of revenue, and did not fulfill their fiduciary duties.

The full Complaint is available upon request.

Vertas and GTS

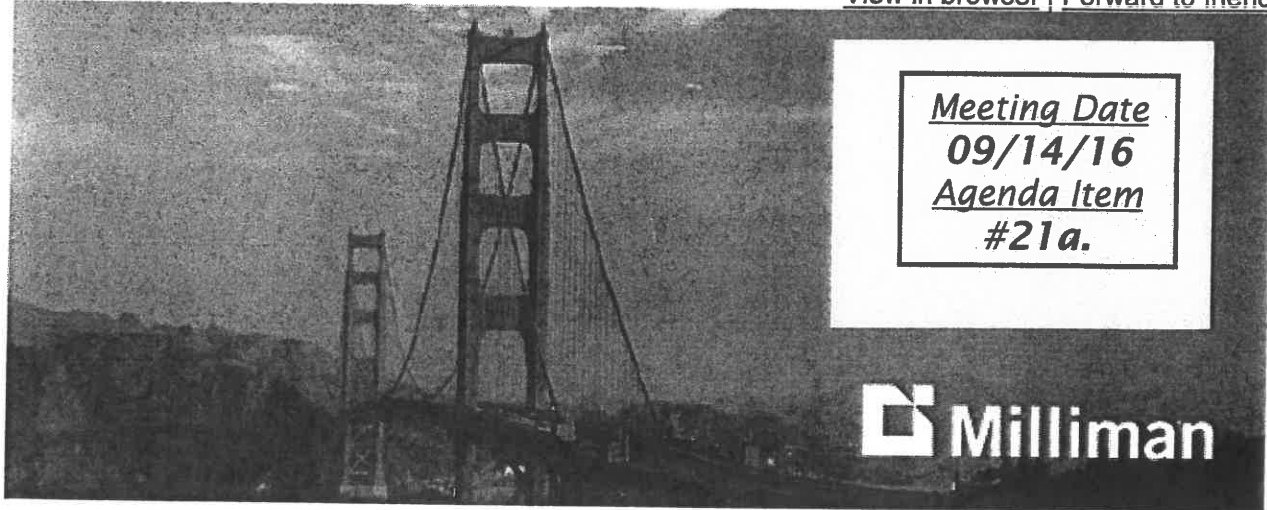
In February of 2014 a group of employees in the transition management unit of GTS departed to start a new company, Vertas. Vertas was formed as an independent unit of Percival Financial Partners, a member of FINRA and a registered broker-dealer with the SEC. Vertas provides independent brokerage and transition management consulting services. John T. Place, Paul G. Kirk, and John P. Kirk, the former employees of GTS who are under enforcement action, have never been employed by Vertas. In November of 2014 GTS withdrew its registration as a broker-dealer.

Recommendation

Vertas was included in the recent review of transition management service providers and identified as an option for smaller, less complex transitions. No transitions have been initiated nor are any pending. Given this enforcement action, Verus recommends that at least until the SEC has concluded its case against GTS, Vertas should be excluded from transition management activity at least until the SEC has concluded its case against GTS and each of the three listed employees.

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and Verus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.

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2016
SACRS
FALL CONFERENCE

NOVEMBER 8-11, 2016
RENAISSANCE INDIAN WELLS
RESORT & SPA
INDIAN WELLS, CA

Meeting Date
09/14/16
Agenda Item
#21b.

Tuesday, November 8

		Golf Tournament Contact Crystal Stokey, StepStone Group for sponsorship opportunities and to register. cstokey@stepstoneglobal.com
3:00 PM	6:30 PM	SACRS Registration
3:00 PM	5:00 PM	New Trustee Training & Advanced Trustee Training Combo SACRS members will participate in an interactive game where they will allocate across asset classes to maximize for Sharpe Ratio and hit required rate of return. Speaker: JP Morgan
3:00 PM	5:00 PM	Disability/Ops Breakout
5:30 PM	6:30 PM	SACRS Welcome Reception

Wednesday, November 9

6:45 AM	7:45 AM	SACRS Yoga Want to impress your benefits manager when you go back to the office? Participate in the SACRS Wellness Sessions! Yoga with SACRS is open to all levels, from beginner to expert. Although yoga poses are physical exercise, they have the added benefit of bringing great balance to the mind, body and spirit. A morning yoga session is a great way to energize before our busy conference day. <i>*Professional Yoga instructor will lead class, no fee to participate for conference attendees & guests, preregistration required, towels and water will be available, and all participants must submit a waiver prior to class.</i>
7:30 AM	8:30 AM	SACRS Breakfast
7:30 AM	6:00 PM	SACRS Registration
8:30 AM	9:00 AM	General Session Welcome & Awards
9:00 AM	10:00 AM	General Session Keynote 2016 Elections
10:00 AM	10:30 AM	SACRS Networking Break
10:30 AM	11:30 AM	General Session - Implications for Private Markets Speaker: David Rubenstein, The Carlyle Group
11:35 AM	12:35 AM	General Session TBA
12:40 PM	1:50 PM	SACRS Lunch
2:00 PM	3:00 PM	General Session - Outside the Box: The Power of Diversity The Diversity Panel will address the impact that diversity in the boardroom has in the context of investing, fund performance and corporate governance. Speakers: Rosie Rios, 43rd U. S. Treasurer, Betty Tse, Alameda CERA
3:15 PM	5:00 PM	Administrators Breakout
3:15 PM	5:00 PM	Affiliate Breakout
3:15 PM	5:00 PM	Attorney Breakout
3:15 PM	5:00 PM	Disability Breakout

*This is a preliminary agenda, please check SACRS.ORG for updates to the agenda for updates.



3:15 PM	5:00 PM	Accounting/Internal Auditors Breakout
3:15 PM	5:00 PM	Investment Breakout
3:15 PM	5:00 PM	Ops/Benefit Breakout
3:15 PM	5:00 PM	Safety Breakout
3:15 PM	5:00 PM	Trustee Breakout
4:30 PM	5:30 PM	SACRS Legislative Committee Meeting
6:00 PM	10:00 PM	Annual Wednesday Evening Event Location: TBA

Thursday, November 10

6:45 AM	7:45 AM	<p>SACRS 5K Fun Run/Walk</p> <p>Don't miss SACRS 5K Fun Run/Walk! Enjoy the cool Indian Wells morning with an invigorating walk, jog or run with fellow SACRS conference attendees along an easy 5K (3.1 miles) course. The 5K Fun Run/Walk is a great way for SACRS conference attendees and guests to come together and get moving before the day's educational sessions. All participants receive a SACRS Fun Run/Walk T-Shirt, water and a snack at the end of the Run/Walk.</p> <p><i>*Registration is \$10 per person, the course is flat and paved, direction signs will be along course along with pocket maps, pre-registration required, and all participants must submit a waiver prior to Run/Walk.</i></p>
7:30 AM	8:30 AM	SACRS Breakfast
7:30 AM	6:00 PM	SACRS Registration
8:30 AM	9:00 AM	<p>General Session</p> <p>Welcome and Veterans Honor</p>
9:00 AM	10:00 AM	<p>General Session – Keynote</p> <p>Speaker: Cliff Asness, AQR</p>
10:00 AM	10:30 AM	SACRS Networking Break
10:35 AM	11:35 AM	<p>General Session - Transportation</p> <p>Speakers: TBA</p>
11:40 AM	12:40 PM	<p>General Session – Annual System Comparison</p> <p>Speaker: Becky Gratsinger, RVK</p>
12:40 PM	1:50 PM	SACRS Lunch
2:00 PM	3:00 PM	<p>General Session</p> <p>TBA</p>
3:15 PM	4:15 PM	<p>Concurrent Session A - The Cost of Fiduciary Business</p> <p>Monitoring and controlling costs is a primary fiduciary responsibility for all funds and trusts. In this survey, Callan compares the costs of administering and operating funds and trusts across all types of tax-exempt and tax-qualified organizations in the U.S. We identify practices and trends to help institutional investors manage expenses.</p> <p>Speakers: Callan</p>
3:15 PM	4:15 PM	<p>Concurrent Session B - Compliance</p> <p>Speaker: TBA</p>

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2016
SACRS
FALL CONFERENCE

NOVEMBER 8-11, 2016
RENAISSANCE INDIAN WELLS
RESORT & SPA
INDIAN WELLS, CA



3:15 PM	4:15 PM	Concurrent Session C Speaker: Shawna Ferguson, Global Diversity and Inclusion
4:15 PM	4:45 PM	SACRS Network Break
4:45 PM	5:45 PM	Concurrent Session A – SACRS 2016 Legislative Update Speakers: Richard Stensrud, Sacramento CERA, Jim Lites, SACRS Consultant, Trent Smith & Mike Robson, SACRS Lobbyist
4:45 PM	5:45 PM	Concurrent Session B - Disability Speaker: TBA
4:45 PM	5:45 PM	Concurrent Session C Speaker: Shawna Ferguson, Global Diversity and Inclusion
4:30 PM	5:30 PM	Education Committee Meeting
6:00 PM	7:00 PM	SACRS Reception

Friday, November 11

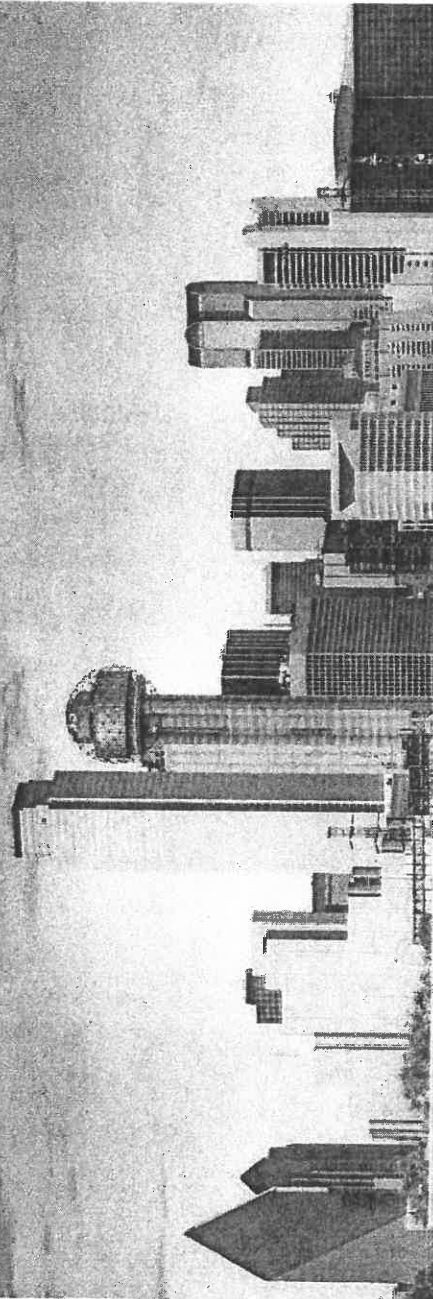
7:30 AM	8:30 AM	SACRS Breakfast
8:30 AM	9:30 AM	General Session Speaker: TBA
9:30 AM	9:45 AM	SACRS Break
9:45 AM	Upon Adj	SACRS Business Meeting
Upon Adj	Upon Adj	SACRS BOD

*This is a preliminary agenda, please check SACRS.ORG for updates to the agenda for updates.

**SAVE
THE
DATE**

2016

**FALL ADVISORY COMMITTEE MEETING
& ANNUAL PARTNERS MEETING**



**NOVEMBER 16-17, 2016
CRESCENT COURT HOTEL / DALLAS, TX**

INVITATION TO FOLLOW

For additional information, please contact Jane Walsh at jane.walsh@lwrep.com / 637.250.7262



**LONG WHARF
REAL ESTATE PARTNERS**

Meeting Date
09/14/16
Agenda Item
#21c.

