

**MINUTES OF A PUBLIC MEETING
OF THE ARIZONA STATE RETIREMENT SYSTEM
INVESTMENT COMMITTEE**

**Monday, May 23, 2022
1:30 p.m. Arizona Time**

A quorum of the Investment Committee (IC) of the Arizona State Retirement System (ASRS) met in public session in person, in the First Floor Board Room of the ASRS Office, 3300 N. Central Avenue, Phoenix, Arizona 85012.

Mr. Mike Lofton, Chair of the Investment Committee, called the meeting to order at 1:31 p.m.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. Mike Lofton, Chair
Mr. Kevin McCarthy, Vice Chair – virtual
Ms. Diane Landis
Mr. Jim Mueller – virtual

A quorum of the IC was present to conduct business.

Ms. Bridget French, ASRS IC Administrator, provided all attendees with virtual meeting guidelines.

2. Approval of the Minutes of February 28, 2022, Public Meeting of the ASRS Investment Committee

Motion: Ms. Diane Landis moved to approve the minutes of the February 28, 2022, Investment Committee meeting. Mr. Jim Mueller seconded the motion.

By a roll call vote of 4 in favor, 0 opposed, 0 abstentions, 0 excused, and 0 vacancies, the motion was approved. The trustee votes were as follows:

Mr. Michael Lofton - approved
Mr. Kevin McCarthy – approved
Ms. Diane Landis – approved
Mr. Jim Mueller – approved

3. Presentation, Discussion, and Appropriate Action Regarding Market Environment and Outlook, ASRS Investment Management Division House Views

Mr. Michael Viteri, ASRS Chief Investment Officer, introduced Mr. Chris Levell, NEPC.

Mr. Levell presented information on the first quarter economic environment, including inflation, selloffs in equities, commodities, unemployment, and higher interest rates. At the end of last year, the market was robust, but it is difficult in 2022 across the capital markets to find anything positive. It is a challenging economic environment, but the ASRS asset allocation is resilient. Mr. Levell discussed key market themes, including economic crossroads that have changed from neutral to prevalent.

Ms. Diane Landis, Trustee, asked how much of the unemployment rates are people not looking for work. Mr. Levell responded there are fewer people in the workforce than three years ago, and ideally, rising wages will increase the workforce.

Mr. Levell discussed historical inflation rates throughout the world and their differences.

Mr. Viteri and Mr. Levell discussed the co-movement of asset classes and cross-quarter opportunities attributed to the pandemic and the future expectation. Mr. Levell explained that more internal infrastructure is needed to better the economy. All countries are looking at their supply chain issues and reevaluating their local industry. Globalization should slow down as a result of the pandemic.

Mr. Samer Ghaddar, Deputy CIO, presented information and materials relating to public equity, performance, and valuations. Both the S&P and World Index are down over -12%. The 10-year Treasury yield movement has been very volatile, and equities are sensitive to this. The US 10-year treasury yields are at the highest in 12 months, and the US markets across segments of the market witnessed negative performance year-to-date. As of March 31, 2022, we had \$21.16 billion invested in the Public Equity asset class, representing a 41.3% allocation within the Total Fund. The ASRS is at equal weight as of March 31, 2022, to its benchmark index: MSCI ACWI IMI.

Ms. Landis asked for clarification on the 10-year treasury yields regarding rate increases, the market drop, and the long-term shift out of equities. Mr. Ghaddar responded that this increase should not increase movement out of equities into other asset classes as this is a short-term event and just affecting valuations.

Mr. Ghaddar continued his presentation with international developed markets and emerging markets valuations.

Mr. Ghaddar presented information and materials relating to private equity market conditions, performance, and valuations. Total private equity uncalled capital is at an all-time high, and the first quarter witnessed a drop in the number of deals compared to Q4 2022 and should continue throughout the year. As of April 30, 2022, the ASRS had \$6.06 billion invested in the Private Equity asset class representing a 12.2% allocation. The ASRS Private Equity team is very selective in making commitments at this time.

Mr. Viteri began his presentation on behalf of Mr. Al Alaimo, Deputy CIO, regarding the credit asset class information and materials. As of April 29, 2022, the ASRS had \$11.2 billion invested in the credit asset class representing a 22.7% allocation versus a Strategic Asset Allocation (SAA) target of 20.0%. The goal of the credit portfolio is to maintain a well-diversified portfolio and general low double-digit returns over a multi-year period. The ASRS is overweight to the asset class.

Private debt represents 70% of the overall credit portfolio. The ASRS believes Private Debt asset offers the most attractive opportunity in the fixed income markets, with double-digit expected returns available for investors.

Ms. Landis asked for clarification regarding tradable credit markets with lower volatility and whether private debt offers significantly higher returns with lower volatility. Mr. Viteri and Mr. Matson responded that the ASRS fund-of-one accounts allow better economic terms with lower volatility. The private debt market has lower volatility than the public market and significantly higher rates of return.

Mr. Viteri presented information and materials regarding Distressed Debt, representing over 18% of our total portfolio. The distressed debt, such as pools of non-performing loans sold primarily by European banks, will likely provide investment opportunities over time as banks will need to shed defaulted loans stemming from the economic impact of the pandemic.

Mr. Viteri presented information and materials regarding Other Credit, representing over 16% of the total credit portfolio. Other credit strategies include partnerships that invest in the niche, private market opportunities, including life settlements, risk-sharing transactions, equipment leasing, litigation finance, and infrastructure collateralized loan obligations.

Mr. Viteri presented information and materials regarding Interest Rate Sensitive assets. As of April 29, 2022, we are underweight in the Interest Rate Sensitive Fixed Income with an allocation of 6.9% versus a 10.4% Interim SAA target. The index's yield has historically been a good indicator of long-term expected returns of the asset class.

Mr. Micheal Copeland, Private Markets Portfolio Manager, presented information and materials regarding the Real Estate Investment Portfolio. Mr. Copeland discussed inflation and its effect on real estate. Negative changes since last quarter include increased construction costs, issues with labor availability, and office utilization. Positives include industrial demand staying strong and needing more space. Home affordability is an issue and increases the demand for rental properties.

Ms. Landis and Mr. Copeland discussed the report of grocery-anchored centers and that favorable leasing and sales are being seen post-pandemic in these centers.

Mr. Copeland presented materials and information about different property markets and their outlooks: multifamily, office, retail, industrial, and hotel. The ASRS is selling its student housing and storage portfolio and selective retail.

Mr. Lofton asked for the rationale for selling off student housing assets. Mr. Copeland responded that there had been a decrease in college enrollment, and online classes are replacing in-person courses. The properties in question were further off-campus with fewer amenities. Mr. Jim Mueller, a Trustee, commented that high school graduation classes continue to decline significantly, and colleges expect lower enrollment and increased competition for students. Mr. Viteri and Mr. Copeland explained that the ASRS internally manages this asset, and they are selling the best assets in this portfolio.

Mr. Viteri commented that the total performance summary for the period ending 4/30/2022 has a total fund valuation of \$49,552.61 billion with strong 3- and 5-year inception to date numbers. Since the last meeting, Ms. Landis commended the ASRS staff for a job well done to increase

fund valuation. Mr. Matson responded that the ASRS portfolio numbers are because of the developed structure of the seven market accounts, and the ASRS is underweight in the asset classes that have fallen the most. Discussion occurred with Mr. Levell and Mr. Allan Martin, NEPC, about other pension funds and their fiscal year-to-date returns related to the ASRS. Mr. Martin commended the ASRS on their asset allocation and selection of assets. Mr. Matson briefly explained the idea of smart risk and being patient for a high rate of return.

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

Mr. Martin presented information and materials regarding the independent program oversight for the period ending March 31, 2022. Mr. Martin reported that in the first quarter, the S&P was down 4.7% due to the equity market returns being severely impacted by various factors. The Bloomberg Aggregate, an index for publicly traded bonds, was down by 5.9%. Mr. Martin noted that for the same period, a typical 60/40 portfolio was down over 5%, but thanks to the Fund's positioning, the ASRS was only down by 1.6% for the quarter, which in this environment, the ASRS fared much better than its peers.

Mr. Martin explained the seven strategic plan objectives that follow the goal to design, implement and maintain the portfolio that maximizes rates of return for acceptable levels of risk, including the asset allocation study and strategic asset allocation benchmarks. The ASRS structure of the portfolio has consistently added approximately 1% per year. Mr. Matson referenced the asset allocation study and the goal to increase performance levels internally and in comparison to their peers. Mr. Martin continued to present his materials on the 1-, 3-, 5-, and 10-year ASRS returns compared to their peers. The ASRS is in the top 10% of its peers. The ASRS has earned higher returns with lower volatility. Across the four major asset classes, the private market asset has significantly outperformed on 1- and 3-year returns in relation to benchmarks.

Mr. Martin presented information and materials regarding independent oversight and compliance. The ASRS is operating the Fund well within the Board-approved targets. The ASRS strategic positioning and manager selections significantly account for their success. Mr. Matson commented that the ASRS also invests the health insurance and LTD monies.

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

Mr. Robert Butler, Investment Risk & Compliance Officer, presented information and materials on the ASRS risk philosophy, asset class correlation and contribution to volatility, hypothetical stress test scenarios, and public market exposures. The ASRS investment goals include maximizing fund rate of return for acceptable risk levels and mitigating contribution rate volatility. Investment risk is multi-dimensional, and volatility is only one of the risks involved. Mr. Butler explained more about the definition of volatility as risk. Mr. Butler discussed asset class correlation and the diversified portfolio of the ASRS. Mr. Matson commented that there are multiple definitions of risk, including the standard deviation of returns.

Mr. Butler continued his presentation on current and historical asset class market value allocation and total volatility contributions. The ASRS has a much more diversified portfolio than

the typical pension fund portfolio. Mr. Butler provided information about the hypothetical scenarios of the ASRS portfolio during historical world events since 1973.

Mr. Butler briefly presented information about the public market's top 20 global issuers, which are less than 3% of the total ASRS portfolio. The internal and externally managed public investment market is about 50% of the holdings. Blackrock and Legal & General managers are very important with the number of assets they manage.

6. Presentation, Discussion, and Appropriate Action Regarding Investment Compliance

Mr. Butler presented information and materials regarding the internally managed portfolios pre-trade compliance system, the custody bank investment compliance program, and the private markets investment compliance program. There were no exceptions for the period under review for the ASRS internally managed portfolios pre-trade compliance system. Regarding the custody bank investment compliance review, the total ASRS fund investments passed the five mandated statutes on investment limits and the Arizona Restricted Country Test for all periods. RCLCO provides the real estate separate account investment compliance review, and they have completed 21 compliance reviews. They found immaterial inconsistencies, and all findings have been corrected. Meketa Investment Group performed a compliance review of the commingled funds and non-real estate separate accounts investments. They have completed nine compliance reviews, and no material issues were identified, with an additional 30 funds under review.

7. Presentation, Discussion, and Appropriate Action Regarding an Introduction to the Current Asset Liability Study

Mr. Matson began the presentation of the Asset Liability Study with a detailed background of the study, which takes place every three to five years. The study aims to determine whether the portfolio in aggregate is structured at a high level most efficiently. Mr. Matson discussed the terms efficient frontier and the various definitions of risk, including standard deviation, and then discussed the pros and cons of traditional risk metrics versus the ASRS perspective. ASRS focuses on the average long-term contribution rates, the volatility of the contribution rates, actuarial funded status, and the unsmoothed financial funded status. The ASRS is looking to optimize the long-term average rate of return to maximize the portfolio value. The ASRS and NEPC have constructed ten possible portfolio structures for the Board to review. The study includes the most significant asset classes but does not include smaller asset classes or asset classes that have very low returns and modest diversification value.

Mr. Levell discussed that asset allocation is the essential critical investment decision to determine portfolio performance. The policy targets, policy ranges, and benchmarks will be reviewed as part of the asset allocation. The ASRS portfolio is already very diversified, and the current asset allocation is favorable, and any changes would only slightly change the portfolio value. Mr. Levell explained in detail the process of valuing the asset class assumptions.

Ms. Landis asked if the asset allocation process is model-driven or includes human input. Mr. Levell responded that there is both model and human input throughout their asset allocation team.

The NEPC beta capital market assumptions of return and risk expectations were reviewed regarding 10 and 20-year forward-looking assumptions. Mr. Levell discussed the capital market assumptions for the ten possible portfolio structures and the returns in a 10- and 20-year cycle, including volatility. Mr. Matson explained that the ASRS asset class and investment strategy input is essential to the development of the asset mix. Mr. Matson invited Committee members to participate in this analysis by offering any input or recommendations. Mr. Matson discussed the definition and comparison of NEPC and ASRS capital market expectations and the ASRS portfolio construction theory.

Mr. Mueller, Mr. Matson, Mr. Martin, Mr. Viteri, and Mr. Lofton discussed capital market assumptions and the various analysis.

8. Request for Future Agenda Items

No requests for future agenda items were made.

9. Call to the Public

No members of the public requested to speak.

10. The next scheduled ASRS Investment Committee Meeting is scheduled for August 29, 2022 at 1:30 p.m.

Mr. Lofton noted the next scheduled IC meeting is scheduled for August 29, 2022, at 1:30 p.m.

11. Adjournment of the ASRS IC Meeting.

Mr. Lofton adjourned the meeting at 4:09 p.m.

Respectfully submitted by:

Bridget French
Investment Committee Administrator
ARIZONA STATE RETIREMENT SYSTEM