The regular meeting of the Dallas Police and Fire Pension System Board of Trustees will be held at 8:30 a.m. on Thursday, December 14, 2017, in the Second Floor Board Room at 4100 Harry Hines Boulevard, Dallas, Texas. Items of the following agenda will be presented to the Board:

A. MOMENT OF SILENCE

B. CONSENT AGENDA

1. Approval of Minutes
   a. Special meeting of November 1, 2017
   b. Regular meeting of November 9, 2017

2. Approval of Refunds of Contributions for the Month of November 2017
3. Approval of Estate Settlements

4. Approval of Survivor Benefits

5. Approval of Service Retirements

6. Approval of Alternate Payee Benefits

7. Approval of Payment of Military Leave Contributions

8. Spouse Wed After Retirement (SWAR)

9. Denial of Unforeseen Emergency Requests

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Deferred Retirement Option Plan (DROP) Policy

   Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

   a. DROP revocation and special needs trusts
   b. Hardship payments for members’ estates
   c. 10-year limitation on Active DROP payment deferrals
2. Hearthstone: Possible sales

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.072 of the Texas Government Code.

a. Spring Valley
b. Sandstone

3. Ethics Policies

4. Governance and Board Conduct Policy

5. Discussion and approval of the 2018 Budget

6. Hybrid Defined Contribution/Defined Benefit plan analysis report

7. Tax Issues

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

a. Excess Benefit Plan and Trust
b. Unrelated Business Income Tax (UBIT)
8. Investment Policy Statement amendments


10. Extension of Legislative Consultant's Agreement - Locke Lord LLP

11. RFP Process for Investment Consultant

12. Legal issues

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

a. City of Dallas contributions pursuant to USERRA
b. Eddington et al. v. DPFP
c. Rawlings v. DPFP
d. DPFP v. Columbus A. Alexander III
e. Degan et al. v. DPFP (Federal suit)
f. HB 3158

13. Board approval of Trustee education and travel

a. Future Education and Business-related Travel
b. Future Investment-related Travel
14. Unforeseeable Emergency Requests from DROP Members

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.078 of the Texas Government Code.

D. BRIEFING ITEMS

1. Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

2. Executive Director’s report
   a. Associations’ newsletters
      • NCPERS Monitor (October 2017)
      • NCPERS Monitor (November 2017)
      • NCPERS Monitor (December 2017)
      • NCPERS PERSist (Fall 2017)
   b. Employee recognition – Third Quarter 2017
      • Employee Service Award
      • Employee of the Quarter award

The term “possible action” in the wording of any Agenda item contained herein serves as notice that the Board may, as permitted by the Texas Government Code, Section 551, in its discretion, dispose of any item by any action in the following non-exclusive list: approval, disapproval, deferral, table, take no action, and receive and file. At the discretion of the Board, items on this agenda may be considered at times other than in the order indicated in this agenda.

At any point during the consideration of the above items, the Board may go into Closed Executive Session as per Texas Government Code, Section 551.071 for consultation with attorneys, Section 551.072 for real estate matters, Section 551.074 for personnel matters, and Section 551.078 for review of medical records.
ITEM #A

MOMENT OF SILENCE

In memory of our Members and Pensioners who recently passed away

(October 3, 2017 – December 1, 2017)

<table>
<thead>
<tr>
<th>NAME</th>
<th>ACTIVE/ RETIRED</th>
<th>DEPARTMENT</th>
<th>DATE OF DEATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walter A. Burrows</td>
<td>Retired</td>
<td>Police</td>
<td>Nov. 2, 2017</td>
</tr>
<tr>
<td>Robert F. Golden</td>
<td>Retired</td>
<td>Fire</td>
<td>Nov. 14, 2017</td>
</tr>
<tr>
<td>James R. Stevenson</td>
<td>Retired</td>
<td>Fire</td>
<td>Nov. 14, 2017</td>
</tr>
<tr>
<td>Edwin E. Carlson</td>
<td>Retired</td>
<td>Police</td>
<td>Nov. 18, 2017</td>
</tr>
<tr>
<td>William K. Pullen</td>
<td>Retired</td>
<td>Fire</td>
<td>Nov. 18, 2017</td>
</tr>
<tr>
<td>Edd W. Head</td>
<td>Retired</td>
<td>Police</td>
<td>Nov. 25, 2017</td>
</tr>
<tr>
<td>Edmund R. Kozlovsky</td>
<td>Retired</td>
<td>Police</td>
<td>Nov. 25, 2017</td>
</tr>
<tr>
<td>Artie C. Christian</td>
<td>Retired</td>
<td>Police</td>
<td>Nov. 27, 2017</td>
</tr>
<tr>
<td>John A. Green</td>
<td>Retired</td>
<td>Fire</td>
<td>Nov. 29, 2017</td>
</tr>
<tr>
<td>Daniel G. Brantley</td>
<td>Retired</td>
<td>Police</td>
<td>Dec. 1, 2017</td>
</tr>
</tbody>
</table>
Dallas Police and Fire Pension System  
Wednesday, November 1, 2016  
10:00 a.m.  
Second Floor Board Room  
4100 Harry Hines Blvd., Suite 100  
Dallas, TX

Special meeting, William F. Quinn, Chairman, presiding:

**ROLL CALL**

**Board Members**

Present at 10:00: William F. Quinn, Nicholas A. Merrick, Samuel L. Friar, Ray Nixon, Gilbert A. Garcia, Frederick E. Rowe, Tina Hernandez Patterson (via telephone), Robert C. Walters, Joseph P. Schutz, Kneeland Youngblood.

Present at 10:06: Blaine Dickens

Absent: None

**Staff**

Kelly Gottschalk, Josh Mond, Summer Loveland, John Holt, Damion Hervey, Cynthia Thomas, Ryan Wagner, Milissa Romero, Greg Irlbeck, Linda Rickley

**Others**

Special Meeting
Wednesday, November 1, 2017


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The meeting was called to order at 10:02 a.m.

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DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

A. CONSENT AGENDA

Approval of Minutes

Regular meeting of October 12, 2017
Special Meeting  
Wednesday, November 1, 2017

A. CONSENT AGENDA (continued)

After discussion, Mr. Friar made a motion to approve the minutes of October 12, 2017, subject to the final approval of the staff. Mr. Youngblood seconded the motion, which was unanimously approved by the Board. Mr. Dickens was not present for this item.

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B. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION:

1. 2018 Board meeting calendar

The Board and staff discussed options for scheduling the 2018 regular monthly Board meetings.

The Board directed that the Board meetings for the remainder of 2017 will be held on the second Thursday of the month beginning at 8:30 a.m. In 2018, the Board meetings will be held on the second Thursday of each month. The January through April meetings will begin at 1:00 p.m. The Board will decide the start time for the May through December meetings at a later time.

No motion was made.

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2. Deferred Retirement Option Plan (DROP) Policy

a. Discussion of draft DROP Policy including DROP balance annuitization, DROP revocation election and hardship distributions
b. Legal considerations

Ms. Gottschalk stated that the DROP Policy must be amended to comply with the changes that HB 3158 made which impact DROP. Staff presented a draft DROP Policy for consideration by the Board.

Rocky Joyner and Jeff Williams, representatives of DPFP’s Actuary, Segal Consulting, were present to provide support to the Board in considering the draft policy.
2. Deferred Retirement Option Plan (DROP) Policy (continued)

The Board went into a closed executive session – legal at 10:07 a.m.

The meeting was reopened at 11:29 a.m.

The Board directed staff to pay the DROP annuitization amounts monthly as the default option, with 60 days to request an annual payment option instead.

After discussion, Mr. Youngblood made a motion to accept the mortality table presented by the Actuary. Mr. Walters seconded the motion, which was approved by the following vote:

For: Youngblood, Walters, Quinn, Merrick, Friar, Nixon, Rowe, Schutz
Against: Dickens, Garcia, Hernandez Patterson

After discussion, Mr. Garcia made a motion that the Board adopt a variable interest rate based on US Treasury bonds, plus a spread that is based on the market. The motion died for the lack of a second.

After discussion, Mr. Youngblood made a motion that the Board approve the staff recommendation to adopt a fixed interest rate at the time of annuitization, with the rates for each quarter to be set at the average of the prior three months’ rates as of the 15th of each month, based on the U.S. Department of Commerce Daily Treasury Yield Curve Rates, and for life expectancies greater than 30 years, that the 30-year rate would be used. Mr. Merrick seconded the motion, which passed by the following vote:

For: Youngblood, Merrick, Quinn, Nixon, Rowe, Hernandez Patterson, Walters
Against: Friar, Schutz, Garcia, Dickens

After discussion, Mr. Walters made a motion to include interest for the period from September 1, 2017 to the annuitization commencement, based on the DROP balance as of September 1, 2017, and adjusted for any change in the balance since September 1, 2017. Mr. Nixon seconded the motion, which was unanimously approved by the Board.

After discussion, Mr. Garcia made a motion that the Board accept all current criteria for DROP hardship distributions and then consider each of the possible expanded criteria presented by staff. Mr. Friar seconded the motion.
Special Meeting  
Wednesday, November 1, 2017

2. Deferred Retirement Option Plan (DROP) Policy (continued)

After discussion, Mr. Garcia amended his motion to state that the Board accept all current criteria for DROP hardship distributions, with some reasonable verification by staff regarding a Member’s financial resources, and then consider each of the possible expanded criteria presented by staff. Mr. Friar accepted the amended motion, which failed by the following vote:
For:  Garcia, Friar, Schutz, Dickens, Hernandez Patterson  
Against:  Quinn, Merrick, Nixon, Rowe, Walters, Youngblood

After discussion, Mr. Youngblood made a motion to accept the current criteria for DROP hardship distributions, with some reasonable verification by staff regarding a Member’s financial resources, but to exclude from the criteria for hardship distributions the imminent foreclosure or eviction from a primary residence and expenses related to an automobile accident involving a DROP account holder not covered by insurance. Mr. Walters seconded the motion.

After discussion, Mr. Youngblood amended the motion to include other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Retiree Annuitant. Mr. Walters accepted the amended motion, which passed by the following vote:
For:  Youngblood, Walters, Quinn, Merrick, Friar, Dickens, Nixon, Rowe, Hernandez Patterson, Schutz  
Against:  Garcia

After discussion, Mr. Garcia made a motion to expand the hardship criteria for the need to repair damage to a primary residence to include significant damage caused by significant events such as fire or flood, in addition to damage caused by natural disasters, and to expand the hardship criteria for funeral expenses to include parent, child, and grandchild, regardless of dependency and to allow necessary associated travel costs. Mr. Friar seconded the motion, which was unanimously approved by the Board.

After discussion, Mr. Garcia made a motion to expand the hardship criteria to include the Free Application for Federal Student Aid (FAFSA)-determined Expected Family Contribution amount for Postsecondary education below the graduate level at an eligible institution for a dependent person who is or was a dependent of the Retiree Annuitant. Mr. Schutz seconded the motion, which failed by the following vote:
For:  Garcia, Schutz, Dickens, Friar, Hernandez Patterson  
Against:  Quinn, Merrick, Nixon, Rowe, Walters, Youngblood
2. Deferred Retirement Option Plan (DROP) Policy (continued)

After discussion, Mr. Walters made a motion to accept the staff recommendation to calculate the interest owed on DROP revocations using the actuarial rate of return assumption used in the annual actuarial valuations, compounded annually, from the date the contribution would have been made through the date of service purchase. Mr. Youngblood seconded the motion.

After discussion, Mr. Walters amended the motion to base the interest owed on DROP revocations on an established Consumer Price Index (CPI) until March 1, 2018, and thereafter, the assumed rate of return in effect until payment is completed. Mr. Youngblood accepted the amended motion, which was approved, as follows:
For: Walters, Youngblood, Quinn, Merrick, Friar, Dickens, Nixon, Garcia, Rowe, Schutz
Against: Hernandez Patterson

After discussion, Mr. Garcia made a motion to authorize the Executive Director to take all necessary actions to commence the DROP annuitizations. Mr. Nixon seconded the motion, which was unanimously approved by the Board. Messrs. Walters and Youngblood were not present when the vote was taken.

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The meeting was recessed at 12:35 p.m.

The meeting was reconvened at 12:57 p.m.

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3. Hybrid Defined Contribution/Defined Benefit plan analysis scope of work

Ms. Gottschalk stated that Section 3.01(j-5)(2) of Article 6243a-l requires the Board, by January 1, 2018, “to conduct an evaluation of …the impact, including the impact on the combined pension plan, of establishing one or more alternative benefit plans, including a defined contribution plan or a hybrid retirement plan that combines elements of both a defined benefit plan and a defined contribution plan, for newly hired employees of the city and for members who voluntarily elect to transfer to an alternative benefit plan.”

Rocky Joyner and Jeff Williams, representatives of DPFP’s Actuary, Segal Consulting, presented an outline for the Board of a proposed analysis to satisfy the requirements of Section 3.01(j-5)(2). With direction from the Board, Segal will return for the December Board meeting to present the analysis and results.
3. **Hybrid Defined Contribution/Defined Benefit plan analysis scope of work (continued)**

Mr. Youngblood was not present for this item.

No motion was made.

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4. **Voting requirements for Board action under Article 6243a-1**

The Board went into a closed executive session – legal at 10:07 a.m.

The meeting was reopened at 11:29 a.m.

The Board’s legal counsel briefed the Board on the new voting requirements under Article 6243a-1 for the Board to take action.

No motion was made.

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5. **Ashmore: Emerging Market Debt allocation**

Staff stated that DPFP has approximately $19.2 million, or 0.90% of the portfolio, invested in the Ashmore Emerging Markets Local Currency Bond Fund (“Local Currency Fund”) which is held within the Emerging Markets Debt allocation. DPFP’s target allocation to Emerging Markets Debt is 6%. At the July 13, 2017 meeting, the Board approved an initial investment of $50 million, with authority to increase the investment up to $70 million, into the Ashmore EM Blended Debt Fund LP (“EM Blended Debt Fund”), with the intention of liquidating the investment in the Local Currency Fund and using the proceeds as a funding source for the EM Blended Debt Fund.

After discussion, Mr. Nixon made a motion to authorize liquidation of DPFP’s investment in the Ashmore Emerging Markets Local Currency Bond Fund and to invest $20 million in the Ashmore EM Blended Debt Fund. Mr. Merrick seconded the motion, which was unanimously approved by the Board. Messrs. Walters and Youngblood were not present for the vote.
6. Short-Term Core Bond allocation

Staff stated that at the October 12, 2017 Board meeting, staff and NEPC discussed with the Board their recommended rebalancing plan to deploy excess cash on hand. The Board voted, in light of the recent seating of all trustees and the need for the full Board to study and possibly amend the Investment Policy Statement, to suspend the Investment Policy Statement solely for the purpose of the Board directing staff to invest $60 million with Income Research & Management (“IR+M”) in Short-Term Core Bonds and $15 million in Global Equity, allocated as directed by the Executive Director. Based on discussions with IR+M, staff does not recommend investing the $60 million in the Short-Term Core Bond portfolio over a short, but unknown time period, due to high transaction costs and longer liquidity periods based on the separate account structure of the DPFP portfolio. Staff and Mr. Humphreys, of NEPC, discussed possible alternatives to the IR+M portfolio for the $60 million of excess cash on hand.

After discussion, Mr. Merrick made a motion to hold DPFP’s excess cash at JPMorgan, the custodian bank. Mr. Garcia seconded the motion, which was unanimously approved by the Board. Messrs. Walters and Youngblood were not present for the vote.

7. Executive Director appointment

Ms. Gottschalk stated that Section 1.54 of HB 3158 requires the Board by January 1, 2018 to appoint an Executive Director under Section 3.04 of Article 6243a-1.

In considering such appointment, Section 3.04 (a-1) provides:

“During any period in which the most recent actuarial valuation of the pension system indicates that the period needed to amortize the unfunded actuarial accrued liability of the pension system exceeds 35 years, the board shall, to the extent lapsed investments are a significant portion of the pension system's assets, ensure that the executive director appointed under Subsection (a) of this section has, or hires staff that has, appropriate experience in managing a business entity with lapsed investments in a manner that resulted in the improved liquidity or profitability of the business entity.”

The Board went into a closed executive session – personnel at 2:28 p.m.

The meeting was reopened at 2:58 p.m.
7. Executive Director appointment (continued)

After discussion, Mr. Youngblood made a motion to reappoint Kelly Gottschalk as Executive Director. Mr. Nixon seconded the motion, which was unanimously approved by the Board.

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Mr. Youngblood left the meeting at 2:58 p.m.

Mr. Walters left the meeting at 3:05 p.m.

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C. BRIEFING ITEM

Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

The Board heard member and pensioner comments.

No motion was made.

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Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Garcia and a second by Mr. Friar, the meeting was adjourned at 3:15 p.m.

_____________________
William F. Quinn
Chairman

ATTEST:

_____________________
Kelly Gottschalk
Secretary
Dallas Police and Fire Pension System  
Thursday, November 9, 2017  
8:30 a.m.  
4100 Harry Hines Blvd., Suite 100  
Second Floor Board Room  
Dallas, TX

Regular meeting, William F. Quinn, Chairman, presiding:

**ROLL CALL**

**Board Members**

Present at 8:30 a.m.  William F. Quinn, Nicholas A. Merrick, Samuel L. Friar, Blaine Dickens, Ray Nixon, Gilbert A. Garcia, Tina Hernandez Patterson, Robert C. Walters

Absent:  Frederick E. Rowe, Joseph P. Schutz, Kneeland Youngblood

**Staff**  Kelly Gottschalk, Josh Mond, Summer Loveland, John Holt, Damion Hervey, Ryan Wagner, Milissa Romero, Greg Irlbeck, Linda Rickley, Aimee Crews

**Others**  Chuck Campbell, Keith Stronkowsky, Lloyd D. Brown, William Huffman, Don Howard III, Tom Belcher, Ricky Adams, Lizette Adams, Irene Alanis, Jim Aulbaugh, Jim McDade, Joe Alexander, Carolyn Freeman, James Freeman, Chris Peterson, George D. Stricklin, Larry Williams, Perro Henson, Jr., Jerry M. Rhodes, Kenneth Hatley, Joel Lavender, Andy Acord, David Waks, Charles Hale, Michael Mata, Hunter Walton, Zaman Hemani, Tristan Hallman

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The meeting was called to order at 8:38 a.m.

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**A.  MOMENT OF SILENCE**


No motion was made.

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B. CONSENT AGENDA

1. Approval of Refunds of Contributions for the Month of October 2017
2. Approval of Estate Settlements
3. Approval of Survivor Benefits
4. Approval of Service Retirements
5. Approval of Alternate Payee Benefits
6. Approval of Payment of Military Leave Contributions
7. Spouse Wed After Retirement (SWAR)
8. Denial of Unforeseen Emergency Requests

After discussion, Mr. Friar made a motion to approve the items on the Consent Agenda, subject to the final approval of the staff. Mr. Garcia seconded the motion, which was unanimously approved by the Board. Mr. Walters was not present for the vote.

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C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Closed Session - Board serving as Medical Committee

Disability applications

The Board went into closed executive session – medical at 8:40 a.m.

The meeting was reopened at 9:04 a.m.

Staff presented two applications for On-Duty disability pensions for consideration by the Board in accordance with Section 6.03 of the Plan.

After discussion, Mr. Friar made a motion to approve an on-duty disability retirement for Police Officer 2017-2. The disability benefit calculation will be based on the plan provisions prior to September 1, 2017. Since the member is currently over the age of 50, the member is not subject to future medical examinations. Mr. Nixon seconded the motion, which was unanimously approved by the Board.
1. **Closed Session - Board serving as Medical Committee (continued)**

   **Disability applications (continued)**

   After discussion, Mr. Friar made a motion to approve an on-duty disability retirement for Police Officer 2017-3, effective October 13, 2017. The disability benefit calculation will be based on the plan provisions prior to September 1, 2017. The disability will be subject to a medical recall every two years until the member is age 50. Earning tests will be required until the age of 58. Mr. Nixon seconded the motion, which was unanimously approved by the Board.

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2. **Deferred Retirement Option Plan (DROP) Policy**

   Ms. Gottschalk stated that at the special Board meeting on November 1, 2017, the Board gave staff direction on numerous issues with respect to the DROP Policy. Staff presented to the Board a revised DROP Policy reflecting the Board’s requested changes.

   The Board went into a closed executive session – legal at 9:38 a.m.

   The meeting was reopened at 10:01 a.m.

   After discussion, Mr. Merrick made a motion to adopt the revised DROP Policy. Mr. Nixon seconded the motion, which failed due to the following tied vote:
   For: Merrick, Nixon, Quinn, Walters
   Against: Friar, Dickens, Garcia, Hernandez Patterson

   After discussion, Ms. Hernandez Patterson made a motion to adopt the revised DROP Policy with the revision that no interest would be charged on DROP revocations. Mr. Dickens seconded the motion, which failed due to the following tied vote:
   For: Hernandez Patterson, Dickens, Garcia, Friar
   Against: Merrick, Nixon, Quinn, Walters

   After discussion, Mr. Quinn made a motion to adopt the revised DROP Policy, except for Section D. DROP Revocation, and to further discuss Section D at the December 14, 2017 Board meeting. Mr. Nixon seconded the motion, which was approved by the following vote:
   For: Quinn, Nixon, Merrick, Friar, Dickens, Hernandez Patterson, Walters
   Against: Garcia

   * * * * * * *
3. **Investment-related items**

a. Investment Advisory Committee
b. Review of possible changes to Investment Policy Statement
c. Investment Policy Statement – Alternative Investments
d. Investment Policy Statement – Staff Rebalancing Authority

Staff discussed the above topics with the Board. Keith Stronkowsky, of NEPC, DPFP’s investment consultant, was present and participated in the discussion.

a. Ms. Gottschalk stated that Section 4.07(h) of the plan, added by HB 3158, requires that the Board shall establish an Investment Advisory Committee (IAC) composed of trustees and outside investment professionals, with the majority of members being non-trustees, to review investment related matters as prescribed by the Board and make recommendations to the Board. Staff discussed the potential composition, roles and responsibilities of the IAC with the Board. The Board gave direction to staff that the IAC should consist of three non-DPFP Board members and two DPFP Board members, for a total of five IAC members. Formation of the IAC should not take place until after the Board has decided the asset allocation.

No motion was made.

b. The Board and staff discussed possible changes to the Investment Policy Statement (IPS) based on the requirements of HB 3158, as well other recommended changes to clarify the roles and responsibilities of the Board, the IAC, Staff and the Investment Consultant. The Board directed staff to place the Investment Policy Statement on the December 14, 2017 agenda for further discussion.

No motion was made.

c. Section 4.071 of the plan, added by HB 3158, stipulates that any new “Alternative Investment” requires a 2/3rd vote of the Board for approval. NEPC and staff discussed possible definitions of Alternative Investments.

No motion was made.

d. Ms. Gottschalk stated that staff seeks direction from the Board regarding temporary rebalancing authority to invest excess cash over the interim period until the asset allocation is further studied.

After discussion, Mr. Garcia made a motion to authorize staff to rebalance across all liquid asset classes over the interim period until the asset allocation is determined. Ms. Hernandez Patterson seconded the motion, which was unanimously approved by the Board.
4. **Budget Adoption Policy**

Staff presented changes to the Budget Adoption Policy to conform to the changes to Section 4.01 of Article 6243a-1 as set forth in HB 3158. Such provisions call for submission of the approved annual budget to the City Manager for comment as opposed to the prior requirement for submission to the City’s budget office. In addition, HB 3158 removed the requirement for a letter from the DPF actuary stating whether or not the budget will have an adverse effect on the payment of benefits.

After discussion, Mr. Merrick made a motion to approve the Budget Adoption Policy as amended. Mr. Garcia seconded the motion, which was unanimously approved by the Board.

5. **Second reading and discussion of the 2018 Budget**

Ms. Loveland presented the second reading of the 2018 budget, prepared in total for both the Combined Pension Plan and the Supplemental Plan.

The Board directed staff to address any proposed amendments and present the amended budget to the Board at the December 14, 2017 Board meeting.

No motion was made.

The meeting was recessed at 11:27 a.m.

The meeting was reconvened at 11:28 a.m.

Mr. Nixon left the meeting at 11:29 a.m.

6. **Ethics Policy review**

Mr. Mond stated that Section 3.01(r) of Article 6243a-1 requires the Board to adopt a code or codes of ethics consistent with Section 825.212 of the Texas Government Code. Section 1.54(a)(1) of HB 3158 requires the Board to adopt the code or codes no later than January 1, 2018.
Regular Board Meeting
Thursday, November 9, 2017

6. Ethics Policy review (continued)

Staff presented for the Board’s review and comment two draft policies (Ethics Policy and Contractor’s Statement of Ethics) intended to comply with this requirement.

The Board directed staff to present the two policies, with amendments, at the December 14, 2017 meeting.

No motion was made.

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7. Governance and Board Conduct Policy review

Staff stated that Section 1.53(g) of HB 3158 requires the Board to, not later than the 90th day after the date all trustees have been appointed or elected “…vote on and, if the board determines it is appropriate, amend the existing rules relating to the governance and conduct of the board.”

Staff presented for the Board’s review and comment a draft Governance and Board Conduct Policy intended to comply with the HB 3158 requirement. The Board directed staff to present the policy, with amendments, at the December 14, 2017 meeting.

No motion was made.

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The meeting was recessed at 12:03 p.m.

The meeting was reconvened at 12:21 p.m.

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Mr. Walters left the meeting at 12:58 p.m.

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8. Significant Professional Service Advisors and Providers

Staff reviewed the significant professional service advisors and providers (Service Providers) of the Board. In 2015, the Board gave direction to conduct a competitive selection process for Service Providers every five years unless the Board explicitly waives or extends the requirement. A phased-in approach was put in place by the Board for existing Service Providers.
8. **Significant Professional Service Advisors and Providers** (continued)

Service Providers in this context includes the actuary, auditor, legal counsel (fiduciary and tax), investment and legislative consultants.

The Board directed staff to conduct a search for an investment consultant and invite the current consultant to re-bid.

No motion was made.

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9. **Trustee Education Requirements**

Discussion of Trustee education and training requirements was postponed to a future meeting.

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10. **Board approval of Trustee education and travel**

   a. Future Education and Business-related Travel
   b. Future Investment-related Travel

Discussion of Board approval of future education and business-related travel and future investment-related travel was postponed to the December 14, 2017 meeting.

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11. **Unforeseeable Emergency Requests from DROP Members**

The Board and staff discussed an Unforeseeable Emergency Request from a DROP member.

After discussion, Mr. Walters made a motion to approve the debris removal request and fund additional amounts related to the building extension and personal property losses if the member presents documentation within a two-year period that demonstrates the amount expended exceeded the insurance replacement costs in total. Ms. Hernandez Patterson seconded the motion, which was unanimously approved by the Board. Mr. Nixon was not present for this item.

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12. Legal issues

a. Potential claims involving fiduciaries and advisors
b. DPFP v. The Townsend Group and Gary Lawson
c. Eddington et al. v. DPFP
d. Rawlings v. DPFP
e. DPFP v. Columbus A. Alexander III
f. Degan et al. v. DPFP (Federal suit)
g. HB 3158

No discussion was held regarding legal issues. No motion was made.

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13. Quarterly financial reports

The Chief Financial Officer presented the third quarter 2017 financial statements.

No motion was made.

Mr. Nixon was not present for this item.

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Mr. Garcia left the meeting at 1:01 p.m.

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14. Requirement for Two Annual Public Meetings

Discussion of the requirement to hold two public meetings each year was postponed to a future meeting.

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D. BRIEFING ITEMS

1. Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

The Board heard member and pensioner comments.

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2. Executive Director’s report

a. Open Government Training
b. Associations’ newsletters
   • NCPERS Monitor (October 2017)
   • NCPERS PERSist (Fall 2017)
c. Employee recognition – Third Quarter 2017
   • Employee Service Award
   • Employee of the Quarter award

No discussion was held and no motion was made regarding the Executive Director’s report.

* * * * * * *

The Board lost its quorum at 1:01 p.m.; therefore, the meeting was adjourned.

_____________________
William F. Quinn
Chairman

ATTEST:

_____________________
Kelly Gottschalk
Secretary
DISCUSSION SHEET

ITEM #C1

Topic: Deferred Retirement Option Plan (DROP) Policy

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

a. DROP revocation and special needs trusts
b. Hardship payments for members’ estates
c. 10-year limitation on Active DROP payment deferrals

Discussion:

a. At its November 9, 2017 meeting the Board adopted the DROP Policy without rules dealing with DROP revocation. The Board will discuss an amendment to the DROP Policy to include a section dealing with DROP revocation as well as a change to allow special needs trusts to be the holder of a DROP annuity.

b. The current DROP Policy only permits former members to apply for a hardship distribution. The Board will consider the extension of this to the estates of former members.

c. At the request of an active member, the Board will discuss the 10-year limit for crediting a member’s retirement pension to their DROP balance while they are in active service as provided for in Section 6.14(c) of Article 6243a-1.

Staff Recommendation: Amend the DROP Policy as presented.
DEFERRED RETIREMENT OPTION PLAN POLICY

As Amended Through December 149, 2017
DEFERRED RETIREMENT OPTION PLAN POLICY

Adopted December 10, 1992
Amended through December 14, November 9, 2017

A. PURPOSE

1. This policy provides rules governing the Deferred Retirement Option Plan of the Dallas Police and Fire Pension System (“DPFP”), as contemplated by Section 6.14 of Article 6243a-1 of Revised Statutes (the “Plan”) and the Supplemental Pension Plan for the Police and Fire Departments of the City of Dallas, Texas (the “Supplemental Plan”) where applicable. It is intended that DROP and the terms of this policy allow for the continued qualification of the Plan under Section 401 of the Internal Revenue Code (“Code”).

2. Any reference in this policy to a provision of the Plan shall also be considered a reference to the comparable provision of the Supplemental Plan if the applicant is a member of the Supplemental Plan.

3. The Executive Director may, if necessary, develop written procedures to implement this policy.

4. This policy may be amended at any time by the Board of Trustees (“Board”), consistent with the terms of the Plan.

5. Any capitalized terms not defined in this policy shall have the meaning ascribed to them in the Plan.

B. DEFINITIONS

1. **DROP** - The program whereby a Member while still in Active Service may elect to have an amount equal to the pension benefit that the Member would otherwise be eligible to receive be credited to a notional account on the Member’s behalf. A Member, as of his or her intended date of participation in DROP, must be eligible to retire and receive an immediate pension benefit. An election to enter DROP is irrevocable except for the one-time revocation window for certain Members that is described in Section D.

2. **DROP Account** - The notional account of a Member, retiree, beneficiary or Alternate Payee created pursuant to Section 6.14 of the Plan which existed or exists prior to any annuitization required under the Plan and in conformity with this policy.
B. DEFINITIONS (continued)

3. DROP Annuitant – The holder of a DROP Annuity.

4. DROP Annuity – The series of equal payments created when a DROP Account is annuitized as required under the Plan and in conformity with this policy.

C. ENTRY INTO DROP

1. The application of any Member applying for DROP participation will be placed on the agenda for a Board meeting as soon as administratively practicable following the date the application is received for consideration and approval.

2. If the Board approves a DROP application, the application will become effective on the first day of the month in which the Board approves the application.

3. At the time of entry into DROP, the Member must irrevocably select the Plan benefit he or she will receive at the time his or her pension benefit will commence upon retirement with the Member’s pension benefit calculated as of the effective date of entering DROP. While on Active Service, these benefit amounts that the Member would have otherwise received if he or she would have retired on his or her effective date of DROP participation will be credited to the DROP Account.

4. Once a Member has elected to participate in DROP, that election is irrevocable except as further described in Section D.

5. A Group B Member who obtains a rank that is higher than the highest Civil Service Rank for the City of Dallas after the effective date of his or her participation in DROP will not participate in the Supplemental Plan.

6. As of the effective date of his or her participation in DROP, the Member will no longer be entitled to obtain additional Pension Service by repaying previously withdrawn contributions or paying for any Pension Service that could have been purchased under the Plan prior to DROP entry. However, a Member who is entitled, under Section 5.08 of the Plan, to purchase credit for Pension Service for any period he or she was on a military leave of absence may still purchase that Pension Service after entering DROP so long as the required contributions are made no later than the time provided by the Uniformed Services Employment and Reemployment Rights Act (“USERRA”).

7. The Board shall interpret the Plan and this policy to ensure that Members’ rights are fully protected as required by USERRA.
D. DROP REVOCATION

1. A Member who was a DROP participant on or before June 1, 2017, has a one-time opportunity to revoke his or her DROP election. The revocation must be made before the earlier of February 28, 2018, or the date that the Member terminates Active Service. The revocation must be made by filing with the Executive Director a completed DROP revocation election form that has been approved by the Executive Director.

2. A DROP revocation eliminates the balance in a Member’s DROP Account. The Member’s benefit will then be established at the earlier of when the Member either (a) reenters DROP or (b) retires with DPFP, and will be calculated at that time under the Plan based upon the Member’s total Pension Service and historic Computation Pay (highest 36 consecutive months for Pension Service prior to September 1, 2017 and highest 60 consecutive months for Pension Service on or after September 1, 2017.)

3. Any revocation of DROP participation described in this Section shall be for the entire period that the Member participated in DROP. No partial revocation of DROP participation shall be accepted.

4. No Member shall be entitled to revoke his or her DROP participation if any amount has been transferred out of such Member’s DROP Account, except for any transfers related to corrections to DROP Accounts.

5. A Member will be credited with Pension Service for all or a portion (one-half) of the period relating to the revoked DROP participation if the Member who revoked the DROP participation purchases such Pension Service in an amount equal to the sum of: (a) the Member contributions that would have been made if the Member had not been a DROP participant during such period of DROP participation and (b) interest on such Member contributions, calculated on the contributions for the period from the dates the contributions would have been made if the Member had not been a DROP participant through the date of purchase. Interest will be calculated (a) through February 28, 2018 at the monthly rate of change of the U.S. City Average All Items Consumer Price Index (unadjusted) for All Urban Wage Earners and Clerical Workers for the applicable periods and (b) after February 28, 2018 at the interest rate used from time to time in DPFP’s actuarial rate of return assumptions, compounded annually. DPFP staff shall be authorized to establish procedures for implementing the interest calculation required in this Section.
D. DROP REVOCATION (continued)

6. A Member may purchase Pension Service relating to the period of revoked DROP participation in increments of one-half of his or her total Pension Service during DROP participation. If a Member elects to purchase one-half of his or her total Pension Service available to be purchased following the DROP revocation, (a) a Member may not elect to purchase Pension Service relating to specific time periods during his or her DROP participation and (b) the amount of the Member contributions for purposes of such purchase will be one-half of the total amount required to be paid pursuant to Section D.5. above.

7. If a Member elects to purchase one-half of his or her Pension Service available to be purchased following the DROP revocation, the Member may subsequently purchase the remaining one-half of the Pension Service available, but must complete such purchase prior to any election to reenter DROP or terminating Active Service. The amount to be paid for the remaining Pension Service to be purchased will be calculated pursuant to subsections 4 and 5 above, with interest continuing to accrue on the portion that has not yet been paid at the rate used from time to time in DPFP’s actuarial rate of return assumptions, compounded annually, calculated from the date of the original Pension Service purchase through the date of the purchase of the remaining Pension Service.

8. Only full payment will be accepted for the amount of any Pension Service elected to be purchased under this Section. No partial payment will be accepted. Direct rollovers from other tax-qualified plans or similar employer plans, including the City of Dallas 401(k) Retirement Savings Plan, governmental Section 401(k) (including the City of Dallas 401(k) Retirement Savings Plan) and 457(b) deferred compensation plans and, or Section 403(b) annuity arrangements will be accepted for payment to the extent such plans permit such rollovers. Payment is not permitted from the Member’s DROP account.

9. For the purposes of calculating a Member’s pension benefit in the case where a Member purchases only one-half of the total Pension Service available for the period relating to a DROP revocation, the purchased Pension Service attributable to time prior to September 1, 2017 shall be equal to the product of: (a) the amount of Pension Service purchased, multiplied by (b) a fraction of which the numerator equals the Pension Service available for purchase representing periods prior to September 1, 2017, and the denominator equals the total Pension Service available for purchase in connection with the DROP revocation.

10. All DROP revocation election forms must be received by DPFP in proper order by February 28, 2018 and will be considered effective as of September 6, 2017 after approval by DPFP staff that the form is in proper order. Approval of the Board shall not be required for a DROP revocation to become effective.
E. ANNUITIZATION OF DROP ACCOUNTS

1. **Methodology.** DPFP staff, with the assistance of DPFP’s Qualified Actuary, shall determine the annuitization of all DROP Accounts as required by the Plan and consistent with this policy.

2. **Interest Rates.** To reflect the accrual of interest over the annuitization period of a DROP Annuity as required under the Plan, the accrual of interest for all DROP Annuities shall be calculated utilizing an interest rate based on the published United States Department of Commerce Daily Treasury Yield Curve Rates (“Treasury Rates”) for durations between 5 and 30 years, rounded to two decimal places. If an annuitization period for a DROP Annuity is between the years for which Treasury Rates are established, then a straight-line linear interpolation shall be used to determine the interest rate. The interest rates for purposes of this subsection E.2. will be set on the first business day of each quarter (January, April, July and October) and will be based upon the average of the Treasury Rates as published on the 15th day of the three prior months, or the next business day after the 15th day of a month if the 15th day falls upon a day when rates are not published. Based upon advice from DPFP’s Qualified Actuary upon implementation of this policy, interest rates to be used in calculating DROP Annuities with an annuitization period that exceeds thirty years will be the Treasury Rate published for the 30-year duration as Treasury Rates beyond thirty years do not exist. The initial interest rates effective as of October 1, 2017, are attached to this policy as Exhibit 1.

3. **Mortality Table.** The Board shall, based upon the recommendation of DPFP’s Qualified Actuary, adopt a mortality table to be utilized in determining life expectancy for purposes of calculating DROP Annuities. The mortality table shall be based on the healthy annuitant mortality tables used in the most current actuarial valuation and blended in a manner to approximate the male/female ratio of holders of DROP accounts and DROP annuities. The Board will review this table and male/female blended ratio upon the earlier of (i) the conclusion of any actuarial experience study performed by DPFP’s Qualified Actuary or (ii) any change to mortality assumptions in DPFP’s annual actuarial valuation. Actual ages used in calculating life expectancy will be rounded to two decimals. The life expectancy will be rounded to the nearest whole year. Life expectancy in whole years based on a 2017 annuitization date and the mortality table recommended by DPFP’s Qualified Actuary is shown in Exhibit 2.

4. **Initial Annuitzation of Non-Member’s DROP Accounts.**

   a. The first payment of DROP Annuities after annuitization of all DROP Accounts in existence on or after September 1, 2017, except those DROP Accounts of Members, shall commence the last business day of the month in which this policy is adopted, or as soon as practicable thereafter.
E. **ANNUIITIZATION OF DROP ACCOUNTS (continued)**

4. **Initial Annuitization of Non-Member’s DROP Accounts.**

   b. The initial annuitization of all non-Member DROP Accounts existing on September 1, 2017 will be calculated and implemented on the basis of a monthly annuity. DPFP staff will send notices to the holders of such DROP Annuities to inform them that they have sixty (60) days from the date of such notice to make a one-time election to have the monthly DROP Annuity converted to an annual annuity. If a DROP Annuitant makes such an election, the monthly DROP Annuity payments will cease as soon as administratively practicable, and the first payment of the annual DROP Annuity will begin 12 months after the last monthly payment made to the DROP Annuitant.

   c. For purposes of the initial annuitization described in this subsection E.4., any DROP Account which is held by a non-Member at any time on or after September 1, 2017, but prior to the initial annuitization pursuant to subsection E.4.a. above, shall (i) be adjusted to reflect any distributions to such non-Member after September 1, 2017, but prior to the initial annuitization and (ii) accrue interest for the period from September 1, 2017 through the date of initial annuitization at the same rate as the interest rate applicable pursuant to subsection E.2. in the calculation of the initial DROP Annuity.

   d. Annuitization of any non-Member DROP Account under this subsection E.4. will be based on the age of the holder of such DROP Account as of the first day of the month when the annuitization of DROP Accounts under this subsection E.4. occurs. In the case of a DROP Account which is held by a trust, such DROP Account will be annuitized using the age of the oldest beneficiary of the trust.

5. **Annuitization of Member DROP Accounts**

   a. The DROP Annuity for a Member shall be calculated based upon the Member’s age and DROP Account balance on the effective date of the Member’s retirement. The interest rate applicable to the calculation of the Member’s DROP Annuity will be the interest rate in effect under subsection E.2. during the month the Member terminates Active Service. Payment of the DROP Annuity shall commence effective as of the first day of the month in which the Member’s retirement commences.

   b. Each Member as part of the retirement process shall be given the opportunity to elect either a monthly or annual DROP Annuity. If no election is made, the Member will be deemed to have elected a monthly DROP Annuity.
E. **ANNUITIZATION OF DROP ACCOUNTS (continued)**

6. **Annuitzation of Alternate Payee’s Account**

   The DROP Annuity for any Alternate Payee receiving a portion of a Member’s DROP Account through a Qualified Domestic Relations Order after the date of this policy shall commence on the earlier of (i) the date the Member’s DROP Annuity commences or (ii) the first day of the month the Alternate Payee reaches age 58. Calculation of the DROP Annuity of an Alternate Payee will be based on the age of the Alternate Payee and the interest rate in effect under subsection E.2 upon commencement of the DROP Annuity.

7. **Annuitzation and Payments to Beneficiaries**

   a. Upon the death of a Member, the DROP Account of such Member shall be transferred to the Member’s beneficiary(ies) pursuant to Section F of this policy. Such transferred account shall be annuitized as promptly as administratively practicable utilizing the interest rate in effect under subsection E.2. and the age of the beneficiary at the time of the Member’s death in calculating the beneficiary’s DROP Annuity.

   b. Upon the death of a DROP Annuitant, the remaining DROP Annuity shall be paid to the beneficiary designated by such DROP Annuitant, and shall be divided if there are multiple beneficiaries as designated by the DROP Annuitant pursuant to Section F of this policy.


   If any DROP Annuitant shall receive a distribution pursuant to Section G hereof, the DROP Annuity of such DROP Annuitant shall be re-annuitized through a calculation using (a) the interest rate utilized in the calculation of the original DROP Annuity, (b) the present value of the DROP Annuity on the date of the unforeseeable financial hardship distribution as calculated by DPFP’s Qualified Actuary, and (c) the remaining number of months in the life expectancy utilized in the calculation of the original DROP Annuity.
F. DESIGNATION OF BENEFICIARIES

1. A DROP participant will have the opportunity to designate a primary beneficiary (or primary beneficiaries) and a contingent beneficiary (or contingent beneficiaries) of his or her DROP Account either when filing the application for DROP participation, or thereafter, on a beneficiary form provided by DPFP for this purpose. The named beneficiary must be a living person at the time of the filing of the beneficiary form. No trusts may be named as a beneficiary, except for a trust established for a child who is entitled to benefits pursuant to Section 6.06 (n)(1) of the Plan (“Special Needs Trust”). Existing trusts which have a DROP Account as of the date of this policy will be permitted and will be annuitized pursuant to Section E.4. and the age of the oldest beneficiary of the trust will be utilized for purposes of the annuitization. Special Needs Trusts will be annuitized based upon the age of the child.

2. In the case of a holder of DROP Annuity who dies where no living person is named as a beneficiary, the remaining DROP Annuity will be paid to the deceased DROP Annuitant’s estate. In the case of a Member who dies with a DROP Account where no living person is named as a beneficiary, the DROP Account will be annuitized based upon the life of the youngest heir to the deceased Member’s estate and the resulting DROP Annuity will be paid to the estate.

3. Beneficiaries of a Member’s DROP Account or a DROP Annuitant’s DROP Annuity are not limited to the Qualified Survivors. Upon request, DPFP will divide a deceased participant’s DROP Account or DROP Annuity among the designated beneficiaries at the time of the DROP participant’s death.

4. Upon the death of a DROP participant, the DROP participant’s DROP Account or DROP Annuity shall become the property of the surviving spouse unless either (i) the surviving spouse has specifically waived his or her right to such funds or (ii) the surviving spouse’s marriage to the DROP participant occurred after January 14, 2016 and the participant had already joined DROP and named a beneficiary other than the surviving spouse who was not the participant’s spouse at the time of the beneficiary election, and will be transferred to the name of the surviving spouse or such other named beneficiary or beneficiaries. DROP Annuities shall be paid to the designated beneficiaries in accordance with the last beneficiary form on file in the DPFP administrative office upon that office’s receipt of sufficient evidence of the DROP participant’s death.
G. HARDSHIPS (continued)

1. Pursuant to the Plan, a DROP Annuitant who was a former Member of the Plan (a “Retiree Annuitant”) may apply for a lump sum distribution relating to his or her DROP Annuity in the event that the Retiree Annuitant experiences a financial hardship that was not reasonably foreseeable. To qualify for an unforeseeable financial hardship distribution, a Retiree Annuitant must demonstrate that:

   a. a severe financial hardship exists at the time of the application (i.e., not one that may occur sometime in the future);

   b. the hardship cannot be relieved through any other financial means (i.e., compensation from insurance or other sources, monthly annuity benefits, or liquidation of personal assets) unless using those other sources would also cause a financial hardship; and

   c. the amount requested in the application is reasonably related to and no greater than necessary to relieve the financial hardship.

2. The Board shall only recognize the following circumstances as an unforeseeable financial hardship that is eligible for a lump sum distribution:

   a. the need to repair damage to a Retiree Annuitant’s primary residence not covered by insurance as the result of a natural disaster or significant event (i.e., fire, flood, hurricane, earthquake, etc.);

   b. the need to make significant changes to a Retiree Annuitant’s primary residence not covered by insurance because of medical necessity;

   c. the need to pay for medical expenses of the Retiree Annuitant, a Retiree Annuitant’s spouse, or a dependent child or relative of the Retiree Annuitant as described under Code section 152(c) and (d), including non-refundable deductibles, as well as for the cost of prescription drug medication;

   d. the need to pay for the funeral expenses of a parent, child, grandchild or spouse of the Retiree Annuitant, including reasonable travel and housing costs for the Retiree Annuitant, their spouse, parent, child or grandchild; or

   e. other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Retiree Annuitant.
G. **HARDSHIPS (continued)**

3. DPFP staff will develop procedures relating to the application for an unforeseeable financial hardship distribution, which will include, at a minimum, a notarized statement by the applicant relating to the requirements for eligibility and documentation sufficient to demonstrate such eligibility. Following submission of the required financial hardship distribution application, the notarized statement, and other required documentation as stated in the application form, DPFP staff shall review the materials and inform the Retiree Annuitant within thirty (30) days whether any additional information or documentation is required or requested. Once all required and/or requested documentation has been submitted, the Retiree Annuitant shall be informed within thirty (30) days if (i) the Retiree Annuitant is eligible for an unforeseeable financial hardship distribution or (ii) the matter has been referred to the Board for consideration at the next regular meeting. After an unforeseeable financial hardship distribution has been made to a Retiree Annuitant, a Retiree Annuitant may not request an additional unforeseeable financial hardship distribution for ninety (90) days from the date of distribution of any amount under this Section.

4. The Executive Director shall have the authority to approve an application for an unforeseeable financial hardship distribution. The Executive Director shall submit to the Board for final action by the Board any recommended denial, in whole or in part, of any request for an unforeseeable financial hardship distribution. Determinations of the Board and the Executive Director on applications for unforeseeable financial hardship distributions are final and binding. Once an unforeseeable financial hardship distribution has been approved by either the Executive Director or the Board, payment of the distribution shall be made to the Retiree Annuitant as soon as administratively practicable.

5. For the purposes of this Section G, the term “dependent” shall mean any person who is claimed by a Retiree Annuitant as a dependent on the Retiree Annuitant’s federal income tax return in any year for which a distribution is sought under this Section G.

6. Distributions under this Section G shall only be available for persons who (a) entered DROP prior to June 1, 2017 and (b) who have not revoked a DROP election under Section D. of this policy.

7. No claims for hardship distributions will be accepted for any circumstances which give rise to the hardship where such circumstances occurred more than six months prior to the date of filing of the application pursuant to subsection G.3.
H. EFFECTIVE DATE

APPROVED on November 9, 2017 by the Board of Trustees of the Dallas Police and Fire Pension System.

[signature]

William F. Quinn
Chairman

ATTEST:

[signature]

Kelly Gottschalk
Secretary
## Exhibit 1 - Interest Rates

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Exhibit 2 – Life Expectancies Based on a November 2017 DROP Annuity Commencement Date
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Note: The above factors are based on the sex-distinct RP-2014 Blue Collar Healthy Annuitant Mortality Tables, with the female table set forward two years, projected generationally using Scale MP-2015. The sex-distinct tables are blended 85% male and 15% female.
DISCUSSION SHEET

ITEM #C2

Topic: Hearthstone: Possible sales

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.072 of the Texas Government Code.

a. Spring Valley
b. Sandstone

Attendees: Bryce Brunsting, SVP/Chief Operating Officer - Hearthstone
          Todd Rosa, Vice President - Hearthstone
          Michael Yang, Research Consultant - NEPC

Discussion: At the January 8, 2015 meeting, the Board approved engaging Hearthstone to takeover investment management of DPFP’s investment in the Sandstone and Spring Valley properties, along with other land investments. Sandstone consists of 2,038 acres located in Douglas County, Colorado, 40 miles south of Denver planned for 114 luxury estate lots. Spring Valley consists of approximately 6,000 acres located in Eagle, Idaho, outside of Boise, planned for over 7,000 residential lots. Based upon Board direction, marketing efforts for both Sandstone and Spring Valley commenced early in 2017. Hearthstone will discuss the marketing process to date for each property and provide a recommended course of action.

Staff Recommendation: Authorize Hearthstone to consummate the sale of Spring Valley and Sandstone, subject to the final approval of terms by the Executive Director.
The conclusions and recommendations contained in this Residential Portfolio Review are derived from forecasts and projections based on Hearthstone’s assumptions and beliefs and on information currently available to Hearthstone. Such forecasts and projections are subject to risks and uncertainties which could cause actual results to differ materially from those anticipated. Consequently, nothing contained in this Review should be construed or implied as a representation, warranty, or guarantee that the conclusions and recommendations contained herein will ever be realized or achieved. Nothing in this Review shall be deemed to impart legal, engineering, geologic, or environmental expertise nor should this Review be considered or referred to as an appraisal.
Timeline of Engagement and Tasks

- Hearthstone was appointed Investment Manager in February 2015 of three real estate assets in Idaho (Spring Valley, Dry Creek, and Nampa) and one real estate asset in Colorado (Sandstone Ranch).
- Presented Strategic Review with initial findings and recommendations to the Board in August 2015.
- Nampa was sold in December 2015, and Dry Creek sold in September 2016.
Spring Valley is located a few miles north east of Highway 16 and West Beacon Light Road at the north eastern corner of the City of Eagle in unincorporated Ada County, Idaho. The Project Site is situated on over 6,000 gross acres in a valley surrounded by foothills and varied topography.
Sandstone Ranch is located approximately 40 miles south of the Denver central business district, and 30 miles north of the Colorado Springs business district within an area west of Larkspur, Colorado. Castle Rock is located just 15 miles north of the ranch. And Denver International Airport is just a 60-minute drive from the ranch, making it reasonably accessible to future out-of-state owners.

### Drive Time Info

<table>
<thead>
<tr>
<th>To Ranch</th>
<th>Drive Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Downtown Denver</td>
<td>50 Minutes</td>
</tr>
<tr>
<td>From Colorado Springs</td>
<td>40 Minutes</td>
</tr>
<tr>
<td>From Denver International Airport</td>
<td>60 Minutes</td>
</tr>
<tr>
<td>From I-25 Exit at Larkspur</td>
<td>4 Miles to the Ranch Entrance</td>
</tr>
</tbody>
</table>
DISCUSSION SHEET

ITEM #C3

Topic: Ethics Policies

Discussion: Section 3.01(r) of Article 6243a-1 requires the Board to adopt a code or codes of ethics consistent with Section 825.212 of the Texas Government Code. Section 1.54(a)(1) of HB 3158 requires the Board to adopt the code or codes no later than January 1, 2018. At the November 9, 2017 Board meeting, staff presented ethics policies intended to comply with these requirements. Staff is presenting changes to these policies as discussed with the Board at the November 9, 2017 meeting.

Staff Recommendation: Adopt the Board of Trustees and Employees Ethics Policy and Contractor’s Statement of Ethics as presented.
BOARD OF TRUSTEES AND EMPLOYEES
ETHICS AND CODE OF CONDUCT POLICY

Adopted January 11, 1996
As amended through December 14, 2017

A. Purpose

The Board of Trustees (“Board”) of the Dallas Police and Fire Pension System (“DPFP” or the “System”) is obligated to administer its pension system as a trust fund solely in the interest of members and beneficiaries. In performance of this obligation, the Board is required to administer DPFP in accordance with Chapter 802, Title 8 of the Texas Government Code and other applicable state and federal laws and regulations. In furtherance of these obligations, the Board adopts the following Ethics and Code of Conduct Policy (this “Policy”), which shall be applicable to all System Representatives. By adopting this Policy, all System Representatives agree to act with integrity, competence, dignity, and in an ethical manner when dealing with the public, members and beneficiaries of the System, current and prospective Consultants and Vendors, DPFP staff, and fellow System Representatives.

B. Definitions

1. **Benefit** – anything reasonably regarded as economic gain or advantage, including benefit to any other person in whose welfare the beneficiary is interested, or anything expressly included as a benefit by applicable law.

2. **Consultants** – independent contractors (whether individuals, partnerships, corporations or other organizations) which provide legal, economic, investment, actuarial or other advice to the Trustees or staff to be used in the performance of fiduciary functions. Any limitations or obligations under this Policy apply to the individuals involved with the System and the contracting organization, if any.

3. **Fiduciary** – any person who (1) exercises any discretionary control over the management of DPFP or any authority or control over the management or disposition of its assets, (2) renders investment advice for a fee or other compensation, direct or indirect, with respect to any moneys or other property of DPFP or has any authority or discretionary responsibility to do so, (3) has any discretionary authority or discretionary responsibility in the administration of DPFP, or (4) has been designated by the Trustees as a fiduciary in the performance of certain duties for DPFP.

4. **Gift** – anything of tangible value given without adequate consideration, which shall include, but not be limited to, any payment of cash, or receipt of goods or services, or anything expressly included as a gift by applicable law.
B. Definitions (continued)

5. **Key Staff** – The Executive Director, Chief Investment Officer, Chief Financial Officer, and General Counsel of the System. For purposes of this Policy, the Executive Director may designate one or more other DPFP employees as Key Staff as reasonably determined by the Executive Director.

6. **Permitted Benefit or Gift** - A Benefit or Gift that (A) is food, lodging, transportation, or entertainment and is accepted as a guest, (B) has a value of less than $50 (including taxes), or (C) is an honorarium speaking at a conference or event that only includes meals, lodging and transportation. A Benefit or Gift is accepted as a guest if the person or representative of the entity providing the Benefit or Gift is present. Disclosure and related reporting requirements under Chapter 176, Tex. Local Gov’t Code (“Chapter 176”), may apply to a Permitted Benefit or Gift, with specific dollar limitations applying for lodging, transportation, or entertainment, including lodging, transportation, or entertainment that is accepted as a guest.

7. **System Representative** – Trustees, Investment Advisory Committee members of the System, and Key Staff.

8. **Third Party** - means and includes a person or entity that is seeking action, opportunity or a specific outcome from DPFP regarding a DPFP matter. The Third Party may be seeking the action, opportunity or outcome for his or her or its own behalf or the third party may be seeking it on behalf of another person or entity in the capacity of a representative, agent or intermediary, or as an advocate for a cause or group of individuals or entities. This definition includes public officials.

9. **Trustee** – Members of the Board of Trustees of DPFP and persons who are candidates for the position of a Trustee.

10. **Undue Influence** - the employment of any improper or wrongful pressure, scheme or threat by which one’s will is overcome, and he or she is induced to do or not to do an act which he or she would not do, or would do, if left to act freely.

11. **Vendors** – independent contractors, whether individuals, partnerships, corporations or other organizations, which perform services for DPFP for direct or indirect compensation. Services include, but are not limited to, custodianship of funds, management of investments, maintenance of official records and provision of professional advice.
C. Standards of Conduct

The following legal standards of conduct apply to all System Representatives.

A System Representative shall not:

1. solicit, accept or agree to accept any Benefit or Gift that the System Representative knows or should know is being offered with the intent to influence the System Representative’s official conduct.

2. solicit, accept, or agree to accept any Benefit or Gift for having exercised the System Representative’s official powers or performed the System Representative’s official duties in favor of another.

3. solicit, accept, or agree to accept a Benefit or Gift that is not a Permitted Benefit or Gift from a person the System Representative knows is interested in or likely to become interested in any contract, purchase, payment, claim, or transaction involving the exercise of the System Representative’s discretion.

4. accept other employment or compensation or engage in a business or professional activity that could reasonably be expected to impair the System Representative’s independence of judgment in the performance of the System Representative’s official duties or that might reasonably be expected to require or induce the System Representative to disclose confidential information acquired by reason of the official position.

5. make personal investments that could reasonably be expected to create a substantial conflict between the System Representative’s private interest and the public interest (this does not include investments in publicly traded index funds or mutual funds where the System Representative has no control over the selection of holdings).

6. use official position for financial gain, obtaining privileges, or avoiding consequence of illegal acts.

7. have any direct or indirect pecuniary interest in a contract entered into by DPFP other than an interest incidental to the System Representative’s membership in a large class such as that of participants in DPFP (this does not include investments in publicly traded index funds or mutual funds where the System Representative has no control over the selection of holdings).
D. Fiduciary Duties

1. Under Texas State statutes and applicable federal law and regulations, the System is a trust fund to be administered solely in the interest of the members and beneficiaries thereof for the exclusive purpose of providing benefits to members and beneficiaries and to defray reasonable expenses of DPFP.

2. In the performance of these duties, all Fiduciaries are subject to the "prudent person" rule which requires that they exercise their duties with the care, skill, prudence, and diligence under the prevailing circumstances that a prudent person acting in a like capacity and familiar with matters of the type would use in the conduct of an enterprise with a like character and like aims. Further, all Fiduciaries shall maintain high ethical and moral character both professionally and personally, including interactions with other Trustees and DPFP staff, such that the conduct of all Fiduciaries shall not reflect negatively upon the Board or DPFP.

3. In making or participating in decisions, Fiduciaries shall give appropriate consideration to those facts and circumstances reasonably available to the Fiduciary which are relevant to the particular decision and shall refrain from considering facts or circumstances which are not relevant to the decision.

4. Investment decisions of Fiduciaries must be made in accordance with the approved Investment Policy Statement of the System.

5. As a Fiduciary, each Trustee shall adhere to the following:

   A. A Trustee’s loyalty must be to the members and beneficiaries of the System and not to the source of his or her appointment. A Trustee must exercise care and caution always to place the interest of members and beneficiaries ahead of the Trustee’s own interest.

   B. All members and beneficiaries of DPFP are to be treated fairly and impartially. A Trustee’s duty is to the members and beneficiaries of DPFP as a whole and not to individuals or groups of individuals within DPFP.

   C. Trustees must possess the ability and willingness to dedicate the time required to satisfy the duties of serving as a Fiduciary. This includes but is not limited to possessing a complete understanding of the obligations and duty to act in accordance with plan documents, as well as having a substantive base of knowledge that contributes to sufficient analysis of recommendations by DPFP staff and other professionals and fulfillment of fiduciary obligations. A Trustee is responsible for preparing himself or herself for Board work, including committee meetings.
D. Fiduciary Duties (continued)

D. A Trustee shall treat executive session and closed meeting information as confidential.

E. A Trustee shall not give, disclose or provide access to any confidential information owned, obtained, or developed by DPFP.

F. Trustees should delegate duties, when appropriate, and prudently select, instruct, and monitor all Vendors, Consultants, DPFP staff, and agents to whom they delegate such duties.

6. No Trustee shall knowingly or negligently participate in the breach of fiduciary duty by another fiduciary, participate in concealing such breach, or knowingly or negligently permit such breach to occur or continue.

E. Conflicts of Interest and Prohibited Transactions

1. Certain transactions by System Representatives of DPFP are strictly prohibited, specifically:

   A. Compensation from any person in connection with any action involving assets of DPFP.

   B. Participation in a decision or action involving any asset or benefit for personal interest.

   C. The purchase, sale, exchange or leasing of property with DPFP if that System Representative holds an interest in the property.

   D. The purchase, sale or exchange of any direct investment with DPFP if that System Representative holds an interest in the investment.

   E. Causing the Fund to engage in any of the prohibited transactions described herein with any immediate relative or business associate of the System Representative, any other Trustee, employee, custodian, or counsel to DPFP, any other Fiduciary, any person providing services to DPFP, any employee organization whose members are covered by DPFP, or the City of Dallas and its officers, officials and employees.
E. Conflicts of Interest and Prohibited Transactions (continued)

2. In addition, any goods, services, or facilities furnished by DPFP to any person shall be used for the exclusive benefit of DPFP unless reasonable consideration is received by the System for the use of the goods, services, or facilities.

3. Black-Out List for Investment Entities

   A. For purposes of this subsection, “Investment Entity” means an investment firm, partnership, fund, advisor, consultant, placement agent or owner of property that is being considered for purchase.

   B. The Chief Investment Officer shall maintain and periodically update as appropriate a list (the “Black-out List”) of Investment Entities that meet any of the following criteria:

      i. The Investment Entity is under consideration by DPFP staff for a recommendation to the Board or the Board’s Investment Advisory Committee on a mandate, commitment, increased allocation or any retention for investment-related services (exclusive of rebalancing);

      ii. The Investment Entity is under consideration by the DPFP staff for a recommendation to the Board or the Investment Advisory Committee to decrease the allocation to the Investment Entity (exclusive of rebalancing) or to discontinue use of the Investment Entity, provided, however, this shall not include any Investment Entity where the assets managed by the Investment Entity that are being considered to be reduced in whole or in part are contained within an asset class where the actual assets held by DPFP are higher than the target allocation for such asset class in the Investment Policy Statement; or

      iii. The Investment Entity is in negotiations with DPFP for contractual terms after a conditional selection has been made.

   D. During the first half of each month, the Chief Investment Officer shall supply the current Black-out List to Trustees and any DPFP employees that, in the Chief Investment Officer’s opinion, might potentially be affected by this section (the “Affected Employees”). Additionally, prior to departure for DPFP-related travel, Trustees andAffected Employees shall be issued the most current Black-out List.
E. Conflicts of Interest and Prohibited Transactions (continued)

E. Notwithstanding any other DPFP policies, including those in this Policy concerning Benefits or Gifts, while an Investment Entity’s name appears on the Black-out List, Trustees and Affected Employees and their immediate relatives shall not accept payment, reimbursement, complimentary admission or similar extension or subsidy for food, lodging, travel or entertainment, including any Permitted Benefit or Gift, from any person or entity identified or affiliated with said Investment Entity, including, without limitation, any placement agent of an Investment Entity (an “Investment Entity Representative”), except for:

i. food and beverages that would be typically or conventionally provided by a business host in connection with a business meeting and that are provided by the host at its place of business during a due diligence visit;

ii. food and beverages provided at regularly scheduled Investment Entity annual meetings or advisory committee meetings; and

iii. food and beverages provided at educational conferences where such food and beverages may be sponsored by an Investment Entity, but are available to all conference attendees.

F. Trustees shall not reciprocate communications from an Investment Entity Representative about the Investment Entity outside of committee or Board meetings (“ex-parte communications”).

4. A System Representative shall report to the Executive Director any business relationship with a current or prospective Vendor on a signed document upon establishment of such relationship if the System Representative knows or should know that the person or entity is a current or prospective Vendor for DPFP.\(^1\) Upon receipt of such information, the Executive Director will as promptly as practicable report the Board of the facts involved.

5. A Trustee shall not lobby against legislative proposals pertaining to DPFP pension issues and benefits that have been duly approved by the Board or an authorized committee of the Board.

6. A System Representative shall not disclose any information deemed confidential by DPFP.

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\(^1\) Chapter 176, Texas Local Gov’t Code.
E. Conflicts of Interest and Prohibited Transactions (continued)

7. Other than as a member or beneficiary of DPFP, a System Representative may have no conflict of interest during such System Representative’s tenure with DPFP and for one year after tenure ends, such that System Representative shall comply with the provisions of this Policy during such System Representative’s tenure, and a System Representative shall not, during such System Representative’s tenure with DPFP and for one year after such tenure ends, represent any Third Party in any formal or informal appearance before the Board or DPFP staff. DPFP will not enter into or renew an existing contract with any Vendor during the one year period after the System Representative’s tenure with DPFP if such Vendor employs or is represented by the System Representative unless the Board determines that such a restriction would not be in DPFP's best interest.

8. Nothing in this Section shall exempt any System Representative from applicable provisions of any other laws. The standards of conduct set forth in this Section are in addition to those prescribed elsewhere in this Policy and in applicable laws and rules.

F. Gifts, Travel and Expenses

1. System Representatives shall not solicit any Benefit or Gift, including a Permitted Benefit or Gift, from any source which is a current or prospective Vendor or Consultant of DPFP. All Trustees and Key Staff of DPFP shall exercise care in accepting any Permitted Benefit or Gift from any source, particularly those sources which are current or prospective Vendors or Consultants of the System.

2. System Representatives shall not accept a Benefit or Gift that is not a Permitted Benefit or Gift. Any Benefit or Gift to a System Representative that is not a Permitted Benefit or Gift shall be returned to its source whenever possible or donated to a suitable charitable organization upon its receipt.

3. No System Representative shall receive any Permitted Benefit or Gift through an intermediary, if the person knows, or has reason to know, that the Permitted Benefit or Gift has originated from another source.

4. In no event shall any System Representative accept a Permitted Benefit or Gift if the source of the Permitted Benefit or Gift is not identified. If the source of any Permitted Benefit or Gift cannot be ascertained, the Permitted Benefit or Gift shall be donated to a suitable charitable organization.

5. Under no circumstances shall a System Representative accept a cash Gift.
F. Gifts, Travel and Expenses (continued)

6. In no event shall any System Representative accept any expenses related to travel, other than working meals or ground transportation, the purpose of which is to determine the selection of new Vendors or to determine the assignment of continuing or additional business to existing Vendors.

G. Examples of Situations That Involve a Permitted Benefit or Gift

1. Permitted Benefit or Gift or No Benefit or Gift Provided (and Reporting Required in Certain Situations)
   
   A. A Vendor (not currently in a search) invites a System Representative to attend a sporting event at no cost to the System Representative. The Vendor and the System Representative both attend the event. Because the Vendor accompanies the System Representative to this event, the event is a Permitted Benefit or Gift. However, for purposes of Chapter 176, whether the event has to be reported depends on the whether the value of the sporting event and the value of any Gift, including transportation, lodging or entertainment received by the System Representative from the Vendor in the applicable 12-month period (as described in Chapter 176) would, in the aggregate, exceed $100.

   B. A Vendor (not currently in a search) invites several System Representatives to a dinner at a restaurant. The Vendor and the System Representatives attend the dinner. Because the Vendor accompanies the System Representatives to the dinner, the dinner is a Permitted Benefit or Gift.

   C. While attending a conference, a System Representative attends a reception sponsored and attended by Vendors (none of which currently are in a search). Because the reception is widely attended and the Vendors are present, the reception is a Permitted Benefit or Gift.

   D. While attending a conference, a System Representative and all other attendees of the conference receive a bag with various items and the aggregate value of the items is under $50 (including taxes). Because the value of the gift bag is under $50, the gift bag is a Permitted Benefit or Gift. Whether these items must be reported under Chapter 176 depends on whether the items are from a specific Vendor or prospective Vendor and whether that Vendor has provided other gifts within the applicable 12-month period (as described by Chapter 176) that would, in the aggregate, exceed $100.

2 In all scenarios, the Vendor does not have a separate employment or other business relationship with the System Representative or the System Representative’s family member (see Chapters 171 and 176 for details).
G. Examples of Situations That Involve a Permitted Benefit or Gift (continued)

E. A System Representative realizes that seven months ago, he participated in a golf outing valued at $175 as a guest of a company who had representatives at the golf outing. The company, however, now enters into a contract with DPFP in the current month. The System Representative did not know at the time of the golf outing that the company or DPFP was considering entering into the contract. Because representatives of the company were in attendance at the golf outing, the outing was a Permitted Benefit or Gift, even though the outing was over $50. However, because the golf outing was valued at over $100, it must be reported under Chapter 176 because the System Representative received a Gift from the Vendor during the 12-month period preceding the date that he became aware that a contract with the Vendor had been executed.

F. A System Representative and her spouse attend a professional basketball game as guests of a company with representatives of the company present. The value of the tickets is over $100. Six months later, the System Representative becomes aware that DPFP and the company are considering entering into a contract, even though no contract is being entered into at such time. Because the basketball game was attended by a representative of the company, the basketball game was a Permitted Benefit or Gift, even though the value was over $50. However, because the tickets were valued at over $100, it must be reported under Chapter 176 because the System Representative received a Gift from the Vendor during the 12-month period preceding the date that she became aware that DPFP and the Company were considering entering into a contract.

G. While attending a conference, a System Representative and all other attendees of the conference receive an item such as a shirt/sweater or briefcase type bag with the Vendor’s name on it. Because items with Vendors’ logos and/or company name generally are advertising and do not have retail value, no Benefit or Gift is provided.

H. A System Representative attends a conference as a speaker and in return the conference pays for transportation, meals and lodging. This is a permitted honorarium, and no Benefit or Gift is provided. Whether the honorarium must be reported under Chapter 176, depends on whether the transportation, meals and lodging are from a current or prospective Vendor and whether that Vendor has provided other gifts within the applicable 12-month period (as described in Chapter 176) that would, in the aggregate, exceed $100.

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3 In all scenarios, the Vendor does not have a separate employment or other business relationship with the System Representative or the System Representative’s family member (see Chapters 171 and 176 for details).
G. Examples of Situations That Involve a Permitted Benefit or Gift\(^4\) (continued)

2. Benefit or Gift Provided that is Not Permitted

   A. A Vendor (not currently in a search) invites a System Representative to attend a sporting event at no cost to the System Representative, but does not plan on attending the event. Because the Vendor does not attend the event with the System Representative, a Benefit or Gift is provided that is not permitted.

   B. A System Representative, while attending a conference, wins a raffle sponsored by the conference. The prize is $25 cash. The System Representative may not accept the cash, as it is a Benefit or Gift that is expressly prohibited under Section F4.5.

   C. A System Representative, during the Christmas Holidays, receives a pen and pencil set from a Vendor. The value of the set is obviously over $50 (including taxes). Because the value of the pen and pencil set is over $50, the pen and pencil set is a Gift that is not permitted and should be returned to the Vendor, or if return is not possible, donated to a charitable organization.

H. Undue Influence

1. Trustees recognize that, by virtue of their position of authority with the System, may have Undue Influence on DPFP staff or Consultants when communicating directly with such staff or Consultants.

2. Individual Trustees shall refer all proposals or other communications regarding potential or existing investments or other contracts or services, or matters involving general System operations, directly to the Executive Director or his or her designee and shall not communicate as to such matters with other DPFP staff or Consultants.

3. Any communication regarding a potential investment transaction, other contract, or System operations initiated by a Trustee with either DPFP staff or a Consultant in which the Trustee is advocating for a specified outcome must be documented by the employee or Consultant and reported to the Executive Director. The Executive Director will notify the Chairman of such communications for appropriate action.

\(^4\) In all scenarios, the Vendor does not have a separate employment or other business relationship with the System Representative or the System Representative’s family member (see Chapters 171 and 176 for details).
I. General Provisions

1. Nothing in this policy shall excuse any Trustee, officer, or employee from any other restrictions of state or federal law concerning conflicts of interest and fiduciary duties, including but not limited to Chapters 171 and 176, Tex. Local Gov’t Code, as amended (Attachment III), and the Securities and Exchange Commission “Pay to Play” Regulations, Rule 206(4)-5.5

2. Violation of this Policy by a Vendor will result in corrective action, up to and including termination of contract or relationship with DPFP, discipline, or initiation of removal action pursuant to any and all applicable laws. Enforcement of this Policy with respect to Trustees is provided in Section L.

J. Enforcement

1. It is the duty of all System Representatives to be aware of all provisions of this document and to abide by the letter and the spirit of this Policy.

2. If the Executive Director is notified in writing of an alleged violation of this Policy, the Executive Director shall promptly notify the Chairman of the alleged violation. If the violation is alleged against a Trustee, the Chairman is authorized to call an ad hoc committee of four (4) Trustees who are not the subject of the allegation to review the alleged violation and make recommendations to the Board for resolution of the matter. If the Chairman is a subject of the alleged violation, the Executive Director shall promptly notify the Vice Chairman of the alleged violation. The Vice Chairman is authorized to call an ad hoc committee of four (4) Trustees who are not the subject of the allegation to review the alleged violation and make recommendations to the Board for resolution of the matter.

3. The Board shall have final decision-making authority with respect to Trustee violations of this Policy. The Executive Director shall have final decision-making authority with respect to staff violations of this Policy.

A. Available decisions for Trustee violations of this Policy are:

   i. Require that the Trustee file disclosure or conflicts report(s) within a specified time period.

   ii. Require that the Trustee attend approved specialized training within a specified time period.

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J. Enforcement (continued)

  iii. Removal of the Trustee from any Committee Chairman role for a specified time period.

  iv. Removal of the Trustee from any Committee membership for a specified time period.

  v. Censure of the Trustee.

  vi. Bring suit against the Trustee for breach of fiduciary duty.

B. A decision under this Section is binding on the Trustee.

K. Compliance

Trustees and Key Staff are required to file an annual form with the System acknowledging that they have read, understand and will comply with the provisions of this Policy.

L. Effective Date

APPROVED on December 14, 2017 by the Board of Trustees of the Dallas Police and Fire Pension System.

[signature]

William F. Quinn
Chairman

ATTEST:

[signature]

Kelly Gottschalk
Secretary
Attachment I

The fiduciary responsibilities of a Trustee of a Public Retirement System in the state of Texas under Texas Government Code, Title 8, Section 802.203.

Sec. 802.203. FIDUCIARY RESPONSIBILITY. (a) In making and supervising investments of the reserve fund of a public retirement system, an investment manager or the governing body shall discharge its duties solely in the interest of the participants and beneficiaries:

(1) for the exclusive purposes of:
   (A) providing benefits to participants and their beneficiaries; and
   (B) defraying reasonable expenses of administering the system;

(2) with the care, skill, prudence, and diligence under the prevailing circumstances that a prudent person acting in a like capacity and familiar with matters of the type would use in the conduct of an enterprise with a like character and like aims;

(3) by diversifying the investments of the system to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so; and

(4) in accordance with the documents and instruments governing the system to the extent that the documents and instruments are consistent with this subchapter.

(b) In choosing and contracting for professional investment management services and in continuing the use of an investment manager, the governing body must act prudently and in the interest of the participants and beneficiaries of the public retirement system.

(c) A Trustee is not liable for the acts or omissions of an investment manager appointed under Section 802.204, nor is a Trustee obligated to invest or otherwise manage any asset of the system subject to management by the investment manager.

(d) An investment manager appointed under Section 802.204 shall acknowledge in writing the manager's fiduciary responsibilities to the fund the manager is appointed to serve.

(e) The investment standards provided by Subsection (a) and the policies, requirements, and restrictions adopted under Section 802.204(c) are the only standards, policies, or requirements for, or restrictions on, the investment of funds of a public retirement system by an investment manager or by a governing body during a 90-day interim between professional investment management services. Any other standard, policy, requirement, or restriction provided by law is suspended and not applicable during a time, and for 90 days after a time, in which an investment manager is responsible for investment of a reserve fund. If an investment manager has not begun managing investments of a reserve fund before the 91st day after the date of termination of the services of a previous investment manager, the standards, policies, requirements, and restrictions otherwise provided by law are applicable until the date professional investment management services are resumed.
Attachment II

Chapters 171 and 176 of the Texas Local Government Code

CHAPTER 171. REGULATION OF CONFLICTS OF INTEREST OF OFFICERS OF MUNICIPALITIES, COUNTIES, AND CERTAIN OTHER LOCAL GOVERNMENTS

Sec. 171.001. DEFINITIONS. In this chapter:

(1) "Local public official" means a member of the governing body or another officer, whether elected, appointed, paid, or unpaid, of any district (including a school district), county, municipality, precinct, central appraisal district, transit authority or district, or other local governmental entity who exercises responsibilities beyond those that are advisory in nature.

(2) "Business entity" means a sole proprietorship, partnership, firm, corporation, holding company, joint-stock company, receivership, trust, or any other entity recognized by law.

Sec. 171.002. SUBSTANTIAL INTEREST IN BUSINESS ENTITY. (a) For purposes of this chapter, a person has a substantial interest in a business entity if:

(1) the person owns 10 percent or more of the voting stock or shares of the business entity or owns either 10 percent or more or $15,000 or more of the fair market value of the business entity; or

(2) funds received by the person from the business entity exceed 10 percent of the person's gross income for the previous year.

(b) A person has a substantial interest in real property if the interest is an equitable or legal ownership with a fair market value of $2,500 or more.

(c) A local public official is considered to have a substantial interest under this section if a person related to the official in the first degree by consanguinity or affinity, as determined under Chapter 573, Government Code, has a substantial interest under this section.

Sec. 171.0025. APPLICATION OF CHAPTER TO MEMBER OF HIGHER EDUCATION AUTHORITY. This chapter does not apply to a board member of a higher education authority created under Chapter 53, Education Code, unless a vote, act, or other participation by the board member in the affairs of the higher education authority would provide a financial benefit to a financial institution, school, college, or university that is:

(1) a source of income to the board member; or

(2) a business entity in which the board member has an interest distinguishable from a financial benefit available to any other similar financial institution or other school, college, or university whose students are eligible for a student loan available under Chapter 53, Education Code.
Sec. 171.003. PROHIBITED ACTS; PENALTY. (a) A local public official commits an offense if the official knowingly:

(1) violates Section 171.004;

(2) acts as surety for a business entity that has work, business, or a contract with the governmental entity; or

(3) acts as surety on any official bond required of an officer of the governmental entity.

(b) An offense under this section is a Class A misdemeanor.

Sec. 171.004. AFFIDAVIT AND ABSTENTION FROM VOTING REQUIRED. (a) If a local public official has a substantial interest in a business entity or in real property, the official shall file, before a vote or decision on any matter involving the business entity or the real property, an affidavit stating the nature and extent of the interest and shall abstain from further participation in the matter if:

(1) in the case of a substantial interest in a business entity the action on the matter will have a special economic effect on the business entity that is distinguishable from the effect on the public; or

(2) in the case of a substantial interest in real property, it is reasonably foreseeable that an action on the matter will have a special economic effect on the value of the property, distinguishable from its effect on the public.

(b) The affidavit must be filed with the official record keeper of the governmental entity.

(c) If a local public official is required to file and does file an affidavit under Subsection (a), the official is not required to abstain from further participation in the matter requiring the affidavit if a majority of the members of the governmental entity of which the official is a member is composed of persons who are likewise required to file and who do file affidavits of similar interests on the same official action.

Sec. 171.005. VOTING ON BUDGET. (a) The governing body of a governmental entity shall take a separate vote on any budget item specifically dedicated to a contract with a business entity in which a member of the governing body has a substantial interest.

(b) Except as provided by Section 171.004(c), the affected member may not participate in that separate vote. The member may vote on a final budget if:

(1) the member has complied with this chapter; and

(2) the matter in which the member is concerned has been resolved.

Sec. 171.006. EFFECT OF VIOLATION OF CHAPTER. The finding by a court of a violation under this chapter does not render an action of the governing body voidable unless the measure that was the subject of an action involving a conflict of interest would not have passed the governing body without the vote of the person who violated the chapter.
Sec. 171.007. COMMON LAW PREEMPTED; CUMULATIVE OF MUNICIPAL PROVISIONS. (a) This chapter preempts the common law of conflict of interests as applied to local public officials.

(b) This chapter is cumulative of municipal charter provisions and municipal ordinances defining and prohibiting conflicts of interests.

Sec. 171.009. SERVICE ON BOARD OF CORPORATION FOR NO COMPENSATION. It shall be lawful for a local public official to serve as a member of the board of directors of private, nonprofit corporations when such officials receive no compensation or other remuneration from the nonprofit corporation or other nonprofit entity.

Sec. 171.010. PRACTICE OF LAW. (a) For purposes of this chapter, a county judge or county commissioner engaged in the private practice of law has a substantial interest in a business entity if the official has entered a court appearance or signed court pleadings in a matter relating to that business entity.

(b) A county judge or county commissioner that has a substantial interest in a business entity as described by Subsection (a) must comply with this chapter.

(c) A judge of a constitutional county court may not enter a court appearance or sign court pleadings as an attorney in any matter before:

(1) the court over which the judge presides; or

(2) any court in this state over which the judge's court exercises appellate jurisdiction.

(d) Upon compliance with this chapter, a county judge or commissioner may practice law in the courts located in the county where the county judge or commissioner serves.

CHAPTER 176. DISCLOSURE OF CERTAIN RELATIONSHIPS WITH LOCAL GOVERNMENT OFFICERS; PROVIDING PUBLIC ACCESS TO CERTAIN INFORMATION

Sec. 176.001. DEFINITIONS. In this chapter:

(1) "Agent" means a third party who undertakes to transact some business or manage some affair for another person by the authority or on account of the other person. The term includes an employee.

(1-a) "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or
(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

(1-b) "Charter school" means an open-enrollment charter school operating under Subchapter D, Chapter 12, Education Code.

(1-c) "Commission" means the Texas Ethics Commission.

(1-d) "Contract" means a written agreement for the sale or purchase of real property, goods, or services.

(2) "Family member" means a person related to another person within the first degree by consanguinity or affinity, as described by Subchapter B, Chapter 573, Government Code.

(2-a) "Family relationship" means a relationship between a person and another person within the third degree by consanguinity or the second degree by affinity, as those terms are defined by Subchapter B, Chapter 573, Government Code.

(2-b) "Gift" means a benefit offered by a person, including food, lodging, transportation, and entertainment accepted as a guest. The term does not include a benefit offered on account of kinship or a personal, professional, or business relationship independent of the official status of the recipient.

(2-c) "Goods" means personal property.

(2-d) "Investment income" means dividends, capital gains, or interest income generated from:

(A) a personal or business:
   (i) checking or savings account;
   (ii) share draft or share account; or
   (iii) other similar account;

(B) a personal or business investment; or

(C) a personal or business loan.

(3) "Local governmental entity" means a county, municipality, school district, charter school, junior college district, water district created under Subchapter B, Chapter 49, Water Code, or other political subdivision of this state or a local government corporation, board, commission, district, or authority to which a member is appointed by the commissioners court of a county, the mayor of a municipality, or the governing body of a municipality. The term does not include an association, corporation, or organization of governmental entities organized to provide to its members education, assistance, products, or services or to represent its members before the legislative, administrative, or judicial branches of the state or federal government.

(4) "Local government officer" means:

(A) a member of the governing body of a local governmental entity;

(B) a director, superintendent, administrator, president, or other person designated as the executive officer of a local governmental entity; or
(C) an agent of a local governmental entity who exercises discretion in the planning, recommending, selecting, or contracting of a vendor.

(5) "Records administrator" means the director, county clerk, municipal secretary, superintendent, or other person responsible for maintaining the records of the local governmental entity or another person designated by the local governmental entity to maintain statements and questionnaires filed under this chapter and perform related functions.

(6) "Services" means skilled or unskilled labor or professional services, as defined by Section 2254.002, Government Code.

(7) "Vendor" means a person who enters or seeks to enter into a contract with a local governmental entity. The term includes an agent of a vendor. The term includes an officer or employee of a state agency when that individual is acting in a private capacity to enter into a contract. The term does not include a state agency except for Texas Correctional Industries.

Sec. 176.002. APPLICABILITY TO VENDORS AND OTHER PERSONS. (a) This chapter applies to a person who is:

(1) a vendor; or

(2) a local government officer of a local governmental entity.

(b) A person is not subject to the disclosure requirements of this chapter if the person is:

(1) a state, a political subdivision of a state, the federal government, or a foreign government; or

(2) an employee or agent of an entity described by Subdivision (1), acting in the employee's or agent's official capacity.

Sec. 176.003. CONFLICTS DISCLOSURE STATEMENT REQUIRED. (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(1) the vendor enters into a contract with the local governmental entity or the local governmental entity is considering entering into a contract with the vendor; and

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or
(ii) the local governmental entity is considering entering into a contract with the vendor; or

(C) has a family relationship with the local government officer.

(a-1) A local government officer is not required to file a conflicts disclosure statement in relation to a gift accepted by the officer or a family member of the officer if the gift is:

(1) a political contribution as defined by Title 15, Election Code; or

(2) food accepted as a guest.

(a-2) A local government officer is not required to file a conflicts disclosure statement under Subsection (a) if the local governmental entity or vendor described by that subsection is an administrative agency created under Section 791.013, Government Code.

(b) A local government officer shall file the conflicts disclosure statement with the records administrator of the local governmental entity not later than 5 p.m. on the seventh business day after the date on which the officer becomes aware of the facts that require the filing of the statement under Subsection (a).

(c) Repealed by Acts 2015, 84th Leg., R.S., Ch. 989, Sec. 9(1), eff. September 1, 2015.

(d) Repealed by Acts 2015, 84th Leg., R.S., Ch. 989, Sec. 9(1), eff. September 1, 2015.

(e) The commission shall adopt the conflicts disclosure statement for local government officers for use under this section. The conflicts disclosure statement must include:

(1) a requirement that each local government officer disclose:

(A) an employment or other business relationship described by Subsection (a)(2)(A), including the nature and extent of the relationship; and

(B) gifts accepted by the local government officer and any family member of the officer from a vendor during the 12-month period described by Subsection (a)(2)(B) if the aggregate value of the gifts accepted by the officer or a family member from that vendor exceeds $100;

(2) an acknowledgment from the local government officer that:

(A) the disclosure applies to each family member of the officer; and

(B) the statement covers the 12-month period described by Subsection (a)(2)(B); and

(3) the signature of the local government officer acknowledging that the statement is made under oath under penalty of perjury.

Sec. 176.006. DISCLOSURE REQUIREMENTS FOR VENDORS AND OTHER PERSONS; QUESTIONNAIRE. (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

(b) The commission shall adopt a conflict of interest questionnaire for use under this section that requires disclosure of a vendor’s business and family relationships with a local governmental entity.

(c) The questionnaire adopted under Subsection (b) must require, for the local governmental entity with respect to which the questionnaire is filed, that the vendor filing the questionnaire:

(1) describe each employment or business and family relationship the vendor has with each local government officer of the local governmental entity;

(2) identify each employment or business relationship described by Subdivision (1) with respect to which the local government officer receives, or is likely to receive, taxable income, other than investment income, from the vendor;

(3) identify each employment or business relationship described by Subdivision (1) with respect to which the vendor receives, or is likely to receive, taxable income, other than investment income, that:

(A) is received from, or at the direction of, a local government officer of the local governmental entity; and

(B) is not received from the local governmental entity; and

(4) describe each employment or business relationship with a corporation or other business entity with respect to which a local government officer of the local governmental entity:

(A) serves as an officer or director; or

(B) holds an ownership interest of one percent or more.
(d) A vendor shall file an updated completed questionnaire with the appropriate records administrator not later than the seventh business day after the date on which the vendor becomes aware of an event that would make a statement in the questionnaire incomplete or inaccurate.

(e) A person who is both a local government officer and a vendor of a local governmental entity is required to file the questionnaire required by Subsection (a)(1) only if the person:

(1) enters or seeks to enter into a contract with the local governmental entity; or

(2) is an agent of a person who enters or seeks to enter into a contract with the local governmental entity.

(f) Repealed by Acts 2015, 84th Leg., R.S., Ch. 989, Sec. 9(3), eff. September 1, 2015.

(g) Repealed by Acts 2015, 84th Leg., R.S., Ch. 989, Sec. 9(3), eff. September 1, 2015.

(h) Repealed by Acts 2015, 84th Leg., R.S., Ch. 989, Sec. 9(3), eff. September 1, 2015.

(i) The validity of a contract between a vendor and a local governmental entity is not affected solely because the vendor fails to comply with this section.

Sec. 176.0065. MAINTENANCE OF RECORDS. A records administrator shall:

(1) maintain a list of local government officers of the local governmental entity and shall make that list available to the public and any vendor who may be required to file a conflict of interest questionnaire under Section 176.006; and

(2) maintain the statements and questionnaires that are required to be filed under this chapter in accordance with the local governmental entity’s records retention schedule.

Sec. 176.008. ELECTRONIC FILING. The requirements of this chapter, including signature requirements, may be satisfied by electronic filing in a form approved by the commission.

Sec. 176.009. POSTING ON INTERNET. (a) A local governmental entity that maintains an Internet website shall provide access to the statements and to questionnaires required to be filed under this chapter on that website. This subsection does not require a local governmental entity to maintain an Internet website.

(b) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 847, Sec. 3(b), eff. January 1, 2014.

Sec. 176.010. REQUIREMENTS CUMULATIVE. The requirements of this chapter are in addition to any other disclosure required by law.

Sec. 176.012. APPLICATION OF PUBLIC INFORMATION LAW. This chapter does not require a local governmental entity to disclose any information that is excepted from disclosure by Chapter 552, Government Code.
Sec. 176.013. ENFORCEMENT. (a) A local government officer commits an offense under this chapter if the officer:

(1) is required to file a conflicts disclosure statement under Section 176.003; and

(2) knowingly fails to file the required conflicts disclosure statement with the appropriate records administrator not later than 5 p.m. on the seventh business day after the date on which the officer becomes aware of the facts that require the filing of the statement.

(b) A vendor commits an offense under this chapter if the vendor:

(1) is required to file a conflict of interest questionnaire under Section 176.006; and

(2) either:

(A) knowingly fails to file the required questionnaire with the appropriate records administrator not later than 5 p.m. on the seventh business day after the date on which the vendor becomes aware of the facts that require the filing of the questionnaire; or

(B) knowingly fails to file an updated questionnaire with the appropriate records administrator not later than 5 p.m. on the seventh business day after the date on which the vendor becomes aware of an event that would make a statement in a questionnaire previously filed by the vendor incomplete or inaccurate.

(c) An offense under this chapter is:

(1) a Class C misdemeanor if the contract amount is less than $1 million or if there is no contract amount for the contract;

(2) a Class B misdemeanor if the contract amount is at least $1 million but less than $5 million; or

(3) a Class A misdemeanor if the contract amount is at least $5 million.

(d) A local governmental entity may reprimand, suspend, or terminate the employment of an employee who knowingly fails to comply with a requirement adopted under this chapter.

(e) The governing body of a local governmental entity may, at its discretion, declare a contract void if the governing body determines that a vendor failed to file a conflict of interest questionnaire required by Section 176.006.

(f) It is an exception to the application of Subsection (a) that the local government officer filed the required conflicts disclosure statement not later than the seventh business day after the date the officer received notice from the local governmental entity of the alleged violation.

(g) It is an exception to the application of Subsection (b) that the vendor filed the required questionnaire not later than the seventh business day after the date the vendor received notice from the local governmental entity of the alleged violation.
# LOCAL GOVERNMENT OFFICER

## CONFLICTS DISCLOSURE STATEMENT

(Instructions for completing and filing this form are provided on the next page.)

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This is the notice to the appropriate local governmental entity that the following local government officer has become aware of facts that require the officer to file this statement in accordance with Chapter 176, Local Government Code.

1. **Name of Local Government Officer**

2. **Office Held**

3. **Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code**

4. **Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in item 3.**

5. **List gifts accepted by the local government officer and any family member, if aggregate value of the gifts accepted from vendor named in item 3 exceeds $100 during the 12-month period described by Section 176.003(a)(2)(B).**

   - Date Gift Accepted ____________ Description of Gift ____________________________________________________________
   - Date Gift Accepted ____________ Description of Gift ____________________________________________________________
   - Date Gift Accepted ____________ Description of Gift ____________________________________________________________

   (attach additional forms as necessary)

6. **AFFIDAVIT**

I swear under penalty of perjury that the above statement is true and correct. I acknowledge that the disclosure applies to each family member (as defined by Section 176.001(2), Local Government Code) of this local government officer. I also acknowledge that this statement covers the 12-month period described by Section 176.003(a)(2)(B), Local Government Code.

______________________________
Signature of Local Government Officer

**AFFIX NOTARY STAMP / SEAL ABOVE**

Sworn to and subscribed before me, by the said ________________________________, this the ___________ day of _____________, 20 ______ , to certify which, witness my hand and seal of office.

______________________________
Signature of officer administering oath

______________________________
Printed name of officer administering oath

______________________________
Title of officer administering oath
LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

Section 176.003 of the Local Government Code requires certain local government officers to file this form. A "local government officer" is defined as a member of the governing body of a local governmental entity; a director, superintendent, administrator, president, or other person designated as the executive officer of a local governmental entity; or an agent of a local governmental entity who exercises discretion in the planning, recommending, selecting, or contracting of a vendor. This form is required to be filed with the records administrator of the local governmental entity not later than 5 p.m. on the seventh business day after the date on which the officer becomes aware of the facts that require the filing of this statement.

A local government officer commits an offense if the officer knowingly violates Section 176.003, Local Government Code. An offense under this section is a misdemeanor.

Refer to chapter 176 of the Local Government Code for detailed information regarding the requirement to file this form.

INSTRUCTIONS FOR COMPLETING THIS FORM

The following numbers correspond to the numbered boxes on the other side.

1. Name of Local Government Officer. Enter the name of the local government officer filing this statement.

2. Office Held. Enter the name of the office held by the local government officer filing this statement.

3. Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code. Enter the name of the vendor described by Section 176.001(7), Local Government Code, if the vendor: a) has an employment or other business relationship with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code; b) has given to the local government officer or a family member of the officer one or more gifts as described by Section 176.003(a)(2)(B), Local Government Code; or c) has a family relationship with the local government officer as defined by Section 176.001(2-a), Local Government Code.

4. Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in item 3. Describe the nature and extent of the employment or other business relationship the vendor has with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code, and each family relationship the vendor has with the local government officer as defined by Section 176.001(2-a), Local Government Code.

5. List gifts accepted, if the aggregate value of the gifts accepted from vendor named in item 3 exceeds $100. List gifts accepted during the 12-month period (described by Section 176.003(a)(2)(B), Local Government Code) by the local government officer or family member of the officer from the vendor named in item 3 that in the aggregate exceed $100 in value.

6. Affidavit. Signature of local government officer.

Local Government Code § 176.001(2-a): “Family relationship” means a relationship between a person and another person within the third degree by consanguinity or the second degree by affinity, as those terms are defined by Subchapter B, Chapter 573, Government Code.


(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.
Investment Managers & Other Service Providers

**Investment Managers**
AEW Capital Management
Alvarez & Marsal
AQR Capital Management
Ashmore Investment Management Limited
BankCap Partners
Barings Real Estate Advisors
Bentall Kennedy
Boston Partners Global Investors
Brandywine Global Investment Management
Bridgewater Associates
BTG Pactual Asset Management
CDK Realty Advisors
Cintra US
Clarion Partners
Forest Investment Associates
Grantham, Mayo, Van Otterloo & Co. (GMO)
Hancock Agricultural Investment Group
Hearthstone, Inc.
Highland Capital Management
Hudson Clean Energy Partners
Income Research & Management
Industry Ventures
JP Morgan Asset Management
L&B Realty Advisors
Lone Star Funds
Lone Star Investment Advisors
Loomis, Sayles & Company
M&G Real Estate
Manulife Asset Management
Merit Energy Partners
Matthews Southwest
OFI Institutional Asset Management
Oaktree Capital Management
Pacific Asset Management
Pharos Capital Group
Putnam Fiduciary Trust Company
RBC Global Asset Management
RED Development, LLC
Riverstone Credit Partners
Russell Investments Implementation Services
Walter Scott & Partners Limited
W.R. Huff Asset Management
Yellowstone Capital Partners

**Other Service Providers**
JP Morgan Chase Bank, N.A. – Custodian Bank
Segal Consulting – Actuary
BDO USA, LLP – Auditor
Arthur J. Gallagher & Co. - Insurance
STP Investment Services, LLC – Investment Accounting Firm
HillCo Partners, LLC – Legislative Consultants
Locke Lord, LLP – Legislative Consultants
Jackson Walker, LLP - Legal
Haynes and Boone, LLP – Legal
Diamond McCarthy, LLP – Legal
Messer, Rockefeller & Fort - Legal
Winstead PC – Legal
NEPC – Investment Consultant
Evercore Group, LLC – Private Capital Advisory
Duff & Phelps, LLC – Valuation Services
Bank of America – Banking
Texas Capital Bank – Banking
Sumitomo Mitsui Banking Corporation - Banking

December 14, 2017
CONTRACTOR’S STATEMENT OF ETHICS

As amended through December 14, 2017
I. SCOPE AND OBJECTIVES

The Board of Trustees (the "Board") of the Dallas Police and Fire Pension System and the Supplemental Police and Fire Pension Plan of the City of Dallas, Texas (collectively referred to as the "System") adopts and shall enforce this Statement of Ethics to serve as guidance to the System as well as to persons who provide, or actively seek to provide, goods or services to the System (referred to herein as "Contractors"). This Statement of Ethics will apply to all Contractors in the performance of their respective duties and activities and is intended to instill and maintain a high level of confidence in the relationship between the System and the Contractors, as well as maintaining the confidence of the general public and government officials in the System, its Board and the Contractors.

This Statement of Ethics will provide assistance in clarifying certain obligations of the Contractors in carrying out their duties and obligations. Contractors are always expected to obey applicable law and to file any reports that may be required by Texas or Federal statutes. Should there be any conflict between this Statement of Ethics and state law, the state law will prevail.

Contractors must be honest in their dealings with the System and such other persons with whom they have dealings in the course of involvement in the System's matters, and must be loyal to the System to the extent such loyalty is not in conflict with other legal duties which are perceived to take precedence, provided in the event of any perceived conflict the Contractor shall advise the Executive Director in writing of same.

II. DEFINITIONS

A. Business Relationship – means any employment relationship or any other commercial connection between two or more parties that results in taxable income, other than investment income, to one or more of the parties. However, a Business Relationship does not arise as a result of one or more transactions conducted at a price and subject to the same terms available to the public or a transaction that is subject to rate or fee regulations by a government entity.
B. **Contractor** – means any person, whether an individual, partnership, corporation or other organization that provides, or actively seeks to provide goods or services to the System or any System Representative to be used in the performance of the System’s functions. Services means skilled or unskilled labor or professional services, including but not limited to, custodianship of funds, management of investments, advice with regard to investments and/or investment manager(s), maintenance of official records, the provision of professional advice and other System related services.

C. **Employee** – means any employee of the System.

D. **Family Member** – means a parent, child (whether or not a minor), spouse, step child, mother-in-law, father-in-law, son-in-law or daughter-in-law.

E. **Fiduciary** – means any person who: (i) exercises any discretionary control over the management of the System or any authority or control over the management, investment or disposition of the System’s Assets; (ii) renders investment advice for a fee or other compensation, directly or indirectly, or has any authority or responsibility to do so; (iii) has any discretionary authority or discretionary responsibility in the administration of the System in the determination, application, approval or denial of benefits; or (iv) has been designated by the Board as a Fiduciary and has agreed to such designation in the performance of certain duties for or on behalf of the System. It is, however, recognized that the System’s attorneys, actuary and accountant do not exercise the type of discretion or control over the management of the System that would make them Fiduciaries for purposes of this definition.

F. **Gift** – anything of tangible value given without adequate consideration, which shall include, but not be limited to, any payment of cash, or receipt of goods or services, or anything expressly included as a gift by applicable law, except a Gift that (A) is food, lodging, transportation, or entertainment and is accepted as a guest, (B) has a value of less than $50 (including taxes), or (C) is an honorarium speaking at a conference or event that only includes meals, lodging and transportation. A Gift is accepted as a guest if the person or representative of the entity providing the Gift is present.

G. **Investment Income** – means dividends, capital gain or interest generated from: (i) a personal or business checking account, share draft or share account or similar account; or (ii) a personal or business investment, or (iii) a personal or business loan.
H. **Substantial Interest** – means: (i) ownership of ten percent or more of the voting stock, shares, or equity interest of an entity or investment; (ii) ownership of ten percent or more of the fair market value of an entity or investment; or (iii) receipt of ten percent or more of gross income in any twelve-month period from an entity or investment. With regard to real property, a Substantial Interest is an equitable or legal ownership with a fair market value of $2,500 or more. A person is considered to have a Substantial Interest in an entity or investment if a Family Member of that person has a Substantial Interest in that entity or investment.

I. **System Representative** – means any Trustee, Investment Advisory Committee member, Employee, Contractor or agent of the System.

J. **Trustee** – includes any person who has been elected or appointed as a Trustee of the System under Article 6243a-1 of the Revised Civil Statutes of Texas and has agreed, by acceptance or act, to serve as a Trustee of the System.

III. **GENERAL DUTIES**

A. The System is to be administered solely in the interest of the System's members, pensioners and their qualified survivors for the exclusive purpose of providing benefits to such members, pensioners and eligible survivors, and defraying reasonable expenses of the System, in a manner that ensures the sustainability of the System for purposes of providing current and future benefits to members and their beneficiaries.

B. All Contractors must comply with all applicable laws, maintain proper ethical standards of behavior, and be honest in their dealings with the System, its members, pensioners and eligible survivors, other Contractors, and government officials.

   If there is a question concerning the applicability of this Statement of Ethics to the duties or activities of a Contractor, such Contractor must disclose the facts concerning the contemplated activity to the Board for the Board's review and approval.

IV. **PROHIBITED CONDUCT**

A. No Contractor will make any Gift or campaign contribution, or offer to make any Gift or campaign contribution or pay anything of substantial value, to any Trustee, person who is running for a position as a Trustee, Employee or Family Member of any of the foregoing.
IV. PROHIBITED CONDUCT (continued)

B. The Contractor will not lend money to any Trustee, any person who is running for a position as a Trustee, any Employee or Family Member of any of the foregoing, unless such Contractor is normally engaged in such lending in the usual course of its business; and then only if such loan or credit is generally available to the public and the terms of such loan are those customarily offered to others under similar circumstances to finance usual and customary activities.

V. EXERCISE OF DUTIES

A. In making or participating in decisions, subject to its contractual obligations and limitations thereupon, the Contractor may be obliged to make a determination that the particular course of action is reasonably designed, either standing alone or as part of the overall objectives of the System, to further the purposes of the System.

B. A Contractor (1) in which a System Representative holds a Substantial Interest, (2) that holds a Substantial Interest in another Contractor or in an entity in which the System invests or with respect to which the System otherwise does business, (3) who has a Business Relationship or a personal relationship with any System Representative, including a Business Relationship with an entity that employs a System Representative or Family Member of the foregoing or in which a Trustee or Employee or Family Member of the foregoing has an ownership interest, or (4) that employs a Trustee, Employee or Family Member of the foregoing must fully and promptly report such interest or employment to the Executive Director. Upon receipt of such information, the Executive Director will as promptly as practicable apprise the Board of the facts involved. For purposes of the above, a Contractor holds a Substantial Interest in another Contractor or entity if a management-level employee of the Contractor holds the Substantial Interest.

C. No Contractor will knowingly participate in the breach of any duty by another System Representative or participate in concealing such breach. If a Contractor has knowledge of such a breach or a prospective breach, such Contractor has a duty to notify the Executive Director of same in writing.

D. Subject to Article VIII below, it is understood that Contractors may communicate with Trustees or Employees to provide information believed to be pertinent to a matter relating to the System. In light of the preceding, Contractors acknowledge that (1) no remark of any Trustee can be construed as any commitment to any person or firm regarding his or her vote or the Board's ultimate decision and (2) Trustees and Employees will, as accurately as possible, relay information they
receive from Contractor(s) to the full Board to permit full and open consideration of the subject matter of such information.

VI. CONCURRENT BUSINESS RELATIONSHIPS

It is recognized that one or more Contractors may have other clients in common and may also render arms-length services to another Contractor. If such relationships are not intended to influence either Contractor with regard to the System, they will not be in violation of this Statement of Ethics; provided, however, that the existence and nature of such Business Relationship (including any economic relationship which bears upon the services rendered to the System) is disclosed to the Executive Director in writing.

VII. TRAVEL AND RELATED EXPENSES

A. It is the general policy of the Board that the expenses of travel, lodging and meals for Trustees and Employees traveling on business of the System will be paid by the System, and a Contractor may pay for such expenses only when (1) it is the general practice of the Contractor to pay such expenses for other public retirement systems and (2) such travel is pre-approved by the Board. Contractors must not provide anything of material value to a Trustee or Employee for the purpose of attending any conference, convention, seminar or other business meeting except for the payment of the travel or related expense as provided above and generally provided and available entertainment events sponsored at such conferences, conventions, seminars or other business meetings. *De minimis* promotional materials may be accepted by Trustees and Employees attending such events. However, door prizes are treated as Gifts and will be subject to the reporting requirements of Section IX.B. below.

B. Notwithstanding anything elsewhere herein, a Trustee or Employee is prohibited from accepting any Gift, meal or travel expenses from a Contractor where the clear purpose of such expense is to affect the determination of the selection of a new Contractor or to affect the determination of the assignment or continuation of, or additional business to, an existing Contractor.
VIII. MISCELLANEOUS – BIDS AND PROPOSALS

A. Other than communications required in conducting the existing business of the System or conversations at a social event, a Contractor must not knowingly have direct or indirect contact with Trustees once the Board has decided to obtain bids or proposals for services typically provided by the Contractor.

B. A Contractor must not provide meals or entertain a Trustee or Employee during the bid and proposal period for the Contractor.

C. If necessary to properly conduct the bid process, the Contractor may have conversations with Employees regarding such bid process. Questions concerning the bid and proposal process will be addressed in accordance with Board-approved procedures. It is strongly recommended that all such communications be made in writing. Copies of such writings will, generally, be given to all other bidding prospective Contractors by the System.

IX. CONTRACTS AND REPORTING REQUIREMENTS

A. All contracts with Contractors, by affixing this Statement of Ethics as an exhibit thereto, will include a requirement that thereafter records will be maintained and filed annually with the System which reflect:

1. any finder's fees, commissions or similar payments, made to anyone whatsoever as consideration for the placement of business with the Contractor;

2. any Gift offered or tendered to a System Representative; and

3. the extent, amount and placement of any business, other than directed brokerage placed in accordance with a resolution adopted by the Board in open meeting, which was in any way associated with the party's relationship with the System.

B. In addition to the annual filing described in A, above, a Contractor or agent of a Contractor may be required to file information with the System as provided by Local Government Code Section 176. Contractor agrees to comply with the requirements of such section. This Statement of Ethics will, by being affixed to all contractual agreements with Contractors, be incorporated into all such contractual agreements and will be referenced in each request for proposals issued by the Board.
C. To the extent a Contractor is a Fiduciary, the contract shall acknowledge such status and such Contractor will conform its conduct to appropriate Fiduciary Standards.

X. ADOPTION

The foregoing Statement of Ethics, which is subject to modification as deemed appropriate, from time to time by the Board of Trustees, was adopted by the Board of Trustees of the System at its meeting of January 11, 1996, and has been amended from time to time by the Board of Trustees of the System.

APPROVED on December 14, 2017 by the Board of Trustees on the Dallas Police and Fire Pension System.

____________________
William F. Quinn
Chairman

Attested:

____________________
Kelly Gottschalk
Executive Director
ITEM #C4

Topic: Governance and Board Conduct Policy

Discussion: Section 1.53(g) of HB 3158 requires the Board to, not later than the 90th day after the date all trustees have been appointed or elected “…vote on and, if the board determines it is appropriate, amend the existing rules relating to the governance and conduct of the board.” At the November 9, 2017 Board meeting, staff presented a draft Governance and Board Conduct Policy. Staff is presenting for the Board’s review and comment a revised Governance and Board Conduct Policy reflecting changes discussed at the November 9, 2017 Board meeting.

Staff Recommendation: Approve the Governance and Board Conduct Policy as presented.
BOARD OF TRUSTEES GOVERNANCE AND CONDUCT POLICY

Adopted December 14, 2017
A. Purpose

The Board of Trustees (“Board”) of the Dallas Police and Fire Pension System (“DPFP” or the “System”) is required to administer DPFP in accordance with Article 6243a-1 (the “Plan”), Chapter 802, Title 8 of the Texas Government Code and other applicable state and federal laws and regulations. In furtherance of these obligations, the Board adopts the following Governance and Conduct Policy (this “Policy”), which shall be applicable to all Trustees.

B. Trustee Communication

1. Trustee Communication with Members

   A. Trustees shall be aware of the risk of communicating inaccurate information to members and beneficiaries and the potential exposure to liability and possible harm that may result from such miscommunications. Trustees shall mitigate this risk by refraining from providing specific advice, counsel or education with respect to the rights or benefits a member or beneficiary may be entitled to pursuant to the Plan or any Board policies.

   B. In the event a member or beneficiary requests that a Trustee provide explicit advice with respect to System benefits or related policies, the Trustee should assist by referring the member or beneficiary to the Executive Director or his or her designee or by having the Executive Director or his or her designee contact the member or beneficiary. The Trustee shall be informed of the outcome.

   C. Trustees shall direct questions regarding any aspect of the System’s operations to the Executive Director or appropriate senior DPFP staff member.

2. Trustee Communication with Staff

   A. Trustees recognize that their link to DPFP operations and administration is through the Executive Director, the executive staff or a designee of the Executive Director. A Trustee should refrain from communicating directly with DPFP staff other than through the Executive Director, the Chief Investment Officer, the Chief Financial Officer, the General Counsel or another designee of the Executive Director, unless otherwise directed by the Executive Director. If the communication involves the Executive Director, the Trustee should communicate with the General Counsel of DPFP or outside fiduciary counsel, as applicable.

   B. In the spirit of open communication, individual Trustees shall share any information pertinent to the System with the Executive Director in a timely manner, and the Executive Director shall similarly share with the Board any information pertinent to the Board’s role and responsibilities in a timely manner.
2. Trustee Communication with Staff (continued)

C. The Executive Director shall ensure that information that has been requested by the Board or by a Trustee is made available to all Trustees as appropriate.

3. Trustee Communication with External Parties

A. The Executive Director or the Chairman or their designee shall serve as the spokesperson for the System, unless the Board designates another member of the Board to serve as spokesperson on a specified issue. The following guidelines shall apply with respect to the spokesperson:

i. If time permits, and to the extent permitted by the Texas Open Meetings Act, the spokesperson shall address sensitive, high profile issues with as many Trustees as possible, prior to engaging in external communications. At a minimum, the Chairman and Vice Chairman shall be contacted.

ii. To the extent possible, in situations where Board policy concerning an issue has not been established, the Board or an appropriate committee shall meet to discuss the issue prior to the spokesperson’s engaging in external communications.

B. When asked to be interviewed or otherwise approached by the media for substantive information concerning the affairs of the System, Trustees should generally refer the matter to the Executive Director or spokesperson and shall make no commitments to the media on behalf of the Board or the System.

C. In their external communications, Trustees shall, as appropriate:

i. Speak on behalf of the Board only when explicitly authorized to do so by the Chairman or the Board;

ii. Indicate if they are speaking in a capacity other than that of a member of the Board;

iii. Respectfully indicate when (a) they are representing a personal position, opinion, or analysis, as opposed to one approved by the Board, (b) their position, opinion, or analysis does not represent the official position of the Board, and (c) their position, opinion or analysis is in opposition to the official position of the Board; and
C. In their external communications, Trustees shall, as appropriate: (continued)

iv. Make known to the Executive Director in a timely fashion if a personal position, opinion, or analysis was publicly communicated, such that it could receive media coverage. The Trustee shall advise as to whom the communication was made and what was discussed.

D. Trustees may indicate publicly that they disagree with a policy or decision of the Board, but shall do so respectfully and shall abide by such policy or decision to the extent consistent with their fiduciary duties.

E. Communications by Trustees, when acting in their capacity as Trustees, should be consistent with their fiduciary duty to represent the interests of all DPFP members and beneficiaries.

F. Written press releases concerning the business of DPFP shall be the responsibility of the Executive Director and shall clearly and accurately reflect the provisions of the System and the policies of the Board. The Executive Director shall, when feasible, submit to the Chairman and the Vice Chairman for approval all press releases of a sensitive or high-profile nature or pertaining to Board policy. Such press releases shall be shared with the Board concurrently with their release.

G. Trustees should not prepare materials for publication or general distribution which are related to the affairs of the System without the consent of the Chairman. To ensure the accuracy of materials prepared by Trustees for publication or general distribution which are related to the affairs of the System, and to ensure that the System is not inadvertently placed at risk, Trustees agree to provide such material in a timely manner to the Executive Director, or his or her designee, for review prior to distribution or publication, but such distribution or publication shall only occur if the Chairman has given his or her consent.

C. Requests by Individual Trustees for Information

1. Trustees are entitled to information necessary to make informed decisions relating to their role and responsibilities. However, it is recognized that Trustee requests for information that is not pertinent to their role or any decisions to be made by Trustees can place an unnecessary burden on the System. It is also recognized that access to certain confidential information by Trustees may violate the requirements for keeping such information confidential, be in conflict with the purpose for keeping such information confidential, or unnecessarily jeopardize the System’s ability to keep such information confidential.
2. All requests by individual Trustees for information should be directed to the Executive Director or presented at a Board meeting or appropriate committee meeting. Requests for non-confidential information that do not require a significant expenditure of DPFP staff time or System resources or the use of external resources should be fulfilled by the Executive Director. (Requests for confidential information are addressed in Section C.5 below).

3. Requests for non-confidential information that require a significant expenditure of DPFP staff time or System resources or the use of external resources should be presented to the Board or appropriate committee for approval.

4. In determining whether to approve a potentially burdensome request for non-confidential information, the Board or committee shall balance the Trustee’s need to access the particular information for purposes of performing of his or her role as a Trustee with the burden that such request will place on the System. In making its determination, the Board may consider, as it deems appropriate under the circumstances and without limitation, the following factors:

A. An assessment of the Trustee’s stated purposes and objectives for requesting the information, including, but not limited to, whether (i) the request is tailored to the stated purposes or objectives of the request; (ii) the stated purposes or objectives of the request are specific or general and (iii) the requested information is pertinent to the Trustee’s role or any decision to be made by the Trustee;

B. Staff time that would be required, and costs and expenses that would be incurred by the System, in responding to the Trustee’s request, including, but not limited to, an assessment of whether the information requested already exists as requested and/or whether the request involves acquisition, creation or synthesis of information, analysis, computation or programming that would not otherwise be performed but for the request; other non-public information the release or provision of which the Board determines is not in the best interest of the System’s members and beneficiaries; and

C. An assessment of any possibility that the request for information relates in whole or in part, or directly or indirectly, either (i) to the requesting Trustee’s self-interest as distinct from that of members and beneficiaries and/or; (ii) to the requesting Trustee’s duties or loyalties to any person, entity or political or corporate official or body other than DPFP.
5. Requests for Confidential Information

A. Confidential information of the System includes:

i. non-public information relating to investments, members or beneficiaries, litigation, or other matters in which DPFP has a responsibility (which may be determined by the Board with appropriate advice) to protect the information from disclosure under statute, contract, regulation, DPFP policy, governmental order or other obligation; or

ii. other non-public information the release or provision of which the Board determines is not in the best interest of members and beneficiaries.

B. All requests by individual Trustees for disclosure of or access to confidential information that has not been presented to the Board as a whole shall be considered by the Board, which is solely responsible for making a determination as to the request.

C. In considering whether to release or make available confidential information in any form or by any means to any Trustee who requests such information, the Board shall balance said Trustee’s need to access the particular information for purposes of performing of his or her role as a Trustee with the need to protect such confidential information. In making its determination, the Board may consider, as it deems appropriate under the circumstances and without limitation, the factors set forth in Section C.4. above and the following factors:

i. Whether DPFP regularly or traditionally provides the requested confidential information to Trustees;

ii. An assessment of the Trustee’s stated purposes and objectives for requesting the information, including, but not limited to, whether alternative measures or DPFP resources would adequately satisfy the Trustee’s stated purposes and objectives without the release of confidential information;

iii. The potential liability or damage to DPFP and to Trustees that may result, directly or indirectly, from unauthorized, negligent or inappropriate use, handling or further disclosure of the information; and

iv. An assessment of whether it is likely or possible that the information requested, if combined together with other available non-DPFP information, might impair the interests of the members and beneficiaries in confidentiality and/or privacy, or might impair the interests of DPFP’s investment program or portfolio.
6. A Board determination to disclose or otherwise make available confidential information to a Trustee in response to a Trustee’s request may include within its terms any conditions of time, place, medium and form of disclosure or availability deemed appropriately protective or prudent under the circumstances as determined by the Board in its discretion.

7. A Board determination to disclose or otherwise make available confidential information to a Trustee in response to a Trustee’s request shall not waive any confidentiality rights of DPFP or its members or beneficiaries and shall not be deemed or construed to be a waiver of confidentiality or consent to any subsequent use, transfer or disclosure of such information to any other party, including but not limited to, any individual, entity or political or corporate official or body other than DPFP.

8. Unauthorized use by a Trustee of confidential information made available to such Trustee under this section shall constitute an unpermitted appropriation of DPFP information and a violation of this Policy. The Board in its discretion may take any legal action to secure or vindicate its rights in DPFP information that is the subject of suspected or alleged unauthorized use.

9. Nothing in this section shall be construed to contravene the requirements of the Texas Public Information Act, as applicable to System information.

10. Nothing in this section shall be construed to limit the Board’s ability as a whole to require that DPFP staff provide information to the Board.

D. Voting Requirements for Board Action

Any action by the Board, except those where the Plan specifically requires approval by 2/3 of all the Trustees of the Board, is required to be approved by a majority of all the Trustees of the Board, i.e. at least six Trustees must approve any Board action regardless of the number Trustees present.

E. Board Agenda

1. The agenda for each Board meeting will be set by the Executive Director. The Executive Director shall consult with the Chairman on the agenda to be posted for the next meeting or meetings in the future.

2. The Chairman may direct that an item be placed on the agenda for consideration by the Board.
E. Board Agenda (continued)

3. **AnyFour Trustees** may file a written request with the Executive Director asking that a particular item be placed on the agenda for a future meeting. Upon receipt of such request, the Executive Director will endeavor to cause such item to be on the agenda for the meeting date requested, subject to the timing of the request, the amount of preparation time required to address such item as well as the projected meeting length of the requested meeting given items already scheduled to be on the agenda.

F. Board Meetings


2. A Trustee shall be considered to have attended a Board meeting if the Trustee is present for at least 50% of the meeting time initially scheduled on the Order of Business posted on the DPFP website on the day of the meeting.

3. Participation in a Board meeting through telephone conference shall be permitted.

4. If a Trustee does not attend a Board meeting, the Trustee may provide a written explanation to the Board to be considered at the next Board meeting.
   
   a. At the next Board meeting, the Board shall consider the written explanation together with any other oral information the Trustee shall provide.
   
   b. The Board shall vote as to whether the absence shall be noted as excused.

5. The Chairman shall have the power to call a special meeting.
G. Effective Date

APPROVED on December 14, 2017, by the Board of Trustees of the Dallas Police and Fire Pension System.

_____________________
William F. Quinn
Chairman

ATTEST:

_____________________
Kelly Gottschalk
Secretary
DISCUSSION SHEET

ITEM #C5

Topic: Discussion and approval of the 2018 Budget

Discussion: Attached is the budget proposal for Calendar Year 2018, updated for Board education related items discussed at the November 9, 2017 Board meeting.

The proposed budget, net of expenses allocated to the Supplemental Plan, totals approximately $27.3M which is a decrease of 5.9% compared to the equivalent projected expenses for 2017. The proposed budget excluding investment related expenses not previously budgeted is 5.1% lower than the projected expenses for 2017 and 19.1% lower than the 2017 budget.

Significant variances from the prior year budget and/or projected 2017 actual expenses are explained in the comments accompanying the proposed budget.

Staff Recommendation: Approve the calendar year 2018 budget.
<table>
<thead>
<tr>
<th>Description</th>
<th>2017 Budget</th>
<th>2017 Projected Actual</th>
<th>2018 Budget</th>
<th>$ Change vs Prior Yr Budget</th>
<th>% Change vs Prior Yr Budget</th>
<th>$ Change vs Prior Yr Proj. Actual</th>
<th>% Change vs Prior Yr Proj. Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Salaries and benefits</td>
<td>4,199,476</td>
<td>4,190,000</td>
<td>3,728,000</td>
<td>(471,476)</td>
<td>(11.2%)</td>
<td>(462,000)</td>
<td>(11.0%)</td>
</tr>
<tr>
<td>2 Employment expenses</td>
<td>3,009</td>
<td>450</td>
<td>151,125</td>
<td>148,116</td>
<td>4922.4%</td>
<td>150,675</td>
<td>33483.3%</td>
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<tr>
<td>3 Memberships and dues</td>
<td>17,600</td>
<td>17,600</td>
<td>17,040</td>
<td>(560)</td>
<td>(3.2%)</td>
<td>(560)</td>
<td>(3.2%)</td>
</tr>
<tr>
<td>4 Staff meetings</td>
<td>1,000</td>
<td>-</td>
<td>1,000</td>
<td>-</td>
<td>0.0%</td>
<td>1,000</td>
<td>N/A</td>
</tr>
<tr>
<td>5 Employee service recognition</td>
<td>1,960</td>
<td>1,200</td>
<td>-</td>
<td>(1,960)</td>
<td>(100.0%)</td>
<td>(1,200)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>6 Member educational programs</td>
<td>2,500</td>
<td>1,500</td>
<td>2,500</td>
<td>-</td>
<td>0.0%</td>
<td>1,000</td>
<td>66.7%</td>
</tr>
<tr>
<td>7 Member outreach programs</td>
<td>720</td>
<td>-</td>
<td>-</td>
<td>(720)</td>
<td>(100.0%)</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>8 Board meetings</td>
<td>13,360</td>
<td>7,000</td>
<td>10,100</td>
<td>(3,260)</td>
<td>(24.4%)</td>
<td>3,100</td>
<td>44.3%</td>
</tr>
<tr>
<td>9 Conference registration/materials - Board</td>
<td>51,615</td>
<td>10,000</td>
<td>14,400</td>
<td>(37,215)</td>
<td>(72.1%)</td>
<td>4,400</td>
<td>44.0%</td>
</tr>
<tr>
<td>10 Travel - Board</td>
<td>128,335</td>
<td>15,000</td>
<td>25,000</td>
<td>(103,335)</td>
<td>(80.5%)</td>
<td>10,000</td>
<td>66.7%</td>
</tr>
<tr>
<td>11 Mileage - Board</td>
<td>5,000</td>
<td>3,100</td>
<td>5,000</td>
<td>-</td>
<td>0.0%</td>
<td>1,900</td>
<td>61.3%</td>
</tr>
<tr>
<td>12 Conference/training registration/materials - Staff</td>
<td>32,450</td>
<td>6,800</td>
<td>27,050</td>
<td>(5,400)</td>
<td>(16.6%)</td>
<td>20,250</td>
<td>297.8%</td>
</tr>
<tr>
<td>13 Travel - Staff</td>
<td>60,550</td>
<td>32,000</td>
<td>47,000</td>
<td>(13,550)</td>
<td>(22.4%)</td>
<td>15,000</td>
<td>46.9%</td>
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<tr>
<td>14 Liability insurance</td>
<td>447,667</td>
<td>440,000</td>
<td>510,000</td>
<td>62,333</td>
<td>13.9%</td>
<td>70,000</td>
<td>15.9%</td>
</tr>
<tr>
<td>15 Communications (phone/internet)</td>
<td>64,312</td>
<td>57,000</td>
<td>49,100</td>
<td>(15,212)</td>
<td>(23.7%)</td>
<td>(7,900)</td>
<td>(13.9%)</td>
</tr>
<tr>
<td>16 Information technology projects</td>
<td>20,000</td>
<td>3,000</td>
<td>75,000</td>
<td>55,000</td>
<td>275.0%</td>
<td>72,000</td>
<td>2400.0%</td>
</tr>
<tr>
<td>17 IT subscriptions/services/licenses</td>
<td>122,950</td>
<td>84,000</td>
<td>147,100</td>
<td>24,150</td>
<td>19.6%</td>
<td>63,100</td>
<td>75.1%</td>
</tr>
<tr>
<td>18 IT software/hardware</td>
<td>39,800</td>
<td>9,400</td>
<td>17,000</td>
<td>(22,800)</td>
<td>(57.3%)</td>
<td>7,600</td>
<td>80.9%</td>
</tr>
<tr>
<td>19 Building expenses, incl capitalizable fixed assets</td>
<td>599,266</td>
<td>450,000</td>
<td>337,337</td>
<td>(261,929)</td>
<td>(43.7%)</td>
<td>(112,663)</td>
<td>(25.0%)</td>
</tr>
<tr>
<td>20 Repairs and maintenance</td>
<td>97,508</td>
<td>120,000</td>
<td>110,992</td>
<td>12,584</td>
<td>12.9%</td>
<td>(9,908)</td>
<td>(8.3%)</td>
</tr>
<tr>
<td>21 Office supplies</td>
<td>31,800</td>
<td>32,000</td>
<td>30,500</td>
<td>(1,300)</td>
<td>(4.1%)</td>
<td>(1,500)</td>
<td>(4.7%)</td>
</tr>
<tr>
<td>22 Leased equipment</td>
<td>20,500</td>
<td>24,000</td>
<td>24,500</td>
<td>4,000</td>
<td>19.5%</td>
<td>500</td>
<td>2.1%</td>
</tr>
<tr>
<td>23 Postage</td>
<td>27,700</td>
<td>30,000</td>
<td>25,800</td>
<td>(1,900)</td>
<td>(6.9%)</td>
<td>(4,200)</td>
<td>(14.0%)</td>
</tr>
<tr>
<td>24 Printing</td>
<td>5,635</td>
<td>5,000</td>
<td>6,370</td>
<td>735</td>
<td>13.0%</td>
<td>1,370</td>
<td>27.4%</td>
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<tr>
<td>25 Subscriptions</td>
<td>2,510</td>
<td>1,200</td>
<td>2,020</td>
<td>(490)</td>
<td>(19.5%)</td>
<td>820</td>
<td>68.3%</td>
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<tr>
<td>26 Records storage</td>
<td>1,200</td>
<td>1,200</td>
<td>1,560</td>
<td>360</td>
<td>30.0%</td>
<td>360</td>
<td>30.0%</td>
</tr>
<tr>
<td>27 Administrative contingency reserve</td>
<td>-</td>
<td>150</td>
<td>-</td>
<td>N/A</td>
<td>(150)</td>
<td>(100.0%)</td>
<td></td>
</tr>
</tbody>
</table>
# Dallas Police & Fire Pension System
## Operating Budget
### Calendar Year 2018

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 Budget</th>
<th>2017 Projected Actual</th>
<th>2018 Budget</th>
<th>$ Change vs Prior Yr Budget</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Investment management fees</td>
<td>N/A</td>
<td>17,416,000</td>
<td>17,522,000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>29 Investment consultant and reporting</td>
<td>575,000</td>
<td>489,000</td>
<td>505,000</td>
<td>(70,000)</td>
<td>(12.2%)</td>
<td>16,000</td>
<td>3.3%</td>
</tr>
<tr>
<td>30 Bank/security custodian services</td>
<td>328,600</td>
<td>262,000</td>
<td>260,000</td>
<td>(68,600)</td>
<td>(20.9%)</td>
<td>(2,000)</td>
<td>(0.8%)</td>
</tr>
<tr>
<td>31 Other portfolio operating expenses (legal, valuation, tax)</td>
<td>N/A</td>
<td>2,187,000</td>
<td>860,000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Professional Services Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 Actuarial services</td>
<td>600,000</td>
<td>550,000</td>
<td>150,000</td>
<td>(450,000)</td>
<td>(75.0%)</td>
<td>(400,000)</td>
<td>(72.7%)</td>
</tr>
<tr>
<td>33 Accounting services</td>
<td>59,000</td>
<td>59,000</td>
<td>59,000</td>
<td>-</td>
<td>0.0%</td>
<td>-</td>
<td>0.0%</td>
</tr>
<tr>
<td>34 Independent audit</td>
<td>149,500</td>
<td>149,500</td>
<td>152,500</td>
<td>3,000</td>
<td>2.0%</td>
<td>3,000</td>
<td>2.0%</td>
</tr>
<tr>
<td>35 Legal fees</td>
<td>2,514,800</td>
<td>1,610,000</td>
<td>2,000,000</td>
<td>(514,800)</td>
<td>(20.5%)</td>
<td>390,000</td>
<td>24.2%</td>
</tr>
<tr>
<td>36 Legislative consultants</td>
<td>324,000</td>
<td>307,000</td>
<td>271,000</td>
<td>(53,000)</td>
<td>(16.4%)</td>
<td>(36,000)</td>
<td>(11.7%)</td>
</tr>
<tr>
<td>37 Public relations</td>
<td>290,000</td>
<td>245,000</td>
<td>-</td>
<td>(290,000)</td>
<td>(100.0%)</td>
<td>(245,000)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>38 Pension administration software &amp; WMS</td>
<td>271,000</td>
<td>250,000</td>
<td>291,000</td>
<td>20,000</td>
<td>7.4%</td>
<td>41,000</td>
<td>16.4%</td>
</tr>
<tr>
<td>39 Business continuity</td>
<td>13,500</td>
<td>15,000</td>
<td>13,500</td>
<td>-</td>
<td>0.0%</td>
<td>(1,500)</td>
<td>(10.0%)</td>
</tr>
<tr>
<td>40 Network security</td>
<td>35,000</td>
<td>15,000</td>
<td>33,000</td>
<td>(2,000)</td>
<td>(5.7%)</td>
<td>18,000</td>
<td>120.0%</td>
</tr>
<tr>
<td>41 Disability medical evaluations</td>
<td>12,500</td>
<td>7,000</td>
<td>30,000</td>
<td>17,500</td>
<td>140.0%</td>
<td>23,000</td>
<td>328.6%</td>
</tr>
<tr>
<td>42 Elections</td>
<td>10,000</td>
<td>32,000</td>
<td>-</td>
<td>(10,000)</td>
<td>(100.0%)</td>
<td>(32,000)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>43 Miscellaneous professional services</td>
<td>122,000</td>
<td>108,000</td>
<td>18,300</td>
<td>(103,700)</td>
<td>(85.0%)</td>
<td>(89,700)</td>
<td>(83.1%)</td>
</tr>
<tr>
<td><strong>Total without Investment Expenses not previously budgeted for</strong></td>
<td>11,303,323</td>
<td>9,640,100</td>
<td>9,147,894</td>
<td>(2,155,429)</td>
<td>(19.1%)</td>
<td>(492,206)</td>
<td>(5.1%)</td>
</tr>
<tr>
<td><strong>Gross Total</strong></td>
<td>11,303,323</td>
<td>29,243,100</td>
<td>27,529,894</td>
<td>N/A</td>
<td>N/A</td>
<td>(1,713,206)</td>
<td>(5.9%)</td>
</tr>
<tr>
<td>Less: Allocation to Supplemental Plan Budget*</td>
<td>75,246</td>
<td>251,608</td>
<td>236,867</td>
<td>N/A</td>
<td>N/A</td>
<td>(14,740)</td>
<td>(5.9%)</td>
</tr>
<tr>
<td><strong>Total Combined Pension Plan Budget</strong></td>
<td>11,228,077</td>
<td>28,991,492</td>
<td>27,293,027</td>
<td>N/A</td>
<td>N/A</td>
<td>(1,698,466)</td>
<td>(5.9%)</td>
</tr>
</tbody>
</table>

*Allocation to Supplemental is based on JPM allocation between accounts as of 9/30/17 of .8604%*

December 14, 2017
## Management Fee Budget - 2018

<table>
<thead>
<tr>
<th>Asset Category</th>
<th>Asset Class</th>
<th>2018 Management Fee Budget*</th>
<th>Fee as a % of Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Global Equity</td>
<td>$2,400,000</td>
<td>0.57%</td>
</tr>
<tr>
<td></td>
<td>Emerging Markets Equity</td>
<td>364,000</td>
<td>0.70%</td>
</tr>
<tr>
<td></td>
<td>Private Equity</td>
<td>4,145,000</td>
<td>1.54%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>Liquid Fixed Income^</td>
<td>1,973,000</td>
<td>0.48%</td>
</tr>
<tr>
<td></td>
<td>Private Debt</td>
<td>207,000</td>
<td>1.61%</td>
</tr>
<tr>
<td>GAA</td>
<td>Risk Parity</td>
<td>837,000</td>
<td>0.84%</td>
</tr>
<tr>
<td></td>
<td>GTAA</td>
<td>287,000</td>
<td>1.00%</td>
</tr>
<tr>
<td></td>
<td>Absolute Return</td>
<td>1,356,000</td>
<td>3.80%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>Natural Resources</td>
<td>1,726,000</td>
<td>0.98%</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>1,378,000</td>
<td>2.10%</td>
</tr>
<tr>
<td></td>
<td>Real Estate</td>
<td>2,848,000</td>
<td>0.57%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$17,522,000</strong></td>
<td><strong>0.83%</strong></td>
</tr>
</tbody>
</table>

* - The Management Fee Budget does not include any carried interest or profit sharing paid to the General Partner ("GP"), which is typical in private equity and debt structures. The budget includes management fees, performance/incentive fees & disposition fees paid to the fiduciary investment manager, as well as the base management fees payable to the GP.

^ - Liquid Fixed Income combines the following asset classes for presentation purposes due to their similar fee levels: Short-Term Core Bonds, Global Bonds, High Yield, Bank Loans & Emerging Markets Debt.
## Significant Budget Changes - 2018

<table>
<thead>
<tr>
<th>Item</th>
<th>2017 Budget</th>
<th>2017 Projected Actual**</th>
<th>2018 Budget</th>
<th>$ Change vs Prior Yr Budget</th>
<th>% Change vs Prior Yr Budget</th>
<th>$ Change vs PY Proj Actual</th>
<th>% Change vs PY Proj Actual</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCREASES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Information technology projects</td>
<td>20,000</td>
<td>3,000</td>
<td>75,000</td>
<td>55,000</td>
<td>275.0%</td>
<td>72,000</td>
<td>2400.0%</td>
<td>Network storage device is end of life and requires replacement.</td>
</tr>
<tr>
<td>2 IT subscriptions/services/licenses</td>
<td>122,950</td>
<td>84,000</td>
<td>147,100</td>
<td>24,150</td>
<td>19.6%</td>
<td>63,100</td>
<td>75.1%</td>
<td>Increase in cost for proposed file sharing software for Board materials.</td>
</tr>
<tr>
<td>3 Employment expenses</td>
<td>3,009</td>
<td>450</td>
<td>151,125</td>
<td>148,116</td>
<td>4922.4%</td>
<td>150,675</td>
<td>33483.3%</td>
<td>Potential use of search firms for hiring of vacant positions.</td>
</tr>
<tr>
<td>4 Liability insurance</td>
<td>447,667</td>
<td>440,000</td>
<td>510,000</td>
<td>62,333</td>
<td>13.9%</td>
<td>70,000</td>
<td>15.9%</td>
<td>Increase due to market factors, as well as claims experience for fiduciary coverage.</td>
</tr>
<tr>
<td><strong>REDUCTIONS:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Salaries and benefits</td>
<td>4,199,476</td>
<td>4,190,000</td>
<td>3,728,000</td>
<td>(471,476)</td>
<td>(11.2%)</td>
<td>(462,000)</td>
<td>(11.0%)</td>
<td>Due to payment of one-time employment contract related amounts in 2017.</td>
</tr>
<tr>
<td>6 Conference/training registration/materials - Board</td>
<td>51,615</td>
<td>10,000</td>
<td>14,400</td>
<td>(37,215)</td>
<td>(72.1%)</td>
<td>4,400</td>
<td>44.0%</td>
<td>Reduction in anticipated Board participation in conferences.</td>
</tr>
<tr>
<td>7 Travel - Board</td>
<td>128,335</td>
<td>15,000</td>
<td>25,000</td>
<td>(103,335)</td>
<td>(80.5%)</td>
<td>10,000</td>
<td>66.7%</td>
<td>Reduction in anticipated Board participation in conferences.</td>
</tr>
<tr>
<td>8 Legal fees</td>
<td>2,514,800</td>
<td>1,610,000</td>
<td>2,000,000</td>
<td>(514,800)</td>
<td>(20.5%)</td>
<td>390,000</td>
<td>24.2%</td>
<td>Legal fees in 2017 were partially offset by insurance recoveries totaling $940K. Total legal expenses are estimated to decrease in 2018.</td>
</tr>
<tr>
<td>9 Public relations</td>
<td>290,000</td>
<td>245,000</td>
<td>-</td>
<td>(290,000)</td>
<td>(100.0%)</td>
<td>(245,000)</td>
<td>(100.0%)</td>
<td>Staff is proposing the hiring of an internal communications position in 2018.</td>
</tr>
<tr>
<td>10 Miscellaneous professional services</td>
<td>122,000</td>
<td>108,000</td>
<td>18,300</td>
<td>(103,700)</td>
<td>(85.0%)</td>
<td>(89,700)</td>
<td>(83.1%)</td>
<td>In 2017, the budget included leasing commissions for 4100 Harry Hines space available for lease. The space is now fully leased.</td>
</tr>
<tr>
<td>11 Actuarial services</td>
<td>600,000</td>
<td>550,000</td>
<td>150,000</td>
<td>(450,000)</td>
<td>(75.0%)</td>
<td>(400,000)</td>
<td>(72.7%)</td>
<td>In 2017, the volume of actuarial services were driven by Plan changes.</td>
</tr>
<tr>
<td>12 Building expenses, incl capitalizable fixed assets</td>
<td>599,266</td>
<td>450,000</td>
<td>337,337</td>
<td>(261,929)</td>
<td>(43.7%)</td>
<td>(112,663)</td>
<td>(25.0%)</td>
<td>In 2017, actual tenant improvements for leased space were less than anticipated. Also, continuous cost cutting measures with service provider contracts.</td>
</tr>
<tr>
<td>13 Investment consultant and reporting</td>
<td>575,000</td>
<td>489,000</td>
<td>505,000</td>
<td>(70,000)</td>
<td>(12.2%)</td>
<td>16,000</td>
<td>3.3%</td>
<td>Reduction vs PY budget is due to reduced total average NAV.</td>
</tr>
<tr>
<td>14 Bank/security custodian services</td>
<td>328,600</td>
<td>262,000</td>
<td>260,000</td>
<td>(68,600)</td>
<td>(20.9%)</td>
<td>(2,000)</td>
<td>(0.8%)</td>
<td>Reduction vs PY budget is due to reduced number of assets and accounts. Anticipated to be in line with actual 2017 fees.</td>
</tr>
</tbody>
</table>
ITEM #C6

Topic: Hybrid Defined Contribution/Defined Benefit plan analysis report

Attendees: Rocky Joyner, Vice President and Consulting Actuary, Segal Consulting
Jeff Williams, Vice President and Consulting Actuary, Segal Consulting

Discussion: Section 3.01(j-5)(2) of Article 6243a-1 requires the Board, by January 1, 2018, “to conduct an evaluation of ... the impact, including the impact on the combined pension plan, of establishing one or more alternative benefit plans, including a defined contribution plan or a hybrid retirement plan that combines elements of both a defined benefit plan and a defined contribution plan, for newly hired employees of the city and for members who voluntarily elect to transfer to an alternative benefit plan.”

Representatives of DPFP’s Actuary, Segal Consulting, will present their analysis and results regarding the evaluation required under Section 3.01(j-5) (2).

Staff Recommendation: Accept the report presented by Segal Consulting.
Dallas Police and Fire Pension System

Analysis of Potential Hybrid Plan Design

December 14, 2017

Leon F. (Rocky) Joyner, Jr. Jeffrey S. Williams

Segal Consulting
Study Objectives

The new Plan, which went into effect September 1, 2017, includes the following requirement for the Board to review before December 31, 2017.

(2) The impact, including the impact on the combined pension plan, of establishing one or more alternative benefit plans, including a defined contribution plan or a hybrid retirement plan that combines elements of both a defined benefit plan and a defined contribution plan, for newly hired employees of the city and for members who voluntarily elect to transfer to an alternative benefit plan.

This study includes the following:

- Items for consideration when reviewing plan structure
- Comparison of current DPFP pension plan to potential hybrid plan
- Model replacement ratios for sample DPFP members including the current plan for new hires and a hybrid plan model
- Projected contribution requirements under the current plan and the modeled hybrid plan
Considerations for Retirement Plan Structure
Public Sector Retirement Plans fall into 2 broad categories:

- **Defined Benefit Plans** which focus on benefit security
- **Defined Contribution Plans** which focus on wealth accumulation

**Defined Benefit Plans** include final average salary plans, career average salary plans and flat dollar plans

- Risk generally borne by Employer
- **Risk includes:** Wage inflation, Inflation risk, Interest rate, Investment risk, Longevity risk, Incentive risk, Regulatory risk

**Defined Contribution Plans** include 401(a), 403(b), 457(b) and matching plans

- Risk generally borne by Employee
- **Risk includes:** Wage inflation, Inflation risk, Interest rate, Investment risk, Longevity risk, Incentive risk, Regulatory risk, Non-participation risk, Leakage risk, Cognitive and Will-power risk
Setting Priorities

➢ What is the ultimate purpose in reviewing plan design?

➢ Is it to reduce contribution requirements?
  • If yes, by how much? As a dollar amount or as a % of pay?

➢ Is it to reallocate potential retirement risk?
  • If yes, how will responsibility for retirement income be shared?

➢ Is it to modify work force behavior to better coincide with management and personnel objectives?
  • If yes, how do we quantify these objectives?
### Balancing Taxpayer, Employer and Member Concerns

<table>
<thead>
<tr>
<th>Taxpayer Concerns</th>
<th>Employer Concerns</th>
<th>Member Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td><strong>Mission</strong></td>
<td><strong>Adequacy</strong></td>
</tr>
<tr>
<td>• No increase in taxes</td>
<td>• No increase in costs</td>
<td>• Maintain living standard</td>
</tr>
<tr>
<td>• No decrease in services</td>
<td>• Recruiting and retention of workforce</td>
<td>• Portable benefits</td>
</tr>
<tr>
<td></td>
<td>• Meeting service mission</td>
<td>• Competitive compensation and benefits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Healthcare costs (including end of life costs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Outliving the money</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Leaving an estate</td>
</tr>
</tbody>
</table>
Assessing the Value of a Retirement Program

➢ **Measure against retirement policy**
  • Adequacy at retirement (replacement ratios)
  • Purchasing power into retirement

➢ **Measure against funding policy**
  • Stability
  • Amount

➢ **Analyze investment options**
  • Sufficient number and variety
  • Sufficient safeguards
In December 2014, the National Institute for Retirement Security (NIRS) released an update of their 2008 study “Better Bang for the Buck”.

In spite of some discussions proposing to use DC plans as the base retirement in the public sector, this study shows that the DB model is inherently more cost-efficient than DC plans.

These efficiencies in delivering benefits are due to three structural advantages.

- Longevity risk pooling
- Asset allocation
- Low fees and professional management

Consequently, any savings from shifting from a DB plan to a DC plan results from decreasing retirement income.

Since 2008, improvements have been made in benefit delivery for some DC plans. The “Better Bang” paper refers to these as “ideal DC” plans, also known as pooled DC plans.

- These plans remove asset allocation and selection from the individual to a professional manager.
- Even with this improvement DB plans are 29% more efficient than an “ideal” DC plan.

The chart on the following page from “Still a Better Bang for the Buck” illustrates the impact of these structural efficiencies inherent in DB plans.

- For an individually managed DC plan, a DB plan is 48% more cost effective in delivering benefits.
Cost of DB and DC Plans as a % of Payroll

- DB Plan: 16.3%
- Ideal DC: 23.0%
- Individually Directed DC: 31.3%

Savings:
- 29% Savings
- 47% Savings

Lower Returns/Higher Fees
Less Balanced Portfolio
No Longevity Risk Pooling
DB Cost

Recent studies have shown that about 80% of pre-retirement pay at retirement is needed to maintain a retiree’s standard of living after retirement. The 80% typically includes spousal coverage and unless a COLA is included in the plan design, inflation will erode purchasing power over time.

Traditionally this has included three sources; Social Security, employer pension and employee savings.
Current DPFP Retirement Offerings
# Current DPFP Retirement Offerings - Summary

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Plan Effective September 1, 2017 (for service earned beginning September 1, 2017)</th>
<th>Theoretical Hybrid Plan Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Retirement Age (NRA)</td>
<td>Age 58 with at least 5 years of service</td>
<td>Same</td>
</tr>
<tr>
<td>Early Retirement Age</td>
<td>Age 53 with at least 5 years of service</td>
<td>Same</td>
</tr>
<tr>
<td>Early Retirement Reductions</td>
<td>2/3 of 1% per month for retirement prior to age 58</td>
<td>Same</td>
</tr>
<tr>
<td>Unreduced Early Retirement</td>
<td>If benefit multipliers earned equal at least 90% of average computation pay</td>
<td>Same</td>
</tr>
<tr>
<td>20 &amp; Out Retirement</td>
<td>Multiplier of 2.0% at age 53 increasing to 2.5% at age 58</td>
<td>Multiplier of 1.4% at age 53 increasing to 1.75% at age 58</td>
</tr>
<tr>
<td>Benefit Formula</td>
<td>2.5% times years of service times average computation pay (ACP); ACP is highest consecutive 60 months</td>
<td>1.75% times years of service times average computation pay (ACP); ACP is highest consecutive 60 months</td>
</tr>
<tr>
<td>Vesting</td>
<td>5 years of service</td>
<td>Same</td>
</tr>
<tr>
<td>DB Plan Employee Contributions</td>
<td>13.5% of pay</td>
<td>9.45% of pay</td>
</tr>
<tr>
<td>DC Plan Employee Contributions</td>
<td>N/A</td>
<td>4.05% of pay</td>
</tr>
</tbody>
</table>
Projected Replacement Ratios
To compare the impact of various plan designs on employees, we considered how well the pension plan option performs in replacing employee income upon retirement:

- **A retirement income replacement ratio ("replacement ratio")** is a common approach used to compare retirement programs. It measures the relative income provided by the retirement plan as a percentage of the employee’s final salary prior to retirement.
- A replacement ratio allows for an “apples-to-apples” comparison of retirement benefits since the benefits provided by plans vary. A replacement ratio normalizes Defined Benefit (DB) and Defined Contribution (DC) plans by converting DC account balances to a stream of lifetime income.

The sources of income generally considered in retirement income studies include: (a) Social Security benefits, (b) Employer-provided benefits, and (c) Personal savings:

- Employer-provided benefits primarily include defined benefit and defined contribution retirement plans.
- Personal savings are estimated assuming each participant contributes a given percentage of salary among all sources.
### Replacement Ratio and Funding Projections

#### Assumptions and Methodology

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid DB Plan multiplier</td>
<td>1.75% (currently 2.50% for new hires)</td>
</tr>
<tr>
<td>Hybrid DC Plan Contributions</td>
<td>4.05% member; 4.05% City</td>
</tr>
<tr>
<td>DB Plan Contributions</td>
<td>9.45% member; City contributions dictated by HB3158, except instead of a minimum of 34.5% of payroll being contributed each year (excluding the additional $13 million payment through 2024), a minimum of 30.45% of payroll is contributed on an annual basis</td>
</tr>
<tr>
<td>Salary Growth</td>
<td>Varies by age/service; in accordance with the January 1, 2017 Dallas Police and Fire Pension System actuarial valuation</td>
</tr>
<tr>
<td>Investment Return – DB Plan</td>
<td>4.75% in 2017; 5.50% in 2018; 6.50% in 2019; 7.25% thereafter</td>
</tr>
<tr>
<td>Investment Return – DC Plan</td>
<td>5.0% annual investment return on Defined Contribution (DC) Plan</td>
</tr>
<tr>
<td>Conversion of DC Balance/Personal Savings to Annual Annuity</td>
<td>Assumes member balances in Defined Contribution plan converted to annuity at retirement based on DFPF mortality table in the January 1, 2017 actuarial valuation, at 3.5% rate</td>
</tr>
</tbody>
</table>
### Replacement Ratio and Funding Projections
#### Assumptions and Methodology

<table>
<thead>
<tr>
<th>Hire Ages</th>
<th>28 and 33; participant assumed to be male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement Age</td>
<td>58</td>
</tr>
<tr>
<td>Salary at Hire</td>
<td>$46,000</td>
</tr>
<tr>
<td>Police/Fire</td>
<td>Although the benefit dollar amounts would be different between Police and Fire based on the minor differences in projected salary scale, the Replacement Ratios between the two groups are the same. No distinction was made between the two groups for purposes of the study.</td>
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| Payroll Projections | Based on City’s Hiring Plan payroll projections (in millions):  
2017 - $372; 2018 - $364; 2019 - $383; 2020 - $396; 2021 - $408; 2022 - $422  
2023 - $438; 2024 - $454; 2025 - $471; 2026 - $488; 2027 - $507; 2028 - $525  
2029 - $545; 2030 - $565; 2031 - $581; 2032 - $597; 2033 - $614; 2034 - $631  
2035 - $548; 2036 - $666; 2037 - $684;  
Payroll assumed to increase by 2.75% each year after City’s Hiring Plan payroll projection period. |
Replacement Ratio Comparisons

The graph on the following page shows that for a member hired at age 28 who works 30 years, they are projected to replace about 71% of final pay under either the current plan or the modeled hybrid plan.

This does not mean that these two plans are equivalent.

Please note the following:

- The current plan has a normal cost rate of 15% for new members.
- Under the hybrid model, it takes a total estimated contribution rate of 19.1% to generate the same 71% replacement ratio as the current plan.
- The 19.1% consists of a normal cost rate of approximately 11.0% to fund the DB plan multiplier and 8.1% (4.05% each for the member and city) for the DC portion.
- This is 27% greater than the DB cost of 15% of pay.
- This also means that the 8.1% DC contribution that would have gone into the DB plan no longer does, thus extending the funding period for the DB plan by 11 years.
Entry Age 28

Replacement Ratios at age 58, with an entry age of 28

- Current Plan: 71%
- Hybrid Plan: 50% Defined Benefit, 21% Defined Contribution
Entry Age 33

Replacement Ratios at age 58, with an entry age of 33

- Defined Contribution
- Defined Benefit

Current Plan: 59%
Hybrid Plan: 41%

17% Defined Contribution in Hybrid Plan
Age 58 Plan Comparisons

Comparison of Age 58 Replacement Ratios by Entry Age

Entry Age = 28
- Current Plan: 71%
- Hybrid: 71%

Entry Age = 33
- Current Plan: 59%
- Hybrid: 58%
Age 58 Plan Comparisons

Comparison of Replacement Ratios at Age 58 by Entry Age

- **Current Plan** at Entry Age 28: 71%
- **Current Plan** at Entry Age 33: 59%
- **Hybrid Plan** at Entry Age 28: 71%, Defined Contribution 21%, Defined Benefit 50%
- **Hybrid Plan** at Entry Age 33: 58%, Defined Contribution 17%, Defined Benefit 41%

Segal Consulting
Projected Funding Ratios and Required Contributions under the Current DB Plan and the Hybrid DB Plan
Projected DB Plan Funding Percentages

- **Current Plan** - Projected to reach full funding by 2061
- **Hybrid DB Plan** - Projected to reach full funding by 2072; projected to be under 62% funded by 2061
Projected City Contributions – DB Plan Only

Current Plan - Projected City contributions of $11.9 Billion through 2061

Hybrid DB Plan - Projected City contributions of $10.7 Billion through 2061; projected City contributions of $15.3 Billion through 2071, at which time full funding is projected

Hybrid DB Plan w/Full Funding by 2061 - Projected City contributions of $11.6 Billion through 2061 (minimum projected City contribution rate of 33.25%)
### Differences in City Contribution Rates and Amounts

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<th>Current Plan</th>
<th>Hybrid Plan</th>
<th>Hybrid Plan - Full Funding by 2061</th>
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<tr>
<td>City Rate - DB Plan</td>
<td>34.50%</td>
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<td>Contributions through 2061 (billions)</td>
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<td>Projected DC Plan Contributions</td>
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<td>Contributions through 2061 (billions)</td>
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Questions and Discussion
Thank You!

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DISCUSSION SHEET

ITEM #C7

Topic: Tax Issues

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

a. Excess Benefit Plan and Trust
b. Unrelated Business Income Tax (UBIT)

Attendees: Robert Gauss – Partner, Ice Miller
Rocky Joyner – Vice President and Consulting Actuary, Segal Consulting

Discussion:

a. At its meeting on August 10, 2017, the Board adopted the Excess Benefit Plan and Trust (the “Excess Plan”) with the condition that the Excess Plan would expire on December 31, 2017 unless ratified by the current Board. Robert Gauss of Ice Miller, DPFP’s tax counsel, and Segal Consulting, DPFP’s actuary, will be present to explain the Excess Plan and answer questions.

b. Tax Counsel will brief the Board on the status of Unrelated Business Income Tax under the House and Senate versions of the Tax Cuts and Jobs Act.

Staff Recommendation: Ratify the Excess Benefit Plan and Trust and authorize its submission to the Internal Revenue Service for a Private Letter Ruling.
DALLAS POLICE AND FIRE PENSION SYSTEM
COMBINED PENSION PLAN

EXCESS BENEFIT PLAN AND TRUST

Adopted August 10, 2017
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DALLAS POLICE AND FIRE PENSION SYSTEM COMBINED PENSION PLAN
EXCESS BENEFIT PLAN AND TRUST

ARTICLE I.

ESTABLISHMENT OF PLAN AND TRUST

1.01. Establishment of Plan and Trust. The “Dallas Police and Fire Pension System Combined Pension Plan Excess Benefit Plan and Trust” (“this Plan”) was established effective as of August 10, 2017.

1.02. Purpose. The purpose of this Plan is solely to provide the part of a Participant's Retirement Benefit that would otherwise have been payable under the Dallas Police and Fire Pension System Combined Pension Plan (“Retirement Plan”), except for the limitations of Code Section 415(b). This Plan is intended to be a “qualified governmental excess benefit arrangement” within the meaning of Code Section 415(m)(3) and must be interpreted and construed consistently with that intent. This Plan is deemed a portion of the Retirement Plan solely to the extent required under, and within the meaning of, Code Section 415(m)(3) and Section 9.02 of the Retirement Plan.

This Plan is an “exempt governmental deferred compensation plan” described in Code Section 3121(v)(3). Code Sections 83, 402(b), 457(a) and 457(f)(1) do not apply to this Plan. With respect to Code Section 457(a), the maximum amount that may be deferred under this Plan on behalf of any Participant for the taxable year may exceed both the amount in Code Section 457(b)(2) (as adjusted for cost of living increases) and the percent of the Participant's includable compensation referred to in that Code Section. The Retirement Plan will not hold any assets or income under this Plan in trust for the exclusive benefit of Participants or their Beneficiaries.
ARTICLE II.
DEFINITIONS AND CONSTRUCTIONS

2.01. Definitions. When the initial letter of a word or phrase is capitalized herein, it has the same meaning as defined below:

(a) “Administrator” means the Dallas Police and Fire Pension System (also referred to as "DPFP" or "System") and its employees, including any individual or entity with whom DPFP contracts to provide services to this Plan.

(b) “Beneficiary” means an individual receiving a pension, an annuity, a retirement allowance, or other benefit provided under the Retirement Plan.

(c) “Board” means the Board of Trustees for DPFP as established by Sections 2.01(11) and 3.01 of the Retirement Plan.

(d) "City" means the City of Dallas.

(e) “Code” means the United States Internal Revenue Code of 1986, as amended, as applicable to a governmental plan, or corresponding provisions of any subsequent federal income tax law.

(f) “Eligible Member” means any person included in the membership of the Retirement Plan pursuant to Section 5.01 of the Retirement Plan who is entitled to receive a retirement benefit in excess of the limits imposed by 26 U.S.C. § 415.

(g) “Excess Benefit” means the benefit determined in accordance with Section 4.01 of this Plan.

(h) "HB 3158" means House Bill 3158 which was signed by Texas Governor Abbott on May 31, 2017 and amends the Retirement Plan effective as of September 1, 2017.
(i) “Member” means a person who became a member of the Retirement Plan in accordance with Section 5.01 of the Retirement Plan.

(j) “Participant” means a Member, Retiree, or Beneficiary who is entitled to benefits under this Plan in accordance with Section 9.02 of the Retirement Plan.

(k) “Plan” means the “Dallas Police and Fire Pension System Combined Pension Plan Excess Benefit Plan and Trust” established pursuant to Section 9.02 of the Retirement Plan and Section 8.2 of HB 3158.

(l) “Plan Year” means the calendar year, which is the limitation year for the Retirement Plan.

(m) “Retiree” means a Pensioner under Section 2.01(33) of the Retirement Plan who is receiving a Service Retirement benefit from DPFP under the Retirement Plan.

(n) “Retirement Benefit” means the amount of Service Retirement (as defined under Section 2.01(43) of the Retirement Plan) income payable to a Retiree under the Retirement Plan, or the benefit payable to a Beneficiary, without regard to any limitations on that retirement income or benefit under Code Section 415(b).

(o) “Retirement Fund” means the funds that collectively hold the assets of the System established under Section 2.01(24) for the exclusive benefit of Members and their beneficiaries in accordance with Section 9.01(b) of the Retirement Plan.

(p) "State" means the State of Texas.

(q) “Trust Fund” means the trust fund established pursuant to Section 9.02 of the Retirement Plan and Article VI of this Plan which is separate from the Retirement Fund and which constitutes a valid trust under the law of the State.

(r) “Trustees” mean the members of the Board.
2.02. **Construction.**

(a) Words used in this Plan in the masculine gender include the feminine gender where appropriate, and words used in this Plan in the singular or plural include the plural or singular where appropriate.

(b) Whenever any actuarial present value or actuarial equivalency is to be determined under the Plan to establish a benefit, it will be based on reasonable actuarial assumptions approved by the State Treasurer through a delegation from the Board, made in the State Treasurer’s sole discretion, and determined in a uniform manner for all similarly situated Participants.

**ARTICLE III.**

**PARTICIPATION**

All Members, Retirees, and Beneficiaries of the Retirement Plan are eligible to participate in this Plan if their Retirement Benefits from DPFP for a Plan Year would exceed the limitation imposed by Code Section 415(b). The Administrator determines for each Plan Year which Members, Retirees, and Beneficiaries are eligible to participate in the Plan. Participation in the Plan begins each Plan Year once a Member, Retiree, or Beneficiary has an Excess Benefit in that Plan Year. Participation in the Plan ends for any Plan Year in which the Retirement Benefit of a Member, Retiree, or Beneficiary is not limited by Code Section 415(b) or when all benefit obligations under the Plan to the Member, Retiree, or Beneficiary have been satisfied.

**ARTICLE IV.**

**PAYMENT OF BENEFITS**

4.01. **Benefit Amount.** A Participant in the Plan will receive a benefit equal to the amount of Retirement Benefit that would have been payable to, or with respect to, a Participant
by the Retirement Plan that could not be paid because of the application of the limitations on his or her Retirement Benefit under Code Section 415(b). An Excess Benefit under the Plan will be paid only if and to the extent the Participant is receiving Retirement Benefits from the Retirement Fund.

**4.02. Time for Payment; Form of Benefit.** The Administrator will compute and pay the Excess Benefit in the same form, at the same time, and to the same persons as such benefits would have otherwise been paid as a monthly pension under the Retirement Plan, except for the Code Section 415 limitations. No election is provided at any time to the Participant, directly or indirectly, to defer compensation under this Plan.

**ARTICLE V.**

**CONTRIBUTIONS AND FUNDING**

**5.01. Funding.** The Plan is, and will remain, unfunded and the rights, if any, of any person to any benefits under the Plan are limited to those specified in the Plan. The Plan constitutes a mere unsecured promise by the City to make benefit payments in the future.

**5.02. Contributions.**

(a) Based upon information provided by the Board of the Retirement Plan, the Administrator will determine the amount necessary to pay the Excess Benefit under the Plan for each Plan Year. The required contribution will be the aggregate of the Excess Benefits payable to all Participants for the Plan Year and an amount determined by the Administrator to be a necessary and reasonable expense of administering the Plan. Contributions will not be accumulated under the Plan to pay future Excess Benefits. Instead, each payment of contributions by the City that would otherwise be made to the Retirement Fund will be reduced by the amount necessary to pay the required Excess Benefit, and these contributions will be
deposited in the Trust Fund. The City contributions otherwise required under the terms of the Retirement Plan will be divided into those contributions required to pay Excess Benefits hereunder, and those contributions paid into and accumulated in the Retirement Fund to pay the maximum benefits permitted. Under no circumstances will City contributions to fund the Excess Benefits be credited to or commingled with contributions paid into and accumulated in the Retirement Fund. Amounts deducted from City contributions and deposited into the Trust Fund will not increase the amount of City contributions required under the Retirement Fund. Any contributions not used to pay the Excess Benefit for a current Plan Year, together with any income accruing to the Trust Fund, will be used, as determined by the Administrator to pay the administrative expenses of the Plan for the Plan Year. Any contributions not used to pay the Excess Benefit for the current Plan Year that remain after paying administrative expenses of the Plan for the Plan Year will be used to fund administrative expenses or benefits of Participants in future Plan Years.

(b) DPFP will account separately for the amounts the Administrator determines to be necessary to provide the Excess Benefit under the Plan for each Participant. But, this separate accounting will not be deemed to set aside these amounts for the benefit of a Participant. Benefits under this Plan will be paid from the Trust Fund.

(c) The consultants, independent auditors, attorneys, and actuaries performing services for the Administrator or DPFP may also perform services for this Plan; but, any fees attributable to services performed with respect to this Plan will be payable solely by the City or from the Trust Fund.
ARTICLE VI.

TRUST FUND

6.01. Establishment of Trust Fund. In accordance with Section 9.02 of the Retirement Plan, the Trust Fund is established as a valid trust under the laws of the State, separate from the Retirement Fund, to hold contributions of the City. Contributions to this Trust Fund will be held separate and apart from the funds comprising the Retirement Fund and will not be commingled with assets of the Retirement Fund, and must be accounted for separately.

6.02. Trust Fund Purpose. The Trust Fund is maintained solely to provide benefits under a qualified governmental excess benefit arrangement within the meaning of Code Section 415(m), and pay administrative expenses of this arrangement.

6.03. Trust Fund Assets. All assets held by the Trust Fund to assist in meeting the City's obligations under the Plan, including all amounts of City contributions made under the Plan, all property and rights acquired or purchased with these amounts and all income attributable to these amounts, will be held separate and apart from other funds of the City and will be used exclusively for the uses and purposes of Participants and general creditors as set forth in this Plan. Participants have no preferred claim on, or any beneficial interest in, any assets of the Trust Fund. Any rights created under the Plan are unsecured contractual rights of Participants against the City. Any assets held by the Trust Fund are subject to the claims of the City's general creditors under federal and state law in the event of insolvency.

6.04. Grantor Trust. The Trust Fund is intended to be a grantor trust, of which the City is the grantor, within the meaning of subpart E, part I, subchapter J, chapter 1, subtitle A of the Code, and will be construed accordingly. This provision will not be construed to create an irrevocable trust of any kind.
6.05. **Trust Fund Income.** Income accruing to the Trust Fund under the Plan constitutes income derived from the exercise of an essential governmental function upon which the Trust is exempt from tax under Code Section 115, as well as Code Section 415(m)(1).

**ARTICLE VII.**

**ADMINISTRATION**

7.01. **Administrative Authority.** The Board and the Administrator, respectively, depending on which duties are delegated, have the exclusive authority to control and manage the operation and administration of the Plan. In accordance with Section 9.02 of the Retirement Plan, the Board and the Administrator, respectively, have the same rights, duties and responsibilities respecting the Plan as they have with respect to the Retirement Plan. To the extent applicable, the Administrator has the authority to take management and administrative actions on behalf of the Board with respect to the implementation and administration of this Excess Benefit Plan and Trust.

(a) Through the delegation from the Board, the Administrator has the power and authority (including discretion with respect to the exercise of that power and authority) necessary, advisable, desirable or convenient to enable the Administrator:

(1) to adopt the agreement for the Plan;

(2) to establish procedures to administer the Plan not inconsistent with the Plan and the Code, and to amend or rescind these procedures;

(3) to determine, consistent with the Plan, applicable law, rules or regulations, all questions of law or fact that may arise as to eligibility for participation in the Plan and
eligibility for distribution of benefits from the Plan, and the status of any person claiming benefits under the Plan;

(4) to make payments from the Trust Fund to Participants pursuant to Article IV of the Plan,

(5) to contract with a third party to perform designated administrative services under this Plan; and

(6) to construe and interpret the Plan as to administrative issues and to correct any defect, supply any omission or reconcile any inconsistency in the Plan with respect to same, subject to and consistent with the Code.

(b) Any action by the Board that is not found to be an abuse of discretion will be final, conclusive and binding on all individuals affected thereby. The Board may take any such action in such manner and to such extent as the Board in its discretion may deem expedient, and the Board will be the sole and final judge of such expediency.

(c) The Board may delegate any of its authority to the Administrator with respect to the Trust Fund.

(d) The Board, and/or the Administrator, will seek appropriate rulings from the Internal Revenue Service with regard to the status of the Plan under the Code.

7.02. **Advice.** The Board, and/or the Administrator, may employ one or more persons to render advice with regard to its responsibilities under the Plan.

7.03. **Payment of Benefits.** If in doubt concerning the correctness of any action in making a payment of a benefit, the Administrator may suspend payment until satisfied as to the correctness of the payment or the person to receive the payment.
7.04. **Delegation by Administrator.** The Administrator will handle the day-to-day operation of the Plan and may delegate certain functions to a third party.

**ARTICLE VIII.**

**PLAN AMENDMENTS**

The Board from time to time may amend, suspend, or terminate any or all of the provisions of this Plan as may be necessary to comply with Code Section 415(m) and to maintain the Plan's or the Retirement Fund's qualified status under the Code.

**ARTICLE IX.**

**NONASSIGNABILITY AND EXEMPTION FROM TAXATION AND EXECUTION**

The interests of Participants under this Plan are exempt from any state, county, municipal or local tax, and are not subject to execution, garnishment, attachment, or any other process of law whatsoever, and are unassignable and nontransferable, except as otherwise provided by Section VI or otherwise in the same manner as established under Section 9.03 of the Retirement Plan.

**ARTICLE X.**

**MISCELLANEOUS**

10.01. **Federal and State Taxes.** The State, the City, the Board, and the Administrator, if any, do not guarantee that any particular Federal or State income, payroll, or other tax consequence will occur because of participation in this Plan.

10.02. **Investment.** The Board may hold a portion of the Plan uninvested as it deems advisable for making distributions under the Plan, or may invest assets of the Plan pending the Excess Benefit payments in short-term investment grade instruments as otherwise permitted by law.
10.03. **Conflicts.** In resolving any conflict between provisions of the Plan, and in resolving any other uncertainty as to the meaning or intention of any provision of the Plan, the prevailing interpretation will be the one that (i) causes the Plan to constitute a qualified governmental excess benefit arrangement under the provisions of Code Section 415(m) and the Trust Fund to be exempt from tax under Code Sections 115 and 415(m), (ii) causes the Plan and DPFP to comply with all applicable requirements of the Code, and (iii) causes the Plan and DPFP to comply with all applicable State laws.

10.04. **Limitation on Rights.** Neither the establishment or maintenance of the Plan, nor any amendment to the Plan, nor any act or omission under the Plan (or resulting from the operation of the Plan) may be construed:

(a) as conferring upon any Participant or any other person a right or claim against the State, the City, Board, Trustees, or Administrator, if any, except to the extent that the right or claim is specifically expressed and provided in the Plan;

(b) as creating any responsibility or liability of the City for the validity or effect of the Plan;

(c) as a contract between the City and any Participant or other person;

(d) as being consideration for, or an inducement or condition of, employment of any Participant or other person, or as affecting or restricting in any manner or to any extent whatsoever the rights or obligations of the City or any Participant or other person to continue or terminate the employment relationship at any time; or

(e) as giving any Participant the right to be retained in the City's service or to interfere with the City's right to discharge any Participant or other person at any time.
10.05. **Erroneous Payments.** Any benefit payment that should not have been made, according to the terms of the Plan and the benefits provided hereunder, may be recovered as provided by law.

10.06. **Release.** Any payment to any Participant will, to the extent thereof, be in full satisfaction of the Participant's claim being paid thereby, and the Administrator may condition the payment on the delivery by the Participant of the duly executed receipt and release in a form determined by the Administrator.

10.07. **Liability.** The State, City, Board, Trustees, DPFP, or Administrator, if any, will not incur any liability in acting upon any paper or document or electronic transmission believed by the State, City, Board, Trustees, DPFP, or Administrator to be genuine or to be executed or sent by an authorized person.

No suit may be brought against any present, future, or former officers and employees of the State, the City, the Board, Trustees, DPFP or the Administrator for claims, demands, suits, actions, damages, judgments, costs, charges and expenses, including court costs and attorney’s fees for liability, losses, and damages of any nature whatsoever that may be sustained by reason of any action taken relative to the establishment, modification, termination, administration or implementation of this Plan.

The Administrator may obtain insurance to provide coverage for any liabilities that may arise as described by this Section.

10.08. **Governing Laws.** The Code and the laws of the State apply in determining the construction and validity of this Plan.

10.09. **Necessary Parties to Disputes.** The only party necessary to any accounting, litigation or other proceedings relating to the Plan is the Administrator. The settlement or
judgment in any case in which the Administrator is duly served will be binding upon all affected Participants in the Plan, their beneficiaries, estates and upon all persons claiming by, through or under them.

10.10. Severability. If any provision of the Plan is held by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions of the Plan will continue to be fully effective.

IN WITNESS WHEREOF, the undersigned has caused this Excess Benefit Plan and Trust to be executed as of this 10 day of August, 2017.

APPROVED BY THE BOARD OF TRUSTEES OF THE DALLAS POLICE AND FIRE PENSION SYSTEM COMBINED PENSION PLAN

By: [signature] _________________________________
    Samuel L. Friar
    Chairman of the Board
ITEM #C8

Topic: Investment Policy Statement amendments

Discussion: At the November 9, 2017 meeting, Staff and NEPC discussed with the Board the formation and structure of an Investment Advisory Committee, possible changes to the Investment Policy Statement (IPS), and the definition of “Alternative Investments” under Article 6243a-1. Staff will present amendments to the IPS to incorporate the Board’s direction on these items.

Staff Recommendation: Approve the Investment Policy Statement as presented.
INVESTMENT POLICY STATEMENT

As Amended through May 12, 2016 as of December 14, 2017
# INVESTMENT POLICY STATEMENT

Adopted April 14, 2016
Amended Through May 12, 2016 as of December 14, 2017

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INVESTMENT POLICY STATEMENT

Adopted April 14, 2016
Amended through May 12, 2016 as of December 14, 2017

Section 1  Introduction and Purpose

This policy statement shall guide investment of the assets of the Dallas Police and Fire Pension System (DPFP). This investment policy statement (IPS) is issued for the guidance of the Dallas Police and Fire Pension System Board of Trustees (Board), Investment Advisory Committee (IAC), Executive Director, Staff, Consultant(s), Custodian, and Investment Managers. This IPS is intended to set forth an appropriate set of goals and objectives for DPFP. It will define guidelines to assist fiduciaries and Staff in the supervision of the investments of DPFP. The investment program processes and procedures are defined in the various sections of the IPS by:

A. Stating in a written document DPFP’s expectations, objectives and guidelines for the investment of assets;

B. Setting forth an investment structure for managing the portfolio. This structure includes assigning various asset classes, investment management styles, asset allocation and acceptable ranges that, in total, are expected to produce an appropriate level of overall diversification and total investment return over the investment time horizon;

C. Encouraging effective communications between the Board, IAC, Staff, Consultant(s), Investment Managers and Custodian(s);

D. Set forth policy that will consider various factors, including inflation, consumption, taxes, liquidity and administrative expenses, that will affect the portfolio’s short and long term total expected returns and risk;

E. Establishing formal criteria to select, evaluate, monitor, compare, and attribute the performance of Investment Managers on a regular basis; and

F. Complying with all applicable fiduciary and due diligence requirements experienced investment professionals would utilize, and with all applicable laws, rules and regulations from various local, state, federal, and international political entities that can impact DPFP.
Section 2  Design, Goals, and Objectives

Staff and the Consultant(s) are expected to deliver excess return beyond the Policy Benchmark\(^1\) through manager selection and asset allocation adjustments. By achieving allocation and performance objectives consistently, the long-term investment goals of DPFP are expected to be achieved.

A. Goals

1. Ensure funds are available to meet current and future obligations of the plan when due while earning a long-term, net of fees investment return greater than the actuarial return assumption.

2. To consistently rank in the top half of the public fund universe over the rolling three-year period, net of fees.

B. Objectives

1. To maintain a diversified asset allocation;

2. To provide for an appropriate risk adjusted rate of return;

3. To allow for both passive and active investment management;

4. To monitor quarterly manager performance;

5. To monitor monthly asset allocation changes;

6. To outperform the Policy Benchmark over rolling three-year periods;

7. To control and monitor the costs of administering and managing the investments;

8. Establish guidelines and procedures for selecting, monitoring and replacing investment vehicles; and

9. Re-evaluate annually the policies defined in this IPS.

---

\(^1\) The Policy Benchmark represents the return of the investable and non-investable indices as defined in Appendix A, at the target allocation for each asset class.
Section 3 Standards of Conduct and Fiduciary Responsibility

The following are standards of conduct for the Board, Investment Advisory Committee, Staff, Investment Managers, Consultant(s) and all investment related other service providers of DPFP:

A. Place the interest of DPFP above personal interests;
B. Act with integrity, competence, diligence, respect, and in an ethical manner;
C. Use reasonable care, diligence, and exercise independent professional judgment when conducting analysis, making recommendations, and taking actions;
D. Promote the integrity of and uphold the rules governing DPFP;
E. Comply with all applicable laws, rules, and regulations of any government agency, regulatory organization, licensing agency, or professional association governing their professional activities;
F. Not assist or knowingly participate in any violation of governing laws, rules, or regulations;
G. Not accept gifts, benefits, or compensation that could be expected to compromise independence and objectivity;
H. Must not knowingly make any statement that misrepresents facts relating to investment analysis, recommendations, actions, or other professional activities;
I. Not engage in conduct involving dishonesty, fraud, deceit; and
J. Make full disclosure (annually) of all matters that could reasonably be expected to impair independence and objectivity with their respective duties to DPFP.

Section 4 Core Beliefs and Long-Range Acknowledgements

This section outlines the core beliefs and long—range acknowledgements for the overall governance of DPFP. These beliefs and acknowledgements will serve as guiding principles in the decision making and implementation of DPFP’s investment mandate.

A. A well-defined governance structure with clearly delineated responsibilities is critical in achieving consistent, long term performance objectives.

These are informed by the CFA Institute and the Center for Fiduciary Studies.
Section 4 Core Beliefs and Long-Range Acknowledgements (continued)

B. The strategic asset allocation determines the risk reward profile of the portfolio and thus drives overall portfolio volatility.

C. The opportunity for active manager outperformance (alpha) is not uniformly distributed across asset classes or Investment Managers’ strategies.

D. Leverage may improve a risk / return profile when structured appropriately.

E. Portfolio cash flow and income will be used to rebalance the asset allocation. Rebalancing will occur on a periodic basis.

Section 5 Roles and Responsibilities

A. Board

The Board is made up of twelve (12) Trustees. The Board has a fiduciary role as the representative of DPFP. The Board recognizes its fiduciary duty and acknowledges its responsibility to ensure that the management of plan and DPFP’s fund is in compliance with state and federal laws. Additionally, the Board:

1. Establishes investment objectives consistent with the needs of DPFP and approves the IPS of DPFP;

2. Prudently diversifies, selects, and maintains a general investment strategy consistent with allocation ranges and investment guidelines including an agreed upon risk/return profile;

3. Approves strategic asset allocation targets and ranges;

4. Prudently hires, monitors, & terminates Consultant(s), Investment Managers and other vendors;

5. Reviews investment related expenses;

6. Approves Board travel related to investment monitoring, and in exceptional cases due diligence;
A. **Board (continued)**

7. Approves any expansion or renewal use of the DPFP direct portfolio leverage facility and reviews existing facility by DPFP;

8. Adopts the IPS and annually reviews in the last quarter of each calendar year and revises as needed; and

9. Avoids prohibited transactions and conflicts of interest.

B. **Investment Advisory Committee**

1. **IAC Composition, Selection and Criteria:**
   a. The IAC serves at the discretion of the Board of Trustees;

   b. The IAC is composed of seven outside investment professionals with broad portfolio management experience and two current Board members.

   c. The Executive Director will nominate one additional outside investment professional to serve on the IAC. Non-Board members will serve a year term.

   d. The Board will vote on and approve all IAC nominations;

To be eligible to serve on the

   e. IAC meetings will not be open to the public and will require a quorum of at least three years. It is contemplated that the outside investment members of the IAC will sign an agreement and be compensated as determined to be reasonable by the Board. Compensation and expenses are reimbursable under the Education and Travel Policies and Procedure. The IAC selects a chair and vice-chair from its members, for a two-year term.

   f. The IAC will select a chair from its members to serve as liaison to the Board and to preside over IAC meetings;

   g. Each outside investment professional member of the IAC will respond annually to a disclosure questionnaire, which the Board will review for any independence issues or potential conflicts of interest.
h. If the Executive Director learns that potential ground for removal of an IAC member exists, the Executive Director shall notify the Chair of the Board of the potential grounds for removal;

i. The Board of Trustees may elect to dismiss a member of IAC for any reason; and
2. IAC Roles and Responsibilities:

a. The IAC will review all investment-related items including, but not limited to, annual asset allocation updates and the hiring or termination of the Board for action: Investment Managers, Consultant(s), and Custodian;

b. The IAC will vote on each investment-related action item and make non-binding recommendations to the Board;

c. The IAC chair or vice chair will update the Board with an abbreviated version of the facts and discuss the IAC recommendation, or lack thereof, to the Board, as needed.

a. If requested by the Board, which will accompany the Staff and Consultant recommendations;

e. IAC shall review Staff and Consultant recommendations on asset allocation targets and ranges at least annually, and provide an IAC recommendation to the Board; and

d. Acts as The IAC members are fiduciaries to DPFP.

C. Staff

1. Executive Director

a. The Executive Director is authorized to administer the operations and investment activities of DPFP under policy guidance from the Board;

b. Is authorized to manage investments approved by the Board, including authority to enter into contract amendments including fund extensions, act with regard to investment governance issues and engagement of advisors as needed;

c. Manages the day-to-day operations of DPFP;

d. Reports to the Board when strategic asset allocation breaches target allocation bands;

e. Oversees and reports to the Board on investment and due diligence processes and procedures;
f. Approves/declines all Staff travel related to all manager pre-hire & on-site due diligence;

g. Approval of Investment Staff recommendations for presentation to the IAC and Board; and
1. **Executive Director** (continued)

   h. Is **not** a fiduciary to DPFP when exercising discretion.

2. **Investment Staff**

   The Staff is responsible for manager due diligence and recommendations, portfolio implementation consistent with the Board approved asset allocation, and will assess the activities of the Consultant(s). The Staff helps the Board and the IAC to oversee Investment Managers, Consultant(s), Custodian(s), and vendors. Additionally, the Staff:

   a. Reports to Executive Director when portfolio asset classes exceed allowable strategic boundaries;

   b. Notifies Consultant(s) in writing of rebalancing needs and recommended implementation, so as to employ periodic cash flows to asset classes within target allocation ranges **as well as to periodically rebalance the portfolio**;

   c. Instructs Investment Managers to implement Consultant approved re-balance instructions;

   d. Submits to Executive Director for review, on annual basis, recommended asset allocation targets and ranges & oversees implementation of the approved asset allocation;

   e. Monitors and reports portfolio asset class balances;

   f. Assists in the preparation and annual review of IPS;

   g. Reviews Consultant(s)’s Investment Manager due diligence and recommendations;

   h. Prepares Staff Investment Manager recommendations, submits Staff and Consultant(s) recommendations to Executive Director for review;

   i. After Board approval of investment, Staff approves Investment Manager Strategy guidelines which will be outlined in the Investment Manager agreements, as applicable;
2. **Investment Staff** (continued)

j. Monitors all investments, Investment Managers and vendors;
k. Monitors adherence to quantitative due diligence criteria;
l. Accounts for and reviews annually all external management fees and investment expenses;
m. Reviews, every two years, the eligibility status of members of the IAC;

n. Ensures all fiduciaries to DPFP are aware of their fiduciary obligations annually;\(^3\)

and

o. Is not a fiduciary to DPFP.

D. **Consultant(s)**

The Consultant(s) should monitor qualitative and quantitative criteria related to Investment Managers and aggregate portfolio activity and performance. The Consultant(s), through its continuous and comprehensive responsibilities to DPFP should acknowledge in its contract, its fiduciary responsibility to DPFP. Additionally, the Consultant(s):

1. Recommends annually to IAC and Board strategic asset allocation targets, ranges, and benchmarks for asset classes;

2. Documents asset allocation recommendations with asset class performance expectations including standard deviation, expected return and correlations for each asset class used by DPFP;

3. Establishes and follows due diligence procedures for Investment Manager candidate searches;

4. Conducts screens and searches for Investment Manager candidates;

5. Assists in the selection process and monitoring of Investment Managers;\(^4\)

6. Reviews and recommends Investment Managers and peer groups to IAC and Board;

---

\(^3\) Verification of this may be through contract, agreement, or annual fiduciary acknowledgement letter.

\(^4\) The specific screening criteria for investment managers can be found in Appendix B.
D. Consultant(s) (continued)

7. Documents and delivers to Staff written recommendations on Investment Manager new hire, hold and termination reviews;

8. Any new hire recommendation from the Consultant should include a recommended benchmark and an assessment of appropriate asset class and sub-allocation;

9. Approves and verifies in writing each of Staff’s rebalancing recommendations and implementation;

10. Reviews whether rebalancing was done consistent with best practices;

11. Monitors the diversification, quality, duration, and risk of holdings as applicable;

12. Assists Staff in negotiation of terms of vendor contracts;

13. Prepares quarterly investment reports, which include the information outlined in Appendix C; and

14. Acts as a fiduciary to DPFP.

E. Investment Managers

1. Public Investment Managers

   a. Acknowledge in writing acceptance of the objectives, guidelines, and standards of performance;

   b. Invest the assets of DPFP in accordance with its objectives, guidelines and standards;

   c. Exercise full discretionary authority as to all buy, hold and sell decisions for each security under management, subject to the guidelines as defined in this Statement;

---

5 Evidence of approval may be in electronic format
1. Public Investment Managers (continued)
   
d. If managing a separate account, send trade confirmations to the Custodian;

   e. For separately managed accounts, deliver monthly report to Consultant(s)/Staff describing portfolio asset class weights, investment performance, security positions, and transactions;

   f. For commingled assets, this statement should show unit position and unit value;

   g. Adhere to best execution and valuation policies;

   h. Prices and fair market valuations will be obtained from a third-party reporting service provider;

   i. Communicate to Executive Director any material changes at firm;

   j. Inform DPFP, as soon as practical, in writing of any breach of investment guidelines, ethic violations or violations of self-dealing;

   k. Communicate significant changes in the ownership, organizational structure, financial condition, or personnel staffing; and

   l. Acts as a fiduciary to DPFP.

2. Private Investment Managers

   a. Acknowledge in writing acceptance of the objectives, strategy guidelines, and standards of performance as evidenced in investment manager, operating or partnership agreement;

   b. Will ensure that financials statements undergo annual audits and that investments are reported at fair market value, as outlined in the Investment Management, Partnership or Operating Agreement(s);

   c. Communicate to Executive Director any material changes in the ownership or management of the firm, and or the stability of the organization;
2. **Private Investment Managers** (continued)

   d. Inform DPFP, as soon as practical, in writing of any breach of investment guidelines, ethic violations or violations of self-dealing; and

   e. Acts as fiduciary to DPFP, unless specified and acknowledged by Board at time of hire.

F. **Custodian**

1. **Safekeep** and hold all of DPFP’s assets in the appropriate domestic accounts and provide highly secure storage of physical stock certificates and bonds such that there is no risk of loss due to theft, fire, or accident.\(^6\)

2. Maintain separate accounts by legal registration;

3. Arrange for timely execution and settlement of Investment Manager securities transactions made for DPFP;

4. Provide for receipt and prompt crediting of all dividend, interest and principal payments received as a result of DPFP portfolio holdings or securities lending activities;

5. Monitor income receipts to ensure that income is received when due and institute investigative process to track and correct late or insufficient payments, including reimbursement for any interest lost due to tardiness or shortfall;

6. At the direction of the Staff, expeditiously transfer funds into and out of specified accounts.

\(^6\) *Electronic transfer records at the Depository Trust Company (‘‘DTC’’) are preferred.*
Section 6  Authorized Asset Classes & Investments Guidelines

A.  Asset Class Guidelines

1. Asset allocation is the primary driver of the volatility of portfolio return. To achieve the goals and objectives of DPFP, the fund’s assets will be invested in the categories listed in Appendix A. The assets shall be diversified, in order to minimize the concentration risk, both by asset class and within an asset class.

2. The strategic asset allocation shall be monitored on an ongoing basis and rebalanced when the lower and upper bounds on the ranges are breached, understanding the timing of the rebalancing may be delayed depending the liquidity of the asset class and costs of rebalancing, and otherwise at the discretion of Staff with concurrence of the Consultant.

3. Securities lending is permissible for separately managed accounts and commingled vehicles.

B. Authorized Investments

1. Equities: Equity represents residual ownership of public and private companies after obligations to debt holders have been satisfied.

2. Fixed Income: Fixed-income instruments are securities or debt obligations issued by governments, government-related entities, structured debt facilities and public and private companies that contain contractual obligations from the issuer to make interest and/or principal repayments to investors over the duration of the negotiated term agreement.

3. Real Assets (Liquid and Illiquid): Liquid real assets are investments in tradable tangible/physical assets or related claims that may display a positive correlation to the rate of inflation. Illiquid real assets (natural resources and infrastructure) represent ownership claim to an actual, finite asset or property.

4. Global Asset Allocation: An investment strategy that actively invests in a variety of liquid assets including cash, equity, fixed income, credit, derivatives (interest rate, currency, index) and commodities.

5. Private Equity: A non-financial asset that is relatively illiquid and non-transparent. Private equity funds make investments directly into private companies.
B. **Authorized Investments** (continued)

6. **Private Debt:** Private debt funds typically provide capital to private sector borrowers.

7. **Real Estate:** Real estate represents investment in a range of properties which provide income and/or appreciation potential. Investments in real estate can be structured as public or private debt and/or equity, and can be in the U.S. or foreign countries.

8. **Other Authorized Investments:** Trade finance and reinsurance based strategies;

C. **Alternative Investments**

The Board has adopted the definition of “Alternative Investments” as outlined in Appendix D, which will be reviewed as part of the due diligence process for any new investment. Pursuant to Section 4.07 of Article 6243a-1, the vote of eight trustees is required to approve any Alternative Investment.

Section 7 **Investment Due Diligence & Monitoring**

A. **Investment Due Diligence**

Staff and Consultant(s) are responsible for recommending external Investment Managers to the IAC and Board for review for potential hiring. The following will be implemented:

1. Investment Manager candidate due diligence will be conducted by Staff & Consultant(s).

2. Due diligence criteria are defined in Appendix B.

3. Selected candidate(s) will be presented to the IAC.

4. IAC will communicate their recommendation, or lack thereof, on the candidate(s) for consideration and final approval by the Board.
B. Investment Monitoring

1. Staff and Consultant(s) are responsible for monitoring external public & private Investment Managers. Public and private Investment Managers will be monitored relative to peers and benchmarks monthly and quarterly, respectively. Additionally, each current manager is expected to satisfy the due diligence criteria outlined in Appendix B. If the following criteria are not met, an Investment Manager is to be considered an underperformer:

   a. Investment Managers’ 3 year rolling returns in excess of peer group average;

   b. Investment Managers’ 3 year rolling risk-adjusted returns in excess of peer group average;

   c. Investment Managers’ qualitative requirements must be satisfied at all time periods, as determined by Staff or Consultant;

2. Based on the criteria outlined above, the Consultant will highlight underperforming Investment Managers in their quarterly report to the Board. If an Investment Manager is considered an underperformer, Staff and Consultant will provide recommendations to IAC and the Board regarding whether to “hold” or “sell”.

Section 8 Risk Management

The Staff will work within these policies in order to mitigate the risk of capital loss. By implementing these policies, the Board has addressed:

A. Custodial Risk for both public and private holdings;  

B. Interest Rate Risk through fixed income duration and credit monitoring;  

C. Concentration and Credit Risk through asset allocation targets and ranges, rebalancing, and the monitoring of investment guidelines.

7 Please review Custodian responsibilities in Section 4.5.
8 Please review Annual Review of IPS and Investment Manager strategy guidelines reviewed and approved by Staff.
Section 8  Risk Management (continued)

Through these policies, Staff has necessary monitoring criteria established for Custodian, Consultant(s) and Investment Managers, such that DPFP has in place policies that will mitigate interest rate, custody, concentration and credit risks.

Section 9.  Effective Date

APPROVED on May 12, 2015 by ___________ the Board of Trustees of the Dallas Police and Fire Pension System.

______________________________
Samuel L. Friar
William F. Quinn
Chairman

Attested:

______________________________
Kelly Gottschalk
Executive Director
SECTION IX.
## Appendix A – Asset Allocation

### Strategic Asset Allocation Targets & Ranges

<table>
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<tr>
<th>Asset Class</th>
<th>Policy Benchmark</th>
<th>Target</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>90-day T Bills</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td>Plan Level Leverage</td>
<td>(LIBOR + 300)</td>
<td>0%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Equity</td>
<td>MSCI AC World (gross)</td>
<td>20.0%</td>
<td>10% – 23%</td>
</tr>
<tr>
<td>EM Equity</td>
<td>MSCI EM Equity (gross)</td>
<td>5.0%</td>
<td>0% – 8%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>R3000 +3% (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>4% – 15%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Term Core Bonds</td>
<td>Barclays UST 1-3 Year</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>Barclays Global Aggregate</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td>High Yield</td>
<td>Barclays Global HY</td>
<td>5.0%</td>
<td>2% – 8%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>S&amp;P Leveraged Loan Index</td>
<td>6.0%</td>
<td>3% – 9%</td>
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<tr>
<td>Structured Credit &amp; Absolute Return</td>
<td>HFRI RV: FI (50/50-ABS/Corp)</td>
<td>6.0%</td>
<td>0% – 9%</td>
</tr>
<tr>
<td>EMD (50/50)</td>
<td>50% JPM EMBI/50% JPM GBI-EM</td>
<td>6.0%</td>
<td>0% – 9%</td>
</tr>
<tr>
<td>Private Debt</td>
<td>Barclays Global HY + 2% (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>2% – 7%</td>
</tr>
<tr>
<td><strong>Real Assets</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Natural Resources</td>
<td>S&amp;P Global Nat Res (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>3% – 10%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>S&amp;P Global Infra (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>3% – 10%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>NCREIF</td>
<td>12.0%</td>
<td>10% – 25%</td>
</tr>
<tr>
<td>Liquid Real Assets</td>
<td>CPI + 5.00%</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td><strong>Global Asset Allocation</strong></td>
<td></td>
<td>10.0%</td>
<td>5% – 15%</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>60% MSCI ACWI/40% Barclays Global Aggregate</td>
<td>5.0%</td>
<td>2% – 8%</td>
</tr>
<tr>
<td>GTAA</td>
<td>60% MSCI ACWI/40% Barclays Global Aggregate</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>HFRX Abs Ret Index</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>100.0%</td>
<td></td>
</tr>
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Appendix B – Due Diligence Criteria

The public market Investment Manager screening criteria include:

1. Lead portfolio manager tenure/experience at least 5 years.
2. Firm level assets under management: 75 million or more under management.
3. Investment style should consistently match what is approved and outlined in the Investment Manager’s guidelines, and will be compared and analyzed against peers/sub-asset class category.
4. Sharpe ratio generally would exceed .3, which may not be possible following a prolonged bear market in that respective market, and must exceed 50% of its peer group over a three year rolling period.
5. Three year rolling total return, on a net of fee basis, must exceed 50% of its peer group.
6. On site due diligence meeting is recommended.
7. Fiduciary acceptance and acknowledgement.

The private Investment Manager screening will focus on the key areas of:

1. Alignment of Interests: management fees and expenses, carry/waterfall, term of fund, General Partner commitment.
2. Governance: team, investment strategy, fiduciary duty, Limited Partner Advisory Committee responsibilities and makeup, changes of the fund.
3. Transparency: risk management, financial information, disclosure related to the GP, management and other fees.
4. Track Record: the firm or lead portfolio manager should have a track record of at least 5 years.
5. Performance: a majority of previous funds should rank in the top 50% of their vintage year and strategy fund universe.

The hedge-fund Investment Manager screening criteria include:

1. Lead portfolio manager tenure/experience at least 5 years.
2. Utilization of independent third-party administrator.
3. Sharpe ratio should exceed .5 and must exceed 50% of its peer group over a three year rolling period.
4. Three year rolling total return must exceed 50% of its peer group.
5. A well-defined and documented risk management process.
6. Leverage terms should be appropriate to strategy.
7. Liquidity of assets should match liquidity of fund.
8. Redemption terms consistent with peers.

If any of the above due diligence criteria are not met, the Staff and Consultant will disclose this in their recommendations to the IAC and Board, along with an explanation of why the investment is still appropriate.
Appendix C

– Investment Consultant Reporting Requirements

The investment consultant is required to provide the Board with quarterly investment information for portfolio monitoring purposes. Generally these are as follows:

Quarterly (due in advance of the Investment Advisory Committee meeting)

1. A review of the current investment market environment.
2. DPFP’s actual asset allocation relative to its target asset allocation as defined in Appendix A.
3. DPFP’s return relative to its Policy Benchmark return as defined in Appendix A and other public pension funds.
4. DPFP’s risk adjusted returns relative to the policy and other public pension funds.
5. Asset class performance relative to the benchmarks as defined in Appendix A.
6. Individual Investment Manager returns relative to their stated benchmark.
7. Report will specifically acknowledge any underperforming Investment Managers based on the criteria outlined in Section VII7 of the Investment Policy Statement IPS.
8. Any reportable events affecting any of DPFP’s Investment Managers.
Appendix D – Alternative Investments

Alternative Assets means any investment that is not a Traditional Asset.

Traditional Assets include:

1. Common Stocks: publicly traded securities representing ownership in a corporation; also known as publicly traded equity. Examples include publicly traded equity shares of public companies, REITs, and ADRs. Regional examples include shares of companies domiciled in the US, non-US developed markets and emerging markets.

2. Bonds: publicly-traded securities, the holders of which serving as creditors to either governmental or corporate entities. Examples include government bonds and corporate bonds, including senior bank loans. Regional examples include US government issued bonds, non-US international developed market issued bonds, and emerging market issued bonds. Credit examples include investment grade bonds and non-investment grade bonds (e.g. high yield bonds and bank loans).

3. Cash Equivalents: short-term investments held in lieu of cash and readily convertible into cash within a short time span. Examples include CDs, commercial paper, and Treasury bills.

Though an exhaustive list is not included, some of the defining characteristics of Alternative Assets and their vehicles include:

1. Private ownership vehicles
2. Liquidity-constrained, and a lock-up of capital for extended time periods (one-year or longer)
3. Use of leverage
4. Ability to take short positions
5. Use of derivatives

The Board recognizes that certain investments may have characteristics and underlying securities that could be classified as both a Traditional and Alternative Investment. On any new investment recommendation, Staff and Consultant will categorize an investment as either Alternative or Traditional based on these criteria, with a focus of liquidity of the investment, for the Board’s consideration.
INVESTMENT POLICY STATEMENT

Amended as of December 14, 2017
INVESTMENT POLICY STATEMENT

Adopted April 14, 2016
Amended as of December 14, 2017

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SECTION 6   Authorized Asset Classes and Investment Guidelines
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Section 1  Introduction and Purpose

This policy statement shall guide investment of the assets of the Dallas Police and Fire Pension System (DPFP). This investment policy statement (IPS) is issued for the guidance of the Dallas Police and Fire Pension System Board of Trustees (Board), Investment Advisory Committee (IAC), Executive Director, Staff, Consultant(s), Custodian, and Investment Managers. This IPS is intended to set forth an appropriate set of goals and objectives for DPFP. It will define guidelines to assist fiduciaries and Staff in the supervision of the investments of DPFP. The investment program processes and procedures are defined in the various sections of the IPS by:

A. Stating in a written document DPFP’s expectations, objectives and guidelines for the investment of assets;

B. Setting forth an investment structure for managing the portfolio. This structure includes assigning various asset classes, investment management styles, asset allocation and acceptable ranges that, in total, are expected to produce an appropriate level of overall diversification and total investment return over the investment time horizon;

C. Encouraging effective communications between the Board, IAC, Staff, Consultant(s), Investment Managers and Custodian(s);

D. Set forth policy that will consider various factors, including inflation, consumption, taxes, liquidity and administrative expenses, that will affect the portfolio’s short and long term total expected returns and risk;

E. Establishing formal criteria to select, evaluate, monitor, compare, and attribute the performance of Investment Managers on a regular basis; and

F. Complying with all applicable fiduciary and due diligence requirements experienced investment professionals would utilize, and with all applicable laws, rules and regulations from various local, state, federal, and international political entities that can impact DPFP.
Section 2  Design, Goals, and Objectives

Staff and the Consultant(s) are expected to deliver excess return beyond the Policy Benchmark through manager selection and asset allocation adjustments. By achieving allocation and performance objectives consistently, the long-term investment goals of DPFP are expected to be achieved.

A. Goals

1. Ensure funds are available to meet current and future obligations of the plan when due while earning a long-term, net of fees investment return greater than the actuarial return assumption.

2. To consistently rank in the top half of the public fund universe over the rolling three-year period, net of fees.

B. Objectives

1. To maintain a diversified asset allocation;

2. To provide for an appropriate risk adjusted rate of return;

3. To allow for both passive and active investment management;

4. To monitor quarterly manager performance;

5. To monitor monthly asset allocation changes;

6. To outperform the Policy Benchmark over rolling three-year periods;

7. To control and monitor the costs of administering and managing the investments;

8. Establish guidelines and procedures for selecting, monitoring and replacing investment vehicles; and

9. Re-evaluate annually the policies defined in this IPS.

---

1 The Policy Benchmark represents the return of the investable and non-investable indices as defined in Appendix A, at the target allocation for each asset class.
Section 3 Standards of Conduct and Fiduciary Responsibility

The following are standards of conduct for the Board, Investment Advisory Committee, Staff, Investment Managers, Consultant(s) and all investment related other service providers of DPFP:

A. Place the interest of DPFP above personal interests;
B. Act with integrity, competence, diligence, respect, and in an ethical manner;
C. Use reasonable care, diligence, and exercise independent professional judgment when conducting analysis, making recommendations, and taking actions;
D. Promote the integrity of and uphold the rules governing DPFP;
E. Comply with all applicable laws, rules, and regulations of any government agency, regulatory organization, licensing agency, or professional association governing their professional activities;
F. Not assist or knowingly participate in any violation of governing laws, rules, or regulations;
G. Not accept gifts, benefits, or compensation that could be expected to compromise independence and objectivity;
H. Must not knowingly make any statement that misrepresents facts relating to investment analysis, recommendations, actions, or other professional activities;
I. Not engage in conduct involving dishonesty, fraud, deceit; and
J. Make full disclosure (annually) of all matters that could reasonably be expected to impair independence and objectivity with their respective duties to DPFP.

Section 4 Core Beliefs and Long-Range Acknowledgements

This section outlines the core beliefs and long-range acknowledgements for the overall governance of DPFP. These beliefs and acknowledgements will serve as guiding principles in the decision making and implementation of DPFP’s investment mandate.

A. A well-defined governance structure with clearly delineated responsibilities is critical in achieving consistent, long term performance objectives.

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2 These are informed by the CFA Institute and the Center for Fiduciary Studies.
Section 4  Core Beliefs and Long-Range Acknowledgements (continued)

B. The strategic asset allocation determines the risk reward profile of the portfolio and thus drives overall portfolio volatility.

C. The opportunity for active manager outperformance (alpha) is not uniformly distributed across asset classes or Investment Managers’ strategies.

D. Leverage may improve a risk / return profile when structured appropriately.

E. Portfolio rebalancing to the asset allocation will occur on a periodic basis.

Section 5  Roles and Responsibilities

A. Board

The Board is made up of eleven (11) Trustees. The Board has a fiduciary role as the representative of DPFP. The Board recognizes its fiduciary duty and acknowledges its responsibility to ensure that the management of plan and DPFP’s fund is in compliance with state and federal laws. Additionally, the Board:

1. Establishes investment objectives consistent with the needs of DPFP and approves the IPS of DPFP;

2. Prudently diversifies, selects, and maintains a general investment strategy consistent with allocation ranges and investment guidelines including an agreed upon risk/return profile;

3. Approves strategic asset allocation targets and ranges;

4. Prudently hires, monitors, & terminates Consultant(s), Investment Managers and other vendors;

5. Reviews investment related expenses;

6. Approves Board travel related to investment monitoring, and in exceptional cases due diligence;
A. **Board** (continued)

7. Approves any use of direct portfolio leverage by DPFP;

8. Adopts the IPS and annually reviews in the last quarter of each calendar year and revises as needed; and

9. Avoids prohibited transactions and conflicts of interest.

B. **Investment Advisory Committee**

1. **IAC Composition, Selection and Criteria**
   
   a. The IAC serves at the discretion of the Board of Trustees;
   
   b. The IAC is composed of five members: three outside investment professionals with broad portfolio management experience and two current Board members.
   
   c. The current Board members will serve one-year terms on the IAC. Non-Board members will serve a _____ year term.
   
   d. The Board will vote on and approve all IAC members;
   
   e. IAC meetings will not be open to the public and will require a quorum of at least three IAC members;
   
   f. The IAC will select a chair from its members to serve as liaison to the Board and to preside over IAC meetings;
   
   g. Each outside investment professional member of the IAC will adhere to the DPFP Ethics Policy;
   
   h. If the Executive Director learns that potential ground for removal of an IAC member exists, the Executive Director shall notify the Chair of the Board of the potential grounds for removal;
   
   i. The Board of Trustees may elect to dismiss a member of IAC for any reason
B. **Investment Advisory Committee** (continued)

2. **IAC Roles and Responsibilities:**
   a. The IAC will review all investment-related items which are brought to the Board for action;
   b. The IAC will make non-binding recommendations to the Board;
   c. The IAC chair will discuss the IAC recommendation, or lack thereof, with the Board, as needed
   d. If requested by the Board, IAC shall review Staff and Consultant recommendations on asset allocation targets and ranges, and provide an IAC recommendation to the Board; and
   e. The IAC members are fiduciaries to DPFP.

C. **Staff**

1. **Executive Director**
   a. The Executive Director is authorized to administer the operations and investment activities of DPFP under policy guidance from the Board;
   b. Is authorized to manage investments approved by the Board including authority to enter into contract amendments including fund extensions, act with regard to investment governance issues and engagement of advisors as needed;
   c. Manages the day to day operations of DPFP;
   d. Reports to the Board when strategic asset allocation breaches target allocation bands;
   e. Oversees and reports to the Board on investment and due diligence processes and procedures;
   f. Approves/declines all Staff travel related to all manager pre-hire & on-site due diligence;
C. Staff (continued)

1. Executive Director
   g. Approval of Investment Staff recommendations for presentation to the IAC and Board; and
   h. Is a fiduciary to DPFP when exercising discretion.

2. Investment Staff

The Staff is responsible for manager due diligence and recommendations, portfolio implementation consistent with the Board approved asset allocation, and will assess the activities of the Consultant(s). The Staff helps the Board and the IAC to oversee Investment Managers, Consultant(s), Custodian(s), and vendors. Additionally, the Staff:

a. Reports to Executive Director when portfolio asset classes exceed allowable strategic boundaries;

b. Notifies Consultant(s) in writing of rebalancing needs and recommended implementation, so as to employ periodic cash flows to asset classes within target allocation ranges as well as to periodically rebalance the portfolio;

c. Instructs Investment Managers to implement Consultant approved re-balance instructions;

d. Submits to Executive Director for review, on annual basis, recommended asset allocation targets and ranges & oversees implementation of the approved asset allocation;

 e. Monitors and reports portfolio asset class balances;

f. Assists in the preparation and annual review of IPS;

g. Reviews Consultant(s)’s Investment Manager due diligence and recommendations;
C. Staff (continued)

2. Investment Staff

h. Prepares Staff Investment Manager recommendations, submits Staff and Consultant(s) recommendations to Executive Director for review;

i. After Board approval of investment, Staff approves Investment Manager Strategy guidelines which will be outlined in the Investment Manager agreements, as applicable;

j. Monitors all investments, Investment Managers and vendors;

k. Monitors adherence to quantitative due diligence criteria;

l. Accounts for and reviews annually all external management fees and investment expenses;

m. Ensures all fiduciaries to DPFP are aware of their fiduciary obligations annually;\(^3\) and

n. Is not a fiduciary to DPFP.

D. Consultant(s)

The Consultant(s) should monitor qualitative and quantitative criteria related to Investment Managers and aggregate portfolio activity and performance. The Consultant(s), through its continuous and comprehensive responsibilities to DPFP should acknowledge in its contract, its fiduciary responsibility to DPFP. Additionally, the Consultant(s):

1. Recommends annually to IAC and Board strategic asset allocation targets, ranges, and benchmarks for asset classes;

2. Documents asset allocation recommendations with asset class performance expectations including standard deviation, expected return and correlations for each asset class used by DPFP;

\(^3\) Verification of this may be through contract, agreement, or annual fiduciary acknowledgement letter.
D. **Consultant(s) (continued)**

3. Establishes and follows due diligence procedures for Investment Manager candidate searches;

4. Conducts screens and searches for Investment Manager candidates;

5. Assists in the selection process and monitoring of Investment Managers;\(^4\)

6. Reviews and recommends Investment Managers and peer groups to IAC and Board;

7. Documents and delivers to Staff written recommendations on Investment Manager new hire, hold and termination reviews;

8. Any new hire recommendation from the Consultant should include a recommended benchmark and an assessment of appropriate asset class and sub-allocation;

9. Approves and verifies in writing each of Staff’s rebalancing recommendations and implementation;\(^5\)

10. Reviews whether rebalancing was done consistent with best practices;

11. Monitors the diversification, quality, duration, and risk of holdings as applicable;

12. Assists Staff in negotiation of terms of vendor contracts;

13. Prepares quarterly investment reports, which include the information outlined in Appendix C; and

14. Acts as a fiduciary to DPFP.

\(^4\) *The specific screening criteria for investment managers can be found in Appendix B.*

\(^5\) *Evidence of approval may be in electronic format*
E. Investment Managers

1. Public Investment Managers
   a. Acknowledge in writing acceptance of the objectives, guidelines, and standards of performance;
   b. Invest the assets of DPFP in accordance with its objectives, guidelines and standards;
   c. Exercise full discretionary authority as to all buy, hold and sell decisions for each security under management, subject to the guidelines as defined in this Statement;
   d. If managing a separate account, send trade confirmations to the Custodian;
   e. For separately managed accounts, deliver monthly report to Consultant(s)/Staff describing portfolio asset class weights, investment performance, security positions, and transactions;
   f. For commingled assets, this statement should show unit position and unit value;
   g. Adhere to best execution and valuation policies;
   h. Prices and fair market valuations will be obtained from a third-party reporting service provider;
   i. Communicate to Executive Director any material changes at firm;
   j. Inform DPFP, as soon as practical, in writing of any breach of investment guidelines, ethic violations or violations of self-dealing;
   k. Communicate significant changes in the ownership, organizational structure, financial condition, or personnel staffing; and
   l. Acts as a fiduciary to DPFP.
E. Investment Managers (continued)

2. Private Investment Managers

a. Acknowledge in writing acceptance of the objectives, strategy guidelines, and standards of performance as evidenced in investment manager, operating or partnership agreement;

b. Will ensure that financial statements undergo annual audits and that investments are reported at fair market value, as outlined in the Investment Management, Partnership or Operating Agreement(s);

c. Communicate to Executive Director any material changes in the ownership or management of the firm, and or the stability of the organization;

d. Inform DPFP, as soon as practical, in writing of any breach of investment guidelines, ethic violations or violations of self-dealing; and

e. Acts as fiduciary to DPFP, unless specified and acknowledged by Board at time of hire.

F. Custodian

1. Safe keep and hold all DPFP’s assets in the appropriate domestic accounts and provide highly secure storage of physical stock certificates and bonds such that there is no risk of loss due to theft, fire, or accident;6

2. Maintain separate accounts by legal registration;

3. Arrange for timely execution and settlement of Investment Manager securities transactions made for DPFP;

4. Provide for receipt and prompt crediting of all dividend, interest and principal payments received as a result of DPFP portfolio holdings or securities lending activities;

5. Monitor income receipts to ensure that income is received when due and institute investigative process to track and correct late or insufficient payments, including reimbursement for any interest lost due to tardiness or shortfall;

6 Electronic transfer records at the Depository Trust Company (“DTC”) are preferred.
F. Custodian (continued)

6. At the direction of the Staff, expeditiously transfer funds into and out of specified accounts.

Section 6 Authorized Asset Classes & Investments Guidelines

A. Asset Class Guidelines

1. Asset allocation is the primary driver of the volatility of portfolio return. To achieve the goals and objectives of DPFP, the fund’s assets will be invested in the categories listed in Appendix A. The assets shall be diversified, in order to minimize the concentration risk, both by asset class and within an asset class.

2. The strategic asset allocation shall be monitored on an ongoing basis and rebalanced when the lower and upper bounds on the ranges are breached, understanding the timing of the rebalancing may be delayed depending the liquidity of the asset class and costs of rebalancing, and otherwise at the discretion of Staff with concurrence of the Consultant.

3. Securities lending is permissible for separately managed accounts and commingled vehicles.

B. Authorized Investments

1. Equities: Equity represents residual ownership of public and private companies after obligations to debt holders have been satisfied.

2. Fixed Income: Fixed-income instruments are securities or debt obligations issued by governments, government-related entities, structured debt facilities and public and private companies that contain contractual obligations from the issuer to make interest and/or principal repayments to investors over the duration of the negotiated term agreement.

3. Real Assets (Liquid and Illiquid): Liquid real assets are investments in tradable tangible/physical assets or related claims that may display a positive correlation to the rate of inflation. Illiquid real assets (natural resources and infrastructure) represent ownership claim to an actual, finite asset or property.
B. **Authorized Investments** (continued)

4. Global Asset Allocation: An investment strategy that actively invests in a variety of liquid assets including cash, equity, fixed income, credit, derivatives (interest rate, currency, index) and commodities.

5. Private Equity: A non-financial asset that is relatively illiquid and non-transparent. Private equity funds make investments directly into private companies.

6. Private Debt: Private debt funds typically provide capital to private sector borrowers.

7. Real Estate: Real estate represents investment in a range of properties which provide income and/or appreciation potential. Investments in real estate can be structured as public or private debt and/or equity, and can be in the U.S. or foreign countries.

8. Other Authorized Investments: Trade finance and reinsurance based strategies;

C. **Alternative Investments**

The Board has adopted the definition of “Alternative Investments” as outlined in Appendix D, which will be reviewed as part of the due diligence process for any new investment. Pursuant to Section 4.07 of Article 6243a-1, the vote of eight trustees is required to approve any Alternative Investment.

Section 7  **Investment Due Diligence & Monitoring**

A. **Investment Due Diligence**

Staff and Consultant(s) are responsible for recommending external Investment Managers to the IAC and Board for review for potential hiring. The following will be implemented:

1. Investment Manager candidate due diligence will be conducted by Staff & Consultant(s).

2. Due diligence criteria are defined in Appendix B.

3. Selected candidate(s) will be presented to the IAC.

4. IAC will communicate their recommendation, or lack thereof, on the candidate(s) for consideration and final approval by the Board.
B. Investment Monitoring

1. Staff and Consultant(s) are responsible for monitoring external public & private Investment Managers. Public and private Investment Managers will be monitored relative to peers and benchmarks monthly and quarterly, respectively. Additionally, each current manager is expected to satisfy the due diligence criteria outlined in Appendix B. If the following criteria are not met, an Investment Manager is to be considered an underperformer:
   a. Investment Managers’ 3 year rolling returns in excess of peer group average;
   b. Investment Managers’ 3 year rolling risk-adjusted returns in excess of peer group average;
   c. Investment Managers’ qualitative requirements must be satisfied at all time periods, as determined by Staff or Consultant;

2. Based on the criteria outlined above, the Consultant will highlight underperforming Investment Managers in their quarterly report to the Board. If an Investment Manager is considered an underperformer, Staff and Consultant will provide recommendations to IAC and the Board regarding whether to “hold” or “sell”.

Section 8 Risk Management

The Staff will work within these policies to mitigate the risk of capital loss. By implementing these policies, the Board has addressed:

A. Custodial Risk for both public and private holdings;\(^7\)

B. Interest Rate Risk through fixed income duration and credit monitoring;\(^8\)

C. Concentration and Credit Risk through asset allocation targets and ranges, rebalancing, and the monitoring of investment guidelines.

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\(^7\) Please review Custodian responsibilities in Section 5.
\(^8\) Please review Annual Review of IPS and Investment Manager strategy guidelines reviewed and approved by Staff.
Section 8. Risk Management (continued)

Through these policies, Staff has necessary monitoring criteria established for Custodian, Consultant(s) and Investment Managers, such that DPFP has in place policies that will mitigate interest rate, custody, concentration and credit risks.

Section 9. Effective Date

APPROVED on ___________ the Board of Trustees of the Dallas Police and Fire Pension System.

__________________________
William F. Quinn
Chairman

Attested:

__________________________
Kelly Gottschalk
Executive Director
APPENDICES
Appendix A – Asset Allocation

STRATEGIC ASSET ALLOCATION TARGETS & RANGES

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Policy Benchmark</th>
<th>Target</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>90-day T Bills</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td>Plan Level Leverage</td>
<td>(LIBOR + 300)</td>
<td>0%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td>Equity</td>
<td></td>
<td>30.0%</td>
<td>20% – 40%</td>
</tr>
<tr>
<td>Global Equity</td>
<td>MSCI AC World (gross)</td>
<td>20.0%</td>
<td>10% – 23%</td>
</tr>
<tr>
<td>EM Equity</td>
<td>MSCI EM Equity (gross)</td>
<td>5.0%</td>
<td>0% – 8%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>R3000 +3% (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>4% – 15%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td></td>
<td>33.0%</td>
<td>15% – 38%</td>
</tr>
<tr>
<td>Short-Term Core Bonds</td>
<td>Barclays UST 1-3 Year</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>Barclays Global Aggregate</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td>High Yield</td>
<td>Barclays Global HY</td>
<td>5.0%</td>
<td>2% – 8%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>S&amp;P Leveraged Loan Index</td>
<td>6.0%</td>
<td>3% – 9%</td>
</tr>
<tr>
<td>Structured Credit &amp; Absolute Return</td>
<td>HFRI RV: FI (50/50-ABS/Corp)</td>
<td>6.0%</td>
<td>0% – 9%</td>
</tr>
<tr>
<td>EMD (50/50)</td>
<td>50% JPM EMBI/50% JPM GBI-EM</td>
<td>6.0%</td>
<td>0% – 9%</td>
</tr>
<tr>
<td>Private Debt</td>
<td>Barclays Global HY + 2% (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>2% – 7%</td>
</tr>
<tr>
<td>Real Assets</td>
<td></td>
<td>25.0%</td>
<td>20% – 45%</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>S&amp;P Global Nat Res (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>3% – 10%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>S&amp;P Global Infra (Rolling 3 Mo.)</td>
<td>5.0%</td>
<td>3% – 10%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>NCREIF</td>
<td>12.0%</td>
<td>10% – 25%</td>
</tr>
<tr>
<td>Liquid Real Assets</td>
<td>CPI + 5.00%</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td>Global Asset Allocation</td>
<td></td>
<td>10.0%</td>
<td>5% – 15%</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>60% MSCI ACWI/40% Barclays Global Aggregate</td>
<td>5.0%</td>
<td>2% – 8%</td>
</tr>
<tr>
<td>GTAA</td>
<td>60% MSCI ACWI/40% Barclays Global Aggregate</td>
<td>3.0%</td>
<td>0% – 6%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>HFRX Abs Ret Index</td>
<td>2.0%</td>
<td>0% – 5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B – Due Diligence Criteria

The public market Investment Manager screening criteria include:

1. Lead portfolio manager tenure/experience at least 5 years.
2. Firm level assets under management: 75 million or more under management.
3. Investment style should consistently match what is approved and outlined in the Investment Manager’s guidelines, and will be compared and analyzed against peers/sub-asset class category.
4. Sharpe ratio generally would exceed .3, which may not be possible following a prolonged bear market in that respective market, and must exceed 50% of its peer group over a three year rolling period.
5. Three year rolling total return, on a net of fee basis, must exceed 50% of its peer group.
6. On site due diligence meeting is recommended.
7. Fiduciary acceptance and acknowledgement.

The private Investment Manager screening will focus on the key areas of:

1. Alignment of Interests: management fees and expenses, carry/waterfall, term of fund, General Partner commitment.
2. Governance: team, investment strategy, fiduciary duty, Limited Partner Advisory Committee responsibilities and makeup, changes of the fund.
3. Transparency: risk management, financial information, disclosure related to the GP, management and other fees.
4. Track Record: the firm or lead portfolio manager should have a track record of at least 5 years.
5. Performance: a majority of previous funds should rank in the top 50% of their vintage year and strategy fund universe.

The hedge-fund Investment Manager screening criteria include:

1. Lead portfolio manager tenure/experience at least 5 years.
2. Utilization of independent third-party administrator.
3. Sharpe ratio should exceed .5 and must exceed 50% of its peer group over a three year rolling period.
4. Three year rolling total return must exceed 50% of its peer group.
5. A well-defined and documented risk management process.
6. Leverage terms should be appropriate to strategy.
7. Liquidity of assets should match liquidity of fund.
8. Redemption terms consistent with peers.

If any of the above due diligence criteria are not met, the Staff and Consultant will disclose this in their recommendations to the IAC and Board, along with an explanation of why the investment is still appropriate.
Appendix C – Investment Consultant Reporting Requirements

Investment Consultant Reporting Requirements
The investment consultant is required to provide the Board with quarterly investment information for portfolio monitoring purposes. Generally these are as follows:

Quarterly (due in advance of the meeting)
1. A review of the current investment market environment.
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Traditional Assets include:

1. **Common Stocks**: publicly traded securities representing ownership in a corporation; also known as publicly-traded equity. Examples include publicly traded equity shares of public companies, REITs, and ADRs. Regional examples include shares of companies domiciled in the US, non-US developed markets and emerging markets.

2. **Bonds**: publicly-traded securities, the holders of which serving as creditors to either governmental or corporate entities. Examples include government bonds and corporate bonds, including senior bank loans. Regional examples include US government issued bonds, non-US international developed market issued bonds, and emerging market issued bonds. Credit examples include investment grade bonds and non-investment grade bonds (e.g. high yield bonds and bank loans).

3. **Cash Equivalents**: short-term investments held in lieu of cash and readily convertible into cash within a short time span. Examples include CDs, commercial paper, and Treasury bills.

Though an exhaustive list in not included, some of the defining characteristics of Alternative Assets and their vehicles include:

1. Private ownership vehicles
2. Liquidity-constrained, and a lock-up of capital for extended time periods (one-year or longer)
3. Use of leverage
4. Ability to take short positions
5. Use of derivatives

The Board recognizes that certain investments may have characteristics and underlying securities that could be classified as both a Traditional and Alternative Investment. On any new investment recommendation, Staff and Consultant will categorize an investment as either Alternative or Traditional based on these criteria, with a focus of liquidity of the investment, for the Board’s consideration.
ITEM #C9


Attendees: Rhett Humphreys, Partner, NEPC
Michael Yang, Research Consultant, NEPC

Discussion: NEPC will present the above reports.
Dallas Police & Fire Pension System

Investment Summary
Quarter Ending September 30, 2017

December 14, 2017
Rhett Humphreys, CFA
Partner
Keith Stronkowsky, CFA
Senior Consultant
Q3 2017 Performance & Asset Allocation
<table>
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<tr>
<th>Index Performance Summary as of 09/30/2017</th>
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<td>Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse</td>
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# Dallas Police & Fire Pension

## Trailing Returns: By Broad Composite

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<th>Portfolio</th>
<th>Market Value ($)</th>
<th>% of Portfolio</th>
<th>3 Mo (% Rank)</th>
<th>YTD (% Rank)</th>
<th>1 Yr (% Rank)</th>
<th>3 Yrs (% Rank)</th>
<th>5 Yrs (% Rank)</th>
<th>7 Yrs (% Rank)</th>
<th>10 Yrs (% Rank)</th>
<th>Return (%)</th>
<th>Since</th>
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<tbody>
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<td>DPFP</td>
<td>2,107,885,009</td>
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<td>1.0</td>
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<td>3.7</td>
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91 Day T-Bills

0.3 | -- | 0.6 | -- | 0.7 | -- | -- | -- | 0.3 | -- | 0.2 | -- | 0.2 | -- | 0.4 | -- | 0.4 | Apr-15 |

Policy Indexes are calculated using policy benchmarks and weights of the underlying sub composites.

Net of fees returns shown on report are time weighted.
# Dallas Police & Fire Pension

## Trailing Returns: By Asset Class

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<th>Asset Class</th>
<th>Market Value ($M)</th>
<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>YTD (%)</th>
<th>1 Yr (%)</th>
<th>3 Yrs (%)</th>
<th>5 Yrs (%)</th>
<th>7 Yrs (%)</th>
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<th>Return (%) Since</th>
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*91 Day T-Bills*
### Public Equity: Composite Overview

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*Boston Partners and Manulife 3-year risk/return obtained from manager records.
## Dallas Police & Fire Pension

### Public Equity: Trailing Manager Returns

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<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>YTD (%)</th>
<th>1 Yr (%)</th>
<th>3 Yrs (%)</th>
<th>5 Yrs (%)</th>
<th>7 Yrs (%)</th>
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Public Fixed Income: Composite Overview

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<td>Bank Loans</td>
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**Public Fixed Income Managers**

- Ashmore (LC) 6%
- Pacific 15%
- Loomis (SBLs) 18%
- Loomis (HY) 25%
- Brandywine 20%
- IR&M 15%

**3-Year Risk/Return***

*Pacific Asset Management and IR&M 3-year risk/return obtained from manager records.
# Dallas Police & Fire Pension

## Public Fixed Income: Trailing Manager Returns

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<th>1 Yr (%)</th>
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*NEPC, LLC*  
September 30, 2017
# Dallas Police & Fire Pension

## Public Fixed Income: Trailing Manager Returns

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<th>Market Value ($)</th>
<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>YTD (%)</th>
<th>1 Yr (%)</th>
<th>3 Yrs (%)</th>
<th>5 Yrs (%)</th>
<th>7 Yrs (%)</th>
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## Global Asset Allocation: Composite Overview

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<th>Manager</th>
<th>Benchmark</th>
<th>Asset Class</th>
<th>Descriptions</th>
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<tr>
<td>Bridgewater (All Weather)</td>
<td>91 Day T-bill +7%</td>
<td>Risk Parity</td>
<td>Passive approach</td>
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<tr>
<td>Putnam</td>
<td>Global 60/40</td>
<td>Risk Parity</td>
<td>Active approach</td>
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<tr>
<td>GMO</td>
<td>CPI +5%</td>
<td>GTAA</td>
<td>Unconstrained</td>
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<td>Bridgewater (PAMM)</td>
<td>HFRX Absolute Return</td>
<td>Absolute Return</td>
<td>Global Macro Hedge Fund</td>
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</tbody>
</table>

### GAA Managers

- Bridgewater (PAMM): 25%
- Bridgewater (AW): 31%
- GMO: 16%
- Putnam: 28%

### 3-Year Risk/Return

- Total GAA Policy Index
- Global 60/40
- Global AA Composite
- Putnam
- GMO
- Bridgewater (AW)
- Bridgewater (PA)
# Dallas Police & Fire Pension

## Global Asset Allocation: Trailing Manager Returns

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Market Value ($)</th>
<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>YTD (%)</th>
<th>1 Yr (%)</th>
<th>3 Yrs (%)</th>
<th>5 Yrs (%)</th>
<th>7 Yrs (%)</th>
<th>10 Yrs (%)</th>
<th>Return (%)</th>
<th>Since</th>
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Risk/Return & Compliance Analysis
### Dallas Police & Fire Pension

#### Total Fund Risk/Return

### 3 Years Ending September 30, 2017

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<th>Anlzd Std Dev</th>
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<td>Policy Index</td>
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<th>Sortino Ratio RF</th>
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### 5 Years Ending September 30, 2017

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<th>Rank</th>
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<td>5.8%</td>
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<th>Fund</th>
<th>Sharpe Ratio</th>
<th>Rank</th>
<th>Sortino Ratio RF</th>
<th>Rank</th>
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<tbody>
<tr>
<td>DPFP</td>
<td>0.19</td>
<td>99</td>
<td>0.17</td>
<td>99</td>
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<td>Policy Index</td>
<td>2.56</td>
<td>1</td>
<td>5.73</td>
<td>1</td>
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<tr>
<td>60 MSCI ACWI/40 BC Global Agg</td>
<td>0.90</td>
<td>97</td>
<td>1.77</td>
<td>85</td>
</tr>
<tr>
<td>InvestorForce Public DB Net Median</td>
<td>1.34</td>
<td>--</td>
<td>2.17</td>
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</table>

---

*Graphs showing annualized return vs. annualized standard deviation for different funds.*
## Policy Compliance Test: Traditional Managers

### 3 Year Rolling Excess Return Violations:

<table>
<thead>
<tr>
<th>Manager</th>
<th>Return Rank</th>
<th>NEPC Recommendation</th>
</tr>
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<tbody>
<tr>
<td>Global Equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walter Scott</td>
<td>81</td>
<td>HOLD</td>
</tr>
<tr>
<td>Public Fixed Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brandywine</td>
<td>62</td>
<td>HOLD</td>
</tr>
<tr>
<td>Ashmore AEMLCB</td>
<td>81</td>
<td>N/A</td>
</tr>
<tr>
<td>Loomis Sayles HY</td>
<td>65</td>
<td>HOLD</td>
</tr>
<tr>
<td>GAA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Putnam</td>
<td>51</td>
<td>HOLD</td>
</tr>
<tr>
<td>Bridgewater AW</td>
<td>60</td>
<td>HOLD</td>
</tr>
</tbody>
</table>

### 3 Year Rolling Risk-Adjusted Excess Return Violations:

<table>
<thead>
<tr>
<th>Manager</th>
<th>Sharpe Ratio Rank</th>
<th>NEPC Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFI</td>
<td>67</td>
<td>HOLD</td>
</tr>
<tr>
<td>Walter Scott</td>
<td>53</td>
<td>HOLD</td>
</tr>
<tr>
<td>Public Fixed Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brandywine</td>
<td>70</td>
<td>HOLD</td>
</tr>
<tr>
<td>Loomis Sayles HY</td>
<td>85</td>
<td>HOLD</td>
</tr>
<tr>
<td>Loomis Sayles SBL</td>
<td>87</td>
<td>HOLD</td>
</tr>
<tr>
<td>Ashmore AEMLCB</td>
<td>81</td>
<td>N/A</td>
</tr>
<tr>
<td>GAA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridgewater AW</td>
<td>67</td>
<td>HOLD</td>
</tr>
</tbody>
</table>

### Qualitative Concerns:

<table>
<thead>
<tr>
<th>Manager</th>
<th>NEPC Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: ‘N/A’ denotes that the Board has voted to terminate the manager in question. However, market exposure will be maintained with managers that have previously been approved for liquidation and to rebalance if additional cash is needed.
Asset Allocation
## Asset Allocation: Broad Composites

<table>
<thead>
<tr>
<th></th>
<th>Market Value $</th>
<th>% of Portfolio</th>
<th>Policy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Equity</td>
<td>572,284,036</td>
<td>27.1%</td>
<td>30%</td>
</tr>
<tr>
<td>Total Fixed Income</td>
<td>342,830,680</td>
<td>16.3%</td>
<td>33%</td>
</tr>
<tr>
<td>Total Real Assets</td>
<td>836,311,712</td>
<td>39.7%</td>
<td>25%</td>
</tr>
<tr>
<td>Total GAA</td>
<td>139,576,060</td>
<td>6.6%</td>
<td>10%</td>
</tr>
<tr>
<td>Cash</td>
<td>216,882,521</td>
<td>10.3%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total DPFP</strong></td>
<td><strong>2,107,885,009</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

September 30, 2017
## Asset Allocation: By Asset Class

<table>
<thead>
<tr>
<th></th>
<th>Current Allocation $</th>
<th>Current Allocation %</th>
<th>Policy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>343,542,261</td>
<td>16.3%</td>
<td>20%</td>
</tr>
<tr>
<td>Emerging Market Equity</td>
<td>--</td>
<td>0.0%</td>
<td>5%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>228,741,775</td>
<td>10.9%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>572,284,036</td>
<td>27.1%</td>
<td>30%</td>
</tr>
<tr>
<td>Short-Term Core Bonds</td>
<td>50,174,169</td>
<td>2.4%</td>
<td>2%</td>
</tr>
<tr>
<td>High Yield</td>
<td>81,176,553</td>
<td>3.9%</td>
<td>5%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>108,632,380</td>
<td>5.2%</td>
<td>6%</td>
</tr>
<tr>
<td>Emerging Market Debt</td>
<td>19,547,976</td>
<td>0.9%</td>
<td>6%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>66,198,543</td>
<td>3.1%</td>
<td>3%</td>
</tr>
<tr>
<td>Structured &amp; AR Credit</td>
<td>--</td>
<td>0.0%</td>
<td>6%</td>
</tr>
<tr>
<td>Private Debt</td>
<td>17,101,060</td>
<td>0.8%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total Fixed Income</strong></td>
<td>342,830,680</td>
<td>16.3%</td>
<td>33%</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>238,900,618</td>
<td>11.3%</td>
<td>5%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>60,537,347</td>
<td>2.9%</td>
<td>5%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>536,873,747</td>
<td>25.5%</td>
<td>12%</td>
</tr>
<tr>
<td>Real Assets – Liquid</td>
<td>--</td>
<td>0.0%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Real Assets</strong></td>
<td>836,311,712</td>
<td>39.7%</td>
<td>25%</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>81,408,497</td>
<td>3.9%</td>
<td>5%</td>
</tr>
<tr>
<td>GTAA</td>
<td>22,797,715</td>
<td>1.0%</td>
<td>3%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>35,369,848</td>
<td>1.7%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total GAA</strong></td>
<td>139,576,060</td>
<td>6.6%</td>
<td>10%</td>
</tr>
<tr>
<td>Cash</td>
<td>216,882,521</td>
<td>10.3%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,107,885,009</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Asset Allocation: Portfolio Lookthrough

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Lookthrough %</th>
<th>Actual %</th>
<th>Policy %</th>
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</thead>
<tbody>
<tr>
<td>US Equity</td>
<td>7.9%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>International Equity</td>
<td>7.6%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Emerging Markets Eq</td>
<td>1.3%</td>
<td>--</td>
<td>5%</td>
</tr>
<tr>
<td>Global Equity</td>
<td>--</td>
<td>16.3%</td>
<td>20%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>10.9%</td>
<td>10.9%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td><strong>27.7%</strong></td>
<td><strong>27.1%</strong></td>
<td><strong>30%</strong></td>
</tr>
<tr>
<td>Short-Term Core Bonds</td>
<td>2.4%</td>
<td>2.4%</td>
<td>2%</td>
</tr>
<tr>
<td>High Yield</td>
<td>3.9%</td>
<td>3.9%</td>
<td>5%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>5.2%</td>
<td>5.2%</td>
<td>6%</td>
</tr>
<tr>
<td>Emerging Market Debt</td>
<td>1.2%</td>
<td>0.9%</td>
<td>6%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>5.7%</td>
<td>3.1%</td>
<td>3%</td>
</tr>
<tr>
<td>Structured &amp; AR Credit</td>
<td>--</td>
<td>--</td>
<td>6%</td>
</tr>
<tr>
<td>Private Debt</td>
<td>0.8%</td>
<td>0.8%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total Fixed Income</strong></td>
<td><strong>19.2%</strong></td>
<td><strong>16.3%</strong></td>
<td><strong>33.0%</strong></td>
</tr>
<tr>
<td>Natural Resources</td>
<td>11.3%</td>
<td>11.3%</td>
<td>5%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>2.9%</td>
<td>2.9%</td>
<td>5%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>26.0%</td>
<td>25.5%</td>
<td>12%</td>
</tr>
<tr>
<td>Real Assets – Liquid</td>
<td>--</td>
<td>--</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Real Assets</strong></td>
<td><strong>40.2%</strong></td>
<td><strong>39.7%</strong></td>
<td><strong>25%</strong></td>
</tr>
<tr>
<td>Risk Parity</td>
<td>--</td>
<td>3.9%</td>
<td>5%</td>
</tr>
<tr>
<td>GTAA</td>
<td>--</td>
<td>1.0%</td>
<td>3%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>--</td>
<td>1.7%</td>
<td>2%</td>
</tr>
<tr>
<td>Hedge Funds*</td>
<td>2.4%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total GAA</strong></td>
<td><strong>2.4%</strong></td>
<td><strong>6.6%</strong></td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td>Cash</td>
<td><strong>10.2%</strong></td>
<td><strong>10.3%</strong></td>
<td><strong>2%</strong></td>
</tr>
</tbody>
</table>

*Hedge Fund lookthrough exposure due to GMO and Bridgewater Pure Alpha Major Markets allocations.
**Attribution Analysis: By Asset Class – 3 Months Ending September 30, 2017**

<table>
<thead>
<tr>
<th>Portfolio Weights</th>
<th>Returns</th>
<th>Attribution Effects By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPFP</td>
<td>Index</td>
</tr>
<tr>
<td></td>
<td>Policy</td>
<td></td>
</tr>
<tr>
<td>DPFP</td>
<td>16.3%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Equity</td>
<td>0.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Emerging Markets Equity</td>
<td>10.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>2.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>3.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>High Yield</td>
<td>3.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>5.2%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Structured &amp; A/R Credit</td>
<td>0.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Emerging Markets Debt</td>
<td>0.9%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Private Debt</td>
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</tr>
<tr>
<td>Natural Resources</td>
<td>11.3%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>2.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>25.5%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Liquid Real Assets</td>
<td>0.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>3.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>GTAA</td>
<td>1.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>1.7%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>10.3%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Total*</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Total column may not add up due to rounding.
## Attribution Analysis: By Asset Class – 12 Months Ending September 30, 2017

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Weights</th>
<th>Returns</th>
<th>Attribution Effects By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPFP</td>
<td>Policy</td>
<td>Selection</td>
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<td>16.3%</td>
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<td>20.37%</td>
</tr>
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<td>Emerging Markets Equity</td>
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<td>0.00%</td>
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<tr>
<td>Private Equity</td>
<td>10.9%</td>
<td>5.00%</td>
<td>-31.32%</td>
</tr>
<tr>
<td>Short Term Core Bonds</td>
<td>2.4%</td>
<td>2.00%</td>
<td>0.30%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>3.1%</td>
<td>3.00%</td>
<td>4.93%</td>
</tr>
<tr>
<td>High Yield</td>
<td>3.9%</td>
<td>5.00%</td>
<td>13.73%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>5.2%</td>
<td>6.00%</td>
<td>6.21%</td>
</tr>
<tr>
<td>Structured &amp; A/R Credit</td>
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<td>0.00%</td>
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<td>Emerging Markets Debt</td>
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<td>10.97%</td>
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<td>Private Debt</td>
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<td>-17.57%</td>
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<td>0.00%</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>3.9%</td>
<td>5.00%</td>
<td>7.20%</td>
</tr>
<tr>
<td>GTAA</td>
<td>1.0%</td>
<td>3.00%</td>
<td>9.59%</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>1.7%</td>
<td>2.00%</td>
<td>12.73%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>10.3%</td>
<td>2.00%</td>
<td>0.75%</td>
</tr>
<tr>
<td><strong>Total</strong>*</td>
<td><strong>100.0%</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>3.70%</strong></td>
</tr>
</tbody>
</table>

*Total column may not add up due to rounding.
Dallas Police & Fire Pension

Attribution Analysis: Definition and Explanation (3 months ending 9/30/2017)

• **Selection Effect**
  – Contribution to excess return due to the over/under weighting of managers within asset classes
  • The Selection Effect of **-0.193%** is due to the underperformance of the DPFP Global Equity return vs. the Global Equity Index return. Based on policy, DPFP selected underperforming managers vs. the index. 20%*(4.332% - 5.309%)= -0.193%

• **Allocation Effect**
  – Contribution to excess return due to the over/under weighting of asset classes
  • The Allocation Effect of **-0.068%** is due to the underweighting of the Global Equity allocation, 16.3% vs. the Global Equity Policy Allocation, 20% and also the outperformance of the Global Equity Index, 5.309% vs. the Total Plan Index, 2.113%. DPFP was underweight to an outperforming sector resulting in a negative Allocation Effect.
    – (16.3% - 20%)*(5.309% - 2.113%)= -0.068%

• **Interaction Effect**
  – Is the residual effect due to timing not explained directly by either the selection or the allocation effect.
  • (16.3% - 20%)*(4.332% - 5.309%)= 0.047%

<table>
<thead>
<tr>
<th></th>
<th>Portfolio Weights</th>
<th>Returns</th>
<th>Attribution Effects By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPFP</td>
<td>Policy</td>
<td>DPFP</td>
</tr>
<tr>
<td>Global Equity</td>
<td>16.3%</td>
<td>20.0%</td>
<td>4.332%</td>
</tr>
<tr>
<td>Total*</td>
<td>100.0%</td>
<td>100.0%</td>
<td>1.008%</td>
</tr>
</tbody>
</table>
Footnotes

1. **Sustainable Asset Management** was included in the Global Natural Resources composite from 11/1/2008 to 3/31/2015 and included in the Global Equity composite from 4/1/2015 to present.
2. **Hudson Clean Energy** was included in the Global Natural Resources composite from 1/1/2010 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and the Private Equity composite from 1/1/2016 to present.
3. **RREEF** was included in the Real Estate composite from 2/1/1999 to 12/31/2009 and included in the Global Equity composite from 1/1/2010 to present.
4. **Highland Crusader** was included in the Global Fixed Income composite from 7/1/2003 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
5. **Highland Capital Management** was included in the Global Fixed Income composite from 1/1/2007 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
6. **Oaktree Fund IV** was included in the Global Fixed Income composite from 1/1/2002 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
7. **Global Infrastructure composite** was included in the Private Markets composite history until 6/30/2012.
8. **Private Equity composite** includes Private Credit managers until 12/31/2015. From 01/01/2016 to present the Private Equity and Credit managers are now in separate composites.
9. **Policy index** changed on 4/1/2016 from 20% MSCI ACWI, 15% S&P 500+2%, 10% Global Natural Resources Benchmark, 15% Barclays Global Agg, 20% CPI+5%, 10% CPI +5%, 15% NCREIF PI to 20% MSCI ACWI (gross), 5% MSCI EM Equity (gross), 5% Russell 3000 +3%, 2% Barclays UST 1-3 Yr, 3% Barclays Global Agg, 5% Barclays Global HY, 6% S&P Leveraged Loan Index, 6% HFRI RV: FI (50/50- Abs/Corp), 6%50% JPM EMBI/50% JPM GBI-EM, 5% Barclays Global HY +2%, 5% S&P Global Nat Res, 5% S&P Global Infra, 12% NCREIF, 3% CPI +5%, 5% 60% MSCI ACWI/40% Barclays Global Agg, 3% 60% MSCI ACWI/40% Barclays Global Agg, 2% HFRX Abs Ret Index, 2% 90 Day T-Bill.
10. **Natural Resources** benchmark changed from the Global Natural Resources benchmark from 12/1/2010 to 12/31/2015 to the S&P Global Natural Resources benchmark 1/1/2016 to present.
11. **Infrastructure** benchmark changed from CPI +5% from 7/1/2012 to 12/31/2015 to S&P Global Infrastructure benchmark 1/1/2016 to present.
12. **Total Asset Allocation** benchmark changed from CPI+ 5% from 7/1/2007 to 12/31/2015 to 80% 60/40 MSCI ACWI & Barclays Global Agg and 20% HFRX Absolute Return Index 1/1/2016 to present.
Glossary of Investment Terminology – Risk Statistics

**Alpha** - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

**Alpha Jensen** - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

**Annualized Excess Return over Benchmark** - Annualized fund return minus the annualized benchmark return for the calculated return.

**Annualized Return** - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

**Beta** - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

**Information Ratio** - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula: 
\[
(\text{Annualized Return of Portfolio} - \text{Annualized Return of Benchmark}) / \text{Annualized Standard Deviation(Period Portfolio Return – Period Benchmark Return)}
\]

**R-Squared** – Represents the percentage of a fund’s movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

**Sharpe Ratio** - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

**Sortino Ratio** - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula: 
\[
\text{Calculation Average } (X-Y) / \text{Downside Deviation } (X-Y) ^ * 2
\]
Where X=Return Series Y= Return Series Y which is the risk free return (91 day T-bills)

**Standard Deviation** - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula: 
\[
(\text{Annualized Return of Portfolio} - \text{Annualized Return of Risk Free}) / \text{Annualized Standard Deviation (Portfolio Returns)}
\]

**Tracking Error** - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula: 
\[
\text{Tracking Error } = \text{Standard Deviation } (X-Y) ^ * \sqrt{\text{(# of periods per year)}}
\]
Where X = periods portfolio return and Y = the period’s benchmark return
For monthly returns, the periods per year = 12
For quarterly returns, the periods per year = 4

**Treynor Ratio** - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula: 
\[
(\text{Portfolio Average Return} - \text{Average Return of Risk-Free Rate}) / \text{Portfolio Beta}
\]

**Up/Down Capture Ratio** - A measure of what percentage of a market’s returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

**UpsideCapture** = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > 0

**DownsideCapture** = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark < 0

Source: Investor Force
Glossary of Investment Terminology

**# Of Portfolios/Observations** - The total number of data points that make up a specified universe.

**Allocation Index** - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly. The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

**Asset Allocation Effect** - Measures an investment manager’s ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and under weighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and under weighted in a sector that underperforms the benchmark.

**Agency Bonds (Agencies)** - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

**Asset Backed Securities (ABS)** - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

**Attribution** - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager’s decisions.

**Average Effective Maturity** - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

**Batting Average** - A measurement representing an investment manager’s ability to meet or beat an index.

*Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.*

**Brinson Fachler (BF) Attribution** - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio’s underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BH and measures whether the benchmark sector, country, etc. outperformed or underperformed the overall benchmark.

**Brinson Hood Beebower (BHB) Attribution** - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio’s underlying performance.

**Corporate Bond (Corp)** - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company’s physical assets may be used as collateral for bonds.

**Correlation** - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

*Data Source: 1InvestorForce, 2Interaction Effect Performance Attribution, 3NEPC, LLC, 4Investopedia, 5Hedgeco.net*
Glossary of Investment Terminology

**Coupon** - The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

**Currency Effect** - Is the effect that changes in currency exchange rates over time affect excess performance.

**Derivative Instrument** - A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

**Downside Deviation** - Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

**Formula:**
Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

**Duration** - Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond’s duration is inversely related to interest rates and directly related to time to maturity.

**Equity/Debt/Cash Ratio** - The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e., a 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

**Foreign Bond** - A bond that is issued in a domestic market by a foreign entity in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

**Hard Hurdle** - Is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

**High-Water Mark** - The highest peak in value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

**Hurdle Rate** - The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

**Interaction Effects** - The interaction effect measures the combined impact of an investment manager’s selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

**Median** - The value (rate of return, market sensitivity, etc.) that exceeds one-half of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

**Modified Duration** - The percentage change in the price of a fixed income security that results from a change in yield.

**Mortgage Backed Securities (MBS)** - Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

**Municipal Bond (Muni)** - A debt security issued by a state, municipality or county to finance its capital expenditures.

**Net Investment Change** - Is the change in an investment after accounting for all Net Cash Flows.

**Performance Fee** - A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net

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NEPC, LLC

September 30, 2017

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Glossary of Investment Terminology

Policy Index² - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

Price to Book (P/B)³ - A ratio used to compare a stock’s market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter’s book value per share, also known as the “price-equity ratio”.

Price to Earnings (P/E)³ - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

Price to Sales (P/S)⁴ - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock’s current price by its revenue per share for the trailing 12 months.

Return on Equity (ROE)⁴ - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation’s profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect² - Measures the investment manager’s ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager’s allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

Soft Hurdle rate³ - is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

Tiered Fee¹ - A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first $10M invested, 0.90% on the next $10M, and 0.80% on the remaining balance).

Total Effects² - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio’s return.

Total Return¹ - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe³ - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation⁴ - Standard Deviation of Positive Returns

Weighted Avg. Market Cap.⁴ - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)³ - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity³ - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgco.net
Past performance is no guarantee of future results.

NEPC uses, as its data source, the plan’s custodian bank or fund service company, and NEPC relies on those sources for security pricing, calculation of accruals, and all transactions, including income payments, splits, and distributions. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

The Investment Performance Analysis (IPA) is provided as a management aid for the client’s internal use only. Portfolio performance reported in the IPA does not constitute a recommendation by NEPC.

Information in this report on market indices and security characteristics is received from sources external to NEPC. While efforts are made to ensure that this external data is accurate, NEPC cannot accept responsibility for errors that may occur.

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Information Disclosure

- NEPC, LLC uses, as its data source, the plan’s fund manager and custodian bank or fund service company, and NEPC, LLC relies on those sources for all transactions, including capital calls, distributions, income/expense and reported values. While NEPC, LLC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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December, 2017

Trustees
Dallas Police & Fire Pension System
4100 Harry Hines Blvd – Suite 100
Dallas, TX 75219

RE: Private Markets Strategy – 2nd Quarter 2017

Dear Trustees:

We are pleased to present the June 30, 2017 Private Markets Report for Dallas Police & Fire Pension System, (DPFP). The report provides a variety of performance analysis for the private markets portfolio. The reports include trailing performance, performance by investment stage and vintage year performance.

The DPFP experienced a negative quarter with a nominal IRR of -0.02%. The annualized IRR of the private markets portfolio since inception was 1.15% at quarter end. Since inception, the Total Value to Paid In multiple (current valuation plus cumulative distributions, divided by total capital calls) was 1.05.

The following table presents the status of the DPFP private markets portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,473,216,153</td>
<td>$154,014,236</td>
<td>$3,160,280,411</td>
<td>$2,071,708,231</td>
<td>$1,278,535,719</td>
<td>90.99%</td>
<td>65.55%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure (Reported Value + Unfunded Commitment)</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Private Markets Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$179,460,075</td>
<td>$1,457,995,794</td>
<td>$2,122,543,462</td>
<td>Varies By Category</td>
<td>60.24%</td>
<td>68.69%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception (October 13, 1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,350,243,950</td>
<td>1.05</td>
<td>1.15%</td>
</tr>
</tbody>
</table>
As of June 30, 2017, the DPFP has made commitments totaling $3,473.22 million to 87 private markets assets.

The following chart provides an analysis of the vintage year performance comparing the capital calls to the distributions and reported value for the private markets program:
During the quarter-ended June 30, 2017, the DPFP private markets portfolio funded 42 investments and received 24 distributions from its funds. The summary of the cash flows follows:

<table>
<thead>
<tr>
<th>Amount Funded for the Quarter</th>
<th>Number of Funds Calling Capital</th>
<th>Distributions for the Quarter</th>
<th>Number of Funds Making Distributions</th>
<th>Net Cash/Stock Flows for the Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>$62,986,510</td>
<td>42</td>
<td>$87,182,764</td>
<td>24</td>
<td>$24,196,254</td>
</tr>
</tbody>
</table>

Since inception the DPFP private markets portfolio added $163.79 million in value to the DPFP. Investment strategies adding value include Venture $0.06 million, Buyouts $96.24 million, Distressed $33.44 million, Co-investments $17.48 million, Energy $8.72 million, Infrastructure $101.76 million, Natural Resources $179.52 million, Timber $40.97 million, Credit Opportunities $8.50 million, RE Core $19.74 million, RE Value Add/Opportunistic $79.91 million. Strategies losing value include Growth Equity ($65.18) million, Direct Investments ($357.45) million, and RE Debt ($0.90) million.

![Value Added (Loss) By Strategy](chart.png)
As of June 30, 2017, the private markets funds in the DPFP portfolio had the following investment strategy diversification based on the investment fund’s reported value:

We thank you for the opportunity to work with the DPFP and look forward to continued success in the future.
### Dallas Police & Fire Pension System
#### Performance Analysis - Total Private Markets Program

**6/30/2017**

<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Commitment Amount</th>
<th>Paid in Capital</th>
<th>Capital to be Funded</th>
<th>Cumulative Distributions</th>
<th>Valuation</th>
<th>Total Value</th>
<th>Net Benefit</th>
<th>Call Ratio</th>
<th>DPI Ratio</th>
<th>TVPI Ratio</th>
<th>IRR (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Equity / Debt</td>
<td>$1,278,364,612</td>
<td>$1,174,126,430</td>
<td>$41,683,565</td>
<td>$1,054,098,741</td>
<td>$244,642,729</td>
<td>$1,298,741,470</td>
<td>$98,520,444</td>
<td>92%</td>
<td>0.88</td>
<td>1.08</td>
<td>2.16%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>$2,194,851,541</td>
<td>$1,986,153,981</td>
<td>$137,776,510</td>
<td>$1,017,609,490</td>
<td>$1,033,892,990</td>
<td>$2,051,502,480</td>
<td>$65,265,155</td>
<td>90%</td>
<td>0.51</td>
<td>1.03</td>
<td>0.67%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,473,216,153</strong></td>
<td><strong>$3,160,280,411</strong></td>
<td><strong>$179,460,075</strong></td>
<td><strong>$2,071,708,231</strong></td>
<td><strong>$1,350,243,950</strong></td>
<td><strong>$163,785,599</strong></td>
<td><strong>91%</strong></td>
<td><strong>0.65</strong></td>
<td><strong>1.05</strong></td>
<td><strong>1.15%</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Performance Analysis - Private Markets Subsectors

<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Commitment Amount</th>
<th>Paid in Capital</th>
<th>Capital to be Funded</th>
<th>Cumulative Distributions</th>
<th>Valuation</th>
<th>Total Value</th>
<th>Net Benefit</th>
<th>Call Ratio</th>
<th>DPI Ratio</th>
<th>TVPI Ratio</th>
<th>IRR (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Equity</td>
<td>$817,061,050</td>
<td>$737,275,318</td>
<td>$38,977,352</td>
<td>$579,570,663</td>
<td>$228,260,879</td>
<td>$807,831,542</td>
<td>$55,589,257</td>
<td>90%</td>
<td>0.77</td>
<td>1.07</td>
<td>1.85%</td>
</tr>
<tr>
<td>Private Debt</td>
<td>$461,303,562</td>
<td>$436,851,112</td>
<td>$2,706,213</td>
<td>$474,528,078</td>
<td>$16,381,850</td>
<td>$490,909,929</td>
<td>$42,931,187</td>
<td>95%</td>
<td>1.06</td>
<td>1.10</td>
<td>2.76%</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>$236,406,706</td>
<td>$236,406,706</td>
<td>-</td>
<td>$209,004,999</td>
<td>$247,899,394</td>
<td>$456,904,392</td>
<td>$220,497,686</td>
<td>100%</td>
<td>0.88</td>
<td>1.93</td>
<td>9.66%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$1,594,444,835</td>
<td>$1,460,481,786</td>
<td>$102,275,612</td>
<td>$657,613,670</td>
<td>$545,880,997</td>
<td>$1,203,494,667</td>
<td>$(256,987,119)</td>
<td>92%</td>
<td>0.45</td>
<td>0.82</td>
<td>-4.02%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$364,000,000</td>
<td>$289,265,489</td>
<td>$35,500,897</td>
<td>$150,990,822</td>
<td>$240,112,599</td>
<td>$391,103,421</td>
<td>$101,754,588</td>
<td>79%</td>
<td>0.52</td>
<td>1.35</td>
<td>7.92%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,473,216,153</strong></td>
<td><strong>$3,160,280,411</strong></td>
<td><strong>$179,460,075</strong></td>
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<td><strong>91%</strong></td>
<td><strong>0.65</strong></td>
<td><strong>1.05</strong></td>
<td><strong>1.15%</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. IRR's are since inception as of the following dates: Private Equity (10.13.94), Private Debt (12.20.01), Real Estate (3.31.99), Natural Resources (3.12.99), Infrastructure (10.3.07)
Dallas Police & Fire Pension System

Second Quarter 2017
Private Equity & Private Debt
## Private Equity and Private Debt

The following table presents the status of the DPFP **PRIVATE EQUITY** portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
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<tr>
<td>$817,061,050</td>
<td>$61,288,143</td>
<td>$737,275,318</td>
<td>$795,570,663</td>
<td>$228,260,879</td>
<td>90.24%</td>
<td>78.61%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Private Equity Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$38,977,352</td>
<td>$267,238,231</td>
<td>$2,122,543,462</td>
<td>5%</td>
<td>10.75%</td>
<td>12.59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>$807,831,542</td>
<td>1.07</td>
<td>1.85%</td>
</tr>
</tbody>
</table>

The following table presents the status of the DPFP **PRIVATE DEBT** portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$461,303,562</td>
<td>$21,763,165</td>
<td>$436,851,112</td>
<td>$474,528,078</td>
<td>$16,381,850</td>
<td>94.70%</td>
<td>108.62%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Private Debt Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,706,213</td>
<td>$19,088,063</td>
<td>$2,122,543,462</td>
<td>5%</td>
<td>0.77%</td>
<td>0.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>$490,909,928</td>
<td>1.10</td>
<td>2.76%</td>
</tr>
<tr>
<td>Investment Name</td>
<td>Vintage Year</td>
<td>Commitment Amount</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>BankCap Partners Fund I</td>
<td>2007</td>
<td>20,000,000</td>
</tr>
<tr>
<td>Highland Credit Ops</td>
<td>2006</td>
<td>35,348,165</td>
</tr>
<tr>
<td>Highland Crusader Fund</td>
<td>2003</td>
<td>50,955,397</td>
</tr>
<tr>
<td>Huff Alternative Fund</td>
<td>2000</td>
<td>66,795,718</td>
</tr>
<tr>
<td>Huff Energy Fund</td>
<td>2006</td>
<td>100,000,000</td>
</tr>
<tr>
<td>Industry Ventures Partnership Holdings IV</td>
<td>2016</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Lone Star CRA Fund</td>
<td>2008</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Lone Star Growth Capital</td>
<td>2006</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Lone Star Opportunities Fund V, LP</td>
<td>2012</td>
<td>75,000,000</td>
</tr>
<tr>
<td>North Texas Opportunity Fund</td>
<td>2000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>OCM Opportunities Fund IV</td>
<td>2001</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Riverstone Credit Partners</td>
<td>2016</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Yellowstone Energy Ventures II, L.P.</td>
<td>2008</td>
<td>5,283,254</td>
</tr>
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</table>

**Total: Active Funds**

<p>| | | | | | | | | |</p>
<table>
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<tr>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$19,562,020</td>
<td>0.64</td>
<td>-22.30</td>
<td>-27.33</td>
<td>-15.65</td>
<td>-8.63</td>
<td>0.96</td>
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**Completed Funds:**

<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Vintage Year</th>
<th>Commitment Amount</th>
<th>QTD</th>
<th>YTD</th>
<th>1 Year</th>
<th>3 Year</th>
<th>5 Year</th>
<th>Inception</th>
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<tbody>
<tr>
<td>Ashmore Global Special Situations Fund IV1</td>
<td>2007</td>
<td>70,000,000</td>
<td>-2.82</td>
<td>-78.11</td>
<td>-20.79</td>
<td>-14.21</td>
<td>-10.12</td>
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<tr>
<td>BankCap Partners Opportunity Fund, LP2</td>
<td>2013</td>
<td>20,000,000</td>
<td>-17.88</td>
<td>-4.41</td>
<td>-5.69</td>
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<tr>
<td>CDK Southern Cross</td>
<td>2008</td>
<td>1,535,316</td>
<td>-37.44</td>
<td>-20.86</td>
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<tr>
<td>HM Capital Sector Performance Fund</td>
<td>2008</td>
<td>47,300,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-6.55</td>
<td>-4.01</td>
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<tr>
<td>Huff Alternative Income Fund</td>
<td>1994</td>
<td>40,000,000</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Kainos Capital Partners, L.P.2</td>
<td>2013</td>
<td>35,000,000</td>
<td>8.42</td>
<td>29.32</td>
<td></td>
<td></td>
<td></td>
<td>24.76</td>
</tr>
<tr>
<td>Levine Leichtman Capital Partners IV2</td>
<td>2008</td>
<td>50,000,000</td>
<td>29.61</td>
<td>14.16</td>
<td>16.81</td>
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<td></td>
<td>20.12</td>
</tr>
<tr>
<td>Levine Leichtman Capital Partners V, L.P.2</td>
<td>2013</td>
<td>25,000,000</td>
<td>27.92</td>
<td>18.42</td>
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<td>15.26</td>
</tr>
<tr>
<td>Levine Leichtman Deep Value Fund</td>
<td>2006</td>
<td>75,000,000</td>
<td>-0.50</td>
<td>10.10</td>
<td>-6.32</td>
<td></td>
<td></td>
<td>0.73</td>
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<tr>
<td>Levine Leichtman Private Capital Solutions II, L.P.2</td>
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<td>25,000,000</td>
<td>-0.54</td>
<td>-2.36</td>
<td>1.77</td>
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<td></td>
<td>1.30</td>
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<tr>
<td>Lone Star Fund IX (U.S.), L.P.1</td>
<td>2014</td>
<td>35,000,000</td>
<td>-1.16</td>
<td>-9.64</td>
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<td></td>
<td></td>
<td>-3.28</td>
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<tr>
<td>Lone Star Fund VII (U.S.), L.P.1</td>
<td>2011</td>
<td>25,000,000</td>
<td>-1.01</td>
<td>-30.18</td>
<td>0.52</td>
<td>55.16</td>
<td></td>
<td>47.54</td>
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<tr>
<td>Lone Star Fund VIII (U.S.), L.P.1</td>
<td>2013</td>
<td>25,000,000</td>
<td>-1.25</td>
<td>-12.04</td>
<td>9.47</td>
<td></td>
<td></td>
<td>16.26</td>
</tr>
<tr>
<td>Merit Energy Partners E-1</td>
<td>2004</td>
<td>7,018,930</td>
<td>-10.79</td>
<td>-37.25</td>
<td>-29.51</td>
<td>0.98</td>
<td></td>
<td>14.48</td>
</tr>
<tr>
<td>Oaktree Loan Fund 2X</td>
<td>2007</td>
<td>60,000,000</td>
<td>-3.35</td>
<td>-79.03</td>
<td>-37.96</td>
<td>0.31</td>
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<td>2.24</td>
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<tr>
<td>Oaktree Power Fund III</td>
<td>2011</td>
<td>30,000,000</td>
<td>-3.35</td>
<td>-1.00</td>
<td>9.70</td>
<td>16.91</td>
<td></td>
<td>12.35</td>
</tr>
<tr>
<td>Pharos Capital Co-Investment, LLC</td>
<td>2007</td>
<td>20,000,000</td>
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<td></td>
<td></td>
<td></td>
<td>42.83</td>
<td>-9.92</td>
</tr>
<tr>
<td>Pharos Capital Co-Investments, LP</td>
<td>2008</td>
<td>40,000,000</td>
<td>-9.34</td>
<td>-14.67</td>
<td>-98.21</td>
<td>-1.49</td>
<td>21.36</td>
<td>8.42</td>
</tr>
<tr>
<td>Pharos Capital Partners IIA, L.P.1</td>
<td>2005</td>
<td>20,000,000</td>
<td>-79.63</td>
<td>-34.14</td>
<td>-18.58</td>
<td>-2.39</td>
<td></td>
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</tr>
<tr>
<td>Pharos Capital Partners III, L.P.1</td>
<td>2012</td>
<td>50,000,000</td>
<td>-51.50</td>
<td>-18.69</td>
<td></td>
<td></td>
<td>-19.95</td>
<td></td>
</tr>
</tbody>
</table>

**Total: Completed Funds**

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>758,820,592</td>
<td>-95.11</td>
<td>-6.04</td>
<td>-22.71</td>
<td>-2.94</td>
<td>3.93</td>
<td>3.30</td>
</tr>
</tbody>
</table>

**Total: Dallas Police & Fire Pension System**

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,278,364,612</td>
<td>0.46</td>
<td>-21.39</td>
<td>-25.96</td>
<td>-10.34</td>
<td>-2.88</td>
<td>2.16</td>
</tr>
</tbody>
</table>

1. Funds sold in Evercore secondary sale during Q1 2017
2. Funds sold in Evercore secondary sale during Q4 2016
<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Vintage Year</th>
<th>Commitment Amount</th>
<th>Paid in Capital</th>
<th>Capital to be Funded</th>
<th>Additional Fees</th>
<th>Cumulative Distributions</th>
<th>Valuation</th>
<th>Total Value</th>
<th>Net Benefit</th>
<th>Call Ratio</th>
<th>DPI Ratio</th>
<th>TVPI Ratio</th>
<th>IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Venture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Industry Ventures Partnership Holdings IV</td>
<td>2016</td>
<td>5,000,000</td>
<td>1,125,000</td>
<td>3,875,000</td>
<td>0</td>
<td>0</td>
<td>1,184,068</td>
<td>1,184,068</td>
<td>59,068</td>
<td>23%</td>
<td>0.00</td>
<td>1.05</td>
<td>11.87%</td>
</tr>
<tr>
<td><strong>Subtotal: Venture</strong></td>
<td></td>
<td>5,000,000</td>
<td>1,125,000</td>
<td>3,875,000</td>
<td>0</td>
<td>0</td>
<td>1,184,068</td>
<td>1,184,068</td>
<td>59,068</td>
<td>23%</td>
<td>0.00</td>
<td>1.05</td>
<td>11.87%</td>
</tr>
<tr>
<td><strong>Growth Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. BankCap Partners Fund I</td>
<td>2007</td>
<td>20,000,000</td>
<td>20,000,000</td>
<td>0</td>
<td>0</td>
<td>15,348,386</td>
<td>8,429,880</td>
<td>23,778,266</td>
<td>3,778,266</td>
<td>100%</td>
<td>0.77</td>
<td>1.19</td>
<td>2.08%</td>
</tr>
<tr>
<td>2. Hudson Clean Energy Partners</td>
<td>2009</td>
<td>25,000,000</td>
<td>24,938,574</td>
<td>61,426</td>
<td>0</td>
<td>3,661,896</td>
<td>8,440,990</td>
<td>12,102,886</td>
<td>-12,385,688</td>
<td>100%</td>
<td>0.15</td>
<td>0.49</td>
<td>-13.73%</td>
</tr>
<tr>
<td>3. Lone Star CRA Fund</td>
<td>2008</td>
<td>50,000,000</td>
<td>57,432,941</td>
<td>0</td>
<td>0</td>
<td>12,928,698</td>
<td>39,215,558</td>
<td>52,144,256</td>
<td>-5,288,685</td>
<td>115%</td>
<td>0.23</td>
<td>0.91</td>
<td>-24.47%</td>
</tr>
<tr>
<td>4. Lone Star Growth Capital</td>
<td>2006</td>
<td>16,000,000</td>
<td>12,800,000</td>
<td>16,000,000</td>
<td>0</td>
<td>12,800,000</td>
<td>1,590,420</td>
<td>14,390,420</td>
<td>1,590,420</td>
<td>80%</td>
<td>1.00</td>
<td>1.12</td>
<td>1.96%</td>
</tr>
<tr>
<td>5. Lone Star Opportunities Fund V, LP</td>
<td>2012</td>
<td>75,000,000</td>
<td>56,250,000</td>
<td>18,750,000</td>
<td>0</td>
<td>531,444</td>
<td>14,194,022</td>
<td>14,725,466</td>
<td>-41,524,534</td>
<td>75%</td>
<td>0.01</td>
<td>0.26</td>
<td>-80.76%</td>
</tr>
<tr>
<td>6. North Texas Opportunity Fund</td>
<td>2000</td>
<td>10,000,000</td>
<td>10,000,000</td>
<td>0</td>
<td>0</td>
<td>8,798,464</td>
<td>2,129,894</td>
<td>10,928,358</td>
<td>928,358</td>
<td>100%</td>
<td>0.88</td>
<td>1.09</td>
<td>1.03%</td>
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<tr>
<td><strong>Subtotal: Growth Equity</strong></td>
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<td>196,000,000</td>
<td>181,421,515</td>
<td>34,811,426</td>
<td>0</td>
<td>0</td>
<td>54,068,889</td>
<td>74,000,764</td>
<td>128,069,633</td>
<td>-53,351,862</td>
<td>84%</td>
<td>0.30</td>
<td>0.71</td>
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<tr>
<td><strong>Buyouts</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Huff Alternative Fund</td>
<td>2000</td>
<td>66,795,718</td>
<td>66,795,718</td>
<td>0</td>
<td>0</td>
<td>12,022,676</td>
<td>56,245,197</td>
<td>33,524,315</td>
<td>89,769,512</td>
<td>100%</td>
<td>0.71</td>
<td>1.14</td>
<td>1.78%</td>
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<tr>
<td><strong>Subtotal: Buyouts</strong></td>
<td></td>
<td>66,795,718</td>
<td>66,795,718</td>
<td>0</td>
<td>0</td>
<td>12,022,676</td>
<td>56,245,197</td>
<td>33,524,315</td>
<td>89,769,512</td>
<td>100%</td>
<td>0.71</td>
<td>1.14</td>
<td>1.78%</td>
</tr>
<tr>
<td><strong>Direct Lending</strong></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Riverstone Credit Partners</td>
<td>2016</td>
<td>10,000,000</td>
<td>7,293,787</td>
<td>2,706,213</td>
<td>102,142</td>
<td>959,178</td>
<td>7,424,448</td>
<td>8,383,626</td>
<td>987,697</td>
<td>73%</td>
<td>0.13</td>
<td>1.13</td>
<td>18.50%</td>
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<tr>
<td><strong>Subtotal: Direct Lending</strong></td>
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<td>10,000,000</td>
<td>7,293,787</td>
<td>2,706,213</td>
<td>102,142</td>
<td>959,178</td>
<td>7,424,448</td>
<td>8,383,626</td>
<td>987,697</td>
<td>73%</td>
<td>0.13</td>
<td>1.13</td>
<td>18.50%</td>
</tr>
<tr>
<td><strong>Distressed</strong></td>
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<tr>
<td>1. OCM Opportunities Fund IV</td>
<td>2001</td>
<td>50,000,000</td>
<td>50,000,000</td>
<td>0</td>
<td>0</td>
<td>82,508,450</td>
<td>9,564</td>
<td>82,518,014</td>
<td>32,518,014</td>
<td>100%</td>
<td>1.65</td>
<td>1.65</td>
<td>28.36%</td>
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<td>50,000,000</td>
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<td>0</td>
<td>82,508,450</td>
<td>9,564</td>
<td>82,518,014</td>
<td>32,518,014</td>
<td>100%</td>
<td>1.65</td>
<td>1.65</td>
<td>28.36%</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Huff Energy Fund</td>
<td>2006</td>
<td>100,000,000</td>
<td>99,880,021</td>
<td>119,979</td>
<td>-947,331</td>
<td>4,477,394</td>
<td>119,444,777</td>
<td>123,922,171</td>
<td>24,989,481</td>
<td>100%</td>
<td>0.05</td>
<td>1.25</td>
<td>3.10%</td>
</tr>
<tr>
<td>2. Yellowstone Energy Ventures II, L.P.</td>
<td>2008</td>
<td>5,283,254</td>
<td>5,112,307</td>
<td>170,947</td>
<td>0</td>
<td>1,458,572</td>
<td>106,955</td>
<td>1,565,527</td>
<td>-3,546,780</td>
<td>97%</td>
<td>0.29</td>
<td>0.31</td>
<td>-28.31%</td>
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<tr>
<td><strong>Subtotal: Energy</strong></td>
<td></td>
<td>105,283,254</td>
<td>104,992,328</td>
<td>290,926</td>
<td>-947,331</td>
<td>5,935,966</td>
<td>119,551,732</td>
<td>125,487,698</td>
<td>21,442,701</td>
<td>100%</td>
<td>0.06</td>
<td>1.21</td>
<td>2.60%</td>
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<tr>
<td><strong>Credit Opportunities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>1. Highland Credit Ops</td>
<td>2006</td>
<td>35,348,165</td>
<td>35,348,165</td>
<td>0</td>
<td>0</td>
<td>23,595,921</td>
<td>6,215,935</td>
<td>29,811,856</td>
<td>-5,536,309</td>
<td>100%</td>
<td>0.67</td>
<td>0.84</td>
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<tr>
<td>2. Highland Crusader Fund</td>
<td>2003</td>
<td>50,955,397</td>
<td>50,955,397</td>
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<td>0</td>
<td>62,263,032</td>
<td>2,731,903</td>
<td>64,994,935</td>
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<td>1.28</td>
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<td><strong>Subtotal: Credit Opportunities</strong></td>
<td></td>
<td>86,303,562</td>
<td>86,303,562</td>
<td>0</td>
<td>0</td>
<td>85,858,953</td>
<td>8,947,838</td>
<td>94,806,791</td>
<td>8,503,229</td>
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<td>0.99</td>
<td>1.10</td>
<td>1.53%</td>
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<tr>
<td><strong>Total: Active Funds</strong></td>
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<td>519,562,020</td>
<td>498,111,395</td>
<td>41,483,655</td>
<td>11,177,487</td>
<td>285,576,632</td>
<td>244,642,729</td>
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<td>0.56</td>
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<td>Investment Name</td>
<td>Vintage Year</td>
<td>Commitment Amount</td>
<td>Paid in Capital</td>
<td>Capital to be Funded</td>
<td>Additional Fees</td>
<td>Cumulative Distributions</td>
<td>Valuation</td>
<td>Total Value</td>
<td>Net Benefit</td>
<td>Call Ratio</td>
<td>DPI Ratio</td>
<td>TVPI Ratio</td>
<td>IRR</td>
</tr>
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<td>-----------------</td>
<td>--------------</td>
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<td>----------------</td>
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<td>------------</td>
<td>-----------</td>
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<td>Ashmore Global Special Situations Fund IV</td>
<td>2007</td>
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<td>70,012,300</td>
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<td>0</td>
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<td>0.57</td>
<td>-10.12%</td>
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<td>BankCap Partners Opportunity Fund, LP</td>
<td>2013</td>
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<td>19,587,052</td>
<td>0</td>
<td>0</td>
<td>18,266,454</td>
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<td>18,266,454</td>
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<td>100%</td>
<td>0.93</td>
<td>0.93</td>
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<td>CDK Southern Cross</td>
<td>2008</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1,535,316</td>
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<td>0.00</td>
<td>-20.08%</td>
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<td>HM Capital Sector Performance Fund</td>
<td>2008</td>
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<td>44,354,248</td>
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<td>1,933,378</td>
<td>39,792,545</td>
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<td>40,000,000</td>
<td>0</td>
<td>2,018,676</td>
<td>66,940,198</td>
<td>0</td>
<td>66,940,198</td>
<td>24,921,522</td>
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<td>1.59</td>
<td>17.82%</td>
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<td>Kainos Capital Partners, L.P.</td>
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<td>30,316,015</td>
<td>0</td>
<td>0</td>
<td>43,263,688</td>
<td>0</td>
<td>43,263,688</td>
<td>-12,997,000</td>
<td>100%</td>
<td>1.43</td>
<td>1.43</td>
<td>24.76%</td>
</tr>
<tr>
<td>Levine Leichtman Capital Partners IV</td>
<td>2008</td>
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<td>38,009,085</td>
<td>0</td>
<td>0</td>
<td>78,916,788</td>
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<td>78,916,788</td>
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<td>2.08</td>
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<td>Levine Leichtman Capital Partners V, L.P.</td>
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<td>19,181,272</td>
<td>0</td>
<td>-4,405</td>
<td>24,506,336</td>
<td>0</td>
<td>24,506,336</td>
<td>5,329,470</td>
<td>100%</td>
<td>1.28</td>
<td>1.28</td>
<td>15.26%</td>
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<tr>
<td>Levine Leichtman Deep Value Fund</td>
<td>2006</td>
<td>75,000,000</td>
<td>75,000,000</td>
<td>0</td>
<td>11,025,662</td>
<td>88,688,224</td>
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<td>88,688,224</td>
<td>2,662,562</td>
<td>100%</td>
<td>1.03</td>
<td>1.03</td>
<td>0.73%</td>
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<td>Levine Leichtman Private Capital Solutions II, L.P.</td>
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<td>25,000,000</td>
<td>17,961,807</td>
<td>0</td>
<td>-175</td>
<td>18,691,764</td>
<td>0</td>
<td>18,691,764</td>
<td>730,132</td>
<td>100%</td>
<td>1.04</td>
<td>1.04</td>
<td>1.30%</td>
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<td>Lone Star Fund IX (U.S.), L.P.</td>
<td>2014</td>
<td>35,000,000</td>
<td>24,241,467</td>
<td>0</td>
<td>0</td>
<td>23,459,730</td>
<td>0</td>
<td>23,459,730</td>
<td>-781,738</td>
<td>100%</td>
<td>0.97</td>
<td>0.97</td>
<td>-3.28%</td>
</tr>
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<td>Lone Star Fund VII (U.S.), L.P.</td>
<td>2011</td>
<td>25,000,000</td>
<td>23,469,024</td>
<td>0</td>
<td>0</td>
<td>41,624,566</td>
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<td>41,624,566</td>
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<td>1.77</td>
<td>1.77</td>
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<td>Lone Star Fund VIII (U.S.), L.P.</td>
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<td>25,000,000</td>
<td>22,564,537</td>
<td>0</td>
<td>0</td>
<td>28,017,551</td>
<td>0</td>
<td>28,017,551</td>
<td>5,453,014</td>
<td>100%</td>
<td>1.24</td>
<td>1.24</td>
<td>16.26%</td>
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<tr>
<td>Merit Energy Partners E-1</td>
<td>2004</td>
<td>7,018,930</td>
<td>7,031,052</td>
<td>0</td>
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<td>14,975,776</td>
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<td>14,975,776</td>
<td>7,466,464</td>
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<td>2.13</td>
<td>14.48%</td>
</tr>
<tr>
<td>Merit Energy Partners F-1</td>
<td>2005</td>
<td>8,748,346</td>
<td>8,749,275</td>
<td>0</td>
<td>0</td>
<td>3,801,206</td>
<td>0</td>
<td>3,801,206</td>
<td>-4,948,069</td>
<td>100%</td>
<td>0.43</td>
<td>0.43</td>
<td>-17.19%</td>
</tr>
<tr>
<td>Merit Energy Partners G, LP</td>
<td>2008</td>
<td>39,200,000</td>
<td>39,320,050</td>
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<td>0</td>
<td>26,756,651</td>
<td>0</td>
<td>26,756,651</td>
<td>-12,563,399</td>
<td>100%</td>
<td>0.68</td>
<td>0.68</td>
<td>-9.96%</td>
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<tr>
<td>Merit Energy Partners H, LP</td>
<td>2010</td>
<td>10,000,000</td>
<td>10,033,415</td>
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<td>0</td>
<td>6,870,451</td>
<td>0</td>
<td>6,870,451</td>
<td>-3,162,964</td>
<td>100%</td>
<td>0.68</td>
<td>0.68</td>
<td>-13.78%</td>
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<tr>
<td>Oaktree Loan Fund 2X</td>
<td>2007</td>
<td>60,000,000</td>
<td>60,004,628</td>
<td>0</td>
<td>0</td>
<td>65,066,951</td>
<td>0</td>
<td>65,066,951</td>
<td>5,002,323</td>
<td>100%</td>
<td>1.08</td>
<td>1.08</td>
<td>2.24%</td>
</tr>
<tr>
<td>Oaktree Power Fund III</td>
<td>2011</td>
<td>30,000,000</td>
<td>16,167,147</td>
<td>0</td>
<td>0</td>
<td>23,839,959</td>
<td>0</td>
<td>23,839,959</td>
<td>7,672,812</td>
<td>100%</td>
<td>1.47</td>
<td>1.47</td>
<td>12.35%</td>
</tr>
<tr>
<td>Pharos Capital Co-Investment, LLC</td>
<td>2007</td>
<td>20,000,000</td>
<td>20,080,306</td>
<td>0</td>
<td>0</td>
<td>10,019,157</td>
<td>0</td>
<td>10,019,157</td>
<td>-9,980,843</td>
<td>100%</td>
<td>0.50</td>
<td>0.50</td>
<td>-9.92%</td>
</tr>
<tr>
<td>Pharos Capital Co-Investments, LP</td>
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<td>0</td>
<td>67,459,271</td>
<td>0</td>
<td>67,459,271</td>
<td>27,497,211</td>
<td>100%</td>
<td>1.69</td>
<td>1.69</td>
<td>8.42%</td>
</tr>
<tr>
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<td>17,715,199</td>
<td>0</td>
<td>0</td>
<td>17,715,199</td>
<td>0</td>
<td>17,715,199</td>
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<td>100%</td>
<td>0.88</td>
<td>0.88</td>
<td>-2.39%</td>
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<tr>
<td>Pharos Capital Partners III, L.P.</td>
<td>2012</td>
<td>50,000,000</td>
<td>28,397,038</td>
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<td>-54,286</td>
<td>20,196,932</td>
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<td>20,196,932</td>
<td>-8,145,820</td>
<td>100%</td>
<td>0.71</td>
<td>0.71</td>
<td>-19.95%</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td>758,802,592</td>
<td>676,015,035</td>
<td>14,917,109</td>
<td>768,522,109</td>
<td>77,589,965</td>
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1. Funds sold in Evercore secondary sale during Q1 2017
2. Funds sold in Evercore secondary sale during Q4 2016
## Growth Equity

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>BankCap Partners Fund I</td>
<td>2007</td>
<td>18</td>
<td>2.08%</td>
<td>15.18%</td>
<td>10.35%</td>
<td>2.01%</td>
<td>0.77x</td>
<td>1.43x</td>
<td>1.00x</td>
<td>0.57x</td>
<td>1.19x</td>
<td>4</td>
<td>U.S. Growth Equity</td>
</tr>
<tr>
<td>Hudson Clean Energy Partners</td>
<td>2009</td>
<td>7</td>
<td>-13.73%</td>
<td>---</td>
<td>10.87%</td>
<td>---</td>
<td>0.15x</td>
<td>---</td>
<td>0.66x</td>
<td>---</td>
<td>0.49x</td>
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<td>U.S. Growth Equity</td>
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<tr>
<td>Lone Star CRA Fund</td>
<td>2008</td>
<td>7</td>
<td>-24.47%</td>
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<td>10.06%</td>
<td>---</td>
<td>0.23x</td>
<td>---</td>
<td>1.07x</td>
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<td>0.91x</td>
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<tr>
<td>Lone Star Growth Capital</td>
<td>2006</td>
<td>12</td>
<td>-0.76%</td>
<td>16.33%</td>
<td>13.29%</td>
<td>11.62%</td>
<td>0.01x</td>
<td>0.36x</td>
<td>0.19x</td>
<td>0.03x</td>
<td>0.26x</td>
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<td>U.S. Growth Equity</td>
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<tr>
<td>Lone Star Opportunities Fund V, LP</td>
<td>2012</td>
<td>12</td>
<td>1.03%</td>
<td>9.65%</td>
<td>4.40%</td>
<td>-4.42%</td>
<td>0.88x</td>
<td>1.61x</td>
<td>1.33x</td>
<td>0.76x</td>
<td>1.09x</td>
<td>3</td>
<td>U.S. Growth Equity</td>
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## Buyouts

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<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huff Alternative Fund</td>
<td>2000</td>
<td>54</td>
<td>1.78%</td>
<td>22.18%</td>
<td>14.33%</td>
<td>10.38%</td>
<td>0.71x</td>
<td>2.25x</td>
<td>1.85x</td>
<td>1.52x</td>
<td>1.14x</td>
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<td>U.S. Buyout</td>
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## Direct Lending

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<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
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</thead>
<tbody>
<tr>
<td>Riverstone Credit Partners</td>
<td>2016</td>
<td>112</td>
<td>18.50%</td>
<td>9.04%</td>
<td>-1.95%</td>
<td>-16.12%</td>
<td>0.13x</td>
<td>0.00x</td>
<td>0.00x</td>
<td>0.00x</td>
<td>1.13x</td>
<td>1</td>
<td>U.S. All PE</td>
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## Distressed

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<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
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<tbody>
<tr>
<td>OCM Opportunities Fund IV</td>
<td>2001</td>
<td>2</td>
<td>28.36%</td>
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<td>---</td>
<td>1.65x</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>1.65x</td>
<td>---</td>
<td>U.S. Distressed</td>
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</table>

## Energy

<table>
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<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huff Energy Fund</td>
<td>2006</td>
<td>11</td>
<td>3.10%</td>
<td>12.00%</td>
<td>2.99%</td>
<td>-4.42%</td>
<td>0.05x</td>
<td>1.28x</td>
<td>0.99x</td>
<td>0.56x</td>
<td>1.25x</td>
<td>2</td>
<td>U.S. Energy</td>
</tr>
<tr>
<td>Yellowstone Energy Ventures II, L.P.</td>
<td>2008</td>
<td>13</td>
<td>-28.31%</td>
<td>8.76%</td>
<td>5.87%</td>
<td>-0.05%</td>
<td>0.29x</td>
<td>0.81x</td>
<td>0.63x</td>
<td>0.44x</td>
<td>0.31x</td>
<td>4</td>
<td>U.S. Energy</td>
</tr>
</tbody>
</table>

## Credit Opportunities

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland Credit Ops</td>
<td>2006</td>
<td>18</td>
<td>-2.17%</td>
<td>12.08%</td>
<td>8.64%</td>
<td>5.70%</td>
<td>0.67x</td>
<td>1.72x</td>
<td>1.27x</td>
<td>1.05x</td>
<td>0.64x</td>
<td>4</td>
<td>Global Distressed</td>
</tr>
<tr>
<td>Highland Crusader Fund</td>
<td>2003</td>
<td>6</td>
<td>4.29%</td>
<td>---</td>
<td>12.59%</td>
<td>---</td>
<td>1.22x</td>
<td>---</td>
<td>1.60x</td>
<td>---</td>
<td>1.28x</td>
<td>NA</td>
<td>Global Distressed</td>
</tr>
</tbody>
</table>

## Venture

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Ventures Partnership Holdings IV</td>
<td>2016</td>
<td>46</td>
<td>11.87%</td>
<td>3.97%</td>
<td>-3.86%</td>
<td>-19.03%</td>
<td>0.00x</td>
<td>0.00x</td>
<td>0.00x</td>
<td>0.00x</td>
<td>1.05x</td>
<td>1</td>
<td>U.S. Venture</td>
</tr>
</tbody>
</table>

Benchmarks data from Cambridge Associates/ThomsonOne as of 6/30/2017. Data only includes active funds.
Dallas Police & Fire Pension System

Second Quarter 2017

Private Real Assets Program
(Real Estate, Infrastructure, Natural Resources)
# Real Estate and Real Assets

The following table presents the status of the DPFP **REAL ESTATE** portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,594,444,835</td>
<td>$31,729,315</td>
<td>$1,460,481,786</td>
<td>$657,613,670</td>
<td>$545,880,997</td>
<td>91.60%</td>
<td>45.03%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure (Reported Value + Unfunded Commitment)</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Real Estate Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$102,275,612</td>
<td>$648,156,609</td>
<td>$2,122,543,462</td>
<td>12%</td>
<td>25.72%</td>
<td>30.54%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,203,494,667</td>
<td>0.82</td>
<td>-4.02%</td>
</tr>
</tbody>
</table>

The following table presents the status of the DPFP **NATURAL RESOURCES** portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$236,406,706</td>
<td>$0</td>
<td>$236,406,706</td>
<td>$4,999</td>
<td>$247,899,394</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure (Reported Value + Unfunded Commitment)</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Natural Resources Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$247,899,394</td>
<td>$2,122,543,462</td>
<td>3%</td>
<td>11.68%</td>
<td>11.68%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>$247,904,393</td>
<td>1.93</td>
<td>9.66%</td>
</tr>
</tbody>
</table>

The following table presents the status of the DPFP **INFRASTRUCTURE** portfolio as of June 30, 2017:

<table>
<thead>
<tr>
<th>Since Inception Commitments</th>
<th>Terminated Commitments</th>
<th>Amount Funded</th>
<th>Amount Distributed</th>
<th>Reported Value</th>
<th>Call Ratio</th>
<th>Distribution Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$364,000,000</td>
<td>$39,233,614</td>
<td>$289,265,489</td>
<td>$150,990,822</td>
<td>$240,112,599</td>
<td>79.47%</td>
<td>52.20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unfunded Commitment</th>
<th>Market Exposure (Reported Value + Unfunded Commitment)</th>
<th>Total Fund Composite as of 6/30/2017</th>
<th>Infrastructure Target</th>
<th>Reported Value of Total Fund</th>
<th>Market Exposure as a % Total Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$35,500,897</td>
<td>$275,613,496</td>
<td>$2,122,543,462</td>
<td>5%</td>
<td>11.31%</td>
<td>12.99%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Value (Reported Value + Distributions)</th>
<th>Total Value To Capital Call Ratio</th>
<th>Internal Rate of Return IRR, Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>$391,103,421</td>
<td>1.35</td>
<td>7.92%</td>
</tr>
<tr>
<td>Investment Name</td>
<td>Vintage Year</td>
<td>Commitment Amount</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>RE Direct Investments(^1)</td>
<td></td>
<td>1,035,343,354</td>
</tr>
<tr>
<td>RE Core</td>
<td></td>
<td>72,154,238</td>
</tr>
<tr>
<td>RE Debt</td>
<td></td>
<td>4,500,000</td>
</tr>
<tr>
<td>RE Value Add/Opportun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Hearthstone MS II Homebuilding Investors</td>
<td>1999</td>
<td>10,000,000</td>
</tr>
<tr>
<td>2 Hearthstone MS III Homebuilding Investors</td>
<td>2003</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Total: RE Value Add/Opportun</td>
<td></td>
<td>20,155,554</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 AIRRO</td>
<td>2008</td>
<td>37,000,000</td>
</tr>
<tr>
<td>2 AIRRO II</td>
<td>2013</td>
<td>40,000,000</td>
</tr>
<tr>
<td>3 J.P. Morgan Maritime Fund, L.P.</td>
<td>2009</td>
<td>50,000,000</td>
</tr>
<tr>
<td>4 LBU Infrastructure Group Holding, LLC (LBU)</td>
<td>2009</td>
<td>50,000,000</td>
</tr>
<tr>
<td>5 NTE Mobility Partners Holding, LLC (NTE)</td>
<td>2009</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Total: Infrastructure</td>
<td></td>
<td>227,000,000</td>
</tr>
<tr>
<td>Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Hancock Agricultural</td>
<td>1998</td>
<td>74,420,001</td>
</tr>
<tr>
<td>Total: Natural Resources</td>
<td></td>
<td>74,420,001</td>
</tr>
<tr>
<td>Timber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 BTG International Timberland</td>
<td>2006</td>
<td>80,107,009</td>
</tr>
<tr>
<td>2 FIA Timberland</td>
<td>1992</td>
<td>59,649,696</td>
</tr>
<tr>
<td>Total: Timber</td>
<td></td>
<td>139,756,705</td>
</tr>
<tr>
<td>Total: Active Funds &amp; Investments</td>
<td></td>
<td>1,573,329,852</td>
</tr>
<tr>
<td>Total: Completed Funds &amp; Investments</td>
<td></td>
<td>621,521,689</td>
</tr>
<tr>
<td>Total: Dallas Police &amp; Fire Pension System</td>
<td></td>
<td>2,194,851,541</td>
</tr>
</tbody>
</table>

1. Unfunded commitment includes Sumitomo line of credit of $100,000,000
The following graph shows the performance of the DPFP Timber portfolio vs. the NCREIF Timber Index* as of June 30, 2017:

<table>
<thead>
<tr>
<th></th>
<th>Three Year</th>
<th>Five Year</th>
<th>Seven Year</th>
<th>Ten Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPFP Timber</td>
<td>-1.41%</td>
<td>-0.11%</td>
<td>-0.28%</td>
<td>-0.20%</td>
</tr>
<tr>
<td>NCREIF Timber</td>
<td>5.46%</td>
<td>7.11%</td>
<td>5.27%</td>
<td>5.51%</td>
</tr>
</tbody>
</table>

The following graph shows the performance of the DPFP Agriculture portfolio vs. the NCREIF Agriculture Index* as of June 30, 2017:

<table>
<thead>
<tr>
<th></th>
<th>Three Year</th>
<th>Five Year</th>
<th>Seven Year</th>
<th>Ten Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPFP Agriculture</td>
<td>10.16%</td>
<td>15.67%</td>
<td>14.83%</td>
<td>13.55%</td>
</tr>
<tr>
<td>NCREIF Agriculture</td>
<td>9.26%</td>
<td>12.90%</td>
<td>13.30%</td>
<td>12.79%</td>
</tr>
</tbody>
</table>

*NCREIF Agriculture and Timber index returns are calculated gross of fees and on a time-weighted basis, NEPC has used an assumed fee of 100 basis points. DPFP returns are calculated net of fees using a money-weighted return.
Real Estate Benchmark

The following graph shows the performance of the DPFP Direct Investment Real Estate portfolio vs. the NCREIF NFI-ODCE Index** as of June 30, 2017:

**NFI-ODCE Index returns are net of fees and calculated on a time-weighted basis; DPFP returns are calculated net of fees using a money-weighted return
### U.S. RE

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearthstone MS II Homebuilding Investors</td>
<td>1999</td>
<td>16</td>
<td>26.70%</td>
<td>17.81%</td>
<td>10.20%</td>
<td>9.23%</td>
<td>3.30x</td>
<td>1.76x</td>
<td>1.50x</td>
<td>1.40x</td>
<td>1.30x</td>
<td>1.60x</td>
<td>1.51x</td>
</tr>
<tr>
<td>Hearthstone MS III Homebuilding Investors</td>
<td>2003</td>
<td>25</td>
<td>24.68%</td>
<td>20.10%</td>
<td>10.80%</td>
<td>-1.62%</td>
<td>3.40x</td>
<td>1.76x</td>
<td>1.52x</td>
<td>0.91x</td>
<td>1.40x</td>
<td>1.40x</td>
<td>U.S RE</td>
</tr>
</tbody>
</table>

### Infrastructure

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Vintage Year</th>
<th>Sample Size</th>
<th>IRR 1st Quartile</th>
<th>IRR Median</th>
<th>IRR 3rd Quartile</th>
<th>DPI 1st Quartile</th>
<th>DPI Median</th>
<th>DPI 3rd Quartile</th>
<th>TVPI 1st Quartile</th>
<th>TVPI Median</th>
<th>TVPI 3rd Quartile</th>
<th>Quartile Rank</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRRO</td>
<td>2008</td>
<td>9</td>
<td>2.86%</td>
<td>12.44%</td>
<td>7.98%</td>
<td>6.89%</td>
<td>0.47x</td>
<td>0.64x</td>
<td>0.59x</td>
<td>0.47x</td>
<td>1.17x</td>
<td>1.66x</td>
<td>1.57x</td>
</tr>
<tr>
<td>AIRRO II</td>
<td>2013</td>
<td>7</td>
<td>-8.64%</td>
<td>---</td>
<td>-0.76%</td>
<td>---</td>
<td>0.01x</td>
<td>---</td>
<td>0.01x</td>
<td>---</td>
<td>0.73x</td>
<td>0.98x</td>
<td>---</td>
</tr>
<tr>
<td>J.P. Morgan Maritime Fund, L.P.</td>
<td>2009</td>
<td>3</td>
<td>13.49%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>0.04x</td>
<td>---</td>
<td>1.76x</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>LBJ Infrastructure Group Holding, LLC (LBJ)</td>
<td>2009</td>
<td>3</td>
<td>20.52%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>0.05x</td>
<td>---</td>
<td>2.48x</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Data only includes active funds.
Dallas Police & Fire Pension System

Appendix

Vintage Year Performance Analysis
<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Vintage Year</th>
<th>Commitment Amount</th>
<th>Paid in Capital</th>
<th>Capital to be Funded</th>
<th>Additional Fees</th>
<th>Cumulative Distributions</th>
<th>Valuation</th>
<th>Total Value</th>
<th>Net Benefit</th>
<th>DPI Ratio</th>
<th>TVPI Ratio</th>
<th>Ratio</th>
<th>IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1994</td>
<td>40,000,000</td>
<td>40,000,000</td>
<td>0</td>
<td>2,018,676</td>
<td>66,940,198</td>
<td>66,940,198</td>
<td>24,921,522</td>
<td>100%</td>
<td>1.59</td>
<td>1.59</td>
<td>17.82%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal: 1994</td>
<td>40,000,000</td>
<td>40,000,000</td>
<td>0</td>
<td>2,018,676</td>
<td>66,940,198</td>
<td>66,940,198</td>
<td>24,921,522</td>
<td>100%</td>
<td>1.59</td>
<td>1.59</td>
<td>17.82%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>66,795,718</td>
<td>66,795,718</td>
<td>0</td>
<td>12,022,676</td>
<td>56,245,197</td>
<td>33,524,315</td>
<td>89,769,512</td>
<td>100%</td>
<td>0.71</td>
<td>1.14</td>
<td>1.78%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal: 2000</td>
<td>76,795,718</td>
<td>76,795,718</td>
<td>0</td>
<td>12,022,676</td>
<td>65,043,661</td>
<td>35,654,209</td>
<td>100,697,870</td>
<td>100%</td>
<td>0.73</td>
<td>1.13</td>
<td>1.68%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>50,000,000</td>
<td>50,000,000</td>
<td>0</td>
<td>0</td>
<td>82,508,450</td>
<td>9,564</td>
<td>82,518,014</td>
<td>100%</td>
<td>1.65</td>
<td>1.15</td>
<td>28.36%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal: 2001</td>
<td>50,000,000</td>
<td>50,000,000</td>
<td>0</td>
<td>0</td>
<td>82,508,450</td>
<td>9,564</td>
<td>82,518,014</td>
<td>100%</td>
<td>1.65</td>
<td>1.15</td>
<td>28.36%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>50,955,397</td>
<td>50,955,397</td>
<td>0</td>
<td>0</td>
<td>62,263,032</td>
<td>2,731,903</td>
<td>64,994,935</td>
<td>100%</td>
<td>1.22</td>
<td>1.28</td>
<td>4.29%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal: 2003</td>
<td>50,955,397</td>
<td>50,955,397</td>
<td>0</td>
<td>0</td>
<td>62,263,032</td>
<td>2,731,903</td>
<td>64,994,935</td>
<td>100%</td>
<td>1.22</td>
<td>1.28</td>
<td>4.29%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>7,018,930</td>
<td>7,031,052</td>
<td>0</td>
<td>-1,741</td>
<td>14,975,776</td>
<td>0</td>
<td>14,975,776</td>
<td>100%</td>
<td>2.13</td>
<td>2.13</td>
<td>14.48%</td>
<td></td>
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<td></td>
<td>Subtotal: 2004</td>
<td>7,018,930</td>
<td>7,031,052</td>
<td>0</td>
<td>-1,741</td>
<td>14,975,776</td>
<td>0</td>
<td>14,975,776</td>
<td>100%</td>
<td>2.13</td>
<td>2.13</td>
<td>14.48%</td>
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<tr>
<td></td>
<td>2005</td>
<td>8,748,346</td>
<td>8,749,275</td>
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<td>0</td>
<td>21,516,405</td>
<td>0</td>
<td>21,516,405</td>
<td>100%</td>
<td>0.75</td>
<td>0.81</td>
<td>-3.84%</td>
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<td>Subtotal: 2005</td>
<td>28,748,346</td>
<td>28,829,581</td>
<td>0</td>
<td>0</td>
<td>21,516,405</td>
<td>0</td>
<td>21,516,405</td>
<td>100%</td>
<td>0.75</td>
<td>0.81</td>
<td>-3.84%</td>
<td></td>
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<tr>
<td></td>
<td>2006</td>
<td>35,348,165</td>
<td>35,348,165</td>
<td>0</td>
<td>0</td>
<td>130,016,928</td>
<td>93%</td>
<td>226,348,165</td>
<td>100%</td>
<td>1.10</td>
<td>1.10</td>
<td>1.54%</td>
<td></td>
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<tr>
<td></td>
<td>Subtotal: 2006</td>
<td>226,348,165</td>
<td>223,028,186</td>
<td>16,119,979</td>
<td>10,078,331</td>
<td>129,561,539</td>
<td>127,251,132</td>
<td>256,812,671</td>
<td>93%</td>
<td>0.56</td>
<td>1.10</td>
<td>1.54%</td>
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<td>2007</td>
<td>70,000,000</td>
<td>70,012,300</td>
<td>0</td>
<td>0</td>
<td>130,078,205</td>
<td>8,429,880</td>
<td>138,517,085</td>
<td>100%</td>
<td>0.81</td>
<td>0.81</td>
<td>-3.84%</td>
<td></td>
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<tr>
<td></td>
<td>Subtotal: 2007</td>
<td>170,000,000</td>
<td>170,016,928</td>
<td>0</td>
<td>0</td>
<td>130,078,205</td>
<td>8,429,880</td>
<td>138,517,085</td>
<td>100%</td>
<td>0.81</td>
<td>0.81</td>
<td>-3.84%</td>
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Dallas Police & Fire Pension System
Private Equity & Debt Funds - Vintage Year Performance Analysis
6/30/2017
<table>
<thead>
<tr>
<th>Investment Name</th>
<th>Vintage Year</th>
<th>Commitment Amount</th>
<th>Paid in Capital</th>
<th>Capital to be Funded</th>
<th>Additional Fees</th>
<th>Cumulative Distributions</th>
<th>Valuation</th>
<th>Total Value</th>
<th>Net Benefit</th>
<th>Call Ratio</th>
<th>DPI Ratio</th>
<th>TVPI Ratio</th>
<th>IRR</th>
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<tr>
<td>7 Yellowstone Energy Ventures II, L.P.</td>
<td>2008</td>
<td>5,203,254</td>
<td>5,112,307</td>
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<td>0</td>
<td>1,458,572</td>
<td>106,955</td>
<td>1,565,527</td>
<td>-3,546,780</td>
<td>57%</td>
<td>0.29</td>
<td>0.31</td>
<td>-28.31%</td>
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<td>Subtotal: 2008</td>
<td></td>
<td>233,318,570</td>
<td>225,763,947</td>
<td>170,947</td>
<td>1,933,378</td>
<td>39,322,513</td>
<td>266,635,038</td>
<td>38,937,714</td>
<td>100%</td>
<td>1.00</td>
<td>1.17</td>
<td>4.42%</td>
<td></td>
</tr>
<tr>
<td>8 7 Yellowstone Energy Ventures II, L.P.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Subtotal: 2009</td>
<td></td>
<td>25,000,000</td>
<td>24,938,574</td>
<td>61,426</td>
<td>0</td>
<td>8,440,990</td>
<td>12,102,866</td>
<td>-12,835,688</td>
<td>100%</td>
<td>0.15</td>
<td>0.49</td>
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<tr>
<td>Subtotal: 2010</td>
<td></td>
<td>10,000,000</td>
<td>10,033,415</td>
<td>0</td>
<td>0</td>
<td>1,933,378</td>
<td>227,312,525</td>
<td>39,322,513</td>
<td>100%</td>
<td>1.00</td>
<td>1.17</td>
<td>4.42%</td>
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<tr>
<td>Subtotal: 2011</td>
<td></td>
<td>55,000,000</td>
<td>39,636,171</td>
<td>0</td>
<td>0</td>
<td>65,464,525</td>
<td>25,828,354</td>
<td>72%</td>
<td>1.65</td>
<td>1.65</td>
<td>28.09%</td>
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<tr>
<td>Subtotal: 2012</td>
<td></td>
<td>150,000,000</td>
<td>102,608,845</td>
<td>18,750,000</td>
<td>0</td>
<td>-54,461</td>
<td>39,420,140</td>
<td>14,194,022</td>
<td>85%</td>
<td>0.38</td>
<td>0.52</td>
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<td>Subtotal: 2013</td>
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<td>105,000,000</td>
<td>91,648,876</td>
<td>0</td>
<td>-4,405</td>
<td>114,054,030</td>
<td>22,409,559</td>
<td>98%</td>
<td>1.24</td>
<td>1.24</td>
<td>15.63%</td>
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<tr>
<td>Subtotal: 2014</td>
<td></td>
<td>35,000,000</td>
<td>24,241,467</td>
<td>0</td>
<td>0</td>
<td>23,459,730</td>
<td>-781,738</td>
<td>69%</td>
<td>0.97</td>
<td>0.97</td>
<td>-3.28%</td>
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<tr>
<td>Subtotal: 2016</td>
<td></td>
<td>15,179,486</td>
<td>8,598,273</td>
<td>6,581,213</td>
<td>102,142</td>
<td>959,178</td>
<td>8,608,516</td>
<td>57%</td>
<td>0.11</td>
<td>0.10</td>
<td>14.76%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: Dallas Police &amp; Fire Pension System</td>
<td></td>
<td>1,278,364,612</td>
<td>1,174,126,430</td>
<td>41,683,565</td>
<td>26,094,596</td>
<td>1,054,098,741</td>
<td>244,642,729</td>
<td>92%</td>
<td>0.88</td>
<td>1.08</td>
<td>2.16%</td>
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</tr>
</tbody>
</table>
DISCUSSION SHEET

ITEM #C10

Topic: Extension of Legislative Consultant's Agreement - Locke Lord LLP

Discussion: DPFP has agreements with two legislative consultants, Locke Lord LLP and HillCo Partners. The agreement with Locke Lord expires December 31, 2017, while the agreement with HillCo Partners expires November 30, 2018.

Staff Recommendation: Authorize the Executive Director to extend the contract with Locke Lord LLP until November 30, 2018.
Discussion Sheet

ITEM #C11

Topic: RFP Process for Investment Consultant

Discussion: Staff will brief the Board on the status of the RFP process.
DISCUSSION SHEET

ITEM #C12

Topic: Legal issues

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

a. City of Dallas contributions pursuant to USERRA
b. Eddington et al. v. DPFP
c. Rawlings v. DPFP
d. DPFP v. Columbus A. Alexander III
e. Degan et al. v. DPFP (Federal suit)
f. HB 3158

Discussion: Counsel will brief the Board on these issues.
DISCUSSION SHEET

ITEM #C13

Topic: Board approval of Trustee education and travel

a. Future Education and Business-related Travel
b. Future Investment-related Travel

Discussion:

a. Per the Education and Travel Policy and Procedure, planned Trustee education and business-related travel and education which does not involve travel requires Board approval prior to attendance.

Attached is a listing of requested future education and travel noting approval status.

b. Per the Investment Policy Statement, planned Trustee travel related to investment monitoring, and in exceptional cases due diligence, requires Board approval prior to attendance.

There is no future investment-related travel for Trustees at this time.
**Future Education and Business Related Travel**

**Regular Board Meeting – December 14, 2017**

<table>
<thead>
<tr>
<th></th>
<th>Conference:</th>
<th>Dates:</th>
<th>Location:</th>
<th>Est. Cost:</th>
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<tr>
<td>1</td>
<td>NCPERS Legislative Conference</td>
<td>January 28-30, 2018</td>
<td>Washington, DC</td>
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<tr>
<td>2</td>
<td>IFEBP: Wharton New Trustees Institute</td>
<td>February 12-14, 2018</td>
<td>Lake Buena Vista, FL</td>
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<tr>
<td>3</td>
<td>IFEBP: Wharton Investment Institute</td>
<td>April 9-11, 2018</td>
<td>Naples, FL</td>
<td>$3,000</td>
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<tr>
<td>4</td>
<td>TEXPERS – Advanced Trustee Training Class</td>
<td>April 14, 2018</td>
<td>South Padre Island, TX</td>
<td>$400</td>
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<tr>
<td></td>
<td>Conference</td>
<td>Dates</td>
<td>Location</td>
<td>Est. Cost</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------</td>
<td>----------------</td>
<td>---------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>5</td>
<td>TEXPERS Annual Conference</td>
<td>April 15-18, 2018</td>
<td>South Padre Island, TX</td>
<td>$1,000</td>
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<tr>
<td>6</td>
<td>IFEBP: Wharton Portfolio Concepts and Management</td>
<td>April 23-26, 2018</td>
<td>Philadelphia, PA</td>
<td>$7,000</td>
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<tr>
<td>7</td>
<td>NCPERS Trustee Educational Seminar (TEDS)</td>
<td>May 12-13, 2018</td>
<td>New York, NY</td>
<td>$1,000</td>
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<tr>
<td>8</td>
<td>NCPERS Accredited Fiduciary (NAF) Program</td>
<td>May 12-13, 2018</td>
<td>New York, NY</td>
<td>$1,000</td>
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<tr>
<td>9</td>
<td>NCPERS Annual Conference</td>
<td>May 13-16, 2018</td>
<td>New York, NY</td>
<td>$3,000</td>
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<tr>
<td>No.</td>
<td>Conference Description</td>
<td>Dates</td>
<td>Location</td>
<td>Est. Cost</td>
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<td>----------------------------------------------------------------------------------------</td>
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<td>-----------</td>
</tr>
<tr>
<td>10</td>
<td><strong>IFEBP: Wharton Alternative Investments</strong></td>
<td>July 30-August 1, 2018</td>
<td>San Francisco, CA</td>
<td>$5,500</td>
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<td>11</td>
<td><strong>TEXPERS Summer Educational Forum</strong></td>
<td>August 12-14, 2018</td>
<td>San Antonio, TX</td>
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<td><strong>PRB: MET Online Core Training: Actuarial Matters</strong></td>
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<td>15</td>
<td><strong>PRB: MET Online Core Training: Fiduciary Matters</strong></td>
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<td><a href="http://www.prb.state.tx.us">http://www.prb.state.tx.us</a></td>
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</table>
   Dates: Online - Anytime
   Location: http://www.prb.state.tx.us

   Dates: Online - Anytime
   Location: http://www.prb.state.tx.us
Topic: Unforeseeable Emergency Requests from DROP Members

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.078 of the Texas Government Code.

Discussion: The Executive Director will review with the Board for their consideration any applications under the DROP Unforeseeable Emergency Policy that have not been approved.

Staff Recommendation: To be provided at the meeting.
ITEM #D1

Topic: Reports and concerns of active members and pensioners of the Dallas Police and Fire Pension System

Discussion: This is a Board-approved open forum for active members and pensioners to address their concerns to the Board and staff.
ITEM #D2

Topic: Executive Director’s report

a. Associations’ newsletters
   - NCPERS Monitor (October 2017)
   - NCPERS Monitor (November 2017)
   - NCPERS Monitor (December 2017)
   - NCPERS PERSist (Fall 2017)

b. Employee recognition – Third Quarter 2017
   - Employee Service Award
   - Employee of the Quarter award

Discussion: The Executive Director will brief the Board regarding the above information.
Since our June installment, many of the harmful pension alteration bills have not moved. Bills in Colorado, Connecticut, Maryland, Nebraska, Nevada, North Carolina, Oklahoma, Oregon, Virginia and West Virginia, have all stalled or died in committee. That being said, there are still harmful bills that NCPERS is paying close attention to such in as Michigan and South Carolina. Details on specific state legislation are as follows:

**Connecticut:** On July 31, 2017, the Senate passed Senate Resolution 51, which approved a new public employee's labor contract that will save the state a projected $1.2 billion in mostly pension concessions. The deal, sponsored by Senator (Sen.) Martin Looney (D), extends pension and healthcare provisions through 2027, which will save $24 billion over 20 years. It brings higher employee pension contributions, ties the annual cost-of-living adjustment (COLA) to the Consumer Price Index, and wages are frozen for three years until 2019.

**Michigan:** Governor Rick Snyder (R) signed Senate Bill (SB) 401 on August 16, 2017. The bill, sponsored by Senator Phillip Pavlov (R), will default new public school employees into a 401(k) style plan and offer a choice of a new combination plan that includes cost sharing between employers and employees. In addition, Gov. Snyder has made municipal
Variations on the Secure Choice model for retirement savings are continuing to gain momentum, with Seattle emerging as the latest hotspot, Oregon expanding its pilot program, and New Mexico sounding out ideas.

On September 25, one week into his tenure as Seattle’s new mayor, Tim Burgess put a stake in the ground for workplace retirement programs. Unveiling his fiscal year 2018 city budget, Mayor Burgess threw his support behind legislation to establish a Seattle Retirement Savings Plan for workers who don’t have access to a workplace retirement plan. The initiative would provide approximately 200,000 Seattle workers—40% of the city’s private sector employees—with a path to save for retirement.

“It’ll be a huge win for workers and for business and it makes sense for economic stability. People who have adequate resources during retirement participate in the economy more than people who are struggling to make ends meet,” Mayor Burgess told the Seattle Times.

The initial steps will include a market feasibility study and a legal analysis of the proposed savings plan, the Mayor’s Office announced.

The city program is expected to dovetail with a statewide initiative, the Washington State Small Business Retirement Marketplace. Aimed at small businesses, the state marketplace provides a web portal and search tool to connect businesses with financial services providers.

Oregon, meanwhile, is building on its status as the first state in the nation to create an auto-IRA workplace retirement program for the private sector.

Massena noted that the small pilot group of workers that went live with the program on July 1 had amassed $24,000 in savings in just two months. An expanded pilot group will be starting by October 1, she noted.

OregonSaves is expected to be available to more than 1 million people—more than half of Oregon’s 1.8 million workers who lack workplace retirement plans, Massena said. The results so far, though on a small scale, “show the power” of having a retirement savings program available at work, she said.

By taking the time to ramp up, OregonSaves is fine-tuning its procedures and communications, Massena said. “We are finding you can’t make anything too obvious” in the enrollment process, she said, underscoring that crisp, clean communications are key. It takes employers about 45 minutes to become involved in program, she added, and more than 200 are already online.

“Executive Directors Corner

Inspired by Secure Choice, States and Cities Maintain Momentum

It was my pleasure last month to host Lisa Massena, executive director of OregonSaves in an NCPERS Facebook Live interview.

CONTINUED ON PAGE 5
Unified Framework for Tax Reform

By Tony Roda

On September 27, the Trump Administration and the Republicans on the House Ways and Means and Senate Finance Committees released a unified framework on tax reform. The document, while still extremely short on details, particularly negative details, will be the starting point for a legislative process that will take many months.

Many observers foresee serious pitfalls as the committees begin to write the actual legislation. One major question is whether Congress will attempt to make the bill revenue neutral or pay for part or most of it through high economic growth assumption rates that lift revenue projections. A revenue neutral bill necessarily means that many current deductions and credits, all of which are cherished by their beneficiaries, will have to be eliminated. This, of course, increases the political pain involved in supporting the overall bill. The flip side is that, instead of eliminating more deductions and credits, Congress is not able to make the tax rate reductions as significant.

Another major question is whether the Democrats, who are in the minority in both chambers of Congress, will be allowed a seat at the table when the bill is being written. Most Democrats on Capitol Hill are skeptical that they will be allowed to have any real input into the details of the tax legislation. However, Sen. Joe Donnelly (D-IN) was alongside President Trump in Indianapolis the day the framework was released. Also, the President has been blunt in his criticism of the GOP Congressional Leadership’s unsuccessful efforts to pass legislation to repeal and replace the Affordable Care Act. In contrast, the President was ecstatic with the favorable media attention he received after agreeing with Minority Leaders Nancy Pelosi (D-CA) and Chuck Schumer (D-NY) on a debt ceiling, hurricane relief and stop-gap funding bill.

Regarding retirement policy, the upshot of the unified framework is the few words that follow: The framework retains tax benefits that encourage work, higher education and retirement security. The committees are encouraged to simplify these benefits to improve their efficiency and effectiveness. Tax reform will aim to maintain or raise retirement plan participation of workers and the resources available for retirement.

Of course, the devil will be in the details and the public pension community long has been on alert of some potential challenges ahead. First, Senate Finance Committee Chairman Orrin Hatch’s (R-UT) annuity accumulation retirement plan proposal (included in S. 2381, 114th Congress) could be a part of a tax reform bill. This federal enabling legislation would permit state and local plan sponsors to establish annuity accumulation plans. The plans would provide for the purchase of single-year, fixed rate annuity contracts for each employee. Employer contributions are the only funding stream for the plan. In practice, if a plan sponsor went down this path, they would likely freeze their existing defined benefit plan.

Proponents of the Public Employee Pension Transparency Act (PEPTA), including Chairman Hatch and House Ways and Means Committee member Rep. Devin Nunes (R-CA), may advocate for its inclusion in a tax reform bill. PEPTA would require for the first time that state and local governmental plan sponsors report their funded status to the federal Treasury Department. The reports would be based on two different sets of numbers: (1) the plan’s current assumed rate of return; and (2) a Treasury bond yield curve. The latter method will result in a significantly lower funding level on paper as well as more negative media attention on the funded status of public plans.

House Republicans are also considering making it a requirement that all new contributions to defined contribution plans (e.g., IRAs, 401(k), 457(b) and 403(b) plans) be made under the rules related to Roth accounts. Those rules require that contributions be made with after-tax dollars but are tax-free at distribution. Because a full or partial Roth mandate would accelerate taxable income into the 10-year federal budget window, the proposal would generate new revenues to offset tax rate reductions. This proposal warrants attention by our community.
Pensions Are Healthier Than Many Think, Brown University Scientist Tells Conference

Brown University data scientist Tom Sgouros is taking aim at the conventional wisdom that pension funds should be fully funded to be considered healthy.

Funding ratios are too imprecise to be a useful measure of the capacity of a system to fulfill its obligations, because many assumptions are built in, Sgouros said in a speech to the NCPERS Public Pension Funding Forum, which was held September 10-12 in San Francisco.

"Why would you take a number as imprecise as that and combine it with numbers that you can know to a much higher degree of certainty, such as accounts payable, and expect to get a meaningful number?" he asked.

"In data science, imprecision is infectious," Sgouros added. "If you want inaccurate financial reports, this is an ideal way to get them."

Sgouros argued that pension funds are healthier than is generally believed. "Lots of systems are technically underfunded yet meeting their obligations," he said. However, he added, "money's coming in, money's going out, and everybody's getting paid," even with funding levels in the 40% or 50% range.

He criticized the practice of calculating unfunded liability as "an odd way to measure the health of a system if they're not planning to close it." Sgouros noted that pension plans, at their inception, started out with a large unfunded liability. Rules that require pension funds to become fully funded as a hedge against the risk of liquidation are "a waste of resources," because states and localities don't go out of business.

Likewise, he said, focusing on the present value of pension assets is misguided. "The last penny of a pension debt is due when the youngest current employee dies," Sgouros said.

Sgouros also described a running debate over the appropriate rate of returns for public pensions as "unnecessarily heated." There is simply no way to know in advance what the ultimate rate of return will be. We do know that using too low a rate creates political pressure to reduce benefits, he added.

Videos of comments delivered by Sgouros and other speakers at the Public Pension Funding Forum are available on NCPERS’s Facebook page.
pensions one of his fall session priorities. The Responsible Retirement Reform for Local Government Task Force, (Gov. Snyder’s task force on retirement reform for local government) released a report in the middle of July, calling for greater reporting and transparency, development of a fiscal stress system, and new funding requirements for long-term stability. Stay tuned for what this report could mean for Michigan pensions.

**Missouri**: Gov. Eric Greitens (R) signed SB 62 on July 14, 2017. The bill, sponsored by Sen. Daniel Hegeman (R) and Rep. Rusty Black (R), re-lowers the vesting period for state workers to 5 years. The bill also authorized the Missouri State Employees’ Retirement System (MOSERS) to offer a Buyout Program to 17,500 beneficiaries. SB 62 aims to save $8 billion over the long term by offering to pay out a percentage of a pension’s value over time and avoid administrative fees.

**New Hampshire**: As previously reported, House Bill (HB) 631, introduced by Rep. Neal Kurk (R) on January 5, would create a cash balance retirement plan for new hires and non-vested employees. The bill was retained in the Executive Departments and Administration Committee on February 8, but in August it retained a bill subcommittee work session.

**New Jersey**: Senate bill 3040 was introduced with bi-partisan support on February 28, 2017; the bill will transfer management of the Police & Fire Retirement System (PFRS) to the board of PFRS. The bill passed both chambers but was vetoed by Gov. Chris Christie (R) on May 8. Gov. Christie said he would allow lawmakers to make revisions, including a cap on sick time payouts.

**South Carolina**: As previously reported, Assembly 13 was signed by Gov. Henry McMaster (R) on April 25. The bill, which was approved by large bi-partisan majorities in the House and Senate, increases government employees’ contributions from 8.66 percent to 9 percent and increases employer contributions by 1 percent annually until 2022. The state government will also contribute an additional 1 percent. However, Gov. McMaster does not believe these reforms go far enough. He wants to introduce a 401 (k) style plan to new state employees and increase the retirement age for current employees. At the end of August, Gov. McMaster sent a letter calling for these changes to a special 12-member legislative committee that is reviewing the future of the state’s retirement system.

Stay tuned and visit [www.NCPERS.org](http://www.NCPERS.org) for more information on upcoming state pension reform battles. You can visit the [legislation maps](http://www.NCPERS.org) on [www.NCPERS.org](http://www.NCPERS.org) to view our latest membership feature. As always, if your state is facing pension reform efforts and you would like NCPERS’ help, please let us know.

**New Mexico**: I also had the opportunity on September 7 to present at a meeting organized by the New Mexico Retirement Income Security Task Force. Led by State Treasurer Tim Eichenberg, the task force has the statutory role of studying the preparedness of New Mexicans to retire in a financially secure manner, with a focus on private-sector workers with limited or no access to workplace retirement solutions. At held its first organizational meeting on June 29.

My testimony focused on the status of auto-IRA programs in California, Illinois, Oregon and Vermont, and featured a discussion of NCPERS’s SecureChoice 2.0 white paper.

New Mexico has a compelling case for creating workplace retirement programs for the private sector. A staggering 62% of New Mexico’s private-sector workers – 336,000 people – don’t have access to a plan. And a third of New Mexicans age 65 or older rely on Social Security for 90% or more of their income.

We are in strong company as we continue promoting retirement security for all. Lisa Massena from OregonSaves was also on hand in New Mexico, as were numerous representatives of AARP at both the federal and state levels.
Finally, during a recent hearing, Chairman Hatch promoted his corporate integration tax reform proposal, which is designed to eliminate the double taxation of corporate income. Under current tax law, corporate earnings are taxed at the corporate entity level (1st level of taxation) and then if those earnings are distributed as dividends to shareholders, those dividends are taxable income to the recipient (2nd level of taxation).

Many have concluded that this double taxation leads to distortions in business decision-making, such as corporations relying on debt financing, which is tax-favored, and a shift to non-corporate business forms, such as S corporations, partnerships and sole proprietorships, which do not have entity level tax.

Depending on how Chairman Hatch structures this provision, it may have a significant impact on pension funds, endowments and other non-taxable entities that own equity shares in corporations and receive dividend income from those investments.

Under the approach currently being contemplated by Chairman Hatch, corporate earnings distributed as dividends would be taxed one time at the shareholder level. A tax withholding scheme would be created whereby the corporation would withhold tax from the dividend. The shareholder would then receive the net amount as a dividend. The proposal does not differentiate between tax-paying and non-taxable recipients of dividends. Since non-taxable entities, such as pension plans, do not currently pay tax on dividend income, they would simply receive lower dividend distributions.

Please be assured that NCPERS will monitor developments in these areas very closely as the legislative process on tax reform process evolves.

Tony Roda is a partner at the Washington, D.C. law and lobbying firm Williams & Jensen, where he specializes in legislative and regulatory issues affecting state and local pension plans. He represents NCPERS and individual pension plans in California, Ohio, Tennessee and Texas.
2018 Conferences

January
Legislative Conference
January 28 – 30, 2018
Capital Hilton
Washington, DC

May
Trustee Educational Seminar (TEDS)
May 12 – 13, 2018
Sheraton Hotel
New York, NY

Annual Conference & Exhibition
May 13 – 16, 2018
Sheraton Hotel
New York, NY

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The U.S. Government Accountability Office (GAO) is calling for a comprehensive reevaluation of the nation’s retirement system to promote dignified and secure financial future for Americans.

The retirement landscape has shifted dramatically over the past 40 years, creating major challenges for the workers and retirees, the GAO said in an October 18 report, “The Nation’s Retirement System.” In particular, the marked trend toward defined-contribution (DC) plans such as 401(k)s “has increased the risks and responsibilities for individuals in planning and managing their retirement,” the report stated.

Most Americans will depend on some combination of Social Security, individual savings, and employer-sponsored retirement plans to support themselves when they are no longer working. However, the report said, this three-pillar system may be “unable to ensure adequate benefits for a growing number of Americans due, in part, to the financial risks associated with certain federal programs.”

As of 2016, only 15% of private-sector workers had a defined-benefit (DB) plan, while 44% had DC plans and 34% had no workplace retirement plan at all, the report noted.

CONTINUED ON PAGE 4
October brought a bountiful harvest of studies underscoring how school pensions help to support the overall quality level in classrooms.

In separate studies, the Economic Policy Institute (EPI), the National Institute on Retirement Security (NIRS), and the National Public Pension Coalition (NPPC) provided significant counterweight to attacks on school pensions being mounted by The Arnold Foundation and other organizations with an anti-pension agenda.

EPI focused on arguments that teachers are shortchanged by pensions when they change school systems or leave the profession. The study, by EPI economist Monique Morrissey, found that traditional pensions serve both teachers and schools “by providing long-term financial security that attracts dedicated, career-minded workers.”

The EPI study noted that anti-pension research mischaracterizes the experiences of teachers by giving equal weight to career teachers and those who leave after a year or two, rather than examining a cross section of the teaching workforce.

“Research that properly weights teachers and correctly portrays their experiences shows that the vast majority are better off with traditional pensions than account-style plans like 401(k)s,” the study found. At least half of teachers accumulate 30 years of service in their retirement plan, and at least three-fourths accumulate 20 years or more, the study noted, and these teachers earn a healthy return on contributions and a level of retirement security few participants in account-style plans can count on.

The NIRS study debunks false claims about defined contribution (DC) 401(k)-type plans and makes clear that pensions offer important incentives to retain experienced teachers while providing the best path to retirement security. The study, by Christian Weller, professor of public policy at the University of Massachusetts, Boston, noted that as a form of deferred compensation, DB pensions provide an incentive for teachers to stay in their jobs, resulting in a more experienced and effective teacher workforce.

“Research that properly weights teachers and correctly portrays their experiences shows that the vast majority are better off with traditional pensions than account-style plans like 401(k)s,”

“Our nation’s schools face a growing shortage of teachers, and U.S. teachers are paid on average as much as 60 percent less than similarly educated professionals across the globe,” said Diane Oakley, NIRS executive director. “Pensions play an essential role in recruiting and retaining our best and most experienced teachers. It’s critical that states continue to leverage the magnetic effect of pensions to keep teachers in the classrooms and empower students to achieve their highest potential.”

The NPPC study focused on the impact on teacher retirement of the growth of publicly funded but privately managed charter schools, which are exempt from many rules and regulations that apply to...
Illinois Governor Bruce Rauner is looking to Congress for help in restructuring his state’s public pensions. While the proposal has not been specifically identified and is being described as conceptual, signals are that the conservative Republican Governor is dusting off a plan first put forward last spring by Diana Furchtgott-Roth, a senior fellow at the conservative-minded Manhattan Institute. The proposal, which is described in detail below, would amend the federal bankruptcy code to allow states to bypass state-based constitutional protections and other legal impediments in order to make changes to their pension funding and benefit structures, provided certain requirements are met.

In April 2016, the Manhattan Institute, which interestingly used the Illinois public pension system as its primary justification, released a proposal to create a new section 113 of the U.S. Bankruptcy Code – Proceeding to Protect Essential State Actions. The proposal received minimal media attention at the time and due to the upcoming presidential, congressional, state and local elections was put on the back-burner until a more opportune time arose. That time may be now.

The Illinois Governor has become increasingly frustrated by legal barriers to pension benefit cuts, particularly his state’s constitutional protections against benefit diminishment or impairment. He views the federal statutory route as one that will supersede these state constitutional protections.

Under the Manhattan Institute’s plan, which was released in both descriptive and draft legislative form, states would be allowed to publish a proposal to make changes to pension benefits that, in the state’s view, are necessary and/or appropriate to ensure the undiminished and unimpaired performance of any essential state action by the state or any subdivision, agency or municipality thereof. One or more public hearings would be required and any proposal would have to be approved by the state legislature and signed by the governor in the same manner as general statutes of that state. Such legislation (the proposal to change benefits) would then be filed as a petition in a U.S. Bankruptcy Court.

It’s critical to understand what state or local legal protections would be cast aside by this new bankruptcy provision. The proposal states that pension benefits may be modified to ensure the performance of essential state actions, notwithstanding any prohibition against or limitations on changes to pension benefits contained in any state constitution, statute, law, regulation, judicial decision, contract or other local legal document, decision or rule.

In order to understand the broad sweep of the proposal, focus on two key definitions:

- **Essential State Action** – any undertaking by the state in furtherance of (a) providing for the health, safety or welfare of persons residing within the state; (b) addressing,remedying or preventing fiscal emergencies of the state or any subdivision, agency or municipality thereof; or (c) ensuring the ability of the state and its subdivisions, agencies and municipalities to fund essential governmental services on reasonable terms.

- **Pension Benefits** – any accrued or prospective, vested or unvested, pension, health or other employee or retiree benefit, which a state or any subdivision, agency or municipality thereof, funds or is required to fund.

The proponents of the proposal cite the authority for section 113 as the Bankruptcy Clause to the U.S. Constitution, which gives Congress the specific power to enact uniform laws on the subject of bankruptcies throughout the U.S. In addition, the Manhattan Institute’s white paper from last spring states that the U.S. Supreme Court has held that the U.S. Constitution “does not impair Congress’ ability under the Bankruptcy Clause to define classes of debtors and structure relief accordingly.”

The proposal includes the ability of an affected person to challenge a petition by demonstrating by clear and convincing evidence that the petition is unnecessary. However, in evaluating challenges, the Bankruptcy Court must defer to the judgment of the state legislature and the governor regarding revenue and spending, unless there is no rational basis underlying that judgment. That is a high hurdle for any challenge to clear.

CONTINUED ON PAGE 4
The GAO report is the most comprehensive government review of retirement security in several decades, and has the potential to “set a tone for what should become a productive and continuing debate over retirement security,” said Hank Kim, NCPERS executive director and counsel. Kim was one of 15 experts selected by the GAO to convene in November 2016 for a day-long discussion of the nation’s approach to retirement policy. This discussion helped to shape the report, which draws on research and other information from more than 20 federal agencies and private-sector organizations and financial institutions.

According to the GAO, individuals face three key challenges in retirement:

- **Many lack access to an employer-sponsored retirement plan.** Having such a plan “makes it easier to save, and more likely that an individual will have another source of income in retirement beyond Social Security.” Workers at companies with 50 or fewer employees and workers in the leisure and hospitality industry were the least likely to have access to a workplace plan, the GAO said.

- **Accumulating sufficient retirement savings can be difficult.** “Challenges are greatest for workers with no employer-sponsored plan, and are also significant for those with DC plans. Workers with DB plans can also face certain challenges, but to a lesser extent,” the report said. Deciding how to invest and understanding the implications of changing employers are two of the hurdles workers face. One of the most effective ways to help workers build savings is to automatically enroll them plans, which can increase participation rates to as high as 95%, the GAO said. A related concept — auto-escalation, or automatically increasing the contribution each year until it reaches a target point — is also a valuable tool for helping workers amass savings.

- **Making savings last is a big challenge once workers enter retirement.** Retirees face decisions such as deciding when to claim Social Security and, for those with DC plans, how to draw down retirement savings. Those with few resources other than Social Security may need to continue working. Risks include the inability to continue working, poor investment returns, unexpected costs, inflation, cognitive decline, and living an unexpectedly long life. Individuals with DB plans face fewer risks, but they may need to make decisions about lump sum payments versus annuities, and could face reduced benefits if their employer fails to adequately fund the plan.

The report, which is available for download on the GAO website, identifies five policy goals for a reformed U.S. retirement system:

- Promote universal access to a retirement savings vehicle.
- Ensure greater retirement income adequacy.
- Improve options for the spend-down phase of retirements.
- Reduce complexity and risk for both plan participants and sponsors.
- Stabilize fiscal exposure to the federal government.

**Tony Roda** is a partner at the Washington, D.C. law and lobbying firm Williams & Jensen, where he specializes in legislative and regulatory issues affecting state and local pension plans. He represents NCPERS and individual pension plans in California, Ohio, Tennessee and Texas.

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**BANKRUPTCY ACT CONTINUED FROM PAGE 3**

Federal legislation has not yet been introduced on this or any other proposal to restructure state pension benefits, but reports are that Illinois has hired a lobbyist in Washington, D.C. to advocate for such legislation. Be assured that NCPERS will closely monitor Congress on this matter. ☑️
traditional public schools. The study noted that 20 states allow charter schools to pick between the traditional school pension system or an alternative DC plan for their teachers, while 23 require charter schools to participate in the public school teacher pension system.

NPPC found “wide variation in the levels of participation in public pension plans,” with 89% of charter schools in California remaining in the state pension system, versus only 12% for charter schools in Florida and Michigan.

“Unfortunately, the trend seems to be toward charter schools opting out of public pension plans and, thereby, denying their teachers and other school employees access to the secure retirement that pensions provide,” said the NPPC study, authored by Tyler Bond.

“Retirement security for charter school teachers is a seriously overlooked issue,” Bond said. “Among charter schools that opt out of the teacher pension plan in their state, the alternative retirement plans offered fail to provide adequate retirement savings for their teachers.” Out of the 200 reviewed retirement plans in the report, including some offered by the largest charter school chains in the country, only one charter school offers a defined contribution plan that could provide a more secure retirement than the state public pension plan, he added.
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Throughout November, as tax reform has gained steam in Congress, NCPERS worked vigorously to halt efforts to impose a new federal tax on state and local pension plans. Public pension plans would face significant costs and other burdens if they are forced to apply the tax provision in question, known as the unrelated business income tax, or UBIT. The current version of the House Republican tax bill would subject certain investments of public pension plans to this tax beginning in 2018.

The House Ways and Means Committee came up with this approach in its desperate search for revenues to offset the White House’s wish list of tax breaks for corporations and the wealthiest Americans. The committee has estimated that the UBIT provisions would add $1.1 billion to federal tax coffers between 2018 and 2027.

Allowing the federal government to balance its books on the backs of public pension plans is unfair and unacceptable. We urge all NCPERS members to reach out to their members of Congress to argue against expanding UBIT to public pensions. Key points to get across include:

CONTINUED ON PAGE 5
Good ideas have a way of taking root even in the face of opposition. On November 22, Seattle Mayor Tim Burgess signed the Seattle Retirement Savings Plan into law, becoming the first city in the nation to create a workplace retirement savings program for the private sector. It’s the latest sign of the resiliency of the Secure Choice movement that NCPERS has championed for more than six years.

Approximately 200,000 workers who lack access to workplace retirement benefits will be eligible, which is expected to be open to participants in 2019 or 2020. In a press statement, Mayor Burgess described the program as “a pro-business, pro-economic stability, pro-growth, and pro-worker achievement.”

The Seattle City Council voted for the measure on November 20, Mayor Burgess noted. “Too many Americans have little more than a few hundred dollars in savings, if any savings at all, never mind any significant amount of money for retirement,” he explained. “In Seattle, Black, Latino, and Asian workers are disproportionately disadvantaged by lack of access to workplace retirement savings. We all know that retirees without savings will never be able to participate in society as they should.”

Under the plan, employers that don’t offer a retirement savings benefit will enroll their workers, who will be able to opt out if they wish. An amount chosen by the employee will be deposited from each paycheck into a personal IRA. No taxpayer support is required and no city resources are at risk. A board will be established by the city to oversee the program, assess market feasibility and select a private sector plan administrator.

Mayor Burgess made the Seattle Retirement Savings Plan a centerpiece of his 2018 budget proposal, which he unveiled one week after taking office in mid-September.

The city program is expected to dovetail with a statewide initiative, the Washington State Small Business Retirement Marketplace. Earlier this year, nearby Oregon became the first state in the nation to create an auto-IRA workplace retirement program for the private sector.
The public pension community recently got a wake-up call about a serious and growing threat when cyber criminals struck the Iowa Public Employee Retirement System (IPERS).

A total of 103 retiree accounts were compromised in the incident, which IPERS disclosed on October 31. Criminals used stolen Social Security numbers and birth dates to register for IPERS online account access, changed direct deposit information, and directed benefit payments to their own bank accounts. IPERS, which provides benefits totaling $1.8 billion annually to 115,000 retirees, did not disclose the dollar value of the stolen payments.

Upon discovering the theft, IPERS reissued the benefit payments to the correct financial institutions, temporarily suspended online account access, and communicated the matter to retirees. IPERS is working with investigators from the FBI and the Iowa Office of the Chief Information Officer as pursue prosecution against the criminals.

In the aftermath of the episode, IPERS announced that Social Security numbers can no longer be used to register for member online account access. It is monitoring all new online registrations and failed login attempts.

IPERS urged the retirees whose payments were affected to take the follow steps: File a policy report; place a security freeze on credit by contacting Equifax, Experian, and TransUnion, the three major credit reporting agencies; and request a free credit report from each of the agencies at www.annualcreditreport.com.

Cyber security is the largest risk facing public pension systems, Ronald King, general counsel of the Police and Fire Retirement System of the City of Detroit told participants at NCPERS’s 2017 Public Safety Conference, held in early October in San Antonio. He noted that pension systems have access to significant personally identifiable information (PII) that they are required by law to safeguard, such as Social Security numbers, dates of birth, addresses, bank account information, and protected health care information gained through the administration of disability benefits.

King said best practices for public pension systems include: Perform a risk assessment; have an actionable incident response plan; understand what tools you have to manage situations and consequences; ensure processes allow for effective management in crisis; identify key personnel in the event of a crisis; train employees regularly on cybersecurity; update your privacy policy; and include a recent terms and conditions section on your website.

NCPERS has partnered with Ullico Casualty Group and Arthur J. Gallagher & Co. to create a proprietary cyber liability policy with preferred rates and a simplified application process. For more information, please contact James Martinez at jimmy_martinez@ajg.com.

DON’T DELAY!
Renew Your Membership
Online Today!

Renew Your Membership at http://ncpers.org/Members/
After years of talking the talk, Congress is now trying to walk the walk down a path toward enactment of major rewrite of the tax code. A lot of work still needs to be done and important issues remain unresolved, but Congress has not been this close to approving tax legislation since it actually did so in 1986. That's not to say it can't get knocked off the path. Vote counting in the 52-48 majority Republican Senate is a notoriously difficult process.

There is no doubt that Congress is in a rush. Having failed to enact legislation to repeal-and-replace the Affordable Care Act, Republicans are hungry for a political victory. Also, at every opportunity President Trump keeps the pressure on Congress through tweets and speeches saying that a tax bill must be enacted by Christmas. Finally, if the electoral defeats in New Jersey and Virginia earlier this month weren't enough, concerns over losing a safe Senate seat in Alabama has Republicans on the knife's edge.

So, where are we now and, more importantly, what are the implications for public pension plans?

On November 16, the full House approved its version of the tax bill, H.R. 1, by a vote of 227-205. All Democrats and 13 Republicans voted against the bill. As passed by the House, H.R. 1 includes a provision that would subject state and local governmental pension plans to the unrelated business income tax (UBIT) on certain investments beginning in tax year 2018. This provision is scored by the Joint Committee on Taxation (JCT) to raise revenues by $1.1 billion over 10 years. The House is calling this provision a clarification – a description with which we strongly disagree. It's more apt to call it a new tax that overturns a 40-year-old position by the IRS to not apply UBIT to public pensions. Further it sets a dangerous precedent regarding federal taxation of state agencies, eroding the Constitutional immunity states and the federal government each enjoy from taxation by the other.

While we will continue to strongly oppose the UBIT provision and work closely with our key allies – NCTR, NASRA, IAFF, FOP and individual state and local pension plans -- it is important to recognize that the House-passed bill does not contain the Public Employee Pension Transparency Act (PEPTA), the annuity accumulation plan, changes to rules on elective deferrals to defined contributions plans (so-called Rothification) or other restrictions on section 457(b) plans. That's all good news for the moment.

In the Senate, the Finance Committee also approved its version of a tax bill on November 16. Not surprisingly, the Committee voted along party lines 14-12. The legislation will be on the Senate floor during the week of November 27. As currently written, the Senate bill would:

- Include a provision that would prevent a participant from maxing out contributions to both a 403(b) and 457(b) plan; this provision also repeals all special rules related to post-employment contributions to 403(b) plans and catch-up contributions to 457(b) plans within three years of reaching normal retirement age.

Provisions related to subjecting 457(b) plans to the early withdrawal penalty and preventing a taxpayer who had wages of $500,000 or more in the preceding tax year from making a catch-up contribution were included in the original Senate bill but have been dropped. In addition, PEPTA, Rothification and the annuity accumulation plan are not included in the Finance Committee-reported bill.

Normally, negotiations between the House and Senate on a final tax bill would begin immediately following Senate passage. However, given the GOP's current headlong rush to enactment and nervousness about the special election in Alabama on December 12, the negotiations may take place prior to Senate passage. In this scenario, the Senate would be required to take only one vote on the tax bill. It would vote on the negotiated final language, which the House would then approve and send to President Trump for his signature.

Stay tuned. There are likely to be many twists and turns ahead. Be assured that NCPERS will continue to work against the UBIT provision and monitor the tax bill very closely. ✶

Tony Roda is a partner at the Washington, D.C. law and lobbying firm Williams & Jensen, where he specializes in legislative and regulatory issues affecting state and local pension plans. He represents NCPERS and individual pension plans in California, Ohio, Tennessee and Texas.
Sec. 5001 in the House Tax bill H.R. 1 imposes a NEW tax on state and local government retirement systems. It is not a clarification of existing law, and overturns a 40-year-old position by the IRS to not apply UBIT to public pension trusts.

It sets a dangerous precedent regarding federal taxation of state agencies, eroding the Constitutional immunity states and the federal government each enjoy from taxation by the other.

Since the Great Recession, every state has made changes to one or more of its pension plans to strengthen their financial condition. Public pension plans have NOT sought any type of assistance from Congress, but expect Congress to avoid imposing adverse tax changes, particularly without any formal consideration of the impact on the funds and the affected investments (including economic development, real estate and infrastructure).

If Congress wants public pension funds to exit the types of investments that would be subject to UBIT, they should, at a minimum, apply UBIT to new investments only, not ones that were entered into in good faith based on the long-standing understanding that UBIT did not expressly apply.

Existing public plan investments will be treated far worse than private investments that use a corporate blocker, which under tax reform would give them a nearly 20 percent lower tax rate than trusts that do not have such blockers in place.

Tax reform is moving fast. There’s no time to waste—please pick up the phone and ask your U.S. Senators and Representatives to oppose Sec. 5001 of HR 1. If you cannot reach him or her directly, ask to speak to the Tax LA (Legislative Assistant), who is typically the lawmaker’s right hand on tax issues. The U.S. Capitol switchboard can be reached at 202-224-3121.

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NCPERS has concluded another successful Public Safety Conference! This year’s conference took place October 1-4 in San Antonio, Texas, at the Hyatt Regency San Antonio. This program, attended by 300 public safety officials, trustees, and administrators, provided participants with important information and tools to help them deal with the unique needs and aspects of public safety plans.

Dr. Steven R. Malin of Allianz Global Investors opened the conference with a discussion on the economic outlook under Trump, the Fed and Congress. If you missed this presentation, or would like more information, we will be hosting a webinar with Dr. Malin on Tuesday, October 31 at 1:00pm ET. You can register for that webinar here.

NCPERS board member, Dan Givens, along with CorPERS member and executive board advisor, Don Heilman of Gallagher Benefit Services, led a discussion on the evolving benefits landscape for active and retirement public safety officers. You can view their presentation through Facebook Live here. The morning continued with presentations from CorPERS members J.P. Morgan on the shifting landscape in private credit and Foster & Foster on amortization payments.

The first day concluded with two presentations from Robert Klausner, of Klausner, Kaufman, Jensen & Levinson. In the first presentation he joined Jeffery Weiler, executive director of the Fairfax County Retirement Systems, for a panel discussion on headlines and trends in disability cases. The final presentation of the day was Klausner’s legal update. You can view both presentations on Facebook Live here.

The agenda for the second day was equally informative. The program began with a presentation on alternatives for managing unfunded liability from Eric Atwater of Aon Hewitt, a CorPERS member. The morning continued with presentations on the benefits of global listed infrastructure with John Creswell of CorPERS member Duff & Phelps Investment Management. Anthony Roda of Williams & Jensen updated members on federal legislative and regulatory issues. Jennifer Mink of Investment Performances Services, once again led an engaging discussion on opportunistic investments. Ronald King, general counsel for the Police and Fire Retirement Systems of the City of Detroit finished out the morning with a discussion on legislative efforts to erode benefits. You can view his presentation here on Facebook Live.

The second day of programing concluded with a discussion on disaster planning with David Keller of Houston Firefighters’ Relief & Retirement Fund and Steven Waas of the Houston Municipal Retirement System. You can view their engaging discussion here on Facebook Live.

The final day of the conference began with Brad Kelly and Peter
An Alternative to Hedge Funds

By John Ritz

Hedge funds have flourished by offering investors the promise of consistent revenue generation with a low-risk asset correlation.

They appealed to plans looking to plug funding gaps in a world where enduring low yields on most conventional bonds and equities have led many to look further afield to meet investment requirements.

Hedge funds’ assets swelled from $500B in 2000 to almost $3T in 2015, but we observe that many have failed to deliver on their promises.

Disappointing Returns
The global financial crisis (GFC) showed us that many hedge funds were unable to produce the promised risk/reward profiles, and many investors endured serious capital losses. Many hedge funds exemplified headline risk—the very thing plans seek to avoid. The Credit Suisse Hedge Fund Index reveals an annualized net return of +3.75% over the 10 years ended December 31, 2016, well below the +6.75% annualized return of the S&P 500 Index.

Cutting Back the Hedge
But disappointing performance is only one reason why we believe pension plans have been reducing hedge fund exposure recently. CalPERS was the first major public pension plan to abandon hedge funds in 2014, but many have followed suit since. Specific issues relate to cost (2% fee on assets plus 20% on outperformance), complexity, lack of transparency and illiquidity.

Many hedge funds also employ a predetermined asset allocation process derived from quantitative models. It is our contention that some of these “black-box” strategies mask the rationale behind investment decisions, as well as the assets or risks to which the underlying strategy may be exposed. This opacity became an issue during the GFC, when many hedge funds suffered significant capital losses, and investors struggled to access liquidity to fund pressing liabilities. While we think there are some good hedge funds still operating, their numbers appear to be dwindling.

Introducing Liquid Alternatives
Traditional long-only asset managers are filling the gap with multi-asset class strategies (MACs), sometimes referred to as “liquid alternatives.” There are four broad categories.

- **Absolute return** strategies, offering, for example, LIBOR plus 3-5% with target volatility between equities and bonds and relatively low market correlation.
- **Relative return** strategies, which offer a 60/40 split of equity and fixed income with a higher risk/return profile.
- **Risk parity** strategies, which allocate equally across asset classes based on risk, and employ leverage to boost returns.
- **Risk premia** strategies, which use a quantitative-analysis approach to produce low-volatility returns that unearth quality and value, and tend to have the highest risk/return profile.

Newton has considerable experience in both absolute and relative return MACs.

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**Jon Ritz** leads consultant relations efforts of Newton Investment Management (North America), based in New York. He joined Newton in 2006 and has held various roles in business development and consultant relations. Prior to joining Newton he worked for Mellon Financial and PNC Bank.

Jon holds the following qualifications, CFA charter holder, Member of the New York Society of Security Analysts, MBA, Mendoza College of Business, University of Notre Dame (highest honors), BS Finance and Management Virginia Tech, FINRA (Series 24, 7 and 63). 11 years at Newton 20 years industry experience
A Revival of Corporate Interest in Environmental, Social and Governance (ESG): Awareness Matters

By Tim Barron

Interest within the U.S. institutional investor community for understanding and applying Environmental, Social and Governance (ESG) factors to their asset pools slowed substantially as they faced the economic and financial meltdown in 2008-09. When faced with dramatic negative returns affecting markets here and around the world, being laser focused on asset allocation and portfolio structure is a natural and appropriate reaction.

Now, almost a decade later, we again see investors returning to this important conversation. Investors are more universally beginning to consider the impact of such factors on the sustainability of public companies and, ultimately, on share price and companies’ ability to repay debt.

Additional influences driving this discussion include the greater number of available products being offered by asset managers that integrate ESG considerations, multiple databases utilizing various methodologies for rating and ranking companies’ ESG activities, and increasing outreach by the United Nation’s Principles for Responsible Investing (UNPRI) team.

Most recently, however, some are raising questions as to whether the global political environment may have an impact either upon corporate responsible actions or investors’ appetites for ESG-integrated investments. We believe there are several strong reasons that support an increasing awareness by all parties for these factors.

- Sustainable practices are truly a global conversation at the company and investor level. In Europe, for example, the European Commission and the European Parliament have endorsed and directed that about 6,000 companies will be required to report on environmental, social, and employee-related, human rights, anti-corruption and bribery matters as well as the diversity policy applied for management and supervisory bodies. This reporting crosses country boundaries.
- A growing number of companies are recognizing that good practices in ESG represent sound operating principles and that both customers and investors are aware of their importance.
- There is an increasing body of evidence via numerous studies that indicate that ESG integration is not injurious to returns, and many indicate that it has a favorable impact.
- The logic that sustainability and corporate success are aligned concepts, not mutually exclusive. Consider key principles of each element.

Environmental – avoiding resource depletion, waste and pollution, and deforestation; reducing emissions

Social – diversity in the workforce; favorable working conditions that exclude slavery, child labor, and other types of worker exploitation, and promote health and safety

Governance – transparency to stakeholders; accountability; fairness; responsibility

These concepts are not related to politics or parties. Involved actors can differ on the degree of importance and these considerations will shift through time, however, the basic ideals transcend elections and are about what is just and reasonable.

In the not too distant future, ESG factors will be akin to valuations, free cash flow and dividends – items any fiduciary/analyst must be aware of in order to complete a 360-degree evaluation of any investment opportunity.

Tim Barron is the Chief Investment Officer of Segal Marco Advisors where he manages the firm’s Research Department and oversees all investment activities. He has over 35 years of experience in the investment industry. Mr. Barron also chairs Segal Marco Advisors’ Investment Committee and is on the Governing Committee of the Global Investment Research Alliance.
The Administrative Trials and Tribulations of Alternative Assets Investing

By Paul Finlayson and Najiba Miraki

There was a time when non-market traded, or so-called alternative, assets were a small, sleepy portion of the institutional investment plan. With plans seeking return sources greater than traded securities, alternative allocations have increased substantially in the past decade. Commensurate with alternative asset allocation increases, there has been escalation in internal and external diligence demands on investment plans owning these operationally demanding assets.

Non-market traded assets such as private equity, hedge funds, infrastructure and real estate share a common data challenge: the manager is the source of information, including activity details and valuation appraisals. The depth and quality of the information for accounting and analysis depends on the willingness, and sometimes the ability, of the manager to disclose information. Managers are increasingly responding to the demands, but the asset owner thirst for data has only increased due to audit, analytical and regulatory reporting requirements.

The depth and quality of alternative assets data has improved. Studies indicate private equity fair valuations have improved but remain conservative, with returns continuing to move with public markets. Similarly, hedge fund estimated valuations track nicely with final valuations. Accounting granularity of fundings and distributions has increased and providing more information has become part of the manager reporting routine.

Despite meaningful improvements, data and statement standardization challenges remain. Information continues to arrive in an array of statement formats via disparate delivery or retrieval channels. Valuations typically arrive long after the period they represent and are not consistent in composition. These industry realities require the investor to deploy specialized talent, time and systems infrastructure to collect, ingest, validate and report information. The increased asset owner demands on the manager have created a fiduciary dichotomy between asset owner needs and plan performance requirements.

To help address alternative assets diligence needs, an entire industry of specialized service providers has emerged. Valuation and fee verification services exist. Fund news data flows freely and daily from specialist arms of traditional news outlets. Emerging technologies, such as blockchain, hold promise of efficient and secure information exchange. Traditional public market transfer agency channels are now offering secure exchange. The success of these capabilities

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Does your pension fund have a Business Continuity Management System? (BCMS)

By John Reidy

Planning for continued business operations in the aftermath of a disaster is a complex task. Preparation for, response to, and recovery from a disaster affecting the administrative functions of an institution requires the cooperative efforts of many in partnership with the functional areas supporting the “business” of the institution.

A BCMS is part of an organization’s overall management system. A BCMS is a set of interrelated elements that organizations use to establish, implement, operate, monitor, review, maintain, and improve their business continuity capabilities. These elements include people, policies, plans, procedures, processes, structures, and resources. All of these elements are used to ensure that operations continue and that products and services are delivered at predefined levels, and that the reputations and interests of key stakeholders are safeguarded whenever disruptive incidents occur.

One sub-set of BCMS is a business continuity plan (BCP) which is comprised of documented procedures. Organizations use these procedures to respond to disruptive incidents, to guide recovery efforts, to resume prioritized activities, and to restore operations to acceptable predefined levels. Business continuity plans usually identify the services, activities, and resources needed to ensure that prioritized business activities and functions can continue whenever disruptions occur.

In the past, daily back-up and offsite storage of data was considered a sufficient disaster recovery plan. Today, as evidenced by the recent events in Texas, data backups are just one of many tasks that should be completed on a consistent basis to ensure that your pension fund is meeting its fiduciary responsibility to protect the financial assets and personally identifiable information of your membership. In addition, temporary facilities, such as an offsite business operations center should be predetermined where members of the various business contingency teams and others within your company assemble immediately after they receive notification.

It is important to understand that BCP’s are not boiler plate documents that can be replicated from one pension fund to another. Although public employee pension funds might have a number of similarities between them, they all have unique characteristics with different threat levels and exposure points. For example, a pension fund utilizing web based pension administration software will have a different plan than one relying on an installed application hosted in the pension office. Additionally, pension funds are each governed by their own Board of Trustees and each board will have their own view on how to handle certain situations.

Practicing the procedures of a BCP will help your pension fund become more resistant to potential threats and more resilient and adaptable to change or disaster. Most importantly, a BCP will help protect a pension fund’s reputation during a time of crisis which ensures that the pension fund is viewed in a positive light.

ISO 22301:2012

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John Reidy is one of the Principle founders of the Pension Technology Group (PTG). Founded in 2006, PTG is a technology company that provides web based pension administration software solutions to public employee pension funds. John has participated in nearly 150 pension administration software projects at public employee pension funds throughout the United States. John lives with his family in South Boston, MA.
Landers, of CorPERS members Global Governance Advisors. Kelly and Landers led a discussion on the financial benefits and importance of good corporate governance. You can view their presentation on Facebook Live here.

The morning continued with Tim Barron of Segal Marco Advisors and Brad Ramirez of CorPERS member Segal Consulting, with a presentation asking what comes first the actuarial assumption or the investment allocation. Aakar Vachhani of Fairview Capital Partners discussed the next generation investment opportunities available to public safety plans.

Mark Dearman of CorPERS member Robbins Geller Rudman & Dowd LLP led a discussion on the opioid epidemic. Ronald King presented for a second time, now discussing the risk cyber security poses for public safety plans. The final presentation of the conference was given by Wally Gomma of ACAP Health, on healthcare costs and what can be done.

The full presentations from the conference can be viewed at www.NCPERS.org/psc. The 2018 Public Safety Conference will be held in Las Vegas, Nevada at Caesar’s Palace.  

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**HEDGE FUNDS CONTINUED FROM PAGE 2**

MACs may appeal to a broad range of institutional clients seeking a return stream with low correlation to risk assets. In our view, in contrast to hedge funds, they should be inexpensive, offer daily liquidity and low leverage levels, and should not short individual securities. They should also seek to reduce overall portfolio volatility.

We believe transparent security selection, asset flexibility across global markets unconstrained by indices, and a focus on capital preservation are also key requirements.

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**ALTERNATIVE ASSETS CONTINUED FROM PAGE 4**

requires the cooperation of the asset manager considerate of impacts on their primary business of generating returns.

Industry-wide data standards, data availability and workflow technology are all improving. However, the non-standard nature and escalating transparency demands of alternative assets will continue to exact a tangible administrative cost on the plan. For the foreseeable future, the asset owner must consider and quantify the erosive effects of non-marketable administration expense on the alpha promised by these attention intensive investments. Transparency, standardization and technology advances have been made, but it is a process that will take time to fully actualize, requiring the cooperation of both the asset owner and manager as well the evolution and adaption of new technology.

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**Conclusion**

In our view, MACs can be a viable alternative to hedge funds for institutional investors and we believe the credentials of Newton’s absolute return and relative return MACs are worthy of consideration. However, we advise investors to review each MACs category to determine which type best fits their investment requirements.  


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**Disclosure:**

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Fiduciary Duty and Divestment - Can They Mix?

By Robert D. Klausner, NCPERS General Counsel

For several years there has been increasing pressure for retirement systems to make retirement decisions based on political and social concerns, separate and apart from traditional investment concerns. Divestment moves have included tobacco, firearms, private prisons and fossil fuels.

In the recent weeks, the New York City pension funds made a decision to divest of stocks in private prisons. This has long been a practice in faith-based retirement plans such as church plans where investment practices and articles of faith often cross paths. Unlike church plans which are free from judicial or legislative control on First Amendment grounds, public pension plans do not enjoy that luxury.

In deciding to follow or decline a divestiture mandate, retirement systems have looked to whether the effect on the portfolio is “de minimis.”

De minimis non curat lex - “The law does not concern itself with trifles.”

At least one state, New York, rejected this maxim in the context of a fiduciary duty. In Sorin v. Shahmoon Industries, 220 N.Y.S.2d 760 (N.Y. App. 1961), a waste of corporate assets challenge, the court held that where a fiduciary’s duty to account is at issue, it is a question of “principle,” not principal. When a fiduciary is to account for funds entrusted to his or her care, it means all funds “not some, or even most.” This would seem to suggest that there is no de minimis exception (at least in New York), highlighting the confused and unsettled state of the law.

The leading (and really the only) case in this context remains Board of Trustees v. Mayor and City Council, 562 A.2d 720 (Md. 1989). The trustees of the City pension fund sued to challenge ordinances requiring divestiture of holding in companies doing business with the Apartheid government of South Africa. In upholding the ordinances the Court observed that given “vast power that pension funds exert in American society, it would be unwise to bar trustees from considering the social consequences of investment decisions,” where the cost was de minimis. In the Baltimore case, the trial court found that the initial cost of divestment was 1/32 percent (3 basis points) and the on-going cost was 1/20 percent (2 basis points. To date this remains the only public pension case giving some concrete definition to the term “de minimis” in the divestment context.

A similar case concerned an action by the Oregon Board of Higher Education passing a divestiture resolution relating to investment of endowment funds. The State Investment Council declined to adopt the resolution finding it contrary to prudent investment standards. Various student groups whose members received endowment-funded scholarships sued. An Oregon trial court held that the Board of Higher Education and not the State Investment Council controlled the endowment funds but agreed that divestiture was a violation of the prudent investor standard. The decision was over turned on appeal when student plaintiffs were found to lack standing. The trial court decision was contrary to the result reached in Maryland. Significantly, the Maryland decision was employer driven and the Oregon case was driven by Board of Higher education policy.

The Florida Attorney General opined that a decision by the State Board of Investment (which acts as the fiduciary for the Florida Retirement System) could not adopt an administrative rule on divestiture based on ethical considerations in the absence of enabling legislation. The opinion continued, however, that instability in a region (here, South Africa) would be a legitimate consideration in making an investment decision because of the potential effect on economic considerations.

In a post-South Africa Attorney General opinion, Maryland considered whether Iran and Sudan divestiture was inconsistent with the State Retirement Board’s fiduciary duty. The AG concluded it was not under the following conditions: (1) Fair market value was received for the divested interests; (2) substitute investments had comparable return and risk; (3) timing and manner of divestment

CONTINUED ON PAGE 8
transactions were prudent; and (4) the effect was de minimis as compared to “total fund assets.”

Viewing the de minimis nature of an event in the context of “total plan assets” would have a different effect in the context of based on the individual plan.

Last year, the California Legislature adopted California Government Code 7513.75 calling on the state retirement systems to divest thermal coal holdings, subject to their constitutionally mandated fiduciary duty. The Legislature made express findings that divestiture from thermal coal was in the long term economic benefit to California, although not expressly in relation to the retirement systems. More recently, Montgomery County, Maryland voted to divest fossil fuel holdings in its retirement systems.

In virtually all of these cases, the decision to divest had legislative origins. This frees the plan fiduciary from having to balance public political or social sentiment with its core purpose of protecting the retirement system. The U.S. withdrawal from the Paris Climate Accords has only accelerated politically driven divestment initiatives. To remain true to their fiduciary duty to the members and beneficiaries of the retirement plans, it is best for trustees if these decisions are made by the political branches of the government which must also raise the revenue to offset any divestment related increase in cost.

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This article is a regular feature of PERSIST. Robert D. Klausner, a well-known lawyer specializing in public pension law throughout the United States, is General Counsel of NCPERS as well as a lecturer and law professor. While all efforts have been made to insure the accuracy of this section, the materials presented here are for the education of NCPERS members and are not intended as specific legal advice. For more information go to www.robertdklausner.com.
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Calendar of Events 2018

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Legislative Conference
January 28 – 30
Washington, DC

May
NCPERS Accredited Fiduciary Program (All modules)
May 12 – 13
New York, NY

Trustee Educational Seminar
May 12 – 13
New York, NY

Annual Conference & Exhibition
May 13 – 16
New York, NY

June
CIO Summit
June 14-15
Chicago, IL

September
Public Pension Funding Forum
September 10 – 12
Cambridge, MA

October
Public Safety Conference
October 7 – 10
Las Vegas, NV

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