



## AGENDA

### RETIREMENT BOARD MEETING

REGULAR MEETING  
November 7, 2018  
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 Janet Kutrowski for 25 years of service.
3. Accept comments from the public.
4. Approve minutes from the September 26 and October 10, 2018 meetings.
5. Routine items for November 7, 2018.
  - 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 travel report.
  - f. Accept Asset Allocation Report.
  - g. Accept Liquidity Report.

#### ***CLOSED SESSION***

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

Agency designated representatives:  
Gail Strohl, Chief Executive Officer  
Anne Sommers, Admin/HR Manager  
Joe Wiley, CCCERA's Chief Negotiator

Employee Organization: AFSCME, Local 2700

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.

7. The Board will continue in closed session pursuant to Govt. Code Section 54957 to consider recommendations from the Medical Advisor and/or staff regarding the following disability retirement applications:

<u>Member</u>	<u>Type Sought</u>	<u>Recommendation</u>
a. Haidee Jezek	Service Connected	Service Connected
b. Mary Oades	Service Connected	Service Connected
c. John Whittington	Service Connected	Service Connected

8. The Board will continue in closed session pursuant to Govt. Code Section 54957 to consider the Hearing Officer's recommendation regarding the disability application for Angela Alex-Moore.

***OPEN SESSION***

9. Consider and take possible action to authorize the CEO to execute a contract with Northern Trust for Master Custodian.
10. Consider and take possible action to add a meeting on November 28, 2018 and to cancel the meeting on November 20, 2018.
11. Consider and take possible action on Board meeting schedule for 2019.
12. Consider authorizing the attendance of Board:
- a. Board & Audit Committee Compliance Conference, SCCE, February 18-19, 2019, Scottsdale, AZ.
  - b. Advanced Principles of Pension Management for Trustees, CALAPRS, March 27-29, 2019, Los Angeles, CA. (Note: Conflict with meeting)
13. 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  
**11/07/18**  
Agenda Item  
**#4**

## MINUTES

### RETIREMENT BOARD MEETING MINUTES

#### SECOND MONTHLY MEETING

September 26, 2018  
9:00 a.m.

Retirement Board Conference Room

The Willows Office Park  
1355 Willow Way, Suite 221  
Concord, California

**Present:** Candace Andersen, Scott Gordon, Jerry Holcombe, Louie Kroll, Jay Kwon, David MacDonald, John Phillips, William Pigeon, Gabe Rodrigues, Todd Smithey, Jerry Telles and Russell Watts

**Absent:** None

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

<b>Outside Professional Support:</b>	<b>Representing:</b>
Susan Hastings	Laughlin, Falbo, Levy & Moresi
Ed Hoffman	Verus Investments
Eva Young	Segal Consulting
Joe Wiley	Wiley Price & Radulovich LLP
Christopher Boucher	Wiley Price & Radulovich LLP

#### **1. Pledge of Allegiance**

The Board, staff and audience joined in the *Pledge of Allegiance*.

#### **2. Accept comments from the public**

No member of the public offered comment.

Gordon and Pigeon were present for subsequent discussion and voting.

#### **CLOSED SESSION**

The Board moved into closed session pursuant to Govt. Code Section 54957 and 54957.6.

The Board moved into open session.

**3. It was M/S/C to adopt the Findings of Fact and Decision to deny the service-connected disability retirement application for Rebecca Halvorson. (Yes: Andersen, Gordon, Holcombe, MacDonald, Phillips, Pigeon, Smithey and Watts. No: Telles)**

4. There was no reportable action related to Govt. Code Section 54957.6.
5. **Consider and take possible action to accept the GASB 68 report from Segal Consulting** – Eva Young

Young reviewed the results of the GASB 68 report noting the total Net Pension Liability (NPL) decreased from \$1.40 billion as of December 31, 2016 to \$0.81 as of December 31, 2017. The decrease was primarily due to the 13.3% return on the market value of assets during 2017. She stated the NPL is allocated to each employer based on payroll and reported on each of their balance sheets as a liability.

There was a discussion on allocating the NPL for Cost Groups with multiple employers and for terminated employers. Strohl noted that every year Segal provides a letter to the terminated employers informing them of what they owe and then the terminated employers pay CCCERA directly.

It was M/S/C accept the GASB 68 report from Segal Consulting. (Yes: Andersen, Gordon, Holcombe, MacDonald, Phillips, Pigeon, Smithey, Telles and Watts)

6. **Review of Report on Growth Sub-portfolio**

Price reviewed the role of Growth in CCCERA's portfolio and noted this is the long term sustainability piece of the program. He stated it provides the vast majority of the long term rates of return and future liabilities will be funded by the growth of this portfolio. He reviewed how the program is structured, the asset classes included in the portfolio, how it's working, and the areas of strength and concern noting that risk is a consideration but we accept the volatility. He also reviewed the objectives and measurements used to report out to the Board.

He reviewed the portfolio's performance as of June 30, 2018 noting absolute returns outperformed but not as much as we would have liked. He reviewed recent decisions made by the Board and decisions the Board will be making along the way. He provided status updates on the emerging market, private credit, and risk parity mandates.

He reported we are nearing the final phase of restructuring the Growth Sub-portfolio and expect a complete build-out by the end of the year. He noted the performance results should be reflected within the next three years.

7. **Update from StepStone Group on Private Credit implementation** – Marcel Schindler and Urs von Bueren

Schindler provided an update on the Private Debt mandate noting the only change to the original plan was extending the 2-3 year deployment speed to 3-4 years due to market conditions. He reported \$120 million has been committed to Satellite funds and \$34 million has been funded in co-investments. He stated 3-4 additional fund commitments are planned over the next 12 months and he anticipates continuing the investments pace of approximately \$20 million per quarter for co-investments.

He gave an update on StepStone's Private Debt program noting they currently oversee \$19 billion of debt, have 45 investment professionals, and the core team has been together for over 10 years. He stated they look at private debt very broadly including looking at real estate, infrastructure, and performing credit and non-performing credit.

Schindler gave an update on the market noting yields across all fixed income asset classes have dramatically reduced over the past decade and over half of the Global IG credit today is BBB rated, which is up 25% from ten years ago. He reviewed gross asset yields in direct lending and the challenges to be managed in the credit cycle.

Bueren reviewed CCCERA's private debt investment objectives including the investment amount, return objectives and flexibility. He reviewed the status of the two managed accounts, Core and Satellite, and noted they are working on a third one. He also reviewed the activities to date between CCCERA and StepStone for Core, Satellite, and Co-investment/secondaries.

Schindler reviewed the set-up process and highlights of the currently implemented mandate.

Bueren reported the investment pacing has been slightly reduced. Price noted the size of the program is determined by the Board and the pacing plan is decided by StepStone.

Strohl commented on StepStone mentioning that CCCERA is saving 7-9 basis points using this structure. She acknowledged Price on the time he has spent on the structure and relationship with StepStone.

#### **8. Presentation from Verus on Risk Parity manager search process and recommendations**

Hoffman reviewed the background and search process for Risk Parity managers noting the search process began with 20 strategies of which two are now being recommended. He reviewed the backgrounds of AQR GRP-EL (enhanced liquidity) and PanAgora and noted we are looking at investing in commingled funds with both firms. He reviewed their performance to date as of June 30, 2018 on a separate basis and as a 50/50 split. He noted there isn't a single benchmark so 60/40 is the model. He also reviewed the performance summary over the last 5 years.

He reviewed AQR's investment philosophy noting their strategy is to outperform cash. He also reviewed PanAgora's investment philosophy noting it is similar but contains a 4 step process and uses single name stocks which allows for a more controlled exposure.

Hoffman reviewed the next steps which include presentations from the providers and direction to staff to enter into negotiations with the selected providers.

Levy asked if Verus has a recommendation. Hoffman reported the recommendation is a 50/50 split allocating 2.5% of Plan assets to AQR and 2.5% of Plan assets to PanAgora.

#### **9. Presentation from AQR regarding a potential commitment to Risk Parity strategy – Joey Lee and Yao Hua Ooi**

AQR waived the confidentiality statement in the presentation materials.

Lee gave an overview of the firm and their investment strategies. She reported they have 20 years of experience and \$226 billion in AUM of which almost \$30 billion is in the risk parity strategy. She reviewed their organizational structure noting the firm is majority owned by 35 partners. She also reviewed the GRP-EL Risk Parity management team and noted they are supported by over 150 people.

Ooi reviewed their investment strategy and how it is implemented in the risk parity space. He reviewed their investment goals including looking for high long-term risk adjusted returns that are

diversified and risk targeted at all times. He also reviewed the characteristics of their portfolios and noted they try to keep risk to a minimum.

It was the consensus of the Board to move to Item 11.

**11. Presentation from PanAgora regarding a potential commitment to Risk Parity strategy – Lisa Mahoney and Bryan Belton**

PanAgora waived the confidentiality statement in the presentation materials.

Mahoney introduced herself and Bryan Dalton and briefly reviewed their backgrounds. She stated they currently manage over \$50 billion in AUM and serve approximately 15 public plans including 6 public plans located in California.

Belton reviewed the objective of the risk parity strategy and noted the strategy is adapting to volatility, which is unique to risk parity. He reviewed differences in the portfolio when economic surprise months are positive and when they are negative noting returns are much higher during negative surprise months. He reviewed how the asset classes are selected in the strategy and noted 40% are in equities, 40% are in credits, and 20% are in commodities. He also reviewed how the asset classes are weighted, how they build exposures, and how they shift exposures.

It was the consensus of the Board to move to Item 10.

**10. Consider and take possible action regarding a commitment to AQR Risk Parity strategy**

After a discussion, it was M/S/C to allocate 2.5% which currently is \$215 million of Plan Assets to AQR Risk Parity subject to satisfactory due diligence and legal review and authorize the CEO to execute the necessary contracts. (Yes: Andersen, Gordon, Holcombe, MacDonald, Phillips, Pigeon, Smithey, Telles and Watts)

It was the consensus of the Board to move to Item 12.

**12. Consider and take possible action regarding a commitment to PanAgora Risk Parity strategy**

It was M/S/C to allocate 2.5% which currently is \$215 million of Plan Assets to PanAgora Risk Parity subject to satisfactory due diligence and legal review and authorize the CEO to execute the necessary contracts. (Yes: Andersen, Gordon, Holcombe, MacDonald, Phillips, Pigeon, Smithey, Telles and Watts)

Gordon was no longer present for subsequent discussion and voting.

**13. Educational session on fiduciary duties presented by fiduciary counsel**

Leiderman distributed a handout and discussed the roles and responsibilities of fiduciaries including the primary loyalty rule, the exclusive benefit rule, the prudence standard, duty to diversify and the requirement to act lawfully.

Watts was no longer present for subsequent discussion and voting.

**14. Educational presentation on Ralph M. Brown Act open meetings laws**

Levy reviewed the Ralph M. Brown Act noting this is an annual educational presentation that is provided to the Board. She reviewed the purpose of the Brown Act and discussed meetings, serial meetings, attendance at conferences, and attendance at social events. She also discussed voting requirements. She reviewed the requirements for posting the agenda, discussing items included and not included on the agenda, public comments, and closed session requirements. She also reviewed the consequences of violating the Brown Act.

**15. Educational presentation on the California Public Records Act**

Levy reviewed the California Public Records Act (CPRA) noting the purpose is to give the public access to records that enables them to monitor the functioning of their government. She reviewed examples of what a public record is, who can make requests, fees that can be charged, the duty to respond within 10 days, and the duty to produce records within a reasonable time. She reviewed the types of records that are exempt including litigation, attorney-client communications, member's personal records, preliminary drafts and notes, and alternative investments. She noted personal email and text communications about CCCERA business may be public records.

Pigeon was no longer present for subsequent discussion and voting.

**16. Consider and take possible action to amend CCCERA's Accessibility of Investment Records Policy**

Levy reported this policy is being updated to reflect current provisions enacted by the legislature pertaining to the accessibility of investment records.

It was **M/S/C** to amend CCCERA's Accessibility of Investment Records Policy as presented. (Yes: Andersen, Holcombe, Kwon, MacDonald, Phillips, Rodrigues, Smithey and Telles)

**17. Consider and take possible action to issue a Request for Proposal for Actuarial Consulting and Actuarial Auditing Services**

Dunn reviewed the background on the Request for Proposal.

After a discussion, it was **M/S/C** to authorize the CEO to issue a Request for Proposal for Actuarial Consulting and Actuarial Auditing Services. (Yes: Andersen, Holcombe, Kwon, MacDonald, Phillips, Rodrigues, Smithey and Telles)

**18. Consider and take possible action on SACRS Voting Proxy Form**

It was **M/S/C** to appoint Gabe Rodrigues as the SACRS Voting Delegate and Louie Kroll as the Alternate Voting Delegate. (Yes: Andersen, Holcombe, Kwon, MacDonald, Phillips, Rodrigues, Smithey and Telles)

**19. Report from Audit Committee**

Phillips reported on the highlights of the September 12, 2018 Audit Committee meeting including updates on employer audits for the Moraga-Orinda Fire District, the Contra Costa County Office of the Public Defender, the Housing Authority of Contra Costa County, and the Rodeo-Hercules Fire Protection District. Phillips reported that he, Dutkiewicz and Holcombe attended the SCCE Board Audit Committee Compliance Conference.

**20. Consider authorizing the attendance of Board:**

- a. It was **M/S/C** to authorize the attendance of 2 Board members at the Nossaman's 2018 Fiduciaries' Forum, Nossaman LLP, October 18-19, 2018, San Francisco, CA. (Yes: Andersen, Holcombe, Kwon, MacDonald, Phillips, Rodrigues, Smithey and Telles)

**21. Miscellaneous**

(a) Staff Report –

Strohl reported the Rodeo-Hercules Fire Protection District was a little late with their August payment and their September payment was received a few days early; we are reviewing the finalists from the RFP for OPEB Trust Fund Management Services and the RFP for Custodian Bank; the CCCERA picnic was held last weekend. Two of the Trustees attended and it was a very nice event.

Dunn reported a new vocational expert from the Center for Career Evaluations has been contracted with effective October 1, 2018.

(b) Outside Professionals' Report -

None

(c) Trustees' comments –

Rodrigues stated the picnic was really nice. He reported there is a SACRS Trustee meeting on Tuesday.

Smithey commented 2 of his coworkers attended group counseling and they were pleased with the service they had.

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

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Todd Smithey, Chairman

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David MacDonald, Secretary



Meeting Date  
**11/07/18**  
Agenda Item  
**#4**

MINUTES

RETIREMENT BOARD MEETING MINUTES

REGULAR MEETING  
October 10, 2018  
9:00 a.m.

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

Present: Candace Andersen, Scott Gordon, Jerry Holcombe, Louie Kroll, Jay Kwon, David MacDonald, John Phillips, Todd Smithey, Jerry Telles and Russell Watts

Absent: William Pigeon and Gabe Rodrigues

Staff: Gail Strohl, Chief Executive Officer; Christina Dunn, Deputy Chief Executive Officer; Timothy Price, Chief Investment Officer; Karen Levy, General Counsel; Wrally Dutkiewicz, Compliance Officer; Anne Sommers, Administrative/HR Manager; Henry Gudino, Accounting Manager; Tim Hoppe, Retirement Services Manager; and Colin Bishop, Member Services Manager

Outside Professional Support: None  
Representing:

**1. Pledge of Allegiance**

The Board, staff and audience joined in the *Pledge of Allegiance*.

**2. Accept comments from the public**

No member of the public offered comment.

**3. Approval of Minutes**

It was M/S/C to approve the minutes of the August 22 and September 12, 2018 meetings. (Yes: Andersen, Gordon, Holcombe, Kroll, Phillips, Smithey, Telles and Watts)

**4. Routine Items**

It was M/S/C to approve the routine items of the October 10, 2018 meeting. (Yes: Andersen, Gordon, Holcombe, Kroll, Phillips, Smithey, Telles and Watts)

**CLOSED SESSION**

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

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. Scott Anderson – Service Connected (Yes: Andersen, Gordon, Holcombe, Kroll, Phillips, Smithey, Telles and Watts)
  - b. Angela Parga – Service Connected (Yes: Andersen, Holcombe, Kroll, Phillips, Smithey, Telles and Watts. No: Gordon)

6. **Presentation of the Housing Authority of Contra Costa County Final Audit Report**

Dutkiewicz presented the Final Audit Report for the Housing Authority of Contra Costa County.

The follow-up items include: Item 1, Timeliness of submission of I29 and I30 reports by the 10<sup>th</sup> of each month – The Housing Authority requested an exception to the policy for operational considerations (they are on a bi-weekly payroll schedule). It was noted the reports were received late but the contributions were received on time; Item 2, Submission of updated I29 member records for missing demographic information – The Housing Authority transmitted an updated I29 correcting any missing demographics; Item 3, IRC Compensation Limits – The Housing Authority has developed and implemented a tracking system that alerts the payroll process anytime a member is approaching the annual compensation limits; Item 4, Reconcile the small pension contribution variances for the months of May and June 2016 – The Housing Authority will transmit the amounts in question to CCCERA. CCCERA has reviewed the input files and has made corrections to the affected member accounts.

The Board discussed different options for employers on a bi-weekly payroll schedule. Strohl noted the Audit Committee is working on something regarding extensions for bi-weekly payroll reporting.

7. **Presentation of the Contra Costa County Office of the Public Defender Final Audit Report**

Dutkiewicz presented the Final Audit Report for the Contra Costa County Office of the Public Defender noting it was a very clean audit. He reported County departments are only responsible up to a certain point in the process and then the Auditor-Controller and the Department of Information Technology are responsible for compiling the reports and submitting them to CCCERA.

8. **Presentation of the Rodeo-Hercules Fire Protection District Final Audit Report**

Dutkiewicz presented the Final Audit Report for the Rodeo-Hercules Fire Protection District noting they are also responsible up to a certain point in the process and then the Auditor-Controller and Department of Information Technology are responsible for compiling the reports and submitting them to CCCERA.

The follow-up items include: Item 1, Pensionable Compensation and Contribution Reporting – The District will contact CCCERA to determine how to do a correction adjustment; Item 2, Publicly available pay schedules – The District will be working on updating its pay schedules; Item 3, Enrollment – The District will submit the missing enrollment packet.

MacDonald was present for subsequent discussion and voting.

Chief Bryan Craig commended CCCERA staff and noted it was a very cooperative experience.

9. **Update from staff regarding the lease at the Willows Office Park**

Strohl reported CCCERA has been in this building location since 1990 and the current lease expires on September 30, 2019. We have started to assess our space needs and our options with CBRE.

CBRE - Andy Schmitt and Danielle Scheg

Schmitt reviewed the background of the firm noting they are a full service real estate firm that provides brokerage services as well as consulting services. He also reviewed the team and their backgrounds. He reviewed CCCERA's key objectives, the available scenarios including staying in the current building, relocating & leasing, and relocating and buying. He also reviewed the benefits and risks of each of the scenarios.

He reviewed a transaction process timeline noting they have just begun to look at the available inventory. Key milestone dates, average rent costs in the Bay Area, and asking rents in Concord were reviewed.

The Board discussed areas of importance including accessibility, location, parking, safety/security, and technology as well as the importance of engaging with the staff for their input and to ensure a positive employee experience. Smithey asked the Board if they wanted to have an ad hoc committee or have staff continue to research and provide updates. It was the consensus of the Board to have staff continue and provide updates.

Strohl reported information will be coming back to the Board in the next few months from the discussions today.

**10. Consider and take possible action to cancel the October 24, 2018 meeting**

After a discussion on having only one meeting in November or changing the second meeting in November to the week after Thanksgiving, it was M/S/C to cancel the October 24, 2018 meeting. (Yes: Andersen, Gordon, Holcombe, MacDonald, Phillips, Smithey, Telles and Watts)

**11. Miscellaneous**

(a) Staff Report –

Strohl reported CCCERA met with the Fire Chief of the Contra Costa County Fire Protection District and County Counsel on Monday regarding the pensionability of standby pay.

(b) Outside Professionals' Report -

None

(c) Trustees' comments –

Phillips highlighted the items he felt were important at the SCCE Board Audit Committee Compliance Conference that he, Watts and Dutkiewicz attended.

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

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Todd Smithey, Chairman

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David MacDonald, Secretary

CONTRA COSTA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

Meeting Date  
**11/07/18**  
Agenda Item  
**#5**

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>Tier</u>	<u>Selected</u>
Aguilar, Ruben	36704	03/08/18	SR	Tier II and III	Option 1
Cole, Christine	73304	08/01/18	SR	Tier III	Unmodified
Cummings, Jeannie	69718	07/31/18	SR	Tier III	Unmodified
De La Montanya, Mary	47000	07/20/18	SR	Tier II and III	Unmodified
Faria, Debra	D7830	08/01/18	SR	Tier I	Unmodified
Gideon, Corrie	53655	06/30/18	SR	II and III	Unmodified
Gooch, Robin	68306	08/14/18	SR	Tier I	Unmodified
Jackson-Moore, Katherine	50267	08/01/18	SR	Tier II and III	Unmodified
Jumonville, Louis	71690	08/24/18	SR	Tier III	Unmodified
Kennedy, Gregory	56261	07/01/18	SR	Tier I	Unmodified
Lifshay, Jennifer	69277	08/14/18	SR	Tier III	Unmodified
Menchaca, Isaias Jr	70083	07/02/18	SR	Safety	Option 2
Murphy, Phyllis	48917	08/31/18	SR	Tier II and III	Unmodified
Probert-Kurtz, Natalie	D7830	05/01/18	SCD	Tier I and Safety A	Unmodified
Roberts, April	35052	07/16/18	SR	Tier II and III	Option 1
Salem-Boyd, Kathleen	D9500	07/14/18	SR	Tier II and III	Unmodified
Smith, Susan	54073	07/28/18	SR	Tier II and III	Unmodified
Sullenger, Jennifer	52688	07/28/18	SR	Tier III	Unmodified
Wade, Michelle	48001	07/09/18	SR	Tier II and III	Unmodified
Ybarra, Michael	D7830	07/19/18	SR	Safety	Unmodified

**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>
Ybarra, Michael	D7830/7042	10/16/18	SCD

**Option Type**  
 NSP = Non-Specified  
 SCD = Service Connected Disability  
 SR = Service Retirement  
 NSCD = Non-Service Connected Disability  
 \* = County Advance  
 Selected w/option

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

Pepra 4.2 = Pepra Tier 4 (2% COLA)  
 Pepra 4.3 = Pepra Tier 4 (3% COLA)  
 Pepra 5.2 = Pepra Tier 5 (2% COLA)  
 Pepra 5.3 = Pepra Tier 5 (3% COLA)  
 S/D = Pepra Safety Tier D  
 S/E = Pepra Safety Tier E

CONTRA COSTA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

**D.**

**Deaths:**

<u>Name</u>	<u>Date of Death</u>	<u>Employer as of Date of Death</u>
Harvey, Mary	09/20/18	Contra Costa County
Hickok, Roy	10/08/18	Beneficiary
Jackson, Myrtleen	07/18/18	Contra Costa County
Johnson, Fred	08/16/18	Beneficiary
Johnstone, Diana	10/02/18	Beneficiary
Keller, Veliene	04/25/16	Contra Costa County
Littlepage, Deborah	10/15/18	Alternative Payee
Machado, Juanita	08/09/18	Contra Costa County
Moore, Jerry	09/16/17	Beneficiary
Mullan, Kenneth	10/10/18	CCC Fire Protection District
Santiago, Ruben	10/21/18	Contra Costa County
Saupe, John	10/16/18	Contra Costa County
Shah, Yamini	10/03/18	Contra Costa County
Shuler, Elizabeth	10/18/18	Contra Costa County
Smit, John	09/16/18	Contra Costa County
White, Alan	10/15/18	Beneficiary

**Option Type**

NSP = Non-Specified  
 SCD = Service Connected Disability  
 SR = Service Retirement  
 NSCD = Non-Service Connected Disability  
 \* = County Advance  
 Selected w/option

**Tier**

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

Pepira 4.2 = Pepira Tier 4 (2% COLA)  
 Pepira 4.3 = Pepira Tier 4 (3% COLA)  
 Pepira 5.2 = Pepira Tier 5 (2% COLA)  
 Pepira 5.3 = Pepira Tier 5 (3% COLA)  
 S/D = Pepira Safety Tier D  
 S/E = Pepira Safety Tier E

**CERTIFICATION OF MEMBERSHIPS**

<b>Name</b>	<b>Employee Number</b>	<b>Tier</b>	<b>Membership Date</b>	<b>Employer</b>
Aday, Cheryi	87305	P5.2	09/01/18	Contra Costa County
Aguilar, Hortencia	53172	III	09/01/18	Contra Costa County
Alavi, Roxanna	87351	III	09/01/18	Contra Costa County
Ali, Farah	87238	P5.2	09/01/18	Contra Costa County
Anaya, Michelle	87346	P5.2	09/01/18	Contra Costa County
Apostol, Christine	82286	P5.2	09/01/18	Contra Costa County
Armentano, Elizabeth	87252	P5.2	09/01/18	Contra Costa County
Augustine, Freda	51041	III	09/01/18	Contra Costa County
Austria, Silver Ian	86835	S/E	09/01/18	Contra Costa County
Bang, Teresa	87320	P5.2	09/01/18	Contra Costa County
Barsoumian, Hrag	87355	S/E	09/01/18	Contra Costa County
Behbahany, Nelofar	87241	P5.2	09/01/18	Contra Costa County
Brenner, Matthew	87192	P5.2	09/01/18	Contra Costa County
Buban, Maria	70466	III	09/01/18	Contra Costa County
Budge, Heidi	D3301	P5.3	09/01/18	Contra Costa Mosquito & Vector Control District
Cabral, Jennifer	87208	P5.2	09/01/18	Contra Costa County
Cajigal, Nadaine	87287	P5.2	09/01/18	Contra Costa County
Castillo, Mike	87199	P5.2	08/01/18	Contra Costa County
Castle, Teresa	87153	P4.2	09/01/18	Contra Costa County Fire Protection District
Chhatwal, Amritpal	78620	P5.2	09/01/18	Contra Costa County
Choi, Ameer	87349	P5.2	09/01/18	Contra Costa County
Christenberry, Stefan	83716	P5.2	09/01/18	Contra Costa County
Clay, Brandon	D7830	S/A	09/01/18	San Ramon Valley Fire Protection District
Clay, Rachele	87263	P5.2	09/01/18	Contra Costa County
Cruz, Richelle	87304	P5.2	09/01/18	Contra Costa County
Davidson, Ana	87272	P5.2	09/01/18	Contra Costa County
Deemer, Julie	85076	P5.2	09/01/18	Contra Costa County
Diaz, Adriana	66048	III	09/01/18	Contra Costa County
Ding, Ningyuan	87280	P5.2	09/01/18	Contra Costa County
Dinglasan, Peter	87134	P5.2	09/01/18	Contra Costa County
Dix, Jeffrey	69560	P5.2	09/01/18	Contra Costa County
Dunn, Linda	87217	P5.2	09/01/18	Contra Costa County
Fu, Jonathan	87348	P5.2	09/01/18	Contra Costa County
Galloso, Sara	87191	P5.2	08/01/18	Contra Costa County
Garbharran, Rishi	D4980	P4.3	09/01/18	Contra Costa County Employees' Retirement Association
Garcia, Jimwell	87236	P5.2	09/01/18	Contra Costa County
Garcia, Moyses	D7830	S/D	09/01/18	San Ramon Valley Fire Protection District
Gloria, Sarah	87273	P5.2	09/01/18	Contra Costa County
Gonzales, Nelson	87337	P5.2	09/01/18	Contra Costa County
Goode, Rima	82692	P5.2	09/01/18	Contra Costa County

**Key:**

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

**CERTIFICATION OF MEMBERSHIPS**

<b>Name</b>	<b>Employee Number</b>	<b>Tier</b>	<b>Membership Date</b>	<b>Employer</b>
Griswell, James	86548	P5.2	09/01/18	Contra Costa County
Hansson, Emma	87260	P5.2	09/01/18	Contra Costa County
Hernandez, Carlos	87081	P5.2	09/01/18	Contra Costa County
Hernandez, Evelyn	87292	P5.2	09/01/18	Contra Costa County
Hersh, Isabella	87308	P5.2	09/01/18	Contra Costa County
Hood, Pamela	87310	P5.2	09/01/18	Contra Costa County
Hopkins, Lisa	87258	P5.2	09/01/18	Contra Costa County
Ilan-Garcia, Lei Angela	87299	P5.2	09/01/18	Contra Costa County
Jacobs, Tamina	86280	P5.2	08/01/18	Contra Costa County
Jacobus, Mario	87275	P5.2	09/01/18	Contra Costa County
Jimenez, Lauren	87270	P5.2	09/01/18	Contra Costa County
Joseph, Ciara	87271	P5.2	09/01/18	Contra Costa County
KC, Anil	87283	P5.2	09/01/18	Contra Costa County
Kennard, Sarah	87264	P5.2	09/01/18	Contra Costa County
Lawson, Robert	87356	P5.2	09/01/18	Contra Costa County
Lee, Vivian	77558	P5.2	09/01/18	Contra Costa County
Linares, Josefina	87200	P5.2	09/01/18	Contra Costa County
Lofgren, Linda	84521	P5.2	09/01/18	Contra Costa County
Lomker, Jared	D7830	S/D	09/01/18	San Ramon Valley Fire Protection District
Luna, Omar	87225	P5.2	09/01/18	Contra Costa County
Maglasang, Rosejune	84513	P5.2	09/01/18	Contra Costa County
Martin, Mathew	D7830	S/A	09/01/18	San Ramon Valley Fire Protection District
Martin, Rodrigo	87344	P5.2	09/01/18	Contra Costa County
Mauck, Jason	87366	P5.2	09/01/18	Contra Costa County
Miller, Scott	87216	P5.2	09/01/18	Contra Costa County
Milne, Caroline	87332	P5.2	09/01/18	Contra Costa County
Moncada, Veronica	87230	P5.2	09/01/18	Contra Costa County
Moreno, Erika	82306	P5.2	09/01/18	Contra Costa County
Murray, Tracy	87142	III	09/01/18	Contra Costa County
Nguyen, Neile	87306	P5.2	09/01/18	Contra Costa County
O'Connor, Anna	87185	P5.2	09/01/18	Contra Costa County
Orochena, Oscar	87154	P5.2	09/01/18	Contra Costa County
Pearson, Sabrina	87307	P5.2	09/01/18	Contra Costa County
Perea, Lorena	71306	III	09/01/18	Contra Costa County
Piaggio, Lena	87226	P5.2	09/01/18	Contra Costa County
Piazzisi, Elena	87261	P5.2	09/01/18	Contra Costa County
Piethe, Colin	87255	P5.2	09/01/18	Contra Costa County
Ponce, Melanie	74032	P5.2	09/01/18	Contra Costa County
Rincon, Frederick	D7830	S/D	09/01/18	San Ramon Valley Fire Protection District
Rios, Maria	68282	III	09/01/18	Contra Costa County

**Key:**

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<b>III = Tier III</b>	<b>P5.2 = PEPR Tier 5 (2% COLA)</b>	<b>S/D = Safety Tier D</b>
	<b>P5.3 = PEPR Tier 5 (3% COLA)</b>	<b>S/E = Safety Tier E</b>

**CERTIFICATION OF MEMBERSHIPS**

<b>Name</b>	<b>Employee Number</b>	<b>Tier</b>	<b>Membership Date</b>	<b>Employer</b>
Robertson, Timothy	D7830	S/D	09/01/18	San Ramon Valley Fire Protection District
Rodriguez, Sean	87343	P5.2	09/01/18	Contra Costa County
Ron, Katiana	77659	P5.2	09/01/18	Contra Costa County
Rosas Ramirez, Olaf	87319	P5.2	09/01/18	Contra Costa County
Simas, Christina	73964	P5.2	09/01/18	Contra Costa County
Sloan, Bart	87347	S/E	09/01/18	Contra Costa County
Smith, David	D7830	S/D	09/01/18	San Ramon Valley Fire Protection District
Smith, Raymond	87223	P5.2	09/01/18	Contra Costa County
Sood, Amarjit	87323	P5.2	09/01/18	Contra Costa County
Sooter, Nicholas	84755	P5.2	09/01/18	Contra Costa County
Souder, Nailah	87248	P5.2	09/01/18	Contra Costa County
Stormes, Ryan	87315	P5.2	09/01/18	Contra Costa County
Thompson, Bobbie	66685	III	09/01/18	Contra Costa County
Tran, Bao-Uyen	87267	P5.2	09/01/18	Contra Costa County
Tran, Dan	87368	P5.2	09/01/18	Contra Costa County
Vertudez, Janice Rhea	87186	P5.2	09/01/18	Contra Costa County
Wiley-Walker, Caitlin	85193	P5.2	09/01/18	Contra Costa County
Wright, Joseph	D3301	P5.3	08/01/18	Contra Costa Mosquito & Vector Control District
Younis, Adam	87378	P5.2	09/01/18	Contra Costa County
Zabkiewicz, Denise	87334	P5.2	09/01/18	Contra Costa County
Zapien-Barajas, Silvia	87274	P5.2	09/01/18	Contra Costa County
Zaragoza, Olivia	D3301	P5.3	09/01/18	Contra Costa Mosquito & Vector Control District

**Key:**

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

**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>
Aubin, Joan	83852	III	P5.2	10/01/16	Contra Costa County	Terminated Reciprocity
Kolc, Laci	D3406	P4.3	I	07/01/18	Central Contra Costa Sanitary District	Recip In Age & Tier Change
Mitchell, Margaret	86951	P5.2	III	07/01/18	Contra Costa County	Recip In Age & Tier Change
Mladinich, Leslie	87150	P5.2	III	08/01/18	Contra Costa County	Recip In Age & Tier Change

**Key:**

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

**Meeting Date**

**11/07/18**

**Agenda Item**

**#5e.**

CCCERA Board of Trustees  
Training & Educational Conferences Expenses Paid During  
Quarter 3 2018 (Jul - Sep)

Trustee:	Conference Name/Purpose:	Location:	Dates:	Total
Candace Andersen	NONE			0.00
Scott Gordon	IFEBP 64th Annual Emp Benefits Conference (prepaid)	New Orleans, LA	Oct 14-17, 2018	1,965.00
	NCPERS Public Safety Conference (prepaid)	Las Vegas, NV	Oct 28-31, 2018	214.29
Jerry Holcombe	NONE			0.00
Louie Kroll	2018 Public Funds Forum	Laguna Beach, CA	Sept 4-6, 2018	2,136.75
Jay Kwon	NONE			0.00
David J. MacDonald	Invesco V On-Site	Dallas, TX	Jul 9-10, 2018	885.52
	2018 Public Funds Forum	Laguna Beach, CA	Sept 4-6, 2018	1,904.14
	NCPERS Public Pension Funding Forum	Boston, MA	Sept 16-18, 2018	1,376.14
	2018 Stepstone Conference (prepaid)	New York, NY	Oct 10-11, 2018	387.40
	IFEBP 64th Annual Emp Benefits Conference (prepaid)	New Orleans, LA	Oct 14-17, 2018	2,334.40
John Phillips	Society of Corporate Compliance & Ethics (SCCE) Conf	Scottsdale, AZ	Sept 24-25, 2018	2,026.50
William Pigeon	NCPERS Public Safety Conference (prepaid)	Las Vegas, NV	Oct 28-31, 2018	914.29
Gabriel Rodrigues	DLJ Annual Limited Partners Meeting	Los Angeles, CA	Jul 16-17, 2018	721.19
	2018 Public Funds Forum	Laguna Beach, CA	Sept 4-6, 2018	2,120.77
	IFEBP 64th Annual Emp Benefits Conference (prepaid)	New Orleans, LA	Oct 14-17, 2018	1,965.00
	NCPERS Public Safety Conference (prepaid)	Las Vegas, NV	Oct 28-31, 2018	914.29
Todd Smithey	2018 Public Funds Forum	Laguna Beach, CA	Sept 4-6, 2018	2,143.27
Jerry Telles	Invesco V On-Site	Dallas, TX	Jul 9-10, 2018	914.65
	NCPERS Public Safety Conference (prepaid)	Las Vegas, NV	Oct 28-31, 2018	214.29
Russell V. Watts	Society of Corporate Compliance & Ethics (SCCE) Conf	Scottsdale, AZ	Sept 24-25, 2018	1,728.17
	Torchlight Annual Investment Conference (prepaid)	New York, NY	Oct 16-17, 2018	324.60
	SACRS Fall Conference 2018 (prepaid)	Indian Wells, CA	Nov 13-16, 2018	252.40

Contra Costa County Employees' Retirement Association  
Asset Allocation as of September 30, 2018

Meeting Date  
11/07/18  
Agenda Item  
#5f.

Liquidity	Market Value	Percentage of Total Fund	Phase 3 Target Percentage	Phase 3 Over/(Under)	Long Term Target	Long Term Over/(Under)
Insight	940,109,107	10.9%	12.0%	-1.1%		
Sit	521,745,670	6.1%	5.5%	0.6%		
Dimensional Fund Advisors	442,518,917	5.1%	5.5%	-0.4%		
<b>Total Liquidity</b>	<b>1,904,373,694</b>	<b>22.1%</b>	<b>23.0%</b>	<b>-0.9%</b>	<b>23.0%</b>	<b>-0.9%</b>

Range  
16% - 28%

**Growth**

**Domestic Equity**

Boston Partners	309,138,715	3.6%	3.0%	0.6%		
Jackson Square	341,398,816	4.0%	3.0%	1.0%		
BlackRock Index Fund	132,550,519	1.5%	1.0%	0.5%		
Emerald Advisors	250,301,015	2.9%	2.0%	0.9%		
Ceredex	207,467,922	2.4%	2.0%	0.4%		
<b>Total Domestic Equity</b>	<b>1,240,856,987</b>	<b>14.4%</b>	<b>11.0%</b>	<b>3.4%</b>	<b>5.0%</b>	<b>9.4%</b>

**Global & International Equity**

Pyrford (BMO)	459,027,031	5.3%	5.5%	-0.2%		
William Blair	490,236,409	5.7%	5.5%	0.2%		
First Eagle	364,295,113	4.2%	4.0%	0.2%		
Artisan Global Opportunities	411,145,313	4.8%	4.0%	0.8%		
PIMCO/RAE Emerging Markets	348,136,428	4.0%	4.0%	0.0%		
TT Emerging Markets	311,665,621	3.6%	4.0%	-0.4%		
<b>Total Global &amp; International Equity</b>	<b>2,384,505,915</b>	<b>27.7%</b>	<b>27.0%</b>	<b>0.7%</b>	<b>24.0%</b>	<b>3.7%</b>

**Private Equity**

Private Credit	865,267,000	10.1%	10.0%	0.1%	11.0%	-0.9%
Real Estate - Value Add	261,778,000	3.0%	4.0%	-1.0%	12.0%	-9.0%
Real Estate - Opportunistic & Distressed	163,914,000	1.9%	5.0%	-3.1%	5.0%	-3.1%
Real Estate - REIT (Adelante)	403,134,000	4.7%	4.0%	0.7%	4.0%	0.7%
High Yield (Allianz)	67,577,089	0.8%	1.0%	-0.2%	1.0%	-0.2%
Risk Parity	349,380,629	4.1%	2.0%	2.1%	0.0%	4.1%
Risk Parity	0	0.0%	5.0%	-5.0%	5.0%	-5.0%
<b>Total Other Growth Assets</b>	<b>2,111,050,718</b>	<b>24.5%</b>	<b>31.0%</b>	<b>-6.5%</b>	<b>38.0%</b>	<b>-13.5%</b>

<b>Total Growth Assets</b>	<b>5,736,413,619</b>	<b>66.7%</b>	<b>69.0%</b>	<b>-2.3%</b>	<b>67.0%</b>	<b>-0.3%</b>
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Range  
60% - 80%

**Risk Diversifying**

AFL-CIO	314,654,516	3.7%	3.5%	0.2%	3.0%	0.7%
Parametric Defensive Equity	202,889,997	2.4%	2.5%	-0.1%	3.5%	-1.1%
Wellington Real Total Return	185,411,446	2.2%	2.0%	0.2%	3.5%	-1.3%
<b>Total Risk Diversifying</b>	<b>702,955,959</b>	<b>8.2%</b>	<b>8.0%</b>	<b>0.2%</b>	<b>10.0%</b>	<b>-1.8%</b>

Range  
0% - 10%

**Cash and Overlay**

Overlay (Parametric)	47,295,036	0.5%		0.5%		
Cash	213,868,717	2.5%		2.5%		
<b>Total Cash and Overlay</b>	<b>261,163,753</b>	<b>3.0%</b>	<b>0.0%</b>	<b>3.0%</b>	<b>0.0%</b>	<b>3.0%</b>

<b>Total Fund</b>	<b>8,604,907,025.57</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>
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\*Phase 3 targets and ranges reflect Phase 3 asset allocation targets accepted by the Board on June 27, 2018 (BOR Resolution 2018-2)

**Private Market Investments**  
As of September 30, 2018

<b>REAL ESTATE - Value Add</b>	<b>Inception Date</b>	<b>Target Termination</b>	<b># of Extension</b>	<b>Discretion by GP/LP</b>	<b>New Target Termination</b>	<b>Funding Commitment</b>	<b>Market Value</b>	<b>% of Total Asset</b>	<b>Outstanding Commitment</b>
Invesco IREF II	05/30/07	12/31/15	in full liq.			85,000,000	444,000	0.01%	
Invesco IREF III	08/01/13	08/01/20				35,000,000	13,282,000	0.15%	
Invesco IREF IV	12/01/14	12/01/21				35,000,000	20,544,000	0.24%	1,203,000
Long Wharf FREG IV	08/14/13	09/30/21				25,000,000	11,367,000	0.13%	
Long Wharf FREG V	10/31/16	09/30/24				50,000,000	39,614,000	0.46%	5,662,000
LaSalle Income & Growth Fund VI	01/31/12	01/31/19				75,000,000	31,047,000	0.36%	3,946,000
LaSalle Income & Growth Fund VII	10/31/16	09/30/24				75,000,000	47,616,000	0.55%	27,449,000
						<b>505,000,000</b>	<b>163,914,000</b>	<b>1.90%</b>	<b>38,260,000</b>
<b>Outstanding Commitments</b>							<b>38,260,000</b>		
<b>Total</b>							<b>202,174,000</b>		

<b>REAL ESTATE -Opportunistic &amp; Distressed</b>	<b>Inception Date</b>	<b>Target Termination</b>	<b># of Extension</b>	<b>Discretion by GP/LP</b>	<b>New Target Termination</b>	<b>Funding Commitment</b>	<b>Market Value</b>	<b>% of Total Asset</b>	<b>Outstanding Commitment</b>
DJ Real Estate Capital Partners, L.P. III	06/30/05	06/30/14	in full liq.			75,000,000	23,249,000	0.27%	
DJ Real Estate Capital Partners, L.P. IV	12/31/07	09/30/18				100,000,000	92,208,000	1.07%	
DJ Real Estate Capital Partners, L.P. V	07/31/13	12/31/22				75,000,000	23,433,000	0.27%	
Oaktree Real Estate Opportunities Fund V	02/01/11	02/01/21				50,000,000	5,480,000	0.06%	
Oaktree Real Estate Opportunities Fund VI	09/30/13	09/30/20				80,000,000	37,181,000	0.43%	
Oaktree Real Estate Opportunities Fund VII	02/28/15	02/28/23				65,000,000	20,360,000	0.24%	40,755,000
Siguler Guff Distressed Real Estate Opp. Fund	07/30/11	07/30/22				75,000,000	44,898,000	0.52%	7,362,000
Siguler Guff Distressed Real Estate Opp. Fund II	08/31/13	08/31/25				70,000,000	48,910,000	0.57%	20,372,000
Siguler Guff Distressed Real Estate Opp. II Co-Inv	01/31/16	10/31/25				25,000,000	20,496,000	0.24%	5,217,000
Paulson Real Estate Fund II	11/10/13	11/10/20				20,000,000	22,424,000	0.26%	
Angelo Gordon Realty Fund VIII	12/31/11	12/31/18				80,000,000	23,745,000	0.28%	
Angelo Gordon Realty Fund IX	10/10/14	10/10/22				65,000,000	40,750,000	0.47%	31,091,000
						<b>780,000,000</b>	<b>403,134,000</b>	<b>4.68%</b>	<b>104,797,000</b>
<b>Outstanding Commitments</b>							<b>104,797,000</b>		
<b>Total</b>							<b>507,931,000</b>		

<b>PRIVATE CREDIT</b>	<b>Inception Date</b>	<b>Target Termination</b>	<b># of Extension</b>	<b>Discretion by GP/LP</b>	<b>New Target Termination</b>	<b>Funding Commitment</b>	<b>Market Value</b>	<b>% of Total Asset</b>	<b>Outstanding Commitment</b>
Torchlight Debt Opportunity Fund II	09/28/06	09/30/16	in full liq.			128,000,000	16,820,000	0.20%	
Torchlight Debt Opportunity Fund III	09/30/08	06/30/16	2nd 1 YR	LP	06/30/18	75,000,000	1,273,000	0.01%	
Torchlight Debt Opportunity Fund IV	08/01/12	08/30/20				60,000,000	21,654,000	0.25%	
Torchlight Debt Opportunity Fund V	12/31/14	09/17/22				75,000,000	47,606,000	0.55%	36,037,000
Angelo Gordon Energy Credit Opportunities	09/10/15	09/10/20				16,500,000	8,410,000	0.10%	
CCCERA StepStone	12/01/17	11/30/27				400,000,000	166,015,000	1.93%	233,985,000
						<b>754,500,000</b>	<b>261,778,000</b>	<b>3.04%</b>	<b>270,022,000</b>
<b>Outstanding Commitments</b>							<b>270,022,000</b>		
<b>Total</b>							<b>531,800,000</b>		

**Private Market Investments  
As of September 30, 2018**

<b>PRIVATE EQUITY</b>	<b>Inception Date</b>	<b>Target Termination</b>	<b># of Extension</b>	<b>Discretion by GP/LP</b>	<b>New Target Termination</b>	<b>Funding Commitment</b>	<b>Market Value</b>	<b>% of Total Asset</b>	<b>Outstanding Commitment</b>
Adams Street Partners	12/22/95	12/22/25				180,000,000	116,834,000	1.36%	71,080,000
Adams Street Secondary II	12/31/08	12/31/20				30,000,000	8,205,000	0.10%	12,637,000
Adams Street Secondary V	10/31/12	10/31/22				40,000,000	20,518,000	0.24%	15,740,000
Adams Street Venture Innovation Fund	03/09/16	03/09/28				75,000,000	19,913,000	0.23%	55,088,000
Bay Area Equity Fund	06/14/04	12/31/14	2nd 2 YR	LP	12/31/2017	10,000,000	2,965,000	0.03%	
Bay Area Equity Fund II	2/29/09	12/31/19				10,000,000	8,615,000	0.10%	
Carpenter Community BancFund	10/31/09	10/31/19				30,000,000		0.00%	
EIF USPF I	11/08/02	11/08/15	in full liq.	LP	11/08/15	30,000,000	755,000	0.01%	
EIF USPF II	06/15/05	06/15/15	3rd 1 YR	LP	06/15/18	50,000,000	22,928,000	0.27%	
EIF USPF III	02/28/07	02/28/17	1st 1 YR	LP	02/28/18	65,000,000	39,674,000	0.46%	
EIF USPF IV	06/28/10	06/28/20				50,000,000	47,131,000	0.55%	
Oaktree Private Investment Fund 2009	02/28/10	12/15/19				40,000,000	7,833,000	0.24%	
Ocean Avenue Fund II	05/07/14	05/07/24				30,000,000	22,313,000	0.26%	4,584,000
Ocean Avenue Fund III	12/09/15	12/09/25				50,000,000	22,079,000	0.07%	25,000,000
Paladin III	08/15/08	08/15/18				25,000,000	18,413,000	0.21%	
Pathway	11/09/98	05/31/21				125,000,000	18,433,000	0.21%	14,246,000
Pathway 2008	12/26/08	12/26/23				30,000,000	18,273,000	0.21%	5,738,000
Pathway 6	05/24/11	05/24/26				40,000,000	30,461,000	0.35%	10,094,000
Pathway 7	02/07/13	02/07/23				70,000,000	51,395,000	0.60%	17,271,000
Pathway 8	11/23/15	11/23/25				50,000,000	25,801,000	0.30%	26,940,000
Siguler Guff CCCERA Opportunities	06/03/14	05/31/25				200,000,000	146,939,000	1.71%	65,300,000
Siguler Guff Secondary Opportunities	12/31/16	12/31/26				50,000,000	33,597,000	0.39%	15,069,000
<b>Real Assets</b>									
Aether III & III Surplus	11/30/13	11/30/20				75,000,000	81,457,000	0.95%	12,378,000
Aether IV	01/01/16	01/01/28				50,000,000	19,023,000	0.22%	30,656,000
ARES EIF V	09/09/15	11/19/25				50,000,000	27,672,000	0.32%	18,371,000
Commonfund Capital Natural Resources IX	06/30/13	06/30/20				50,000,000	41,711,000	0.48%	10,160,000
Wastewater Opportunity Fund	12/31/15	11/30/22				25,000,000	12,329,000	0.14%	12,489,000
						<b>1,545,000,000</b>	<b>865,267,000</b>	<b>10.02%</b>	<b>422,841,000</b>
<b>Outstanding Commitments</b>							<b>422,841,000</b>		
<b>Total</b>							<b>1,288,108,000</b>		

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.



Meeting Date  
**11/07/18**  
Agenda Item  
**#5g.**

**Contra Costa County Employees' Retirement Association  
Liquidity Report – September 2018**

**September 2018 Performance**

	Cash Flow	Coverage Ratio
Benefit Cash Flow Projected by Model	\$38,250,000	
Liquidity Sub-Portfolio Cash Flow	\$38,250,000	100%
Actual Benefits Paid	\$38,094,995	100%
<i>Next Month's Projected Benefit Payment</i>	<i>\$38,500,000</i>	

**Monthly Manager Positioning – September 2018**

	Beginning Market Value	Liquidity Program Cash Flow	Market Value Change/Other Activity	Ending Market Value
Sit	\$524,210,435	(\$1,250,000)	(\$1,214,765)	\$521,745,670
DFA	\$456,274,281	(\$13,000,000)	(\$755,364)	\$442,518,917
Insight	\$963,743,359	(\$24,000,000)	\$365,748	\$940,109,107
<b>Liquidity</b>	<b>\$1,944,228,075</b>	<b>(\$38,250,000)</b>	<b>(\$1,604,381)</b>	<b>\$1,904,373,694</b>
Cash	\$249,112,666	\$155,005	(\$35,398,954)	\$213,868,717
<b>Liquidity + Cash</b>	<b>\$2,193,340,741</b>	<b>(\$38,094,995)</b>	<b>(\$37,003,335)</b>	<b>\$2,118,242,411</b>

**Functional Roles**

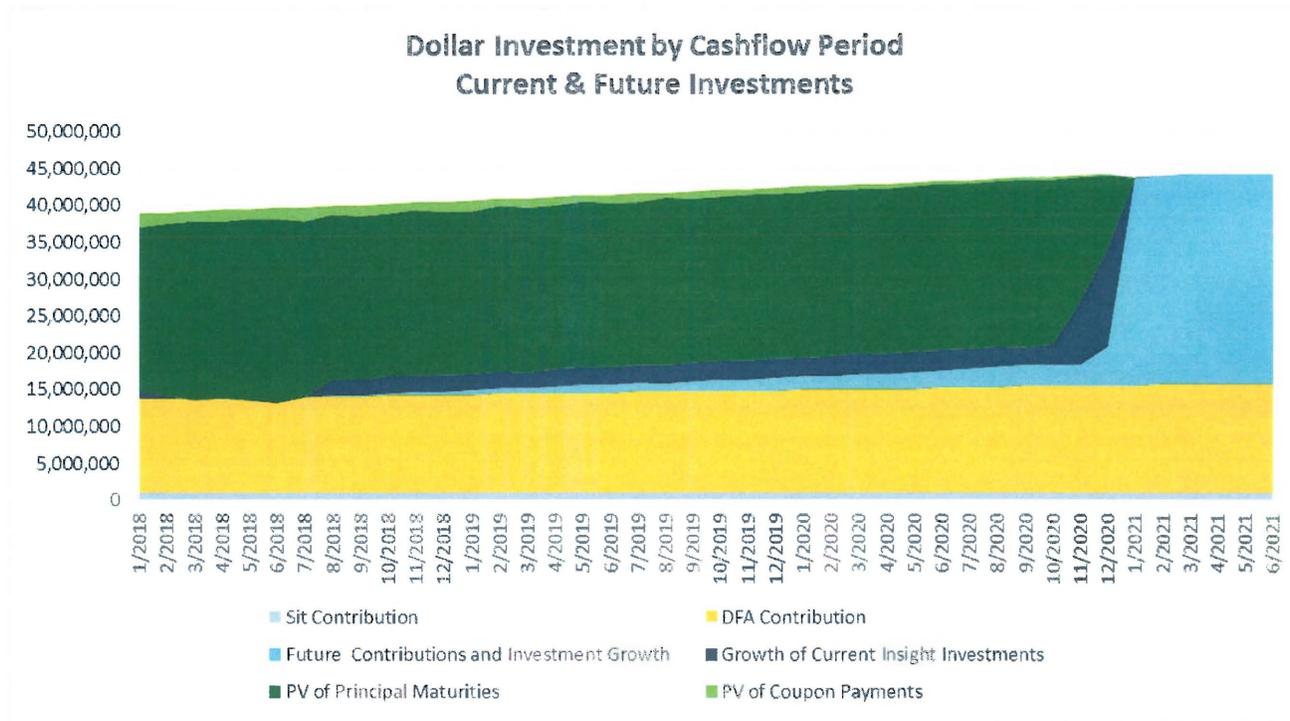
Manager	Portfolio Characteristics	Liquidity Contribution
Sit	High quality portfolio of small balance, government guaranteed mortgages with higher yields.	Pays out net income on monthly basis.
DFA	High quality, short duration portfolio of liquid, low volatility characteristics.	Pays out a pre-determined monthly amount. DFA sources liquidity from across their portfolio.
Insight	Buy and maintain (limited trading) portfolio of high quality, short duration, primarily corporates.	Completion portfolio makes a payment through net income and bond maturities that bridges the gap between other managers and projected payment.
Cash	STIF account at custodial bank.	Buffer in the event of any Liquidity shortfall/excess.

**Notes**

The September cash flow from the liquidity program for 2018 was completed on September 21<sup>st</sup>. The actuarial model nearly matched the actual experience, producing \$155 thousand more than the actual benefits paid.

### Cash Flow Structure

The chart below shows the sources of cash flow for the next several years of CCCERA’s projected benefit payments. This table will change slightly as the model is tweaked and as the portfolios receive new rounds of funding each July as part of the Annual Funding Plan.



## ***MEMORANDUM***

Date: November 7, 2018

To: CCCERA Board of Retirement

From: Gail Strohl, Chief Executive Officer

Subject: Consider and take possible action to authorize the CEO to execute a contract with Northern Trust for Master Custodian.

---

### ***Background***

The CCCERA Board of Retirement approved the issuance of a Request For Proposal (RFP) for Master Custodian at the February 14, 2018 meeting. The purpose of the RFP was to assess that the custodial services provided are the most effective, cost efficient, and continue to be in the best interests of CCCERA, its members and beneficiaries. CCCERA has utilized the services of State Street Bank and Trust for many years. A master custodian is considered an important core service provider in accordance with CCCERA's Procurement of Products and Services Policy. It was determined that the RFP would provide the sound research and analysis along with clear and appropriate screening criteria of a potential master custodian bank.

The RFP was issued on April 13, 2018 with responses due by May 25, 2018. The RFP was posted on CCCERA's website, including State Association of Counties Retirement Systems (SACRS), and also targeted to custodian banks who are sponsor members of Public Pension Financial Forum (P2F2). By the submission deadline, three RFP responses were received by the following banks:

- Northern Trust
- BNY Mellon
- State Street Bank and Trust.

### ***Evaluation and Due Diligence***

A three member staff review team comprised of Tim Price, Chief Investment Officer, Wrally Dutkiewicz, Compliance Officer, and Henry Gudino, Accounting Manager, reviewed and evaluated the responses in accordance with the criteria outlined in the RFP. Following the initial screening and review, due diligence was conducted during September 2018. The review team met with representatives from the custodian bank's client service, investment accounting,

performance management, risk management and private market teams. The review team took into consideration all stated criteria and evaluation factors such as completeness of response, follow up questions, conformity to terms and conditions, and written plan to effectively and timely deliver on scope of services. The criteria and evaluation factors sought by the review committee included but was not limited to:

- **Performance Measurement and Reporting Capabilities.** Assessment of each proposing bank's ability to deliver reports covering performance and risk analysis and other information to CCCERA that enhances the ability of CCCERA staff to monitor all portfolios on a real time basis including private markets, limited partnerships, and alternative investments.
- **Technology and System Capabilities.** Assessment of each proposing bank's overall commitment to improving their ability to deliver, and continuing to grow and improve on their technology as a single integrated global platform.
- **Quality of the Team and Personnel.** Assessment of the quality and experience of each proposing bank's personnel and client team assigned to CCCERA including reference checks and level of satisfaction from other 1937 Act plans.
- **Quality of the Organization.** Assessment of the breadth and depth of the proposing bank's organizational resources in areas such as performance measurement, GASB accounting, risk management systems, and private market reporting and support services.
- **Value of Services to CCCERA.** Reasonableness and competitiveness of the fee structure and costs as a flat rate to provide the most value and cost efficiency.

Based on the written RFP and follow up questions, due diligence meetings, system evaluations, minimum transition disruption, reference checks, and fee proposal, Northern Trust has emerged as the top candidate to meet CCCERA's current custodian needs.

The Northern Trust fee proposal is flat-dollar fee based which totals up to \$470,000 annually for major core custodial services.

### ***Recommendation***

Consider and take possible action to authorize the CEO to execute a contract with Northern Trust for Master Custodian, subject to satisfactory legal review.

NORTHERN TRUST

# Contra Costa County Employees' Retirement Association

Meeting Date  
11/07/18  
Agenda Item  
#9

November 7, 2018



NORTHERN TRUST

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# CLIENT-CENTRIC, FOCUSED BUSINESS MODEL

*Asset servicing, asset management and banking for personal and institutional clients, supported by our integrated operating platform.*

## Corporate & Institutional Services

- Public/Corporate Pensions
- Insurance companies
- Sovereign entities
- Fund managers
- Foundations and endowments

## Wealth Management

- Individuals
- Families
- Family offices
- Foundation
- Endowments
- Privately held businesses



**\$8.1 trillion**  
assets under custody

**\$1.1 trillion**  
assets under management

**\$6.1 trillion\***  
assets under administration

Figures as of 06/30/2018 unless otherwise indicated  
(\*Figures as of 12/31/2017)  
Amounts shown are in U.S. Dollars  
Source: Northern Trust

# FINANCIAL STRENGTH AND STABILITY

*Strong capital position, high quality balance sheet and superior credit ratings position us to permit continued investment in our business across cycles and withstand unforeseen adverse developments*

## Strong capital position

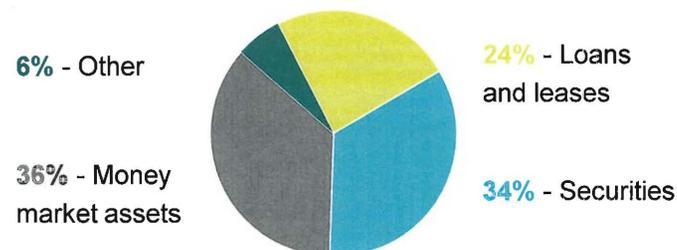
Northern Trust Corporation Capital Ratios	Q4 2017	"Well Capitalized" Guideline
<i>Advanced Approach</i>		
Common Equity Tier 1	13.5%	6.5%
Tier 1	14.8%	8.0%
Total	16.7%	10.0%
Supplementary Leverage	6.8%	3.0%
<i>Standardized Approach</i>		
Common Equity Tier 1	12.6%	6.5%
Tier 1	13.8%	8.0%
Total	15.8%	10.0%
Tier 1 Leverage	7.8%	5.0%

\*Capital ratios are preliminary until regulatory reports have been filed

No other large US bank has a higher long term rating assigned by Standard & Poor's and Fitch Ratings

## High quality balance sheet

Balance sheet is highly liquid and low risk



## Superior credit rating

	Standard & Poor's	Moody's	Fitch Ratings	DBRS
<b>Northern Trust Corporation</b>				
Short-Term / Commercial Paper	A-1	No Rating*	F1+	R-1 (middle)
Long-Term / Senior Debt	A+	A2	AA-	AA (low)
<b>The Northern Trust Company</b>				
Short-Term / Deposits	A-1+	P-1	F1+	R-1 (high)
Long-Term / Deposits	AA-	Aa2	AA	AA

\*Rating removed as of September 16, 2016, as Northern Trust does not have an active Commercial Paper Program.

# REPRESENTATIVE PUBLIC FUND CLIENTS

**Clients won since 2014**

**Clients extended or retained since 2014**

**Alameda-Contra Costa Transit**  
**Arkansas State Highway Employees' Retirement System**  
**City of Aurora**  
City of Fresno Retirement Systems  
City of Miami Fire Fighters & Police Officers Retirement Trust  
**City of Tallahassee**  
**City of Tampa General Employees' Retirement Fund**  
Colorado Public Employees Retirement Association  
Treasurer of Orange County California  
**Dallas Area Rapid Transit**  
Delaware Public Employees' Retirement System  
**Delaware State Treasury**  
**District of Columbia Office of The Chief Financial Officer**  
**District of Columbia Retirement Board**  
East Bay Municipal Utility District  
Fort Worth Employees  
Fresno County Employees' Retirement Association  
**Hawaii Employer-Union Health Benefits Trust Fund**  
**Illinois State Board of Investment**  
Kern County Employees Retirement Association  
Los Angeles City Employees Retirement System  
Los Angeles Fire & Police Pension System  
**Los Angeles Water & Power Employees' Retirement System**  
**Maricopa County Treasurer**  
**Merced County Employees Retirement Association**

**Milwaukee County Employees' Retirement System**  
Missouri Local Government Employees Retirement System  
**New Castle County**  
**North Slope Borough**  
**Oakland County (MI)**  
**Ohio Police & Fire Pension Fund**  
**Oklahoma City Employee Retirement System**  
**Oklahoma Municipal Retirement Fund**  
**Oklahoma Public Employees Retirement System**  
**Oklahoma State Law Enforcement Retirement System**  
**Oklahoma State Treasurer**  
**Oklahoma Teachers Retirement System**  
**Saginaw Chippewa Indian Tribe**  
San Antonio Fire & Police Pension Fund  
**San Mateo County Employees Retirement Association**  
**San Joaquin County Employees Retirement Association**  
**Santa Ynez Band Of Mission Indians**  
**Stanislaus County Employees' Retirement Association**  
**State of Utah, School and Institutional Trust Funds**  
**State Teachers Retirement System of Ohio**  
**State Universities Retirement System (of IL)**  
**Tribe of the Grand Ronde**  
**Utah Retirement Systems**  
**State of Washington, Officer of the State Treasurer**  
**Wyoming Retirement System**

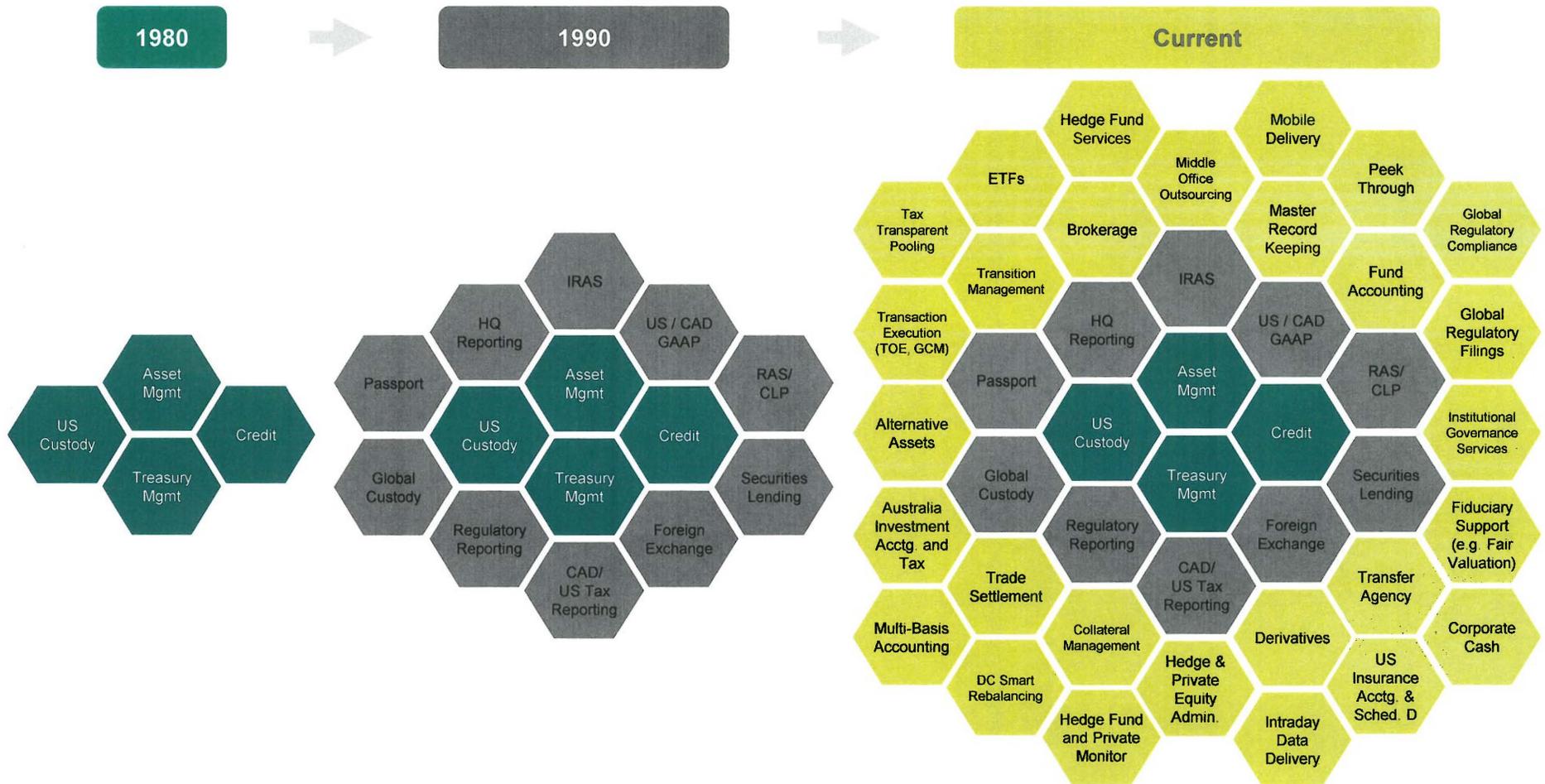
CORPORATE & INSTITUTIONAL SERVICES

# Technology

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# EVOLVING MARKETSCAPE AND OUR PRODUCT SOLUTIONS

*Northern Trust continues to invest in our business to support the ever changing needs of our clients*



# COMMITMENT TO TECHNOLOGY

*Our technology strategy remains dedicated to providing you with the information you require for timely, accurate and intuitive decision support*



Single Integrated Global Operating Platform – Internally developed and maintained



Technology Spending: \$720 Million per annum

- 55% Capital Expenditure
- 45% Operations and Production Support – keeping the lights on
- Projected spend 2018-2021 of approximately US\$2.3 billion



1,300 dedicated Technologists  
Hiring leading IT professionals with different mindset

# INNOVATION IS FOUNDATIONAL TO MEETING STRATEGIC OBJECTIVES

*Creating and nurturing a R&D mindset is key to our mutual long-term success*



## Driven by Industry Trends

- Unprecedented pace of change
  - *Mounting industry requirements*
  - *Accelerating developments*
  - *Availability of new technologies*
  - *The rise of disrupters*
- Client behaviors and expectations



## Strategic Technology Commitment

- Financial and strategic commitment
- IT investment est. \$2.4B+ (2016-2018)
- Peer leader per capita, per AuC, per AuA, per AuM
- Hiring industry-leading technologists
- Early adoption of new technology



## A Focused Approach

- Efficient capital deployment
- Improved speed to market
- Increased productivity / reduced cost
- Enhanced security / stability
- Superior products / capabilities
- Maximum data quality / flexibility

## Industry Recognition

2016 CIO 100 Award  
*CIO100*

2015 Best Analytics Initiative American Financial Technology Awards

*Waters Magazine*

2015 Best Cloud Initiative American Financial Technology Awards

*Waters Magazine*

2016 Top Wealth Management Mobile App

*Brand New Media*

# SILICON VALLEY ENGAGEMENT

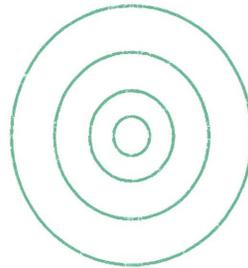
*Taking advantage of technology innovation opportunities via robust engagement with Silicon Valley*

## Ongoing Investment

Our **50 South Capital** asset management subsidiary has invested more than \$1 billion in tech start-ups over the past 16 years

**\$1B+**

INVESTED IN START-UPS



## Creation of a Virtual Think Tank

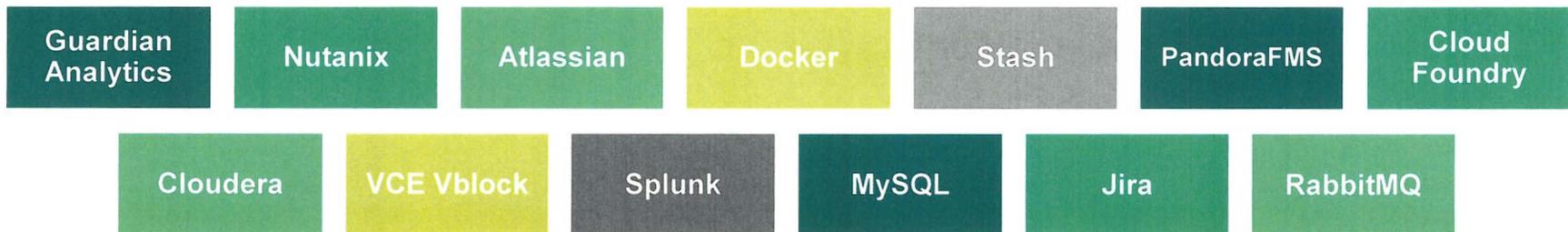
Market Advocacy group driving our 'Tech Radar'.

Collaboration with private equity and technology firms in Silicon Valley enabling us to:

- Evaluate emerging technologies
- Access the industry's best tech talent
- Ensure IT expertise supports business decisions

## Early Adopter Advantage

Silicon Valley engagement has enabled us to capitalize on new technology innovation



# TECHNOLOGY INNOVATION



## Global Operating Platform

### Private Cloud

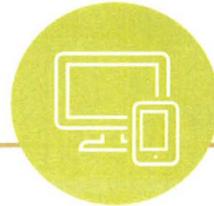
The cloud also allows us to maximize the efficiency and capacity of existing resources.

### Agile Approach

Helps increase productivity of our development teams whilst enabling higher-quality solutions that fulfill customer needs much faster.

### Innovation Lab

The lab focuses on human-centered design principles, with insights sourced directly from our clients and employees.



## Client Facing Technology

### Business Intelligence/Analytics

Predictive Analytics

- Natural Language Dialog
- Guided Analytic Discovery

### Predictive Technology

Captures user behavior in order to provide recommendations and assist in future product development.

### Biometrics

Exploring different technologies for user authentication



## Client Support Tools

### AI/Robotics

- Virtual desktops used to complement what we do by automating repeatable and predictable tasks.

### Blockchain

Our research and laboratory work has been focused around the following key themes:

- asset safety
- reduced transactional friction
- security
- operational efficiency

### Collaborative Tools

Investigating and testing real-time collaboration tools (e.g., screen sharing, live chat, instant messaging, on-line video calls)

### APIs

Standard Application Programming Interface used to facilitate data exchange with clients more timely and effectively

# PRODUCT INNOVATION



## **Global Operating Platform**

### **Data Governance**

Enables Northern Trust to meet or exceed client and regulator expectations and obligations through improved data quality and consistent sourcing and lineage of data

### **Cyber Security**

Big data security application scans more than 1.5 billion events each day looking for red flags related to theft, data loss or abnormal activity

### **Derivatives Processing**

Significant investment into core processing to assist clients in complying with industry changes. This includes but not limited to OTC Central Clearing, delegated trade repository reporting and OTC un-cleared margin rules.



## **Client Facing Technology**

### **Performance and Risk**

Expanded fixed income characteristics

- Separation of inflation sensitivity measures
- Ex-ante Risk: Alongside our existing suite developing new solutions for measuring liquidity risk, environmental, social and governance risks, plus facilitating our clients' dynamic de-risking requirements.

### **Compliance Monitoring**

Relaunch of Compliance Analyst®, offering clients substantially improved data coverage and monitoring capabilities as well as an enhanced user experience.

### **Hedge Funds**

Partnership with AltX to drive innovation in Hedge Fund intelligence providing access to the largest ever amount of structured and unstructured data for hedge funds



## **Client Support Tools**

### **Front Office Solutions**

Solutions team dedicated to building a thoughtful, forward thinking offering powered by Parilux Investment Technology, LLC that helps

- Alleviate operational burdens
- Improves the decision support required by asset owners and allocators with in-house investment teams.

### **Foreign Exchange**

Innovative FX Algorithm execution capability providing access to high quality liquidity providers, straight-through operational processing and full cost transparency reporting

### **Industry and Regulatory Transformation**

Continue to enhance current product offering based on new regulations and industry needs such as T2S, CLS, DTCC.

# MUTUALLY BENEFICIAL RESULTS

*A forward thinking, contemporary approach to technology mutually benefiting your organization and ours*

## CCCERA BENEFITS



Collaboration and co-creation

Enabling data-driven decision making

## NORTHERN TRUST BENEFITS



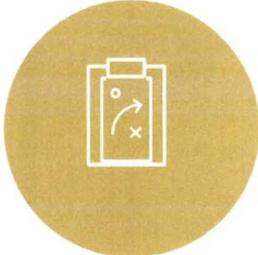
R&D Mindset | Innovation Lab | Silicon Valley | Digital Transformation | Technology Talent

# DRIVING OUR SERVICE MODEL

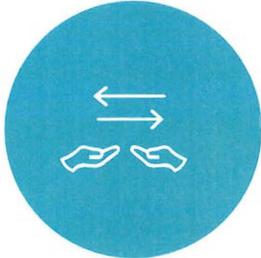
EXPERIENCE



EXPERTISE



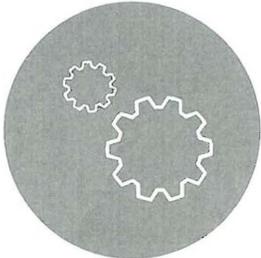
ENGAGEMENT



ENERGY



EXECUTION



CORPORATE & INSTITUTIONAL SERVICES

# Client Service

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# CLIENT SERVICING TEAM APPROACH

## Senior Management Oversight

**Peter Cherecwich**  
President, C&IS

**Jeff Porta**  
Practice Executive

## Relationship Management

**Kathy Stevenson**  
Client Executive

**Araceli Estrada**  
Sr. Client Service Manager

**Kim Miller**  
Back-Up Client Executive

**Matt Lipuma**  
Back-Up Client Service Manager

## Servicing Team

Accounting and Reporting

Asset Management

Investment Manager  
Liaison Group (IMLG)

Financial & Regulatory  
Reporting Consultant

Investment Risk &  
Analytical Services

New Business  
Coordinator / Event  
Manager

Passport®  
Consultant

Securities  
Lending

## Core Custody Functions

Asset Pricing &  
Coding

Trade Settlement

Valuation

Income  
Processing

Corporate & Class  
Actions

Proxy  
Services

Tax Reclamation

Alternative Asset  
Operations

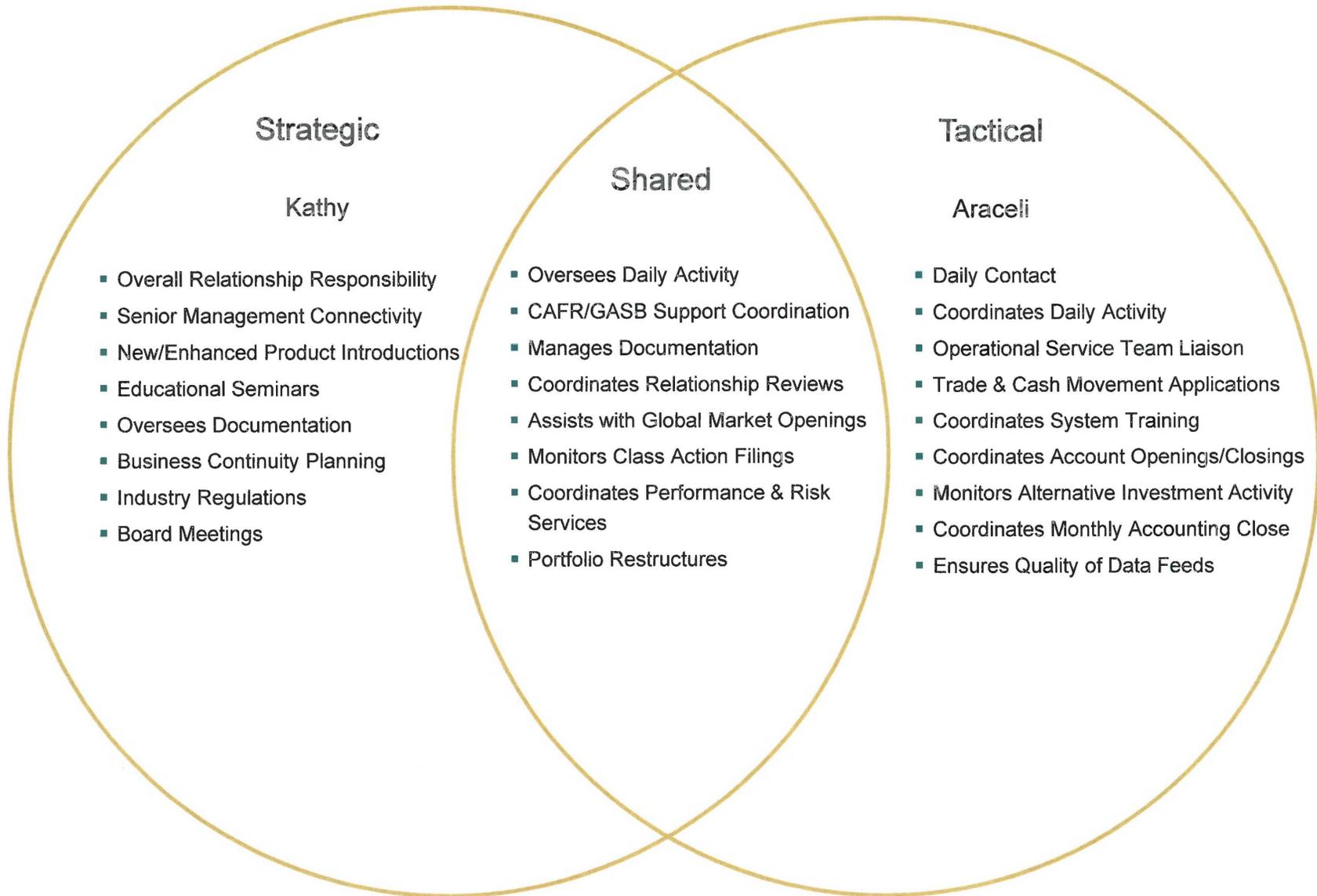
Investment Manager  
Liaison

Foreign Exchange

Cash Management

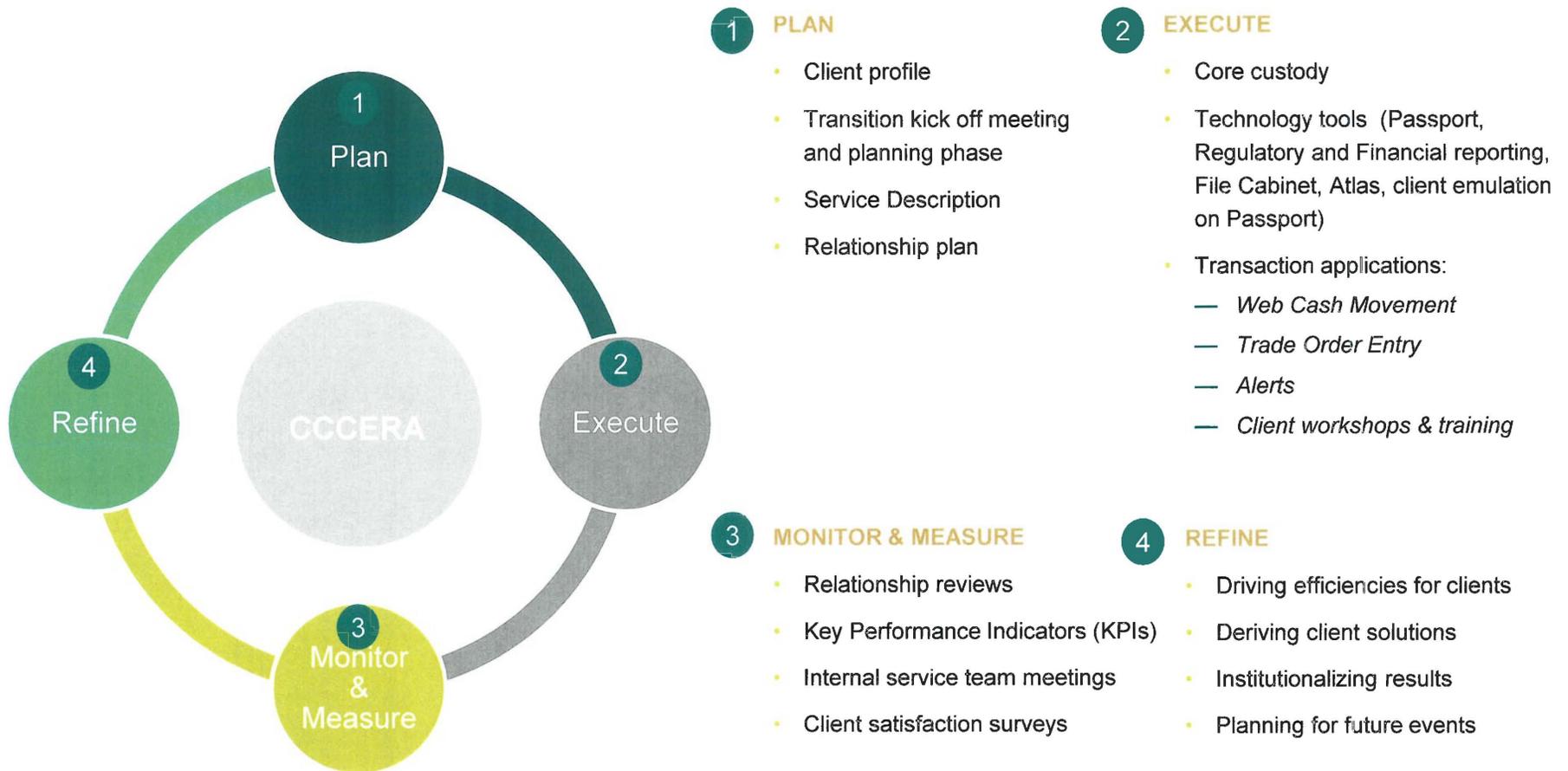
Business Continuity &  
Disaster Recovery

# CLIENT SERVICE TEAM – RESPONSIBILITIES



# SERVICE APPROACH IS ALWAYS FOCUSED ON EXECUTION

*We apply best practices, operational processes, accounting controls, and a discipline in managing relationships, supported by expert professionals and innovative technology.*



# EXPERTISE ACROSS THE FULL CUSTODY SPECTRUM

*Emphasis on automation, straight-through processing (STP), accuracy and timeliness, risk reduction, enhancing efficiency, cost minimization, and ensuring transparency*

## Trade Receipt and Capture

- Annually process over 25 million global trades
- A dedicated global team servicing alternative assets and non-STP investments

## Income Collection and Tax Reclamation

- Collect income on portfolio holdings promptly
- Recover taxes in markets that have tax treaties and exemptions

## Class Actions

- Gather information, provide timely notifications, file claims and post disbursements

## Trade Settlement

- Transmit precise, timely trade information and execute settlements
- Offer contractual settlement in 46 global markets

## Web Trade Services

- Connected to over 2,700 end-points in the global brokerage community with automated communications to over 40 major custodians globally
- Hitting over 770,000 trades/month

## Proxy Voting

- On-line proxy voting in 55 markets

## Safe Keeping

- \$8.1 trillion in total assets under custody
- Safekeeping services for institutional investors in 103 global securities markets

## Corporate Actions

- Monitor events thoroughly and settle entitlements

## Accounting and Reporting

- Service investment participants through a single global, integrated, multi-currency platform
- Alternative asset processing
- GASB Reporting

\*As at 3/31/2018 (updated quarterly) unless otherwise stated Source: Northern Trust

CORPORATE & INSTITUTIONAL SERVICES

# Alternative Assets Services

---

# SCALE AND DEPTH

*Northern Trust's private equity services for asset owners are a key pillar of our global alternatives practice.*

Limited Partner  
Administration

4,000+

CLIENTS

40,000+

FUND INTERESTS (approx)

\$390B+

IN UNREALIZED FAIR VALUE

30+

YEARS EXPERIENCE

Private Monitor

60

CLIENTS GLOBALLY

6,000+

FUND INTERESTS

\$30B+

IN UNREALIZED FAIR VALUE

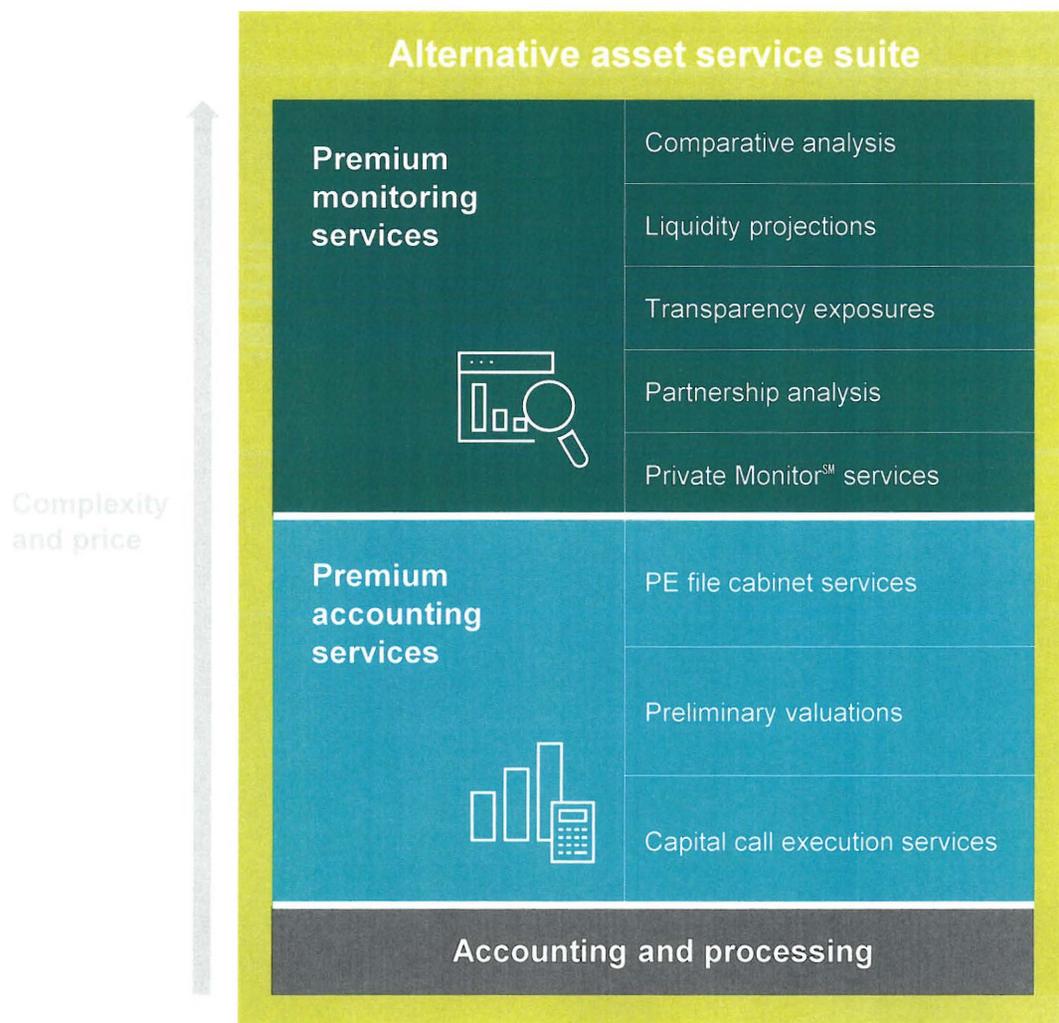
20+

DEDICATED TEAM

As at 31 December 2017. (Updated annually)

# ALTERNATIVE ASSETS OWNER SERVICES

*A unique range of services to support your evolving alternative portfolio needs.*



## Dedicated process

Data pursuit by industry-aware specialists

## Proprietary workflow technology

Quality checks across all fund occurrences

## Diligence

Rigorous audit of accounting details

## Advocacy

Working directly with managers on your behalf

## In-depth data capture

Standard details of calls and distributions

## Seamless transitions

Dedicated new investments and proven transitions process

## Advanced analytics

Sophisticated tracking, transparency, benchmarking, and projections

# SUPPORTING YOUR PRIVATE MARKETS ACTIVITIES

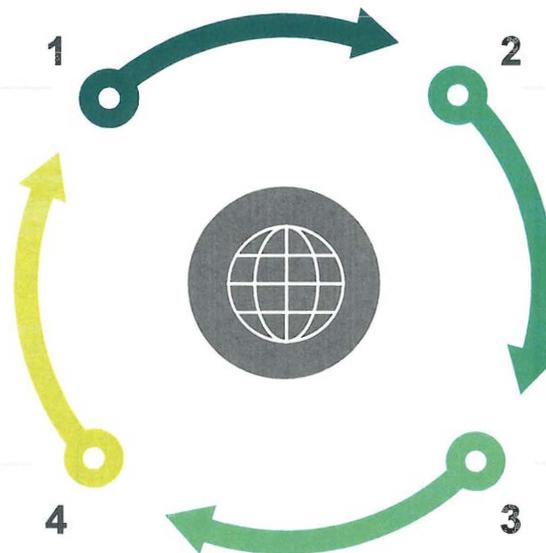
*Benefit from a dedicated approach to supporting the private equity administration process.*

## Capital Call Administration

- Receive notice from general partner
- Receive client approval
- Wire physical cash
- Record accounting entries

## Reporting

- Dedicated reporting available via Passport
- Reconcile adjusted valuations
- View exposures



## Distributions

- Receive notice from general partner
- Receive physical cash
- Record accounting entries

## Valuations

- Receive valuation statement
- Reconcile cash positions to statement
- Use latest value to derive a new adjusted valuation

# LEVERAGING ROBOTICS TO SUPPORT ALTERNATIVE INVESTMENTS



## BLUE PRISM

*Robotic Process Automation*

Used to gather key documents from General Partners' Website



## KOFAX

*Data Capture*

Used to extract pre-determined data elements from key documents



## IBM EDM

*Enterprise Data Management*

Workflow tool - creation, indexing, storage, retrieval and disposition of key documents



## KOFAX

*Robotic Process Automation*

Auto posting of updated valuations and cash flow activity



## PED

*Private Equity Desktop*

Proprietary tool used to efficiently manage the flow, accuracy and reporting

*Providing automation, accuracy and timeliness in a historically highly manual asset class*

CORPORATE & INSTITUTIONAL SERVICES

# Investment Reporting & Analytical Services

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# INSTITUTIONAL INVESTOR SOLUTIONS AND SUPPORT

*Products and service support designed with the priorities of large investors in mind.*



- ✓ **Transparency**  
Transparent data sources, processes and approach
- ✓ **Independent Oversight**  
Independent data set and unbiased perspective
- ✓ **Consistent Approach**  
Proven, scalable, operating model and technology platform
- ✓ **Constituent Engagement**  
Reporting and collateral to support client engagement
- ✓ **Investment Monitoring**  
Analytical tools support investment risk and performance monitoring requirements
- ✓ **Operational Efficiency**  
Regulatory reporting and operational efficiency toolkit

# SCALE AND SUPPORT

*Delivering global client service expertise and operational scale*

## Investment Risk & Analytical Services

<b>855</b>	<b>1,900</b>	<b>60,000</b>	<b>\$5.1T</b>	<b>119</b>
Clients	Legal Entities	Portfolios	Assets Under Service	Client Facing Partners

### Performance Measurement

**819**

Global Clients

**45,000**

Institutional Portfolios

**7.6M**

Daily Valuations

### Compliance Monitoring

**217**

Global Clients

**60,000**

Rules Processed Daily

**150+**

Attributes Available for Data Enrichment

### Risk Services

**42**

Global Clients

**10,620**

Monthly Portfolio Stress Tests

**50,770**

Custom Modeled Assets

### Private Monitor

**50**

Global Clients

**\$150B**

Capital Commitments Monitored

**7,000+**

Fund Interests Monitored

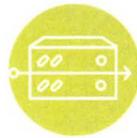
# BETTER DATA - BETTER TOOLS - BETTER DECISION MAKING

*Scale and flexibility to aggregate data in a single place and transform it into information.*



## Capturing quality data

- **Aggregated:** Capture a complete set of asset and liability data
- **Transparent:** Access holdings level data across all investment types
- **Enriched:** Apply additional asset characteristics to add depth to the data set
- **Timely:** Update data frequently to add value and support structured investment strategies



## Transforming data into information

- **Analytical:** Process vast amounts of data from multiple sources with powerful analytical capabilities
- **Flexible:** Adjust data and analytical parameters to focus on what matters to you
- **Automated:** Automated data capture and analysis offers scalable simplicity to even complex portfolios
- **Accessible:** Direct access to the analytical infrastructure puts you in control



## Applying information to benefit you

- **Monitor:** Access your most important information in a way that best suits you
- **Reflect:** Be better informed to make better decisions
- **Optimize:** Optimize your investment policy, strategies and structure to reduce risks and enhance returns
- **Expertise:** Access a global team of dedicated experts and be part of a global client network

CORPORATE & INSTITUTIONAL SERVICES

# Securities Lending

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# COMMITTED TO THE SECURITIES LENDING BUSINESS

*We are investing in the long-term value of securities lending*

## Philosophy

- Enhance returns
- Extract intrinsic value from loans
- Customizable program
- Does not interfere with investment strategy

## Securities lending agent

- Asset servicing and asset management alignment
- Credit and risk framework
- Financial strength supported by capital and our balance sheet

## Core Business for Northern Trust

- Continue to invest in the securities lending business
  - *People*
  - *Process*
  - *Technology*
- 37 years of experience

Securities Lending Clients

**435**

from 30 countries

Outstanding Loans

**US \$162**

billion

Lendable Base

**US \$1.2**

trillion

Average for September 30, 2018 (updated quarterly), Source: Northern Trust

# WHY NORTHERN TRUST

*An industry leader in securities lending*

## A core business

- Experienced team dedicated to securities lending
- Close coordination between custody and asset management

## Proven performance results

- 37-year track record of innovative solutions
- #1 in trade value for Fixed Income and Equities for Autoborrow

## Exceptional capital strength

- Sustained financial strength and stability
- Strong indemnification options

## Unrivaled client service

- Relationship staff anticipates client needs
- Focused on relationships, not transactions

## Unique global integration

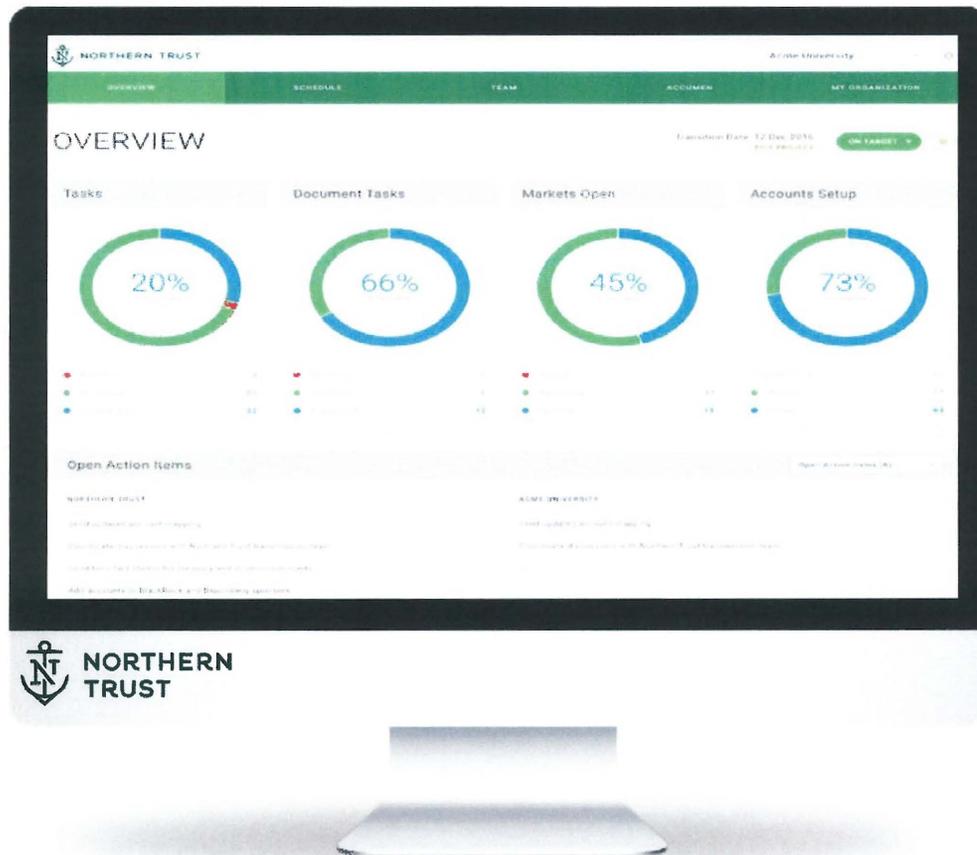
- Expertise provided by a global team of professionals
- Technology efficiency achieved through a single, global proprietary trading platform

# Transition Planning, Key Milestones and Metrics for Success

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# ONBOARDING DASHBOARD – MONITORING KEY MILESTONES

*Oversight and collaborative tool to help facilitate smooth transition*

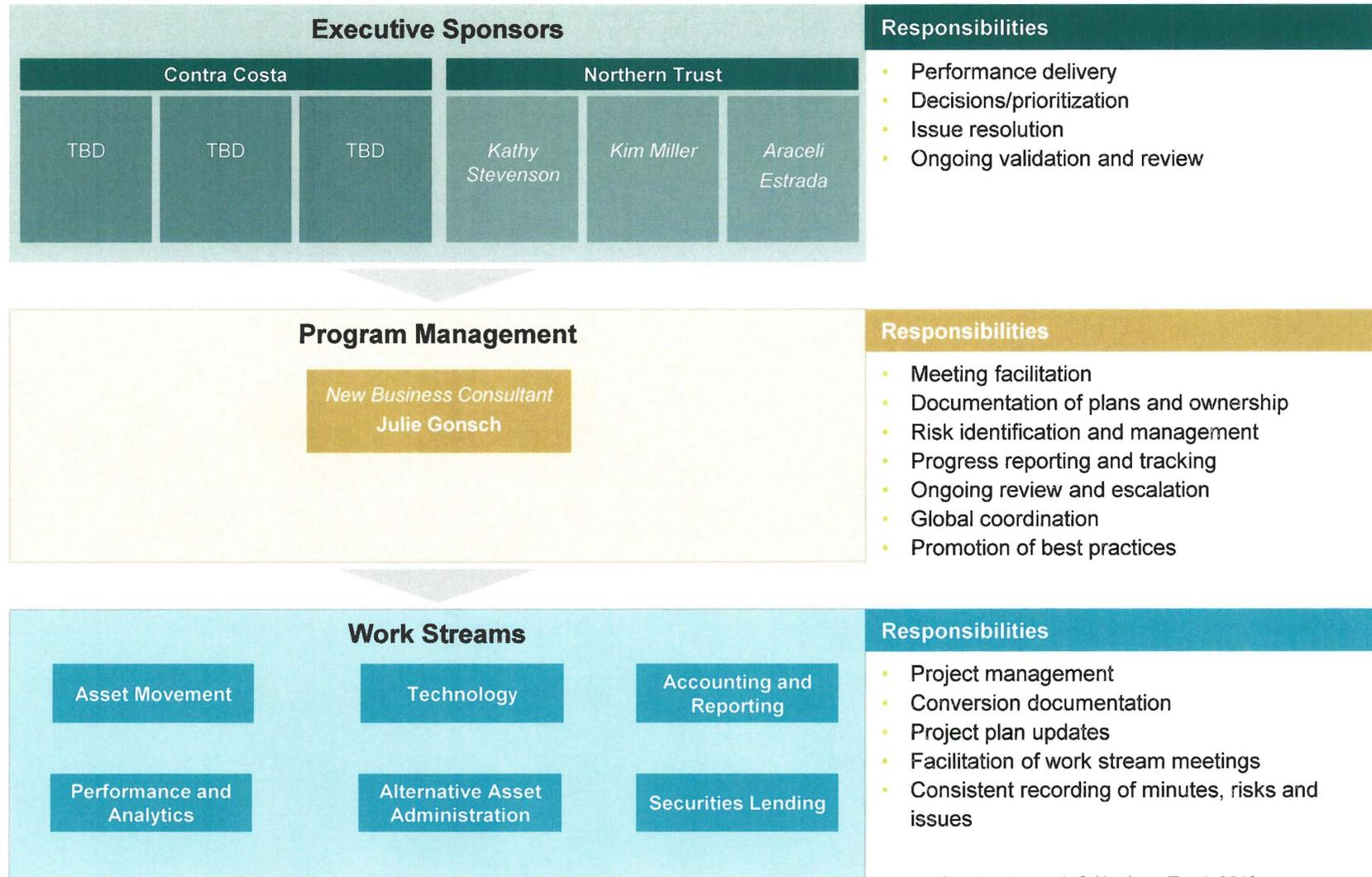


## Key Features

- Personalized view of the status of the transition based on key metrics
- Enables cooperation between you our client and the entire team
- Ability to collaborate on key documents needed for the transition
- Provides the ability to monitor status, next steps and action items in real-time

# DILIGENT GOVERNANCE

*A successful transition requires ownership, accountability, expertise and oversight.*



# A WELL-MANAGED CONVERSION IS KEY TO SUCCESS

Clear responsibility and accountability will be assigned to the Executive Council, the program manager and the work stream leaders.

Phase 1 Discovery	Phase 2 Preparation			Phase 3 Conversion			Phase 4 Reconciliation			Phase 5 Sign-off				
Focus Area	Northern Trust	Client	Prior Custodian	Focus Area	Northern Trust	Client	Investment Managers	Focus Area	Northern Trust	Client	Prior Custodian	Focus Area	Northern Trust	Client
Assemble conversion team led by Northern Trust new business consultant	●	●	●	Weekly task schedule review	●	●		Issue pre-conversion status receipt	●			Bi-weekly task schedule review	●	●
Notify prior custodian and other providers			●	Open securities and cash accounts	●			Monitor asset movement	●		●	Monitor income	●	
Work through legal and contractual documents	●	●		Confirm trade communication arrangement	●		●	Monitor cash balance postings	●		●	Post pay-downs	●	
Complete project planning and task schedule	●			Set up operational support	●			Post on-record conversions	●			Monitor prior custodian / administrator statement activity	●	
Commence series of due-diligence meetings to understand client's foundational requirements; document in client profile – account mapping structure, reporting and product solutions	●	●		Set up decision support solutions	●	●		Complete cash and asset reconciliations	●			Resolve exceptions with prior custodian / administrator	●	
Provide existing asset detail and account schematic			●	Provide client training about reporting	●	●		Issue post-transition status report	●			Issue first monthly accounting statements	●	
Compare asset detail to Northern Trust asset file; code unmatched securities	●							Provide additional client technology training	●	●				
Contract subcustodian network regarding emerging market holdings	●													

Northern Trust will support your ongoing reporting needs:

- Performance & analytics
- Financial
- Regulatory
- Auditors  
Northern Trust will meet with your internal and external auditors
- The conversion is complete after the first year's audit

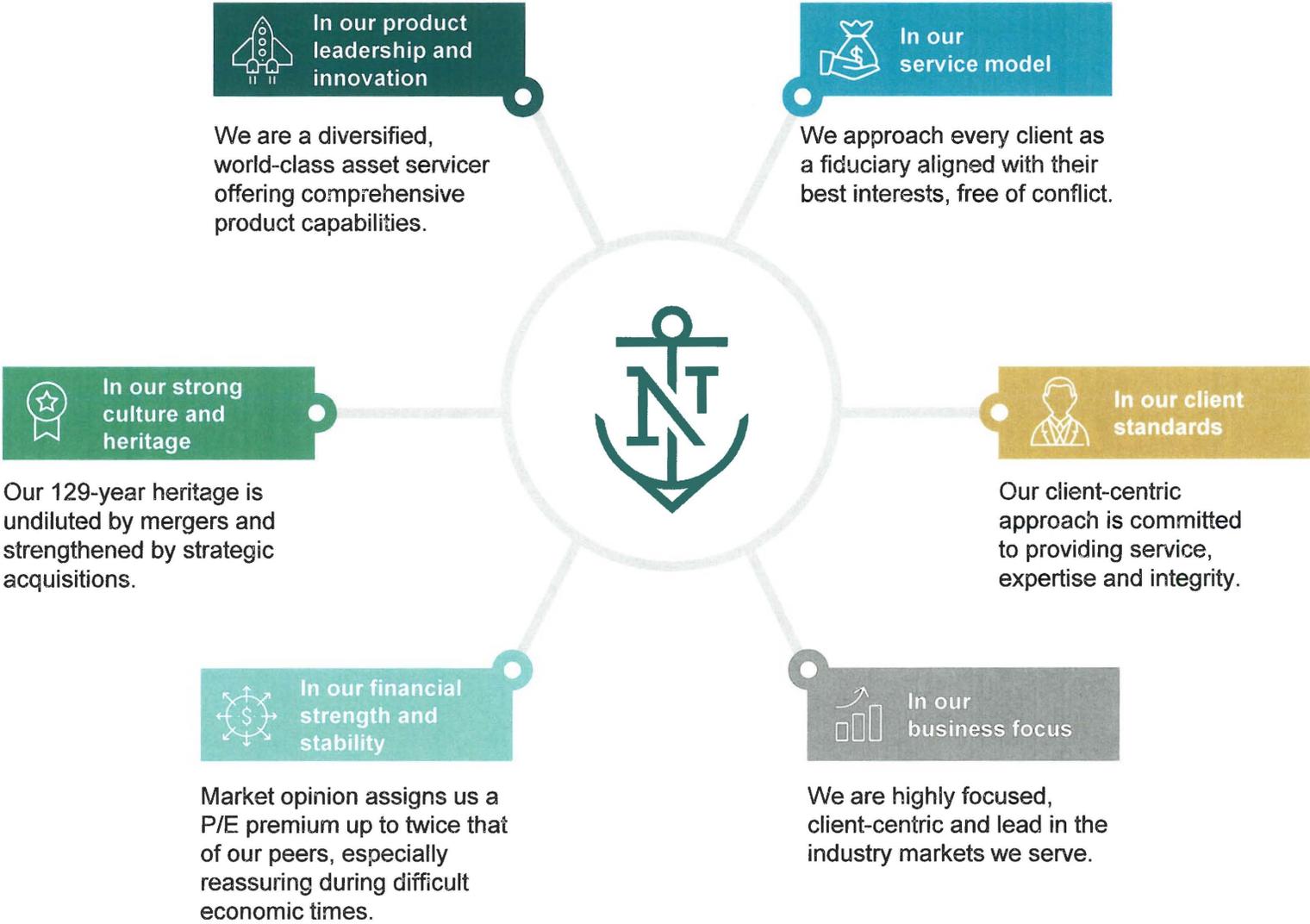
CORPORATE & INSTITUTIONAL SERVICES

# Why Northern Trust?

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# WHY NORTHERN TRUST?

*We're unique...*





**NORTHERN  
TRUST**

# CCCERA Board Meetings 2018

Meeting Date  
11/07/18  
Agenda Item  
#10

January						
Su	Mo	Tu	We	Th	Fr	Sa
	H	2	3	4	5	6
7	8	9	B	11	12	13
14	H	16	17	18	19	20
21	22	23	B	25	26	27
28	29	30	31			

1 - New Year's Day Observed  
15 - Martin Luther King Jr. Day

February						
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18	H	20	21	22	23	24
25	26	27	B			

19 - Presidents' Day

March						
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27	H	29	30	31		

28 - Memorial Day

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4 - Independence Day

August						
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3- Labor Day

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25	26	27	SB	29	30	

12 - Veterans Day  
22 and 23 - Thanksgiving

December						
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30	31					

25 - Christmas Day Observed

**B** Board Meeting

**SB** Special Board Meeting

**S** SACRS

**C** CALAPRS - General Assembly

# CCCERA Board Meetings 2019

Meeting Date  
11/07/18  
Agenda Item  
#11

January						
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1 - New Year's Day Observed  
21 - Martin Luther King Jr. Day

February						
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18 - Presidents' Day

March						
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27 - Memorial Day

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July						
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28	29	30	31			

4 - Independence Day

August						
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September						
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22	23	24	B	26	27	28
29	30					

2 - Labor Day

October						
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27	28	29	30	31		

November						
Su	Mo	Tu	We	Th	Fr	Sa
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3	4	5	SB	7	8	9
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17	18	19	20	21	22	23
24	25	B	27	H	H	30

11 - Veterans Day  
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15	16	17	18	19	20	21
22	23	24	H	26	27	28
29	30	31				

25 - Christmas Day

B Board Meeting     SB Special Board Meeting     S SACRS     C CALAPRS - General Assembly

# Board & Audit Committee Compliance Conference

February 18-19, 2019 | Scottsdale, AZ



Meeting Date  
**11/07/18**  
Agenda Item  
**#12a.**

## PRELIMINARY AGENDA

### ***New for 2019:***

- Two full days of education and networking
- Two learning tracks: General Organizational Compliance and Healthcare Compliance
- New location at The Scottsdale Resort at McCormick Ranch

Buy one  
registration for  
\$995  
and get one  
for \$695

[corporatecompliance.org/audit](http://corporatecompliance.org/audit)

Questions: [jill.burke@corporatecompliance.org](mailto:jill.burke@corporatecompliance.org)



**SCCE**<sup>TM</sup>  
Society of Corporate  
Compliance and Ethics

The Department of Justice expects board members and senior level leaders of organizations to be experienced in compliance oversight. The Board & Audit Committee Compliance Conference can help you and your board meet this expectation.

Our 2019 conference combines the efforts of the Health Care Compliance Association (HCCA) and the Society of Corporate Compliance and Ethics (SCCE) and features two session tracks: General Organizational Compliance and Healthcare Compliance. As an attendee you may choose to attend sessions from either track.

### Who Should Attend?

Past attendees have included:

- Board chairs
- Board officers
- Board members
- Trustees
- Audit & compliance committee members
- Presidents/CEOs
- Chief compliance officers
- Healthcare senior internal auditors
- Senior directors of finance
- General counsel

### Why Should You Attend?

Attendees will learn:

- How to fulfill fiduciary obligations as board/committee members and senior-level leaders
- How to help improve board performance for compliance oversight
- The latest on regulatory risk and compliance obligations
- Tips for successful oversight of financial reporting
- How to conduct internal audits and investigations
- How to improve overall compliance program performance at their organizations

### Speakers



**Martin Biegelman, CFE, CCEP-F**  
Managing Director, Regulatory, Forensics & Compliance  
Deloitte Financial Advisory Services LLP



**Eric Cannon,**  
Director  
KONE Americas



**Chris Cestaro, (invited)**  
Assistant Chief Criminal Division  
Fraud Section of Department of Justice



**Darrell Contreras, CHC-F, CHPC, CHRC**  
Chief Compliance Officer  
Millennium Health



**Shawn DeGroot, CCEP, CHPC, CHRC,**  
President  
Compliance Vitals



**Lisa Gressel,**  
General Counsel  
PF Chang's



**Juliette Gust, CFE**  
Former Director, Fraud & Investigations  
Starwood Hotels & Resorts Worldwide, Inc.



**Odell Guyton, CCEP, CCEP-I**  
Co-founder SCCE, Managing Director  
Klink & Co. Inc.



**Martin Hellmer,**  
Supervisory Special Agent  
FBI



**Gabriel Imperato, CHC**  
Managing Partner  
Nelson Mullins Broad and Cassel



**Marianne Jennings, JD**  
Emeritus Professor  
Arizona State University



**Michael Morse, CHC**  
Partner  
Pietragallo Gordon Alfano Bosick & Raspanti, LLP



**Jacqueline Nash Bloink,**



**Steve Ortquist, Esq., CCEP, CHC-F, CHRC**  
Senior Managing Director  
Ankura Consulting



**Dan Oseran, CIPP, JD, MBA**  
Senior Director and Counsel Global Privacy,  
Business Ethics and Compliance  
eBay Inc.



**Judy Ringholz, JD, RN, CHC**  
Vice President of Compliance and Ethics &  
Chief Compliance Officer, Jackson Health  
System



**Dan Roach,**  
Chief Compliance Officer  
Optum 360



**Gerry Roy, CHC, CHRC**  
VP, Chief Compliance & Privacy Officer,  
Phoenix Children's Hospital



**James Rough, CCEP, CFE, CHC**  
Founder and President  
SunHawk Consulting, LLC



**Christian Schrank,**  
Special Agent in Charge, US DHHS OIG OI,  
LA Regional Office



**Frank Sheeder, Esq., JD**  
Partner  
Alston & Bird LLP



**Mia Singer,**  
Principal and Owner  
Singer Consulting, LLC



**Roy Wyman,**  
Attorney  
Nelson Mullins Broad and Cassel

Speakers are subject to change

### Hotel & conference location

#### The Scottsdale Resort at McCormick Ranch

7700 E McCormick Parkway, Scottsdale, AZ 85258

Reservations: 800.540.0727

Main: 480.991.9000

Fax: 480.596.7422

<https://www.destinationhotels.com/scottsdale-resort>

A reduced rate of \$235.00 per night plus taxes (currently 13.92%, subject to change) for single/double occupancy has been arranged for this program. This rate includes wireless internet in guest rooms and meeting space, access to fitness center, daily USA Today, and Valet & Self-Parking. To book your reservation, call 1 800.540.0727 and request the SCCE group rate.

The cutoff date for the group rate is Friday, January 25, 2019 or once the group room block is full, whichever comes first. The group rate is available 3 days pre and post conference. All reservations must be guaranteed by a major credit card.

NOTICE: Neither SCCE or any hotel it is affiliated with will ever contact you to make a hotel reservation. If you receive a call soliciting reservations on behalf of SCCE or the event, it is likely from a room poacher and may be fraudulent. We recommend you make reservations directly with the hotel using the phone number or web link on the conference website. If you have concerns or questions, please contact 888.580.8373.

## MONDAY, FEBRUARY 18

8:00 AM–5:30 PM	<b>Registration</b>	
8:00–8:45 AM	<b>Continental Breakfast (provided)</b>	
8:45–9:00 AM	<b>Welcome &amp; Opening Remarks</b> <i>Gabriel Imperato, CHC, Managing Partner at Nelson Mullins Broad and Cassel; James Rough, CCEP, CFE, CHC, Founder and President of SunHawk Consulting, LLC</i>	
9:00–10:00 AM	<b>Introduction to Risk and Compliance</b> <i>Shawn DeGroot, CCEP, CHPC, CHRC, President, Compliance Vitals</i> <ul style="list-style-type: none"> <li>• Key areas of consideration in developing and implementing a compliance program</li> <li>• Risk areas for consideration by the board</li> <li>• Steps a board may take in considering management accountability related to compliance risks</li> </ul>	
10:00–10:15 AM	<b>Networking Break</b>	
10:15–11:15 AM	<b>Introduction to Board and Management Responsibilities for Compliance Oversight</b> <i>Dan Roach, Chief Compliance Officer, Optum 360</i> <ul style="list-style-type: none"> <li>• What is reasonable oversight of a compliance and ethics program?</li> <li>• What are the ideal qualifications and characteristics of a board member for compliance oversight?</li> <li>• How do you know if compliance matters are getting sufficient attention by the Board and the C-suite?</li> </ul>	
11:15–11:30 AM	<b>Networking Break</b>	
11:30 –12:30 PM	<b>Cyber Security and Privacy</b> <i>Martin Hellmer, Supervisory Special Agent, FBI; Roy Wyman, Attorney, Nelson Mullins Broad and Cassel</i> <ul style="list-style-type: none"> <li>• Cybercrime, hacking, and ransomware</li> <li>• Risks to privacy</li> <li>• How to become and remain compliant</li> </ul>	
12:30–1:30 PM	<b>Lunch (provided)</b> <i>Compliance Keynote Session</i>	
1:30–2:30 PM	<b>Healthcare Compliance Track</b>	<b>General Compliance Track</b>
	<b>Healthcare Fraud and Compliance Update</b> <i>Gabriel Imperato, CHC, Managing Partner at Nelson Mullins Broad and Cassel</i> <ul style="list-style-type: none"> <li>• Recent developments in enforcement and compliance</li> <li>• Individual accountability for organizational health care fraud</li> <li>• Department of Justice Compliance Counsel and enforcement and compliance in the new administration</li> </ul>	<b>Anti-Corruption and Anti-Bribery—Foreign Corruption Practices Act</b> <i>Odell Guyton, CCEP, CCEP-I, Co-Founder SCCE, Managing Director, Klink &amp; Co., Inc.; Chris Cestaro (invited), Assistant Chief Criminal Division, Fraud Section of Department of Justice</i> <ul style="list-style-type: none"> <li>• FCPA basics</li> <li>• Recent trends and enforcement actions</li> <li>• Observations and lessons learned</li> </ul>
2:30–2:45 PM	<b>Networking Break</b>	
2:45–3:45 PM	<b>Healthcare Compliance Track</b>	<b>General Compliance Track</b>
	<b>Stark and Anti-Kickback Compliance</b> <i>Frank Sheeder, Esq., JD, Partner, Alston &amp; Bird LLP</i> <ul style="list-style-type: none"> <li>• An overview of both laws and how they intersect</li> <li>• The False Claims Act overlay</li> <li>• Recent enforcement actions</li> <li>• Practical approaches to mitigating risk</li> </ul>	<b>GDPR 1 Year Later – What’s Next?</b> <i>Mia Singer, Principal and Owner, Singer Consulting, LLC; Dan Oseran, CIPP, JD, MBA, Senior Director and Counsel, Global Privacy, Business Ethics and Compliance, eBay Inc.</i> <ul style="list-style-type: none"> <li>• General scope and breadth of the GDPR</li> <li>• Major challenges and potential solutions to compliance with the law</li> <li>• GDPR became effective May 25, 2018 – what does ongoing compliance look like?</li> </ul>
3:45–4:00 PM	<b>Networking Break</b>	
4:00–5:00 PM	<b>Conflicts of Interest</b> <i>Martin Biegelman, CFE, CCEP-F, Managing Director, Regulatory, Forensics &amp; Compliance, Deloitte Financial Advisory Services LLP</i> <ul style="list-style-type: none"> <li>• Why conflicts of interest matter for organizations</li> <li>• Key conflicts of interest for board members, compliance professionals and other employees</li> <li>• Case studies, best practices and effective mitigation strategies</li> </ul>	
5:00–5:30 PM	<b>Q&amp;A Session</b> <i>All Speakers</i>	
5:45 – 7:00 PM	<b>Networking Reception</b>	

## TUESDAY, FEBRUARY 19

8:00 AM–4:30 PM	<b>Registration</b>	
7:30–8:00 AM	<b>Continental Breakfast (provided)</b>	
8:00–9:15 AM	<b>Whistleblowers: Who Are They, Why Do They Blow the Whistle, and What Makes a Good Whistleblower Case?</b> <i>Michael Morse, CHC, Partner, Pietragallo Gordon Alfano Bosick &amp; Raspanti, LLP; Jacqueline Nash Bloink</i> <ul style="list-style-type: none"> <li>Whistleblowers: Who are they and why do they file Qui Tam cases under the False Claims Act?</li> <li>What are typical organization responses to reports of non-compliance and the whistleblower threat?</li> <li>What are the most important features of compliance programs that are useful in managing compliance deficiencies and the whistleblower threat?</li> <li>How important is minimizing “retaliation” against a reporter and how does an organization achieve this goal?</li> </ul>	
9:15–9:30 AM	<b>Networking Break</b>	
9:30–10:30 AM	<b>Healthcare Compliance Track</b> <b>Healthcare Privacy &amp; Security and Responsibility to Breaches</b> <i>Shawn DeGroot, CCEP, CHPC, CHRC, President, Compliance Vitals; Darrell Contreras, CHC-F, CHPC, CHRC Chief Compliance Officer, Millennium Health</i> <ul style="list-style-type: none"> <li>The basics of HIPAA Privacy and Security</li> <li>Board responsibilities for the Privacy and Security program</li> <li>What to expect when something goes wrong</li> </ul>	<b>General Compliance Track</b> <b>Communicating with Enforcement and Regulatory Representatives</b> <i>James Rough, CCEP, CFE, CHC, Founder and President of SunHawk Consulting, LLC; Christian Schrank; Chris Cestaro (invited) Assistant Chief Criminal Division, Fraud Section of Department of Justice</i> <ul style="list-style-type: none"> <li>Management knows all too well the consequences of receiving regulatory inquiries, or worse, a subpoena can have on their reputation, bottom line, and their time.</li> <li>Learn the importance of building a good working relationship with government representatives</li> <li>Learn the importance of accurate, timely, and complete disclosure when reporting or self-disclosing to government representatives</li> </ul>
10:30–10:45 AM	<b>Networking Break</b>	
10:45–11:45 AM	<b>Internal Investigations 101</b> <i>Lisa Gressel, General Counsel, PF Chang’s; Eric Cannon, Director, KONE Americas; Juliette Gust, CFE, Former Director, Fraud &amp; Investigations, Starwood Hotels &amp; Resorts Worldwide, Inc.</i> <ul style="list-style-type: none"> <li>Leveraging Resources</li> <li>Control and Track</li> <li>Prevent Retaliation</li> <li>Effects of poor investigation/lessons learned</li> </ul>	
11:45–12:45 PM	<b>Lunch (provided) Failures of ATF Culture</b> <i>Keynote Speaker: Gerry Roy, CHC, CHRC, VP, Chief Compliance &amp; Privacy Officer, Phoenix Children’s Hospital</i>	
12:45–1:45 PM	<b>Ethical Culture and Compliance Effectiveness</b> <i>Steve Ortquist, Esq., CCEP, CHC-F, CHRC, Senior Managing Director, Ankura Consulting; Marianne Jennings, JD, Emeritus Professor, Arizona State University; Judy Ringholz, JD, RN, CHC, Vice President of Compliance and Ethics &amp; Chief Compliance Officer, Jackson Health System</i>	
1:45–2:00 PM	<b>Networking Break</b>	
2:00 – 3:00 PM	<b>What It Takes To Be a Good Board Member</b> <i>Speaker and Panel</i> <ul style="list-style-type: none"> <li>Compliance and board member duties in compliance investigations</li> <li>Board member oversight of mergers and acquisitions</li> <li>The relationship between the board and the C-suite</li> </ul>	
3:00 – 3:15 PM	<b>Networking Break</b>	
3:15 – 4:15 PM	<b>False Claims Act Practices and Procedures, and Halifax Case Study</b> <i>Gabriel Imperato, CHC, Managing Partner at Nelson Mullins Broad and Cassel</i>	
4:15 – 4:30 PM	<b>Wrap Up</b> <i>Gabriel Imperato, CHC, Managing Partner at Nelson Mullins Broad and Cassel; James Rough, CCEP, CFE, CHC, Founder and President of SunHawk Consulting, LLC</i>	
4:30 PM	<b>Adjourn</b>	

### CONTACT INFORMATION

Mr.  Mrs.  Ms.  Dr.

Member/Account ID (if applicable) \_\_\_\_\_

First Name \_\_\_\_\_ MI \_\_\_\_\_

Last Name \_\_\_\_\_

Credentials (CCEP, JD, etc.) \_\_\_\_\_

Job Title \_\_\_\_\_

Organization (Name of employer) \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_ Country \_\_\_\_\_

Phone \_\_\_\_\_

Email (required for registration confirmation & conference information) \_\_\_\_\_

### REGISTRATION OPTIONS (Registration fees are as listed and considered net of any local withholding taxes applicable in your country of residence.)

- Registration..... \$995
- Registration plus SCCE Membership\*..... \$1195
- 2<sup>nd</sup> Attendee Registration ..... \$695
- 2<sup>nd</sup> Attendee Registration plus SCCE Membership\*..... \$895

\*Join SCCE and SAVE \$95 off your first year!  
(First-time members only. Dues regularly \$295; \$325 after January 1, 2019)

TOTAL \$ \_\_\_\_\_

Code: \_\_\_\_\_ 2<sup>nd</sup> Attendee: \_\_\_\_\_

Organizations may receive one registration at \$695 for each registration purchased at \$995. To receive this offer, write **2AACS0219** in the space for the code above and write the name of the person with whom you are attending. Offers may not be combined. Both attendees must complete separate registration forms.

### PAYMENT OPTIONS

- Check (mail to: SCCE, 6500 Barrie Road, Suite 250, Minneapolis, MN 55435)
- Invoice me
- I authorize SCCE to charge my credit card (choose below)

CREDIT CARD:  American Express  Visa  MasterCard  Discover

Due to PCI Compliance, please do not provide any credit card information via email. Email this form to [helpsteam@corporatecompliance.org](mailto:helpsteam@corporatecompliance.org) (without credit card information) and call SCCE at +1 952.933.4977 or 888.277.4977 with your credit card information.

Credit Card Account Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Cardholder's Name (please print) \_\_\_\_\_

Cardholder's Signature \_\_\_\_\_

AACS0219

### WAYS TO REGISTER

MAIL SCCE  
6500 Barrie Road, Suite 250  
Minneapolis, MN 55435-2358

WEB [www.corporatecompliance.org/audit](http://www.corporatecompliance.org/audit)  
FAX +1 952.988.0146  
(include completed registration form with payment)  
EMAIL [helpsteam@corporatecompliance.org](mailto:helpsteam@corporatecompliance.org)  
(do not provide credit card information via email)

### TERMS & CONDITIONS

**REGISTRATION PAYMENT TERMS:** Checks are payable to SCCE. Credit cards accepted: American Express, Visa, MasterCard, or Discover. SCCE will charge your credit card the correct amount should your total be miscalculated. If you wish to pay using wire transfer funds, please email [helpsteam@corporatecompliance.org](mailto:helpsteam@corporatecompliance.org) for instructions.

**CANCELLATIONS/SUBSTITUTIONS:** Refunds will not be issued. You may send a substitute in your place or request a conference credit. Conference credits are issued in the full amount of the registration fees paid, and will expire 12 months from the date of the original canceled event. Conference credits may be used towards any SCCE service or product. If a credit is applied towards an event, the event must take place prior to the credit's expiration date. If you need to cancel your participation, notification is required by email at [helpsteam@corporatecompliance.org](mailto:helpsteam@corporatecompliance.org), prior to the start date of the event. Please note that if you are sending a substitute, an additional fee may apply.

**TAX DEDUCTIBILITY:** All expenses incurred to maintain or improve skills in your profession may be tax deductible; including tuition, travel, lodging, and meals. Please consult your tax advisor.

**SPECIAL NEEDS/CONCERNS:** Prior to your arrival, please call SCCE at +1 952.933.4977 or 888.277.4977 if you have a special need and require accommodation.

**RECORDING:** Unauthorized audio or video recording of SCCE conferences is not allowed.

**USE OF INFORMATION:** To find out how we may use your information, please read our Privacy Statement at [corporatecompliance.org/privacy.aspx](http://corporatecompliance.org/privacy.aspx). By submitting this registration form you agree to the use of your information as stated in the privacy policy.

**AGREEMENTS & ACKNOWLEDGEMENTS:** I agree and acknowledge that I am undertaking participation in SCCE events and activities as my own free and intentional act, and I am fully aware that possible physical injury might occur to me as a result of my participation in these events. I give this acknowledgement freely and knowingly and assert that I am, as a result, able to participate in SCCE events, and I do hereby assume responsibility for my own well-being. I agree and acknowledge that SCCE plans to take photographs and/or video at the Board & Audit Committee Compliance Conference and reproduce them in SCCE educational, news, or promotional material, whether in print, electronic, or other media, including the SCCE website. By participating in the Board & Audit Committee Compliance Conference, I grant SCCE the right to use my name, photograph, video, and biography for such purposes. As a participant of this event, my name, job title, organization, city, state, and country will be listed on the attendee list that will be distributed to attendees, speakers, and exhibitors of this event.

### CONTINUING EDUCATION

SCCE is in the process of applying for additional external continuing education units (CEUs). Should overall number of education hours decrease or increase, the maximum number of CEUs available will be changed accordingly. Credits are assessed based on actual attendance and credit type requested.

Approval quantities and types vary by state or certifying body. For entities that have granted prior approval for this event, credits will be awarded in accordance with their requirements. **CEU totals are subject to change.**

Upon request, SCCE may submit this course to additional states or entities for consideration. If you would like to make a request, please contact us at +1 952.933.4977 or 888.580.8373 or email [ccb@compliancecertification.org](mailto:ccb@compliancecertification.org). Visit SCCE's website, [corporatecompliance.org](http://corporatecompliance.org) for up-to-date information.

**COMPLIANCE CERTIFICATION BOARD (CCB)<sup>®</sup>:** CCB has awarded a maximum of 15.9 CEUs for these certifications: Certified in Healthcare Compliance (CHC)<sup>®</sup>, Certified in Healthcare Compliance—Fellow (CHC-F)<sup>®</sup>, Certified in Healthcare Privacy Compliance (CHPC<sup>®</sup>), Certified in Healthcare Research Compliance (CHRC)<sup>®</sup>, Certified Compliance & Ethics Professional (CCEP)<sup>®</sup>, Certified Compliance & Ethics Professional—Fellow (CCEP-F)<sup>®</sup>, Certified Compliance & Ethics Professional—International (CCEP-I)<sup>®</sup>.

By submitting this registration form, you agree to the use of your information and the terms and conditions stated on this form. To view our Privacy Statement, visit [corporatecompliance.org/privacy.aspx](http://corporatecompliance.org/privacy.aspx).

SOCIETY OF CORPORATE COMPLIANCE AND ETHICS  
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P +1 952.933.4977 or 888.277.4977 | F +1 952.988.0146  
[corporatecompliance.org](http://corporatecompliance.org) | [helpsteam@corporatecompliance.org](mailto:helpsteam@corporatecompliance.org)

**MARCH 27-29, 2019**

**UCLA LUSKIN CONFERENCE CENTER  
LOS ANGELES, CA**



**Advanced Principles of Pension Management**  
*for Trustees*

**FOR THE CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS**

# Advanced Principles of Pension Management

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## *for Trustees*

### ADVANCED PRINCIPLES OF PENSION MANAGEMENT

The Advanced course is about building trustee skills and strengthening board governance. Pension trustees have many opportunities to learn about the disciplines required to run a pension system: institutional investing, actuarial science, benefits law, etc. But another highly important area of knowledge is the business of being a trustee and of contributing to a well-functioning board. The **CALAPRS Advanced Principles of Pension Management** course exposes veteran trustees to the most effective pension management thinking to help them enhance their service to their retirement systems.

### COURSE RATINGS

**100%** of last year's participants agreed that the course would "enhance their performance and leadership abilities as a board member," and that they would, "recommend the program to their colleagues."

### THE PROGRAM

Course attendees will hear from and discuss issues with top-level presenters in the areas of board/staff roles, governance, pension law, economic forecasting and actuarial science.

### CURRICULUM | YOUR COURSE OF STUDY

Over the course of two days, attendees will be immersed in a powerful learning process—acquiring the skills they need to lead their organizations effectively.



#### The 2019 Program will cover:

- **Policy-Based Boards**
- **Effective Planning**
- **Economics Forecasting Methods and the annual forecast of the UCLA Anderson School**
- **Good Governance & the Investment Team**
- ***Wearing the Right Hat at the Right Time — The Fiduciary Duties of Public Pension System Board Members***
- **Advanced Actuarial Principles**

### PARTICIPANTS | WHO IS RIGHT FOR THE PROGRAM?

The program is designed for an experienced group of trustees. Trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" which is specifically designed for new trustees. The course was previously held at Stanford University.

## **EXPERIENCE UCLA'S TRADITION OF EXCELLENCE AT THE LUSKIN CONFERENCE CENTER**

In the heart of UCLA's vibrant campus, the new UCLA Meyer and Renee Luskin Conference Center is set amid iconic campus buildings and the exhilarating backdrop of daily student life. The Luskin Conference Center is a place where the best academic minds, innovators, researchers, political leaders, and societal visionaries meet to exchange ideas that help shape the world.



The UCLA Luskin Conference Center is an ideal central meeting place where California's public pension trustees can gather for a transformational academic experience that transcends the acquisition of knowledge, skills, and tools—and fosters professional, intellectual, and personal development.

**Participants will receive a Certificate of Completion for this program.**

**PROGRAM DATES**  
**March 27-29, 2019**

## **LEARNING COMMITMENT**

Active involvement in all classroom sessions, case discussions, and other program activities is expected. Participants devote considerable time and intellect to the learning experience. Therefore, they must be free of outside responsibilities during the two days of the program.

## **THE FACULTY**

The Advanced Principles Program is taught by a faculty of highly regarded experts and experienced professionals in the field of public pension management.

## **TUITION**

Program tuition is \$3,100 for CALAPRS members and \$3,400 for non-members and includes all lodging, meals, and materials. Tuition must be paid in full by March 8, 2019.

## **ACCOMMODATIONS**

Program tuition includes all meals and lodging on the nights of March 27 and 28, 2019 at the acclaimed UCLA Luskin Conference Center, located at 425 Westwood Plaza, Los Angeles, CA. To ensure full participation, all participants are required to stay on-site in the provided private, comfortable hotel rooms.

## **REGISTRATION**

**Applications must be received by February 15, 2019.** Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be.

# Advanced Principles of Pension Management for Trustees

March 27-29, 2019 Los Angeles, CA

## APPLICATION FOR ENROLLMENT

Due by February 15, 2019

**Applications must be received by February 15, 2018.** Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be. Accepted applicants will be notified via email on February 20, 2019

**Applicant Qualifications:** *The Advanced Principles Program is designed for an experienced group of trustees. In evaluating readiness for this program, trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the initial trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" that is specifically designed for new trustees. The course was previously held at Stanford University.*

### Applicant Information

Trustee's Name (for certificate/name badge): \_\_\_\_\_

Retirement System: \_\_\_\_\_

Trustee Type:  Elected  Appointed  Ex-Officio Date Became a Trustee: \_\_\_\_\_ Date Current Term Expires: \_\_\_\_\_

Trustee's Mailing Address: \_\_\_\_\_

Trustee's Phone : \_\_\_\_\_ Trustee's Email: \_\_\_\_\_

Emergency Contact (name, phone): \_\_\_\_\_

Dietary Restrictions (if any): \_\_\_\_\_

Administrative Contact (name, email): \_\_\_\_\_

I have **e-mailed** this applicant's biography (≤150 words) to register@calaprs.org for printing in the attendee materials.

### Applicant Signature

*If admitted, I agree to attend the Advanced Principles program in full and acknowledge that missing one or more sessions may result in forfeiture of my Certificate of Completion, as determined by the Faculty.*

Trustee Signature (required) \_\_\_\_\_ Date: \_\_\_\_\_

### Administrator Approval

Administrator Name: \_\_\_\_\_ Email: \_\_\_\_\_

Administrator Signature (required): \_\_\_\_\_

### Tuition Payment

\$3,100 CALAPRS Member  \$3,400 Non-member

**Program tuition must be paid in full by March 8, 2019.** Tuition includes all meals, materials, and mandatory lodging for all participants for the nights of March 27 and 28 in the UCLA Luskin Conference Center. Payable by check only made out and mailed to "CALAPRS". A separate invoice will not be sent.



If, due to a disability, you have any special needs, call 415-764-4860 to let us know. We will do our best to accommodate your needs.

## CALAPRS

EDUCATION · COMMUNICATION · NETWORKING  
California Association of Public Retirement Systems

Mail, email or fax form and payment to  
CALAPRS  
575 Market Street, Suite 2125  
San Francisco, CA 94105  
Phone: 415-764-4860 Fax: 415-764-4915  
register@calaprs.org www.calaprs.org