AGENDA

Date: July 3, 2019

The regular meeting of the Dallas Police and Fire Pension System Board of Trustees will be held at 8:30 a.m. on Thursday, July 11, 2019, 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. TRUSTEES

   Welcome Fire Fighter Trustee

B. MOMENT OF SILENCE

C. CONSENT AGENDA

   1. Approval of Minutes

      Regular meeting of June 13, 2019
2. Approval of Refunds of Contributions for the Month of June 2019

3. Approval of Activity in the Deferred Retirement Option Plan (DROP) for July 2019

4. Approval of Estate Settlements

5. Approval of Survivor Benefits

6. Approval of Service Retirements

7. Approval of Alternate Payee Benefits

8. Approval of Earnings Test

D. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Portfolio Update

2. Report on Investment Advisory Committee
3. **Lone Star Investment Advisors Update**

   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.

4. **Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation, including Eddington et al. v. DPFP et al. or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.**

5. **Private Asset Cash Flow Projection Update**

   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.

6. **Infrastructure Portfolio Review**

7. **Audit Status**

8. **Monthly Contribution**
9. Board approval of Trustee education and travel
   a. Future Education and Business-related Travel
   b. Future Investment-related Travel

E. 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 (June 2019)
   b. Open Records
   c. Nominations Committee Update
   d. Employee Service 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

Topic: Welcome Fire Fighter Trustee

Discussion: The Fire Fighter Trustee, Armando Garza, has been certified and deemed elected by the Board at the June Board meeting and will serve as the Fire Fighter Trustee for the remaining vacated Fire Fighter Trustee term.
ITEM #B

MOMENT OF SILENCE

In memory of our Members and Pensioners who recently passed away

<table>
<thead>
<tr>
<th>NAME</th>
<th>ACTIVE/ RETIRED</th>
<th>DEPARTMENT</th>
<th>DATE OF DEATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerry T. Minter</td>
<td>Retired</td>
<td>Fire</td>
<td>May 30, 2019</td>
</tr>
<tr>
<td>J. A. Landess</td>
<td>Retired</td>
<td>Fire</td>
<td>June 5, 2019</td>
</tr>
<tr>
<td>W. W. Carter</td>
<td>Retired</td>
<td>Fire</td>
<td>June 9, 2019</td>
</tr>
<tr>
<td>Thomas G. Gartrell</td>
<td>Retired</td>
<td>Police</td>
<td>June 11, 2019</td>
</tr>
<tr>
<td>L. H. Abercrombie</td>
<td>Retired</td>
<td>Fire</td>
<td>June 19, 2019</td>
</tr>
<tr>
<td>James R. Bates</td>
<td>Retired</td>
<td>Fire</td>
<td>June 23, 2019</td>
</tr>
<tr>
<td>Jerry Raz</td>
<td>Retired</td>
<td>Police</td>
<td>June 27, 2019</td>
</tr>
</tbody>
</table>

Regular Board Meeting – Thursday, July 11, 2019
Dallas Police and Fire Pension System
Thursday, June 13, 2019
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 8:31 a.m. William F. Quinn, Nicholas A. Merrick (by phone), Blaine Dickens (by phone), Ray Nixon, Gilbert A. Garcia, Susan M. Byrne (by phone), Tina Hernandez Patterson, Robert C. Walters, Joseph P. Schutz

Present at 9:01 a.m. Kneeland Youngblood (by phone)

Present at 10:11 a.m. Kneeland Youngblood

Absent: None

Staff
Kelly Gottschalk, Josh Mond, Kent Custer, Brenda Barnes, John Holt, Damion Hervey, Cynthia Thomas, Ryan Wagner, Greg Irlbeck, Milissa Romero, Aimee Crews, Ann Mathews, Trish Wiley

Others
Jeff Williams, Alexandra Wallace, Aaron Lally, Todd Rosa, Adam Gore, Rick Bodio, Skeet Ponder, Robert Jones, Rick Salinas, Darryl Wachsman, Ken Sprecher, Sandy Alexander, Zaman Hemani, Danielle Huddleston

* * * * * * *

The meeting was called to order at 8:31 a.m.

* * * * * * *

A. MOMENT OF SILENCE

The Board observed a moment of silence in memory of active police officer Stephen S. Comstra, retired police officers Bob L. Jones, Henry L. Ellison, Jerry W. Foster, Grady C. Ford, and retired firefighters John L. Blume, Jon P. Whatley, Jerry D. Morgan, Tommy G. Wyatt.

No motion was made.

* * * * * * *

1 of 8
B. CONSENT AGENDA

1. Approval of Minutes
   a. Required Public meeting of May 9, 2019
   b. Regular meeting of May 9, 2019

2. Approval of Refunds of Contributions for the Month of May 2019

3. Approval of Activity in the Deferred Retirement Option Plan (DROP) for June 2019

4. Approval of Estate Settlements

5. Approval of Survivor Benefits

6. Approval of Service Retirements

7. Approval of Alternate Payee Benefits

8. Approval of Earnings Test

After discussion, Mr. Garcia made a motion to approve the minutes of the meeting of May 9, 2019. Mr. Walters seconded the motion, which was unanimously approved by the Board.

After discussion, Mr. Garcia made a motion to approve the remaining items on the Consent Agenda, subject to the final approval of the staff. Mr. Walters seconded the motion, which was unanimously approved by the Board.

* * * * * * *

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Board Chairman, Vice Chairman and Deputy Vice Chairman Election

   Mr. Quinn opened the floor for officer nominations, beginning with the office of Chairman.
1. Board Chairman, Vice Chairman and Deputy Vice Chairman Election (continued)

Mr. Garcia nominated William F. Quinn as Chairman. Mr. Nixon seconded the nomination. Nominations ceased. The Board voted unanimously to elect Mr. Quinn as Chairman.

Mr. Quinn opened nominations for the office of Vice Chairman. He nominated Nicholas A. Merrick as Vice Chairman. Ms. Hernandez Patterson seconded the nomination. Nominations ceased. The Board voted unanimously to elect Mr. Merrick as Vice Chairman.

Mr. Quinn opened nominations for the office of Deputy Vice Chairman. Mr. Garcia nominated Joseph P. Schutz as Deputy Vice Chairman. Mr. Nixon seconded the nomination. Nominations ceased. The Board voted unanimously to elect Mr. Schutz as Deputy Vice Chairman.

* * * * * * *

2. January 1, 2019 Actuarial Valuation Assumptions

Jeff Williams, Vice President, Segal Consulting is preparing the January 1, 2019 actuarial valuation reports for the Regular Plan (Combined Plan) and the Supplemental Plan. At the April Board meeting Segal reviewed the economic and demographic assumptions required to prepare the valuation. The Board provided direction about most of the assumptions to be used in the valuation and requested additional information about the assumed rate of return assumption. Segal provided information about the assumed rate of return assumption.

After discussion, Mr. Garcia made a motion to direct Segal to continue with the 7.25% assumed rate of return assumption to be used in preparing the January 1, 2019 actuarial valuation reports for the Regular Plan (Combined Plan) and the Supplemental Plan. Mr. Walters seconded the motion, which was unanimously approved by the Board.

* * * * * * *
3. Staff Retirement Plan

Jeff Williams, Vice President, Segal Consulting was present to discuss the staff retirement plan and provided additional information to address questions that were raised from the May 2019 Board meeting when the modifications to the Staff Retirement Plan were first proposed.

After discussion, the Board directed staff to continue pursuing work with Segal and bring back the proposed Staff Retirement Plan in the fall after further analysis and research is completed.

No motion was made.

* * * * * * *

4. Review Fire Fighter Trustee applicant qualifications

The Board went into closed session executive session – Personnel at 11:58 a.m.

The meeting was reopened at 12:02 p.m.

After discussion, Ms. Hernandez Patterson made a motion to approve Armando Garza as qualified under Section 3.01(b-1) of the Plan to serve as a Trustee and authorize him to be seated as a Trustee at the next Board meeting pursuant to Section F of the Trustee Election Procedures. Mr. Walters seconded the motion, which was unanimously approved by the Board. Mr. Merrick and Mr. Dickens were not present for the vote.

* * * * * * *

5. Monthly Contribution Report

Staff presented the Monthly Contribution Report.

No motion was made.

* * * * * * *

6. Audit Status

The Chief Financial Officer provided a status update on the annual financial audit.

No motion was made.

* * * * * * *

4 of 8
7. Legislative Update

Staff briefed the Board on new laws passed by the legislature which would affect DPFP.

No motion was made.

* * * * * * *

8. Board approval of Trustee education and travel

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

No discussion was held, and no motion was made regarding Trustee education and travel. There was no future investment-related travel.

* * * * * * *

9. Portfolio Update

Investment staff briefed the Board on recent events and current developments with respect to the investment portfolio.

No motion was made.

* * * * * * *


Alexandra Wallace, Principal and Aaron Lally, Executive Vice President both of Meketa Investment Group and Investment Staff reviewed investment performance.

No motion was made.

* * * * * * *
11. **Hearthstone Portfolio Update and Possible Sale**

The Board went into closed session executive session – Real Estate at 10:19 a.m.

The meeting was reopened at 10:31 a.m.

* * * * * * *

Mr. Merrick left the meeting at 10:28 a.m.

Mr. Dickens left the meeting at 10:31 a.m.

* * * * * * *

Todd Rosa, Vice President of Hearthstone was present to discuss the marketing process to date and recommended course of action for the two remaining assets in the Hearthstone portfolio, Spring Valley and Harris Creek.

After discussion, Mr. Youngblood made a motion to approve the sale of Spring Valley and Harris Creek. Mr. Garcia seconded the motion, which was unanimously approved by the Board. Mr. Merrick and Mr. Dickens were not present for the vote.

* * * * * * *

12. **Natural Resources Overview - Hancock Portfolio**

The Board went into closed session executive session – Real Estate at 11:05 a.m.

The meeting was reopened at 11:16 a.m.

Adam Gore, CFA, Portfolio Manager, Rick Bodio, CFA, Director and Skeet Ponder, Portfolio Analyst Representatives of Hancock Natural Resource Group were present to update the Board on the status and plans for DPFP’s agricultural portfolio.

No motion was made.

* * * * * * *
13. **Lone Star Investment Advisors Update**

The Board went into closed session executive session – Legal at 11:19 a.m.

The meeting was reopened at 11:56 a.m.

The Lone Star Growth Capital fund and the Lone Star CRA fund terms expire in October 2019. Investment Staff updated the Board on recent performance, operational, and administrative developments with respect to DPFP investments in funds managed by Lone Star Investment Advisors.

No motion was made.

* * * * * * *

14. **Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation, including Eddington et al. v. DPFP et al., USERRA contributions owed by the City of Dallas or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.**

The Board went into closed session executive session – Legal at 11:19 a.m.

The meeting was reopened at 11:56 a.m.

No motion was made.

* * * * * * *

D. **BRIEFING ITEMS**

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

   No active member or pensioner requested to address the Board with concerns.

   * * * * * * *
2. Executive Director’s report

a. Associations’ newsletters
   • NCPERS Monitor (May 2019)
   • NCPERS PERSist (Spring 2019)

b. Open Records

c. Nominations Committee Update

d. Employee Service Award

e. Executive Performance Evaluation Input

The Executive Director’s report was presented.

* * * * * * *

Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Nixon and a second by Mr. Walters, the meeting was adjourned at 12:05 p.m.

_______________________
William F. Quinn
Chairman

ATTEST:

_____________________
Kelly Gottschalk
Secretary
DISCUSSION SHEET

ITEM #D1

**Topic:** Portfolio Update

**Discussion:** Investment Staff will brief the Board on recent events and current developments with respect to the investment portfolio.
Portfolio Update

July 11, 2019
## Asset Allocation

<table>
<thead>
<tr>
<th>DPFP Asset Allocation</th>
<th>% weight</th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6/30/19</td>
<td>Target</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>38.1%</td>
<td>55.0%</td>
</tr>
<tr>
<td>Global Equity</td>
<td>23.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>2.4%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Private Equity*</td>
<td>12.3%</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Income - Cash</td>
<td>3.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Safety Reserve - ST IG Bonds</td>
<td>12.8%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Investment Grade Bonds</td>
<td>0.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Global Bonds</td>
<td>3.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>High Yield Bonds</td>
<td>4.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>5.7%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Emerging Mkt Debt</td>
<td>1.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Private Debt*</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Real Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>21.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Natural Resources*</td>
<td>7.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Infrastructure*</td>
<td>2.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Safety Reserve</td>
<td>15.9%</td>
<td>15.0%</td>
</tr>
<tr>
<td>*Private Market Assets</td>
<td>44.1%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Source: JP Morgan Custodial Data, Staff Calculations
Preliminary data
## 2019 Investment Review Calendar*

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 1Q19    | • Real Estate Reviews: Vista 7, King’s Harbor, & Museum Tower  
          • Real Estate Presentations: Clarion, AEW  
          • Global Equity Structure Review (Staff/Meketa) |
| 2Q19    | • Staff Timber Portfolio Review (FIA & BTG)  
          • Natural Resources: Hancock Presentation  
          • Real Estate: Hearthstone Presentation |
| July    | • Infrastructure: Staff review of AIRRO and JPM Maritime |
| 2H19    | • Private Equity: Staff review of Lone Star, Huff, Hudson, and Industry Ventures  
          • Private Debt: Staff Reviews of Highland and Riverstone  
          • Global Equity Manager Reviews  
          • Fixed Income Manager Reviews |

*Future presentation schedule is subject to change.*
DISCUSSION SHEET

ITEM #D2

Topic: Report on Investment Advisory Committee

Discussion: The external members of the Investment Advisory Committee met on June 24, 2019. Investment Staff will comment on Committee observations and advice.
Topic: Lone Star Investment Advisors Update

Discussion: The Lone Star Growth Capital fund and the Lone Star CRA fund terms expire in October 2019. Investment Staff will update the Board on recent performance, operational, and administrative developments with respect to DPFP investments in funds managed by Lone Star Investment Advisors.
DISCUSSION SHEET

ITEM #D4

Topic: Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation, including Eddington et al. v. DPFP et al. or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.

Discussion: Counsel will brief the Board on these issues.
DISCUSSION SHEET

ITEM #C5

Topic: Private Asset Cash Flow Projection Update

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.

Discussion: Staff will provide the quarterly update on the private asset cash flow projection model first discussed at the February 2018 Board meeting. The cash flow model projects estimated contributions to, and distributions from, private assets through the end of 2022. These estimates are intended to assist the Board in evaluating the expected time frame to reduce DPFP’s exposure to these assets and the implications for the overall asset allocation and expected portfolio risk and return.
Quarterly Private Asset Cash Flow Projection Update

July 11, 2019
Private Asset Bridge Chart – Since 9/30/16

In Millions

- 9/30/16 Private Assets: $1,559
- Distributions: $(949)
- Capital Calls: $237
- Change in Market Value: $40
- 6/30/19 Private Assets: $887

Numbers may not foot due to rounding.
Private Asset Bridge Chart – Since 9/1/17 (New Board Formation)

In Millions

Numbers may not foot due to rounding.
## Private Asset Quarterly Cash Flows – Q2 2019

### TOTAL CAPITAL CALLS & CONTRIBUTIONS

<table>
<thead>
<tr>
<th>Company</th>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Ventures</td>
<td>Capital Call</td>
<td>$786,232</td>
</tr>
<tr>
<td>TRG AIRRO</td>
<td>Capital Call</td>
<td>$94,249</td>
</tr>
<tr>
<td>TRG AIRRO II</td>
<td>Capital Call</td>
<td>$85,328</td>
</tr>
</tbody>
</table>

**TOTAL CAPITAL CALLS & CONTRIBUTIONS**: $965,809

### TOTAL DISTRIBUTIONS

**TOTAL DISTRIBUTIONS**: $33,632,829

#### Inflows $500k and Over

<table>
<thead>
<tr>
<th>Company</th>
<th>Event</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hancock</td>
<td>Iron Corral Sale</td>
<td>$23,668,979</td>
</tr>
<tr>
<td>Museum Tower</td>
<td>Condo Sales</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Hancock</td>
<td>Income Distribution</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Clarion</td>
<td>The Tribute Proceeds</td>
<td>$1,250,000</td>
</tr>
<tr>
<td>AEW</td>
<td>Rayzor Ranch Hold Back</td>
<td>$1,042,500</td>
</tr>
<tr>
<td>Hearthstone MSIII</td>
<td>Final Fund Dist.</td>
<td>$719,121</td>
</tr>
<tr>
<td>Clarion</td>
<td>CCH Lamar Proceeds</td>
<td>$534,480</td>
</tr>
</tbody>
</table>

*Numbers may not foot due to rounding.*
### Private Asset Quarterly Cash Flows – Since 9/30/16

In Millions

<table>
<thead>
<tr>
<th></th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
<th>Q3 17</th>
<th>Q4 17</th>
<th>Q1 18</th>
<th>Q2 18</th>
<th>Q3 18</th>
<th>Q4 18</th>
<th>Q1 19</th>
<th>Q2 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributions</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>Capital Calls</td>
<td>$(200)</td>
<td>$(100)</td>
<td>$-</td>
<td>$100</td>
<td>$200</td>
<td>$300</td>
<td>$400</td>
<td>$500</td>
<td>$600</td>
<td>$700</td>
<td>$800</td>
</tr>
<tr>
<td>Cumulative Net Inflows</td>
<td>$(200)</td>
<td>$(100)</td>
<td>$(-100)</td>
<td>$(100)</td>
<td>$(200)</td>
<td>$(300)</td>
<td>$(400)</td>
<td>$(500)</td>
<td>$(600)</td>
<td>$(700)</td>
<td>$(800)</td>
</tr>
</tbody>
</table>
Cumulative Actual and Projected Private Asset Net Inflows

Private asset cash flows projections are based on either in-process/planned sales, if available, or a gradual disposition through 2022.

In Millions

Cumulative Net Inflows

Cumulative Actual and Projected Private Asset Net Inflows

Current Projection

Prior Quarter Projection

Cumulative Net Inflows

Current Projection

Prior Quarter Projection
Private asset cash flows projections are based on either in-process/planned sales, if available, or a gradual disposition through 2022.

*In Millions*
Private asset cash flows projections are based on either in-process/planned sales, if available, or a gradual disposition through 2022.

*In Millions*

<table>
<thead>
<tr>
<th>Legacy NAV (M)</th>
<th>12/31/2019</th>
<th>12/31/2020</th>
<th>12/31/2021</th>
<th>12/31/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$514</td>
<td>$455</td>
<td>$317</td>
<td>$154</td>
</tr>
<tr>
<td>% of Private Portfolio</td>
<td>58%</td>
<td>61%</td>
<td>67%</td>
<td>56%</td>
</tr>
<tr>
<td>% of DPFP Portfolio</td>
<td>26%</td>
<td>22%</td>
<td>16%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Forward Liquidity Projection

Private asset cash flows projections are based on either in-process/planned sales, if available, or a gradual disposition through 2022.

Based on projected year-end NAVs provided by actuary in 1/1/2018 Actuarial Report
Assumes 100% of private asset proceeds are reinvested into liquid investments

<table>
<thead>
<tr>
<th>Current</th>
<th>12/31/2019</th>
<th>12/31/2020</th>
<th>12/31/2021</th>
<th>12/31/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Asset %</td>
<td>43.7%</td>
<td>36.6%</td>
<td>23.5%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Liquid Asset %</td>
<td>56.3%</td>
<td>63.4%</td>
<td>76.5%</td>
<td>86.2%</td>
</tr>
</tbody>
</table>

Target Private Allocation: 15%
DISCUSSION SHEET

ITEM #D6

Topic: Infrastructure Portfolio Review

Discussion: Staff will provide an overview of the three funds which comprise the infrastructure asset class: the Global Maritime Investment Fund managed by JPMorgan Asset Management, and the Asian Infrastructure and Related Resources Opportunity funds I and II, both managed by The Rohatyn Group.
Infrastructure Portfolio Review

July 11, 2019
**Infrastructure Portfolio Overview**

- The current Infrastructure Portfolio is comprised of investments in funds that have assets in global shipping and various projects in India, including wind power, thermal power, toll roads, and hospitals.
- The current allocation represents just under 3% of plan assets with a Long-Term target allocation of 0%.
- Staff anticipates it will take 3-5 years to monetize these assets.

<table>
<thead>
<tr>
<th>as of 05/30/2019</th>
<th>$ millions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
<td>$57.9</td>
<td>2.89%</td>
</tr>
<tr>
<td>JPM Global Maritime Investment Fund</td>
<td>$33.6</td>
<td>1.68%</td>
</tr>
<tr>
<td>TRG Asian Infrastructure (AIRRO)</td>
<td>$19.7</td>
<td>0.99%</td>
</tr>
<tr>
<td>TRG Asian Infrastructure II (AIRRO II)</td>
<td>$4.6</td>
<td>0.23%</td>
</tr>
</tbody>
</table>
JPMorgan Global Maritime Investment Fund

**Asset Class:** Infrastructure  
**Vintage Year:** 2009

**Investment Period / Fund Term End Dates:** Dec 2014 / Dec 2020  
**Total Fund Size:** $780m

**Management Fee:** 1.50% on capital called for investments and fund expenses  
**DPFP Commitment:** $50m

**Performance Fee/Carry:** 80/20 split with 12% pref  
**DPFP % of Fund:** 6.4%

<table>
<thead>
<tr>
<th><strong>Investment Performance (In Millions)</strong></th>
<th>* - As of 12/31/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid In Capital</td>
<td>Unfunded Commitment</td>
</tr>
<tr>
<td>$48.6</td>
<td>$1.4</td>
</tr>
</tbody>
</table>

**Fund Strategy / Portfolio**

- Private capital investment in the shipping industry with a 63 vessel fleet of bulkers (38), container ships (16), car carriers (7), and tankers (2). Opportunistic strategy aimed to take advantage of a historic market disruption and low cycle in shipping following the global financial crisis.

- The fund is focused on executing charters for the on-water fleet, taking delivery of the final newbuild vessel on order, and evaluating opportunities to sell assets. Future performance will be a function of income from charter rates on the ships and sales proceeds as the fund exits holdings.

**Strategic Plan / Timeline**

- The fund has sold 14 of the 16 vessels in the tanker fleet, began making operating cash distributions in late 2018, and expects to monetize remaining assets over the next 2 years.

- The fund term can be extended for two consecutive one-year periods with Advisory Committee approval.

- Total IRR over the life of the fund is projected by JPMorgan to be in the mid single-digits with a multiple of around 1.2x
TRG Asian Infrastructure (AIRRO)

<table>
<thead>
<tr>
<th>Asset Class: Infrastructure</th>
<th>Vintage Year: 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Period / Fund Term End Dates: Jan 2014 / Jan 2022 (extended 2yrs)</td>
<td>Total Fund Size: $858m</td>
</tr>
<tr>
<td>Management Fee: 2% invested capital</td>
<td>DPFP Commitment: $37m</td>
</tr>
<tr>
<td>Performance Fee/Carry: 80/20 split with 8% pref</td>
<td>DPFP % of Fund: 4.3%</td>
</tr>
</tbody>
</table>

**Investment Performance (In Millions)** * - As of 12/31/18

<table>
<thead>
<tr>
<th>Paid In Capital</th>
<th>Unfunded Commitment</th>
<th>DPFP Distributions</th>
<th>NAV</th>
<th>Inception IRR*</th>
<th>TVPI*</th>
<th>DPI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$36.4</td>
<td>$3.9</td>
<td>$17.9</td>
<td>$19.3</td>
<td>0.37%</td>
<td>1.02</td>
<td>0.49</td>
</tr>
</tbody>
</table>

**Fund Strategy / Portfolio**

- Fund invested in both operating and development infrastructure projects and related investments across Asia. Six remaining investments all located in India include toll roads, hospitals, wind power, and thermal energy.
- JPMorgan was the original fund sponsor, and facilitated a GP transfer to The Rohatyn Group in May 2018.
- The Rohatyn Group has been focused on securing much needed financing for fund projects, and has been making steady progress towards closing a transaction.

**Strategic Plan / Timeline**

- Most of the assets face regulatory or financial hurdles to monetization, and estimates for potential exits through normal sales processes are for two to three years.
- Securing financing will provide the opportunity to add value, but return estimates vary widely due to the number of complicated factors with unknowable outcomes.
TRG Asian Infrastructure II (AIRRO II)

<table>
<thead>
<tr>
<th>Asset Class:</th>
<th>Infrastructure</th>
<th>Vintage Year:</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Period / Fund Term End Dates:</td>
<td>May 2017 / Jan 2025</td>
<td>Total Fund Size:</td>
<td>$468.8</td>
</tr>
<tr>
<td>Management Fee:</td>
<td>0% - waived for life of fund</td>
<td>DPFP Commitment:</td>
<td>$10m, reduced from original $40m upon investment period termination</td>
</tr>
<tr>
<td>Performance Fee/Carry:</td>
<td>80/20 split with 8% pref</td>
<td>DPFP % of Fund:</td>
<td>7.89%</td>
</tr>
</tbody>
</table>

**Investment Performance (In Millions)**

<table>
<thead>
<tr>
<th>Paid In Capital</th>
<th>Unfunded Commitment</th>
<th>DPFP Distributions</th>
<th>NAV</th>
<th>Inception IRR*</th>
<th>TVPI*</th>
<th>DPI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7.0</td>
<td>$2.5</td>
<td>$0.06</td>
<td>$4.5</td>
<td>-8.26%</td>
<td>0.65</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Fund Strategy / Portfolio**

- The Fund was formed to invest in infrastructure and infrastructure-related assets across Asia.
- The Fund investment period was terminated early in May 2017 due to market conditions and a determination that there was a lack of acceptable investment opportunities. The fund holds only one company, a power company with an operating asset and a development asset, that is co-owned with the AIRRO fund.
- JPMorgan was the original fund sponsor, and facilitated a GP transfer to The Rohatyn Group in May 2018.

**Strategic Plan / Timeline**

- The Fund reduced investors’ commitments by 75% upon termination of the investment period in mid-2017. Capital is only expected to be called to pay fund expenses.
- The operating asset is performing in line with expectations despite a challenging environment for thermal power producers. Long-term performance is dependent on continued execution of securing long-term power contracts.
- The development asset has been put on hold due to market conditions, has recently refinanced debt, and is seeking a strategic partner.
DISCUSSION SHEET

ITEM #D7

Topic: Audit Status

Discussion: The Chief Financial Officer will provide a status update on the annual financial audit.
DISCUSSION SHEET

ITEM #D8

Topic: Monthly Contribution

Discussion: Staff will review the Monthly Contribution Report.
Actual Comp Pay was 96% of the Hiring Plan estimate since the effective date of HB 3158.

In the most recent month Actual Comp Pay was 100% of the Hiring Plan estimate and 91% of the floor amount.

The Hiring Plan Comp Pay estimate increased by 5.22% in 2019.

Through 2024 the HB 3158 Floor is in place so there is no City Contribution shortfall.

Combined actual hiring is below the Hiring Plan estimate by 83 people. Fire is over the estimate by 43 people and Police is under by 126 officers.

Since the effective date of HB 3158 actual employee contributions have been $3.4 million less than the Hiring Plan estimate. Potential earnings loss due to the contribution shortfall is $287k at the Assumed Rate of Return.

There is no Floor on employee contributions.
### Contribution Summary Data

#### City Contributions

<table>
<thead>
<tr>
<th></th>
<th>May-19</th>
<th>Number of Pay Periods Beginning in the Month</th>
<th>HB 3158 Floor</th>
<th>City Hiring Plan</th>
<th>Actual Contributions Based on Comp Pay</th>
<th>Additional Contributions to Meet Floor Minimum</th>
<th>Comp Pay Contributions as a % of Floor Contributions</th>
<th>Comp Pay Contributions as a % of Hiring Plan Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td></td>
<td>$16,713,000</td>
<td>$15,246,346</td>
<td>$15,175,693</td>
<td>$1,537,307</td>
<td>91%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Year-to-Date</td>
<td></td>
<td>$61,281,000</td>
<td>$55,903,269</td>
<td>$55,271,155</td>
<td>$6,009,845</td>
<td>90%</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>HB 3158 Effective Date</td>
<td>$246,782,000</td>
<td>$225,908,654</td>
<td>$217,152,368</td>
<td>$29,629,632</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Due to the Floor through 2024, there is no cumulative shortfall in City Contributions.

Does not include the flat $13 million annual City Contribution payable through 2024.

Does not include Supplemental Plan Contributions.

#### Employee Contributions

<table>
<thead>
<tr>
<th></th>
<th>May-19</th>
<th>Number of Pay Periods Beginning in the Month</th>
<th>City Hiring Plan</th>
<th>Actual Employee Contributions Based on Comp Pay</th>
<th>Actual Contribution Shortfall Compared to Hiring Plan</th>
<th>Actuarial Valuation Contribution Assumption</th>
<th>Actual Contributions as a % of Hiring Plan Contributions</th>
<th>Actual Contributions as a % of Actuarial Val Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td></td>
<td>$5,965,962</td>
<td>$5,938,085</td>
<td>$27,877</td>
<td>$5,538,417</td>
<td>100%</td>
<td>107%</td>
<td></td>
</tr>
<tr>
<td>Year-to-Date</td>
<td></td>
<td>$21,875,192</td>
<td>$21,624,690</td>
<td>$250,502</td>
<td>$20,307,529</td>
<td>99%</td>
<td>106%</td>
<td></td>
</tr>
<tr>
<td>HB 3158 Effective Date</td>
<td>$88,399,038</td>
<td>$84,978,750</td>
<td>$3,420,288 $84,406,325</td>
<td>96%</td>
<td>101%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Potential Earnings Loss from the Shortfall based on Assumed Rate of Return $287,523

Does not include Supplemental Plan Contributions.
## Reference Information

### City Contributions: HB 3158 Bi-weekly Floor and the City Hiring Plan Converted to Bi-weekly Contributions

<table>
<thead>
<tr>
<th>Year</th>
<th>City Contributions</th>
<th>City Hiring Plan- Bi-weekly</th>
<th>HB 3158 Floor Compared to the Hiring Plan</th>
<th>Hiring Plan as a % of the Floor</th>
<th>% Increase/(decrease) in the Floor</th>
<th>% Increase/(decrease) in the Hiring Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$5,173,000</td>
<td>$4,936,154</td>
<td>$236,846</td>
<td>95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$5,344,000</td>
<td>$4,830,000</td>
<td>$514,000</td>
<td>90%</td>
<td>3.31%</td>
<td>-2.15%</td>
</tr>
<tr>
<td>2019</td>
<td>$5,571,000</td>
<td>$5,082,115</td>
<td>$488,885</td>
<td>91%</td>
<td>4.25%</td>
<td>5.22%</td>
</tr>
<tr>
<td>2020</td>
<td>$5,724,000</td>
<td>$5,254,615</td>
<td>$469,385</td>
<td>92%</td>
<td>2.75%</td>
<td>3.39%</td>
</tr>
<tr>
<td>2021</td>
<td>$5,882,000</td>
<td>$5,413,846</td>
<td>$468,154</td>
<td>92%</td>
<td>2.76%</td>
<td>3.03%</td>
</tr>
<tr>
<td>2022</td>
<td>$6,043,000</td>
<td>$5,599,615</td>
<td>$443,385</td>
<td>93%</td>
<td>2.74%</td>
<td>3.43%</td>
</tr>
<tr>
<td>2023</td>
<td>$5,812,000</td>
<td>$5,811,923</td>
<td>$77</td>
<td>100%</td>
<td>-3.82%</td>
<td>3.79%</td>
</tr>
<tr>
<td>2024</td>
<td>$6,024,000</td>
<td>$6,024,231</td>
<td>(231)</td>
<td>100%</td>
<td>3.65%</td>
<td>3.65%</td>
</tr>
</tbody>
</table>

*The HB 3158 Bi-weekly Floor ends after 2024*

### Employee Contributions: City Hiring Plan and Actuarial Val. Converted to Bi-weekly Contributions

<table>
<thead>
<tr>
<th>Year</th>
<th>City Hiring Plan Converted to Bi-weekly Employee Contributions</th>
<th>Actuarial Valuation Assumption Converted to Bi-weekly Employee Contributions</th>
<th>Actuarial Valuation as a % of Hiring Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$1,931,538</td>
<td>$1,931,538</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>$1,890,000</td>
<td>$1,796,729</td>
<td>95%</td>
</tr>
<tr>
<td>2019</td>
<td>$1,988,654</td>
<td>$1,846,139</td>
<td>93%</td>
</tr>
<tr>
<td>2020</td>
<td>$2,056,154</td>
<td>$2,056,154</td>
<td>100%</td>
</tr>
<tr>
<td>2021</td>
<td>$2,118,462</td>
<td>$2,118,462</td>
<td>100%</td>
</tr>
<tr>
<td>2022</td>
<td>$2,191,154</td>
<td>$2,191,154</td>
<td>100%</td>
</tr>
<tr>
<td>2023</td>
<td>$2,274,231</td>
<td>$2,274,231</td>
<td>100%</td>
</tr>
<tr>
<td>2024</td>
<td>$2,357,308</td>
<td>$2,357,308</td>
<td>100%</td>
</tr>
</tbody>
</table>

*The information on this page is for reference. The only numbers on this page that may change before 2025 are the Actuarial Valuation Employee Contributions Assumptions for the years 2019-2024 and the associated percentage.*
Reference Information - Actuarial Valuation and GASB 67/68 Contribution Assumptions

Actuarial Assumptions Used in the Most Recent Actuarial Valuation - These assumptions will be reevaluated annually and may change.

City Contributions are based on the Floor through 2024, the Hiring Plan from 2025 to 2037, after 2037 an annual growth rate of 2.75% is assumed

Employee Contributions for 2018 are based on the 2017 actual employee contributions inflated by the growth rate of 2.75% and the Hiring Plan for subsequent years until 2038, when the 2037 Hiring Plan is increased by the 2.75 growth rate for the next 10 years

Actuarial/GASB Contribution Assumption Changes Since the Passage of HB 3158

<table>
<thead>
<tr>
<th>Actuarial Valuation</th>
<th>GASB 67/68</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE 2017 (1/1/2018 Valuation)</td>
<td>$ (2,425,047)</td>
</tr>
</tbody>
</table>

*90% of Hiring Plan was used for the Cash Flow Projection for future years in the 12/31/2017 GASB 67/68 calculation. At 12-31-17 this did not impact the pension liability or the funded percentage.

The information on this page is for reference. It is intended to document contribution related assumptions used to prepare the Actuarial Valuation and changes to those assumptions over time, including the dollar impact of the changes. Contribution changes impacting the GASB 67/68 liability will also be included.
<table>
<thead>
<tr>
<th>Year</th>
<th>Hiring Plan</th>
<th>Actual</th>
<th>Difference</th>
<th>Hiring Plan</th>
<th>Actual EOY</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$372,000,000</td>
<td>Not Available</td>
<td>Not Available</td>
<td>$5,240</td>
<td>4,935</td>
<td>(305)</td>
</tr>
<tr>
<td>2018</td>
<td>$364,000,000</td>
<td>$349,885,528</td>
<td>(14,114,472)</td>
<td>4,988</td>
<td>4,983</td>
<td>(5)</td>
</tr>
<tr>
<td>2019</td>
<td>$383,000,000</td>
<td></td>
<td></td>
<td>5,038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>$396,000,000</td>
<td></td>
<td></td>
<td>5,063</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>$408,000,000</td>
<td></td>
<td></td>
<td>5,088</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$422,000,000</td>
<td></td>
<td></td>
<td>5,113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>$438,000,000</td>
<td></td>
<td></td>
<td>5,163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>$454,000,000</td>
<td></td>
<td></td>
<td>5,213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>$471,000,000</td>
<td></td>
<td></td>
<td>5,263</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td>$488,000,000</td>
<td></td>
<td></td>
<td>5,313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td>$507,000,000</td>
<td></td>
<td></td>
<td>5,363</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td>$525,000,000</td>
<td></td>
<td></td>
<td>5,413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029</td>
<td>$545,000,000</td>
<td></td>
<td></td>
<td>5,463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>$565,000,000</td>
<td></td>
<td></td>
<td>5,513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2031</td>
<td>$581,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2032</td>
<td>$597,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2033</td>
<td>$614,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2034</td>
<td>$631,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>$648,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2036</td>
<td>$666,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2037</td>
<td>$684,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**City Hiring Plan - Annual Computation Pay and Numbers of Employees**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hiring Plan</th>
<th>Actual</th>
<th>Difference</th>
<th>Hiring Plan</th>
<th>Actual EOY</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$372,000,000</td>
<td>Not Available</td>
<td>Not Available</td>
<td>$5,240</td>
<td>4,935</td>
<td>(305)</td>
</tr>
<tr>
<td>2018</td>
<td>$364,000,000</td>
<td>$349,885,528</td>
<td>(14,114,472)</td>
<td>4,988</td>
<td>4,983</td>
<td>(5)</td>
</tr>
<tr>
<td>2019</td>
<td>$383,000,000</td>
<td></td>
<td></td>
<td>5,038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>$396,000,000</td>
<td></td>
<td></td>
<td>5,063</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>$408,000,000</td>
<td></td>
<td></td>
<td>5,088</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$422,000,000</td>
<td></td>
<td></td>
<td>5,113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>$438,000,000</td>
<td></td>
<td></td>
<td>5,163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>$454,000,000</td>
<td></td>
<td></td>
<td>5,213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>$471,000,000</td>
<td></td>
<td></td>
<td>5,263</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td>$488,000,000</td>
<td></td>
<td></td>
<td>5,313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td>$507,000,000</td>
<td></td>
<td></td>
<td>5,363</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td>$525,000,000</td>
<td></td>
<td></td>
<td>5,413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029</td>
<td>$545,000,000</td>
<td></td>
<td></td>
<td>5,463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>$565,000,000</td>
<td></td>
<td></td>
<td>5,513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2031</td>
<td>$581,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2032</td>
<td>$597,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2033</td>
<td>$614,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2034</td>
<td>$631,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>$648,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2036</td>
<td>$666,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2037</td>
<td>$684,000,000</td>
<td></td>
<td></td>
<td>5,523</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comp Pay by Month - 2019**

<table>
<thead>
<tr>
<th>Month</th>
<th>Annual Divided by 26 Pay Periods</th>
<th>Actual</th>
<th>Difference</th>
<th>2019 Cumulative Difference</th>
<th>Number of Employees EOM</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$29,461,538</td>
<td>$29,084,185</td>
<td>(377,354)</td>
<td>(377,354)</td>
<td>4963</td>
<td>(75)</td>
</tr>
<tr>
<td>February</td>
<td>$29,461,538</td>
<td>$29,067,129</td>
<td>(394,410)</td>
<td>(771,763)</td>
<td>4974</td>
<td>(64)</td>
</tr>
<tr>
<td>March</td>
<td>$29,461,538</td>
<td>$29,092,504</td>
<td>(369,035)</td>
<td>(1,140,798)</td>
<td>4962</td>
<td>(76)</td>
</tr>
<tr>
<td>April</td>
<td>$29,461,538</td>
<td>$28,974,912</td>
<td>(486,626)</td>
<td>(1,627,424)</td>
<td>4955</td>
<td>(83)</td>
</tr>
<tr>
<td>May</td>
<td>$44,192,308</td>
<td>$43,987,516</td>
<td>(204,791)</td>
<td>(1,832,216)</td>
<td>4955</td>
<td>(83)</td>
</tr>
<tr>
<td>June</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>$44,192,308</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>$29,461,538</td>
<td>-</td>
<td>-</td>
<td>(1,832,216)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION SHEET

ITEM #D9

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.
<table>
<thead>
<tr>
<th></th>
<th>Conference</th>
<th>Dates</th>
<th>Location</th>
<th>Est. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TEXPERS Basic Trustee Training</td>
<td>August 17, 2019</td>
<td>Frisco, TX</td>
<td>$225</td>
</tr>
<tr>
<td>2</td>
<td>TEXPERS Summer Educational Forum</td>
<td>August 18-20, 2019</td>
<td>Frisco, TX</td>
<td>TBD</td>
</tr>
</tbody>
</table>
ITEM #E1

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 #E2

**Topic:** Executive Director’s report

a. Associations’ newsletters
   - NCPERS Monitor (June 2019)

b. Open Records

c. Nominations Committee Update

d. Employee Service Award

**Discussion:** The Executive Director will brief the Board regarding the above information.
Latest Potshots from Pew Are Based on Outdated Analysis of Public Pensions

Andrew Biggs is at it again with an attack on the Secure Choice retirement savings model than can only be described as contemptuous. In his view, low-wage earners lack the will, the discipline, and the intelligence to think ahead and prepare for their own retirement.

That’s difficult to drive forward if you’re only going to look in the rear view mirror. The latest study on municipal pensions by the Pew Charitable Trusts paints a gloomy picture of growing public pension shortfalls using—wait for it—2015 data.

That’s right. Four-year-old data, which ignores the significant steps undertaken by public pension systems in the intervening years to improve their funding levels and overall operations and efficiency.

In a study of 33 cities, Pew found that their total pension debt rose 64 percent, to $147 billion, from 2009 to 2015, while their funded ratio fell from 74 percent to 66 percent. At the same time, funded ratios for the states fell from 78 percent to 72 percent. These are fascinating figures for students of history, but they are flawed as tools for meaningful analysis.
Andrew Biggs is at it again with an attack on the Secure Choice retirement savings model than can only be described as contemptuous. In his view, low-wage earners lack the will, the discipline, and the intelligence to think ahead and prepare for their own retirement.

The title of the latest paper by the American Enterprise Institute pundit, “How Hard Should We Push the Poor to Save for Retirement,” tells you almost everything you need to know. This is an exercise in us-versus-them thinking that is intended to divide, not unite. As usual for Biggs, it is long on rhetoric and short on facts.

It’s not uncommon for Biggs to get one thing right, and in this case he accomplishes that much. He argues—and no one would dispute—that research is needed to show the effects of Secure Choice programs on participants. But of course, that particular facet of research can only be conducted once there is something to test. And thus far, only one state—Oregon—has a program up and running. But duly noted, Mr. Biggs. We expect to learn a great deal more about the impact of Secure Choice in years to come, but all signs point to the conclusion that helping people to save more for retirement would be overwhelmingly positive.

In the here and now, however, Biggs continues to demonstrate willful ignorance about the Secure Choice movement.

Let’s start with his assertion that state and city governments have flocked to Secure Choice as a way to establish automatic retirement savings plans aimed at low-income workers. That is simply incorrect. Secure Choice was developed as a solution for private-sector workers who lack access to retirement savings programs at work; it is not specifically designed for low-wage earners.

He also supposes that he is coming with fresh and original questions about how the programs would work. Sorry to let you down, Mr. Biggs, but numerous commissions and studies were conducted by states and cities for all the programs that have been approved or are under consideration. The states were well informed.
NATIONAL CONFERENCE ON PUBLIC EMPLOYEE RETIREMENT SYSTEMS

NCPPERS CHIEF OFFICERS SUMMIT

Where Leaders Engage

JUNE 12 – 14, 2019
WESTIN MICHIGAN AVENUE AVENUE
CHICAGO, IL

REGISTRATION OPEN

Visit www.NCPERS.org or call 202-624-1456 for more information

Follow Us on Twitter #NCPERSCEO19
MIDWEST:
Illinois

The administration of Illinois Governor J.B. Pritzker, a Democrat, has canceled plans to re-amortize the state’s pension funding schedule. The move would have reduced the state’s 2020 pension contribution by $1.1 billion.

In a May 7 letter, the heads of the governor’s department of revenue and the office of management and budget credited the decision to the fact that Illinois received “significantly stronger-than-expected revenues in April.” General tax revenues increased 38% in the year ending April 30, 2019, the administration said.

As a result, the state was able to cover budget shortfalls and meet its funding commitment to the retirement systems for fiscal year 2019.

The Bond Buyer reported that the proposal had concerned some analysts, who believed it threatened the state’s investment-grade status. The state also eliminated plans to issue $2 billion of pension obligation bonds, although that measure was not viewed as a rating threat.

The Pritzker Administration recommended that additional revenues to be dedicated to the state’s fiscal year 2018 pension payment. As a result, “the state will be able to meet the current funding commitment to the retirement systems without extending the ramp this year, the administration said. “The Governor remains committed to finding ways to fund our pension commitments in a sustainable manner.”

CONTINUED ON PAGE 5
Two task forces created by the governor’s administration—the Pension Asset Value and Transfer Task Force and the Pension Consolidation Task Force—are expected to issue comprehensive reports on the state’s pensions and other retirement systems. Pritzker expressed hope that the task forces, in consultation of the Colonel, would devise long-term pension reforms.

**SOUTH: Kentucky**

At press time, Kentucky Governor Matt Bevin remains short of the votes he needs in the state House of Representatives to pass his alternative pension bill at a special session of the legislature, several news organizations have reported. As a result, the Republican governor has not yet made good on his April 25 to convene a special session to consider alternatives to the pension bill he vetoed April 9.

And time is running out: Without action, more than 100 entities, including regional universities, county health departments and other quasi-governmental entities, face a massive spike in pension costs on July 1. Legislators are concerned now about logistical challenges in calling the legislature back to work with only a few weeks until the new fiscal year.

Bevin, meanwhile, still says he will call the special session, but has not provided a timetable. He appears to have support for his proposal in the state Senate, but lacks the 51 votes needed to pass the bill through the House, despite the fact that it is controlled by his Republican party.

Republican lawmakers are trying to “find the sweet spot” that balances the impact of a reform bill on taxpayers, employees and agencies that provide vital services, said State Rep. Jerry Miller, a Republican. House Democrats, meanwhile, have been advocating for freezing current pension contribution rates and coming back to the topic of reform legislation in January to make other changes.

**NORTHEAST: Pennsylvania**

When it comes to pensions, walking the walk appears to be optional for Pennsylvania legislators. The state’s lawmakers have embraced 401(k)-style retirement plans for government and school employees’ pensions—but they have different ideas about what they want for themselves.

Under a 2017 law, state government employees hired on or after January 1, 2019—and school employees hired after July 1, 2019—could no longer choose a traditional guaranteed pension plan. Instead, their choice is between a 401(k)-style plan or one of two hybrid plans that combine a 401(k)-style plan with a traditional pension plan.

Lawmakers had until March 31, 2019, to decide whether they would make the switch. As of April 1, 198 out of 218 lawmakers elected to continue in the traditional guaranteed pension plan; the figure includes 43 freshman lawmakers who signed up or pension benefits for the first time. By contrast, only 20 lawmakers chose to switch to a 401(k)-style plan option. None of the lawmakers picked either of the hybrid options.

Pennsylvania in 2017 modified two statewide public pension systems to curb pension-plan costs for school districts. The state was facing approximately $70 billion in unfunded liabilities, more than twice the size of the state’s general fund.

**WEST: Oregon**

Oregon’s House of Representatives on May 30 narrowly passed a Senate-approved bill that would require the state’s employees to redirect a portion of retirement benefits to shore up the pension system. The legislation, which passed the chamber 31-29, now goes to Governor Kate Brown, a Democrat, who is expected to sign it.

Oregon is currently one of two states that don’t require workers
More recent data is far more illuminating. For example, our 2018 Public Retirement Systems Study, released in February 2019, examined real-time responses from 167 state and local government pension funds and market assets exceeding $2.6 trillion. The majority—62 percent—were local (city and county) pension funds, while the remaining 38 percent were state-wide funds.

Our study also showed that pension plans racked up strong on-year returns averaging 13.4 percent in 2018, reflecting robust market conditions. Additionally, the study showed that 65 percent of pension plans had fine-tuned their annual investment return assumptions, lowering assumptions by 15 basis points on average, and 18 percent were considering doing so.

Importantly, our study also showed that contribution rates to pension funds remain stable. Among study respondents who participated two years in a row, employer contribution rates edged down to 20 percent of payroll in 2018, from 21 percent in 2017. Employee contribution rates were unchanged.

Attacks on public pensions are old news. And when they are based on old data, it’s hard to take them seriously. The reality is that our public pension systems are constantly adapting plan designs, revisiting assumptions, and strengthening governance. Through these and myriad other steps, public pensions are delivering on their promise to provide a secure retirement for millions of retired public servants.

Don’t Miss NCPERS’ Social Media

Facebook | Twitter | LinkedIn | YouTube | Blog | NCPERS

The Voice for Public Pensions

LATEST POTSHOTS FROM PEW CONTINUED FROM PAGE 1
as to how these programs would work. And California specifically examined what the program would do for participants’ eligibility for various social welfare programs.

Biggs also leans heavily on the idea that poor people may need money for other things than retirement savings. They might indeed, and if they did, they would have lots of choices. They can opt-out, as many people at the poverty line might very well do. Participants who realize they need to free up cash flow could reduce or eliminate their automatic enrollment. Those who have begun to amass retirement savings could withdraw money and, if applicable, pay any early-withdrawal penalties, just as anyone with an IRA could.

What comes shining through Biggs’ analysis is his elitist disdain for wage earners. He completely ignores the issue of financial insecurity and the corrosive effect it has on people. Instead, his solution seems to be that low-wage earners are better off spending their money now and living off Social Security in retirement.

His rhetoric is tiresome, it’s callous, and it’s just wrong. Early indications from the Secure Choice programs are very positive—enthusiasm for these programs is high. Amassing even a modest retirement nest egg is a plus for workers, because when workers defer drawing on their Social Security for even a few months, they are accumulating higher monthly benefits down the road. Reforming welfare and Social Security are ideas worth considering—but states and cities are responding to a retirement crisis that exists here and now, and they don’t control federal legislation.

When it comes to Secure Choice, the facts speak for themselves. After intensive study and analysis, cities and states are embracing an innovative way to help millions of Americans help themselves be better prepared for retirement. What’s not to like about that? ♦

The bill, SB 1049, would defer immediate action on the state’s $27 billion pension shortfall by extending the minimum payment schedule for eight years. The bill would reduce the ending balances in employees’ supplemental retirement accounts and trim a 30-year employee’s overall retirement benefits by 1 percent to 2 percent of pay. The contributions would apply only to employees $30,000 or more annually. The redirection to the pension plan would cease if the pension system’s funded status reaches at least 90 percent. ♦
2019 Conferences

**June**
Chief Officers Summit (COS)
June 13 – 14
Chicago, IL

**September**
Public Pension Funding Forum
September 11 – 13
New York, NY

**October**
NCPERS Accredited Fiduciary Program (All modules)
October 26 – 27
New Orleans, LA

Public Safety Conference
October 27 – 30
New Orleans, LA

2018-2019 Officers

Daniel Fortuna
President

Kathy Harrell
First Vice President

Dale Chase
Second Vice President

Carol G. Stukes-Baylor
Secretary

Will Pryor
Treasurer

Mel Aaronson
Immediate Past President

Executive Board Members

**State Employees Classification**
Stacy Birdwell
John Neal

**County Employees Classification**
Teresa Valenzuela

**Local Employees Classification**
Sherry Mose
Thomas Ross
Ralph Sicuro

**Police Classification**
Kenneth Hauser
James Sklenar

**Fire Classification**
Dan Givens
Emmit Kane
James Lemonda

**Educational Classification**
David Kazansky
Richard Ingram

**Protective Classification**
Peter Carozza, Jr.
Ronald Saathoff

**Canadian Classification**
Frank Ramagnano

The Monitor is published by the National Conference on Public Employee Retirement Systems. Website: www.NCPERS.org • E-mail: legislative@NCPERS.org