How ASRS employees deliver service with PROFESSIONALISM

"We promote, strive for and expect individuals, teams, and divisions to possess professional qualities and skills to lead the organization"

• Friendly, respectful and courteous
• Proactive and responsive
• Good communicator / active listener
• Trusted contributor / teammate
• Personally accountable
• Subject matter expert
• Critical thinker
• Honest, fair, non-judgmental
• Adaptable to change
• Adheres to the Code of Conduct

RESULTS

"We treasure the achievements of individuals, teams, divisions and the agency that energize the organization"

• Completes projects
• Attains individual accomplishments
• Meets goals and objectives
• Satisfies customers
• Produces quality work products
• Manages risks successfully

IMPROVEMENT

"We appreciate individuals, teams or divisions who drive the agency forward with new, innovative ideas and solutions"

• Promotes new ideas
• Enhances morale
• Enhances outcomes and performance
• Improves relationships
• Solves problems
• Increases efficiency, effectiveness or reduces costs

DIVERSITY

"We recognize that utilizing different talents, strengths and points of view, strengthens the agency and helps propel outcomes greater than the sum of individual contributor"

• Encourages the free flow of ideas and opinions
• Treats all people with dignity and respect
• Works effectively with dissimilar individuals
• Recognizes and promotes new skills in others

EXCELLENCE

"We celebrate individuals, teams and divisions who exceed expectations and deliver service with a PRIDE that permeates the organization"

• Surpasses expectations
• Engenders a positive public image
• Celebrates / rewards accomplishments and contributions of others
• Embraces change in a manner which inspires others
• Promotes teamwork / collaboration through communication
• Accepts personal responsibility and challenges with enthusiasm
AGENDA

NOTICE OF COMBINED PUBLIC MEETING AND POSSIBLE EXECUTIVE SESSION OF
THE ARIZONA STATE RETIREMENT SYSTEM BOARD

September 25, 2020
8:30 a.m.

Pursuant to A.R.S. § 38-431.02(F), notice is hereby given to the Trustees of the Arizona State Retirement System (ASRS) Board and to the general public that the ASRS Board will hold a telephonic meeting open to the public on Friday, September 25, 2020, beginning at 8:30 a.m. The meeting will be open to Trustees and presenting staff who wish to participate in-person while following the appropriate physical distancing guidelines. No members of the public will be permitted to attend the meeting in-person. Trustees of the Board and the public may attend by telephone conference call at 877-820-7831, using Participant Passcode: 857127#.

Pursuant to A.R.S. § 38-431.03(A)(3), the ASRS Board of Trustees may vote to go into executive session, which will not be open to the public, for the purpose of obtaining legal advice on any item on the Agenda.

The Chair may take public comment during any agenda item.

The following agenda topics are proposed action items: 2, 3, 7, 8

The Agenda for the meeting is as follows:

1. Call to Order; Roll Call; Opening Remarks ..................................................... Mr. Jim Hillyard Chair

2. Approval of the Minutes of the July 21, 2020 Ad hoc Public Meeting and Executive Session of the ASRS Board (estimated time: 1 minute) ................................................................. Mr. Jim Hillyard

   Proposed Action Item: The Board may decide whether to amend and approve the minutes, approve the minutes as written, or not approve the minutes at this time.

3. Approval of the Minutes of the July 31, 2020 Public Meeting of the ASRS Board (estimated time: 1 minute) .............................................................................................................. Mr. Jim Hillyard

   Proposed Action Item: The Board may decide whether to amend and approve the minutes, approve the minutes as written, or not approve the minutes at this time.
4. Presentation Regarding Government Finance Officers Association (GFOA) Financial Reporting Awards:
   a. Comprehensive Annual Financial Report (CAFR) for Fiscal Year (FY) 2019
   b. Popular Annual Financial Report (PAFR) for FY 2019
      (estimated time: 5 minutes) ................................................................. Mr. Paul Matson
      ........................................................................................................... Mr. Anthony Guarino
      Deputy Director and Chief Operations Officer
      .............................................................................................................. Ms. Erin Higbee
      Chief Financial Officer
      ............................................................................................................. Ms. Erica Syring
      Controller

5. Presentation, Discussion, and Appropriate Action Regarding the ASRS Investment Program Update
   a. ASRS Fund Positioning
   b. IMD Investment House Views
   c. IMD Projects, and Asset Class Committee (ACC) Activities
      (estimated time: 20 minutes) ................................................................. Mr. Paul Matson
      ........................................................................................................... Mr. Karl Polen
      Director
      .............................................................................................................. Chief Investment Officer

6. Presentation, Discussion, and Appropriate Action Regarding Independent Reporting, Monitoring, and Oversight (estimated time: 20 minutes) .................. Mr. Allan Martin
   ............................................................................................................... Mr. Paul Matson
   Partner, NEPC
   Proposed Action Item: The Board may consider staff’s recommendation; provide an alternate motion, or make no motion.

7. Presentation, Discussion, and Appropriate Action Regarding Staff Recommended Updates to the ASRS Board Governance Policy Handbook (estimated time: 10 minutes) .................. Mr. Jim Hillyard
   ................................................................................................................ Mr. Paul Matson
   Proposed Action Item: The Board may consider staff’s recommendation; provide an alternate motion, or make no motion.

8. Presentation, Discussion and Appropriate Action Regarding the Calendar Year 2021 Board Meeting Schedule (estimated time: 5 minutes) .................. Mr. Paul Matson
   Proposed Action Item: The Board may consider staff’s recommendation; provide an alternate motion, or make no motion.
9. Presentation, Discussion, and Appropriate Action Regarding the Director's Report as well as Current Events
   a. 2020 Operations Report
   b. 2020 Budget and Staffing Reports
   c. 2020 Cash Flow Statements
   d. 2020 Appeals Report
   e. 2020 Employers Reporting
      *(estimated time: 5 minutes)*
      Mr. Paul Matson
      Mr. Anthony Guarino

10. Presentation and Discussion Regarding Informational Updates from Prior and Upcoming Committee Meetings *(estimated time: 15 minutes)*
    a. Operations, Audit and Legislative Committee (OALC) .................. Mr. Clark Partridge, Chair
       *(The next OALC Meeting will be held on October 14, 2020.)*
       Mr. Anthony Guarino
    b. Investment Committee (IC) ................................................... Mr. Michael Lofton, Chair
       *(The next IC Meeting is scheduled for December 21, 2020.)*
       Mr. Karl Polen
    c. Appeals Committee (AC) ..................................................... Mr. Michael Miller, Chair
       *(The next AC Meeting is scheduled for October 13, 2020.)*
       Mr. Anthony Guarino

11. Board Requests for Future Agenda Items *(estimated time: 1 minute)* ........ Mr. Jim Hillyard

12. Call to the Public ......................................................................................... Mr. Jim Hillyard

Those wishing to address the ASRS Board will be requested to do so telephonically. Trustees of the Board are prohibited by A.R.S. § 38-431.01(H) from discussing or taking legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action. As a result of public comment, the Board may direct staff to study and/or reschedule the matter for discussion and decision at a later date.

13. The next regular public ASRS Board meeting is scheduled for Friday, November 13, 2020, at 8:30 a.m.

   Regarding the following agenda item, pursuant to A.R.S. § 38-431.03(A)(1), notice is hereby given to Trustees of the ASRS Board and the general public that the ASRS Board may vote to go into executive session, which will not be open to the public, for the purpose of the Director’s annual review.

14. Presentation, Discussion, and Appropriate Action Regarding the 2019 Review and the Employment Agreement of the Director of the ASRS *(estimated time: 45 minutes)* ........ Mr. Jim Hillyard
15. Adjournment of the ASRS Board.

A copy of the agenda background material provided to Board Trustees (with the exception of material relating to possible executive sessions) is available for public inspection at the ASRS offices located at 3300 North Central Avenue, 14th Floor, Phoenix, Arizona and 4400 East Broadway Boulevard, Suite 200, Tucson, Arizona. The agenda is subject to revision up to 24 hours prior to meeting. These materials are also available on the ASRS website (https://www.azasrs.gov/content/board-and-committee-meetings) approximately 48 hours prior to the meeting.

Persons with disabilities may request alternate formats of this document by contacting Tracy Darmer, ADA Coordinator at (602) 240-5378 in Phoenix, at (520) 239-3100, ext. 5378 in Tucson, or 1-800-621-3778, ext. 5378 outside metro Phoenix or Tucson. Requests should be made as early as possible to allow time to arrange the accommodations.

Dated September 22, 2020

ARIZONA STATE RETIREMENT SYSTEM

Signed Copy on File ______________________ Signed Copy on File ______________________
Joyce Williams Paul Matson
Board Administrator Director
Agenda Item #2
The Arizona State Retirement System (ASRS) Board of Trustees met telephonically.

Mr. Jim Hillyard, Chair of the ASRS Board, called the meeting to order at 3:32 p.m.

1. Call to Order; Roll Call; Opening Remarks

Present:  Mr. Jim Hillyard, Chair
          Mr. Clark Partridge, Vice-chair
          Mr. Rene Guillen
          Mr. Tom Manos
          Mr. Michael Miller

Excused:  Mr. Michael Lofton
          Mr. Kevin McCarthy

Two vacant positions.

A quorum was present for the purpose of conducting business.

Ms. Melanie Alexander, ASRS Board Administrator, provided all attendees with telephonic meeting guidelines.

2. Presentation, Discussion, and Appropriate Action Regarding the ASRS Group Medical Benefits Program Solicitation and Request for Proposal (RFP)

Prior to calling for a motion for Executive Session as the subject matter and materials are confidential, Mr. Jim Hillyard, Board Chair, read the following statement: Pursuant to A.R.S. 38-431.03(B), minutes of and discussions made in executive session are required by law to be confidential and shall not be communicated to any person outside this meeting room.

Motion: Mr. Clark Partridge moved to go into executive session for the purpose of discussion or consideration of records exempt by law from public inspection. Mr. Rene Guillen seconded the motion.
By a roll call vote of 5 in favor, 0 opposed, 0 abstentions, 2 excused, and 0 vacancies, the motion was approved. The Trustee votes were as follows:

- Mr. Jim Hillyard – approved
- Mr. Clark Partridge – approved
- Mr. Rene Guillen – approved
- Mr. Michael Lofton – excused
- Mr. Tom Manos – approved
- Mr. Kevin McCarthy – excused
- Mr. Michael Miller – approved

The Board convened to Executive Session at 3:35 p.m.

The Board reconvened to Public Session at 3:42 p.m.

Ms. Athena Elliston, Budget and Procurement Analyst, took a moment to thank the Board for the opportunity to bring this matter before them at an ad hoc meeting. She expressed, on behalf of the Evaluation Committee, their satisfaction with the number of offers received, which made for a very competitive process. She concluded by stating overall they were happy with the end results and requested that the Board approve the RFP Evaluation Committee and the Operations, Audit and Legislative Committees recommendation for contract award.

Motion: Mr. Clark Partridge moved to accept the staff recommendation and move forward with the award as identified. Mr. Tom Manos seconded the motion.

By a roll call vote of 5 in favor, 0 opposed, 0 abstentions, 2 excused, and 0 vacancies, the motion was approved. The Trustee votes were as follows:

- Mr. Jim Hillyard – approved
- Mr. Clark Partridge – approved
- Mr. Rene Guillen – approved
- Mr. Michael Lofton – excused
- Mr. Tom Manos – approved
- Mr. Kevin McCarthy – excused
- Mr. Michael Miller – approved

3. Board Requests for Future Agenda Items

None were requested.

4. Call to the Public

No members of the public requested to speak.

5. Adjournment of the ASRS Board

Motion: Mr. Tom Manos moved to adjourn the meeting at 3:47 p.m. Mr. Michael Miller seconded the motion.

By a roll call vote of 5 in favor, 0 opposed, 0 abstentions, 2 excused, and 0 vacancies, the motion was approved. The Trustee votes were as follows:
Mr. Jim Hillyard – approved
Mr. Clark Partridge – approved
Mr. Rene Guillen – approved
Mr. Michael Lofton – excused
Mr. Tom Manos – approved
Mr. Kevin McCarthy – excused
Mr. Michael Miller – approved

Respectfully Submitted by:

Melanie Alexander
Board Administrator
ARIZONA STATE RETIREMENT SYSTEM
Confidential Materials

Note: Executive Session Minutes have been provided to the Board and not included in this book.
Agenda Item #3
The Arizona State Retirement System (ASRS) Board of Trustees met telephonically.

Mr. Jim Hillyard, Chair of the ASRS Board, called the meeting to order at 8:31 a.m.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. Jim Hillyard, Chair
         Mr. Clark Partridge, Vice-chair
         Mr. Rene Guillen
         Mr. Michael Lofton
         Mr. Tom Manos
         Mr. Kevin McCarthy
         Mr. Michael Miller

Two vacant positions.

A quorum was present for the purpose of conducting business.

Ms. Joyce Williams, ASRS Board Administrator, provided all attendees with telephonic meeting guidelines.

2. Approval of the Minutes of the May 29, 2020 Public Meeting of the ASRS Board

Motion: Mr. Clark Partridge moved to approve the minutes of the May 29, 2020 Public Meeting of the ASRS Board. Mr. Tom Manos seconded the motion.

By a roll call vote of 7 in favor, 0 opposed, 0 abstentions, 0 excused, and 0 vacancies, the motion was approved. The Trustee votes were as follows:

   Mr. Jim Hillyard – approved
   Mr. Clark Partridge – approved
   Mr. Rene Guillen – approved
   Mr. Michael Lofton – approved
   Mr. Tom Manos – approved
   Mr. Kevin McCarthy – approved
   Mr. Michael Miller – approved
3. Presentation, Discussion, and Appropriate Action Regarding ASRS Budget-Related Topics Including:
   a. The ASRS Appropriated and Continuously Appropriated Budget and Spending Plans for Fiscal Year (FY) 2021.
   b. The ASRS Appropriated and Continuously Appropriated Budget Request and Spending Plans for FY 2022.

Mr. Anthony Guarino introduced Ms. Martha Rozen, Chief of Administrative Services, Mr. Chris Gustafson, Budget and Procurement Manager, and Ms. Kerry White, Assistant Chief Investment Officer who led the discussion and presented the proposed spending plans.

Ms. Rozen opened the discussion by introducing two new analysts who have been assigned to the ASRS budget. The Governor’s Office of Strategic Planning and Budget has assigned Mr. Blake Dodd and the Joint Legislative Budget Committee has assigned Ms. Molly Murphy. Ms. Rozen also recognized Ms. M. Harrison, Budget Manager, who provided a great deal of assistance and input with preparing the materials. Ms. Rozen added that although Mr. Gustafson and Ms. White will be presenting the materials, Ms. Harrison and Mr. Dave King, Assistant Director, Technology Services Division, would be available to answer any questions the Board may have regarding the proposal. Ms. Rozen turned the presentation over to Mr. Gustafson.

Mr. Gustafson reviewed the budget recommendation with the Board and highlighted the following:

- The budget includes key performance indicators to reduce the base administration budget by 3% from FY 2017 to FY 2020. The agency has not only met that goal but has exceeded it and reduced its base administrative spending by 4.68%. Mr. Gustafson referred the Trustees to a detailed reference chart on Page 2 of the attached OALC memo.
- Over the course of the next several fiscal years, the ASRS continues to focus on managing budgets and implementing strategies designed to improve operational effectiveness and make the ASRS more cost effective.
- FY 2021 and FY 2022, administrative spending plans support system and technology modernizations, the framework of the ASRS business model, with an emphasis on security risk mitigation and re-engineering of processes. These investments in technology will help the ASRS avoid future costs associated with inefficient processes. Mr. Gustafson referred the Trustees to Attachments A and B, which highlight the FY21 Spending Plan and the current lists of projects the ASRS is working on.
- FY 2022 the ASRS must complete its required migration to the cloud, upgrade an essential system and implement a critical technology solution to further safeguard data. This will require an increase in the budget request of the ASRS’ base operating appropriations. Technology projects are outlined in Attachment B. Attachments D and E show the budget request and the projected budget for FY 2022. Mr. Gustafson provided the following details:
  o In 2019 the Arizona Department of Administration implemented a Cloud First policy which necessitates the ASRS to migrate its infrastructure for data, systems, servers, and processes from its current physical data center to a cloud environment. With this will come a one-time Cloud Migration transition cost for external consulting resources, followed by ongoing annual Cloud costs for Cloud services.
  o The current version of FileNet is no longer supported and the ASRS will need external resources to successfully configure and implement an upgrade necessary to eliminate any disruption in service to this document management system.
Data subsetting, a software product compatible with core applications to allow teams to utilize only the relevant section of the ASRS’ database rather than the full system will enable the ASRS to work on improvements without affecting the entire database or creating business disruption, along with enhancing data security. Mr. Gustafson referred the Trustees to Page 4 of the attached OALC memo, which contains a chart detailing the structure of the two-year allocation, as well as a more detailed description of the costs.

Mr. Gustafson responded to questions from the Board and turned the presentation over to Ms. Kerry White, Assistant Chief Investment Officer. Ms. White referred the Trustees to Attachment C for her review of the Investment Spending Plan as follows:

- FY 2021 and FY 2022 are relatively the same; with very little differences in the projections.
- The bulk of the requested budget is for management fees in public and private markets.
- Changes to the spending plan may occur from additional automation of workflow, mandate changes to the portfolio, regulatory or legislative changes or management decisions.
- Finalization of contractual changes currently in progress for additional automation of workflow, which will come with additional costs that are not reflected in the materials presented, will be updated as the information becomes available.

For the record, a copy of the detailed budget proposal is attached to these minutes.

Motion: Mr. Clark Partridge moved to accept the budget as proposed and for it to be forwarded for consideration to the budget offices and the legislature. Mr. Rene Guillen seconded the motion.

By a roll call vote of 7 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved. The Trustee votes were as follows:

- Mr. Jim Hillyard – approved
- Mr. Clark Partridge – approved
- Mr. Rene Guillen – approved
- Mr. Michael Lofton – approved
- Mr. Tom Manos – approved
- Mr. Kevin McCarthy – approved
- Mr. Michael Miller – approved

4. Presentation, Discussion, and Appropriate Action Regarding the ASRS Investment Program Update

Mr. Karl Polen, Chief Investment Officer, reported that total fund year-to-date returns through June 30, 2020 are approximately 1%, and assets are at approximately $40.5 billion.

Mr. Polen’s report to the Board covered the following three topics:

- Current status of the economy and economic outlook and implications for investments. The Fund is remaining neutrally positioned as of 7/20/2020. Mr. Polen reviewed the differences between the stock market and the economy and how the financial markets’ responses to the worldwide pandemic differed from other times of financial distress.
• **Annual update to the Board of internal implementation planning process and how they relate to Board-established goals.**

Mr. Polen reviewed a summary of all internal implementation plans for the Board. He noted that these plans illustrate a three- to five-year plan of action, compared to the Strategic Asset Allocation (SAA), which represents a twenty- to thirty-year plan of action for the Fund. These implementation plans are stable and are reviewed annually, allowing for adjustments to be made when necessary. Significant changes were made to the Equities Implementation Plan, and few changes were made to the Real Estate Implementation Plan.

Mr. Polen presented preliminary results for periods ended June 30, 2020, summarized as follows:

- Total fund returns of .8%, 5.5%, 6.1% and 8.9% exceeded benchmark returns by .7%, 1.2%, 1.6% and 1.2% for the one-, three-, five-, and ten-year periods, respectively.
- Comparisons to the public fund universe for the June 30 period were not available, but that analysis for periods ended March 31 showed ASRS to be in the top decile of public plans for all of the one-, three-, five-, and ten-year periods.

Mr. Polen answered questions and provided background on this discussion item.

5. **Update on the Operational, Investment, and Program Statuses of the ASRS as a result of the Current Pandemic Situation**

Mr. Paul Matson, Director, gave an update to the Board of the operational, investment, and program statuses of the ASRS.

- Operational status, internal (staffing) and external (customer service).
  - Mr. Matson described the timeline of ASRS staff working from home. In the first week of the pandemic, staff working onsite at 3300 N. Central Ave. was at about 25%. That percentage went to 12% over the following few weeks. As COVID-19 results increased, staff and management reevaluated the situation and currently, about 7% of the ASRS staff is working in the office. That is close to the minimum onsite staffing needed to maintain nearly 100% functionality, and the physical risk for those who are onsite is greatly reduced because so many are working from home.
  - Mr. Matson described the research project currently underway to determine what the future of the ASRS workforce will look like. Optimistically, the ASRS will be operating in a post-pandemic environment by the first quarter of 2021, but in any case, the workforce will continue to be very fluid and flexible.
  - In response to fewer staff members on site, Mr. Matson also spoke about the distinct possibility of the ASRS potentially vacating one floor in the 3300 N. Central Avenue building. This would free space that will be available to lease when the local demand for office space increases.
  - Customer service levels have continued to exceed expectations over the past few months. Mr. Matson referred to the Board materials for Agenda Item #5 for detailed work-from-home summary reports and again complimented the Member Services staff, and related areas, on continuing to perform beyond expectations.

- Investments and actuarial status of liquidity and return volatility.
Mr. Matson referred to the Investment Positioning Summary Reports in the Board materials and reminded the Board of the three main goals being managed by the IMD: portfolio liquidity, ability to benefit from opportunities as they arise, and portfolio rebalancing as needed.

- Mr. Matson referred to the Cash Flow Aggregate Report included in the Board materials and highlighted the relevant characteristics of internal and external cash flow during the pandemic. This report helps illustrate the Fund’s liquidity as well as any external cash flow stress which might result from increased depletion of pension funds due to increased withdrawals or increased member retirements. The report shows an increase over the previous year in external cash received from contributions, approximately $158 million. This increase can be attributed to salary increases resulting in increased contributions, employment increases, and a small increase in the contribution rate.

- Payments out of the Fund mainly consist of retirement and disability payments and refunds. Approximately $104 million more has been paid out this year compared to last year, so in spite of the pandemic, negative cash flow was improved by about $54 million.

**Impact on contribution rates and funded status.**
- Contribution rates: At the beginning of 2020, pre-pandemic projections on contribution rates would have shown a peak in about 2022 at approximately 12.22%. Now, impacted by the effects of the pandemic, they are projected to peak in about 2034 at approx. 13%, increasing by about .8%.
- Funded status: Originally, the actuarial funded status as of June 30, 2019 was 72.3% and the June 30, 2020 projected rate was 73.2%, or increasing by .9%. Currently, the funded status is projected to increase by about .3%. At this point in time, a more reasonable projected rate estimate would be 72.6%.

**Program results for pensions (addressed above), health insurance, and long-term disability (LTD).**
- Health insurance: Approximately every two weeks, the ASRS receives data related to the pandemic from our health-care provider. Five elements are reported, determining Medicare and non-Medicare categories of tests, infection rates, medical services received by ASRS retirees, access nodes such as in-office visits or telemedicine, and costs. With respect to infection rates, we monitor confirmed COVID-19, probable, and possible cases, categorized by Medicare and non-Medicare.
- In relation to the expectation that health insurance costs would have been likely to increase during this pandemic season, Mr. Matson explained that expenditure patterns have actually decreased because many retirees are not seeing their doctors as often as in previous years and are postponing elective surgeries. This reduction in health care costs will impact the Retroactive Rate Agreement that the ASRS has in place and will allow that cost savings to offset future health care premiums. The impact on health insurance, from a fiscal perspective, is slightly positive, and not significantly negative, as some observers might have assumed.
- LTD: LTD is currently at approximately 74.8% funded status, which is a dramatic increase from 17.6% in 1996. Although the impact of falling contribution rates won’t be evident in LTD for another year or two, Mr. Matson reviewed some statistics
which indicate that there should eventually be a positive impact on LTD funded status and a lowering impact on contribution rates going forward.

- The number of individuals opening new claims in 2018 was 574, in 2019 it was 539, and for the year that just ended on June 20, 2020, it was 527.
- Over the last 20 years, LTD program participation went from approximately 2.2% of the ASRS active workforce to about 1.5%.
- From a cash flow perspective, in 2018 our net LTD payments were $56.7 million, compared to payments for the year ending June 30, 2020 of $51.4 million.

Chairman Hillyard again commended Mr. Matson and the whole ASRS team for their ability to continue to serve the ASRS members and employers during the pandemic.

6. Presentation, Discussion, and Appropriate Action Regarding Appointment of Board Committee Officers and Membership

Mr. Jim Hillyard thanked the Board members for their committee work in the past year and reaffirmed, for the record, continuing appointments to the ASRS Board Committees effective immediately as follows:

**Appeals Committee (AC)**
Chair: Michael Miller
Vice-chair: Rene Guillen
Member: Tom Manos

**Investment Committee (IC)**
Chair: Michael Lofton
Vice-chair: Kevin McCarthy
Member: Clark Partridge

**Operations, Audit, and Legislative Committee (OALC)**
Chair: Clark Partridge
Vice-chair: Tom Manos
Member: Rene Guillen

7. Presentation and Discussion Regarding Fiduciary Education

Ms. Cassie Adams, Assistant Attorney General, provided brief presentations regarding Trustee fiduciary responsibility and Arizona’s Open Meeting Law. Ms. Adams also reviewed the informal opinion issued by the State of Arizona’s Office of the Attorney General addressing concerns relating to Arizona’s Open Meeting Law and COVID-19.

8. Presentation, Discussion, and Appropriate Action Regarding the Director’s Report as well as Current Events

Mr. Matson had no further comments for the Trustees.
9. Presentation and Discussion Regarding Informational Updates from Prior and Upcoming Committee Meetings

a. Operations, Audit and Legislative Committee (OALC)

Mr. Clark Partridge announced the next OALC meeting is to be held on October 14, 2020. Mr. Partridge also commended the staff for their work reviewing operations and gave them his appreciation for their hard work and preparation for their meetings, as well as in the day-to-day operations of the agency.

b. Investment Committee (IC)

Mr. Lofton announced the next IC meeting is to be held on September 21, 2020.

c. Appeals Committee (AC)

Mr. Mike Miller inadvertently announced the next AC meeting is to be held on September 8, 2020, however, it should be noted for the record the correct date is October 13, 2020.

10. Board Requests for Future Agenda Items

No requests were made.

11. Call to the Public

No members of the public requested to speak.

12. Adjournment of the ASRS Board

Motion: Mr. Michael Lofton moved to adjourn the ASRS Board meeting. Mr. Michael Miller seconded the motion.

By a vote of 7 in favor, 0 opposed, 0 abstentions, 0 excused, and 2 vacancies, the motion was approved. The Trustee votes were as follows:

Mr. Jim Hillyard – approved
Mr. Clark Partridge – approved
Mr. Rene Guillen – approved
Mr. Michael Lofton – approved
Mr. Tom Manos – approved
Mr. Kevin McCarthy – approved
Mr. Michael Miller – approved

Mr. Jim Hillyard adjourned the July 31, 2020 public meeting of the Board at 10:46 a.m.
Respectfully Submitted by:

Joyce Williams
Board Administrator
ARIZONA STATE RETIREMENT SYSTEM
Copy of Detailed Budget Proposal – Pertains to Agenda Item #3 of the minutes Must be kept with the minutes for records purposes
## FY 2021

### ASRS Administrative Spending Plan

<table>
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<tr>
<th>Base Operating Appropriations</th>
<th>Long Term Disability Appropriations</th>
<th>Pension Payroll, Rent, and Actuarial Fees Continuous Approprations*</th>
<th>Base Administrative Budget Subtotal</th>
<th>Technology Services Improvements Projected Unspent of Base Appropriations</th>
<th>Administrative Projects Budget</th>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Travel</strong></td>
<td>79,000</td>
<td>-</td>
<td>-</td>
<td>79,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Other Operating Expenditures (OOE)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office rent</td>
<td>-</td>
<td>-</td>
<td>1,589,000</td>
<td>1,589,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Software licenses and support</td>
<td>1,712,000</td>
<td>-</td>
<td>-</td>
<td>1,712,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>390,000</td>
<td>-</td>
<td>-</td>
<td>390,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADOA Risk Management insurance premiums</td>
<td>149,300</td>
<td>-</td>
<td>133,000</td>
<td>282,300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Newsletter printing and mailing</td>
<td>141,600</td>
<td>-</td>
<td>-</td>
<td>141,600</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Professional dues, subscriptions, and publications</td>
<td>159,900</td>
<td>-</td>
<td>172,000</td>
<td>331,900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Postage and delivery</td>
<td>86,000</td>
<td>-</td>
<td>78,000</td>
<td>164,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education, training and conferences; employee tuition assistance</td>
<td>67,000</td>
<td>-</td>
<td>-</td>
<td>67,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Equipment repair and maintenance</td>
<td>63,300</td>
<td>-</td>
<td>-</td>
<td>63,300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other operating supplies and expenditures</td>
<td>88,000</td>
<td>-</td>
<td>-</td>
<td>88,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total OOE</strong></td>
<td>2,827,700</td>
<td>-</td>
<td>1,972,000</td>
<td>4,799,700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency furniture purchases/replacement</td>
<td>20,000</td>
<td>-</td>
<td>-</td>
<td>20,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Network, server, PC and related devices replacement and additions</td>
<td>208,300</td>
<td>-</td>
<td>-</td>
<td>208,300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Equipment</strong></td>
<td>228,300</td>
<td>-</td>
<td>-</td>
<td>228,300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$22,375,000</td>
<td>$1,500,000</td>
<td>$4,496,000</td>
<td>$28,371,000</td>
<td>$19,000</td>
<td>$1,213,200</td>
</tr>
<tr>
<td>ASP Appropriated/Budgeted Amounts</td>
<td>22,375,000</td>
<td>1,500,000</td>
<td>4,496,000</td>
<td>28,371,000</td>
<td>19,000</td>
<td>1,213,200</td>
</tr>
<tr>
<td>FY 2021 Projected Unspent/Reversion</td>
<td>19,000</td>
<td>300,000</td>
<td>-</td>
<td>319,000</td>
<td>(19,000)</td>
<td>-</td>
</tr>
</tbody>
</table>

*Arizona Revised Statute § 38-721(C) lists specific expenditures that are continuously appropriated in the amount deemed necessary by the Board, including rent, actuarial consulting fees, and costs associated with administering retiree pension benefits and disbursements.

Attachment A
### Administrative Projects Detail

**Automation Upgrades and Oracle Modernization Project Special Line Item Appropriations (Non-Lapsing) (PU RT13001: Oracle Forms and Reports Modernization)**

Objective: Evolve legacy technologies to newer open standards-based technologies and re-engineer business processes to increase productivity, reduce costs, mitigate risks, protect and secure information, improve member satisfaction and improve service turnaround time to members.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROPRIATED LINE ITEM BUDGET</td>
<td>1,390,000</td>
<td>4,484,500</td>
<td>2,270,000</td>
<td>2,070,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10,214,500</td>
</tr>
<tr>
<td>ACTUAL AND ESTIMATED SPEND</td>
<td>1,117,400</td>
<td>1,736,200</td>
<td>909,100</td>
<td>1,041,100</td>
<td>1,364,200</td>
<td>1,470,200</td>
<td>1,208,100</td>
<td>1,213,200</td>
<td>-</td>
<td>-</td>
<td>10,059,500</td>
</tr>
</tbody>
</table>

**Technology Services Improvements Project Base Operating Appropriations (Projected Unspent)**

Objective: To achieve operational efficiency as well as to position the agency for a successful migration to the cloud by implementing continuous integration continuous deployment (CICD) or DevOps methodology, setting up the required infrastructure and environment, and migrating some ASRS data center components to the ADOA Shared Hosted Data Center.

<table>
<thead>
<tr>
<th>Project</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>Project Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNDING PROJECTION</td>
<td>221,500</td>
<td>19,000</td>
<td>-</td>
<td>-</td>
<td>240,500</td>
</tr>
<tr>
<td>ESTIMATED SPEND</td>
<td>221,500</td>
<td>19,000</td>
<td>-</td>
<td>-</td>
<td>240,500</td>
</tr>
</tbody>
</table>

**Manual Disbursements and Large Projects Continuous Appropriations**

Objective: Address technology projects related to pension payroll, disbursements, and security. Projects will be identified by ASRS Management as need arises.

<table>
<thead>
<tr>
<th>Project</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>Project Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNDING PROJECTION</td>
<td>370,100</td>
<td>256,400</td>
<td>390,300</td>
<td>-</td>
<td>1,017,400</td>
</tr>
<tr>
<td>ESTIMATED SPEND</td>
<td>370,100</td>
<td>256,400</td>
<td>390,300</td>
<td>-</td>
<td>1,017,400</td>
</tr>
</tbody>
</table>

**Information Protection and Security Project Continuous Appropriations (PU RT19002: Information Protection and Security)**

Objective: Increase the security of Personally Identifiable Information (PII) and create a more robust data logging system for internal applications.

<table>
<thead>
<tr>
<th>Project</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>Project Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIJ FUNDING PROJECTION</td>
<td>484,200</td>
<td>765,600</td>
<td>758,600</td>
<td>758,600</td>
<td>2,767,000</td>
</tr>
<tr>
<td>ESTIMATED SPEND</td>
<td>104,100</td>
<td>396,300</td>
<td>636,200</td>
<td>1,630,400</td>
<td>2,767,000</td>
</tr>
</tbody>
</table>

**Payroll Calculation Project Continuous Appropriations (PU In process)**

Objective: Update and re-engineer the pension payroll calculation coding to achieve efficiency in producing timely and accurate payments.

<table>
<thead>
<tr>
<th>Project</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>Project Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIJ FUNDING PROJECTION</td>
<td>216,400</td>
<td>650,800</td>
<td>435,100</td>
<td>1,302,300</td>
</tr>
<tr>
<td>ESTIMATED SPEND</td>
<td>216,400</td>
<td>650,800</td>
<td>435,100</td>
<td>1,302,300</td>
</tr>
</tbody>
</table>
## ASRS Investment Spending Plan

<table>
<thead>
<tr>
<th></th>
<th>FY 2021 PROJECTION</th>
<th>FY 2022 PROJECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Investment Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and benefits</td>
<td>$1,600,700</td>
<td>$1,560,400</td>
</tr>
<tr>
<td>Investment Incentive Compensation Plan (ICP)</td>
<td>$313,200</td>
<td>$340,600</td>
</tr>
<tr>
<td>Travel, education and training, rent, and other operational expenses</td>
<td>$120,200</td>
<td>$112,200</td>
</tr>
<tr>
<td><strong>Public Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External investment management fees</td>
<td>$3,660,700</td>
<td>$3,389,500</td>
</tr>
<tr>
<td>Transactional and other fees</td>
<td>$3,500,000</td>
<td>$3,500,000</td>
</tr>
<tr>
<td><strong>Private Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Equity management fees</td>
<td>$43,700,000</td>
<td>$46,100,000</td>
</tr>
<tr>
<td>Real Estate management fees</td>
<td>$13,900,000</td>
<td>$14,000,000</td>
</tr>
<tr>
<td>Private Credit management fees</td>
<td>$16,555,800</td>
<td>$14,315,800</td>
</tr>
<tr>
<td>Custodial Banking, Security Lending and Master Cash STIF Fees</td>
<td>$4,530,500</td>
<td>$4,530,500</td>
</tr>
<tr>
<td><strong>Investment Management Expenses Subtotal</strong></td>
<td><strong>$87,881,100</strong></td>
<td><strong>$87,849,000</strong></td>
</tr>
<tr>
<td><strong>Investment Related Consulting, Legal and Information Services Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Consulting Services</td>
<td>$8,156,700</td>
<td>$8,164,800</td>
</tr>
<tr>
<td>Investment Related Legal Services</td>
<td>$4,410,000</td>
<td>$4,410,000</td>
</tr>
<tr>
<td>Investment Electronic Information Services</td>
<td>$3,227,500</td>
<td>$3,382,100</td>
</tr>
<tr>
<td>External Financial Consulting Services</td>
<td>$120,000</td>
<td>$120,000</td>
</tr>
<tr>
<td><strong>Services Expenses Subtotal</strong></td>
<td><strong>$15,914,200</strong></td>
<td><strong>$16,076,900</strong></td>
</tr>
<tr>
<td><strong>Total Continuously Appropriated Investment Expenses</strong></td>
<td><strong>$103,795,300</strong></td>
<td><strong>$103,925,900</strong></td>
</tr>
</tbody>
</table>

1 The ICP is paid with base operating budget appropriated dollars.

2 Due to the nature of the investments and contingent variables, estimated annual performance incentive and other certain fees and expenses that are contractually agreed upon are not projected and are only reported, on a cash basis, when identified and paid. The ASRS has paid approximately $71,435,700 in performance incentive and other fees in FY 2020.

*Arizona Revised Statute § 38-721(C) specific expenditures are continuously appropriated in the amount necessary to meet the Board's investment objectives, including investment management and related consulting fees.
## FY 2022 Appropriated Budget Request

<table>
<thead>
<tr>
<th></th>
<th>FY 2020 Appropriations</th>
<th>FY 2021 Appropriations</th>
<th>Request FY 2022 Appropriations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriated FTEs</td>
<td>240.9</td>
<td>240.9</td>
<td>240.9</td>
</tr>
<tr>
<td>Personal Services &amp; Employee Related Expenditures</td>
<td>$ 18,346,900</td>
<td>$ 18,346,900</td>
<td>$ 18,346,900</td>
</tr>
<tr>
<td>Professional and Outside Services</td>
<td>$ 1,255,400</td>
<td>$ 1,255,400</td>
<td>$ 1,630,400</td>
</tr>
<tr>
<td>Travel - In State</td>
<td>$ 30,000</td>
<td>$ 30,000</td>
<td>$ 30,000</td>
</tr>
<tr>
<td>Travel - Out of State</td>
<td>$ 49,000</td>
<td>$ 49,000</td>
<td>$ 49,000</td>
</tr>
<tr>
<td>Other Operating Expenditures</td>
<td>$ 2,323,200</td>
<td>$ 2,323,200</td>
<td>$ 2,723,200</td>
</tr>
<tr>
<td>Equipment</td>
<td>$ 389,500</td>
<td>$ 389,500</td>
<td>$ 389,500</td>
</tr>
<tr>
<td>Base Operating Budget Subtotal</td>
<td>$ 22,394,000</td>
<td>$ 22,394,000</td>
<td>$ 23,169,000</td>
</tr>
<tr>
<td>Long Term Disability Program Administration (LTD)</td>
<td>$ 1,800,000</td>
<td>$ 1,800,000</td>
<td>$ 1,800,000</td>
</tr>
<tr>
<td>Total Appropriated Operating Budget</td>
<td>$ 24,194,000</td>
<td>$ 24,194,000</td>
<td>$ 24,969,000</td>
</tr>
<tr>
<td>Total Appropriated Budget</td>
<td>$ 24,194,000</td>
<td>$ 24,194,000</td>
<td>$ 24,969,000</td>
</tr>
</tbody>
</table>

### Changes to Appropriations

- **FY 2022 - Statewide Adjustments**: Increase in retirement, IT pro rata, and health insurance employer costs - 0.0%
- **FY 2022 - Cloud Migration Implementation and Maintenance Request**: $775,000 - 3.2%

*Statewide adjustments have not been released as of the publication of these documents.*

Attachment D
## FY 2022 ASRS Administrative Spending Plan

### Personal Services (PS) and Employee Related Expenses (ERE)

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages, employer costs for benefits, taxes, and ADOA Charges</td>
<td>17,780,300</td>
</tr>
<tr>
<td>Variable Compensation Strategies Plan payments to employees</td>
<td>282,200</td>
</tr>
<tr>
<td>Investment Incentive Compensation Plan payments to investment management employees</td>
<td>340,600</td>
</tr>
<tr>
<td><strong>Total PS and ERE</strong></td>
<td>18,413,100</td>
</tr>
</tbody>
</table>

### Professional and Outside Services (P&O)

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTD Program administrative costs for claim processing</td>
<td>1,600,000</td>
</tr>
<tr>
<td>Pension payroll disbursement processing</td>
<td>45,500</td>
</tr>
<tr>
<td>IT development support and business applications</td>
<td>471,600</td>
</tr>
<tr>
<td>Actuarial and benefit consulting services</td>
<td>450,500</td>
</tr>
<tr>
<td>IT security professional services and consulting</td>
<td>188,000</td>
</tr>
<tr>
<td>Legal fees for external counsel, attorney general charges/staff, administrative hearing costs</td>
<td>265,000</td>
</tr>
<tr>
<td><strong>Total P&amp;O</strong></td>
<td>985,600</td>
</tr>
</tbody>
</table>

### In-state Travel for Member and Employer Outreach

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-state travel for member and employer outreach</td>
<td>30,000</td>
</tr>
<tr>
<td>Out-of-state travel to pension industry and educational conferences</td>
<td>49,000</td>
</tr>
<tr>
<td><strong>Total Travel</strong></td>
<td>79,000</td>
</tr>
</tbody>
</table>

### Other Operating Expenses (OOE)

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office rent</td>
<td>2,062,700</td>
</tr>
<tr>
<td>Software licenses and support</td>
<td>1,624,000</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>468,000</td>
</tr>
<tr>
<td>ADOA Risk Management insurance premiums</td>
<td>133,000</td>
</tr>
<tr>
<td>Newsletter printing and mailing</td>
<td>141,600</td>
</tr>
<tr>
<td>Professional dues, subscriptions, and publications</td>
<td>413,900</td>
</tr>
<tr>
<td>Postage and delivery</td>
<td>164,000</td>
</tr>
<tr>
<td>Education, training, and conferences; employee tuition assistance</td>
<td>67,000</td>
</tr>
<tr>
<td>Equipment repair and maintenance</td>
<td>63,300</td>
</tr>
<tr>
<td>Other operating supplies and expenditures</td>
<td>93,500</td>
</tr>
<tr>
<td><strong>Total OOE</strong></td>
<td>3,391,300</td>
</tr>
</tbody>
</table>

### Equipment

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency furniture purchases/replacement</td>
<td>50,000</td>
</tr>
<tr>
<td>Network, server, PC and related devices replacement and additions</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Total Equipment</strong></td>
<td>300,000</td>
</tr>
</tbody>
</table>

### TOTAL

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>23,169,000</td>
</tr>
</tbody>
</table>

### Appropriated/Budgeted Amounts

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2021 PROJECTED SPEND</td>
<td>23,169,000</td>
</tr>
<tr>
<td>FY 2021 PROJECTED UNSPENT/REVERSION</td>
<td>200,000</td>
</tr>
</tbody>
</table>

### Administrative Total

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative Total</strong></td>
<td>19,985,700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>$23,169,000</td>
</tr>
<tr>
<td>Salaries and wages, employer costs for benefits, taxes, and ADOA Charges</td>
<td>$17,780,300</td>
</tr>
<tr>
<td>Variable Compensation Strategies Plan payments to employees</td>
<td>$282,200</td>
</tr>
<tr>
<td>Long Term Disability Appropriations</td>
<td>$951,800</td>
</tr>
<tr>
<td>Total ERE</td>
<td>$19,364,900</td>
</tr>
<tr>
<td><strong>Total P&amp;O</strong></td>
<td>$985,600</td>
</tr>
<tr>
<td>In-state travel for member and employer outreach</td>
<td>$30,000</td>
</tr>
<tr>
<td>Out-of-state travel to pension industry and educational conferences</td>
<td>$49,000</td>
</tr>
<tr>
<td><strong>Total Travel</strong></td>
<td>$79,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$23,169,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>$19,985,700</td>
</tr>
<tr>
<td>Salaries and wages, employer costs for benefits, taxes, and ADOA Charges</td>
<td>$17,780,300</td>
</tr>
<tr>
<td>Variable Compensation Strategies Plan payments to employees</td>
<td>$282,200</td>
</tr>
<tr>
<td>Total ERE</td>
<td>$19,364,900</td>
</tr>
<tr>
<td><strong>Total P&amp;O</strong></td>
<td>$985,600</td>
</tr>
<tr>
<td>In-state travel for member and employer outreach</td>
<td>$30,000</td>
</tr>
<tr>
<td>Out-of-state travel to pension industry and educational conferences</td>
<td>$49,000</td>
</tr>
<tr>
<td><strong>Total Travel</strong></td>
<td>$79,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>$19,985,700</td>
</tr>
<tr>
<td>Salaries and wages, employer costs for benefits, taxes, and ADOA Charges</td>
<td>$17,780,300</td>
</tr>
<tr>
<td>Variable Compensation Strategies Plan payments to employees</td>
<td>$282,200</td>
</tr>
<tr>
<td>Total ERE</td>
<td>$19,364,900</td>
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<td><strong>Total P&amp;O</strong></td>
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<tr>
<td>In-state travel for member and employer outreach</td>
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<tr>
<td>Out-of-state travel to pension industry and educational conferences</td>
<td>$49,000</td>
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<tr>
<td><strong>Total Travel</strong></td>
<td>$79,000</td>
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**Note:** FY 2021 PROJECTED SPEND is calculated based on the projected spending plan for the fiscal year 2021.
## FY 2022
### Appropriated Budget Request Detail

<table>
<thead>
<tr>
<th></th>
<th>FY 22 One-Time Costs</th>
<th>FY 22 Cloud Migration Ongoing Costs</th>
<th>FY22 FileNet Upgrade</th>
<th>FY 22 Data Subsetting</th>
<th>Base Operating with Request</th>
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<td><strong>Personal Services (PS) and Employee Related Expenses (ERE)</strong></td>
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<td>Salaries and wages, employer costs for benefits, taxes, and ADOA Charges</td>
<td>17,790,300</td>
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<td>Variable Compensation Strategies Plan payments to employees</td>
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<td><strong>Professional and Outside Services (P&amp;O)</strong></td>
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<td>LTD Program administrative costs for claim processing</td>
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<td>Pension payroll disbursement processing</td>
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<td>IT development support and business applications</td>
<td>329,600</td>
<td>225,000</td>
<td>150,000</td>
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<td>704,600</td>
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<tr>
<td>Actuarial and benefit consulting services</td>
<td>-</td>
<td>-</td>
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<tr>
<td>IT security professional services and consulting</td>
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<td></td>
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<td>Legal fees for external counsel, attorney general charges/staff, administrative hearing costs</td>
<td>265,000</td>
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<td>Other outside services</td>
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<td><strong>Total P&amp;O</strong></td>
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<td>150,000</td>
<td>-</td>
<td>985,600</td>
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<tr>
<td>In-state travel for member and employer outreach</td>
<td>30,000</td>
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<tr>
<td>Out-of-state travel to pension industry and educational conferences</td>
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<td><strong>Total Travel</strong></td>
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<td><strong>Other Operating Expenditures (OOE)</strong></td>
<td></td>
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<td>Office rent</td>
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<td>Software licenses and support</td>
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<td>Postage and delivery</td>
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<td>Education, training and conferences; employee tuition assistance</td>
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<td>Equipment repair and maintenance</td>
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<td>Other operating supplies and expenditures</td>
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<td>Agency furniture purchases/replacement</td>
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<td>Network, server, PC and related devices replacement and additions</td>
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<tr>
<td><strong>Total Equipment</strong></td>
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<td>$22,394,000</td>
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<td>$300,000</td>
<td>$150,000</td>
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Attachment F
Agenda Item
#4
MEMORANDUM

TO: Mr. James Hillyard, Chair, Arizona State Retirement System (ASRS) Board

FROM: Mr. Paul Matson, Director
       Mr. Anthony Guarino, Deputy Director and Chief Operations Officer

DATE: September 3, 2020

RE: Agenda Item #4: Presentation Regarding Government Finance Officers Association (GFOA) Financial Reporting Awards

Purpose
To present to the ASRS the GFOA’s Financial Reporting Awards.

Recommendation
Informational only; no action required.

Background
It is our pleasure to report to you that the ASRS received the GFOA Certificate of Achievement for Excellence in Financial Reporting for its June 30, 2019, Comprehensive Annual Financial Report (CAFR). This is the 31st consecutive year the ASRS has received this prestigious award. A Certificate of Achievement is presented by the GFOA to those government units whose annual financial reports are judged to adhere to program standards and represents the highest award in government financial reporting.

The CAFR is intended to provide reliable information for decision making, to ensure compliance with legal requirements, and is a means of measuring the responsible stewardship of the assets of the ASRS. For those reasons, the ASRS continually strives to improve upon the content and readability of the financial information presented in its CAFR.

In addition, I am pleased to report the ASRS also received the GFOA Award for Outstanding Achievement for the 2019 Popular Annual Financial Report (PAFR). The GFOA established the Popular Annual Financial Reporting Awards Program in 1991 to encourage and assist state and local governments to extract information from their CAFR to produce high quality PAFRs. The PAFR is specifically designed to be readily accessible and easily understandable to the general public and other interested parties without a background in public finance. The award was established to recognize individual governments that are successful in achieving that goal.

The development of the annual CAFR and PAFR is no small feat. It takes significant time and expertise from multiple divisions in the agency to produce these reporting documents every year to meet not only GFOA reporting deadlines, but also State reporting deadlines, as the ASRS is a component unit of the State of Arizona and is incorporated into the State’s annual reporting requirements. The General Accounting Program, in the Financial Services Division, under the leadership of Erica Syring, Controller, and Erin Higbee CFO/Assistant Director, bears the ultimate responsibility for timely and accurate reporting. They coordinate and rely on the internal technical expertise of the Investment Management Division, as well as the design expertise of our Communications team, to produce the reports every year.

I would like to thank the Board for its support and leadership in planning and conducting the financial affairs of the ASRS in a responsible and progressive manner. It is this support that enables us to publish such a high quality CAFR and PAFR.
Agenda Item #5
CIO Board Report

Arizona State Retirement System

September 25, 2020
Fiscal Year to Date
## Total Fund Positioning through 9/14/2020

<table>
<thead>
<tr>
<th>NAV w/ Notional ($ mm)</th>
<th>NAV Exposure (%)</th>
<th>Target (%)</th>
<th>Active Weight (%)</th>
<th>Active Weight ($ mm)</th>
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<tr>
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<td>813.8</td>
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<td>Credit</td>
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<td>Equity</td>
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<td>Real Estate</td>
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<td>16.1</td>
<td>17.3</td>
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<tr>
<td>Other</td>
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<tr>
<td><strong>Total Fund</strong></td>
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<td><strong>100.0</strong></td>
<td><strong>0.0</strong></td>
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Fiscal Year to Date Total Fund Returns through 9/14/2020
Quarterly Performance
External Reports
State Street Performance Summary for the period ended 6/30/2020

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<th></th>
<th>Benchmark</th>
<th>Market Value (End)</th>
<th>1 Mth</th>
<th>2 Mth</th>
<th>FYTD</th>
<th>1 Year</th>
<th>2 Year</th>
<th>5 Year</th>
<th>ITD</th>
<th>Inception Date</th>
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<td>TOTAL PLAN</td>
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<td>0.76</td>
<td>5.53</td>
<td>6.12</td>
<td>9.45</td>
<td>07-01-1975</td>
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<tr>
<td>Excess</td>
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<td>-3.3</td>
<td>1.74</td>
<td>0.77</td>
<td>0.77</td>
<td>1.24</td>
<td>1.65</td>
<td>0.43</td>
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<tr>
<td>TOTAL EQUITY WPE and Opp</td>
<td>LEGACY Total Equity BMI</td>
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<td>12.08</td>
<td>-1.61</td>
<td>-1.61</td>
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<td>6.15</td>
<td>7.94</td>
<td>07-01-2013</td>
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<tr>
<td>Excess</td>
<td></td>
<td>2.58</td>
<td>1.98</td>
<td>-0.31</td>
<td>-0.31</td>
<td>0.23</td>
<td>0.17</td>
<td>-0.09</td>
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<tr>
<td>Excess</td>
<td></td>
<td>-0.27</td>
<td>-0.17</td>
<td>-3.10</td>
<td>-3.10</td>
<td>-1.97</td>
<td>-1.32</td>
<td>-0.23</td>
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<tr>
<td>INTERNATIONAL EQUITY</td>
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<td>10.84</td>
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<td>-4.70</td>
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<td>-0.15</td>
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<td>PRIVATE EQUITY</td>
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<td>-7.17</td>
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<td>INTEREST RATE SENSITIVE</td>
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<td>9.02</td>
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<td>7.89</td>
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<td>0.11</td>
<td>0.29</td>
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<tr>
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<td>4.41</td>
<td>7.30</td>
<td>7.00</td>
<td>7.03</td>
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<td>12.63</td>
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<td>PRIVATE DEBT</td>
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<td>3,150</td>
<td>0.48</td>
<td>-0.98</td>
<td>6.17</td>
<td>6.17</td>
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<td>9.48</td>
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<td>0.31</td>
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<tr>
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<td></td>
<td>12.09</td>
<td>8.31</td>
<td>7.20</td>
<td>7.20</td>
<td>7.78</td>
<td></td>
<td></td>
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<td>REAL ESTATE</td>
<td>Custom ASRS ODCE (Net)</td>
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<td>04-01-1990</td>
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<td></td>
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<td>ICE BoA US 3-Month Treasury Bill</td>
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<td>23.44</td>
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<td>168.12</td>
<td>78.21</td>
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<td>24.21</td>
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<td>1713.02</td>
<td>168.36</td>
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ASRS Returns Compared to Public Fund Universe for the period ended 6/30/2020

Invaldics Public D3 > $1B Net Return Comparison
Ending June 30, 2020

<table>
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<th>Return (Rank)</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
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<td>7.0</td>
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<td>25th Percentile</td>
<td>2.6</td>
<td>5.7</td>
<td>5.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Median</td>
<td>1.3</td>
<td>5.0</td>
<td>5.4</td>
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<tr>
<td>75th Percentile</td>
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</table>

- Total Fund
- Total Fund Percentile Rank
- Total Fund Ordinal Rank
- Number of Funds In Universe
- Interim SAA Policy
Total Fund Rolling Percentile Rankings for the period ended 6/30/2020
Annual returns for years ended 3/31/2020

ASRS Asset Class Net Returns
1-Year Returns ending March 31

<table>
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<th></th>
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<th></th>
<th></th>
<th></th>
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ASRS INVESTMENT OBJECTIVES

Goal #4: Design, implement, and maintain an investment management program that maximizes rates of return for acceptable levels of risk.

a) Develop, approve and implement an Asset Allocation program that is expected to achieve a 20-year rolling average annual return at or above the actuarial assumed return
   Goal met: Yes

b) Achieve a total fund net return in the top quartile of the peer universe
   Goal met: Partial

c) Achieve a 1 year total fund net return greater than the Strategic Asset Allocation Benchmark
   Goal met: Yes

d) Achieve a 3-year total fund net return greater than the Strategic Asset Allocation Benchmark
   Goal met: Yes

e) Achieve 1 year asset class net returns greater than the respective Asset Allocation Benchmarks
   Goal met: Partial

f) Achieve 3 year asset class net returns greater than the respective Asset Allocation Benchmarks
   Goal met: Partial

g) Sufficient cash will be maintained to meet all payment requirements
   Goal met: Yes

Source: ASRS Strategic Plan, August 2018
Total Fund
Trailing Returns & Dollar Value Add for the period ended 6/30/2020

**Total Fund and Strategic Asset Allocation Benchmark**

Trailing Period Returns

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**Total Fund Dollar Value Add**

Relative to Strategic Asset Allocation Benchmark

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*Notes:*
- Total Fund performance compared to Strategic Asset Allocation Benchmark.
- Dollar value add analysis showing excess return and residual contributions.

*Graphs illustrate performance metrics for different time periods, with bars indicating returns and value add contributions.*
Total Fund Returns for the period ended 6/30/2020
Total Fund Rolling 1 Year Excess Return for the period ended 6/30/2020
Allocation Effect for the period ended 6/30/2020

Allocation Effect by Asset Class
Relative to Strategic Asset Allocation Benchmark

Asset Class Average Active Weights
Relative to Strategic Asset Allocation Policy

- Cash
- Bonds
- Credit
- Real Estate
- Equity
- Other
Excess Return by Asset Class for the period ended 6/30/2020

Excess Return by Asset Class
Relative to Strategic Asset Allocation Benchmark

- One Year
- Three Year
- Five Year
- Ten Year

Categories:
- Cash
- Credit
- Bonds
- Equity
- Real Estate
- Other

Graph shows excess return in millions for different asset classes over one, three, five, and ten years.
Equity
## Total Equities for the period ended 6/30/2020

### Returns for the period ended 6/30/2020

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Total Equity Market Values for the period ended 6/30/2020

Market Values

- Domestic Equity
- International Equity
- Private Equity

in Billions

Fiscal Year to Date
Quarterly Performance
Equity
Private Equity
Real Estate
Credit
Core Fixed Income
Total Equity Performance for the period ended 6/30/2020

The chart above illustrates the total equity portfolio performance versus expectations. It shows the expected excess return with 250 basis points tracking error. The performance is measured from January 2019 to April 2020, with a notable dip in March 2020.
Total Equity Dollar Value Add for the period ended 6/30/2020
Public Equity "Levers" for the period ended 6/30/2020
## Private Equity Performance Overview & Allocation for the period ended 3/31/2020

### Private Equity Internal Rate of Return

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Private Equity Decomposition for the period ended 3/31/2020

Net Asset Value by Strategy

- Distressed
- Energy
- Large Buyout
- Medium Buyout
- Mega Buyout
- Mezzanine
- Private Equity
- Secondaries
- Small Buyout
- Technology
- Venture Capital
Private Equity Dollar Value Add for the period ended 3/31/2020
Private Equity Dollar Value Add for the five years ended 3/31/2020

Private Equity 5 Year
Cumulative Dollar Value Add

- Mega Buyout
- Large Buyout
- Medium Buyout
- Small Buyout
- Technology
- Energy
- Distressed
- Venture Capital
- Secondaries
- Mezzanine
Private Equity Performance by Category for the period ended 3/31/2020
Real Estate
Real Estate Performance Overview & Allocation for the period ended 3/31/2020

Real Estate Internal Rate of Return

<table>
<thead>
<tr>
<th></th>
<th>Composite</th>
<th>Quarter</th>
<th>One Year</th>
<th>Three Year</th>
<th>Five Year</th>
<th>Ten Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate</td>
<td>-2.89</td>
<td>-0.71</td>
<td>4.61</td>
<td>7.14</td>
<td>9.92</td>
<td></td>
</tr>
<tr>
<td>Index IRR</td>
<td>0.75</td>
<td>3.81</td>
<td>5.04</td>
<td>6.84</td>
<td>9.10</td>
<td></td>
</tr>
<tr>
<td>Excess</td>
<td>-3.64</td>
<td>-4.53</td>
<td>-0.44</td>
<td>0.30</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Current Commingled</td>
<td>-4.83</td>
<td>-0.27</td>
<td>5.65</td>
<td>7.54</td>
<td>9.40</td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>-27.74</td>
<td>-27.78</td>
<td>-12.13</td>
<td>-5.63</td>
<td>-1.54</td>
<td></td>
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<tr>
<td>Farming/Infrastructure</td>
<td>-5.59</td>
<td>1.91</td>
<td>8.06</td>
<td>7.73</td>
<td>6.91</td>
<td></td>
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<tr>
<td>Legacy</td>
<td>-4.76</td>
<td>-4.63</td>
<td>1.37</td>
<td>4.75</td>
<td>11.28</td>
<td></td>
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<tr>
<td>Operating Company</td>
<td>23.27</td>
<td>12.63</td>
<td>8.72</td>
<td>7.89</td>
<td>16.03</td>
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<tr>
<td>Separate Account</td>
<td>-0.50</td>
<td>1.77</td>
<td>5.79</td>
<td>9.03</td>
<td>10.21</td>
<td></td>
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<tr>
<td>Real Estate</td>
<td>-2.89</td>
<td>-0.71</td>
<td>4.61</td>
<td>7.14</td>
<td>9.92</td>
<td></td>
</tr>
</tbody>
</table>
Real Estate Net Asset Value by Strategy for the period ended 3/31/2020
Real Estate Dollar Value Add for the period ended 3/31/2020
Real Estate Dollar Value Add for the five years ended 3/31/2020
Real Estate Performance Summary for the period ended 3/31/2020

Comparison of Real Estate Composites

- Operating Company
- Debt
- Separate Account
- Current Commingled
- Farming/Infrastructure
- Legacy

PME:
- 1.05 to 1.15
- 0.95 to 1.05

Internal Rate of Return vs. Total Value to Paid in Multiple
Total Credit for the period ended 6/30/2020

Credit Annualized Returns

<table>
<thead>
<tr>
<th>Category</th>
<th>Quarter</th>
<th>One Year</th>
<th>Three Year</th>
<th>Five Year</th>
<th>Ten Year</th>
<th>Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credit (TWR)</td>
<td>-2.34</td>
<td>4.41</td>
<td>7.30</td>
<td>7.50</td>
<td>7.03</td>
<td>7.03</td>
</tr>
<tr>
<td>Blended Benchmark</td>
<td>-12.47</td>
<td>-6.86</td>
<td>1.49</td>
<td>3.41</td>
<td>2.95</td>
<td>2.95</td>
</tr>
<tr>
<td>Total Credit Excess</td>
<td>10.13</td>
<td>11.26</td>
<td>5.80</td>
<td>4.09</td>
<td>4.08</td>
<td>4.08</td>
</tr>
<tr>
<td>Private Debt</td>
<td>-0.88</td>
<td>5.93</td>
<td>7.78</td>
<td>11.31</td>
<td>9.88</td>
<td>10.35</td>
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<tr>
<td>Index IRR</td>
<td>-12.33</td>
<td>-6.87</td>
<td>1.40</td>
<td>3.27</td>
<td>4.30</td>
<td>5.29</td>
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<tr>
<td>Excess</td>
<td>11.45</td>
<td>12.79</td>
<td>6.38</td>
<td>8.03</td>
<td>5.58</td>
<td>5.06</td>
</tr>
<tr>
<td>Distressed Debt</td>
<td>-7.98</td>
<td>-0.89</td>
<td>5.23</td>
<td>4.71</td>
<td>5.71</td>
<td>5.71</td>
</tr>
<tr>
<td>Index IRR</td>
<td>-11.90</td>
<td>-5.02</td>
<td>2.23</td>
<td>4.39</td>
<td>5.26</td>
<td>5.26</td>
</tr>
<tr>
<td>Excess</td>
<td>3.92</td>
<td>4.13</td>
<td>3.00</td>
<td>0.32</td>
<td>0.45</td>
<td>0.45</td>
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<tr>
<td>Other Credit</td>
<td>-3.53</td>
<td>-0.96</td>
<td>1.96</td>
<td>5.83</td>
<td>5.73</td>
<td>7.73</td>
</tr>
<tr>
<td>Index IRR</td>
<td>-12.74</td>
<td>-13.02</td>
<td>-1.73</td>
<td>-0.16</td>
<td>3.77</td>
<td>4.40</td>
</tr>
<tr>
<td>Excess</td>
<td>9.21</td>
<td>12.06</td>
<td>3.69</td>
<td>5.99</td>
<td>1.96</td>
<td>3.33</td>
</tr>
</tbody>
</table>
Credit Market Values and Performance for the period ended 6/30/2020
Credit Dollar Value Add for the period ended 6/30/2020

Credit Dollar Value Add versus Benchmark

- **Private Debt**
- **Distressed Debt**
- **Other Credit**
- **High Yield**
- **Emerging Market Debt**

**Axes:**
- Y-axis: $0 - $1,500 in Millions
- X-axis: 1 Year, 3 Year, 5 Year, 10 Year
Credit Dollar Value Add for the five years ended 6/30/2020

Private Credit 5 Year
Cumulative Dollar Value Add

- Distressed Debt
- Other Credit
- Private Debt

In Millions

- 2016
- 2017
- 2018
- 2019
- 2020

$0
$500
$1,000
$1,500

September 25, 2020
CIO Board Report
40 / 48
Credit: Total Value to Paid in Multiple & Public Market Equivalent for the period ended 6/30/2020
Credit Performance for the period ended 6/30/2020
Core Fixed Income
Core Fixed Income for the period ended 6/30/2020

## Annualized Time-Weighted Returns

<table>
<thead>
<tr>
<th></th>
<th>Quarter</th>
<th>One Year</th>
<th>Three Year</th>
<th>Five Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Bond Composite</td>
<td>2.97</td>
<td>9.02</td>
<td>5.43</td>
<td>4.60</td>
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<tr>
<td>Barclay’s Aggregate</td>
<td>2.90</td>
<td>8.74</td>
<td>5.32</td>
<td>4.30</td>
</tr>
<tr>
<td>Core Composite Excess</td>
<td>0.08</td>
<td>0.29</td>
<td>0.11</td>
<td>0.29</td>
</tr>
<tr>
<td>Internal Fixed Income</td>
<td>2.96</td>
<td>9.50</td>
<td>5.54</td>
<td>4.51</td>
</tr>
<tr>
<td>Barclay’s Aggregate</td>
<td>2.90</td>
<td>8.74</td>
<td>5.32</td>
<td>4.30</td>
</tr>
<tr>
<td>Internal Fixed Income Excess</td>
<td>0.07</td>
<td>0.76</td>
<td>0.22</td>
<td>0.21</td>
</tr>
<tr>
<td>BlackRock US Debt Fund</td>
<td>2.98</td>
<td>8.82</td>
<td>5.40</td>
<td>4.40</td>
</tr>
<tr>
<td>Barclay’s Aggregate</td>
<td>2.90</td>
<td>8.74</td>
<td>5.32</td>
<td>4.30</td>
</tr>
<tr>
<td>BlackRock Excess</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.09</td>
</tr>
</tbody>
</table>
Core Fixed Income Decomposition for the period ended 6/30/2020
Core Fixed Income Dollar Value Added for the period ended 6/30/2020

Dollar Value Add

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year</td>
<td>$16</td>
</tr>
<tr>
<td>Three Year</td>
<td>$18</td>
</tr>
<tr>
<td>Five Year</td>
<td>$78</td>
</tr>
</tbody>
</table>

Legend:
- Internal Fixed Income
- BlackRock US Debt
- BlackRock Long Govt
Core Fixed Income Performance for the period ended 6/30/2020

**Internal Fixed Income Portfolio Performance versus Expectations**
12.5 Basis Points Expected Excess Return with 12.5 Basis Points Expected Tracking Error

**Blackrock US Debt Portfolio Performance versus Expectations**
12.5 Basis Points Expected Excess Return with 12.5 Basis Points Expected Tracking Error
Total Portfolio Value-At-Risk (VAR)

As of June 30th, 2020 Total VaR for ASRS Portfolio was 28.38%, indicating that there is a 5% chance that portfolio could lose ~$11.74B in a given year. Note that a 5% event is expected to occur every 20 years.
Agenda Item #6
Arizona State Retirement System

Independent ASRS Investment Program Oversight for the Period Ending June 30, 2020

Allan Martin, Partner, NEPC
John Krimmel, Partner, NEPC
Michael Malchenko, Sr. Analyst, NEPC
CONTENTS

• ASRS Investment Objectives/Performance

• Independent Oversight/Compliance
  • SAA Policy Compliance
  • Total Fund and Asset Class Performance
  • Asset Class Committee Monitoring

• Market Environment Update and Outlook

• Appendix: SAA Policy History
NEPC has developed reports for both the Investment Committee and Board designed to 1) provide the appropriate level of investment information for the purposes of independent oversight (ASRS SAAP compliance, Asset Class Committee minutes review, investment selection due diligence packet compliance and oversight of the investment program data used to compile NEPC and ASRS reporting); 2) provide ASRS investment program performance relative to its goals/objectives (presented quarterly); and 3) communicate NEPC’s perspectives on the market environment, investment outlook or other initiatives or topics they believe are important to convey to the Board.

NEPC has completed a quarter-end quality control process and warrants that IMD Staff materials are accurate subject to the following process:

- Investment results were calculated using data provided by the Plan’s custodian bank that is deemed “final” as of June 30, 2020.
- Investment performance oversight includes reconciliation and confirmation of portfolio level valuations, cash flows, transactions and composite construction including interpretation of investment accounting methods used to track IMD Staff instructed activities.
- Oversight of performance calculation includes verification of Staff data used to produce reporting as well verification of processes and procedures in custom investment performance calculations.
- NEPC performed tests of the data produced by IMD Staff and the Plan’s custodian bank (book of record) using underlying financial records provided by the custodian bank and IMD Staff. The net effect of uncorrected misstatements is immaterial, and has been brought to the attention of IMD Staff.
ASRS INVESTMENT OBJECTIVES/PERFORMANCE

Note: All of the data shown on the following pages is as of June 30, 2020 and reflects the deduction of investment manager fees, unless otherwise noted.
ASRS INVESTMENT OBJECTIVES

Goal #4: Design, implement, and maintain an investment management program that maximizes rates of return for acceptable levels of risk.

a) Develop, approve and implement an Asset Allocation program that is expected to achieve a 20-year rolling average annual return at or above the actuarial assumed return
   
   Goal met: Yes

b) Achieve a total fund net return in the top quartile of the peer universe
   
   Goal met: Partial

c) Achieve a 1 year total fund net return greater than the Strategic Asset Allocation Benchmark
   
   Goal met: Yes

d) Achieve a 3-year total fund net return greater than the Strategic Asset Allocation Benchmark
   
   Goal met: Yes

e) Achieve 1 year asset class net returns greater than the respective Asset Allocation Benchmarks
   
   Goal met: Partial

f) Achieve 3 year asset class net returns greater than the respective Asset Allocation Benchmarks
   
   Goal met: Partial

g) Sufficient cash will be maintained to meet all payment requirements
   
   Goal met: Yes

Source: ASRS Strategic Plan, August 2018
## TOTAL FUND PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>3 Mo</th>
<th>YTD</th>
<th>1 Yr</th>
<th>3 Yrs</th>
<th>5 Yrs</th>
<th>10 Yrs</th>
<th>Inception</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund</td>
<td>5.0%</td>
<td>-4.6%</td>
<td>0.8%</td>
<td>5.5%</td>
<td>6.1%</td>
<td>8.9%</td>
<td>9.5%</td>
<td>Jul-75</td>
</tr>
<tr>
<td>Interim SAA Policy</td>
<td>3.3%</td>
<td>-5.4%</td>
<td>0.0%</td>
<td>4.3%</td>
<td>4.5%</td>
<td>7.8%</td>
<td>9.0%</td>
<td>Jul-75</td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.7%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>1.2%</td>
<td>1.6%</td>
<td>1.1%</td>
<td>0.5%</td>
<td></td>
</tr>
</tbody>
</table>

Composition of SAA Policy can be found in the appendix.
UNIVERSE COMPARISON
UNIVERSE COMPARISON

Universe are constructed using net of fee returns; therefore, ASRS rank is based on net of fee returns.
Rankings are from highest (1) to lowest (100) in the InvMetrics Public Funds > $1 Billion Net Universe.
The InvMetrics Public Funds > $1 Billion Net Universe contains 71 observations for the period ending June 30, 2020.
**UNIVERSE COMPARISON**

<table>
<thead>
<tr>
<th>Total Fund Return</th>
<th>Anlzd Return</th>
<th>Anlzd Standard Deviation</th>
<th>Sharpe Ratio</th>
<th>Sortino Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.5</td>
<td>6.9</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Percentile Rank</td>
<td>28</td>
<td>9</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Ordinal Rank</td>
<td>20</td>
<td>6</td>
<td>10</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Interim SAA Policy Return</th>
<th>Anlzd Return</th>
<th>Anlzd Standard Deviation</th>
<th>Sharpe Ratio</th>
<th>Sortino Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.3</td>
<td>7.4</td>
<td>0.4</td>
<td>0.8</td>
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<tr>
<td>Percentile Rank</td>
<td>79</td>
<td>14</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>Ordinal Rank</td>
<td>55</td>
<td>10</td>
<td>34</td>
<td>8</td>
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</tbody>
</table>

Universes are constructed using net of fee returns; therefore, ASRS rank is based on net of fee returns.

Rankings are from highest (1) to lowest (100) in the InvMetrics Public Funds > $1 Billion Net Universe.

The InvMetrics Public Funds > $1 Billion Net Universe contains 71 observations for the period ending June 30, 2020.
UNIVERSE COMPARISON

Total Fund Return | 6.1 | 6.6 | 0.6 | 1.1
Percentile Rank  | 22  | 11  | 8   | 3
Ordinal Rank      | 15  | 8   | 6   | 2
Interim SAA Policy Return | 4.5 | 6.9 | 0.5 | 0.9
Percentile Rank  | 91  | 16  | 59  | 13
Ordinal Rank      | 64  | 11  | 41  | 9

Universes are constructed using net of fee returns; therefore, ASRS rank is based on net of fee returns.
Rankings are from highest (1) to lowest (100) in the InvMetrics Public Funds > $1 Billion Net Universe.
The InvMetrics Public Funds > $1 Billion Net Universe contains 71 observations for the period ending June 30, 2020.
### UNIVERSE COMPARISON

#### InvMetrics Public DB > $1B Net (peer)

#### 10 Year

<table>
<thead>
<tr>
<th>Anlzd Return</th>
<th>Anlzd Standard Deviation</th>
<th>Sharpe Ratio</th>
<th>Sortino Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.9</td>
<td>7.6</td>
<td>1.1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

#### Percentile Rank
- Total Fund Return: 10
- Interim SAA Policy Return: 51

#### Ordinal Rank
- Total Fund Return: 62
- Interim SAA Policy Return: 33

#### Universe Comparison

<table>
<thead>
<tr>
<th>Universe</th>
<th>5th %tile</th>
<th>25th %tile</th>
<th>Median</th>
<th>75th %tile</th>
<th>95th %tile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anlzd Return</td>
<td>9.3</td>
<td>8.5</td>
<td>7.8</td>
<td>7.2</td>
<td>6.7</td>
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<tr>
<td>Percentile Rank</td>
<td>10</td>
<td>42</td>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ordinal Rank</td>
<td>62</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Notes
- Universes are constructed using net of fee returns; therefore, ASRS rank is based on net of fee returns.
- Rankings are from highest (1) to lowest (100) in the InvMetrics Public Funds > $1 Billion Net Universe.
- The InvMetrics Public Funds > $1 Billion Net Universe contains 71 observations for the period ending June 30, 2020.
## ASSET CLASS PERFORMANCE VS. BENCHMARK

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>1 Year Return</th>
<th>3 Year Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Equity (TWR)</td>
<td>-1.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Custom Total Equity Benchmark (TWR)</td>
<td>-1.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-0.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Interest Rate Sensitive (TWR)</td>
<td>9.0%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Bloomberg Barclays US Aggregate Bond Index (TWR)</td>
<td>8.7%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Credit (TWR)</td>
<td>4.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Custom Credit Benchmark (TWR)</td>
<td>-6.9%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>11.3%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Real Estate (IRR)</td>
<td>-0.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Custom Real Estate Benchmark (IRR)</td>
<td>3.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-4.5%</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

Note: Composition of ASRS Custom Asset Class Benchmarks can be found in the appendix.
CASH MANAGEMENT

<table>
<thead>
<tr>
<th>Month</th>
<th>External CFs</th>
<th>Last day of the Month Ending Balance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun - 19</td>
<td>($97.3)</td>
<td>$368.0</td>
</tr>
<tr>
<td>Jul – 19</td>
<td>($163.9)</td>
<td>$465.2</td>
</tr>
<tr>
<td>Aug – 19</td>
<td>($108.9)</td>
<td>$467.2</td>
</tr>
<tr>
<td>Sep - 19</td>
<td>($108.2)</td>
<td>$365.2</td>
</tr>
<tr>
<td>Oct – 19</td>
<td>($87.3)</td>
<td>$676.3</td>
</tr>
<tr>
<td>Nov – 19</td>
<td>($96.1)</td>
<td>$404.2</td>
</tr>
<tr>
<td>Dec - 19</td>
<td>($75.4)</td>
<td>$521.9</td>
</tr>
<tr>
<td>Jan – 20</td>
<td>($63.6)</td>
<td>$412.7</td>
</tr>
<tr>
<td>Feb – 20</td>
<td>($107.4)</td>
<td>$376.8</td>
</tr>
<tr>
<td>Mar - 20</td>
<td>($95.8)</td>
<td>$730.4</td>
</tr>
<tr>
<td>Apr – 20</td>
<td>($98.8)</td>
<td>$1,210.7</td>
</tr>
<tr>
<td>May – 20</td>
<td>($56.7)</td>
<td>$1,034.2</td>
</tr>
<tr>
<td>Jun - 20</td>
<td>($68.6)</td>
<td>$853.8</td>
</tr>
</tbody>
</table>

*Includes assetized & unassetized cash balances (Inception of 1/26/15); represents monies to be used for funding needs that occur in subsequent month(s). Generally, monthly pension payments occur on the first day of month.
INDEPENDENT OVERSIGHT/COMPLIANCE

Note: All of the data shown on the following pages is as of June 30, 2020 and reflects the deduction of investment manager fees, unless otherwise noted.
## SAA POLICY COMPLIANCE

<table>
<thead>
<tr>
<th>Assets</th>
<th>Current Mkt Value</th>
<th>Current Allocation</th>
<th>Interim SAAP</th>
<th>Interim SAAP Difference</th>
<th>Policy Range</th>
<th>Within Range</th>
<th>SAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Equity</td>
<td>$20,906,101,493</td>
<td>51.6%</td>
<td>54.5%</td>
<td>-2.9%</td>
<td>35% - 65%</td>
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<td>50%</td>
</tr>
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<td>0% - 20%</td>
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<td>10%</td>
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<td>20%</td>
</tr>
<tr>
<td>Real Estate</td>
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<td>15.5%</td>
<td>1.2%</td>
<td>10% - 30%</td>
<td>Yes</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>$366,909</td>
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<td>0.0%</td>
<td>0.0%</td>
<td>0% - 10%</td>
<td>0%</td>
<td>0%</td>
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<td>Cash</td>
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<td>1.3%</td>
<td>0%</td>
<td>0% - 5%</td>
<td>0%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$40,493,149,017</strong></td>
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<td><strong>100%</strong></td>
<td><strong>1.3%</strong></td>
<td><strong>0% - 5%</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

Note:
Values shown for private markets portfolios include cash flows that occurred during 2Q 2020.
Total Equity market value includes futures positions.

*Interim SAA Policy includes proration of unfunded Credit assets and unfunded in Real Estate assets. According to policy, the proration is applied 83.3% to Total Equity and 16.7% to Interest Rate Sensitive.*

*Policy Ranges shown are relative to the long-term SAAP and may cause some asset classes to be out of range while implementation of the long-term SAAP is in process.*

Market values include manager held cash.
## Arizona State Retirement System

### PERFORMANCE SUMMARY - PUBLIC MARKETS

<table>
<thead>
<tr>
<th></th>
<th>Market Value ($)</th>
<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>Rank</th>
<th>YTD (%)</th>
<th>Rank</th>
<th>1 Yr (%)</th>
<th>Rank</th>
<th>3 Yrs (%)</th>
<th>Rank</th>
<th>5 Yrs (%)</th>
<th>Rank</th>
<th>Inception (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Fund</strong></td>
<td>40,493,149,017</td>
<td>100.0</td>
<td>5.0</td>
<td>95</td>
<td>-4.6</td>
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<td>9.5</td>
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<td><strong>Interim SAA Policy</strong></td>
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<td>0.8</td>
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<td>1.6</td>
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<td>-1.7</td>
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<tr>
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<td>-2.7</td>
<td></td>
<td>-3.1</td>
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<td>0.9</td>
<td>69</td>
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<td>-0.1</td>
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</tr>
<tr>
<td><strong>Interest Rate Sensitive Fixed Income</strong></td>
<td>3,773,316,644</td>
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<td>17</td>
<td>9.0</td>
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<tr>
<td>Over/Under</td>
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<td>4.7</td>
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<td>4.3</td>
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<td></td>
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</tbody>
</table>

Note: See appendix for custom benchmark definitions.
## PERFORMANCE SUMMARY – PRIVATE MARKETS ONE

### QUARTER LAGGED IRR

Note: See appendix for custom benchmark definitions
Private Equity, Credit sub-asset classes and Real Estate returns are money-weighted (IRR) and one-quarter lagged
Market Values include cash flows within 2Q 2020
Total Fund performance is shown on a time-weighted return (TWR) basis

<table>
<thead>
<tr>
<th>Market Value ($)</th>
<th>% of Portfolio</th>
<th>3 Mo (%)</th>
<th>1 Yr (%)</th>
<th>3 Yrs (%)</th>
<th>5 Yrs (%)</th>
<th>10 Yrs (%)</th>
<th>Inception (%)</th>
<th>Since</th>
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</thead>
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<td><strong>Total Fund (TWR)</strong></td>
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<td>0.8</td>
<td>5.5</td>
<td>6.1</td>
<td>8.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Interim SAA Policy</td>
<td>3.3</td>
<td>0.0</td>
<td>4.3</td>
<td>4.5</td>
<td>7.8</td>
<td>9.0</td>
<td></td>
<td>Jul-75</td>
</tr>
<tr>
<td>Over/Under</td>
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<td>0.8</td>
<td>1.2</td>
<td>1.6</td>
<td>1.1</td>
<td>0.5</td>
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</tr>
<tr>
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<td>8.6</td>
<td>10.9</td>
<td>10.2</td>
</tr>
<tr>
<td>MSCI ACWI Blended</td>
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<td>-13.0</td>
<td>0.0</td>
<td>2.8</td>
<td>8.0</td>
<td>8.4</td>
<td></td>
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</tr>
<tr>
<td>Over/Under</td>
<td>10.2</td>
<td>5.7</td>
<td>6.5</td>
<td>5.8</td>
<td>2.9</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Credit (IRR)</strong></td>
<td>8,505,909,572</td>
<td>21.0</td>
<td>-2.5</td>
<td>4.0</td>
<td>6.9</td>
<td>9.3</td>
<td>8.6</td>
<td>9.0</td>
</tr>
<tr>
<td>S&amp;P LSTA/Leveraged Loan Index + 2.5%</td>
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<td>-6.9</td>
<td>1.4</td>
<td>3.4</td>
<td>4.5</td>
<td>5.2</td>
<td></td>
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</tr>
<tr>
<td>Over/Under</td>
<td>9.8</td>
<td>10.9</td>
<td>5.5</td>
<td>5.9</td>
<td>4.1</td>
<td>3.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Real Estate (IRR)</strong></td>
<td>6,762,931,831</td>
<td>16.7</td>
<td>-2.9</td>
<td>-0.7</td>
<td>4.6</td>
<td>7.1</td>
<td>9.9</td>
<td>7.5</td>
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<tr>
<td>NCREIF ODCE 1 QTR Lagged (net)</td>
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<td>6.8</td>
<td>9.1</td>
<td>6.5</td>
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<td></td>
</tr>
<tr>
<td>Over/Under</td>
<td>-3.7</td>
<td>-4.5</td>
<td>-0.4</td>
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<td>0.8</td>
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## PUBLIC MARKET ASSET CLASS ANALYSIS

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<th>% of Tot</th>
<th>Anlzd Ret</th>
<th>Rank</th>
<th>Anlzd Std Dev</th>
<th>Rank</th>
<th>Tracking Error</th>
<th>Rank</th>
<th>Info Ratio</th>
<th>Rank</th>
<th>Anlzd AJ</th>
<th>Rank</th>
<th>Beta</th>
<th>Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Public Equity</strong></td>
<td>42.3%</td>
<td>4.8%</td>
<td>75</td>
<td>16.9%</td>
<td>65</td>
<td>0.8%</td>
<td>9</td>
<td>-1.5</td>
<td>92</td>
<td>-1.1%</td>
<td>71</td>
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<td>5.9%</td>
<td>32</td>
<td>16.7%</td>
<td>63</td>
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<tr>
<td><strong>Total Domestic Equity</strong></td>
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<td>55</td>
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<td>--</td>
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<td>17</td>
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<tr>
<td><strong>Total International Equity</strong></td>
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<td>0.0%</td>
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<td>69</td>
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<td>--</td>
<td>--</td>
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<tr>
<td><strong>Interest Rate Sensitive Fixed Income</strong></td>
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<td>5.4%</td>
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<td>BBgBarc US Aggregate TR</td>
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<td>33</td>
<td>3.3%</td>
<td>10</td>
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<td>--</td>
<td>--</td>
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<td>40</td>
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</table>

Note: Performance is reported net of fees.
Underlying composites do not add up to 100% because the chart excludes private market composites.
Ranks for statistics shown above are based on the respective universe against which the portfolio is ranked on the asset class performance summary that precedes this section of the analysis.
Rankings are from highest (1) to lowest (100) in the eVestment Universe.
Composition of Interim SAA Policy and ASRS Custom Benchmarks can be found in the appendix.
Arizona State Retirement System

PUBLIC MARKET ASSET CLASS ANALYSIS

5 Years Ending June 30, 2020

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<tr>
<th>Percentage</th>
<th>Annualized Return</th>
<th>Rank</th>
<th>Annualized Std Dev</th>
<th>Rank</th>
<th>Tracking Error</th>
<th>Rank</th>
<th>Information Ratio</th>
<th>Rank</th>
<th>Annualized Alpha</th>
<th>Rank</th>
<th>Beta</th>
<th>Sharpe Ratio</th>
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<td>Total Public Equity</td>
<td>42.3%</td>
<td>5.8%</td>
<td>67</td>
<td>14.8%</td>
<td>60</td>
<td>0.7%</td>
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<td>-1.1</td>
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<td>-0.8%</td>
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<td>34</td>
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</tr>
<tr>
<td>Total Domestic Equity</td>
<td>23.8%</td>
<td>9.0%</td>
<td>46</td>
<td>15.6%</td>
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<td>1.1%</td>
<td>31</td>
<td>-1.2</td>
<td>81</td>
<td>-1.5%</td>
<td>59</td>
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<td>--</td>
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<td>--</td>
<td>15</td>
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</tr>
<tr>
<td>Total International Equity</td>
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<td>--</td>
<td>2.3%</td>
<td>72</td>
<td>15.1%</td>
<td>62</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>71</td>
<td>--</td>
</tr>
<tr>
<td>Interest Rate Sensitive Fixed Income</td>
<td>9.3%</td>
<td>4.6%</td>
<td>22</td>
<td>3.1%</td>
<td>13</td>
<td>0.3%</td>
<td>5</td>
<td>0.9</td>
<td>3</td>
<td>0.2%</td>
<td>43</td>
<td>1.0</td>
</tr>
<tr>
<td>BBgBarc US Aggregate TR</td>
<td>--</td>
<td>4.3%</td>
<td>39</td>
<td>3.1%</td>
<td>11</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>82</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: Performance is reported net of fees.
Underlying composites do not add up to 100% because the chart excludes private market composites.
Ranks for statistics shown above are based on the respective universe against which the portfolio is ranked on the asset class performance summary that precedes this section of the analysis.
Rankings are from highest (1) to lowest (100) in the eVestment Universe.
Composition of Interim SAA Policy and ASRS Custom Benchmarks can be found in the appendix.
ASSET CLASS COMMITTEE MEETING

• **June 4, 2020 – Combined Asset Class Committee**
  - Real Estate manager investment recommendation ($14.5mm)
    - Extension consultant and staff recommendation to commit new capital to an existing investment management relationship
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to change investment guidelines within an existing investment management relationship
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
  - 2020 Public Equity asset class implementation
    - Staff recommendation to implement public equity according to strategic initiatives outlined in the plan
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation

• **June 23, 2020 – Combined Asset Class Committee**
  - Monthly Real Estate report reviewed
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to sell an asset
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to sell an asset
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
• **June 23, 2020 – Combined Asset Class Committee**
  – Real Estate manager recommendation
    • Extension consultant and staff recommendation to terminate an existing investment management relationship
    • Extension consultant and staff replacing legacy manager as operator of the assets
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation

• **July 7, 2020 – Combined Asset Class Committee**
  – Real Estate manager investment recommendation ($400mm)
    • Extension consultant and staff recommendation to commit new capital to an existing investment management relationship
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation
  – Private Equity manager investment recommendation (€50mm)
    • Extension consultant and staff recommendation to commit new capital to a new investment manager relationship
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation

• **July 14, 2020 – Combined Asset Class Committee**
  – Public Equity initiative
    • Staff recommendation to participate in industry associations associated with public markets trading
  – Monthly Real Estate report reviewed
ASSET CLASS COMMITTEE MEETING

- **July 14, 2020 – Combined Asset Class Committee**
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to sell a portion of an existing asset
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
  - Private Equity manager investment recommendation (€50mm)
    - Extension consultant and staff recommendation to commit new capital to a new investment manager relationship
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation

- **July 21, 2020 – Combined Asset Class Committee**
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to terminate a manager via redemption of manager’s interest in the form of a maximum of 2 properties from the 17 property portfolio
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
  - Real Estate manager recommendation
    - Extension consultant and staff recommendation to terminate a manager and sale of the portfolio to the manager
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation

- **July 28, 2020 – Combined Asset Class Committee**
  - Real Estate manager variance request
    - Extension consultant and staff recommendation for a variance to investment guidelines to invest in a private placement security
    - Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    - Committee approved the recommendation
August 11, 2020 – Combined Asset Class Committee
  - Real Estate manager recommendation
    • Extension consultant and staff recommendation to market and sell a portfolio with subsequent termination of the manager
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation

September 8, 2020 – Combined Asset Class Committee
  - Credit manager recommendation ($100mm)
    • Staff recommendation to commit new capital to an existing investment manager relationship
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation
  - Real Estate manager recommendation
    • Extension consultant and staff recommendation to change investment guidelines within an existing investment management relationship
    • Guideline changes include a change to investable markets and return objectives
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation
  - Real Estate monthly report reviewed
  - Private Equity manager investment recommendation ($50mm)
    • Extension consultant and staff recommendation to commit new capital to an existing investment manager relationship
    • Due diligence process was followed in accordance with SIP 006 – Investment Manager, Partner, and Co-Investment Selection and Oversight
    • Committee approved the recommendation
ASSET CLASS COMMITTEE MEETING

- **September 8, 2020 – Combined Asset Class Committee**
  - Staff reviewed rationale for current positioning in public markets
    - Review of market valuation metrics and economic health metrics
  - Public Equity recommendation to direct brokerage services to a vendor
    - The committee reviewed the cost benefit analysis of pursuing the relationship
    - The committee directed staff to execute on the vendor relationship
GENERAL OBSERVATIONS

• **Staff continues to manage the portfolio through the economic crisis caused by the pandemic well**
  – Liquidity study performed and focus on efficient asset management has resulted in benefits to the Plan

• **Staff is proactive in driving change in the public equity portfolio and driving operational efficiency throughout the portfolio**
  – Notably, staff has taken over operational oversight of real estate assets

• **The Plan is outperforming its Strategic Asset Allocation Policy (SAAP) benchmark in the short-run and over longer periods outperforming both the SAAP and actuarial rate of return**

• **Public Equity has contributed negatively to performance over the past five years**
  – Longer-term (5 year) Public Equity relative performance contributing negatively to relative performance; strategic plans in 2020 are aimed at addressing this underperformance

• **Private markets contributing to positive longer-term results**
  – Real Estate is contributing positively to relative performance over the long-term (5 years and longer)
  – Private Equity program has contributed positively in absolute terms and benchmark-relative terms
  – Real Estate as an asset class is 3.3% underweight (based on NAV) but has approximately $4.0 billion in remaining capital commitments as of Q1 2020 (or approximately 9.9% of Total Fund NAV); strategic implementation plan accounts for shorter-term underweight positioning
  – Credit is a strong performer against its benchmark in the short and long-run and is overwieght vs. policy

• **Current positioning is consistent with IMD House Views and strategic implementation plans**
INDEPENDENT OVERSIGHT/COMPLIANCE: LTD

Note: All of the data shown on the following pages is as of June 30, 2020 and reflects the deduction of investment manager fees, unless otherwise noted.
# LONG TERM DISABILITY PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>Quarter</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
<th>Since Inception (July-02)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Disability</td>
<td>5.1%</td>
<td>0.8%</td>
<td>5.5%</td>
<td>5.8%</td>
<td>8.5%</td>
<td>6.3%</td>
</tr>
<tr>
<td>LTD SAA Policy¹</td>
<td>3.3%</td>
<td>0.0%</td>
<td>4.3%</td>
<td>5.2%</td>
<td>8.1%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.8%</td>
<td>0.8%</td>
<td>1.2%</td>
<td>0.6%</td>
<td>0.4%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

¹LTD SAA Policy composition can be found in the appendix.
MARKET ENVIRONMENT UPDATE AND OUTLOOK
ECONOMIC ENVIRONMENT

- Q2 Real GDP (advance estimate) plunged at an annual rate of -32.9%.
  - Retail sales ended May at -1.3% on a YoY basis (April retail sales were down 15.5% YoY). In the same period last year the YoY growth rate was 5.7%.
  - Corporate profits (ended January) as a percent of GDP decreased to 7.6% from 8.7% (in October) and remain elevated relative to historical levels.
  - The inventory-to-sales ratio ended May at 1.5 up from 1.4 in December. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April.
  - The U.S. trade deficit widened (ended May) as the value of exports decreased by 4.4%.

- The unemployment rate spiked up to 11.1% ended June, up from 4.4% in Q1; U-6, a broader measure of unemployment, increased to 18.0% in Q2 from 8.7% in Q1.

- The Case-Shiller Home Price Index (ended May) increased to 218.9 from 215.2 (in March) and remains at levels higher than that of pre-financial crisis levels of 150.9.

- Rolling 12-month seasonally-adjusted CPI saw a down-tick to 0.71% in Q2 from 1.52% ended Q1; Capacity Utilization decreased to 68.6 in Q2 from 73.5% in Q1.

- Fed Funds rate remains at a targeted range of 0.00%-to-0.25%. The 10-year Treasury Yield (constant maturity) finished Q2 down to 0.7% from 0.9% in Q1.

- The Fed remains committed to continuing stimulative action as needed to support the US economy. The Fed’s balance sheet continues to grow in wake of the pandemic.

- S&P valuations increased in Q2 to 29.96x, and is higher than the 10-year average of 25.9x.
  - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.7x.
### Market Environment - Q2 2020 Overview

#### World Equity Benchmarks
- **MSCI ACWI IMI (Net)**: World with Small Cap
  - Qtr: 19.83%
  - 1 Yr: 1.17%
  - 3 Yr: 5.55%
  - 5 Yr: 6.11%
  - 10 Yr: 9.10%
- **MSCI ACWI Net (USD)**: World W/O Small Cap
  - Qtr: 19.22%
  - 1 Yr: 2.11%
  - 3 Yr: 6.14%
  - 5 Yr: 6.46%
  - 10 Yr: 9.16%
- **MSCI ACWI (Local)**: World (Local Currency)
  - Qtr: 18.27%
  - 1 Yr: 3.27%
  - 3 Yr: 6.45%
  - 5 Yr: 6.78%
  - 10 Yr: 9.82%

#### Domestic Equity Benchmarks
- **Russell 3000**: Domestic All Cap
  - Qtr: 22.03%
  - 1 Yr: 6.53%
  - 3 Yr: 10.04%
  - 5 Yr: 10.03%
  - 10 Yr: 13.72%
- **S&P 500**: Large Core
  - Qtr: 20.54%
  - 1 Yr: 7.50%
  - 3 Yr: 10.73%
  - 5 Yr: 10.73%
  - 10 Yr: 13.99%
- **Russell 1000**: Large Growth
  - Qtr: 21.82%
  - 1 Yr: 7.48%
  - 3 Yr: 10.64%
  - 5 Yr: 10.47%
  - 10 Yr: 13.97%
- **Russell 1000 Value**: Large Value
  - Qtr: 14.29%
  - 1 Yr: -8.84%
  - 3 Yr: 1.82%
  - 5 Yr: 4.64%
  - 10 Yr: 10.41%
- **Russell 2000**: Small Core
  - Qtr: 25.42%
  - 1 Yr: -6.63%
  - 3 Yr: 2.01%
  - 5 Yr: 4.29%
  - 10 Yr: 10.50%
- **Russell 2000 Growth**: Small Growth
  - Qtr: 30.58%
  - 1 Yr: 3.48%
  - 3 Yr: 7.86%
  - 5 Yr: 6.86%
  - 10 Yr: 12.92%
- **Russell 2000 Value**: Small Value
  - Qtr: 18.91%
  - 1 Yr: -17.48%
  - 3 Yr: -4.35%
  - 5 Yr: 1.26%
  - 10 Yr: 7.82%

#### International Equity Benchmarks
- **MSCI ACWI Ex USA**: World ex-US
  - Qtr: 16.12%
  - 1 Yr: -4.80%
  - 3 Yr: 1.13%
  - 5 Yr: 2.26%
  - 10 Yr: 4.97%
- **MSCI EAFE Net (USD)**: Int’l Developed
  - Qtr: 14.88%
  - 1 Yr: -5.13%
  - 3 Yr: 0.81%
  - 5 Yr: 2.05%
  - 10 Yr: 5.73%
- **MSCI EAFE (Local)**: Int’l Developed (Local Currency)
  - Qtr: 12.60%
  - 1 Yr: -4.24%
  - 3 Yr: 1.26%
  - 5 Yr: 2.63%
  - 10 Yr: 8.66%
- **MSCI EAFE Small Cap**: Small Cap Int’l
  - Qtr: 19.88%
  - 1 Yr: -3.52%
  - 3 Yr: 0.53%
  - 5 Yr: 3.81%
  - 10 Yr: 8.02%
- **MSCI Emerging Markets**: Emerging Equity
  - Qtr: 18.08%
  - 1 Yr: -3.39%
  - 3 Yr: 1.90%
  - 5 Yr: 2.86%
  - 10 Yr: 3.27%

#### Domestic Fixed Income Benchmarks
- **Barclays Aggregate**: Core Bonds
  - Qtr: 2.90%
  - 1 Yr: 8.74%
  - 3 Yr: 5.32%
  - 5 Yr: 4.30%
  - 10 Yr: 3.82%
- **Barclays US High Yield**: High Yield
  - Qtr: 10.18%
  - 1 Yr: 0.03%
  - 3 Yr: 3.33%
  - 5 Yr: 4.79%
  - 10 Yr: 6.68%
- **BofA ML US HY BBB**: High Yield
  - Qtr: 9.52%
  - 1 Yr: 0.69%
  - 3 Yr: 3.67%
  - 5 Yr: 4.81%
  - 10 Yr: 6.57%
- **CSFB Levered Loans**: Bank Loans
  - Qtr: 9.71%
  - 1 Yr: -2.27%
  - 3 Yr: 2.13%
  - 5 Yr: 2.94%
  - 10 Yr: 4.33%
- **BofA ML US 3-Month T-Bill**: Cash
  - Qtr: 0.02%
  - 1 Yr: 1.63%
  - 3 Yr: 1.77%
  - 5 Yr: 1.19%
  - 10 Yr: 0.64%
- **Barclays US TIPS 1-10 Yr**: Inflation
  - Qtr: 3.76%
  - 1 Yr: 5.75%
  - 3 Yr: 3.94%
  - 5 Yr: 2.97%
  - 10 Yr: 2.66%

#### Global Fixed Income Benchmarks
- **Barclays Global Aggregate**: Global Core Bonds
  - Qtr: 3.32%
  - 1 Yr: 4.22%
  - 3 Yr: 3.79%
  - 5 Yr: 3.55%
  - 10 Yr: 2.81%
- **FTSE WGBI**: World Gov. Bonds
  - Qtr: 2.04%
  - 1 Yr: 4.60%
  - 3 Yr: 3.98%
  - 5 Yr: 3.70%
  - 10 Yr: 2.37%
- **BC Global Credit**: Global Bonds
  - Qtr: 7.68%
  - 1 Yr: 5.49%
  - 3 Yr: 4.49%
  - 5 Yr: 4.23%
  - 10 Yr: 4.26%
- **JPM GBI-EM Glob. Diversified**: Em. Mkt. Bonds (Local Currency)
  - Qtr: 9.82%
  - 1 Yr: -2.82%
  - 3 Yr: 1.14%
  - 5 Yr: 2.34%
  - 10 Yr: 1.64%
- **JPM EMBI+**: Em. Mkt. Bonds
  - Qtr: 9.06%
  - 1 Yr: 1.23%
  - 3 Yr: 2.66%
  - 5 Yr: 4.91%
  - 10 Yr: 5.53%

#### Alternative Benchmarks
- **Bloomberg Commodity Index**: Commodities
  - Qtr: 5.08%
  - 1 Yr: -17.38%
  - 3 Yr: -6.14%
  - 5 Yr: -7.49%
  - 10 Yr: -5.82%
- **HRRI Fund of Funds Composite Index**: Fund of Hedge Funds
  - Qtr: 7.90%
  - 1 Yr: 0.49%
  - 3 Yr: 2.26%
  - 5 Yr: 1.50%
  - 10 Yr: 2.79%
- **Cambridge PE Lagged**: Private Equity
  - Qtr: -11.88%
  - 1 Yr: -4.18%
  - 3 Yr: 7.89%
  - 5 Yr: 8.72%
  - 10 Yr: 11.88%
- **NCREIF ODC Net Lagged**: Real Estate
  - Qtr: 0.75%
  - 1 Yr: 3.93%
  - 3 Yr: 5.85%
  - 5 Yr: 7.48%
  - 10 Yr: 10.42%
- **Wilshire REIT Index**: REIT
  - Qtr: 10.56%
  - 1 Yr: -12.31%
  - 3 Yr: 0.23%
  - 5 Yr: 3.98%
  - 10 Yr: 9.22%
- **CPI + 2% Inflation/Real Assets**: Inflation/Real Assets
  - Qtr: 0.21%
  - 1 Yr: 2.72%
  - 3 Yr: 3.81%
  - 5 Yr: 3.63%
  - 10 Yr: 3.74%

*As of 3/31/2020*
RISK ASSETS RALLIED SIGNIFICANTLY IN Q2

Cumulative Total Returns

Source: S&P, Russell, MSCI, JPM, Bloomberg, FactSet
# THE ECONOMIC BACKDROP IS CHALLENGED

<table>
<thead>
<tr>
<th>Metric</th>
<th>12/31/19</th>
<th>03/31/20</th>
<th>06/30/20</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500 CY 2020 Earnings Estimate</td>
<td>$177.81</td>
<td>$160.40</td>
<td>$126.89</td>
<td></td>
</tr>
<tr>
<td>US Real GDP (QoQ%)</td>
<td>2.1%</td>
<td>-5.0%</td>
<td>-33.4%*</td>
<td></td>
</tr>
<tr>
<td>US CY 2020 Real GDP Growth Consensus</td>
<td>1.8%</td>
<td>-0.7%</td>
<td>-5.2%</td>
<td></td>
</tr>
<tr>
<td>US Unemployment Rate</td>
<td>3.5%</td>
<td>4.4%</td>
<td>11.1%</td>
<td></td>
</tr>
<tr>
<td>Continued Claims for Unemployment</td>
<td>1.7M</td>
<td>3.5M</td>
<td>19.1M</td>
<td></td>
</tr>
<tr>
<td>Federal Reserve Balance Sheet as % of Nominal GDP</td>
<td>19.2%</td>
<td>24.4%</td>
<td>32.9%</td>
<td></td>
</tr>
</tbody>
</table>


*The 06/30/20 real GDP figure represents the consensus estimate from FactSet
The additional decline in economic growth from reinstated lockdowns represents a renewed outbreak of infections that forces economies to re-implement restrictions.
UNEMPLOYMENT MAY BE WORSE THAN REPORTED

Misclassification* represents an estimate of "unemployed on temporary leave" mislabeled as "employed but absent from work".

Source: Department of Labor
INTEREST RATES REFLECT ECONOMIC CONCERNS
EQUITY PRICES DETACHED FROM FUNDAMENTALS

S&P 500 Price Versus Trailing 12M Earnings

- S&P 500 (LHS)
- Trailing 12M EPS (RHS)

Source: S&P, FactSet
Data as of 7/20/2020
FED BALANCE SHEET GROWTH

Sources: Federal Reserve, FactSet, NEPC; *All Liquidity Facilities includes term auction credit, primary credit, secondary credit, seasonal credit, Primary Dealer Credit Facility, Asset-Backed Commercial Paper, Money Market Mutual Fund Liquidity Facility, and central bank liquidity swaps; **Support for Specific Institutions includes credit extended to AIG and Maiden Lane LLCs
MACRO
INFLATION

Source: Bureau of Labor Statistics, FactSet

Source: FactSet
ECONOMIC INDICATORS

Annual Real GDP Growth

OECD Leading Indicators

Source: Bureau of Economic Analysis, Oxford Economics, FactSet

Source: OECD, FactSet
GROSS DOMESTIC PRODUCT

US Quarterly Real GDP Growth

EM vs EM Asia GDP Growth

Source: Bureau of Economic Analysis, FactSet

Source: IMF, FactSet

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CENTRAL BANK RATES

Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet
CENTRAL BANK BALANCE SHEETS

Central Bank Balance Sheet (% of GDP)

- United States
- Eurozone
- Japan

Source: FactSet
## CURRENCIES

<table>
<thead>
<tr>
<th>Currencies</th>
<th>Spot</th>
<th>1 Month</th>
<th>YTD</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro</td>
<td>1.12</td>
<td>1.0%</td>
<td>0.1%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>British Pound</td>
<td>1.24</td>
<td>-0.1%</td>
<td>-6.7%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Japanese Yen</td>
<td>107.89</td>
<td>-0.1%</td>
<td>0.7%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Swiss Franc</td>
<td>0.95</td>
<td>1.4%</td>
<td>2.2%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Australian Dollar</td>
<td>0.69</td>
<td>3.7%</td>
<td>-2.1%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Chinese Yuan</td>
<td>7.07</td>
<td>1.0%</td>
<td>-1.5%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Brazilian Real</td>
<td>5.49</td>
<td>-1.1%</td>
<td>-26.7%</td>
<td>-30.2%</td>
</tr>
<tr>
<td>Russian Ruble</td>
<td>71.25</td>
<td>-0.9%</td>
<td>-12.8%</td>
<td>-11.5%</td>
</tr>
<tr>
<td>Indian Rupee</td>
<td>75.50</td>
<td>0.1%</td>
<td>-5.5%</td>
<td>-8.6%</td>
</tr>
<tr>
<td>Mexican Peso</td>
<td>23.11</td>
<td>-4.2%</td>
<td>-18.3%</td>
<td>-16.9%</td>
</tr>
<tr>
<td>South African Rand</td>
<td>17.38</td>
<td>1.5%</td>
<td>-19.5%</td>
<td>-18.8%</td>
</tr>
</tbody>
</table>

% Change Relative to USD

Source: FactSet

---

**USD Trade-Weighted Index**

- Strengthening dollar negatively impacts international unhedged investments
- Weakening dollar positively impacts international investments

Source: FactSet
VOLATILITY

Equity Volatility Index (VIX)

Source: CBOE, FactSet

Treasury Volatility Index

Source: Merrill Lynch, FactSet
EQUITY
EQUITY INDEX PERFORMANCE

US Style Returns

-20% -10% 0% 10% 20% 30%
Russell 1000 Growth
Russell 1000 Value
Russell 2000 Growth
Russell 2000 Value

International Style Returns

-40% -30% -20% -10% 0% 10% 15%
MSCI EAFE Growth
MSCI EAFE Value
MSCI EM Growth
MSCI EM Value

Country-Specific Index Performance

-40% -30% -20% -10% 0% 10% 20%
US
China
Japan
Germany
UK
France
India
Italy
Brazil
Canada

Source: Russell, FactSet
Source: MSCI, FactSet

Cake: MSCI, FactSet
Represents returns in USD
### INDEX COMPOSITION

#### MSCI ACWI Weights

<table>
<thead>
<tr>
<th>Category</th>
<th>MTD</th>
<th>QTD</th>
<th>YTD</th>
<th>Index Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI ACWI</td>
<td>3.2%</td>
<td>19.2%</td>
<td>-6.3%</td>
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</tr>
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<td>0.2%</td>
<td>9.4%</td>
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<td>3.1%</td>
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</tr>
<tr>
<td>Consumer Staples</td>
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<td>0.8%</td>
<td>-0.6%</td>
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</tr>
<tr>
<td>Energy</td>
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<td>0.7%</td>
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<td>0.5%</td>
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<tr>
<td>Industrials</td>
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Source: MSCI, FactSet

#### S&P 500

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<tr>
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<td>0.5%</td>
<td>3.1%</td>
<td>1.0%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Consumer Staples</td>
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<tr>
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<tr>
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</tr>
<tr>
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<td>0.0%</td>
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<tr>
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<td>8.0%</td>
</tr>
<tr>
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<td>7.5%</td>
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<tr>
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Source: S&P, FactSet

---

Source: MSCI, FactSet
EARNINGS & YIELDS

Index Trailing EPS

Dividend Yields

Source: FactSet
US EQUITY VALUATIONS

Source: S&P, FactSet
EAFE EQUITY VALUATIONS

Source: MSCI, FactSet
EM EQUITY VALUATIONS

Source: MSCI, FactSet
CREDIT
## FIXED INCOME CHARACTERISTICS

<table>
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<th>Averages</th>
<th>Total Returns (%)</th>
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<td>Yield to</td>
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<td>Barclays Aggregate</td>
<td>1.25%</td>
<td>68</td>
</tr>
<tr>
<td>Barclays Treasury</td>
<td>0.50%</td>
<td>-</td>
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<tr>
<td>Barclays Agency</td>
<td>0.54%</td>
<td>21</td>
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<tr>
<td>Barclays MBS</td>
<td>1.36%</td>
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<tr>
<td>Barclays ABS</td>
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<tr>
<td>Barclays CMBS</td>
<td>1.18%</td>
<td>77</td>
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<tr>
<td>Barclays Corp IG</td>
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<td>150</td>
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<tr>
<td>Barclays Muni</td>
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<tr>
<td>Barclays HY Muni</td>
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<tr>
<td>Barclays TIPS</td>
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<tr>
<td>Barclays HY</td>
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<td>626</td>
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<tr>
<td>Barclays Global Agg</td>
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<td>58</td>
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<tr>
<td>JPM EMBI Glob Div</td>
<td>-</td>
<td>474</td>
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<td>JPM GBI - EM</td>
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Source: Barclays, JP Morgan, FactSet
US Treasury Curves

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<tr>
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<th>1 Month Ago</th>
<th>12 Months Ago</th>
<th>1 Month</th>
<th>12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M Treasury</td>
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<td>0.15%</td>
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<td>6M Treasury</td>
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<td>2Y Treasury</td>
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<td>5Y Treasury</td>
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<td>0.30%</td>
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<td>0.17%</td>
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<tr>
<td>10Y Treasury</td>
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<td>0.65%</td>
<td>2.00%</td>
<td>-0.01%</td>
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<tr>
<td>30Y Treasury</td>
<td>1.41%</td>
<td>1.42%</td>
<td>2.53%</td>
<td>-0.04%</td>
<td>29.60%</td>
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REAL YIELDS

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<tr>
<th></th>
<th>Real Rates</th>
<th>Breakeven Rates</th>
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<tr>
<td></td>
<td>Current</td>
<td>1 Month Ago</td>
</tr>
<tr>
<td>5-Year</td>
<td>-0.87%</td>
<td>-0.53%</td>
</tr>
<tr>
<td>7-Year</td>
<td>-0.79%</td>
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<tr>
<td>10-Year</td>
<td>-0.68%</td>
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<td>30-Year</td>
<td>-0.15%</td>
<td>-0.07%</td>
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Source: FactSet
NOMINAL YIELDS

Source: FactSet
CREDIT SPREADS

Source: Barclays, FactSet

US Credit Spreads

- US Aggregate (Left)
- US Aggregate Median (Left)
- High Yield (Right)
- High Yield Median (Right)

Source: Barclays, FactSet
## LONG DURATION

<table>
<thead>
<tr>
<th>Index</th>
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<th>1 Month Ago</th>
<th>12 Months Ago</th>
<th>Duration</th>
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<tbody>
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<td>1.3%</td>
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<td>Barclays 20+ STRIPS</td>
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<td>Barclays Long Credit</td>
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<tr>
<td>Barclays Long Gov/Credit</td>
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<td>Barclays Long Corp A+</td>
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<td>2.9%</td>
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Source: Barclays, FactSet

### Long Duration Yields

Source: Barclays, FactSet
### REAL ASSETS INDEX PERFORMANCE

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<th>YTD</th>
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<td>-19.4%</td>
<td>-17.3%</td>
<td>-6.1%</td>
<td>-7.7%</td>
</tr>
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<td><strong>Bloomberg Sub Agriculture Index</strong></td>
<td>1.8%</td>
<td>-4.8%</td>
<td>-14.2%</td>
<td>-13.7%</td>
<td>-10.5%</td>
<td>-9.6%</td>
</tr>
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<td>-14.2%</td>
</tr>
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<td>Corn</td>
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<td>-15.4%</td>
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<td>-13.0%</td>
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<td>Cotton</td>
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<td>-12.0%</td>
<td>-9.6%</td>
<td>-4.3%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Soybean</td>
<td>3.5%</td>
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<td>-7.3%</td>
</tr>
<tr>
<td>Soybean Oil</td>
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<td>1.9%</td>
<td>-21.5%</td>
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<td>-8.9%</td>
<td>-7.6%</td>
</tr>
<tr>
<td>Sugar</td>
<td>8.5%</td>
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<td>Wheat</td>
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<tr>
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<td>-37.8%</td>
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<td>-28.8%</td>
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<td>-41.1%</td>
<td>-9.9%</td>
<td>-14.7%</td>
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<td>-22.6%</td>
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<td><strong>Bloomberg Sub Industrial Metals</strong></td>
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<td>-0.5%</td>
<td>-0.2%</td>
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<td>10.6%</td>
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<td>6.7%</td>
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<td>17.1%</td>
<td>25.4%</td>
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<td>8.0%</td>
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<td>2.0%</td>
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<td>-16.4%</td>
<td>-8.7%</td>
<td>-6.6%</td>
</tr>
</tbody>
</table>

Source: Bloomberg, FactSet

Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements.
OIL MARKETS

WTI Versus Brent Crude Spot Prices

Source: FactSet
APPENDIX: SAA POLICY HISTORY
STRATEGIC ASSET ALLOCATION POLICY HISTORY

- 7/1/75 – 12/31/79 – 40% S&P 500/60% Barclays Capital Aggregate
- 1/1/80 – 12/31/83 – 50% S&P 500/50% Barclays Capital Aggregate
- 1/1/84 – 12/31/91 – 60% S&P 500/40% Barclays Capital Aggregate
- 1/1/92 – 12/31/94 – 50% S&P 500/10% MSCI EAFE/40% Barclays Capital Aggregate
- 1/1/95 – 6/30/97 – 45% S&P 500/15% MSCI EAFE/40% Barclays Capital Aggregate
- 7/1/97 – 12/31/99 – 50% S&P 500/15% MSCI EAFE/35% Barclays Capital Aggregate
- 1/1/00 – 9/30/03 – 53% S&P 500/17% MSCI EAFE/30% Barclays Capital Aggregate
- 10/1/03 – 12/31/06 – 53% S&P 500/15% MSCI EAFE/ACWI ex-U.S./26% Barclays Capital Aggregate/6% NCREIF ODCE (lagged one quarter)
- 1/1/07 – 10/31/2009 – 31% S&P 500/7% S&P 400/7% S&P 600/18% MSCI ACWI ex-U.S./5% Russell 2000 (lagged one quarter)/26% Barclays Capital Aggregate/6% NCREIF ODCE (lagged one quarter)
- 11/1/2009 – 6/30/2012 – 28% S&P 500/6% S&P 400/6% S&P 600/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/7% Russell 2000 (lagged one quarter)/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/6% NCREIF ODCE (lagged one quarter)/3% Dow Jones/UBS Commodities Index
- 7/1/2012 – 3/31/2015 – 23% S&P 500/5% S&P 400/5% S&P 600/14% MSCI EAFE/3% MSCI EAFE Small Cap/6% MSCI Emerging Markets/7% Russell 2000 (lagged one quarter)/13% Barclays Capital Aggregate/5% Barclays Capital High Yield/4% JP Morgan GBI-EM Global Diversified/3% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)/8% NCREIF ODCE (lagged one quarter)/4% Dow Jones/UBS Commodities Index
- 4/1/2015 – 3/31/2017 – 20% S&P 500/3% S&P 400/3% S&P 600/17% MSCI EAFE/2% MSCI EAFE Small Cap/5% MSCI Emerging Markets/8% Russell 2000 (lagged one quarter)/11% Barclays Capital Aggregate/4% Barclays Capital High Yield/10% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)/10% NCREIF ODCE (lagged one quarter)/2% Bloomberg Commodities Index TR/5% Multi-Asset Class Custom Index
- 4/1/2017 – 6/30/2018 – 20% S&P 500/3% S&P 400/3% S&P 600/17% MSCI EAFE/2% MSCI EAFE Small Cap/5% MSCI Emerging Markets/8% Russell 2000 (lagged one quarter)/11% Barclays Capital Aggregate/2% Barclays Capital High Yield/12% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)/10% NCREIF ODCE (lagged one quarter)/2% Bloomberg Commodities Index TR/5% Multi-Asset Class Custom Index
- 7/1/2018 – Present – 50% MSCI ACWI IMI Net w/ USA Gross, 20% NCREIF ODCE, 20% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter), 10% Barclays US Capital Aggregate

*Interim SAA Policy: 54.5% MSCI ACWI IMI Net w/ USA Gross, 10.8% BBG Barclays US Aggregate Bond Index, 15.5% NCREIF ODCE, 19.2% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)

Note: Interim SAA Policy includes proration of a total of Credit and Real Estate. Unfunded amounts were allocated 83.3% to Equity and 16.7% to Interest Sensitive Fixed Income. Recently approved Strategic Asset Allocation Policy effective July 1, 2018.
LONG TERM DISABILITY STRATEGIC ASSET ALLOCATION POLICY HISTORY

  - 1/1/2005 – 2/28/2007 - 53% Russell 3000/15% MSCI EAFE/26% Barclays Capital Aggregate Bond Index/6% DJ Wilshire Real Estate Securities Index
  - 3/1/2007 – 12/31/2010 - 50% Russell 3000/18% MSCI EAFE/26% Barclays Capital Aggregate Bond Index/6% DJ Wilshire Real Estate Securities Index
  - 1/1/2011 – 12/31/2012 - 40% Russell 1000/7% Russell 2000/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/6% DJ Wilshire Real Estate Securities Index/3% Bloomberg Commodity Index
  - 1/1/2013 – 2/28/2016 - 34% Russell 1000/6% Russell 2000/14% MSCI EAFE/3% MSCI EAFE Small Cap/6% MSCI Emerging Markets/13% Barclays Capital Aggregate/8% Barclays Capital High Yield/4% JP Morgan GBI-EM Global Diversified/8% DJ Wilshire Real Estate Securities Index/4% Bloomberg Commodity Index
  - 2/29/2016 – 7/26/2017 - 24% Russell 1000/12% Russell 2000/18% MSCI EAFE/2% MSCI EAFE Small Cap/5% MSCI Emerging Markets/19% Barclays Capital Aggregate/7% Barclays Capital High Yield/11% DJ Wilshire Real Estate Securities Index/2% Bloomberg Commodity Index
  - 7/27/2017 – 6/30/2018 - 20% S&P 500/3% S&P 400/3% S&P 600/17% MSCI EAFE/2% MSCI EAFE Small Cap/5% MSCI Emerging Markets/8% Russell 2000 (lagged one quarter)/11% Barclays Capital Aggregate/2% Barclays Capital High Yield/12% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)/10% NCREIF ODCE (lagged one quarter)/2% Bloomberg Commodity Index TR/5% Multi-Asset Class Custom Index
  - 7/1/2018 – Present – 50% MSCI ACWI IMI Net w/ USA Gross, 20% NCREIF ODCE, 20% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter), 10% Barclays US Capital Aggregate

*Interim SAA Policy: 54.5% MSCI ACWI IMI Net w/ USA Gross, 10.8% BBG Barclays US Aggregate Bond Index, 15.5% NCREIF ODCE, 19.2% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)

Note: All MSCI indices changed from Gross to Net of dividend withholding taxes effective 1/1/2014.
CUSTOM ASSET CLASS BENCHMARK HISTORY

- **ASRS Custom Total Public Equity Benchmark** was 77% S&P 500, 23% MSCI EAFE through 12/31/1999; 76% S&P 500, 24% MSCI EAFE through 9/30/2003; 78% S&P 500, 22% MSCI EAFE/ACWI ex-U.S.^1 through 12/31/2006; 49% S&P 500, 11% S&P 400, 11% S&P 600, 29% MSCI ACWI ex-U.S. through 10/31/2009; 48% S&P 500, 10% S&P 400, 10% S&P 600, 23% MSCI EAFE, 4% MSCI EAFE Small Cap, 5% MSCI Emerging Markets through 6/30/2012; 41% S&P 500, 9% S&P 400, 9% S&P 600, 25% MSCI EAFE, 5% MSCI EAFE Small Cap, 11% MSCI Emerging Markets through 3/31/2015; 40% S&P 500, 6% S&P 400, 6% S&P 600, 34% MSCI EAFE, 4% MSCI EAFE Small Cap, 10% MSCI Emerging Markets through 6/30/2018; Asset weighted ACWI IMI w/USA Gross (Net) (public equity assets) and ACWI IMI w/USA Gross (Net) 1 qtr Lagged (private equity assets) thereafter.

- **ASRS Custom Domestic Equity Benchmark** was S&P 500 through 12/31/2006; 74% S&P 500, 13% S&P 400, 13% S&P 600 through 12/31/2010; 70% S&P 500, 15% S&P 400, 15% S&P 600 through 3/31/2015.; 77% S&P 500, 11.5% S&P 400, 11.5% S&P 600 through 6/30/2018; 100% MSCI USA IMI thereafter.

- **ASRS Custom Domestic Large Cap Equity Benchmark** was the S&P 500 Index through 6/30/2018; MSCI USA Large Cap Index thereafter.

- **ASRS Custom Domestic Mid Cap Equity Benchmark** was the S&P 400 Index through 6/30/2018; MSCI USA Mid Cap Index thereafter.

- **ASRS Custom Small Cap Equity Benchmark** was the Russell 2000 Index through 12/31/2006; S&P 600 Index through 6/30/2018; MSCI USA Small Cap Index thereafter.

- **ASRS Custom International Equity Benchmark** was MSCI EAFE through 9/30/2005; MSCI ACWI ex-U.S. through 12/31/2010; 72% MSCI EAFE, 11% MSCI EAFE Small Cap and 17% MSCI Emerging Markets through 6/30/2012; 61% MSCI EAFE, 13% MSCI EAFE Small Cap and 26% MSCI Emerging Markets through 3/31/2015; 71% MSCI EAFE, 8% MSCI EAFE Small Cap and 21% MSCI Emerging Markets through 6/30/2018; MSCI ACWI IMI ex USA thereafter.

- **ASRS Custom Private Equity Benchmark** was the Russell 2000 Index 1 quarter lagged from inception to 6/30/2018; MSCI ACWI IMI Net w/USA Gross 1 quarter lagged thereafter.

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^1MSCI EAFE/ACWI ex-U.S. Benchmark is the MSCI EAFE Index prior to 10/1/2005 and the MSCI ACWI ex-U.S. thereafter.

Note: All MSCI indices changed from Gross to Net of dividend withholding taxes effective 1/1/2014.
Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

- NEPC’s source for portfolio pricing, calculation of accruals, and transaction information is the plan’s custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.

- This report is provided as a management aid for the client’s internal use only. Information contained in this report does not constitute a recommendation by NEPC.

- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client’s custodian bank is NEPC’s preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.

- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.

- For managers funded in the middle of a month, the “since inception” return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.

- This report may contain forward-looking statements that are based on NEPC’s estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.
Agenda Item #7
MEMORANDUM

TO: Arizona State Retirement System (ASRS) Board of Trustees

FROM: Mr. Paul Matson, Director

DATE: September 15, 2020

RE: Agenda Item #7: Presentation, Discussion, and Appropriate Action Regarding Updates to the ASRS Board Governance Policy Handbook

Purpose
To present recommended revisions to the ASRS Board Governance Policy Handbook.

Recommendation
Action item: In order to ensure compliance with open meeting law, staff will provide its recommendation during the presentation.

Background
Section B of the Handbook states, “This Handbook will be reviewed by the Board at least triennially or more often if necessary. It will be updated at the Board’s direction. The Executive Director will recommend modifications for the Board’s consideration.”

The revisions to the handbook are being submitted for Board consideration and approval.

Attachments: Redlined version of ASRS Board Governance Policy Handbook
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A. VISION STATEMENT AND CORE VALUES

How ASRS employees deliver service with PRIDE

PROFESSIONALISM

- Friendly, respectful and courteous
- Proactive and responsive
- Good communicator / active listener
- Trusted contributor / teammate
- Personally accountable
- Subject matter expert
- Critical thinker
- Honest, fair, non-judgmental
- Adaptable to change
- Adheres to the Code of Conduct

RESULTS

- Completes projects
- Attains individual accomplishments
- Meets goals and objectives
- Satisfies customers
- Produces quality work products
- Manages risks successfully

IMPROVEMENT

- Promotes new ideas
- Enhances morale
- Enhances outcomes and performance
- Improves relationships
- Solves problems
- Increases efficiency, effectiveness or reduces costs

DIVERSITY

- Encourages the free flow of ideas and opinions
- Treats all people with dignity and respect
- Works effectively with dissimilar individuals
- Recognizes and promotes new skills in others

EXCELLENCE

- Surpasses expectations
- Engenders a positive public image
- Celebrates / rewards accomplishments and contributions of others
- Embraces change in a manner which inspires others
- Promotes teamwork / collaboration through communication
- Accepts personal responsibility and challenges with enthusiasm
B. ASRS BOARD CHARTER

Consistent with recognition of the fiduciary duties imposed upon each individual member of the Board, they are referred to in this Governance Handbook as “Trustees.”

The Board recognizes a sound governance structure is essential to fulfilling its duties and responsibilities. The Board prepared and adopted this Governance Handbook to establish the framework within which the Board intends to set governance and oversight policy.

The purpose of the Handbook is twofold. First, it is to provide orientation material for new Trustees (and executive staff) as to the roles, responsibilities, structure, procedures, policies, and activities in the governance and oversight of the ASRS. Second, it is to serve as an ongoing reference manual for current Trustees and ASRS staff.

This Handbook will be reviewed by the Board at least triennially or more often if necessary. It will be updated at the Board’s direction. The Executive Director will recommend modifications for the Board’s consideration.

The Board’s Role

The ASRS Board was established under state law to govern and administer the ASRS. The Board has only those powers and duties that have been delegated to it by the Legislature. Within this role, the Trustees have a duty as fiduciaries under the law to act solely for the benefit of members and beneficiaries. (A.R.S. § 38-714, Arizona Constitution, Article 29, Section 1)

The Board views itself as being primarily an oversight and strategic policy-making body. The Board has delegated the leadership, management and administrative functions to the ASRS Director and staff, subject to ongoing monitoring and oversight. The Board has also delegated the hiring and termination of investment managers, the Real Estate and Private Equity Consultants, and other Asset Class Consultants to the (Director’s) Asset Class Committees. The Board does not engage in regular day-to-day management functions of the ASRS.

Board Composition (A.R.S. § 38-713)

The Board is composed of nine Trustees who are appointed by the Governor pursuant to the following statutory requirements:

1. Five Trustees must be members of the ASRS as follows:
   a. An educator
   b. An employee of a political subdivision
   c. A retired member
   d. An employee of the state
   e. An at-large member representing any ASRS member group

2. Four Trustees are not members of the ASRS and represent the public.

Trustee Terms, Resignations, and Vacancies

1. Each Trustee is appointed for a term of three years. The terms of office are staggered with three positions beginning and expiring on the third Monday in January of each year.
2. Trustees continue to serve in their positions after the expiration of their terms of appointment in accordance with law.
3. Individual Trustees may resign from their position on the Board by providing appropriate notice to the Governor. In such case, the resignation is not effective until accepted by the Governor. (A.R.S. §§ 38-291, 38-294)
4. Trustee position vacancies that otherwise occur before the expiration of a term will be filled by the Governor. (A.R.S. §§ 38-211, 38-713)
5. A position shall be deemed vacant if a trustee ceases to discharge their duties for a period of three consecutive months. (A.R.S. § 38-291)
6. Insufficient participation or engagement by a Trustee will be addressed by the Board Chair who will speak to the Trustee. If that does not resolve the problem, the Chair will contact the Governor’s Office for assistance.
Duties and Responsibilities

The Board proactively oversees the delivery of ASRS benefits and investment of trust assets. Consistent with fiduciary standards, the ASRS Board will:

1. Oversee and participate in the long-term strategic planning process for the ASRS.
2. Appoint, annually evaluate, and, if necessary, remove the Director in accordance with state law.
3. Delegate the leadership, management, and administrative responsibilities of the ASRS to the Director through the Director Position Description.
4. Delegate the hiring and termination of investment managers, the Real Estate and Private Equity Consultants, and other Asset Class Consultants to the Director through the asset class committee structure.
5. Approve the creation or dissolution of standing and special committees of the Board.
6. Approve the selection, and termination, and oversee the performance of the following external service providers:
   a. Plan actuary and actuarial auditor
   b. External financial auditor
   c. General investment consultant(s)
   d. Third-party administration providers for medical insurance, dental insurance, and long-term disability benefits
7. Review and approve macro-level strategic investment policies which guide the strategic vision for ASRS investments.
   a. SIP001 Asset Allocation (PLAN)
   b. SIP002 Fund Position and Rebalancing (PLAN)
   c. SIP005 Securities Litigation
   d. SIP006 Investment Manager, Partner, and Co-Investment Selection and Oversight
   e. SIP007 Funding Policy
8. Establish high level or significant actuarial funding methods and assumptions including the asset valuation method, consistent with state law.
9. Conduct an annual actuarial valuation of the ASRS liabilities and submit the results to the Governor and the state legislature as required by state law.
10. Conduct an actuarial experience study at least every five years.
11. Review the Actuarial Cost Allocation method in use at least every five years and make changes if appropriate.
12. Conduct an independent third-party audit of the actuarial valuation of the ASRS benefits at least every five years.
13. Review, approve, and monitor the budget and budget change proposals.
14. Ensure the integrity of the financial control and reporting system.
15. Provide technical and administrative information and make recommendations on legislative proposals affecting the ASRS, without advocating for or against pension benefits modifications.
16. Develop and approve other governance policies, directives, and rules for the administration of the ASRS as may be adopted from time to time.
17. Obtain periodic updates from Board Committees regarding oversight activities.
18. Review agency enterprise risk management activities periodically as recommended by the Operations, Audit, and Legislative Committee.
19. Biennially approve the internal audit plan.
20. Review and approve recommendations of the Director to appoint or remove the agency’s Chief Internal Auditor (CIA).
C. TRUSTEE POSITION DESCRIPTION

Primary Responsibility

Each Trustee is individually a fiduciary for the governance and oversight of the ASRS and is obligated to act solely for the exclusive benefit of the ASRS members and beneficiaries. (Arizona Constitution, Article 29, Section 1, and A.R.S. § 38-714)

Commitments

Trustees must be willing and able to devote the necessary time to fulfill their duties on the Board. This commitment includes the responsibility to:

1. Oversee the operations of the agency.
2. Act as a member of a nine-member board of trustees to provide leadership and set the strategic direction for the ASRS.
3. Prepare for and attend scheduled Board and Committee meetings.
4. Be an informed and active member of the Board, fully participating in the decisions and actions of the Board and its committees by making independent assessments and reasonable judgments.
5. Acquire and maintain the knowledge necessary to perform the duties of a Trustee.
6. Follow policies and procedures established by the Board.
7. Be accurate when communicating with other Trustees, members, beneficiaries, interested parties, the public, and ASRS staff, and always be clear on whether the statements being made are the position of the Board or solely the position of the individual Trustee.
8. Act collegially with the other Trustees and staff in the conduct of ASRS business.
9. Bring to the attention of the Board matters of concern that affect the conduct of the business of the Board or the ASRS.
10. Comply with the Board’s Code of Ethics.
11. Adhere to state law regarding confidentiality and privacy of member records and benefits.
12. Adhere to Open Meeting Law. (A.R.S. §§ 38-431 et seq.)
13. Assume responsibility for evaluating the Trustee’s own performance, the overall performance of the entire Board, and the performance of the Director.
14. Seek the advice of the Director and other Trustees when necessary to fulfill their fiduciary duties.
15. Delegate leadership, management and administrative responsibilities to the ASRS Director and where appropriate to outside service providers.

Trustee Fiduciary Responsibilities

Trustees have a duty to the beneficiaries to invest and manage the funds of the trust as a prudent investor would, in light of the purposes, terms, distribution requirements, and other circumstances of the trust.

1. This standard requires the exercise of reasonable care, skill, and caution, and is to be applied to investments not in isolation but in the context of the trust portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the trust.
2. In making and implementing investment decisions, the Trustee has a duty to diversify the investments of the trust unless, under the circumstances, it is prudent not to do so.
3. In addition, the Trustee must:
   a. conform to fundamental fiduciary duties of loyalty and impartiality;
   b. act with prudence in deciding whether and how to delegate authority; and
   c. incur only costs that are reasonable in amount and appropriate to the investment responsibilities of the trusteeship.

Trustee Access to ASRS Resources

1. A Trustee shall not give instructions or assign tasks to individual ASRS staff.
2. A Trustee shall refrain from making negative comments on staff performance other than to the Director or acting Director.
3. A Trustee should make every effort to access ASRS resources through action of the full Board.
4. A Trustee may request from the Director, or the Director’s designee, information or assistance necessary to meet the Trustee’s responsibilities.

5. The Director may seek the advice of the Chair and Legal Counsel or refer the matter to the full Board before complying with individual Trustee requests that, in the Director’s opinion, would require a significant amount of ASRS resources or cause disruption to the regular administration of the ASRS.

6. The Director shall share any vital or useful information resulting from a Trustee request with other Trustees.

7. The Director may refuse requests of individual Trustees that are in conflict with this policy.
D. DIRECTOR POSITION DESCRIPTION

General

1. The Board will appoint the Director who shall serve at the pleasure of the Board. (A.R.S. § 38-715)
2. The Director reports to the full Board.

Delegation of Responsibilities

1. Subject to the areas reserved to the Board by state law or the ASRS Board Charter, the Director is responsible for managing the regular operations of the ASRS in accordance with Board policies and directives.
2. The Director may make prudent delegation of the Director’s responsibilities to other ASRS staff or outside service providers unless specifically prohibited by law or the Board.

Specific Duties and Responsibilities

The Director will:

1. Provide leadership to the ASRS in fulfilling its statutory purpose and achieving the vision, values, investment principles, and goals outlined in the strategic plan.
2. Maintain effective and credible relationships with the members and beneficiaries of the ASRS, participating employers, executive officers of state government, the legislature, employee and retiree organizations, the media, and the public at large.
3. Project a positive image as Director of the ASRS.
4. Act as official spokesperson for the Board and the ASRS.
   With respect to legislation; if draft legislation is proposed affecting the ASRS that the ASRS Board has not already taken a position on, the Director will discuss such draft legislation at his discretion with legal representation, and the Board Chair or acting Board Chair, to formulate an agency response.
   If the draft legislation does not pertain to a benefit modification, the Director may provide relevant information and also support or oppose the draft legislation.
   If the draft legislation pertains to a benefit modification, the Director may provide relevant information but will not support or oppose the draft legislation.
   If a single piece of draft legislation covers both a benefit modification item as well as a non-benefit modification item, the Director may support or oppose the legislation, but will communicate that the support or opposition relates to the non-benefit modification item and not the benefit modification item.
5. Act as liaison between the Board and other ASRS staff and service providers.
6. Safeguard the assets of the ASRS by appointing a custodian and developing and implementing proper internal controls.
7. Account for and be responsible for ASRS data, the collection of income from all sources, maintenance of accounts, and distribution of benefits.
8. Monitor the operational and funded status of the benefit plans under the ASRS.
9. Identify strategic issues involving the design or ongoing administration of the defined benefit plan, defined contribution system, health insurance programs, long-term disability program, the supplemental retirement savings plan, and the supplemental salary deferral plan. Initiate analysis or action as appropriate.
10. Provide necessary staffing, support and resources to the Board and its committees.
11. Proactively assist and advise the Board and its committees with regard to issues requiring Board policy or action.
12. Appoint or remove the Deputy Director, Chief Investment Officer, and Assistant Director(s) positions or other staff as required.
13. Appoint the State Social Security Representative when such duties reside at the ASRS.
14. Recommend to the Board the appointment or removal of the internal auditorChief Internal Auditor.
15. Perform annual performance evaluations of those who have a direct reporting relationship to the Director.
16. Be responsible for the recruitment, hiring and day-to-day management of employees.
17. Ensure the accurate and timely distribution of pension benefits, survivor benefits, and refunds.
18. Review and approve transfers between the ASRS and other retirement plans. (A.R.S. §§ 38-730 and 38-921)
19. Review and approve domestic relations orders. (A.R.S. § 38-773)
20. Review and approve employer applications for ASRS membership. (A.R.S. § 38-729)
21. Adjust the maximum compensation limits (A.R.S. § 38-746), contribution limits (A.R.S. § 38-747) and maximum retirement benefit amounts (A.R.S. § 38-769) when the limits and amounts are adjusted by the United States Secretary of the Treasury pursuant to the Internal Revenue Code.
22. Maintain a process for handling member and participating employer appeals of staff decisions and statutory interpretations.
23. Manage or oversee appeal settlements.
24. Assist the Board in reviewing and adopting actuarial assumptions, funding methods, benefit option factors and actuarial valuation methods for the ASRS.
25. Initiate the annual actuarial valuations, periodic actuarial experience studies and independent actuarial audits as required by state law or Board policy and work with the actuary in determining and/or recommending appropriate assumptions.
26. Oversee and assist the Chief Investment Officer in developing macro-level strategic investment policies.
27. Review and approve standard operating procedures for the Investment Management Division.
28. Execute and manage investments in accordance with Board directives.
29. Assist the Board in soliciting and selecting of the following service providers:
   a. Consulting actuaries and actuarial auditors
   b. External financial auditor
   c. General investment consultants
   d. Third-party administration providers for medical insurance, dental insurance and long-term disability benefits
30. Approve contract extensions.
31. Approve the selection and termination of the Supplemental Retirement Savings Plan (SRSP) and the Supplemental Savings Deferral Plan (SSDP) investment options, and third-party administrators.
32. Review and approve, with the consensus of the Chief Investment Officer, recommendations from ASRS asset class committees, to hire and terminate investment managers/partners.
33. Review and approve recommendations from ASRS asset class committees to hire and terminate asset class consultants.
34. Except as otherwise noted, oversee the performance of all other service providers to the ASRS.
35. Develop and recommend to the Board, an appropriated operating budget. Manage and monitor expenditures within the budget and provide reports to the Operations, Audit and Legislative Committee or Board as necessary or directed.
36. Manage and monitor continuously appropriated expenditures as prescribed in A.R.S. § 38-721.
38. Develop and deliver all operational and actuarial reports to the Governor and state legislature as required by state law after approval by the Board.
39. Perform other duties delegated by the Board.
40. Administer the Supplemental Retirement Savings Plan (SRSP) and report to the Investment Committee annually.
41. Administer the Supplemental Salary Deferral Plan (SSDP) and report to the Investment Committee annually.
42. Review, analyze, implement and present the ASRS Funding Policy (SIP007) to the Board every three years or whenever a significant event impacts the policy or whenever the Director recommends modification.
E. ELECTION OF BOARD OFFICERS

Board Officers

The Board will elect the following Board officers:

1. Board Chair
2. Vice-chair

Election Procedure

1. Any Trustee may serve as a Board officer.
2. Any Trustee may make nomination(s) for Board officer positions, including him/herself.
3. Nominations will be made at the regular meetings of the Board in approximately May of each year.
4. Board officers will be elected by majority vote at a regular meeting of the Board prior to the start of a fiscal year. The Board Chair position shall be elected first, followed by the Board Vice-chair position.

Term

Board officers will serve for the fiscal year following their election. A Board officer typically may not serve more than three consecutive terms in one of the Board officer positions but may serve an unlimited number of non-consecutive terms.

Resignations and Vacancies

1. A Board officer may resign from their position by providing written notice to the Board and also informing the Director by copying him/her on the notice.
2. Board officer vacancies that otherwise occur before the expiration of a term will be filled by the Board for the balance of the term in a manner agreed upon by the Board.

Removal

The Board may remove an officer before the end of the officer’s term at any time by majority vote. The vacant officer position should be filled at either the next meeting of the Board or the next regular meeting of the Board.
F. BOARD CHAIR POSITION DESCRIPTION

Responsibilities and Commitments

The Chair holds a position of leadership for the Board and the ASRS and must be willing and able to devote the time necessary to fulfill these special responsibilities as the leader of the Board. This commitment includes the responsibility to:

1. Convene and conduct Board meetings in a collegial, fair, and efficient manner following Board policies, procedures, and applicable state law.
2. Review and approve the agenda for regular and special Board meetings and include any issues requested by the Trustees or the ASRS Director in accordance with Section G. Board and Committee Meeting Protocol of this Handbook.
3. Ensure proper and timely flow of adequate information to the Board.
4. Solicit input from Trustees regarding matters before the Board.
5. Ensure adequate time is provided for effective study and discussion of business being considered by the Board.
6. Schedule executive session meetings as necessary and in compliance with state law.
7. Make committee assignments, including chair and vice-chair positions to committees, taking into account the desires of the Trustees.
8. Execute such documents and other legal instruments on behalf of the ASRS as required by state law or authorized by the Board.
9. Discuss performance and behavior issues with Trustees who are having a negative impact on the ASRS.
10. Perform all other duties specifically identified by the Board.

Duties of Vice-chair

The Vice-chair will act as temporary Chair in the absence of the Chair.
G. BOARD AND COMMITTEE MEETING PROTOCOL

Rules of Order and Quorum

1. The Board and its committees shall operate under the Arizona Open Meeting Law and the general guidance of Robert’s Rules of Order.
2. A quorum must be present for the Board or its committees to conduct business. A majority of the Board or committee will constitute a quorum.
3. Board or committee members may not attend meetings through delegates or authorize voting by proxy.

Scheduling of Regular, Special, and Emergency Meetings

1. The Board will adopt an annual schedule identifying the time and location of regular meetings. The Board may schedule some meetings outside of the City of Phoenix metropolitan area. The Board or Board Chair may modify this schedule at his/her discretion.
2. The Board Chair, or any four Trustees, may call for special or emergency meetings of the Board.
3. The Director, at his discretion or as requested by the Board Chair, may post any Board Committee meeting as a dual Board and Committee meeting in order to permit interested Board members not on the particular committee to attend and participate in discussions. The committee meeting will be conducted under the committee’s charter and the non-committee Trustees will not make or vote on committee motions.

Meeting Notices

1. At least twenty-four hour notice of all Board and committee meetings, including executive sessions, will be provided to the public in accordance with Arizona Open Meeting Law. (A.R.S. § 38-431.02)
2. If permitted per Arizona Open Meeting Law, in the case of an emergency meeting requiring immediate action to avoid some serious consequence, shorter notice may be provided.
3. The Board Chair or Committee Chair shall normally provide the Trustees with seven calendar days’ notice of all Board and committee meetings.

Trustee Attendance by Electronic Media

A Trustee may participate in any meeting of the Board by telephone or video conference in a manner consistent with Arizona Open Meeting Law and applicable Arizona Attorney General Opinions. (A.R.S. § 38-431)

Meeting Agendas

1. The Board Chair in consultation with the Director will prepare an agenda for each Board meeting containing the specific matters to be discussed, considered or decided at the meeting.
2. The Board may discuss, consider, or make decisions only on matters on the agenda.
3. Items can be placed on a Board meeting agenda by:
   a. The Board Chair
   b. A Trustee
   c. A Board Committee
   d. The Director

   The Board Chair will add requested items to the Board meeting agenda within three months of the request. A longer period may be agreed upon by the Chair and the requestor.
4. The agenda for an executive session must contain a general description of the matter to be considered or decided at the meeting. (A.R.S. § 38-431.02)

Meeting Materials

1. The Director will make every reasonable effort to distribute related Board meeting materials to the Trustees at least five calendar days before each meeting.
2. The Director shall prepare a summary of the issues to be discussed, a staff or committee recommendation, if applicable, and a proposed motion or motions for the Board to consider.
3. The Director shall provide to the Board Chair or Committee Chair, staff or committee recommendations, if applicable, and a proposed motion or motions for the Board or Committee to consider.
Public Access and Testimony at Board Meetings

1. All meetings of the Board or committees are public and all persons who wish to attend may do so in accordance with Arizona Open Meeting Law. (A.R.S. §§ 38-431 et. Seq.)
2. Every agenda for regular Board or committee meetings will provide the public an opportunity to be heard. The Board Chair or Committee Chair may prescribe the time and manner of such public comment.
3. With regard to matters raised by a member of the public for which proper public notice has not been provided, no action may be taken at that meeting. The Board or committee may request the Director to investigate the issue further and report back to the Board or committee at a later meeting.
4. The Director, in consultation with the Chair, will convene meetings in facilities and locations that provide the public with reasonable access.
5. An individual who intends to speak at a meeting may be required by the Board to sign a register to permit compliance with minute taking required under state law.

Executive Sessions

1. The Board and its committees may conduct business in executive session as permitted by state law. (A.R.S. § 38-431) Executive sessions shall be presided over by the Chair of the Board or committee.
2. Executive sessions shall be closed to the public and subject to the following conditions:
   a. The executive session must be held during a regular, special, or emergency meeting of the Board or committee.
   b. The executive session must address only those subject matters permitted under Arizona Open Meeting Law (A.R.S. § 38-431, § 38-797.03):
      • Discussion or consideration of employment, assignment, appointment, promotion, demotion, dismissal, salaries, disciplining or resignation of a public officer, appointee or employee of any public body.
      • Discussion or consideration of records exempt by law from public inspection, including the receipt and discussion of information or testimony that is specifically required to be maintained as confidential by state or federal law.
      • Discussion or consultation for legal advice with the attorney or attorneys of the public body.
      • Discussion or consultation with the attorneys of the public body in order to consider its position and instruct its attorneys regarding the public body’s position regarding contracts that are the subject of negotiations, in pending or contemplated litigation or in settlement discussions conducted in order to avoid or resolve litigation.
      • Discussions or consultations with designated representatives of the public body in order to consider its position and instruct its representatives regarding negotiations with employee organizations regarding the salaries, salary schedules or compensation paid in the form of fringe benefits of employees of the public body.
      • Discussion, consultation or consideration for international and interstate negotiations or for negotiations by a city or town, or its designated representatives, with members of a tribal council, or its designated representatives, of an Indian reservation located within or adjacent to the city or town.
      • Discussions or consultations with designated representatives of the public body in order to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property.
      • Per A.R.S. § 38-797.03, discussions resulting from a member appeal of an administrative law judge determination regarding their long term disability rights, benefits or obligations if such person requests a review of the determination in an executive session.
   c. The executive session must satisfy all of the state’s notice requirements under Arizona Open Meeting Law.
3. The Board will take no action while in executive session. Any such action must be taken during that portion of a meeting that is open to the public.
4. Trustees are prohibited under state law from publicly disclosing the discussions held in executive session. The Chair shall remind the Board or committee of this prohibition at the beginning of each executive session.

**Meeting Minutes and Board Records**

1. The Director will ensure that minutes of all meetings of the Board and committees are taken and public meeting minutes will be made available to the public as required by state law.
2. The Director will direct staff to prepare a written copy of the Board minutes taken at prior meetings of the Board and present it to the Board for approval at a subsequent meeting.
3. The Director will maintain records of the Board activities and actions in accordance with state law and such other documents necessary to establish a due diligence record of the Board’s activities.
H. BOARD COMMITTEES and CHARTERS

General
The Board may establish standing or special committees to conduct the business of the full Board subject to the following conditions and limitations:

1. Board committees are responsible for overseeing various aspects of the ASRS administration and only have the authority to make recommendations to the Board.
2. Board committees may not act or speak for the Board.

Standing Committees
1. Standing committees are permanent committees established by the Board.
2. The standing committees of the Board are as follows:
   a. Operations, Audit and Legislative Committee (OALC)
   b. Investment Committee (IC)
   c. Board Appeals Committee (AC)

Special Committees
1. Special committees may be established from time to time by the Board Chair to address limited purposes and for limited times.
2. Special committees cease to exist automatically upon the completion of their stated purpose as determined by the Committee Chair.

Committee Members
1. The Board Chair shall appoint members of each committee for one-year terms.
2. The Board Chair shall appoint a chair and vice-chair for each committee. These committee officer position appointments will be for one-year terms.
3. The Board Chair may remove or replace members of a committee and committee officers before the end of the terms if the Chair determines such action is in the best interest of the ASRS.

Committee Operating Rules
1. The Committee Chair shall call committee meetings.
2. Committee meetings shall be subject to all of the public notification and meeting requirements established for the full Board in Section G of this Handbook.
3. Committee meetings are open to all Trustees, but only committee members may participate in the dialog or vote. However, if the meeting is posted as a dual meeting of the committee and Board, all participating Trustees may participate in the dialog but only committee members may vote.
4. The committees shall report to the Board, summarizing activities and recommendations on matters that have been referred to them.
5. The Director shall provide staffing, consulting, or other resources and support to Board committees as may be necessary and within budget to meet the responsibilities assigned by the Board.
Standing Committee Charters

Operations, Audit and Legislative Committee Charter

General

The Operations, Audit and Legislative Committee (OALC) is a standing committee of the Board responsible for overseeing the general operations and administration of the ASRS including agency strategic planning, legislative matters and administrative rules; recommending Board action when required.

Composition

The OALC Operations, Audit and Legislative Committee is composed of three or four members at the discretion of the Board Chair. Committee members are appointed by the Board Chair.

Responsibilities

1. Oversight

The OALC Operations, Audit and Legislative Committee will meet regularly to oversee ASRS performance in meeting strategic goals and objectives, managing administrative risks, and reviewing legislative proposals and rules. Areas of responsibility are as follows:

a. Member services, including all outreach, education, walk-in counseling, member correspondence, and call center services and programs.

b. Employer services, including all outreach, education and call center services and programs.

c. Technology services, including development, maintenance, performance, and compliance with state or industry standards.

d. General accounting and financial reporting, including investment accounting, payroll, accounts receivable and payable, pension payroll, and contribution reporting.

e. Collection and maintenance of member/employer accounts, including contributions, salaries and service, and demographic data.

f. Benefit administration, including calculations and disbursements for all benefit types.

g. Strategic, agency-wide staffing issues.

h. Agency privacy and information security.

i. Enterprise risk management.

j. Legislative affairs and rules administration.

k. Administration of the ASRS medical and dental insurance programs.

l. Administration of the ASRS long-term disability program.

m. Review appropriated budget request proposals; ongoing administration of the ASRS appropriated budget and continuously appropriated budget.

n. General contract management and procurement.

o. Strategic planning and strategic initiatives affecting operations, legislation, or administration.

2. The OALC Operations, Audit and Legislative Committee will Operate as the Audit Committee for the Agency

Areas of responsibility are as follows:

a. Review, accept, and oversee changes to the biennial Audit Plan, and determine if the changes require Board review.

b. Review and follow up on audits.

3. Actions Requiring Independent Board Review

The OALC Operations, Audit and Legislative Committee will use its discretion in reporting or making recommendations to the Board except in cases when Board action is required by governance policy. Specifically, the OALC Operations, Audit and Legislative Committee will forward its recommendations to the Board on the following matters:

a. Selection or removal of a vendor or vendors to administer the ASRS long-term disability program.

b. Selection or removal of a vendor to administer the ASRS long-term disability program.
c. Selection or removal of the ASRS external or internal auditor.
d. Review of the agency’s risk management activities (as recommended by the OALC Operations, Audit and Legislative Committee).
e. Biennial approval of the internal audit plan.
f. Appropriated budget request proposals.
g. Legislative recommendations.
h. Rule administration.
Internal Audit Charter

Introduction

The Internal Audit Division (IAD) is a vital part of the ASRS, providing independent, objective assurance and consulting services designed to add value and improve the organization’s operations. The IAD Internal Audit Division is responsible for helping the ASRS leadership accomplish its objectives by performing independent assessments of the systems of risk management, internal controls and operating efficiency, guided by professional standards and in bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. The IAD Internal Audit Division aspires to enhance and protect organizational value by providing risk-based and objective assurance, advice and insight.

Organizational Status

The organizational status and support accorded to the IAD Internal Audit Division by the ASRS Board of Trustees (Board), the Operations, Audit and Legislative Committee (OALC), and senior management are major determinants of the scope and value of the internal audit function to the agency.

The Chief Internal Auditor (CIA) reports functionally to the Board through the OALC Operations, Audit and Legislative Committee and administratively to the Director of the ASRS. The Director in consultation with the OALC Operations, Audit and Legislative Committee or OALC its Chair evaluates the performance, and subject to required Arizona Department of Administration (ADOA) guidelines, determines the remuneration of the CIA Chief Internal Auditor. The OALC in consultation with the Director will recommend to the Board the appointment and removal of the CIA Chief Internal Auditor.

Internal Audit Division personnel are independent of the ASRS activities they audit and will have no authority or responsibility for any of the procedures or activities of the ASRS. The CIA Chief Internal Auditor and Internal Audit Division staff are not authorized to perform operational duties for the organization. Additionally, they are not authorized to initiate or approve accounting transactions external to the IAD Internal Audit Division. Internal Audit Division staff is not authorized to direct the activities of any organization employee not employed by the IAD Internal Audit Division. This independence promotes essential impartial and unbiased judgments, and assures appropriate consideration and effective action on audit findings and recommendations.

To accomplish audit objectives, Internal Audit Division staff is authorized to have full, free, and unrestricted access to any of the ASRS records, property, personnel, employer members, contractors, vendors, members and retirees relevant to any subject under review. Where the need is indicated, special arrangements will be made for the examination of confidential information. Internal auditors will exercise due diligence in the safeguarding and use of these resources. The CIA Chief Internal Auditor shall ensure that internal audit staff is instructed in the handling and safeguarding of confidential information.

Internal Audit Standards

The internal audit charter is consistent with the Mission of Internal Audit and the mandatory elements of the Institute of Internal Auditors’ (IIA), International Professional Practices Framework (IPPF). Conformance with the principles set forth in mandatory guidance is required and essential for the professional practice of internal auditing. The mandatory elements of the International Professional Practices Framework are:

- Core Principles for the Professional Practice of Internal Auditing
- Definition of Internal Auditing
- Code of Ethics
- International Standards for the Professional Practice of Internal Auditing (Standards)

In addition, Internal Audit Division activities comply with the following:
- ASRS objectives and policies;
  - International Standards for the Professional Practice of Internal Auditing and the Code of Ethics of the Institute of Internal Auditors, Inc.;
• Generally accepted government auditing standards; and
• All other applicable professional standards.

Objectives and Scope of Activities

The objectives of the IAD Internal Audit Division are to (1) provide independent assurance to the Board, OALC Operations, Audit and Legislative Committee, and management that the organization’s assets are safeguarded, operating efficiency is enhanced, and compliance is maintained with prescribed laws, and the agency’s policies, and (2) provide assessments and advice for improving the agency’s governance or management by incorporating lean principles, efficient and mature processes, risk management, and control without the IAD Internal Audit Division assuming management responsibility.

The scope of internal audit work includes (1) the examination and evaluation of the adequacy and effectiveness of the agency’s network of risk management, internal control systems, and governance processes and (2) the quality of performance in carrying out assigned responsibilities.

The scope of the above work includes:
• Developing a biennial audit plan using risk analysis, and obtaining approval from the Board;
• Ensuring that risks within and outside the organization are appropriately identified and managed;
• Reviewing the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report information;
• Evaluating compliance with current policies, plans, procedures, laws, and regulations;
• Appraising the safeguarding, and economical and efficient use of the agency’s resources;
• Reviewing operations or programs to ascertain whether results are consistent with established objectives, goals, strategies and risks, and are in synchrony with industry best practices and whether the operations or programs are being carried out as planned;
• Evaluating in-system design related to internal controls;
• Performing special reviews and investigations as requested by the Director, the Board, and the OALC Operations, Audit Legislative Committee;
• Investigating reported fraud occurrences by following the agency’s “Fraud, Criminal Acts, Internal Investigation and Whistleblower Policy;”
• Investigating reported occurrences of fraud, embezzlement, theft, waste, etc., and recommending controls to prevent or detect such occurrences;
• Ensuring quality and continuous improvement are fostered in the agency’s control process;
• Performing reviews or investigations of employers as requested by the Director, the Board, and the OALC Operations, Audit Legislative Committee;
• Auditing contractors, including third-party administrators, to ensure they are meeting the objectives of the contracts, while in conformance with applicable laws, regulations, policies, procedures and best practices; and.
• Recommending opportunities for improving member service, management of risks, internal control, governance, and the organization’s effectiveness.

Reporting

The results of internal audits are reported to the OALC Operations, Audit and Legislative Committee, the Director, appropriate managers, and oversight bodies. On a quarterly basis, or more frequently at the request of the OALC Operations, Audit and Legislative Committee Chair, the CIA-Chief Internal Auditor will meet with the OALC Operations, Audit and Legislative Committee to discuss the status of the audit plan and other significant issues involving the IAD Internal Audit Division.
The IAD-Internal Audit Division will establish and maintain a system for tracking corrective action for significant audit findings reported by internal and external auditors.

Management will provide the corrective action accomplished to the IAD-Internal Audit Division on a timely basis for tracking, consolidation and reporting purposes.

An external peer review of the IAD-Internal Audit Division will be performed every five years and the results reported to the OALCO Operations, Audit and Legislative Committee.
Authority

The IAD Internal Audit Division was established by the Board of the ASRS. The Charter is incorporated into the ASRS Board Governance Policy Handbook and is approved by and all future amendments are approved by the Board through a majority vote. This Charter shall be reviewed at least triennially and updated as required by the Operations, Audit and Legislative Committee.
Investment Committee Charter

General
The Investment Committee (IC) is a standing committee of the Board responsible for assisting the Board in overseeing the ASRS investment program.

Composition
The IC Investment Committee is composed of three or four members at the discretion of the Board Chair. Committee members are appointed by the Board Chair.

Duties and Responsibilities
1. Recommend to the Board the ASRS investment goals and objectives.
2. Recommend to the Board the ASRS strategic asset allocation policy which is expected to achieve the investment goals and objectives.
3. Recommend to the Board ASRS Strategic Investment Policies and review annually the ASRS Investment Policy Statement (IPS).
4. Review and recommend to the Board changes in investment-related sections of the ASRS Board Governance Policy Handbook.
5. By proxy, the General Investment Consultant will review the asset class committee's activities and asset class presentations.
6. By proxy, the General Investment Consultant will receive and review asset class committee minutes.
7. Review recommendations regarding changes to asset class performance benchmarks. Subsequent approval by the Board is required.
8. Review the Tactical Fund Positioning/Portfolio Rebalancing actions.
9. Recommend to the Board the selection, and termination of the ASRS general investment consultant(s) and oversee their performance.
10. Receive and discuss ASRS investment risk and compliance reports.
11. Review annually the administration of the third-party administrator for the Supplemental Retirement Savings Plan (SRSP) and annually report any issues to the Board.
12. Review annually the administration of the third-party administrator for the Supplemental Salary Deferral Plan (SSDP) and annually report any issues to the Board.
13. Review and comment if necessary on compliance reporting related to investment management.
Board Appeals Committee Charter

General
Arizona Revised Statutes § 38-714(E)(1) permits the ASRS Board to delegate to a Committee to act on its behalf for the purposes of determining the rights, benefits or obligations of any party in an appealable agency action aggrieved by a final decision of the ASRS. The Board Appeals Committee (AC) is a standing committee of the Board responsible for hearing and making determinations on appealable agency actions.

Composition
The Board AC Appeals Committee is composed of three or four members at the discretion of the Board Chair. Committee members are appointed by the Board Chair.

Responsibilities
The Board AC Appeals Committee has the following responsibilities:
1. To ensure appeals are heard by the Committee within the proper timeframe of the notice of appeal.
2. To hear and make rulings on appealable agency actions from ASRS members who believe agency decisions have caused them legal harm or loss. (A member may be an employee, retiree, inactive member, employer, or others who have a vested interest in decisions in which they are affected.)
3. To accept, reject, modify, or take no action on the recommendation of the Administrative Law Judge.
4. To ensure staff effectuate the decision of the Committee.
I. ASSET CLASS COMMITTEES

Purpose

Asset class committees are designed to:

1. Provide authority and responsibility to the Director, Chief Investment Officer (CIO), and Investment Management Division (IMD) staff regarding the implementation of the ASRS Strategic Asset Allocation Policy (SAAP), associated selection of investment managers, and approval of investments.
2. Provide authority for the hiring of staff extension consultants.
3. Improve the efficiency and effectiveness of the ASRS investment decision-making process.
4. Provide consistency and uniformity in investment decision-making frameworks.

Asset class committees are not deemed to constitute a sub-committee of the Investment Committee (IC) or full Board.

Duties and Responsibilities

The Director is delegated responsibility for the management of the asset class committees. The Director may establish one or more asset class committee to perform functions described herein.

The asset class committees will meet periodically to review investment recommendations from the IMD Investment Management Division portfolio managers. All such reviews, including the hiring and termination of investment managers and the acquisition of investments will be conducted in accordance with the requirements of SIP006.

Asset class committees will hire a Real Estate Consultant, a Private Equity Consultant and other staff extension consultants to aid the committees in the identification, diligence and monitoring of investments.

Organizational Structure/Composition/Voting Protocol

The ASRS may operate with one or more asset class committees.

Each committee will include as its voting members the Director, the CIO Chief Investment Officer, the Assistant CIO Chief Investment Officer and the Senior Portfolio Managers. All decisions of the asset class committee require concurrence of both the Director and the CIO Chief Investment Officer. Other members of the IMD Investment Management Division and the staff extension consultants may attend the meetings as non-voting members.

To ensure the timely flow of information, the CIO Chief Investment Officer or the General Investment Consultant will communicate to the IC Investment Committee, information regarding activities of the asset class committees.

Staff-extension Investment Consultants

Staff-extension investment consultants are considered as an extension of the CIO Chief Investment Officer and IMD Investment Management Division staff. Responsibility to assign investment tasks to the staff extension consultants is delegated to the CIO Chief Investment Officer.

Staff-extension investment consultants will be utilized by the CIO Chief Investment Officer and IMD Investment Management Division staff to assist in the investment manager searches and other activities pertaining to the selection and monitoring of investment managers.

Selection of a particular staff-extension investment consultant will be based on those available from the approved pool of consultants and their particular strengths and ability to add value to the ASRS.
J. TRUSTEE ORIENTATION AND EDUCATION PROGRAM

General
The Board finds it is critical for the sound governance of the ASRS for Trustees to be fully informed with regard
to the nature, purpose, structure, operational systems and processes of the ASRS. The Board further finds that it
is important that Trustees are provided with education and training in areas that will facilitate the performance
of their governance and oversight responsibilities as trustees and fiduciaries for the ASRS.

New Trustee Orientation Program
1. The Director will develop and present with the Board Chair, if available, to new Trustees an in-depth New
   Trustee Orientation session designed to inform new Trustees of the key functions of the ASRS and their
   responsibilities.
2. Newly appointed Trustees are expected as part of their fiduciary responsibilities for the ASRS to participate
   in the New Trustee Orientation Session within approximately two months of their appointment.
3. The Board believes the following orientation and education topics will increase Trustee understanding:
   a. History and background of the ASRS.
   b. Introduction to the executive management team and other staff as determined by the Director.
   c. The governance role of the Board and the management role of the executive staff of the ASRS.
   d. The state laws establishing the ASRS and the application of other state and federal laws.
   e. A briefing on the fiduciary duties and liabilities of Trustees and other fiduciaries of the ASRS.
   f. A briefing on conflicts of interest and ethics laws and policies and the state mandated courses on
      conflicts of interest laws.
   g. A review of the Board Governance Policy Handbook and other information and documentation
      deemed relevant by the Director or Board Chair.
   h. A review of general retirement pension, health benefits design, Long-Term Disability, and other specific
      benefits provided by the ASRS.
   i. A review of general actuarial funding terminology and principles and the most recent actuarial reports.
   j. A review of general institutional investment principles and the various investment policies in place.
   k. A review of the reporting and disclosure requirements of the ASRS to state entities.
   l. A review of the legal (state and federal) and political environment in which the ASRS operates.
   m. A review of the current ASRS strategic plan and new issues, trends and developments affecting the
      ASRS.
   n. The structure and model for the management and operation of the ASRS.
   o. The legal and legislative environment.
   p. A description and tour of ASRS offices as may be practicable.

Trustee Education Policy
1. Each Trustee is responsible for evaluating their educational needs and obtaining knowledge of specific
   subject matters. The Director will assist them in obtaining information on conferences or seminars to meet
   their education needs.
2. Trustees are to attend ongoing educational sessions to stay current on fiduciary responsibilities and are
   encouraged to attend conferences and seminars relating to:
   a. Investment issues and trends;
   b. Pension, health, LTD Long-Term Disability, and benefits design;
   c. Fiduciary management of employee benefit trusts;
   d. Other subjects related to the oversight of the ASRS;
   e. Training required by the State of Arizona.
3. The Director will periodically provide to the Board information on available conferences and seminars.
4. The Director shall arrange for an annual fiduciary education session for the Board.

Reimbursement of Education Expenses
Payment and/or Reimbursement of travel-related expenses for Trustee orientation and education will be in
accordance with the State of Arizona Accounting Manual.
K. STRATEGIC PLANNING POLICY

General

Strategic planning is essential to ensuring the sound governance, oversight, and management of the ASRS. Since 1998, the ASRS has built its operation around a strategic model based on five organizing principles:

1. Establishing clarity of purpose within its agency Vision, Mission, Values, and Objectives.
2. Performance measurement.
3. Continuous improvement.
4. Strong governance practices.
5. Cost-efficient budgets and an effective workforce.

Strategic Planning Policy

The Board and Director will work collaboratively to ensure that:

1. Strategic priorities facing the ASRS over the short, medium, and long-term are identified, discussed, prioritized, and addressed.
2. Strategic planning discussions remain focused on strategic issues.
3. Strategies are developed to address the short, medium, and long-term priorities.
4. The Board is updated on the agency’s progress addressing strategic priorities.
5. Adequate resources are in place to support the successful execution of the Strategic Plan.
6. The agency’s governance policy is periodically examined and updated to ensure that sound governance practices are in place.
7. Delineation of authority and autonomy is regularly discussed.

Strategic Plan Reporting

1. Once the Board has identified its strategic priorities, the Director or his proxy, will report periodically to the Board or its committees, at the discretion of the Board and the committee chairs.
2. Trustees or the Director may request that priorities be added or deleted as needed.
L. BOARD CODE OF ETHICS

General

The Board has established the following Code of Ethics for the individual Trustees to comply with applicable state law and its duties of loyalty as fiduciaries for the ASRS.

The Board recognizes that compliance with these requirements is often complex and confusing. Trustees are strongly encouraged to seek the advice of the ASRS legal counsel whenever there is uncertainty regarding the required level of compliance from the Trustee.

State Law

Trustees will adhere, without limitation, to the following state laws as such apply to the conduct of their affairs and to carrying out their duties as trustees and fiduciaries for the ASRS:

1. Conflict of Interest Laws (A.R.S. § 38-503)

   Under the conflict of interest laws, Trustees who have a conflict of interest must disclose the interest and refrain from participating in the matter.

   A.R.S. § 38-503, provides in pertinent part:
   
   a. Any public officer or employee of a public agency who has, or who’s relative has, a substantial interest in any contract, sale, purchase or service to such public agency shall make known that interest in the official records of such public agency and shall refrain from voting upon or otherwise participating in any manner as an officer or employee in such contract, sale or purchase.
   
   b. Any public officer or employee who has, or who’s relative has, a substantial interest in any decision of a public agency shall make known such interest in the official records of such public agency and shall refrain from participating in any manner as an officer or employee in such decision.

   The conflict of interest laws require a Trustee to examine proprietary and pecuniary interests of the Trustee and certain relatives of the Trustee. “Relative” is defined expansively and includes “the spouse, child, child’s child, parent, grandparent, brother or sister of the whole or half blood and their spouses and the parent, brother, sister or child of a spouse.” (A.R.S. § 38-502)

   A Trustee must recognize that even though the Trustee may not have a substantial interest in a decision or a contract, if one of the Trustee’s relatives described in A.R.S. § 38-502 has a substantial interest in a decision or a contract, the Trustee must disclose the interest and refrain from participating in the matter.

   Trustees have an affirmative obligation to become aware of the interests of relatives in matters that may involve the Trustees.

   When a Trustee assesses whether the Trustee has a conflict of interest, the Trustee first must evaluate whether the Trustee or any of the Trustee’s relatives has a “substantial interest” in the matter under consideration. An interest is “substantial” if it is not defined by statute as “remote” and if it is “any pecuniary or proprietary interest, either direct or indirect,” of the Trustee or the Trustee’s relatives. (A.R.S. § 38-502) The term “interest” is a pecuniary or proprietary interest, by which a person will gain or lose something, as contrasted with a general sympathy, feeling or bias.

   The Legislature has determined that certain interests do not influence a person’s decisions or actions impermissibly. The Legislature has defined these interests as “remote interests” and has listed them in A.R.S. § 38-502. Unless the pecuniary or proprietary interest at issue falls within one of the situations statutorily specified by the Legislature to be remote, the interest is substantial and creates a conflict of interest.

   To determine whether a “substantial interest” exists, the Trustee should ask these questions:
   
   a. Will the decision affect, either positively or negatively, an interest of the Trustee or the Trustee’s relatives?
   
   b. Is the interest a pecuniary or proprietary interest?
c. Is the interest other than one statutorily designated as a remote interest?

If the answer to any of these questions is “yes,” then a substantial interest exists which requires disclosure and nonparticipation by the Trustee.

Any disclosure of a conflict resulting in a Trustee recusing him/herself from a Board or Committee decision will be recorded in the minutes of that meeting.

2. Gifts and Gratuities

A Trustee will not ask for or accept anything (emolument, gratuity or reward, or any promise thereof) that is not authorized by law for performing the Trustee’s duties.

A Trustee will not use or attempt to use the Trustee’s position to secure valuable things or benefits for the Trustee, unless the benefits are part of the Trustee’s normal compensation.

A Trustee may not receive or agree to receive directly or indirectly compensation other than as provided by law for any service rendered or to be rendered by the Trustee personally in any matter pending before the ASRS.

Trustees are responsible for maintaining the integrity of both the ASRS and the State of Arizona. As a result, no Trustee of the ASRS is permitted to:

a. Use his or her official position or attendance at a conference, seminar or training for personal gain.

b. Solicit gifts.

c. Accept gratuities.

d. Accept gifts or favors that may appear to be designed to influence the Trustee’s official conduct.

e. Permit him/herself to be placed under any kind of personal obligation that could lead a person to expect official favors.

The prohibitions in this policy are in effect any time Trustees can be viewed as being on official business for the ASRS or State of Arizona.

3. Contracts for supplies and services (A.R.S. § 38-503)

A Trustee may supply equipment, material, supplies or services to the ASRS only pursuant to an award or contract let after public competitive bidding. (A.R.S. § 38-503) The requirement of public competitive bidding is in addition to the disclosure and non-participation requirements of the Conflict of Interest Laws.

4. Disclosure of interests (A.R.S. § 38-509)

When a Trustee determines that the Trustee has a substantial interest in a matter, the Trustee must disclose the interest and withdraw from all participation in the decision or contract.

The Trustees must “maintain for public inspection in a special file all documents necessary to memorialize all disclosures of substantial interest made known pursuant to this article.” (A.R.S. §§ 38-501 to -511)

A Trustee who has a conflict of interest in any ASRS decision or in the award of a contract must provide written disclosure of that interest in the ASRS’ special conflict of interest file. (A.R.S. § 38-503). A Trustee may either file a signed written disclosure statement fully disclosing the interest or file a copy of the official minutes of the ASRS which fully discloses the interest. (A.R.S. §§ 38-502, -509)

Having disclosed the conflict of interest and withdrawn from participation in the matter, the Trustee must not communicate about the matter with anyone involved in the decision-making process. (A.R.S. § 38-503)
**Code of Ethics**

1. New Trustees are required to attend any state-provided Public Service Orientation Ethics Course.
2. Trustees shall maintain the highest ethical conduct at all times consistent with their fiduciary duty to act only for the exclusive benefit of the ASRS members and beneficiaries under state law.
3. The Trustees shall conduct themselves with integrity and exercise care, prudence and diligence in handling the affairs of the ASRS.
4. The Trustees must disclose conflicts of interest and appearance of conflicts of interest as defined under state law with respect to their fiduciary responsibility. Where a conflict of interest does exist, the Trustee must refrain from voting or otherwise participating in any manner with regard to the subject matter of the conflict.
5. The Trustees shall not:
   a. Deal with assets of the ASRS for their own interest.
   b. Accept gifts or gratuities prohibited by state law.
   c. Act in any transaction involving the ASRS on behalf of any party whose interests are adverse to the interests of the ASRS or the members and beneficiaries.
   d. Receive any monetary or other valuable consideration for their personal account from any party conducting business with the ASRS.

**Loyalty Oath**

Trustees are required to sign a State of Arizona Loyalty Oath upon their appointment to the ASRS Board. (See Appendix E.)

**Political Activities**

Though Staff are free to make contributions to a political campaign of a trustee or to any charitable organization associated with or supported by a Trustee, Trustees shall refrain from soliciting campaign or charitable contributions from staff, including but not limited to the purchase of, selling, distributing, or receiving payment for tickets for any political fundraiser, political meeting, or other political event.
M. BOARD PERFORMANCE EVALUATION

General

The Board will conduct an annual performance evaluation of its effectiveness and that of its committees as the governing fiduciary body for the ASRS. This will serve as a means of helping ensure that the Board continues to effectively meet its responsibilities and duties.

Board Evaluation Policy

1. The Board Chair, working with the Director, will be responsible for coordinating and conducting the Board performance evaluation process.
2. The evaluation will focus on the operations and decision-making processes of the Board as well as the outcome of ASRS actions.
3. The Board Chair will provide to each Trustee the performance evaluation forms approved by the Board. The Trustees are to conduct their evaluation in the first quarter of each calendar year, preceding the Director’s evaluation.
4. The Board will seek input from the Director with respect to the staffs’ perception regarding the Board’s and Board Committees’ performance.
5. The Board may seek input from the Assistant Attorney General regarding an annual evaluation of the Board’s compliance with statutory and governance responsibilities.

Board Performance Evaluation Process and Forms

A way for the Board to maintain excellence in governance is to develop a policy of reviewing its own performance on an annual basis. A two-step evaluation process has been adopted:

Part A: Trustee Self-Evaluation

The purpose of having each individual Trustee evaluate him/herself is to encourage introspection and heighten awareness of the important areas of fiduciary responsibility. Trusteeship carries with it both a personal and collective duty to the members and beneficiaries. The “Trustee Self-evaluation” is an abbreviated outline and periodic reminder of what constitutes "good trusteeship."

It is recommended that this self-evaluation be performed annually, by each individual Trustee before the overall board evaluation is performed. Each year the Board can choose how to handle the results of the evaluations. The Trustee Self-evaluation is for the personal use of each Trustee to facilitate the full and frank examination of each Trustee's own performance. The form need not be completed or submitted, but rather each Trustee is asked to review the questions as they contemplate their self-evaluation. The objective is for this annual exercise to be helpful to the ASRS and not embarrassing to any individual.

Part B: Overall Board Evaluation

By discussing and developing an overall board evaluation, the Board demonstrates its intention to establish a process for Trustees to evaluate Board performance with candor, objectivity, and a broad perspective. Such an evaluation process presents special challenges, and it may be difficult for Trustees to speak frankly about the performance of the Board as a whole, especially in situations where there is room for improvement. Notwithstanding this difficulty, the benefits of an annual evaluation will enhance the Board’s effectiveness in carrying out the mission of the ASRS.

The "Overall Board Evaluation" form contains elements of “best practices” of public retirement systems and is for the personal use of each Trustee to facilitate the full and frank discussion among the Trustees. The completed form is to be submitted to the Board Chair who will compile the results for further discussion.
N. DIRECTOR EVALUATION PROCESS

General

The Board has delegated the responsibility of administering the ASRS to the Director and, therefore, understands that an annual evaluation of the performance of the Director’s performance is important. The Board may conduct more frequent performance evaluations of the Director as it deems necessary.

Objectives

The evaluation of the performance of the Director is intended to:

1. Assist the Board in establishing and communicating clear, meaningful goals and performance targets for the Director.
2. Enable the Board to hold the Director accountable for performance.
3. Allow the Director to receive objective and timely feedback to help the Director perform at expected levels.

Evaluation Procedure and Criteria

1. The evaluation of the performance of the Director will take place by the second quarter of each calendar year after the Board’s self-evaluation is completed and will cover the preceding calendar year.
2. The subject matter addressed in the performance evaluation will include:
   a. Leadership
   b. Management/Administration/Budgeting
   c. Communication
   d. Policy matters
   e. Staff development
   f. Progress toward achieving performance business objectives previously established by the Board for the year
3. By the second quarter of each calendar year, the Board, working with the Director, may adopt additional performance goals and evaluation criteria to be used in evaluating the performance of the Director for the upcoming calendar year.
4. Other matters identified by the Board
5. The Director will prepare a written summary report of accomplishments and performance for the Board to use in their discussions of his/her performance.
   The ASRS Human Resource Department will conduct a reverse evaluation of the Director, the results of which will be presented to the Board. Participation in the reverse evaluation is voluntary and anonymous and will include the following staff:
   a. Deputy Director - Operations
   b. Chief Investment Officer
   c. Chief of Administrative Services
   d. Manager of Human Resources
   e. Manager of Management Support Services
   f. Chief Internal Auditor
6. The Board will reach consensus and provide verbal or written feedback to the Director on his/her performance, and identify areas for improvement, if necessary.
7. The Board or Board Chair will meet with the Director to present and discuss the Board’s evaluation of the Director’s performance.
### Appendix A – Trustee Self Evaluation

It is not necessary to turn this document in; it is to assist board members in contemplating their evaluation.

Review the following statements in relation to your involvement as a Trustee of the ASRS. Rank answers using the following scale: 5 - always, 4 - almost always, 3 - sometimes, 2 - almost never, 1 - never

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<tbody>
<tr>
<td>1.</td>
<td>I attend the Board and Committee meetings I am expected to attend.</td>
<td>5</td>
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<td>2.</td>
<td>I contribute to the discussion in a meaningful and helpful way.</td>
<td>5</td>
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<td>3.</td>
<td>I fully understand my fiduciary duties and act for the benefit of all members, not merely for a particular constituency.</td>
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<td>4.</td>
<td>I make an effort to be educated on the aspects of the ASRS that I do not understand.</td>
<td>5</td>
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<td>5.</td>
<td>I comply with state laws and Board policies regarding conflicts of interest.</td>
<td>5</td>
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<td>6.</td>
<td>I read the materials distributed before the Board meeting so I can constructively participate and make timely decisions.</td>
<td>5</td>
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<td>7.</td>
<td>I work with the other Trustees and the staff in a collegial way.</td>
<td>5</td>
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<td>8.</td>
<td>I understand that work requests to staff and outside consultants need to be agreed to by the Board or the Director and I act accordingly.</td>
<td>5</td>
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<td>9.</td>
<td>I work with the Director in a way that creates an atmosphere of trust and cooperation.</td>
<td>5</td>
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<td>10.</td>
<td>I understand the Director works for the entire Board and not for individual Trustees and I act accordingly.</td>
<td>5</td>
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<td>11.</td>
<td>I communicate Board governance problems to the Board Chair.</td>
<td>5</td>
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<td>12.</td>
<td>As a Trustee of the Board, I have re-read Section L “Board Code of Ethics” and Appendix F “Loyalty Oath,” of the Board Governance Policy Handbook and I reaffirm my understanding of these items.</td>
<td>5</td>
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I am most concerned about the following issues:

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# Appendix B – Overall Board Evaluation

Name (optional) ___________________________ Date: ___________________________

This document should be completed and submitted to the Board chair.

Rate the following statements in relation to the overall operation of the Board. Rank answers using the following scale: 5 - always, 4 - almost always, 3 - sometimes, 2 - almost never, 1 - never

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<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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<tr>
<td>1. The Board maintains an effective oversight role with regard to benefits and investments issues.</td>
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<td>2. The Board knows and understands the ASRS Strategic Plan, and reflects this understanding when addressing key issues throughout the year.</td>
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<td>3. The Board engages in long-range strategic thinking and planning.</td>
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<td>4. The Board has achieved the business objectives it set out to accomplish this past year.</td>
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<td>5. The Board stays abreast of issues and trends affecting the ASRS, using this information to assess and guide the ASRS over the long term.</td>
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<td>6. The Board conducts a comprehensive evaluation of the Director annually.</td>
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<td>7. The Board ensures that new Trustees receive a prompt, thorough orientation.</td>
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<td>8. Board meetings are conducted in a manner that ensures open communication, meaningful participation, and sound resolution of issues.</td>
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<td>9. The Board meeting agendas are well-balanced, allowing time for the most critical issues.</td>
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<td>10. The Board and Committee meetings are handled efficiently.</td>
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<td>11. The Committees are effective, focusing on pertinent topics and allocating reasonable time.</td>
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<td>12. The Board is well-educated on both benefit and investment issues.</td>
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<td>13. The Board recognizes its policy-making role and reconsiders and revises policies as necessary.</td>
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<td>14. The Board is consistently prepared for meetings.</td>
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<td>15. The Board as a whole, and Trustees as individuals, evaluate their performance on an annual basis.</td>
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<td>16. The Board reviews and adopts a reasonable operating budget that is followed and monitored throughout the year.</td>
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<td>17. The Board periodically monitors investment performance and measures it against relevant benchmarks.</td>
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<td>18. The Board periodically monitors service to members.</td>
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<td>19. The Board comprehends and respects the difference between its policy-making role and the Director’s management role.</td>
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<td>20. Board goals, expectations, and concerns are promptly, candidly and effectively communicated to the Director.</td>
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<td>21. The Board anticipates issues and does not often find itself reacting to “crisis” situations.</td>
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Identify the three greatest achievements of the Agency with Board support during the past year.

1. 
2. 
3. 

What critical issues need to be addressed by the Board in the future?

What suggestions do you have for improvement of the conduct of Board and Committee meetings and for Board operation and communication?
Appendix C – Director Evaluation

ASRS - Director Performance Evaluation

Name: Paul Matson
Title: Director

This form is to help you evaluate the performance of the Director of the ASRS. In each of the following rating categories, bullet points have been provided to assist you with your evaluation. Please rate the Director using the following scale and place the number on the "Rating" line in each category.

5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Leadership: Rating ______
- Establishes and maintains effective and credible relationships affecting the ASRS.
- Projects a positive image as the Director of the ASRS.
- Recognizes the needs and desires of others; treats others with regard, courtesy and respect.
- Maintains a "big picture" outlook and is aware of industry issues.
- Forecasts trends, responds to change and invites innovation.
- Solicits and acts upon ideas of others when needed.
- Stresses the importance of high quality customer service.
- Maintains a well-functioning management team.
- Participates in relevant and worthwhile professional organizations.

General Comments or Examples: (You need not address each point separately.)

Management/Administration/Budgeting: Rating ______
- Manages all ASRS business functions and activities in accordance with all relevant laws, Board policies and goals
- Develops reasonable budgets, communicates them to the Board, and operates within budgetary limits
- Ensures the efficient and effective functioning of the ASRS through delegation
- Follows up on Board directives to ensure proper implementation

General Comments or Examples: (You need not address each point separately.)
**Communication: Rating ________**
- Keeps the Board and staff informed and communicates effectively with them
- Organizes ideas and information logically
- Speaks clearly and concisely, using understandable terminology
- Effectively and politely communicates with the members
- Professionally communicates with entities affecting the ASRS

*General Comments or Examples:* (You need not address each point separately.)

---

**Policy Matters: Rating ________**
- Periodically reviews policies and makes recommendations for changes to the Board
- Accurately interprets Board policies and concerns, and develops a consistent direction for the staff to follow
- Initiates changes in day-to-day operations to conform to established Board policies
- Acts creatively to evaluate and recommend new initiatives or policies

*General Comments or Examples:* (You need not address each point separately.)

---

**Staff Development: Rating ________**
- Creates an atmosphere that fosters teamwork, creativity and participation
- Communicates clear standards of performance for the executive staff
- Keeps informed and follows state personnel policies and procedures
- Encourages professional development of staff
- Addresses succession planning for key positions within the ASRS

*General Comments or Examples:* (You need not address each point separately.)
5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Progress Toward Achieving Business Objectives: Rating __________

[Previously and mutually identified goals and objectives listed here.]

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________
4. __________________________________________________________
5. __________________________________________________________

General Comments or Examples: (You need not address each point separately.)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Significant Overall Accomplishments:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Areas Needing Improvement:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Overall Rating: __________
Appendix D – General Investment Consultants

The primarily role of the ASRS general consultant(s) is to provide independent ASRS fund(s) investment reporting and performance measurement, financial market commentary and macro strategic/tactical investment advice. The general consultant attends Board and IC Investment Committee meetings as available/applicable, and participates in asset class committee meetings. Though not a designated asset class committee consultant, the general consultant will ensure asset class compliance with the ASRS asset allocation policy, be informed of asset class committee investment decisions, and as applicable, provide broad perspectives on opportunistic and public markets-related topics.

The general consultant will be evaluated, and interviewed by the IC Investment Committee, Director and GIO Chief Investment Officer; the IC Investment Committee will make the selection and recommendation to the Board for approval. The general consultant will be hired and terminated by the Board, report to the IC Investment Committee and Board and, through the direction of the IC Investment Committee Chair, Director or GIO Chief Investment Officer, be engaged at the request of the Board, IC Investment Committee, Director or GIO Chief Investment Officer. In the event a backup general consultant is needed, a selection will be made by the IC Investment Committee from the approved pool of project consultants and recommended to the Board for approval.
Appendix E – Trustee Fiduciary Liability and Coverage

The liability of the Board of Trustees and its individual members in the conduct of their duties and responsibilities is established under state law as follows:

1. The Board as a whole and its individual members are not liable for any act or failure to act that is made in good faith within the scope of their responsibilities under state law. (A.R.S. § 38-791)

2. An individual member of the Board is immune from civil liability and is not subject to suit directly or by way of contribution for any act or omission resulting in any damage or injury if the member was acting in good faith and within the scope of the member’s official capacity, unless the damage or injury was caused by willful and wanton or grossly negligent conduct of the member. “Official capacity” means any decision or act taken by a member of the Board to further the purpose for which the Board is established. (A.R.S. §§ 38-717 and 41-621)

3. The state and the ASRS are immune from liability for losses arising out of a judgment against the Trustees for willful and wanton conduct resulting in punitive or exemplary damages. (A.R.S. § 41-621) Liability for such damages would be the responsibility of the Trustees personally.

4. The Arizona Department of Administration is required by statute to provide coverage to the Board and to individual Trustees under the state’s risk management program (A.R.S. §§ 41-621 to -625) “against all liability for acts or omissions of any nature by members of the board while acting in an authorized governmental or proprietary capacity and within the course and scope of their employment or authority.” (A.R.S. § 38-717)

Under the state’s risk management program, the Board and the Trustees receive the same coverage that the state itself receives. (A.R.S. § 41-621)

Under the state’s risk management program the Board and the Trustees have coverage for “liability for acts or omissions of any nature while acting in authorized governmental or proprietary capacities and in the course and scope of employment or authorization except as provided by this chapter.” (A.R.S. § 41-621)

Under the state’s risk management program the Board and the Trustees also have coverage for “[o]ther exposure to loss where insurance may be required to protect this state and its departments, agencies, boards and commissions and all officers, agents and employees acting in the course and scope of employment or authorization except as prescribed by this chapter.” (A.R.S. § 41-621)

According to A.R.S. § 41-621 acts or omissions of a Trustee would be “within the course and scope of employment or authorization” if they:

   a. Occur while performing duties or functions that the Trustees are authorized to perform.
   b. Occur “substantially within” the authorized time and space limits of a Trustee’s authorization.
   c. Are done (or not done) at least in part to serve the Arizona State Retirement System.

Under the state’s risk management program, the Attorney General’s Office will defend the Board and the Trustees. The Attorney General may retain outside counsel to defend the Board and the Trustees. (A.R.S. § 41-621)

Under the state’s risk management program all attorneys’ fees, court costs and litigation expenses will be paid from the permanent liability loss revolving fund of the Department of Administration. (A.R.S. § 41-622) A settlement or judgment, except for punitive damages, also will be paid from this fund. (Id. and A.R.S. § 41-621)

If a Trustee is sued based on conduct outside the course and scope of a Trustee’s authorization, the state is not obligated to provide coverage for that conduct. (A.R.S. § 41-621) If the conduct is clearly outside the course and scope, the state will deny coverage. (A.R.S. § 41-621) If there is a question whether the Trustees’ acts were within their official capacity, the state may reserve the right to refuse to pay any judgment and will then hire outside counsel to represent the Trustees.

Losses arising from contractual breaches are not covered under the state’s risk management program. (A.R.S. § 41-621)
Appendix F – Loyalty Oath

STATE OF ARIZONA

LOYALTY OATH

A.R.S. §38-231. Officers and employees required to take loyalty oath; form; classification; definition

A. In order to ensure the statewide application of this section on a uniform basis, each board, commission, agency and independent office of this state, and of any of its political subdivisions, and of any county, city, town, municipal corporation, school district and public educational institution, shall completely reproduce this section so that the form of written oath or affirmation required in this section contains all of the provisions of this section for use by all officers and employees of all boards, commissions, agencies and independent offices.

B. Any officer or employee who fails to take and subscribe to the oath or affirmation provided by this section within the time limits prescribed by this section is not entitled to any compensation until the officer or employee does so take and subscribe to the form of oath or affirmation prescribed by this section.

C. Any officer or employee having taken the form of oath or affirmation prescribed by this section, and knowingly at the time of subscribing to the oath or affirmation, or at any time thereafter during the officer's or employee's term of office or employment, does commit or aid in the commission of any act to overthrow by force, violence or terrorism as defined in section 13-2301 the government of this state or of any of its political subdivisions, or advocates the overthrow by force, violence or terrorism as defined in section 13-2301 of the government of this state or of any of its political subdivisions, is guilty of a class 4 felony and, on conviction under this section, the officer or employee is deemed discharged from the office or employment and is not entitled to any additional compensation or any other emoluments or benefits which may have been incident or appurtenant to the office or employment.

D. Any of the persons referred to in article XVIII, section 10, Constitution of Arizona, as amended, relating to the employment of aliens, are exempted from any compliance with this section.

E. In addition to any other form of oath or affirmation specifically provided by law for an officer or employee, before any officer or employee enters upon the duties of the office or employment, the officer or employee shall take and subscribe the following oath or affirmation:

State of Arizona, County of _____________ I, _________________________ (type or print name) do solemnly swear (or affirm) that I will support the Constitution of the United States and the Constitution and laws of the State of Arizona, that I will bear true faith and allegiance to the same and defend them against all enemies, foreign and domestic, and that I will faithfully and impartially discharge the duties of the office of THE ARIZONA DEPARTMENT OF ADMINISTRATION according to the best of my ability, so help me God (or so I do affirm).

______________________________________ (Signature of officer or employee)

______________________________________ (Date)

F. For the purposes of this section, “officer or employee” means any person elected, appointed or employed, either on a part-time or full-time basis, by this state or any of its political subdivisions or any county, city, town, municipal corporation, school district, public educational institution or any board, commission or agency of any county, city, town, municipal corporation, school district or public educational institution.
MEMORANDUM

TO: Mr. Jim Hillyard, Chair, Arizona State Retirement System Board

FROM: Mr. Paul Matson, Director

DATE: September 18, 2020

RE: Agenda Item #8: Presentation, Discussion, and Appropriate Action Regarding the 2021 Board Meeting Schedule

Purpose
To discuss meeting dates for the 2021 calendar year for the Board.

Recommendation
Action item: The Board adopt a meeting schedule for the 2021 calendar year.

Background
The 2021 calendar option being presented for the Board’s consideration sets meetings to be held the last Friday of every other month with the exception of November. This follows the same schedule as calendar year 2020.

The Board may choose an alternate schedule, if the Board would prefer.

Additional meetings may be scheduled as needed.

Attachment: Proposed Board Meeting Calendar
2021 Calendar – ASRS BOARD

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

Holiday
Board Proposed Meeting Dates (6)
IC Proposed Meeting Dates (4)
OALC Proposed Meeting Dates (4)
Agenda Item #9

Director’s Report:

9a - Operations Report
9b - Budget & Staffing Reports
9c - Cash Flow Statements
9d - Appeals Report
9e - Employers Reporting
Agenda Item #9a
Director’s Report
Operations Report
Member Advisory Center: Phone

**Volume**
Comparison of calls by month and year

- Sept 19 - Aug 20: 163,199 ( -9.6% )
- Sept 18 - Aug 19: 180,537

**Timeliness**
Percent answered in 20 seconds or less

- Rolling Year Avg. = 96%
- Objective

**Reason for Contact**
Top reasons - Aug 2020

- Retirement Status
- Medical Information Enrollment
- Refund Options
- Account Access Assist
- Retirement Options

**Abandonment Rate**
Percent of calls abandoned

- Rolling Year Avg. = 0.4%
- Objective

**Overall Satisfaction**
2nd Quarter 2020

- 98% satisfied
- 93% overall satisfaction

**Quality**
Of agent response to member inquiries

- Rolling Year Avg. = 98.0%
Member Secure Messages (MSM)

Volume
comparison of secure messages received by month and year

Timeliness
percent of secure messages responded to within 1 business day

Reason for Contact
top reasons - Aug 2020

Overall Satisfaction
2nd Quarter 2020
One-on-One Counseling

Volume
number of one-on-one counseling sessions by type

Timeliness (average wait time in minutes)

One-on-One Timeliness
percent seen within objective wait time

Reasons for Visit
top five reasons - April 2020

Overall Satisfaction
2nd Quarter 2020

100% satisfied
Service Purchase

**Total Volume**
comparison by month and year

---

**Lump Sum Timeliness**
percent within 5 business days

---

**Cost Invoices Timeliness**
percent within 10 business days

---

**Cost Invoices Pending:** 82
**Payments Pending:** 1

---

**Overall Satisfaction**
2nd Quarter 2020

---

---
Refunds

Volume
comparison by month and year

- Requests Sept19-Aug20 = 11,788 (-15%)
- Requests Sept18-Aug19 = 13,545

Timeliness (average turnaround time in business days)

Strategic Plan Objective
Rolling Year Avg. = 99%

Requests Pending

Overall Satisfaction
2nd Quarter 2020

Very Satisfied
Satisfied
Somewhat Satisfied
Somewhat Dissatisfied
Dissatisfied
Very Dissatisfied

94% satisfied
80%
New Retiree and Pension Payroll

First Payment Volume comparison by month and year
- September to August 2020: 9,071 (6% decrease)
- September to August 2019: 9,636

Pension Volume comparison by month and year
- September to August 2020: 1,853,975 (3% increase)
- September to August 2019: 1,803,363

First Payment Timeliness
- Average turnaround time in days:
  - Rolling Year Avg. = 66%

Audits & Adjustments comparison by month and year
- Adjustments Rolling Year = 429
- Audits Rolling Year = 3,163

Overall Satisfaction 2nd Quarter 2020
- 88% satisfied
- 6% Very Satisfied
- 4% Satisfied
- 4% Somewhat Satisfied
- 20% Somewhat Dissatisfied
- 4% Dissatisfied
- 2% Very Dissatisfied

Adjustments Timeliness
- Average turnaround time in days:
  - 9 8 6 12 11 5 6 14 6 5 28 3
Public Website: www.azasrs.gov

Volume
comparison of public website visits by month and year

Engagement
average session duration by fiscal year

Device Usage
type of device used by fiscal year

Most Visited Public Pages
August 2020

Social Media Sept 2020
Followers: 2981 (+0.03%)

Followers: 664 (+0.15%)
Agenda Item #9b

Director’s Report
Budget & Staffing Reports
## FY 2021 ASRS Budget Report Administrative Expenses

**Expenditures as of August 31, 2020**

### Base Administrative Budget

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<tr>
<th>Personal Services (PS)</th>
<th>Administrative Projects Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries and wages</strong></td>
<td><strong>Technology Services Improvements Unspent</strong></td>
</tr>
<tr>
<td>Variable Compensation Strategies Plan</td>
<td>Base Appropriations</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td><strong>Technology Services Improvements Unspent Appropriations</strong></td>
</tr>
<tr>
<td><strong>Pension Payroll, Rent, and Actuarial Fees Continuous Appropriations</strong></td>
<td><strong>Continuous Appropriations</strong></td>
</tr>
<tr>
<td><strong>Budget Subtotal</strong></td>
<td><strong>Projected Budget Total</strong></td>
</tr>
<tr>
<td><strong>Base Administrative Appropriations</strong></td>
<td><strong>23,120,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1,800,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,601,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>29,521,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>13,57,900$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>182,500$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>438,500$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>399,300$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>28,368,900$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1,346,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>54,200$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>25,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,471,800$</strong></td>
</tr>
<tr>
<td><strong>Unspent Base Appropriations</strong></td>
<td><strong>Total Administrative Spend</strong></td>
</tr>
<tr>
<td><strong>Oracle Modernization PIJ</strong></td>
<td><strong>$3,468,200$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>125,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>576,600$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,169,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12,800$</strong></td>
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<tr>
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<td><strong>231,000$</strong></td>
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<td><strong>54,200$</strong></td>
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<td><strong>4,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,471,800$</strong></td>
</tr>
<tr>
<td><strong>Projected Unspent</strong></td>
<td><strong>TOTAL SPEND TOTAL</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$3,468,200$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>125,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>576,600$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,169,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12,800$</strong></td>
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<tr>
<td></td>
<td><strong>231,000$</strong></td>
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<tr>
<td></td>
<td><strong>54,200$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4,471,800$</strong></td>
</tr>
<tr>
<td><strong>Information Protection Security PIJ</strong></td>
<td><strong>APPROPRIATED / BUDGETED AMOUNTS</strong></td>
</tr>
<tr>
<td><strong>Payroll Calculation PIJ</strong></td>
<td><strong>$23,120,800$</strong></td>
</tr>
<tr>
<td><strong>Projected Administrative Spend</strong></td>
<td><strong>$1,800,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$4,601,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$29,521,800$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$1,357,900$</strong></td>
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<tr>
<td></td>
<td><strong>$182,500$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$473,500$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$521,300$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$32,057,000$</strong></td>
</tr>
<tr>
<td><strong>Payroll Calculation PIJ</strong></td>
<td><strong>$22,207,900$</strong></td>
</tr>
<tr>
<td><strong>Projected Administrative Spend</strong></td>
<td><strong>$1,500,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$4,601,000$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$38,700$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$28,368,900$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$1,346,800$</strong></td>
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<tr>
<td></td>
<td><strong>$182,500$</strong></td>
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<tr>
<td></td>
<td><strong>$473,500$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$521,300$</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$30,905,800$</strong></td>
</tr>
<tr>
<td><strong>% EXPENDED YTD</strong></td>
<td><strong>% EXPENDED YTD</strong></td>
</tr>
<tr>
<td></td>
<td><strong>15.0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>6.9%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12.5%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>14.1%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>17.0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>29.7%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>0.8%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>0.0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>13.9%</strong></td>
</tr>
<tr>
<td><strong>% OF PAYROLLS PAID</strong></td>
<td><strong>% OF FISCAL YEAR ELAPSED</strong></td>
</tr>
<tr>
<td></td>
<td><strong>19.2%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>6.9%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12.5%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>14.1%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>17.0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>29.7%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>0.8%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>0.0%</strong></td>
</tr>
</tbody>
</table>
| | **16.7%**

*Does not include ICP*
<table>
<thead>
<tr>
<th>Investment Management Expenses</th>
<th>EXPENDED YTD</th>
<th>ESTIMATED EXPENSES</th>
<th>ESTIMATED EXPENSES AS % OF TOTAL AUM</th>
<th>ESTIMATED EXPENSES PER MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Investment Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and benefits</td>
<td>$282,200</td>
<td>$1,578,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Incentive Compensation Plan (ICP)</td>
<td>-</td>
<td>$313,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel, education and training, rent, and other operational expenses</td>
<td>$22,700</td>
<td>$120,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public Markets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External investment management fees</td>
<td>-</td>
<td>$3,660,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transactional and other fees</td>
<td>$344,400</td>
<td>$3,500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private Markets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Equity management fees</td>
<td>$9,146,800</td>
<td>$54,145,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Equity performance incentive and other fees</td>
<td>$5,702,100</td>
<td>$5,702,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate management fees</td>
<td>$1,305,400</td>
<td>$13,900,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate performance incentive and other fees</td>
<td>$942,100</td>
<td>$942,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Credit management fees</td>
<td>$3,470,600</td>
<td>$31,793,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Credit performance incentive and other fees</td>
<td>$1,551,700</td>
<td>$1,551,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Banking, Security Lending and Master Cash STIF Fees</td>
<td>$60,300</td>
<td>$4,530,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Management Expenses Subtotal</strong></td>
<td>$22,828,300</td>
<td>$121,737,800</td>
<td>0.28%</td>
<td>$196.54</td>
</tr>
<tr>
<td><strong>Investment Related Consulting, Legal and Information Services Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Consulting Services</td>
<td>$623,400</td>
<td>$8,632,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Related Legal Services</td>
<td>$2,600</td>
<td>$3,910,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Electronic Information Services</td>
<td>$183,600</td>
<td>$3,839,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Financial Consulting Services</td>
<td>-</td>
<td>$120,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Services Expenses Subtotal</strong></td>
<td>$809,600</td>
<td>$16,501,000</td>
<td>0.04%</td>
<td>$26.64</td>
</tr>
<tr>
<td><strong>Total Investment Expenses</strong></td>
<td>$23,637,900</td>
<td>$138,238,800</td>
<td>0.32%</td>
<td>$223.18</td>
</tr>
</tbody>
</table>

1 The ICP is paid with base operating budget appropriated dollars.
2 Due to the nature of the investments and contingent variables, estimated annual performance incentive and other certain fees and expenses that are contractually agreed upon are not projected and are only reported, on a cash flow basis, when identified and paid. Amounts in the Estimated Expenses column are equal to the actual Expended YTD.

---

**FY 2021 ASRS Budget Report Total Administrative and Investment Expenses**

<table>
<thead>
<tr>
<th>Administrative Expenses</th>
<th>EXPENDED YTD</th>
<th>ESTIMATED EXPENSES</th>
<th>ESTIMATED EXPENSES AS % OF TOTAL AUM</th>
<th>ESTIMATED EXPENSES PER MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>(from Page 1 - Appropriated/Budgeted Amounts minus Projected Unspent and excluding ICP)</td>
<td>$4,471,800</td>
<td>$30,905,800</td>
<td>0.07%</td>
<td>$49.90</td>
</tr>
<tr>
<td>Investment Expenses (including ICP)</td>
<td>$23,637,900</td>
<td>$138,238,800</td>
<td>0.32%</td>
<td>$223.18</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$28,109,700</td>
<td>$169,144,600</td>
<td>0.39%</td>
<td>$273.08</td>
</tr>
</tbody>
</table>

ASRS Estimated Total Market Value of Assets Under Management (AUM) as of June 30, 2020: $42,909,930,000
ASRS Total Membership as of June 30, 2020: 619,400
The Arizona State Retirement System (ASRS) administrative and investment costs are expended in accordance with Arizona Revised Statutes (A.R.S.). The ASRS utilizes both appropriated and continuously appropriated funds. Column amounts represent the expenditures in each category to date. Total appropriated dollar amounts and estimated planned annual expenses are also included as a guide to the rate of spend during the fiscal year.

**Appropriations**

Columns labeled as *appropriations* represent funds that have been approved by the Legislature and the ASRS Board of Trustees for July 1, 2020 through June 30, 2021:

1. **Base operating budget** – funds for administrative salaries and employee benefits, information technology software and systems, supplies, equipment and ongoing costs associated with providing service to members and employers while maintaining high levels of member satisfaction.

2. **Long Term Disability (LTD) Program** – funds for the administration costs of the LTD program pursuant to A.R.S. § 38-797.

3. **Technology Services Improvements project** – funds to continue to implement a DevOps methodology and set up the required infrastructure to achieve operational efficiency in the cloud. The ASRS will utilize dollars that are projected to be unspent from the base operating budget.

4. **Automation upgrades and Oracle Modernization project** – funds for the Oracle Forms and Reports Modernization project. FY 2021 will be the final year the ASRS will utilize non-lapsing prior-year appropriated funds to complete the project.

**Continuous Appropriations**

Columns labeled as *continuous appropriations* represent funds that, in accordance with A.R.S. § 38-721(C), are continuously appropriated in the amount deemed necessary by the Board and include:

1. **Administrative costs**
   - *Pension Payroll* - funds for costs associated with administering retiree pension benefits and disbursements, including the data, transactional and network security program, third-party fees, postage, benefit-related consulting fees, and the ASRS Manual Disbursements, Information Protection Security, and Payroll Calculation and related projects to support the security program.
   - *Rent* – funds for rent required as tenants for occupancy at 3300 N Central Avenue in Phoenix and in the leased office space in Tucson.
   - *Actuarial fees* – funds for actuarial services related to plan design, benefits, administration and valuations and the expenses related to activities to prepare for a possible transition to self-insured health, pharmacy, and dental benefit plans.

2. **Investment management and related consulting fees necessary to meet the Board’s investment objectives**
   - *Internal investment management* – funds for ASRS Investment Management Division (IMD) staff salaries and employee benefits, travel, education and training, rent, and other operational costs. However, the Investment Incentive Compensation Plan (ICP) is paid with base operating budget appropriations.
   - *External investment management* – funds for:
     - Public Markets investment management fees and transactional and other fees, which include foreign taxes and commissions on derivatives and other incidental costs.
     - Private Markets investment management fees and performance incentive and carried interest fees, which are only paid if earned - upon successful performance of the manager after other return criteria are met – or incurred, and other contractually agreed-upon fees and expenses.
   - *Consulting fees* – funds for investment-related consulting and legal fees, electronic information services and subscriptions, custodial administrative and investment services fees, and external auditing service fees. In order to gain insight into portfolios, investment performance, compliance, and investment opportunities, the ASRS utilizes supplemental, coordinated services of external professionals and data platforms.

The investment continuous appropriations budget report includes projected expenditures for the current fiscal year. Actual expenditures are reported monthly and estimated annual expenses are reviewed and adjusted quarterly.

The ASRS Estimated Total Market Value of Assets under Management (AUM) and ASRS Total Membership values are updated as period ending amounts are finalized.
# Arizona State Retirement System

## Staffing Report

(August 31, 2020)

<table>
<thead>
<tr>
<th>ASRS by Division</th>
<th>241 Full Time Equivalents (FTEs)</th>
<th>New Hires</th>
<th>New Exits</th>
<th>Vacancies</th>
<th>Vacancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director’s Office/ Public Affairs/ Information Security (DIR)/ Leg. Liaison</td>
<td>21</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Administrative Services Division (ASD)</td>
<td>12</td>
<td>0.0</td>
<td>0.0</td>
<td>3.0</td>
<td>25.00%</td>
</tr>
<tr>
<td>Financial Services (FSD)</td>
<td>71</td>
<td>0.0</td>
<td>3.0</td>
<td>14.75</td>
<td>20.77%</td>
</tr>
<tr>
<td>Technology Services (TSD)</td>
<td>57</td>
<td>0.0</td>
<td>0.0</td>
<td>9.00</td>
<td>15.79%</td>
</tr>
<tr>
<td>Internal Audit (IAD)</td>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Investment Management (IMD)</td>
<td>11</td>
<td>0.0</td>
<td>0.5</td>
<td>1.00</td>
<td>9.09%</td>
</tr>
<tr>
<td>Member Services (MSD)</td>
<td>66</td>
<td>0.0</td>
<td>0.0</td>
<td>4.00</td>
<td>6.06%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>241</strong></td>
<td><strong>0.00</strong></td>
<td><strong>3.50</strong></td>
<td><strong>31.75</strong></td>
<td><strong>13.17%</strong></td>
</tr>
</tbody>
</table>

## Turnover

<table>
<thead>
<tr>
<th>Turnover</th>
<th>Hires</th>
<th>Exits</th>
<th>Total Exits (Last 12 Months)</th>
<th>Annualized Turnover %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00</td>
<td>3.50</td>
<td>31.50</td>
<td>14.42%</td>
</tr>
</tbody>
</table>

Turnover benchmarks:
- AZ State Personnel System 2019: 18.1%
- BLS - State/Local 2019: 19.0%
- Milliman AZ Comp. Survey 2019 - Gov’t: 12.6%

## Recruitments

**Under recruitment:**
- FSD: Accounting Specialist 2 (x2), FSD: Pension Calculations Specialist Tier 2 (x3), FSD: Records Management Specialist

**Internal hires (transferred/promoted from within the ASRS):**
- FSD: Accounting Specialist 3 (start date: 09/05/2020) and TSD: Junior Software Engineer (start date: 09/05/2020)

**External hires (new to the ASRS):**
- None
## Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

<table>
<thead>
<tr>
<th>Agency Divisions</th>
<th>Services and Functions</th>
<th>Staffing Impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSD</td>
<td>MAC (Call Center)</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Outreach Education</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>E-mail and Written Correspondence</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Phoenix: Appointments/Walk-ins/Outreach</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Tucson: Appointments/Walk-ins/Outreach</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Benefit Estimates</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Employer Relations</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>MSD</td>
<td>Health Insurance/LTD Benefits Administration and Communication</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Service Purchase Processing</td>
<td>🟢🟢.Yellow</td>
<td></td>
</tr>
</tbody>
</table>

As a result of vacancies, the team struggled to meet strategic goals for Service Purchase. Most notably the biggest struggle was for Service Audit which does not have its own strategic goal but does affect processing in different ASRS departments such as Member Benefit Disbursements and the MSD Benefit Estimates. The SP/SA supervisor has been managing the backlog by expediting the audits requested by supervisors on the other teams. Currently there are 518 pending audits with 99 still pending from July. Staff from FSD Support Services have assisted this team. Another member of this team is assisting the mail/HI
## Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

<table>
<thead>
<tr>
<th>Agency Divisions</th>
<th>Services and Functions</th>
<th>Staffing Impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact of Staffing on ASRS Operations:</strong></td>
<td><strong>Green</strong> = Normal risk</td>
<td><strong>Yellow</strong> = Greater than normal risk</td>
<td><strong>Red</strong> = Negative impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Monthly Pension Payroll</td>
<td><img src="Green" alt="Green" /></td>
<td>team for 50% of their day. Recruitment for one position has been completed and will start September 2020.</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>New Retiree Processing</td>
<td><img src="Green" alt="Green" /></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Survivor Benefit Processing</td>
<td><img src="Green" alt="Green" /></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Records Management</td>
<td><img src="Green" alt="Green" /></td>
<td>As a result of vacancies the team has not met the strategic goal of processing incoming member demographic forms with 5 days of receipt with a 90% risk tolerance. During the month of July 79% was met and in August 82%. Recruitment for one position is underway. This recruitment is the same position referenced in LTD/HI.</td>
</tr>
<tr>
<td></td>
<td>(data processing/imaging)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Mailroom and Printing</td>
<td><img src="Green" alt="Green" /></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>LTD/Health Benefit</td>
<td><img src="Green" alt="Green" /></td>
<td>As a result of vacancies and extended absences the team has not met the following Strategic Goals: The Health Insurance Enrollments processed were at 50% in July and 73% in August within 5 days or their receipt. The strategic goal has a risk tolerance of 95%. Additionally, the Med/Dental Reimbursement forms have a risk tolerance of 90% to be processed within 15 days of receipt. During the month of July the 90% goal was met, but in August only 11.23% was achieved. Recruitment for one position is underway. This recruitment is the same position referenced in RM-Imaging.</td>
</tr>
<tr>
<td></td>
<td>Supplement Processing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

<table>
<thead>
<tr>
<th>Agency Divisions</th>
<th>Services and Functions</th>
<th>Staffing Impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact of Staffing on ASRS Operations:</strong></td>
<td><strong>Green</strong> = Normal risk <strong>Yellow</strong> = Greater than normal risk <strong>Red</strong> = Negative impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Transfer Processing</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>General Accounting</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>Contribution Collections and Posting</td>
<td>🟢🟢🟡</td>
<td>As a result of vacancies the team did not meet the Strategic Goal of 95% of retirement transactions posted within 10 days. During August 63.79% posted in 10 days. Additionally, the Auto Lock report (which indicates outstanding issues) normally has 10 issues needing to be addressed. This is currently at 28. Recruitment for two positions is underway.</td>
</tr>
<tr>
<td>TSD</td>
<td>Network Support</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>TSD</td>
<td>Application Development Team</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>IMD</td>
<td>Investment Management</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Board/Executive Staff Support</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Information Security</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Strategic Planning/Analysis</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Strategic Communications</td>
<td>🟢🟢🟢</td>
<td></td>
</tr>
</tbody>
</table>
## Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

<table>
<thead>
<tr>
<th>Agency Divisions</th>
<th>Services and Functions</th>
<th>Staffing Impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact of Staffing on ASRS Operations:</strong></td>
<td><strong>Green</strong> = Normal risk</td>
<td><strong>Yellow</strong> = Greater than normal risk</td>
<td><strong>Red</strong> = Negative impact</td>
</tr>
<tr>
<td>DIR</td>
<td>Public Affairs</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Rule Writing</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Legislative Relations</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>DIR</td>
<td>Defined Contributions Plans</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>Internal Audit</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>ASD</td>
<td>Human Resources</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>ASD</td>
<td>Training and Development</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>ASD</td>
<td>Contracts and Procurement</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>ASD</td>
<td>Facilities Management</td>
<td>○○○</td>
<td></td>
</tr>
<tr>
<td>ASD</td>
<td>Budget Administration</td>
<td>○○○</td>
<td></td>
</tr>
</tbody>
</table>
Agenda Item #9c

Director’s Report
Cash Flow Statements
## ARIZONA STATE RETIREMENT SYSTEM
### COMBINED STATEMENT OF CHANGES IN TOTAL FUND CASH
#### FOR THE MONTH ENDED JULY 31, 2020

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Fiscal 2021</th>
<th>Fiscal 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retirement Plan Fund</strong></td>
<td>YTD</td>
<td>YTD</td>
</tr>
<tr>
<td>Member contributions</td>
<td>$91,053,020</td>
<td>$78,025,446</td>
</tr>
<tr>
<td>Employment contributions</td>
<td>88,957,252</td>
<td>78,864,009</td>
</tr>
<tr>
<td>Alternative contributions</td>
<td>1,800,879</td>
<td>1,824,057</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>16,241</td>
<td>16,241</td>
</tr>
<tr>
<td>Purchased service</td>
<td>1,593,001</td>
<td>1,720,895</td>
</tr>
<tr>
<td><strong>Total Contributions</strong></td>
<td>$183,420,392</td>
<td>$160,314,325</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deductions</th>
<th>Fiscal 2021</th>
<th>Fiscal 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Investment management fees</td>
<td>-</td>
<td>1,506,207</td>
</tr>
<tr>
<td><strong>Investment performance fees</strong></td>
<td>-</td>
<td>365,905</td>
</tr>
<tr>
<td>***Investment other fees</td>
<td>24,181</td>
<td>-</td>
</tr>
<tr>
<td>Custody fees</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Consultant and legal fees</td>
<td>-</td>
<td>5,051</td>
</tr>
<tr>
<td>Internal investment activity expense</td>
<td>217,009</td>
<td>56,329</td>
</tr>
<tr>
<td>Retirement and disability benefits</td>
<td>272,398,501</td>
<td>283,085,325</td>
</tr>
<tr>
<td>Survivor benefits</td>
<td>2,993,536</td>
<td>2,622,210</td>
</tr>
<tr>
<td>Refunds to withdrawing members, including interest</td>
<td>22,529,798</td>
<td>32,120,299</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>2,658,872</td>
<td>4,669,688</td>
</tr>
<tr>
<td>Transfers to other plans</td>
<td>1,558</td>
<td>139,027</td>
</tr>
<tr>
<td><strong>Total Deductions</strong></td>
<td>$300,823,456</td>
<td>$324,204,136</td>
</tr>
</tbody>
</table>

**Increase (Decrease):**

<table>
<thead>
<tr>
<th>From securities lending activities:</th>
<th>Fiscal 2021</th>
<th>Fiscal 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security loan program</td>
<td>255,501</td>
<td>618,618</td>
</tr>
<tr>
<td>Security loan interest expense / (Rebate)</td>
<td>(161,615)</td>
<td>(3,566)</td>
</tr>
<tr>
<td><strong>Net income from securities lending activities</strong></td>
<td>417,117</td>
<td>622,184</td>
</tr>
</tbody>
</table>

**Capital Calls / (Distributions):**

<table>
<thead>
<tr>
<th>Distressed Debt Total</th>
<th>Fiscal 2021</th>
<th>Fiscal 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>14,766,015</td>
<td>15,544,554</td>
<td></td>
</tr>
<tr>
<td>75,265</td>
<td>23,000,000</td>
<td></td>
</tr>
<tr>
<td>645,159</td>
<td>12,414,990</td>
<td></td>
</tr>
<tr>
<td>58,115</td>
<td>10,544,554</td>
<td></td>
</tr>
<tr>
<td>15,544,554</td>
<td>12,414,990</td>
<td></td>
</tr>
<tr>
<td>(20,558,297)</td>
<td>(20,558,297)</td>
<td></td>
</tr>
<tr>
<td>Private Debt - European Credit Total</td>
<td>21,848,061</td>
<td>12,414,990</td>
</tr>
<tr>
<td>111,364</td>
<td>23,000,000</td>
<td></td>
</tr>
<tr>
<td>954,588</td>
<td>12,414,990</td>
<td></td>
</tr>
<tr>
<td>85,987</td>
<td>10,544,554</td>
<td></td>
</tr>
<tr>
<td>23,000,000</td>
<td>10,544,554</td>
<td></td>
</tr>
<tr>
<td>12,414,990</td>
<td>10,544,554</td>
<td></td>
</tr>
<tr>
<td>(109,521,586)</td>
<td>(109,521,586)</td>
<td></td>
</tr>
<tr>
<td>Private Debt - US Corporate Total</td>
<td>(33,624,738)</td>
<td>(35,397,604)</td>
</tr>
<tr>
<td>(171,392)</td>
<td>(35,397,604)</td>
<td></td>
</tr>
<tr>
<td>(1,469,137)</td>
<td>(35,397,604)</td>
<td></td>
</tr>
<tr>
<td>(132,337)</td>
<td>(35,397,604)</td>
<td></td>
</tr>
<tr>
<td>(35,397,604)</td>
<td>(35,397,604)</td>
<td></td>
</tr>
<tr>
<td>(21,125,257)</td>
<td>(21,125,257)</td>
<td></td>
</tr>
<tr>
<td>(7,987)</td>
<td>(21,125,257)</td>
<td></td>
</tr>
<tr>
<td>(21,125,257)</td>
<td>(21,125,257)</td>
<td></td>
</tr>
<tr>
<td>(72,959,667)</td>
<td>(72,959,667)</td>
<td></td>
</tr>
<tr>
<td>Private Debt - US RE and Asset Backed Total</td>
<td>53,379,540</td>
<td>28,496,368</td>
</tr>
<tr>
<td>272,086</td>
<td>56,193,978</td>
<td></td>
</tr>
<tr>
<td>2,332,266</td>
<td>56,193,978</td>
<td></td>
</tr>
<tr>
<td>210,086</td>
<td>56,193,978</td>
<td></td>
</tr>
<tr>
<td>56,193,978</td>
<td>56,193,978</td>
<td></td>
</tr>
<tr>
<td>28,496,368</td>
<td>28,496,368</td>
<td></td>
</tr>
<tr>
<td>Private Equity</td>
<td>36,697,070</td>
<td>71,495,370</td>
</tr>
<tr>
<td>187,052</td>
<td>38,631,924</td>
<td></td>
</tr>
<tr>
<td>1,603,373</td>
<td>38,631,924</td>
<td></td>
</tr>
<tr>
<td>144,429</td>
<td>38,631,924</td>
<td></td>
</tr>
<tr>
<td>38,631,924</td>
<td>38,631,924</td>
<td></td>
</tr>
<tr>
<td>71,495,370</td>
<td>71,495,370</td>
<td></td>
</tr>
<tr>
<td>Owned Real Estate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Credit Total</td>
<td>15,411,239</td>
<td>18,147,718</td>
</tr>
<tr>
<td>78,554</td>
<td>18,147,718</td>
<td></td>
</tr>
<tr>
<td>673,350</td>
<td>18,147,718</td>
<td></td>
</tr>
<tr>
<td>60,654</td>
<td>18,147,718</td>
<td></td>
</tr>
<tr>
<td>16,223,797</td>
<td>18,147,718</td>
<td></td>
</tr>
<tr>
<td>16,223,797</td>
<td>18,147,718</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL Capital Calls</strong></td>
<td>88,409,973</td>
<td>146,384,078</td>
</tr>
<tr>
<td>450,643</td>
<td>93,071,392</td>
<td></td>
</tr>
<tr>
<td>3,862,820</td>
<td>93,071,392</td>
<td></td>
</tr>
<tr>
<td>347,956</td>
<td>93,071,392</td>
<td></td>
</tr>
<tr>
<td>93,071,392</td>
<td>93,071,392</td>
<td></td>
</tr>
<tr>
<td><strong>NET INCREASE (DECREASE)</strong></td>
<td>$ (205,395,919)</td>
<td>$ (309,651,705)</td>
</tr>
</tbody>
</table>

* Investment management fees for public investment managers and other managers paid by invoice. Does not include management fees paid through capital calls.
** Investment performance fees paid by invoice. Does not include performance fees paid through capital calls.
*** Investment other fees paid to White Oak. Does not include performance fees paid through capital calls.
**** Securities lending activities reported on a one-month lag.
***** Capital calls / (Distributions) include investment management, incentive and other fees that were paid through capital call, rather than payment of an invoice, or through a reduction of a distribution.

Current period private market activity totals represent the best available preliminary information provided by our custodial bank. Changes in preliminary reported information for prior months are reflected in the year-to-date column.
ARIZONA STATE RETIREMENT SYSTEM  
COMBINED STATEMENT OF CHANGES IN TOTAL FUND CASH  
FOR THE MONTH ENDED AUGUST 31, 2020

<table>
<thead>
<tr>
<th></th>
<th>Fiscal 2021</th>
<th>Fiscal 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YTD</td>
<td>August</td>
</tr>
<tr>
<td>Retirement Plan Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member contributions</td>
<td>91,980,274</td>
<td>-</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>88,847,008</td>
<td>-</td>
</tr>
<tr>
<td>Alternative contributions (ACR)</td>
<td>2,058,637</td>
<td>55</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>101,978</td>
<td>-</td>
</tr>
<tr>
<td>*Purchased service</td>
<td>979,065</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>183,966,962</td>
<td>-</td>
</tr>
<tr>
<td>Retirement System Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Alternative contributions (ACR)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>183,966,962</td>
<td>-</td>
</tr>
<tr>
<td>Health Benefit Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member contributions</td>
<td>91,980,274</td>
<td>-</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>88,847,008</td>
<td>-</td>
</tr>
<tr>
<td>Alternative contributions (ACR)</td>
<td>2,058,637</td>
<td>55</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>101,978</td>
<td>-</td>
</tr>
<tr>
<td>*Purchased service</td>
<td>979,065</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>183,966,962</td>
<td>-</td>
</tr>
<tr>
<td>Long Term Disability Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Alternative contributions (ACR)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current Period Benefit Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Alternative contributions (ACR)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transfers from other plans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>YTD Net Increase (Decrease)</td>
<td>(16,656,062)</td>
<td>(2,324,975)</td>
</tr>
<tr>
<td>*Member contributions</td>
<td>91,980,274</td>
<td>-</td>
</tr>
<tr>
<td>**Member contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>**Total Contributions</td>
<td>183,966,962</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**

* Investment management fees for public investment managers and other managers paid by invoice. Does not include management fees paid through capital calls.

** Investment performance fees paid by invoice. Does not include performance fees paid through capital calls.

*** Investment other fees paid to White Oak. Does not include performance fees paid through capital calls.

**** Securities lending activities reported on a one month lag.

****** Capital calls / (Distributions) include investment management, incentive and other fees that were paid through capital call, rather than payment of an invoice, or through a reduction of a distribution.

Current period private market activity totals represent the best available preliminary information provided by our custodial bank. Changes in preliminary reported information for prior months are reflected in the year-to-date column.
Agenda Item #9d

Director’s Report
Appeals Report
### OUTSTANDING ASRS APPEALS

<table>
<thead>
<tr>
<th>Date Received</th>
<th>Appeals</th>
<th>Issues/Questions Regarding</th>
<th>Status/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/13/2018</td>
<td>Elizabeth Mullavey</td>
<td>Member is appealing recalculation of pension benefit due to Mesa Public Schools audit.</td>
<td>Appellant filed this appeal on July 9, 2018. The member has agreed that a hearing will not be scheduled at this time due to a current Notice of Claim by other affected retirees in the Mesa Public Schools audit matter and possible resulting litigation in the superior court. Notice of Claim was litigated in Superior Court and the Judge granted ASRS’ Motion to Dismiss. Plaintiffs appealed to Court of Appeals on 12/5/2019 but withdrew their appeal on or about 7/23/2020. Appellant notified had 30 days to renew appeal on 7/31/2020 and to date, no renewal request has been received.</td>
</tr>
<tr>
<td>5/6/2020</td>
<td>Chad Gosnell</td>
<td>Member is appealing amount of return of contributions.</td>
<td>OAH Hearing occurred on 08/4/2020. ALJ ruled in favor of the ASRS on 8/27/2020. Scheduled for the 10/13/2020 Board Appeals Committee meeting.</td>
</tr>
<tr>
<td>6/1/2020</td>
<td>Gregory Wingo</td>
<td>Member is appealing eligibility for Long Term Disability after forfeiting ASRS account and terminating membership</td>
<td>OAH Hearing occurred on 7/21/2020. ALJ ruled in favor of the ASRS on 8/24/2020. Scheduled for the 10/13/2020 Board Appeals Committee meeting.</td>
</tr>
</tbody>
</table>

Information as of September 9, 2020. Updates are noted in bold font.
Agenda Item #9e

Director’s Report
Employers Reporting
MEMORANDUM

TO: Arizona State Retirement System (ASRS) Board
FROM: Mr. Paul Matson, Director
DATE: September 11, 2020
RE: Delinquent Employers

As of September 11, 2020, the following employers have failed to remit contributions by a date certain. These employers have received a letter advising them that the ASRS will initiate collection procedures unless they contact us within five days:

<table>
<thead>
<tr>
<th>Employer</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSD CHARTER SCHL (COMPUTERIZED PLUS HS)</td>
<td>1,000*</td>
</tr>
<tr>
<td>PRESCOTT VALLEY CHARTER SCHOOL</td>
<td>2,900*</td>
</tr>
<tr>
<td>CITY OF SOMERTON</td>
<td>28,400*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$32,300*</td>
</tr>
<tr>
<td>STARSHINE ACADEMY</td>
<td>67,500*++</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$99,800</strong>*</td>
</tr>
</tbody>
</table>

*Estimated amount
+These schools are run by Edkey Inc.
++ School has filed for Chapter 11 Bankruptcy Protection and are delinquent in their ASRS Contributions
Agenda Item #10
Committee Meeting Updates
Operations, Audit and Legislative Committee
AGENDA

NOTICE OF COMBINED PUBLIC MEETING AND POSSIBLE EXECUTIVE SESSION
OF THE ARIZONA STATE RETIREMENT SYSTEM
OPERATIONS, AUDIT, AND LEGISLATIVE COMMITTEE

August 20, 2020
9:00 a.m.

Pursuant to A.R.S. § 38-431.02(F), notice is hereby given to the Trustees of the Arizona State Retirement System (ASRS) Operations, Audit, and Legislative Committee (OALC) and to the general public that the ASRS OALC will hold a telephonic meeting open to the public on Thursday, August 20, 2020, beginning at 9:00 a.m. In light of the Arizona Department of Health Services’ recommendation to cancel or postpone mass gatherings of 10 or more people, and to help prevent community spread of COVID-19, the meeting will be audience free. Trustees of the Board and the public may attend by telephone conference call at 877-820-7831, using Participant Passcode: 857127#.

This is a meeting of the OALC; however, due to possible attendance by other ASRS Board Trustees, this meeting may technically become a meeting of the Board or one of its committees. Actions taken will be consistent with OALC governance procedures. Actions requiring Board authority will be presented to the full Board for final decision.

The Chair may take public comment during any agenda item.

The agenda for the meeting is as follows:

1. Call to Order; Roll Call; Opening Remarks ................................................ Mr. Clark Partridge
   OALC Chair

2. Presentation, Discussion, and Appropriate Action Regarding 2020 Rulemaking Initiative Related to Compensation (estimated time: 10 minutes) .............................Mr. Paul Matson
   Director
   ............................................................................................................... Mr. Anthony Guarino
   Deputy Director and Chief Operations Officer
   ............................................................................................................... Ms. Jessica Thomas
   Government Relations Officer and Rules Writer

   Proposed Action Item: The Committee may consider staff’s recommendation; provide an alternate motion, or make no motion.
3. Presentation, Discussion, and Appropriate Action Regarding 2020 Rulemaking Initiative Related to Long-Term Disability (LTD) (estimated time: 10 minutes) .......... Mr. Paul Matson
........................................................................................................................................ Mr. Anthony Guarino
........................................................................................................................................ Ms. Jessica Thomas

Proposed Action Item: The Committee may consider staff’s recommendation; provide an alternate motion, or make no motion.

4. Presentation, Discussion, and Appropriate Action Regarding the 2020 Regulatory Agenda to Include an Update on Rulemaking Initiatives (estimated time: 15 minutes) ... Mr. Paul Matson
........................................................................................................................................ Mr. Anthony Guarino
........................................................................................................................................ Ms. Jessica Thomas

5. Call to the Public .......................................................... Mr. Clark Partridge

Those wishing to address the ASRS OALC will be requested to do so telephonically. Trustees of the OALC are prohibited by A.R.S. § 38-431.01(H) from discussing or taking legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action. As a result of public comment, the OALC may direct staff to study and/or reschedule the matter for discussion and decision at a later date.

6. Requests for Future Agenda Items.......................... Mr. Clark Partridge
........................................................................................................................................ Mr. Anthony Guarino

7. The next regular public OALC meeting is scheduled for Wednesday, October 14, 2020, at 2:30 p.m.

8. Adjournment of the OALC

A copy of the agenda background material provided to the OALC Trustees (with the exception of material relating to possible executive sessions) is available for public inspection at the ASRS offices located at 3300 North Central Avenue, 14th Floor, Phoenix, Arizona and 4400 East Broadway Boulevard, Suite 200, Tucson, Arizona. The agenda is subject to revision up to 24 hours prior to meeting. These materials are also available on the ASRS website (https://www.azasrs.gov/content/board-and-committee-meetings) approximately 48 hours prior to the meeting.
Persons with disabilities may request alternate formats of this document by contacting Tracy Darmer, ADA Coordinator at (602) 240-5378 in Phoenix, at (520) 239-3100, ext. 5378 in Tucson, or 1-800-621-3778, ext. 5378 outside metro Phoenix or Tucson. Requests should be made as early as possible to allow time to arrange the accommodations.

Dated August 14, 2020

ARIZONA STATE RETIREMENT SYSTEM

Signature on File
Melanie Alexander
Committee Administrator

Signature on File
Anthony Guarino
Deputy Director and Chief Operations Officer
MINUTES OF A PUBLIC MEETING OF THE ARIZONA STATE RETIREMENT SYSTEM OPERATIONS, AUDIT & LEGISLATIVE COMMITTEE

Thursday, August 20, 2020
2:30 p.m., Arizona Time

A quorum of the Operations, Audit & Legislative Committee (OALC) of the Arizona State Retirement System (ASRS) met telephonically in public session.

Mr. Clark Partridge, Chair of the OALC, called the meeting to order at 9:00 a.m.

1. Call to Order; Roll Call; Opening Remarks

Present:  Mr. Clark Partridge, Chair  
          Mr. Tom Manos, Vice-chair  
          Mr. Rene Guillen (joined the meeting at 9:02 a.m.)

A quorum of the Committee was present for the purpose of conducting business.

Mr. Clark Partridge, Chair, welcomed the attendees and thanked staff for their hard work and preparation for the meeting.

Ms. Melanie Alexander, ASRS Committee Administrator, provided all attendees with telephonic meeting guidelines.

2. Presentation, Discussion, and Appropriate Action Regarding 2020 Rulemaking Initiative Related to Compensation

Mr. Paul Matson, Director, turned the presentation directly over to Ms. Jessica Thomas, Government Relations Officer and Rules Writer. Ms. Thomas summarized the 2020 Regulatory Agenda identified rules that needed to be clarified due to the 2019 legislation that changed the definition of compensation. Those rules are being presented today. The rule changes clarify how employers remit contributions, how service is accrued, and in particular, to clarify what happens with an additional employer’s compensation for members both prior to 2009 and post 2009. Ms. Thomas asked that the Committee consider approving the draft compensation rulemaking language be filed with the Secretary of State.

Ms. Thomas clarified for the Committee; the reason for the change in the compensation definition was to make it easier to understand for both the members and employers. She further indicated the former definition was complex; it was difficult for members and employers to understand what types of compensations should be included when remitting contributions.
Motion: Mr. Tom Manos moved approval of the rulemaking language as presented by staff regarding the issue of compensation and forwarding it on to the full Board. Mr. Rene Guillen seconded the motion.

By a roll call vote of 3 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved. The Trustee votes were as follows:

Mr. Clark Partridge – approved
Mr. Tom Manos – approved
Mr. Rene Guillen – approved

Please see amended motion after Agenda Item #4 below.

3. Presentation, Discussion, and Appropriate Action Regarding 2020 Rulemaking Initiative Related to Long-Term Disability (LTD)

Ms. Thomas stated this rulemaking is similar to the compensation rulemaking in that the 2020 Regulatory Agenda identified Article 3, related to LTD benefits that needed to be updated to indicate that someone could not receive any LTD benefits if they were already receiving 100% of their pre-disability compensation. The 2019 legislation clarified this; however, there were conflicting portions of that statute that indicated that someone could not receive more than 100% of their pre-disability compensation but then there was another provision that also said that the minimum benefit would be at least $50. This rulemaking is to clarify that they will only get the minimum if they are not already at the maximum of 100% of their pre-disability compensation. Ms. Thomas asked that the Committee consider approving the draft LTD rulemaking language be filed with the Secretary of State.

Ms. Thomas opened it up to questions from the Committee; there were none.

Motion: Mr. Tom Manos moved approval of the rulemaking recommendation regarding the LTD program. Mr. Rene Guillen seconded the motion.

By a roll call vote of 3 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved. The Trustee votes were as follows:

Mr. Clark Partridge – approved
Mr. Tom Manos – approved
Mr. Rene Guillen – approved

4. Presentation, Discussion, and Appropriate Action Regarding the 2020 Regulatory Agenda to Include an Update on Rulemaking Initiatives

Ms. Thomas provided the Committee an update on the remaining three items listed on the 2020 Regulatory Agenda. The remaining items were as follows:

• Non-participating Employer Invoices – ASRS was seeking legislative changes earlier this year that affected this rule. This will be postponed until next year when legislative changes will be pursued again in 2021.
• Alternate Contribution Rate Credit – This is related to a piece of legislation approved last year. Staff thought it might be necessary to create rules related to when an employer takes those credits; however, it has been decided not to pursue this at this time because the ASRS does not monitor those credits; it is incumbent on the employer.

• Liability Invoices – This has been postponed pending current issues with employers. Staff believes it is prudent to postpone this rulemaking until the ASRS has resolved pending issues before determining how the ASRS should establish rules and requirements for this invoicing process.

• Five-Year Review Report – This report was completed and received approval from the Governor's Regulatory Review Council. Currently, the ASRS is seeking approval from the Governor's Office to proceed with expedited rulemaking to make the changes identified in the report.

2. Presentation, Discussion, and Appropriate Action Regarding 2020 Rulemaking Initiative Related to Compensation

Prior to moving on to Agenda Item No. 5, Ms. Cassie Adams, Assistant Attorney General, suggested the motion for Agenda Item No. 2, be clarified for the record as it does not need to be forwarded to the full Board for approval, it needs to go to the Secretary of State. Mr. Clark Partridge called for an amended motion.

Motion: Mr. Tom Manos amended his motion for Agenda Item # 2 to reflect that the rulemaking will not be going to the full Board, but rather will be going to the Secretary of State. Mr. Rene Guillen seconded the amended motion.

By a roll call vote of 3 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved. The Trustee votes were as follows:

Mr. Clark Partridge – approved
Mr. Tom Manos – approved
Mr. Rene Guillen – approved

5. Call to the Public

No members of the public requested to speak.

6. Requests for Future Agenda Items

None were requested.

7. The next regular public OALC meeting is scheduled for Wednesday, October 14, 2020, at 2:30 p.m.

Mr. Clark Partridge noted the next OALC meeting is scheduled for Wednesday, October 14, 2020 at 2:30 p.m.
8. Adjournment of the OALC

Mr. Clark Partridge adjourned the meeting at 9:16 a.m.

Respectfully Submitted,

Melanie A. Alexander
Committee Administrator
ARIZONA STATE RETIREMENT SYSTEM
Investment Committee

No Recent Meeting
Appeals Committee

No Recent Meeting
Agenda
Items #11-13

No Materials
Agenda Item #14
Director’s Review
Memo
MEMORANDUM

TO: Arizona State Retirement System (ASRS) Board

FROM: Martha N. Rozen, Chief of Administrative Services

DATE: September 22, 2020

RE: Agenda Item #14: Presentation, Discussion, and Appropriate Action Regarding the 2019 Review and Employment Agreement of the Director of the ASRS

As part of the Board’s evaluation of the Director, the attached Executive Performance Feedback Form has been developed in order to facilitate the reverse evaluation of the Director. The results are attached.

The survey was conducted in a voluntary and anonymous fashion among six Senior and Executive staff members. The list of participants this year is as follows:

- Deputy Director – Chief Operations Officer
- Chief Investment Officer
- Chief of Administrative Services
- Chief Internal Auditor
- Manager of Human Resources
- Manager of Management Support Services

Please note feedback was received from four individuals.

We are considering a different approach in the future to encourage greater participation.
Director Evaluation Process (Board Governance Policy Handbook)
N. DIRECTOR EVALUATION PROCESS

General
The Board has delegated the responsibility of administering the ASRS to the Director and, therefore, understands that an annual evaluation of the performance of the Director’s performance is important. The Board may conduct more frequent performance evaluations of the Director as it deems necessary.

Objectives
The evaluation of the performance of the Director is intended to:
1. Assist the Board in establishing and communicating clear, meaningful goals and performance targets for the Director.
2. Enable the Board to hold the Director accountable for performance.
3. Allow the Director to receive objective and timely feedback to help the Director perform at expected levels.

Evaluation Procedure and Criteria
1. The evaluation of the performance of the Director will take place by the second quarter of each calendar year after the Board’s self-evaluation is completed and will cover the preceding calendar year.
2. The subject matter addressed in the performance evaluation will include:
   a. Leadership
   b. Management/Administration/Budgeting
   c. Communication
   d. Policy matters
   e. Staff development
   f. Progress toward achieving performance business objectives previously established by the Board for the year
3. By the second quarter of each calendar year, the Board, working with the Director, may adopt additional performance goals and evaluation criteria to be used in evaluating the performance of the Director for the upcoming calendar year.
4. Other matters identified by the Board
5. The Director will prepare a written summary report of accomplishments and performance for the Board to use in their discussions of his/her performance.

The ASRS Human Resource Department will conduct a reverse evaluation of the Director, the results of which will be presented to the Board. Participation in the reverse evaluation is voluntary and anonymous and will include the following staff:
   a. Deputy Director - Operations
   b. Chief Investment Officer
   c. Chief of Administrative Services
   d. Manager of Human Resources
   e. Manager of Management Support Services
   f. Chief Internal Auditor
6. The Board will reach consensus and provide verbal or written feedback to the Director on his/her performance, and identify areas for improvement, if necessary.
7. The Board or Board Chair will meet with the Director to present and discuss the Board’s evaluation of the Director’s performance.
Appendix C
Director Evaluation
(Board Governance Policy Handbook)
Appendix C – Director Evaluation

ASRS - Director Performance Evaluation

Name: Paul Matson
Title: Director

This form is to help you evaluate the performance of the Director of the ASRS. In each of the following rating categories, bullet points have been provided to assist you with your evaluation. Please rate the Director using the following scale and place the number on the "Rating" line in each category.

5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Leadership: Rating ________
- Establishes and maintains effective and credible relationships affecting the ASRS.
- Projects a positive image as the Director of the ASRS.
- Recognizes the needs and desires of others; treats others with regard, courtesy and respect.
- Maintains a "big picture" outlook and is aware of industry issues.
- Forecasts trends, responds to change and invites innovation.
- Solicits and acts upon ideas of others when needed.
- Stresses the importance of high quality customer service.
- Maintains a well-functioning management team.
- Participates in relevant and worthwhile professional organizations.

General Comments or Examples: (You need not address each point separately.)

Management/Administration/Budgeting: Rating ________
- Manages all ASRS business functions and activities in accordance with all relevant laws, Board policies and goals
- Develops reasonable budgets, communicates them to the Board, and operates within budgetary limits
- Ensures the efficient and effective functioning of the ASRS through delegation
- Follows up on Board directives to ensure proper implementation

General Comments or Examples: (You need not address each point separately.)
5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Communication: Rating __________
- Keeps the Board and staff informed and communicates effectively with them
- Organizes ideas and information logically
- Speaks clearly and concisely, using understandable terminology
- Effectively and politely communicates with the members
- Professionally communicates with entities affecting the ASRS

General Comments or Examples: (You need not address each point separately.)

5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Policy Matters: Rating __________
- Periodically reviews policies and makes recommendations for changes to the Board
- Accurately interprets Board policies and concerns, and develops a consistent direction for the staff to follow
- Initiates changes in day-to-day operations to conform to established Board policies
- Acts creatively to evaluate and recommend new initiatives or policies

General Comments or Examples: (You need not address each point separately.)

5 - Outstanding, 4 - Above Average, 3 - Satisfactory, 2 - Needs Improvement, 1 - Unacceptable

Staff Development: Rating __________
- Creates an atmosphere that fosters teamwork, creativity and participation
- Communicates clear standards of performance for the executive staff
- Keeps informed and follows state personnel policies and procedures
- Encourages professional development of staff
- Addresses succession planning for key positions within the ASRS

General Comments or Examples: (You need not address each point separately.)
Progress Toward Achieving Business Objectives: Rating __________
[Previously and mutually identified goals and objectives listed here.]
1. ____________________________________________________________
2. ____________________________________________________________
3. ____________________________________________________________
4. ____________________________________________________________
5. ____________________________________________________________

General Comments or Examples: (You need not address each point separately.)
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Significant Overall Accomplishments:
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Areas Needing Improvement:
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Overall Rating: __________
Executive Summary
Confidential Materials

Note: Materials have been provided to the Board and not included in this book