REAL ESTATE INVESTMENT PROGRAM STRATEGIC PLAN

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ARIZONA STATE RETIREMENT SYSTEM

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EXECUTIVE SUMMARY

The Arizona State Retirement System (ASRS) has determined that, over the long term, inclusion of Real Estate (RE) investments in the total portfolio will provide benefits to the ASRS. In 2003, the ASRS approved a six percent (6%) funding target to institutional RE investments as a part of the ASRS' asset allocation policy. The target allows for a range of plus/minus two percent (+/- 2%). To reach and maintain the six percent (6%) funded target, the ASRS may over allocate to RE investments by up to two percent (2%) of the total plan assets (e.g. assuming 6% funding target allows up to 8% in total RE commitments).

This document establishes the specific objectives and policies involved in the implementation and oversight of the RE Program. The objectives define the specific role and return expectations of the RE Program. The policies provide specifications for acceptable investment styles and management of the various risks associated with the asset class.

OBJECTIVES

The purpose of the ASRS' RE Program is to provide the following benefits:

- Achieve returns in excess of the ASRS' actuarial assumed investment rate of return.
- Achieve attractive risk-adjusted returns.
- Enhance the overall diversification of the ASRS' investment program.

RE is expected to positively contribute to the ASRS' investment objective to meet or exceed the actuarial assumed investment rate of return of the ASRS. In addition to achieving attractive risk-adjusted returns relative to other asset classes, another objective for RE is to enhance the overall diversification of the ASRS' investment program.

The ASRS' RE Program will consist of Core and Non-Core investments, as described below. These investments are expected to outperform, on a net of fees basis, the net return of the NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) over rolling five year periods.

The Real Estate Committee (REC) may take a course of action at any time to reduce ASRS' exposure to the real estate asset class or terminate any future funding to the asset class when appropriate risk adjusted returns appear unachievable.

POLICIES

Portfolio Composition

The portfolio will be divided by risk/return profile. There are two major categories:

1. Core Investments

Core investments include existing, substantially leased income-producing properties located principally in metropolitan areas that exhibit reasonable economic diversification. Core properties typically exhibit the following characteristics:

- Predictable income flows with a high proportion of anticipated total return arising from current income and cash flow;
- At least 80% leased upon purchase of the asset;
- Located in an economically diversified metropolitan area;
- Credit quality tenants and a staggered lease maturity schedule;
- Quality construction and design features;
- Reasonable assurance of a broad pool of potential purchasers upon disposition;
- Properties requiring quality asset and portfolio management but not requiring specialized operating expertise which is not readily available in the market; and,
- Investment structures using all cash or limited leverage.

These investments may come in the form of a commingled fund, joint venture, co-investment or secondary structure as determined by the most appropriate vehicle for the specific investment.

Public RE securities (e.g. Real Estate Investment Trusts or REITs) will also be considered part of the core component of the ASRS' portfolio. Public RE securities are publicly traded companies that manage a portfolio of real estate based investments in order to produce income and capital appreciation for investors.

2. Non-Core Investments

Non-Core investments represent those properties and/or investment strategies that require specialized acquisition and management expertise or skill to mitigate the business and leasing risk that may be associated with individual investments. Non-Core investments have greater associated volatility compared to Core investments. Non-Core investments may exhibit one or more of the following characteristics:

- Properties located in secondary and tertiary markets, which are not economically diversified and may have accompanying susceptibility to imbalances of demand and supply;
- Property types including (but not limited to) hotels, motels, senior housing, and residential housing which require specialized management skills focusing primarily on operating business expertise rather than pure real estate management expertise;
- Properties which are considered to be in "work out" mode;
- Properties involving significant appreciation, lease-up, development and/or re-development risks;
- Financing or investment structures that impact cash flows and/or require additional administrative expertise; and,
- Investment structures using leverage as an integral part of the total return strategy.

Non-Core properties can further be broken down into two categories: Value-Added and Opportunistic. These investments may come in the form of a commingled fund, joint venture, co-investment or secondary structure as determined by the most appropriate vehicle for the specific investment.

Value-Added RE is characterized as traditional properties that take on moderate additional risk from one or more of the following sources – leasing, redevelopment, repositioning, the use of moderate leverage and specialized property types such as hotels.

Opportunistic RE takes on additional risks from Value-Added RE strategies in order to achieve a higher level of return. Opportunistic investments may include direct RE assets such as development or major redevelopment of office, retail, industrial, multifamily, hotel or specialized property types. Additionally, opportunistic investments could include land investing, operating company investing, distressed debt/properties, highly leveraged properties and other specialized investments.

While the characteristics of risk/return can be grouped and broadly defined, the return expectations from each group will vary from market cycle to market cycle. The use of a market based index with excess returns determined by relative risk helps to ensure that ASRS will assume minimal risk in order to achieve objectives.

Near term, five to seven (5-7) years, return expectations for each group are as follows:

Component	Expected Net Returns
Core - Private	Net NFI-ODCE
Core - Public Securities	FTSE EPRA/NAREIT Global Index
Non-Core – Private	Greater than net NFI-ODCE

The aggregate benchmark for the real estate portfolio will be Net NFI-ODCE.

The ASRS RE portfolio composition will shift from over time based on the going forward expectations for the market and the risk necessary to achieve the targeted net return objectives of the total real estate portfolio. As such, the portfolio composition (based on the total real estate target allocation) will be as follows:

Component	Minimum/Maximum
Total Core	Minimum 20%
Public Securities	Maximum 30%
Non-Core	Maximum 80%

The Non-Core portfolio composition (i.e., weighting toward Value-Added and Opportunistic investments) will be established as a target within the Annual Investment Plan.

Risk Management

The primary risks associated with equity RE investments include implementation risk, investment manager risk, property market risk, asset and portfolio risk, and liquidity risks. The ASRS will mitigate risk in a prudent manner. The following identifies the ASRS decision-making process, the investment structures and management of risks associated with investing in RE equity.

1. Defined Roles for Participants

The ASRS RE Program shall be planned, implemented, and monitored through the coordinated efforts of the Board, Investment Committee (IC), Real Estate Committee (REC), Director, CIO, and Investment Management Division (IMD) RE Staff, and RE Consultant (Consultant). The IMD RE Staff will be primarily responsible for implementing the investment decisions of the REC, the IC and the Board. ASRS has out-sourced the "back office" function for real estate investments. Set forth below is the delegation of the major responsibilities of each participant.

Duties of the Board

- Establish the allocation to and role of real estate to the ASRS.
- Approve the RE Program Strategic Plan and any changes and modifications to same.
- Review and approve macro-level strategic investment policies which guide the strategic vision for ASRS investments.
- Formally review the RE asset class on an annual basis.

Duties of the Investment Committee (IC)

- Recommend to the Board the RE Program Strategic Plan and any changes and modifications to same.
- Provide expert advice to the board and REC.

Duties of the Real Estate Committee (REC)

- Recommend to the IC the Strategic Plan for the RE program.
- Recommend to the Director the selection, retention and termination of asset class consultants and staff-extension consultants.
- Final decision making authority on investments for the real estate program subject to referral to IC in accordance with board procedures. *
- Final decision making authority on real estate related investments recommended pursuant to the opportunistic private investments strategic plan subject to referral to IC in accordance with board procedures. *
- Approve the hiring/retention/termination of legal counsel for the RE Program in accordance with procurement procedures. *
- Review and, as appropriate, approves tactical variances to the objectives and policies of RE Program targets/ranges during the implementation period.

*Decisions require the consensus of the Director and CIO.

Duties of the Director

- Member of the REC. No investments made without concurrence of Director.
- Approve the selection, retention and termination of asset class committee consultants and staff-extension consultants. The IC must consent to the Director's recommendation before the primary consultant for an asset class committee is hired or terminated.
- Review and approve the RE Standard Operating Procedures.
- Consent to the decisions made by the REC; Requires CIO's concurrence.

Duties of the CIO

- Member of the REC. No investments made without concurrence of CIO.
- Execute the decisions made by the REC
- Review and approve the RE Standard Operating Procedures.
- Approve the selection, hiring, and termination of staff-extension consultants.

Duties of the IMD RE Staff

- Prepare, in consultation with the consultant, the strategic plan and updates thereto.
- Review potential investments and make investment recommendations to the Director, CIO and REC
- Oversee the day-to-day operational activities of the RE Program including manager selection, due diligence, agreements, consultant activities, legal counsel activities, investment cash flows and other real estate compliance to policy.
- Coordinate REC meetings.
- Develop RE Standard Operating Procedures.

Duties of the Consultant

- Act in an advisory role to the REC on all real estate program matters.
  - Advise on the establishment, ongoing review, and recommendations of revisions to the RE Strategic Plan and Tactical Allocation Plan.
  - Advise on the implementation of the policy and managing the real estate program.
  - Conduct, as requested by the ASRS, Due Diligence activities with full fiduciary responsibilities.
- Bring any non-conforming items or significant issues to the attention of the REC, and as applicable, to the IC and/or Board.
- Perform other duties and responsibilities as defined by contract relationship.

Duties of the "Back Office"

- Prepare Quarterly Performance Reports
- Collect data and manage the data flow to and from real estate managers
- Execute capital calls and distributions from investment vehicles

2. Investment Structures

The ASRS recognizes that, regardless of investment structure, RE is an illiquid asset class. Structures that maximize investor control of the assets are preferred, particularly in Core investments. The ASRS also recognizes that the Non-Core style requires the assumption of additional risks including diminished investor control. The risk associated with the reduced investor control in higher return strategies will be mitigated by limiting exposure to any single investment strategy and/or manager.

The ASRS will utilize a variety of investment structures. In all cases, the investment structure will be determined by the need and ability to mitigate the risks associated with the risk/return profile of a particular investment, including manager and strategy diversification.

The ASRS may invest through the following vehicle options:

a. Individually Managed Accounts

The ASRS may purchase assets on a wholly owned basis through Individually Managed Account (IMA) structures, in a commingled vehicle or through direct ownership. The ASRS may also consider joint venture or co-investment ownership within IMA structures.

b. Commingled Vehicles

The ASRS may also purchase assets through the ownership of units or shares of commingled vehicles. Any legally permissible vehicle will be allowed including, but not limited to, joint ventures, limited partnerships, real estate investment trusts and limited liability corporations.

3. Diversification

The ASRS will seek to diversify its real estate program by manager, property type, property location, and investment style. However, initial allocations, i.e. implementation of the RE Program may result in temporary variances to the Policies stated below. Variances to the Manager, Vehicle and Property type/location policies will be reviewed and approved by the REC and discussed and presented to the IC/Board.

a. Manager

The ASRS will implement a multi-manager program. At the time of investment no manager will be more than thirty percent (30%) of the target RE portfolio so as to ensure that any possible underperformance of one manager will not unduly impact the total portfolio.

b. Vehicle

The ASRS will diversify the risk associated with a single manager and the implemented strategy through the diversification of selected investments. At the time of investment, no single commingled investment will be more than thirty percent (30%) of the target RE portfolio to ensure that any possible underperformance of one vehicle will not unduly impact the total portfolio. When investing in commingled investments, the ASRS will also mitigate manager and vehicle risk by limiting its pro rata position within any commingled vehicle to twenty percent (20%) of the total equity capital raised at the final close of the vehicle or at the time of investment for open-ended investments.

c. Property Type and Location

The ASRS will diversify its exposure to property type and location. However, it is expected that at various points in time, the portfolio may be more heavily exposed to a single property type or location by virtue of opportunities available in the market, which are projected to generate the alpha targeted by the ASRS. Exposure to any single property type or geographic location (defined as a single NACREIF region and/or a single country except the United States) in excess of forty percent (40%) of the total targeted real estate portfolio will be reviewed as an exception by the REC.

With the maturation of the RE asset class, investments have become global in nature. The ASRS will seek optimal risk adjusted returns within the context of opportunities located both domestically and internationally. International investments will be limited to no more than thirty percent (30%) of the total targeted RE portfolio and may include core private and public investments as well as non-core investments.

4. Leverage

The ASRS will utilize leverage in the private RE portfolio to increase returns as well as the total equity available for investment and allow for greater diversification. The availability and cost of leverage will be factors in considering its use. Targets are established for each portfolio component based on the risk/return profile of the underlying investments. ASRS will consider the appropriateness of the debt policy of any fund which it considers for investment. The real estate portfolio will limit leverage to sixty-five percent (65%) of the targeted RE allocation.

However, initial allocations, i.e. implementation of the RE Program may result in temporary variances to the Policies stated below. Variances to the leverage policies will be reviewed and approved by the REC and discussed and presented to the IC/Board.

a. Core

Core assets generally provide an established stream of rental revenue. Because of the predictability of the income stream, third-party debt can be used at relatively low risk to enhance return. For any single Core IMA asset, third-party debt will be limited to thirty percent (30%) of the market value of the asset, must provide positive debt-service coverage, be non-recourse, and must be accretive to unlevered returns.

Core commingled investments will be limited to thirty percent (30%) portfolio level debt without approval of exception by the REC.

b. Non-Core

Investments classified as Non-Core investments utilize third-party debt as an integral part of their total return strategy. Such investments may be made through commingled vehicles and will therefore have a specified leverage target or maximum stated in the offering documents. Other vehicles such as separate accounts and/or joint ventures may also be used. Debt levels and structures will be evaluated and approved by the REC when reviewing a specific fund, separate account or joint venture.

5. Valuations

All investments in an IMA and directly owned investments will be independently valued not less than every three years by a qualified expert (certified Member of the Appraisal Institute-MAI). During interim years, valuations will be performed by the Manager in accordance with industry standards. Investments held in commingled funds will be subject to the agreed upon valuation policy approved with the selection of the investment.