

**MINUTES
PUBLIC MEETING
ARIZONA STATE RETIREMENT SYSTEM BOARD**

**HELD
Friday, September 30, 2022
8:30 a.m.**

The Arizona State Retirement System (ASRS) Board of Trustees met in person, with some attending virtually, in the First Floor Board Room of the ASRS Office, 3300 N. Central Avenue, Phoenix, Arizona 85012.

Mr. René Guillen advised ASRS staff he was running late and Mr. Michael Miller will chair the meeting until his arrival.

Mr. Michael Miller, Vice-chair of the ASRS Board, called the meeting to order at 8:32 a.m.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. René Guillen, Chair (joined the meeting @ 8:45 a.m.)
Mr. Mike Miller, Vice-chair
Ms. Diane Landis
Mr. Kevin McCarthy
Mr. Jay Petkunas (virtual)
Ms. Ashley Ruiz (virtual)

Excused: Mr. Michael Lofton
Mr. Jim Mueller
Ms. Sarah Webber

A quorum was present for the purpose of conducting business.

Ms. Cassie Goodwin, ASRS Board Administrator, provided all attendees with virtual attendance meeting guidelines.

2. Approval of the Minutes of the July 22, 2022 Public Meeting of the ASRS Board

Motion: Ms. Diane Landis moved to approve the minutes of the July 22, 2022 Public Meeting of the ASRS Board. Mr. Kevin McCarthy seconded the motion.

By a roll call vote of 5 in favor, 0 opposed, 0 opposed, 0 abstentions, and 4 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – excused
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

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

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

Mr. Chris Levell presented information on the second quarter economic environment, including inflation, unemployment, drops in the equity markets, and higher interest rates. Mr. Levell summarized the markets as of June 30 are mostly the same as today, inflation is the highest in decades, the Feds are fighting inflation, and supply chain issues are exacerbated by Russia's invasion of Ukraine. The U.S. Dollar is exceptionally strong and that is a challenge to the rest of the world. The S&P had its worst start since 1970. Bear markets like today historically have lengthy recovery times. Mr. Levell discussed key market themes, including the historical relationship between fed funds and inflation and the closing of the gaps between them.

(Mr. René Guillen joined the meeting at 8:45 a.m.)

Messrs Chris Levell, Jay Petkunas, Allan Martin (NEPC), and Michael Viteri discussed how inflation will be affected by the fed expectation and market expectation on inflation and the risks related to the housing market, wages and supply chain issues while looking at the next couple of years.

Mr. Samer Ghaddar, Deputy CIO, presented information and materials relating to public equity, performance, and valuations. The S&P 1500 Index and MSCI ACWI Index dropped significantly for the year's first seven months. The Federal Reserve started implementing its most aggressive monetary policy tightening cycle in decades. The markets rebounded in July after the second quarter's correction of approximately -16%. The strong rebound in global equities in July was driven by declines in long-term bond yields and inflation expectations. As of July 31, 2022, \$18.78 billion is invested in the Public Equity asset class, representing a 37.4% allocation within the Total Fund. The ASRS is at equal weight as of July 31, 2022, to its benchmark index: MSCI ACWI IMI.

Mr. Ghaddar presented information and materials relating to private equity market conditions, performance, and valuations, including total global private equity returns, number of buyout deals, and aggregate deal values. The ASRS projects that the rest of 2022 will continue to witness a drop in the number of contractions in the public markets, along with seeing fewer exits and deals across geographies and sectors. The ASRS' portfolio indicates that the number of exits from its partners and acquisitions has dropped. As of August 3, 2022, \$6.2 billion is invested in the Private Equity asset class, representing a 12.5% allocation. The Private Equity team is being very selective in making new commitments.

Mr. Al Alaimo, Deputy CIO, provided house views to the Trustees on private equities relating to the Credit and interest-rate sensitive asset class. As of July 29, 2022, the ASRS had \$11.4 billion invested in the Credit asset class representing almost 23% of the Total Fund, which is above the target of 20%. The ASRS is overweight in the Credit asset class as the ASRS believes there are compelling investment opportunities to exceed the 7% target return of the Total Fund over an extended period of time. The ASRS thinks the most attractive investment opportunities in Credit are almost exclusively in private rather than public markets. The ASRS has created a well-diversified asset class of 18 strategies, including ten in Private Debt, three in Distressed Debt, and five in Other Credit. The ASRS has confidence this asset class is going to more than meet returns on the Total Fund.

Messrs Matson, Alaimo, and Martin provided the background regarding the ASRS Private Equity Markets portfolio. Mr. Matson pointed out that the construction of the portfolio was driven by the forward-thinking of Mr. Alaimo who made this a successful program, supported by Mr. Martin. What started out as a possible 4-year hold perspective, migrated to what is now believed to be a long-term strategic hold. The ASRS is a leader in this asset and has ties to many of the top-tiered credit managers and/or partners. The ASRS has one of the highest private credit allocation among public pension plans with a target of 20% and is currently at approximately 23%. A significant amount of other public pension funds and Sovereign wealth funds are migrating in this direction of more private credit. The idea for private direct lending came out of the global financial crisis. This has been a very successful program.

Mr. Alaimo gave examples of Distressed Debt investments and Other Credit investments. In addition, as of July 29, 2022, the ASRS is underweight in the Interest Rate Sensitive asset class with an allocation of 6.9% versus a 10.0% Interim Strategic Asset Allocation (SAA) target. The ASRS is underweight as they do not expect the asset class to achieve the fund's target return.

Mr. Micheal Copeland, Private Markets Portfolio Manager, presented information and materials regarding the Real Estate Investment Portfolio. Real Estate continues to have solid rental growth across the residential housing market. Rent growth has kept pace with inflation over the past three years. For Sale housing demand has lessened because of interest rate hikes, which is a positive for rental housing. Commercial tenants choose spaces with elevated amenities and better locations and are willing to pay premiums. The negatives of the current market include very high inflation and the high cost of goods and materials. Real Estate transactions in this market have significantly declined because lending standards are tightening, and the higher interest rates.

Mr. Copeland discussed positioning in the market. The ASRS has 70% of the portfolio in residential housing or industrial. Rent growth, in general, is over 12% and continues to grow with high demand and a balanced supply. Many of the rents have kept pace with inflation during the past three years. That's good growth and about 5% of the portfolio. The ASRS is building a robust single-family plan in its retail development. The first to create a separate account targeting the development of single-family rentals. This strategy tends to have longer than average tenant stay of three to four years versus apartments which is two years. It has a positive rent growth. Mr. Viteri expressed the strategy is to build communities with amenities. ASRS' focus is on strong markets, with strong schools, for millennials and others who don't have down payments to have affordable options.

Mr. Martin presented information and materials regarding the independent program oversight for the period ending June 30, 2022. The ASRS Investment Objectives to design, implement, and maintain an investment management program that maximizes rates of return for acceptable levels of risk have been accomplished with one goal partially accomplished. The ASRS has performed well in this turbulent market primarily because of the current asset class allocation.

Mr. Martin provided information concerning the expected 20-year return, peer comparisons, and the total fund performance net of fees. The diversification of the plan and the private market investments drove the plan's performance this quarter.

Mr. Martin commented on the specifics of peer comparisons. The ASRS is in a larger plan which means they are better diversified, with better managers. The ASRS is performing at a high level and is extremely strong relative to peers. He did caution that there is a lag in results so the third-quarter results will reflect second-quarter valuations for private markets which won't be as strong. He discussed asset class performance vs. benchmarks, cash management, SAA policy compliance, performance details, combined asset class committee meeting updates, and the performance summary of long-term disability.

Mr. Matson stated that when attending staff combined asset class committee meetings, NEPC will not only monitor for compliance but also ask questions to ensure there is a logical analysis conducted, and whether the ASRS has considered different risks.

Mr. Martin closed by summarizing general observations.

Mr. Robert Butler, Investment Risk & Compliance Officer, presented information and materials regarding the internally managed portfolio's pre-trade compliance system, the custody bank investment compliance program, and the private markets investment compliance program.

Pre-Trade compliance was performed on all internally managed fixed income and equity portfolios for May 2022 – August 2022, and no exceptions occurred during the period under review.

The ASRS Custody Bank's Compliance Group performed compliance reviews on all public market portfolios, the total fund levels, and the total fund level for the period of April 2022 – July 2022. After compiling this report, he received the August report and all of the investments passed the five mandated investment limits statutes and the Arizona Restricted Country Test for all periods.

The population of real estate investments to be reviewed for 2021 has been identified and RCLCO is targeting to have the compliance review completed by the 4th Quarter of 2022. No material issues have been reported.

Regarding the Private Markets Investment Compliance Program, Meketa has completed 12 compliance reviews for the 2020 period, and no material issues were identified during the reviews of these funds. After compiling this report, he receive two additional reviews, and, once again, no material issues were identified. An additional 25 funds are under review.

Mr. Viteri provided a total performance summary as of July 31, 2022. The fund's market value is \$50.2 billion and the total return for the plan for month is robust at 3.08%. Mr. Viteri discussed the 1-, 3-, and 5-year rates, including the strong excess returns.

4. Presentation, Discussion, and Appropriate Action Regarding the Current Asset Liability Study

Mr. Matson presented information and materials regarding the background and objectives of the asset-liability study. Every four years, the ASRS performs an asset-liability study to determine a strategic view as to how the portfolio should be structured. The expected outcomes of this study included the objectives to:

1. Maximize the long-term (geometric) average investment rate of return to minimize the long-term average contribution rate, subject to prudent risk levels.
2. Mitigate contribution rate volatility.

Mr. Matson discussed the key inputs to standard asset allocations analysis as follows:

- a. expected rates of return going forward;
- b. standard deviation of movement of the assets; and
- c. correlation or co-movement of those assets in the portfolio.

Mr. Matson discussed the academic risk measures, including standard deviations, Sharpe ratio, and Sortino ratio. Further discussion included contribution rate volatility to risk measures, funded status volatility with unsmoothed assets, and funded status volatility with smoothed data assets.

3. Achieve long-term full funding.
4. Ensure both short- and long-term liquidity.

The recommendation for the asset allocation is the "Mix 12" group. It is a migration from credit risk on the interest rate-sensitive side to equity risk, and a decrease in interest rate-sensitive exposure. It also migrates a percentage from real estate to private credit.

Mr. Guillen asked about the post-adoption timeline and how the decisions will be made. Mr. Viteri explained that it may be a multi-year process with some steps moving more quickly than others. It's all a matter of timing. As far as approvals, Mr. Matson and Mr. Viteri would be co-approvers; the Investment Committee will see the implementation plans and the logic of those implementation plans.

Mr. Levell presented additional information and materials regarding the asset allocation recommendation, including the projected increase of benefit payments, the actuarial value of assets and accrued liability, funded status, and the market value ratios.

Mr. Levell explained in detail the differences between both the current NEPC and ASRS assumption sets.

Mr. Levell presented a simulated range of outcomes of funded status over the next 30 years. He defined what risk is for the system and how the system is designed to express the volatility through contribution rates.

He discussed the series of mixes considered as alternative asset allocations and the comparison to ASRS peers. Mr. Martin commented on historical data regarding allocations to other assets and the reasoning behind such changes.

Mr. Kevin McCarthy and Mr. Levell discussed the smoothing effect and the need for generational equity over the 10- and 30-year projections. Mr. Matson explained actuaries' typically like stability in assumptions and desire for equity of participants in the program. Mr. Martin summarized liquidity issues relating to cash outflow causing liquidity concerns and plan long-term stabilization.

Mr. Levell continued his presentation on the analysis of differences between the NEPC and ASRS summary of return assumptions of the different asset mixes. In addition, he discussed the projected median funded status - unsmoothed asset values, median contribution rate (pension, health, LTD), 30-year average contribution rate, and 30-year standard deviation contribution rate. Mr. Levell presented a detailed financial scenario analysis of the asset mixes and briefly reviewed the asset allocation recommendation as previously stated by Mr. Matson.

Mr. Petkunas summarized his interpretation of the asset allocation study. He sought clarification of what assets were going to be moved in the portfolio and what is driving these changes. In the discussion, Mr. Matson summarized the analysis. Mr. Viteri and Mr. Levell discussed the timing of moving the assets. NEPC stress-tested the recommendations as part of this analysis.

Mr. Petkunas and Mr. Matson discussed the interest rate sensitive range and the logic of the asymmetric range.

Hearing no further questions from the Trustees, Mr. Guillen asked for a motion for this Agenda Item.

Motion: Mr. Mike Miller moved to accept the Investment Committee and staff's recommendations and approve the following asset class targets, asset class ranges, and asset class benchmarks:

1. Public Equity with a target of 44%, a range of 34% to 54%, and utilizing the MSCI ACWI IMI Net USA Gross Index as the benchmark.
2. Private Equity with a target of 10%, a range of 7% to 13%, and utilizing the MSCI ACWI IMI Net USA Gross quarter lagged index as the benchmark.
3. Credit with a target of 23%, a range of 17% to 26%, and utilizing the S&P Leveraged Loan Index + 250 basis points as the benchmark.
4. Interest Rate Sensitive with a target of 6%, a range of 3% to 12%, and utilizing the Bloomberg US Treasury Index as the benchmark.
5. Real Estate with a target of 17%, a range of 13% to 21%, and utilizing the NCREIF ODCE Index as the benchmark.

Mr. Kevin McCarthy seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

5. Presentation, Discussion, and Appropriate Action Regarding the Strategic Investment Policies

Mr. Matson presented information and materials regarding modifications to Strategic Investment Policies SIP002 and SIP006. Mr. Matson noted the following modifications:

- SIP002 – non-substantive technical changes, language clarification, added two new investment position references, changed the expected leverage, and updated the policy title;
- SIP006 – non-substantive technical changes, language clarification, and added two new investment position references.

Motion: Mr. Mike Miller moved to accept the Investment Committee and staff's recommendations and adopt the updated Strategic Policies SIP002 – *Tactical Positioning, Rebalancing, and Leverage: Pension, Health Benefit Supplement & Long Term Disability* and SIP006 – *Investment Manager, Partner, and Co-Investment Selection and Oversight*. Ms. Diane Landis seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

6. Presentation, Discussion, and Appropriate Action Regarding the Incentive Compensation Plan (ICP) for Internal Investment Professionals

Mr. Matson presented the ICP's information, materials, and background. The ASRS ICP was designed to contribute to the ASRS' ability to achieve the following objectives:

1. Retain high-caliber investment professionals;
2. Attract high-caliber investment professionals; and
3. Incentivize investment performance.

Mr. Matson explained that since the time the ICP was created there have been many staff changes and duty changes, requiring him to regularly interpret the plan. Updating the plan was more appropriate. Mr. Matson reviewed the fundamental changes as follows:

- Maximum incentive compensation range increased from 25% to 30%, effective July 1, 2022.
- Remove the requirement that total fund absolute returns/performance must be greater than 0% for any incentive compensation to be earned.
- Add the investment operations managed to position as their duties have changed.
- Changes the effective date from September 30 to November 30 and adds for the first practicable date.
- Removal of the total fund rate of return requirement of being positive in order for an incentive compensation payment to be made.

The Executive Director is not included in this policy but would review all the calculations and interpretations.

Mr. Viteri commented that the investment division does not do any calculations on the incentive compensation plan. There are budgeting staff and Board consultants who ensure the numbers are correct and the appropriate incentive is allocated.

Mr. Guillen and Mr. Matson discussed the reason behind the increase as being both reactive to the current marketplace as well as forward-looking. Mr. Viteri agrees that most plans with internally managed staff have incentive compensation plans. All agree that this is a modest move in the right direction. Mr. Matson added the ASRS has significantly fewer investment professionals than other funds. The ASRS can maintain this smaller size as all are empowered to make decisions. Numerous technical changes are needed, including job descriptions and investment performance categories.

Mr. Miller requested to confirm the requested changes are in the documents. Mr. Matson confirmed.

Motion: Ms. Diane Landis moved to accept the Investment Committee and staff's recommendations and approve the amended Incentive Compensation Plan for Internal Investment Professionals commencing fiscal year 2023 (the period from July 1, 2022 – June 30, 2023). Mr. Mike Miller seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused

Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

7. Presentation, Discussion, and Appropriate Action Regarding Staff Recommended Updates to the ASRS Board Governance Policy Handbook

Mr. Matson presented information and materials regarding modifications to the Board Governance Handbook. Mr. Matson identified the four modifications as follows and provided a brief summary of the change:

- Governance Principles have been added;
- New language added regarding the Board's authority with regard to the Contribution Prepayment Plan;
- Modification/migration of health-related vendor procurement from the Board to staff; and
- Modification to Committee membership size.

Mr. Miller and Mr. Guillen expressed their approval of the changes. Mr. Guillen and Mr. Matson discussed the positive changes made regarding Trustees participating on Committees.

Motion: Mr. Kevin McCarthy moved to approve the recommended revisions to the ASRS Board Governance Policy Handbook. Mr. Mike Miller seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

8. Presentation, Discussion, and Appropriate Action Regarding the Calendar Year 2023 Board Meeting Schedule

Mr. Guillen introduced the calendar and asked for comments.

Mr. Miller and Ms. Cassie Adams, Assistant Attorney General, discussed the suggested Appeals Committee dates and suggested that a revision to the schedule may be necessary to accommodate a meeting every other month. Ms. Melanie Alexander, Manager of Management Support Services, addressed the Board and agreed to revisit the schedule and make further adjustments. Mr. Matson agreed.

Motion: Mr. Mike Miller moved to approve the 2023 Board Meeting Schedule. Mr. Kevin McCarthy seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – approved
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

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

Mr. Matson had no additional comments but offered to answer any questions the Trustees had.

Mr. Guillen asked if any of the Trustees had any questions or comments for Mr. Matson. Hearing none, he moved to the next item.

10. Call to the Public

No one from the public requested to address the Board.

Ms. Goodwin advised no one signed in to speak or submitted an email comment.

Mr. Guillen closed the call to the public and moved to the next item.

11. Presentation Discussion and Appropriate Action Regarding the Employment Agreement for the ASRS Director

Motion: Mr. Mike Miller moved to go into executive session to discuss the employment agreement for the ASRS Director. Ms. Diane Landis seconded the motion.

By a roll call vote of 6 in favor, 0 opposed, 0 opposed, 0 abstentions, and 3 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused

Mr. Jay Petkunas – excused
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

The Board convened to Executive Session at 11:41 a.m.

The Board reconvened to Public Session at 12:17 p.m.

Ms. Goodwin called the roll; there was a quorum present with Mr. Michael Lofton, Mr. Jim Mueller, Mr. Jay Petkunas, and Ms. Sarah Webber excused.

Motion: Mr. Mike Miller moved to approve the amended employment agreement between the ASRS Board of Trustees and the ASRS Director Paul Matson, amended September 30, 2022, and approve the request to the Arizona Department of Administration to amend the grade for the ASRS Director position. Mr. Kevin McCarthy seconded the motion.

By a roll call vote of 5 in favor, 0 opposed, 0 opposed, 0 abstentions, and 4 excused, the motion was approved. The Trustee votes were as follows:

Mr. René Guillen – approved
Ms. Diane Landis – approved
Mr. Michael Lofton – excused
Mr. Kevin McCarthy – approved
Mr. Mike Miller – approved
Mr. Jim Mueller – excused
Mr. Jay Petkunas – excused
Ms. Ashley Ruiz – approved
Ms. Sarah Webber – excused

12. Board Requests for Future Agenda Items

No requests were made.

13. The next regular public ASRS Board meeting is scheduled for Friday, November 18, 2022, at 8:30 a.m.

Mr. Guillen, Chair, announced the next public ASRS Board meeting is scheduled to begin at 8:30 a.m. on Friday, November 18, 2022.

14. Adjournment of the ASRS Board

Mr. Guillen adjourned the September 30, 2022, ASRS Board meeting at 12:19 p.m.

Respectfully Submitted by:

Cassie Goodwin

Board Administrator
ARIZONA STATE RETIREMENT SYSTEM