

MINUTES

PUBLIC MEETING OF THE ARIZONA STATE RETIREMENT SYSTEM INVESTMENT COMMITTEE

November 8, 2021
9:00 a.m.

The Arizona State Retirement System (ASRS) Investment Committee (IC) met telephonically.

Mr. Michael Lofton, Chair of the Investment Committee, called the meeting to order at 9:03 a.m.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. Michael Lofton, Chair – via teleconference
Ms. Diane Landis

Excused: Mr. Kevin McCarthy, Vice-chair

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

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

2. Approval of the Minutes of the June 23, 2021, Public Meeting of the ASRS Investment Committee

Motion: Ms. Diane Landis moved to approve the minutes of the June 23, 2021, public Investment Committee meeting. Mr. Michael Lofton seconded the motion.

By a roll call vote of 2 in favor, 0 opposed, 0 abstentions, 1 excused, and 0 vacancies, the motion was approved. The trustee votes were as follows:

Mr. Michael Lofton – approved
Mr. Kevin McCarthy – excused
Ms. Diane Landis – approved

3. Presentation, Discussion, and Appropriate Action Regarding Economic Environment Performance, House Views, and General Discussion

Mr. Michael Viteri, Chief Investment Officer (CIO), opened the presentation with a brief apology for the delayed distribution of meeting materials. Explaining the data calculation issues were

due in part to a recent change in the ASRS' custody bank, as well as the timing of the meeting as it relates to the quarter-end, which will be resolved with the proposed 2022 scheduling that will be addressed later on the agenda. Mr. Viteri turned the presentation over to Mr. Allan Martin, Partner, NEPC.

Mr. Martin highlighted some economic environment statistics noting the US Gross Domestic Product (GDP) was down from 6.7% at a +2.0% increase. Noting the decrease in GDP is due to such things as auto chips not being available; therefore, new cars are not available for sale; trucks are not available to transport merchandise; the workforce is slow to return to work after COVID; and a rise in fuel prices. Unemployment rates continue to be low at 4.8%. Mr. Martin provided a brief overview on inflation, stating that in the long-term, inflation does not appear to pose a problem as demographics, technology and productivity will hold inflation down. Mr. Martin clarified long-term to mean ten years. The US and global growth are decelerating; however, China has shown growth recently in exports. Mr. Martin reviewed the following charts with the Committee and provided commentary: Bond Yields, Global Equity Valuations, Fixed Income Characteristics, and Return-Seeking Credit Characteristics.

Mr. Samer Ghaddar, Deputy Chief Investment Officer, provided house views to the Trustees on public equities, opening with the S&P 1500 correction, which was down almost 5% in September while noting the ASRS still believes the equities will outperform and remains constructive on global public equities, in particular, ex-US, which will outperform. Mr. Ghaddar reviewed the total public equity positioning and the relevant charts before moving on to provide the house views on private equities. As of September 30, 2021, the private equity represents around 12% of the total fund, which is slightly overweight; buyout funds continue to have elevated levels of uncalled capital, and the ASRS remains flexible in its commitments. Mr. Ghaddar reviewed the respective charts related to private equities and provided commentary while responding to questions from the Committee.

Mr. Al Alaimo, Deputy Chief Investment Officer, announced that he would go over credit in more detail when he reviews the credit asset class implementation plans later in the meeting under another agenda topic, so this review will be brief. Mr. Alaimo briefly summarized as of September 30, 2021; the ASRS currently has \$10.2 billion invested in the Credit asset class, which is a 20.3% allocation versus the Strategic Asset Allocation (SAA) target of 20%. Partnership commitments are similar to private equities with General Partner (GP) and Limited Partner (LP) investments, with the capital generally drawn down over a 3-year investment period. The vast majority of the credit allocation is in private debt, with smaller allocations in distressed debt and other credit. Mr. Alaimo spoke about the structure within the Private Debt whereby larger commitments can be made with leading partners by negotiating early termination rights, which has been a key differentiator in this asset class. This has led to more attractive returns; 9%-10% has been achieved since inception. Next, Mr. Alaimo moved on to Distressed Debt, which is approximately 15% of the allocation in the Credit asset class. Mr. Alaimo summarized the type of debt, the purchase process, and the ASRS staff's focus on this type of debt. He provided brief commentary on Other Credit and finished his presentation with house views of the Interest Rate Sensitive asset class. Mr. Alaimo summarized the rationale of this asset class as follows, "we maintain an investment in this asset class to use as a source of liquidity to meet the total fund's needs and to serve as a counter-balance to potential sell-offs in risky assets such as equities."

Mr. Micheal Copeland, Private Markets Portfolio Manager, provided an outlook of the current economic climate and anticipated impacts on the real estate asset class. Mr. Copeland reported

that this asset class is currently at \$8.5 billion, approximately 16.5% of the total fund relative to the 20% target. With current strategies in place, it is expected to reach the 20% target by the end of 2022. Regarding multifamily, in the hardest-hit areas during the pandemic, they are beginning to strengthen and see positive rent growth, vacancy rates decreasing. It is unclear how office utilization will continue going forward or if it will move in the direction of becoming obsolete with more businesses moving to work from home as an option. Retail is marginal at best, and not one the ASRS is largely invested. Industrial is a strong property type as there is a great demand. Although there were not many opportunities for hotel acquisitions during the pandemic, this is still an area of opportunity that is trending upward. Mr. Copeland concluded with a review of the National Cap Rates, Dry Powder, and the ASRS real estate structure compared to its peers.

4. Presentation, Discussion, and Appropriate Action Regarding Independent Reporting, Monitoring, and Oversight

Mr. Martin presented the NEPC oversight, which covers the period ending September 30, 2021. He noted that they review the data from the custodian bank, BNY Mellon, and compare it with the ASRS team calculations to confirm their accuracy and consistency. Although the transition from State Street to BNY Mellon was recent, and there are still some needed adjustments, Mr. Martin stated he did not believe the data was off by more than 1.5 bps. Once reconciliation is complete, the report will be reissued. Mr. Martin reviewed compliance with the ASRS board goals, noting full or partial compliance in all cases. He continued with reviewing the expected 20-year return, total fund performance net of fees, ASRS performance compared to other pension plans in its peer group, and asset class performance versus the benchmark. In conclusion, Mr. Martin reviewed SAA policy compliance, noting all are nearly at allocation targets currently.

At the request of Trustee Diane Landis, Mr. Matson provided a summary of the Combined Asset Class Committee Meeting structure and purpose as it related to the meeting summaries included in the NEPC presentation.

5. Presentation, Discussion, and Appropriate Action Regarding Risk Management

Mr. Robert Butler, Investment Risk and Compliance Officer, opened by noting all of the information in his report is from August 31, 2021, as there was a delay in the reporting to MSCI, but in the future, there will be some improvements. Mr. Butler reviewed the correlation matrix by asset class, noting the diversification in asset classes, with Fixed Income being the largest source. Mr. Butler provided the Committee with the following explanations:

- 'Total Risk' – annualized standard deviation of the asset's total return distribution – smoother return is less risky than a more volatile return stream
- 'Asset Class Risk Contribution' – the product of Asset Class weight, Asset Class standalone Total Risk and Correlation with the Total Plan – more volatile larger asset class would have a bigger impact on the portfolio risk than a smaller asset with a smaller return
- Current market value allocation to Equity, Public and Private Equities, account for 54% of market value, with a predicted risk contribution estimated at 75% of the overall portfolio risk

- In a 60/40 modeled portfolios (60% Global Stocks/4-% Domestic Fixed Income), the predicted risk is estimated to be 99% from Global Stocks
- Historical Risk Contribution from April 2016 shows predicted risk contribution decreased over time to 75% due to increases in allocations to diversifying asset classes
- Stress test scenarios – illustrates how the portfolio, as of August 31, 2021, would have performed in past market events

6. Presentation, Discussion, and Appropriate Action Regarding Compliance

Ms. Lupita Breland, Investment Operations Manager, presented the compliance report.

- The Internally Managed Portfolios Pre-Trade Compliance System Review Summary included pre-trade compliance performed on all internally managed fixed income and equity portfolios for September 2021 – October 2021. No exceptions occurred during the period under review.
- The Private Markets Investment Compliance Program includes reviews by two investment consultants for the ASRS.
 - RCLCO, Real Estate Separate Account Investment Compliance Review – RCLCO has completed 14 compliance reviews for the 2020 review period.
 - RCLCO's review found immaterial inconsistencies related to the management fee and NAV calculations and equity positions, none of which had an impact to the percentage allocation of NAV between the ASRS and the Funds. All findings have been satisfactorily resolved.
 - Meketa Investment Group, Commingled Funds, and Non-Real Estate Separate Accounts Investment Compliance Review – Meketa is currently working on the compliance reviews for the 2020 review period.

7. Presentation, Discussion, and Appropriate action Regarding Credit Asset Class Implementation Plans

Mr. Alaimo opened the discussion by stating the SAA adopted in 2018 created four asset classes; equities, real estate, credit, and interest rate sensitive income. The SAA requires staff to approve an asset class implementation plan yearly and, in turn, are required to report the decisions to the Investment Committee for feedback, which is the purpose of this agenda item. Mr. Alaimo reviewed the decisions made regarding the credit asset class with the Investment Committee, which will keep the ASRS on pace with the expected growth. He further stated that the ASRS is on target with a 9-10% net return for the asset class. Mr. Alaimo reviewed the related slides in detail with the Committee, explaining the areas of opportunity; private debt, distressed debt, and other credit, and the current commitments. Private debt is approximately 70% of the allocation and the best and most consistent performer. The goal is to create a portfolio that can generate 9-10% net IRR over an extended period of time with limited volatility and the ASRS has demonstrated relatively stable performance compared to other risky asset classes. Mr. Alaimo reviewed the implementation approach highlighting the use of negotiation of lower fees and improving expected returns, and a primary focus on fund-of-one partnerships with customized terms that offer advantages such as early termination rights, scalable commitment, customized investment restrictions, to name a few. He summarized the credit asset class benchmark before reviewing the historical performance through March 31, 2021. In the future, it is expected to outperform by 1.5% over the asset class benchmark. It is recommended to continue to maintain an overweight in the asset class. Mr. Alaimo reviewed the

proposed increase in commitments with the Committee and the potential of returning to the 20% SAA target if there should ever be the need or desire. He confirmed the ASRS would be within the liquidity and leverage constraints of the SAAP moving forward with the implementation plans.

8. Presentations, Discussion, and Appropriate Actions Regarding Review of Private Market Investment Reporting and Benchmarks

Mr. Viteri introduced the topic indicating this was in response to a request made at the September 24, 2021, Board meeting for clarification regarding private markets benchmarking and the lag in reporting. Mr. Viteri indicated that although this information would be presented at the upcoming Board meeting, it was brought to the Investment Committee first and turned the presentation over to Mr. Ghaddar.

Mr. Ghaddar opened by stating the private equities benchmark is the same as the public equities benchmark, but the lag for reporting private equities is a quarter as it takes time. This is mainly due to the GPs with multiple portfolio holding companies taking more time for the smaller companies to report their financials to them, and by the time the GPs report to the LPs, there's a quarter lag.

Mr. Ghaddar provided insight into the nature of private market returns volatility and why it doesn't allow for more current numbers. For private assets, a marked-to-market benchmark does not typically represent the public market value of these private assets. Marked to market means reporting as if they are public securities with a listed price. Mr. Ghaddar discussed the three valuations methods used in private equity valuations: discounted cash flow valuation (DCF), private equity transactions' comparables, and public market equivalent multiples. With the exception of public market equivalent multiples, these valuations methods are less volatile compared to public markets marked-to-market.

Mr. Matson noted that Mr. Ghaddar's comments were primarily focused on private equities. There is also a difference in reporting periods between public and private markets. Mr. Matson clarified there are three private market asset classes: credit, real estate, and equities, with each having specific benchmark and / or reporting lag issues. The various reporting methods each have certain strengths and weaknesses. Mr. Matson talked about the different ways to look at benchmarks.

Mr. Viteri provided examples of benchmarks and plans to continue to consider potential areas of performance improvement in the future.

9. Presentation, Discussion, and Appropriate Action Regarding the 2022 Investment Committee Meeting Calendar

Motion: Ms. Diane Landis moved to approve the adoption of the meeting schedule for the 2022 calendar year as presented. Mr. Michael Lofton seconded the motion.

By a roll call vote of 2 in favor, 0 opposed, 0 abstentions, 1 excused, and 0 vacancies, the motion was approved. The trustee votes were as follows:

Mr. Michael Lofton – approved

Mr. Kevin McCarthy – excused
Ms. Diane Landis – approved

10. Request for Future Agenda Items

No requests for future agenda items were made.

11. Call to the Public

No members of the public requested to speak.

12. The next ASRS Investment Committee Meeting is tentatively scheduled for February 28, 2022, at 1:30 p.m.

Mr. Lofton noted the next Investment Committee meeting is scheduled for February 28, 2022, at 1:30 p.m.

13. Adjournment of the ASRS Investment Committee Meeting.

Mr. Michael Lofton adjourned the meeting at 12:01 p.m.

Respectfully submitted by:

Melanie Alexander
Investment Committee Administrator
ARIZONA STATE RETIREMENT SYSTEM