LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Investment Committee Agenda

REGULAR MEETING **TUESDAY, DECEMBER 11, 2018** **TIME: 10:30 A.M. OR IMMEDIATELY FOLLOWING ADJOURNMENT OF REGULAR BOARD MEETING** **MEETING LOCATION:** LACERS Ken Spiker Boardroom 202 West First Street, Suite 500 Los Angeles, CA 90012-4401	Chair: Sung Won Sohn Committee Members: Elizabeth Lee, Nilza R. Serrano Manager-Secretary: Neil M. Guglielmo Executive Assistant: Ani Ghoukassian Legal Counselor: City Attorney's Office, Retirement Benefits Division Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, <u>five</u> or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at (213) 473-7169.

I. PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

II. APPROVAL OF MINUTES FOR THE INVESTMENT COMMITTEE MEETING OF OCTOBER 9, 2018 AND POSSIBLE COMMITTEE ACTION

III. CHIEF INVESTMENT OFFICER VERBAL REPORT

IV. PRESENTATION BY ROBERT W. BAIRD & CO., INCORPORATED REGARDING THE MANAGEMENT OF AN ACTIVE DOMESTIC FIXED INCOME PORTFOLIO

V. PRESENTATION BY NORTHERN TRUST REGARDING SECURITIES LENDING ACTIVITY REPORT FOR THE PERIOD JULY 1, 2017 TO JUNE 30, 2018

VI. INVESTMENT MANAGER CONTRACT WITH AEGON USA INVESTMENT MANAGEMENT, LLC REGARDING THE MANAGEMENT OF AN ACTIVE U.S. HIGH YIELD FIXED INCOME PORTFOLIO AND POSSIBLE COMMITTEE ACTION

VII. LACERS INVESTMENT POLICY STATEMENT REVIEW AND POSSIBLE COMMITTEE ACTION

VIII. OTHER BUSINESS

IX. NEXT MEETING: The next Regular Meeting of the Investment Committee is scheduled for Tuesday, January 8, 2019, in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

X. ADJOURNMENT

LACERS
LOS ANGELES CITY EMPLOYEES'
RETIREMENT SYSTEM

Board of Administration Agenda

SPECIAL MEETING **TUESDAY, DECEMBER 11, 2018** **TIME: 10:30 A.M. OR IMMEDIATELY FOLLOWING ADJOURNMENT OF REGULAR BOARD MEETING** **MEETING LOCATION:** LACERS Ken Spiker Boardroom 202 West First Street, Suite 500 Los Angeles, CA 90012-4401 Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, five or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at (213) 473-7169.	President: Cynthia M. Ruiz Vice President: Elizabeth L. Greenwood Commissioners: Elizabeth Lee Sandra Lee Nilza R. Serrano Sung Won Sohn Michael R. Wilkinson Manager-Secretary: Neil M. Guglielmo Executive Assistant: Ani Ghoukassian Legal Counsel: City Attorney's Office Retirement Benefits Division

I. PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

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VIII. OTHER BUSINESS

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X. ADJOURNMENT

MINUTES OF THE REGULAR MEETING
INVESTMENT COMMITTEE
BOARD OF ADMINISTRATION
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

LACERS Boardroom
202 West First Street, Suite 500
Los Angeles, California

October 9, 2018

12:40 p.m.

Agenda of: Nov. 13, 2018

Item No: II

PRESENT:	Chair:	Sung Won Sohn
	Committee Members:	Elizabeth Lee Nilza R. Serrano
	Manager-Secretary:	Neil M. Guglielmo
	Executive Assistant:	Ani Ghoukassian
	Legal Counselor:	Anya Freedman

The Items in the Minutes are numbered to correspond with the Agenda.

I

PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION – Chair Sohn asked if any persons wished to speak on matters within the Committee's jurisdiction, to which there was no response and no public comment cards received.

II

APPROVAL OF MINUTES FOR THE INVESTMENT COMMITTEE MEETING OF SEPTEMBER 11, 2018 AND POSSIBLE COMMITTEE ACTION – A Motion to approve the minutes of September 11, 2018 was moved by Committee Member Serrano, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano, and Chair Sohn –3; Nays, None.

III

CHIEF INVESTMENT OFFICER VERBAL REPORT – Rod June, Chief Investment Officer, shared the 12-month Investment Committee Calendar with the Investment Committee. Robert Miranda from Townsend Group discussed Asana Partners Fund II with the Board.

IV

COMMITMENT OF UP TO $35 MILLION IN ASANA PARTNERS FUND II, LP AND POSSIBLE COMMITTEE ACTION – Sam Judd, Managing Partner, Jason Tompkins, Managing Partner, and Katie Grissom, Director-Merchandising & Leasing with Asana Partners presented this item to the Committee.

After discussion, Committee Member Serrano moved approval of staff's recommendation, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano, and Chair Sohn –3; Nays, None.

V

PRESENTATION BY AXIOM INTERNATIONAL INVESTORS, LLC REGARDING THE MANAGEMENT OF AN ACTIVE GROWTH NON-U.S. EMERGING MARKETS EQUITIES PORTFOLIO – Suzanne Schechter, Senior Vice President and Jose Morales, Senior Vice President with Axiom International Investors, LLC presented this item to the Committee.

VI

PRESENTATION BY QUANTITATIVE MANAGEMENT ASSOCIATES, LLC REGARDING THE MANAGEMENT OF AN ACTIVE CORE NON-U.S. EMERGING MARKETS EQUITIES PORTFOLIO – Roy Henriksson, Chief Investment Officer, Vlad Shutoy, Principal and Portfolio Manager, and Brad Zenz, Managing Director with Quantitative Management Associates, LLC presented this item to the Committee.

VII

PRIVATE EQUITY PROGRAM 2019 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION – David Fann, President, Heidi Poon, Senior Vice President and Jeff Goldberger, Senior Vice President with TorreyCove Capital Partners presented this item to the Committee. A motion to approved was moved by Committee Member Serrano and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano, and Chair Sohn –3; Nays, None.

VIII

PROXY VOTING ACTIVITY REPORT FOR THE PERIOD JULY 1, 2017 TO JUNE 30, 2018 – Rod June, Chief Investment Officer and Eduardo Park, Investment Officer presented this report to the Committee. The report was received by the Committee and filed.

IX

BROKERAGE ACTIVITY REPORT FOR THE PERIOD JULY 1, 2017 TO JUNE 30, 2018 – Rod June, Chief Investment Officer and Barbara Sandoval, Investment Officer II presented this report to the Committee. The report was received by the Committee and filed.

X

LACERS INVESTMENT POLICY MANUAL REVIEW AND POSSIBLE COMMITTEE ACTION – The Committee discussed this item and provided staff with recommendations but did not take any action on this item.

XI

OTHER BUSINESS – There was no other business.

XII

NEXT MEETING – The next Regular Meeting of the Investment Committee is scheduled for Tuesday, November 13, 2018, in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

XIII

ADJOURNMENT – There being no further business before the Committee, Chair Sohn adjourned the Meeting at 4:06 p.m.

Sung Won Sohn

Neil M. Guglielmo
Manager-Secretary

Prepared for

LACERS

December 11, 2018

Representing Baird Advisors

Charles B. Groeschell
Managing Director, Baird Advisors
Senior Portfolio Manager
Baird Funds Vice President

Education: B.A. - Texas Christian University (1976)

M.B.A. - University of Milwaukee (1979)

Charlie has over 38 years of investment experience managing various types of fixed income portfolios. He plays a lead role in the overall management and distribution of fixed income investment management services at Baird Advisors. His primary responsibilities include client servicing and setting investment policy with a major portion of his time allocated to security analysis, credit research and implementing the long-term investment strategy of the team.

Charlie serves as the Chair of the Board for Prevent Blindness Wisconsin. He is currently on the Board of the Boys & Girls Clubs of Greater Milwaukee; in 2008, Charlie successfully co-chaired the annual campaign to raise $3.8 million. Again in 2019, he will co-chair the annual campaign for the Clubs with a goal to raise over $5 million. Charlie co-chairs the Club's Endowment Committee and is a member of the Finance Committee. Charlie was also the campaign co-chair of Sharp Literacy in 2009.

Charlie has received Baird's G. Frederick Kasten, Jr. Award for Asset Management and Baird's Brenton H. Rupple Citizenship Award.

Charlie and his wife, Beverly, have two children: Scott and Leigh.

Representing Baird Advisors

Warren D. Pierson, CFA
Managing Director
Deputy Chief Investment Officer

Education: B.A. - Lawrence (1984)

Professional Designation: Chartered Financial Analyst (1990)

Warren has over 32 years of investment experience managing various types of fixed income portfolios. His responsibilities include developing and implementing investment strategy with particular emphasis on yield curve analysis and research in the U.S. Treasury, U.S. Government agency and municipal sectors. Prior to joining Baird Advisors, Warren was a Senior Vice President and Senior Portfolio Manager with Firstar Investment Research & Management Company (FIRMCO) where he played a lead role in the management of taxable and tax-exempt portfolios.

Warren is a member of The CFA Institute and the Milwaukee Investment Analysts Society (past President). He is a cabinet member of the United Way of Greater Milwaukee and is currently on the boards of the Milwaukee Rescue Mission (past Board President) and the Lifesong Legacy Fund. Warren has also served as Board President of the Alzheimer's Association of Southeastern Wisconsin.

Warren and his wife, Ann, have six children: Andrew, William, Patrick, Barbara, Amelia and Chloe

Representing Baird Advisors

M. Sharon deGuzman
Managing Director
Senior Portfolio Manager

Education: B.A. – Eastern Illinois University (1988)

Sharon has over 27 years of investment experience managing various types of fixed income portfolios. She is a Managing Director and Senior Portfolio Manager for Baird Advisors, Robert W. Baird & Co's institutional fixed income management group. Sharon has been a named portfolio manager on all of the Baird Bond Fund offerings since their inception dates. She plays a lead role on portfolio construction and focuses on managing short and intermediate taxable portfolios and tax-exempt portfolios.

Prior to joining Baird Advisors, Sharon was an Assistant Vice President and Portfolio Manager with Firstar Investment Research and Management Company (FIRMCO) where she did quantitative fixed income analysis and portfolio management.

Sharon is a member of the CFA Institute and the CFA Society of Milwaukee. She serves on the boards of Divine Savior Holy Angels High School, the American Lung Association of Wisconsin, the Wauwatosa Public Library Foundation and TEMPO Milwaukee. Sharon is a member of Milwaukee Women Inc. and Professional Dimensions. Sharon is a former member of the Finance Committee and the former assistant treasurer for United Way of Greater Milwaukee. She is the past co-chair of Baird's Women Associate Resource Group.

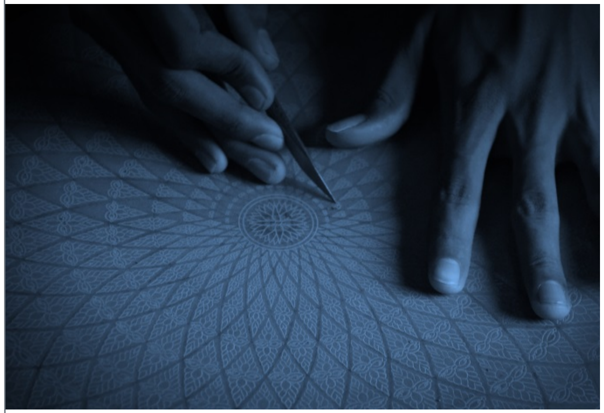
Sharon received the Milwaukee Business Journal's Women of Influence Award – Mentor category in 2015.

Sharon is also an active volunteer at Christ King Parish and School (co-chairs the Stewardship Committee) in Wauwatosa, WI. Sharon and her husband Jim served as co-chairs in 2015 and 2016 for the Soles for Catholic Education Walk for the Archdiocese of Milwaukee.

Sharon and her husband, Jim, have five children: Nicole, Mara, Luke, William and Olivia.

Table of Contents

Section



Section 1

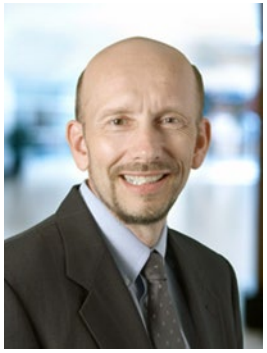
Firm/Team Overview

Baird Advisors

Portfolio Management Team

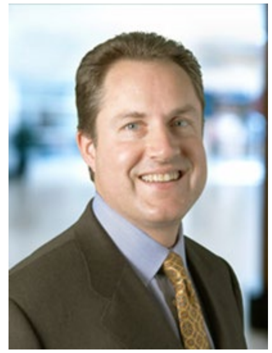
Strategic Leaders

Mary Ellen Stanek, CFA
Managing Director
Chief Investment Officer

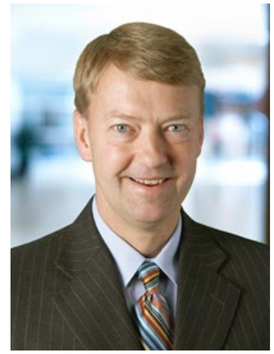


Gary A. Elfe, CFA
Managing Director
Research Director Emeritus
/Senior Portfolio Manager

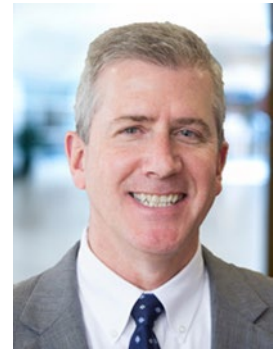
Charles B. Groeschell
Managing Director
Senior Portfolio Manager



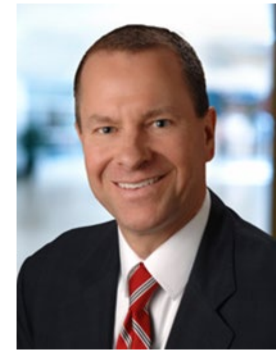
Jay E. Schwister, CFA
Managing Director
Research Director
Senior Portfolio Manager



Warren D. Pierson, CFA
Managing Director
Deputy Chief
Investment Officer



Duane A. McAllister, CFA
Managing Director
Senior Portfolio Manager



Jeffrey E. Simmons, CFA
Managing Director
Senior Portfolio Manager

Portfolio Construction & Risk Monitoring

M. Sharon deGuzman
Managing Director
Senior Portfolio Manager

Patrick A. Mutsune, CFA
Managing Director
Senior Investment &
Systems Analyst

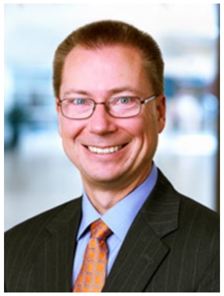
Alice M. Ambrowiak, CFA, CPA
Vice President
Investment Analyst

Allison L. Parra
Investment Analyst

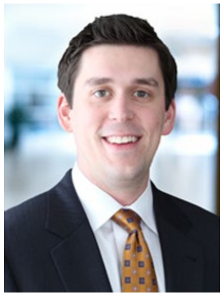
Baird Advisors

Portfolio Management Team

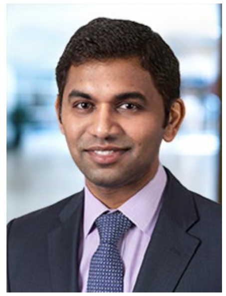
Credit



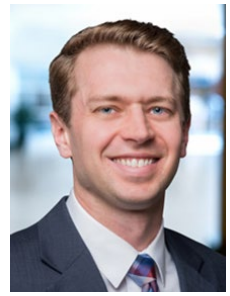
Jeffrey L. Schrom, CFA
Managing Director
Senior Portfolio Manager



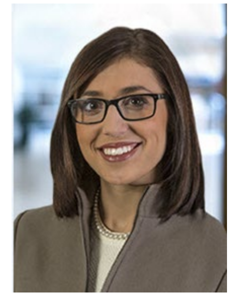
Andrew J. O'Connell, CFA
Senior Vice President
Senior Investment Analyst



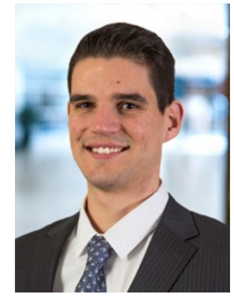
Abhishek Pulakanti, CFA
Senior Vice President
Senior Investment Analyst



John S. Cremer, CFA
Investment Analyst



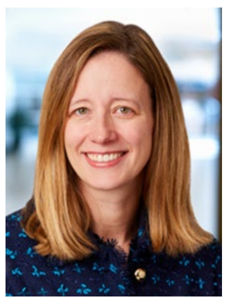
Jaclyn E. Godwin
Investment Analyst



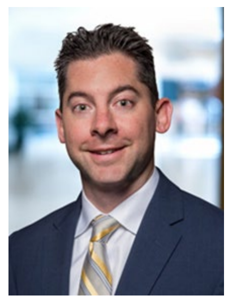
Kristiyan T. Trukov
Investment Analyst

Structured

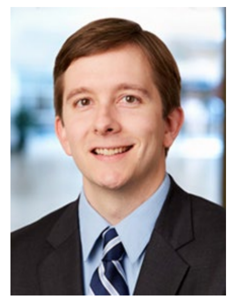
Daniel A. Tranchita, CFA
Managing Director
Senior Portfolio Manager



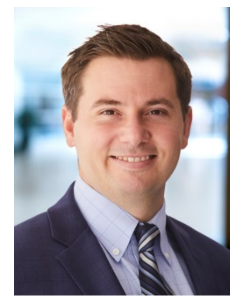
Meghan H. Dean, CFA
Managing Director
Senior Portfolio Manager



Patrick W. Brown, CFA
Managing Director
Senior Investment Analyst

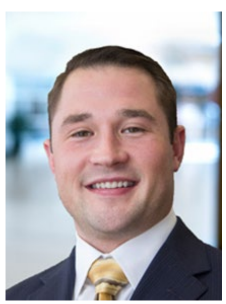


Ian D. Elfe, CFA
Vice President
Senior Investment Analyst

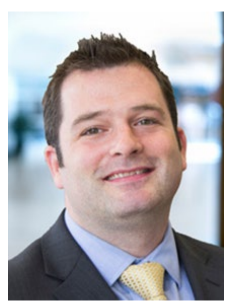


Donald A. Smiley, CFA
Investment Analyst

Municipal



Joseph J. Czechowicz, CFA
Vice President
Portfolio Manager



Erik R. Schleicher, CFA
Vice President
Portfolio Manager

Lauren E. Vollrath, CFA
Investment Analyst

Firm Update

Focused on helping clients achieve their asset management, capital markets, investment banking and private equity goals for nearly 100 years.

1919 founded in Milwaukee

2004 Baird becomes employee-owned

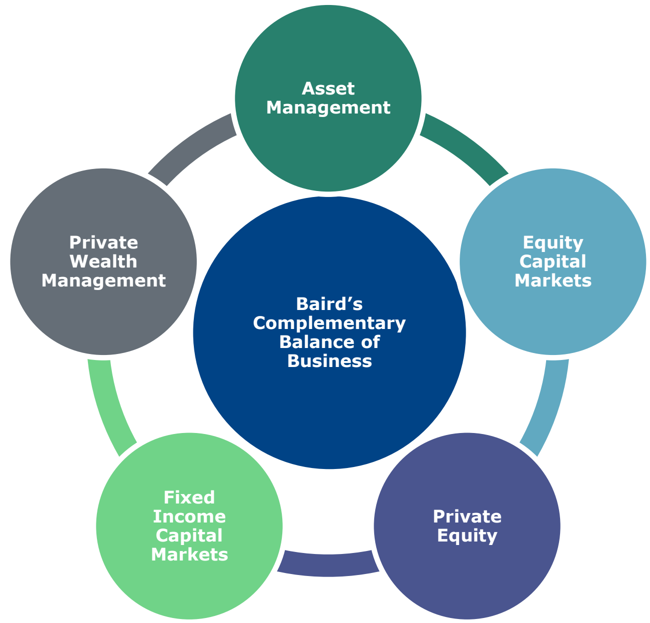
3,500 employees (2,400 are shareholders)

FORTUNE 100 BEST COMPANIES TO WORK FOR® 2018

Pensions&Investments BEST PLACES TO WORK IN MONEY MANAGEMENT 2017 MULTIYEAR WINNER 2012 2013 2014 2015 2016

MORNINGSTAR Awards 2016 Nominee

A Comprehensive Financial Services Firm

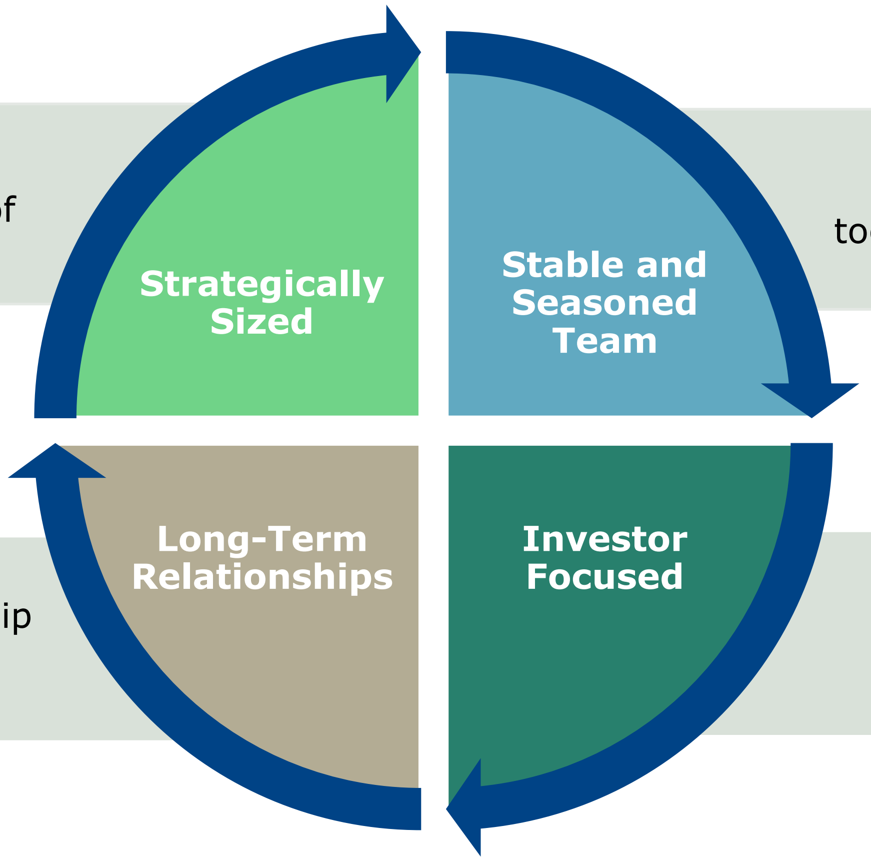


Baird Advisors Overview

Experienced Team with a Track Record of Consistent Results in High-Quality Fixed Income Management

$65.7 billion of assets under management as of October 31, 2018

Seasoned investment professionals working together for over **30 years,** 22 CFA Charterholders



Average client relationship exceeds **12 years**

Emphasize service and communication

Baird
Our Firm. Our Culture.

- Top Talent
- Inclusion & Diversity
- Employee Ownership
- Work-Life Balance
- Community Involvement
- Honesty, Integrity, and Transparency

At Baird, at least **95%** of associates say they have a great atmosphere, great pride, great rewards, great communication, and great management.

vault TOP RANKED 2018

GREENWICH ASSOCIATES

HUMAN RIGHTS CAMPAIGN FOUNDATION BEST PLACES TO WORK 2018 for LGBTQ Equality 100% CORPORATE EQUALITY INDEX

These findings are based upon a 2017 employee survey presented by Great Place to Work®, as published by Fortune®. These numbers represent the percentage of employees surveyed that feel this way sometimes, often or almost always. Greenwich Associates U.S. Equity Investors – Small-/Mid-Cap Funds, 2004–2017. Survey conducted with 101 U.S. small-cap and mid-cap fund managers and 214 fund managers and 300 traders, respectively. Rankings for qualitative metrics are based on leading research firms in survey.

Inclusion & Diversity at Baird Advisors

Inclusion: Creating an environment in which people feel involved, respected, valued and connected, and to which individuals bring their authentic selves (their ideas, backgrounds and perspectives).

Diversity: The variety of people and ideas within a company.

- Everyone is a valued associate who knows without a doubt that what they do contributes directly to the firm's success. It is about hiring the best people with a variety of ideas, backgrounds and perspectives from across the globe.
- If you feel involved, respected, valued and connected, you will be engaged. You will have greater job satisfaction, be more productive and continue to contribute to Baird's success.

"At Baird, we believe that every associate matters. We are committed to an environment of trust, respect and teamwork, where you can partner with the best in the industry and thrive."

-Baird Associate Promise

By the People, for the People: Associate Resource Groups

- **Women in the Workforce: ASCEND** shares a common vision of making Baird the employer of choice for women in the financial services industry.
- **Cultural Diversity: PRISM** provides associates of underrepresented ethnicities with support, resources and opportunities for professional growth and development.
- **LBGT+: SPECTRUM** is Baird’s lesbian, gay, bisexual and transgender group which works to establish inclusive firm policies and procedures to cultivate an open and authentic work environment.
- **Next-Gen: PULSE** explores the needs and trends of Baird’s next-gen associates through the promotion and engagement of firm and community opportunities.
- **Environmental Sustainability: ECO** helps create and improve environmentally sustainable practices at work, at home and in the community.
- **Community Involvement: BAIRD GIVES BACK** continues the firm’s proud tradition of giving back to our communities by collectively contributing thousands of hours in volunteer time each year to a multitude of global nonprofit organizations.
- **Veterans: PATRIOT** supports members of the U.S. military, veterans and their families.

The ARGs provide opportunities to network, promote personal and professional growth, enhance career development and provide a stronger sense of community within Baird.

Baird Advisors

Total Composition of Work Force

As of October 31, 2018

- **Baird Advisors will always be a leader in diversity.**
  - Focusing on increasing diversity by expanding and diversifying its candidate pool and leveraging Baird's intern program
  - Growing existing talent and promoting team stability by maintaining a low turnover rate and by promoting existing talent
  - Offering Inclusion & Diversity Education to increase awareness about the value and impact of differences
  - Supporting leadership development by encouraging associates to volunteer to serve on Baird's Business Diversity Council and our ARGs

TOTAL COMPOSITION OF WORK FORCE									
	African American	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native	Caucasian (Non Hispanic)	Total Employees	Percent (%) Minority	Gender Male	Gender Female
Occupation	**Full Time**	**Full Time**	**Full Time**	**Full Time**	**Full Time**	**Full Time**	**Full Time**	**Full Time**	
Officials & Managers	0	0	0	0	0	**0**	**0.00%**	0	0
Professionals	7	2	2	0	45	**56**	**19.64%**	26	30
Technicians	0	0	0	0	0	**0**	**0.00%**	0	0
Sales Workers	0	0	0	0	0	**0**	**0.00%**	0	0
Office/Clerical	0	0	0	0	0	**0**	**0.00%**	0	0
Semi-Skilled	0	0	0	0	0	**0**	**0.00%**	0	0
Unskilled	0	0	0	0	0	**0**	**0.00%**	0	0
Service Workers	0	0	0	0	0	**0**	**0.00%**	0	0
Other	0	0	0	0	0	**0**	**0.00%**	0	0
Total	**7**	**2**	**2**	**0**	**45**	**56**	**19.64%**	**26**	**30**

Baird Advisors
Competitive Advantages

- Stable team of experienced investment professionals
- Risk-controlled discipline delivering over 30 years of competitive returns
- Consistency of returns versus peers
- Strategically sized, emphasizing bottom-up versus top-down approach
- All cash bonds, all U.S. dollar-denominated, no derivatives, no leverage
- Attractive expense ratio benefits future returns (30 bps Institutional Class)
- Employee-owned, strong financial services firm

Baird Advisors - Representative Clients

Average client relationship exceeds 12 years

BAIRD

LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Insurance & Healthcare

- Broward Health
- Northwestern Medicine
- Premera Blue Cross
- Anthem Blue Cross
- Meritter
- Trinity Health
- Maryland Auto Insurance
- Great River Health Systems
- Guthrie
- Quartz
- Mack
- Texas Mutual
- UW Health University of Wisconsin Hospital and Clinics
- Gundersen Lutheran
- WPS Health Solutions
- WCRB
- BlueCross BlueShield of North Carolina
- AdvocateAuroraHealth
- Froedtert Health
- Hamilton Health Care System
- UAW
- Boulder Community Hospital
- Harris Health System
- BaylorScott&White Health

Retirement Plans

- North Central States Regional Council of Carpenters' Benefit Funds
- Goodyear
- SFERS San Francisco Employees' Retirement System
- thyssenkrupp
- Milwaukee ERS Employes' Retirement System
- MTA
- MedStar Health
- City of Baltimore
- ACERA
- Kohl's
- Johnson Controls
- Memorial Hermann
- Harley-Davidson Motor Cycles
- Amalgamated Transit Union
- Colgate-Palmolive
- City of Detroit Michigan
- Nebraska Public Power District
- ATI
- Publix Super Markets

Foundation / Endowment

- University of Colorado Boulder
- Vidant Health
- The Saint Paul Foundation
- Presence Health
- Make-A-Wish
- The Lynde and Harry Bradley Foundation
- Charter School Growth Fund
- Sam Houston State University
- National Christian Foundation
- The University of New Hampshire
- Tuskegee University
- City of Hope
- The Catholic Community Foundation
- The University of Georgia
- C-SPAN
- Greater Milwaukee Foundation
- Eastern Michigan University
- Wayne State
- Adelphi University
- Marquette University
- University of Wisconsin Foundation
- Medical College of Wisconsin

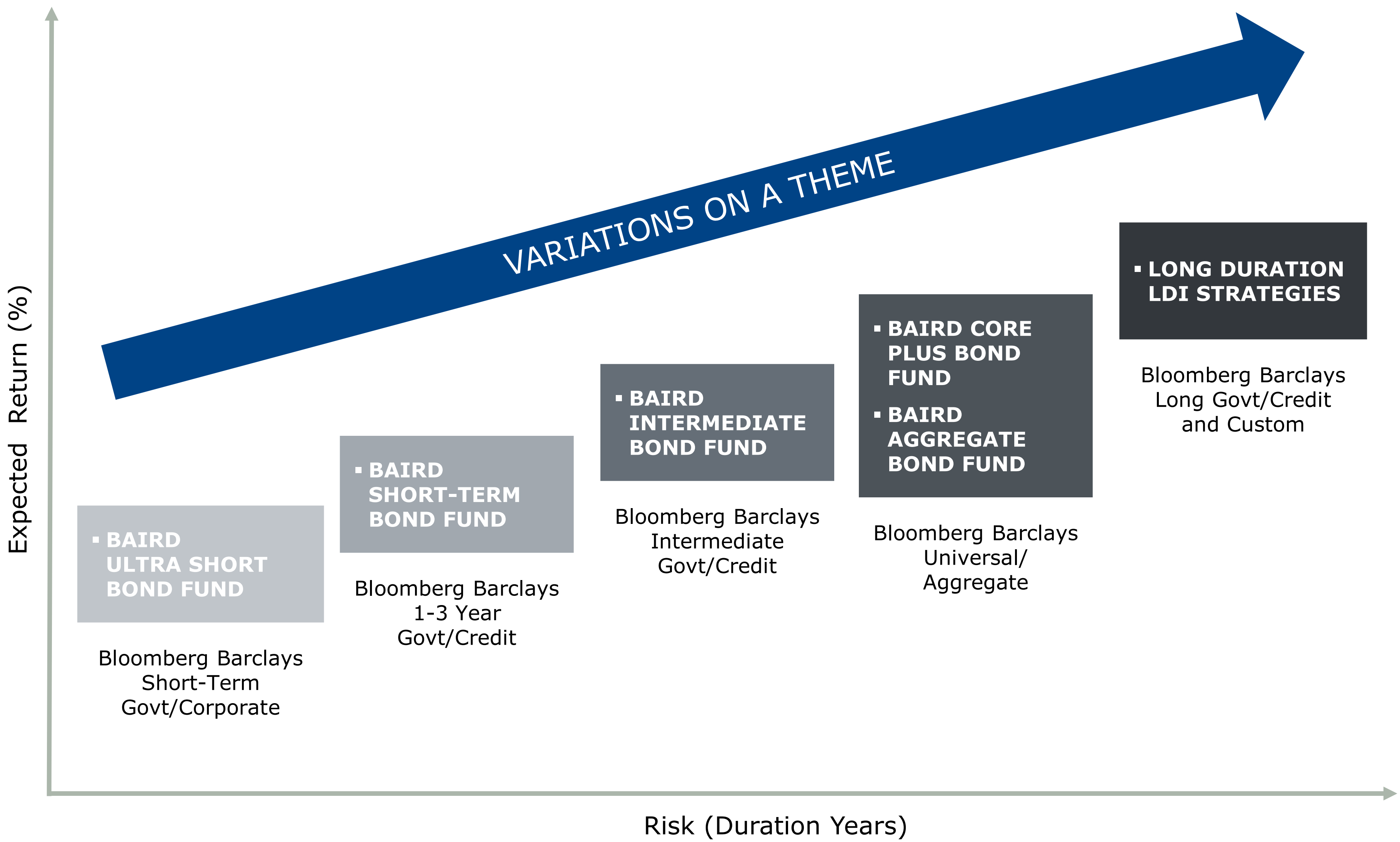
Customized

- Ascension Health
- Summa Health System
- Christian Brothers Services
- West Bend
- Ancilla Systems
- BloodCenter of Wisconsin
- Children's Hospital of Wisconsin
- the Pension Fund
- Virginia Association of Counties
- Green Bay Packers
- Texas Trust
- Gavi The Vaccine Alliance
- VML Virginia Municipal League
- Delphi
- WELS
- Local 139
- Diocese of Joliet in Illinois
- Nasdaq
- KERA KXT 91.7 Public Media for North Texas

Note: The clients listed above represent various industry groups and geographic locations and were not selected based upon performance. Their appearance is not an indication of approval or disapproval of the investment management services provided.

Structured, Risk-Controlled Taxable Portfolio Management

Consistent Approach Applied Across Risk Spectrum



Section 2

Philosophy/Process Overview

Investment Philosophy & Process:
A Two-Fold Approach

Step 1: Structure Portfolio to Achieve Return of the Benchmark

Complete Understanding of the Benchmark	▪ Quantify duration, sector and subsector weightings ▪ Evaluate pricing, turnover and projected changes to benchmarks ▪ Purchase only U.S. dollar-denominated securities
Remain *Duration Neutral* to Control Portfolio Risk	▪ Precisely match duration to index at all times ▪ Immediately adjust portfolio as contributions and withdrawals occur ▪ Rebalance at month-end to match benchmark changes
Maintain Strict Adherence to Portfolio Guidelines	▪ Continuously monitor risk-control measures ▪ Use scenario analysis ▪ Compliance systems for all portfolio trades
Emphasis on Security Structure/Credit Research	▪ Evaluate specific security covenants, cash flows and liquidity concerns ▪ Assess company financials and management ▪ Consider prospects for sector and position in industry

Investment Philosophy & Process:
A Two-Fold Approach

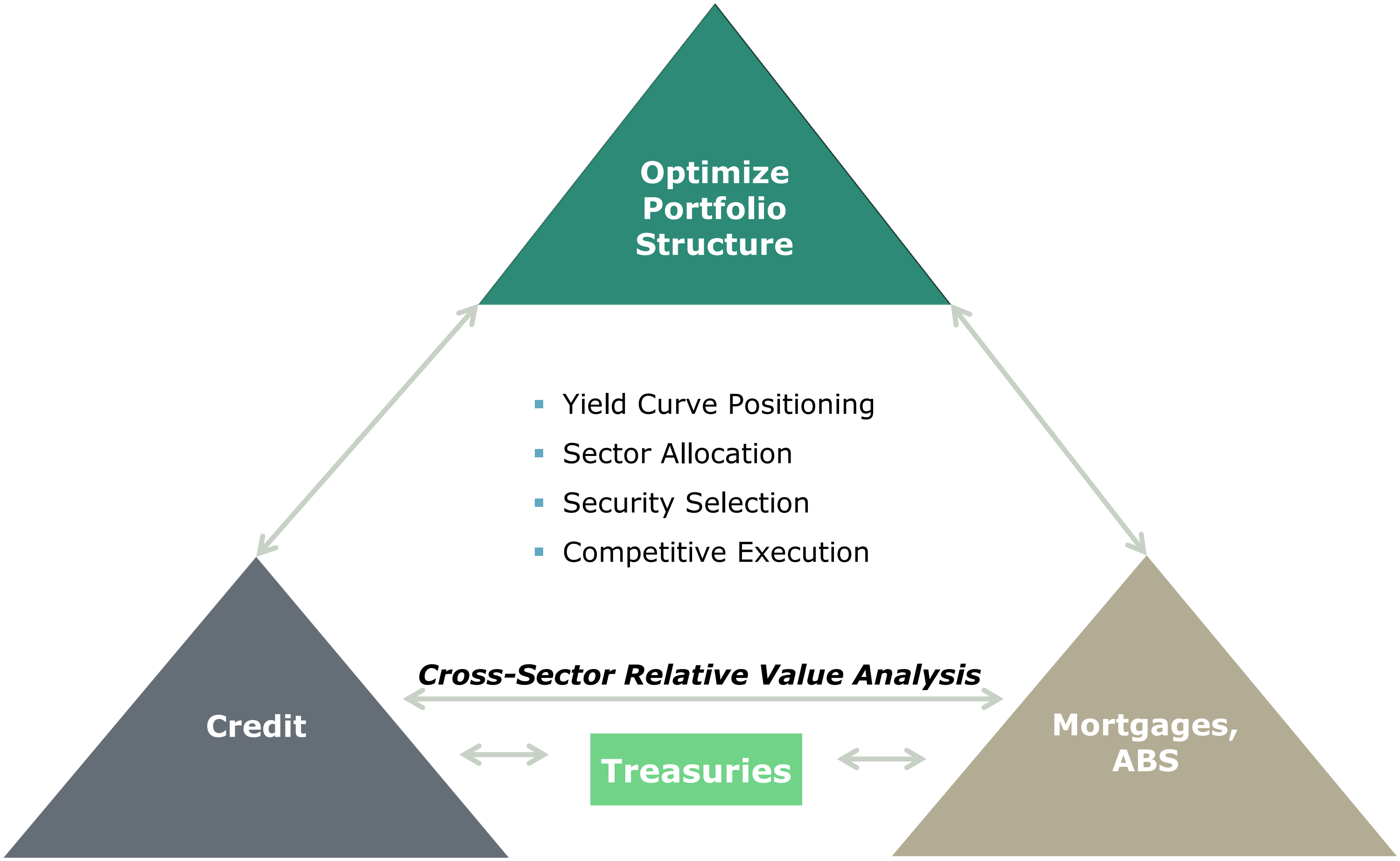
Step 2: Add Incremental Value through Bottom-Up, Risk-Controlled Process

Sources of Added Value:	
Yield Curve Positioning	▪ Optimize yield and "roll down" ▪ Analyze yield curve on a continual basis
Sector Allocation	▪ Evolve sector allocations around long-term biases ▪ Focus on relative value ▪ Yield spreads and underlying risks change constantly
Security Selection	▪ Structure ▪ Attributes ▪ Liquidity
Competitive Execution	▪ Capitalize on market inefficiencies ▪ Receive timely market information ▪ Utilize long-standing dealer relationships

We seek to consistently add 15-50 basis points of incremental return

Consistent, Competitive Performance Over Complete Market Cycles

Implementation – A Holistic Approach



All cash bonds, no derivatives, 100% U.S. dollar-denominated, no leverage

Risk control is the foundation of our investment discipline

Research

Internal Research Drives Our Investment Process

Internal Expertise: Identifying Value from the Bottom Up

Yield Curve Positioning

- Optimize yield
- Search for roll-down opportunities
- Maintain neutral duration

Mortgages/ ABS

- Analyze both structure and collateral
- Prefer senior secured with limited cash flow timing risk, lower LTV
- Top-tier originators and servicers

Credit

- Look at specific issues by structure
- Review issuers by fundamentals, management and benchmark weighting
- Consider sector trends, regulatory environment and benchmark weighting

External Tools:

- **Interactive Data BondEdge**: Portfolio and benchmark analysis, guideline compliance
- **Barclays Live:** Benchmark analysis
- **Bloomberg:** Benchmark analysis, Security analysis, company research
- **MarketAxess:** Corporate trading platform and TRACE data market monitor
- **TradeWeb:** Treasury and agency trading platform, historical curve information
- **Intex Solutions and Bond Studio:** Residential and commercial loan analysis
- **Yield Book:** Option-adjusted spread (OAS) and scenario analysis
- **CreditSights:** Independent credit research from a team of highly ranked analysts
- **Investor Tools Perform:** Municipal portfolio management and analytics system
- **Custom Index Manager:** Municipal portfolio risk and attribution system
- **Access to Baird equity and credit analysts and other Wall Street-leading fixed income and equity research**

Baird Advisors Credit Strategy

Risk-controlled approach with broad issuer diversification

BAIRD

Bottom-up approach, low turnover

Intensive fundamental credit analysis

- Operating risks – industry dynamics, stability of demand, barriers to entry, relative competitive advantage, regulatory environment
- Financial risks – current leverage and trends, liquidity profile, revenue and income trends, free cash flow profile, ratio analysis, equity trends and valuation
- Qualitative assessment of management

Assessment of macro risk environment and industry dynamics, both cyclical and secular

Focus on optimized execution – utilize both new issue and secondary markets

Sector allocation and security selection - focus on spread, yield curve positioning, ranking within capital structure, covenants/guarantees, benchmark weighting, availability and size of issue and bond dollar price

Experience is key in assessing risk and building portfolios

Mortgage and Asset-Backed (MBS/ABS) Portfolio Positioning

Maintain Underweight

Agency MBS

- Spreads remain tight on historical basis driven by Fed's reinvestment program
- Fed reducing reinvestment will increase market net supply and put upward pressure on spreads
- Elevated interest rate volatility will negatively impact returns given heightened prepayment uncertainty (negative convexity)

Maintain Overweight

Non-Agency, Senior Class RMBS, CMBS and ABS

- Limited prepay/cash flow timing risk and attractive valuations versus other spread sectors
- Supported by strong U.S. consumer and real estate fundamentals
- Favorable supply/demand versus investment-grade credit
- Provides additional broad sector diversification to the portfolio in secured form

Section 3

Update on LACERS

Risk Controls in Taxable Portfolio Construction

DURATION NEUTRAL TO BENCHMARK

U.S. TREASURY AND GOVERNMENT AGENCY SECURITIES
- Emphasized for long duration exposures
- Used to match duration

CREDIT SECURITIES
- Overall credit positioning generally shorter on the yield curve versus respective benchmark
- Emphasize sectors and industries that give high priority to stable credit rating
- Broad issuer diversification overall; increases for lower credit quality

MORTGAGE-BACKED AND ASSET-BACKED SECURITIES
- Favor more prepayment protection than U.S. Government Agency MBS (positive convexity "tilt")
- Focus on most senior class in deal structure if Non-U.S. Government guaranteed

CASH BONDS
- No foreign currency
- No derivatives
- No leverage

ONGOING PORTFOLIO MONITORING
- Continuous review of portfolios for adherence to stated guidelines and objectives

RISK CONTROL IS THE FOUNDATION OF OUR INVESTMENT DISCIPLINE

Portfolio Positioning

- **Attractive portfolio yield advantages over respective benchmarks**
- **Portfolios positioned to benefit from spread sector outperformance**
  - Maintain nominal underweight to U.S. Treasury sector
  - Opportunities across spread sectors more selective
  - Maintain modest overweight to spread sectors on duration-weighted basis
- **Portfolios positioned to modestly benefit from flattening of the yield curve**
  - Duration-neutral overall
  - Modest underweight to front end of yield curve
  - Continue to emphasize securities with attractive "rolldown" (short end of the yield curve)
  - De-emphasize securities with extension risk
- **Continued focus on risk control**
  - Emphasize diversification
  - Maintain coupon advantage
- **Experienced team and risk-controlled process key to long-term success**

LACERS

Summary of Investment Objectives and Portfolio Guidelines

Investment Objectives:

To provide a rate of return that outperforms the total return of the benchmark, represented by the Bloomberg Barclays Intermediate Government/Credit Index, by 15 to 40 basis points, net of fees, annualized over a full market cycle and to perform in the top half of a peer group of similar style fixed income managers over a full market cycle.

Authorized Investments:

U.S. dollar-denominated investment-grade securities including but not limited to U.S. Treasury, government agency, mortgage-backed, asset-backed and corporate securities. All securities and security types within the chosen benchmark are included in the authorized universe.

Portfolio Guidelines:

- Securities rated BBB- or higher by Moody's, Standard & Poors or Fitch at time of purchase
- The manager may hold any security that falls below investment grade by all major rating agencies subject to notifying the Retirement System in writing.
- Average portfolio quality A+
- Issuer limits, at market at time of purchase, excluding U.S. Government and Agency issues and non-US sovereign issues:
    - AAA – 5%
    - AA – 4%
    - A – the greater of 2% or 2x the index weight
    - BBB – the greater of 1% or 2x the index weight
- Sector limits at time of purchase:
    - Mortgage-backed securities, including CMOs – 30%
    - Asset-backed securities – 30%
    - Municipal securities – 20%
    - 144A securities – 20%
- Maximum 25% in a single industry
- Maximum 25% in a single country, excluding the U.S.
- Portfolio must follow Sudan Divestment and Exclusion Policy

LACERS
Portfolio Characteristics as of October 31, 2018

Yield to Maturity	3.50%	3.31%	Portfolio Yield Advantage +0.19% to the Bloomberg Barclays Interm Govt/Credit Index
Average Coupon	**2.95%**	2.63%	
Duration	**3.88 years**	3.88 years	
Average Maturity	**4.30 years**	4.29 years	

	LACERS	Bloomberg Barclays Interm Govt/Credit Index	LACERS	Bloomberg Barclays Interm Govt/Credit Index
	Nominal Weighted Composition		Duration Weighted Composition	
Quality Breakdown (%)				
U.S. Treasury	**43.0**	59.5	**47.8**	57.6
U.S. Agency	**3.3**	2.2	**3.3**	1.5
Aaa	**8.8**	4.2	**6.1**	3.6
Aa	**5.2**	4.0	**3.4**	3.6
A	**17.1**	13.8	**15.0**	15.0
Baa	**21.7**	16.3	**23.8**	18.7
Below Baa	**0.9**	0.0	**0.6**	0.0
	100.0%	100.0%	**100.0%**	100.0%
Sector Breakdown (%)				
U.S. Treasury	**43.0**	59.5	**47.8**	57.6
U.S. Agency (Non-MBS)	**0.0**	2.2	**0.0**	1.5
Other Govt. Related	**2.1**	6.6	**1.9**	6.1
Industrials	**20.3**	17.6	**21.5**	19.5
Utilities	**1.5**	1.5	**1.9**	1.8
Financials	**20.4**	12.6	**17.3**	13.5
U.S. Agency RMBS	**0.1**	0.0	**0.0**	0.0
Non-Agency RMBS	**1.3**	0.0	**0.8**	0.0
U.S. Agency CMBS	**3.2**	0.0	**3.3**	0.0
Non-Agency CMBS	**3.6**	0.0	**3.9**	0.0
Other ABS	**2.6**	0.0	**1.6**	0.0
Cash	**1.9**	0.0	**0.0**	0.0
	100.0%	100.0%	**100.0%**	100.0%
Number of Issues	**164**	4,846		
Market Value	**$256,241,409**			

LACERS
Investment Performance Summary

	LACERS Portfolio *Gross of Fees*	Bloomberg Barclays Interm Govt/Credit Index
2005 (Apr-Dec)	2.68%	2.47%
2006	4.86%	4.08%
2007	6.57%	7.39%
2008	0.91%	5.08%
2009	9.03%	5.24%
2010	8.51%	5.89%
2011	6.63%	5.80%
2012	6.26%	3.89%
2013	0.12%	-0.86%
2014	3.70%	3.13%
2015	1.17%	1.07%
2016	3.54%	2.08%
2017	2.75%	2.14%
2018 (1st Qtr.)	-0.87%	-0.98%
(2nd Qtr.)	0.01%	0.01%
(3rd Qtr.)	0.35%	0.21%
(Oct.)	-0.16%	-0.14%
Year-to-Date	-0.68%	-0.90%

Cumulative Return	**72.30%**	**57.40%**
Annualized Return	**4.09%**	**3.40%**

The performance is presented on a cumulative compound and annualized basis and does not reflect the deduction of investment advisory fees. Returns would be reduced by an advisory fee and other fees such as custodial expenses; refer to the client contract for client specific fee schedule. All returns are calculated on a time weighted, total return basis. The results shown should not be considered representative of future investment returns. Baird Advisors relies on securities valuations provided by client's custodian for purposes of performance reports. The Baird Advisors Brochure is available upon request.

LACERS
Investment Performance Summary

	LACERS Portfolio *Net of Fees*	Bloomberg Barclays Interm Govt/Credit Index
2005 (Apr-Dec)	2.57%	2.47%
2006	4.71%	4.08%
2007	6.42%	7.39%
2008	0.76%	5.08%
2009	8.87%	5.24%
2010	8.36%	5.89%
2011	6.50%	5.80%
2012	6.13%	3.89%
2013	0.00%	-0.86%
2014	3.58%	3.13%
2015	1.05%	1.07%
2016	3.41%	2.08%
2017	2.62%	2.14%
2018 (1st Qtr.)	-0.91%	-0.98%
(2nd Qtr.)	-0.02%	0.01%
(3rd Qtr.)	0.32%	0.21%
(Oct.)	-0.17%	-0.14%
Year-to-Date	-0.78%	-0.90%

Cumulative Return	**69.22%**	**57.40%**
Annualized Return	**3.95%**	**3.40%**

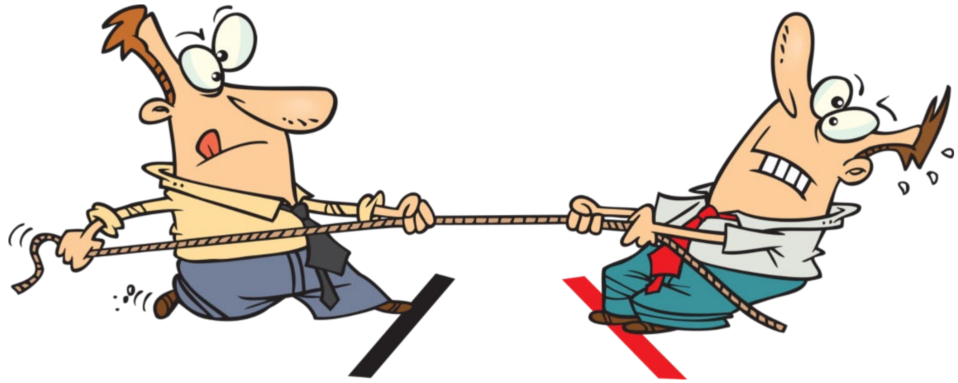
The performance is presented on a cumulative compound and annualized basis net of fees. Returns would be reduced by an advisory fee and other fees such as custodial expenses; refer to the client contract for client specific fee schedule. All returns are calculated on a time weighted, total return basis. The results shown should not be considered representative of future investment returns. Client should review all account statements provided by its custodian and compare those account statements to any account statement provided by Baird Advisors. Baird Advisors relies on securities valuations provided by client's custodian for purposes of performance reports. The Baird Advisors Brochure is available upon request.

Section 4

Current Market Review

Current Environment – Continuation of Gradual

Tug of War Between Cyclical Forces and Secular Trends



What has changed:

Cyclical forces strengthen

U.S. momentum builds as Europe and China Slow, EMs struggle

- U.S. GDP rises to 3% from 2% average in recent years
- "Tax Cuts and Jobs Act" having positive impact

Labor markets near or at "full employment"

- Modest upward pressure on wages likely

Central bank policy in transition

- Global central bank balance sheets peaking

Volatility Returns on fears of higher rates and trade policy uncertainty

What has not changed:

Secular trends continue to restrain growth and inflation

Demographics: Aging population reduces growth in labor force and overall spending

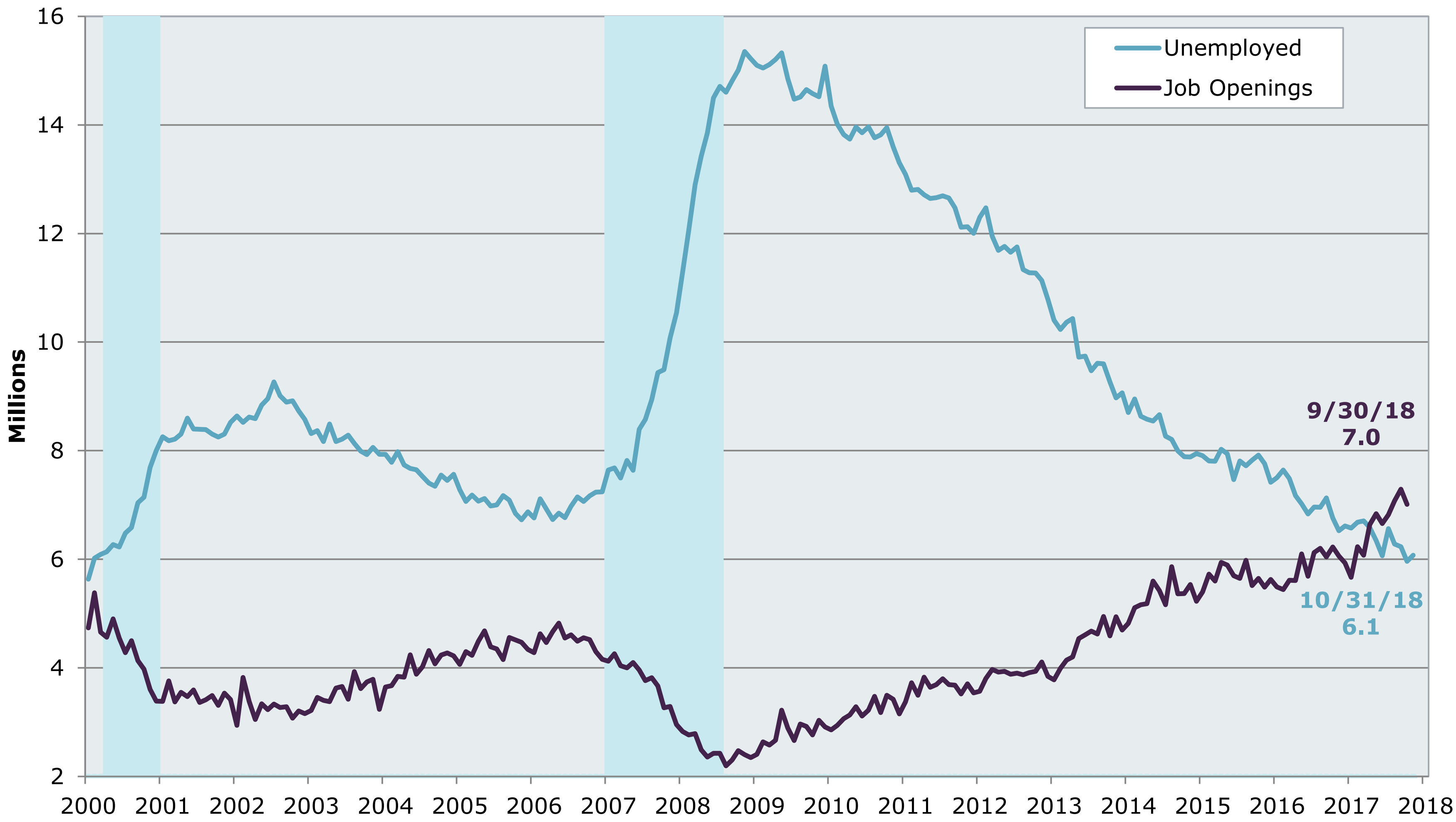
Technology: Displacement of labor by technology limits wage gains and overall inflation

Debt: High Government debt levels and unfunded liabilities limit growth potential

Structural headwinds will limit acceleration in growth and inflation

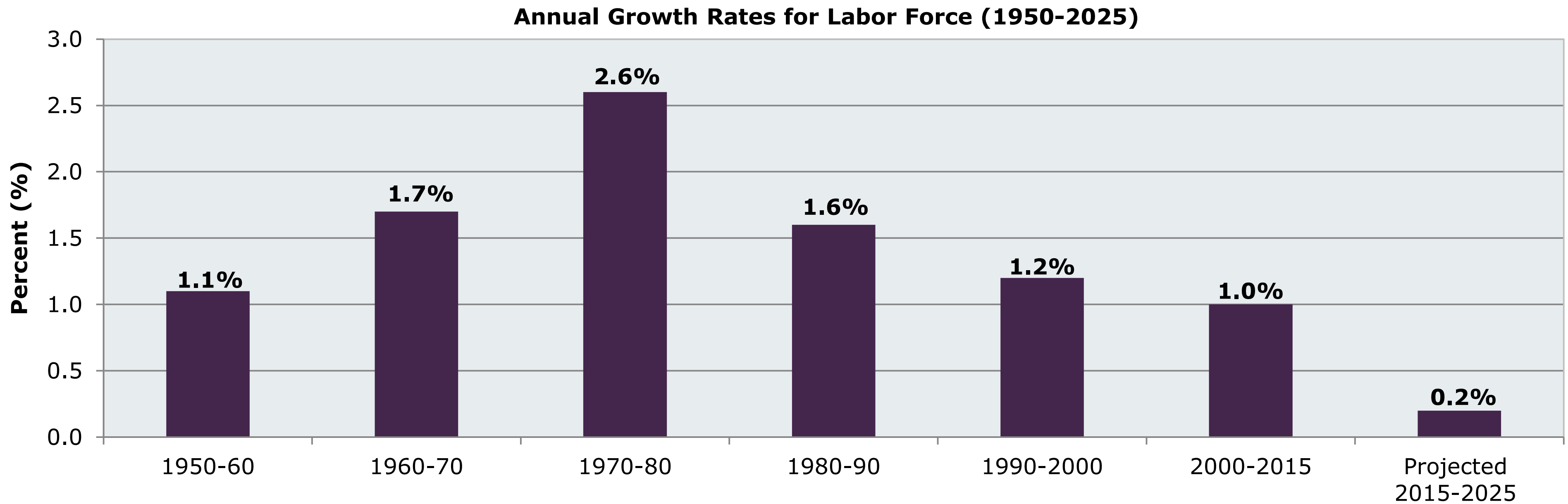
Strength in U.S. Labor Market Continues

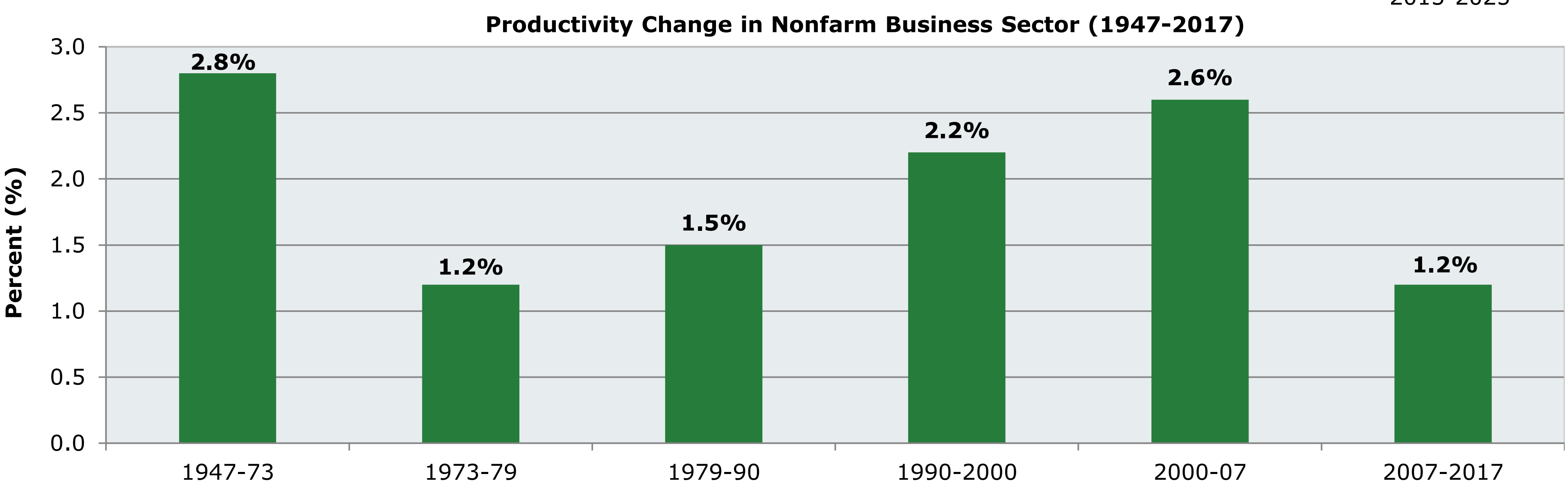
Job Openings Exceed Unemployed Workers



Source: Bloomberg
Data as of: 10/31/18 (Job Openings Next Release: 12/10/18)

Slow Labor Force and Productivity Growth Limit U.S. Growth Potential
Can Productivity Improve?

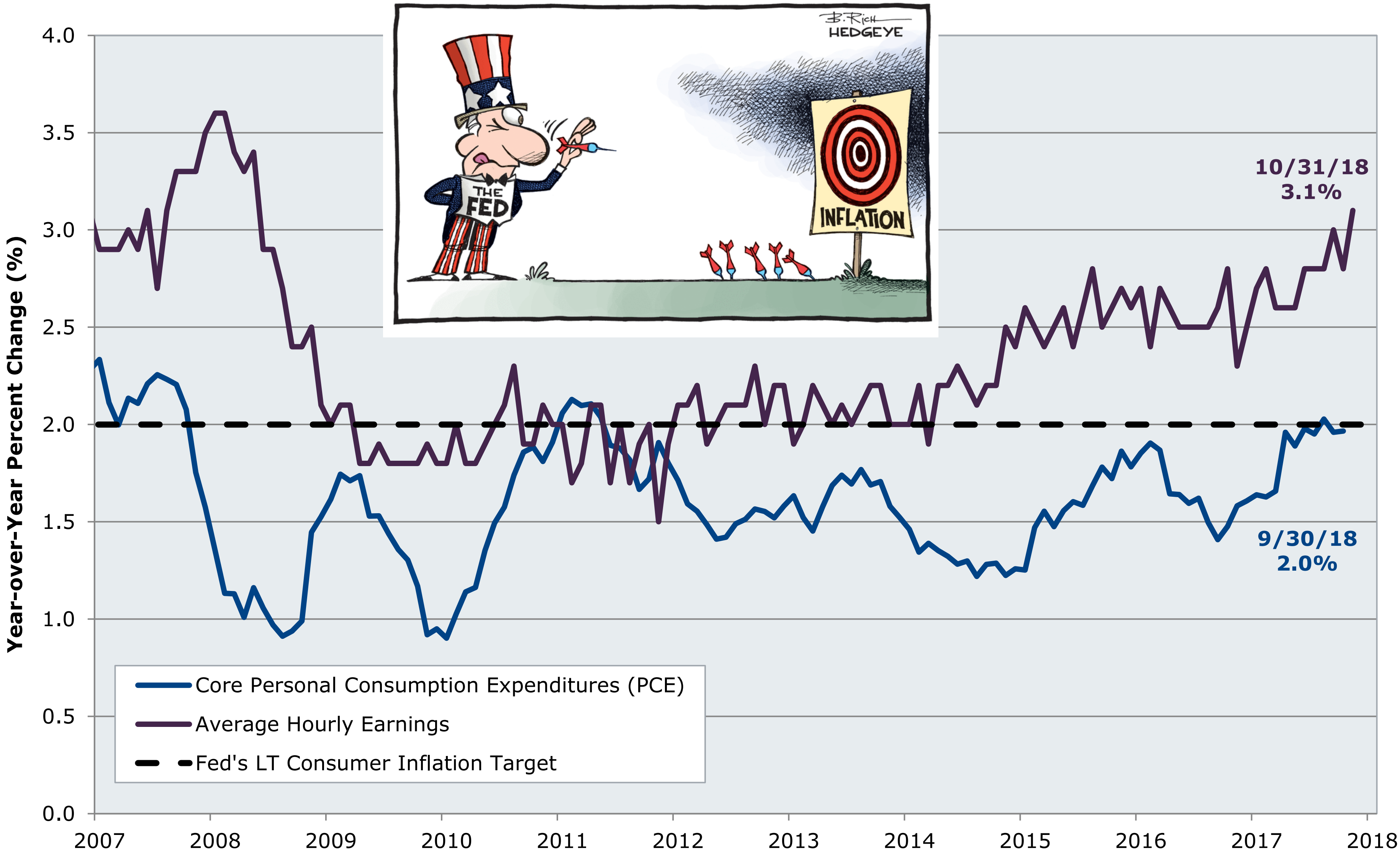




Source: Bureau of Labor Statistics
Data as of: May, 2018

Inflation Firming a Bit

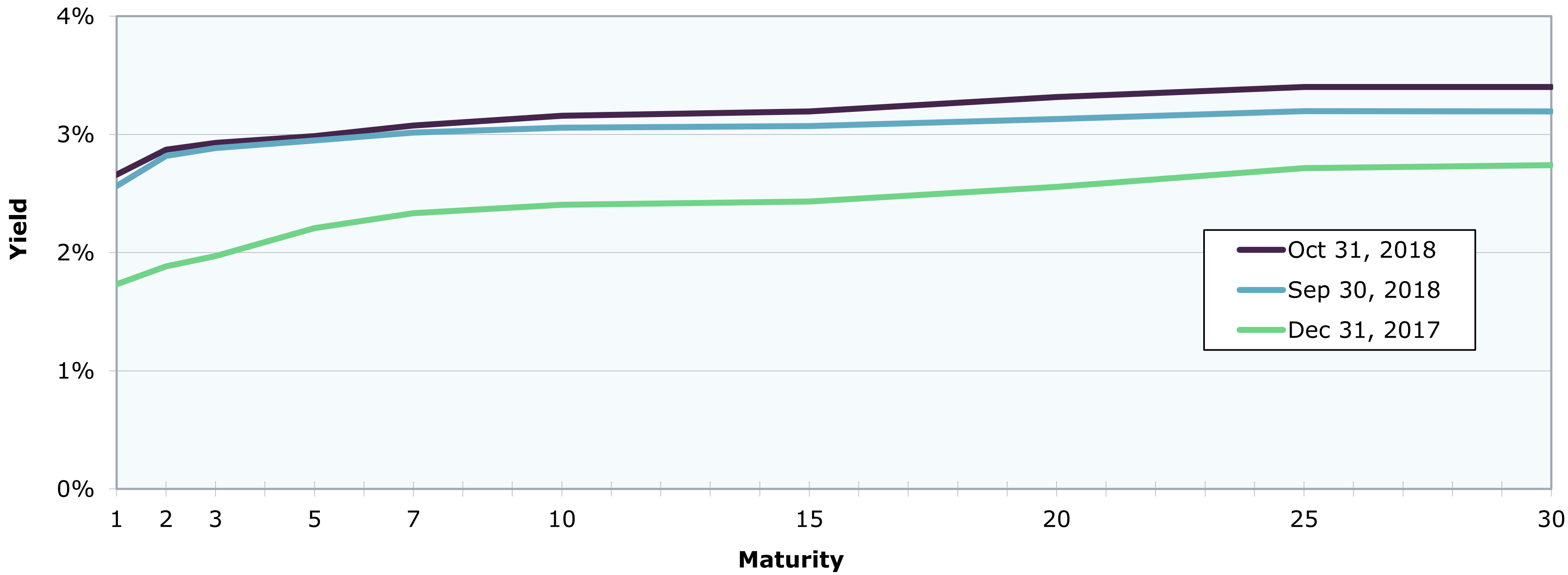
Wage Pressure Still Modest with Consumer Inflation Just Reaching Fed's Target



Source: Bloomberg, B.Rich Hedgeye
Data as of: 10/31/18 (Core PCE Next Release: 11/29/18)

U.S. Treasury Yields

Yields Rise in 2018 with Further Flattening



Maturity	December 31, 2017	September 30, 2018	October 31, 2018	1 Mo. Change	YTD Change
1	1.73%	2.56%	2.66%	0.10%	0.93%
2	1.88%	2.82%	2.87%	0.05%	0.99%
3	1.97%	2.88%	2.93%	0.05%	0.96%
5	2.21%	2.95%	2.99%	0.04%	0.78%
7	2.33%	3.02%	3.08%	0.06%	0.75%
10	2.41%	3.06%	3.16%	0.10%	0.75%
30	2.74%	3.20%	3.40%	0.20%	0.66%

Source: Bloomberg
Data as of: 10/31/18

Investment Grade Corporate Spreads Wider YTD

BAIRD

Option-Adjusted Spreads (bps)												
	6/30/07	2/11/16	12/31/17	6/30/18	9/30/18	10/31/18	Q3 Change	First Half Change	YTD Change	2017 Change	5-Yr. Avg. OAS	Post Crisis Avg.[2]
U.S. Aggregate Index	53	68	36	44	39	44	-5	8	8	-7	46	54
U.S. Agency Sector (Non-MBS)	34	21	14	14	12	13	-2	0	-1	-7	16	19
MBS and ABS Sectors												
U.S. Agency Pass-Throughs	65	21	25	28	28	34	0	3	9	10	26	36
U.S. Agency CMBS	N/A	56	35	45	39	46	-6	10	11	-12	N/A	N/A
Non-Agency CMBS	82	178	79	86	73	85	-13	7	6	-14	107	187
Consumer ABS	57	68	36	47	38	43	-9	11	7	-23	53	66
Investment Grade Credit Sectors												
U.S. Corporates	97	214	93	123	106	118	-17	30	25	-30	125	148
Industrials	104	235	98	126	108	122	-18	28	24	-27	130	139
Utilities	100	165	92	118	106	112	-12	26	20	-25	120	139
Financials	88	185	85	118	102	112	-16	33	27	-35	117	163
Other Govt. Related	47	135	68	79	69	79	-10	11	11	-28	92	99
High Yield Credit Sectors												
U.S. High Yield Corporates	292	839	343	363	316	371	-47	20	28	-66	437	509
Emerging Market Debt[1]	192	846	352	495	485	495	-10	143	143	-136	563	566

[1] Emerging Market Debt is a subindex of the Bloomberg Barclays U.S. Universal Index and is primarily rated below Investment Grade.
[2] Average since 6/30/09.

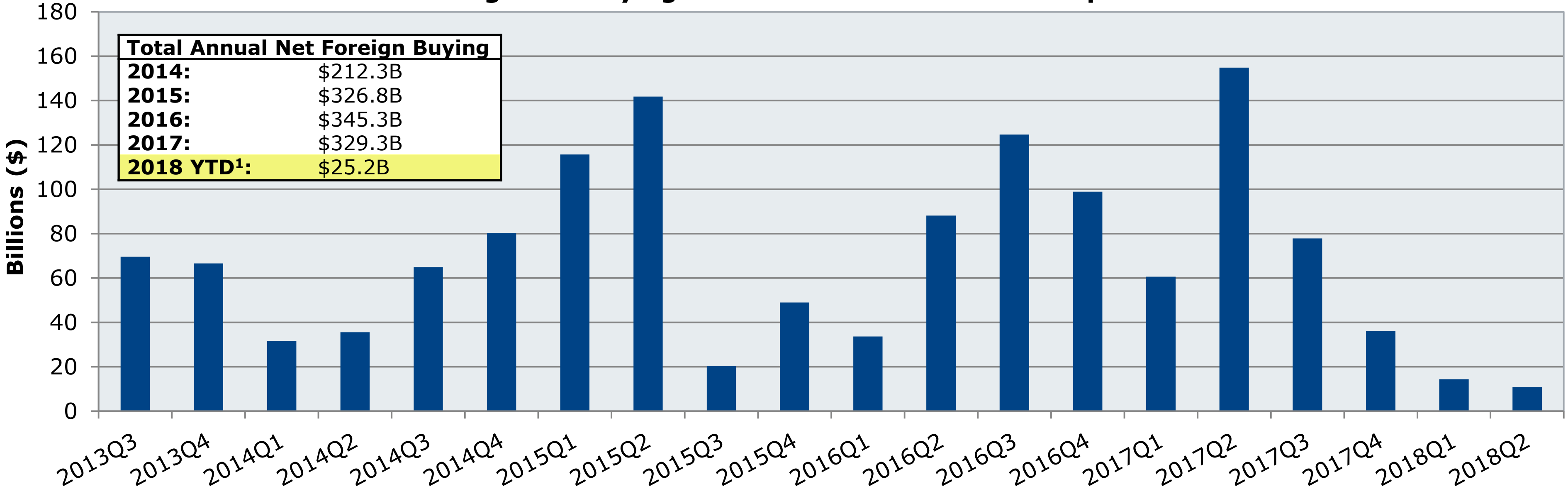
Source: Bloomberg Barclays
Data as of: 10/31/18

Foreign Demand for U.S. Corporates Collapsed

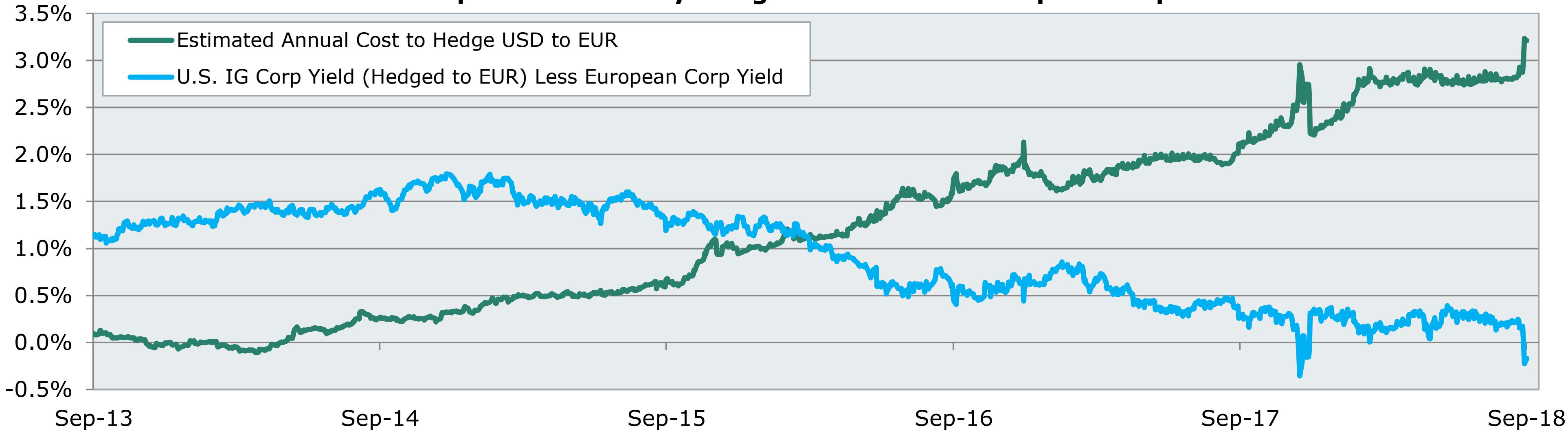
Impact of Increased Hedging Costs

Foreign Net Buying of U.S. Investment Grade Corporate Bonds

Total Annual Net Foreign Buying	
2014:	$212.3B
2015:	$326.8B
2016:	$345.3B
2017:	$329.3B
2018 YTD[1]:	$25.2B



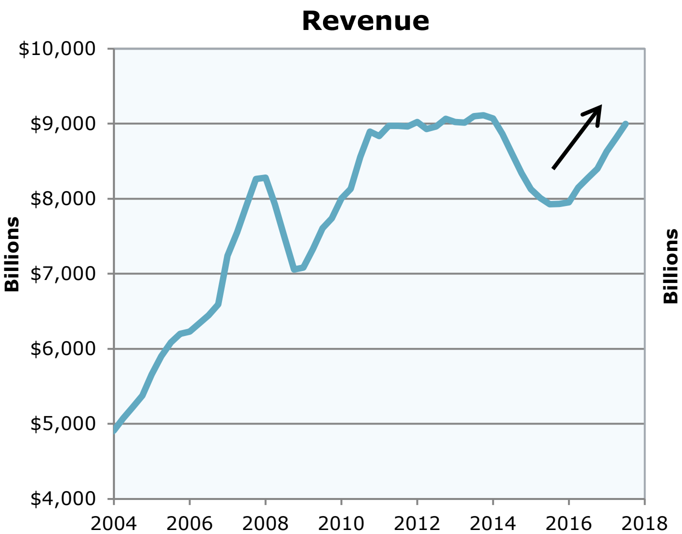
U.S. Corporates Currency-Hedged to Euros vs. European Corporates

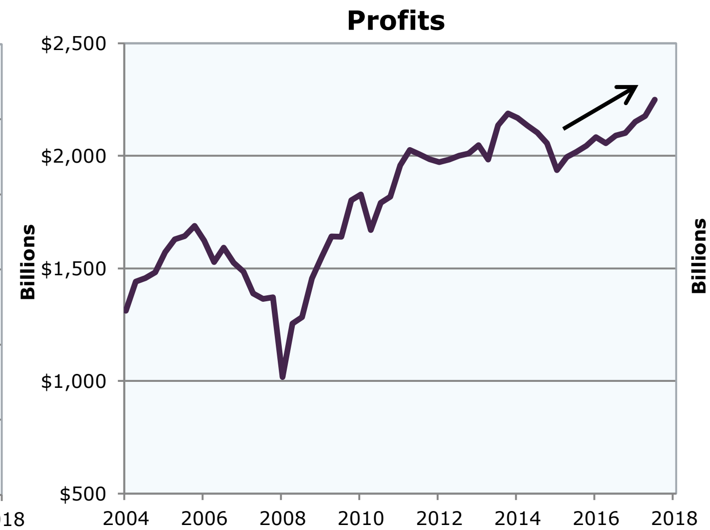


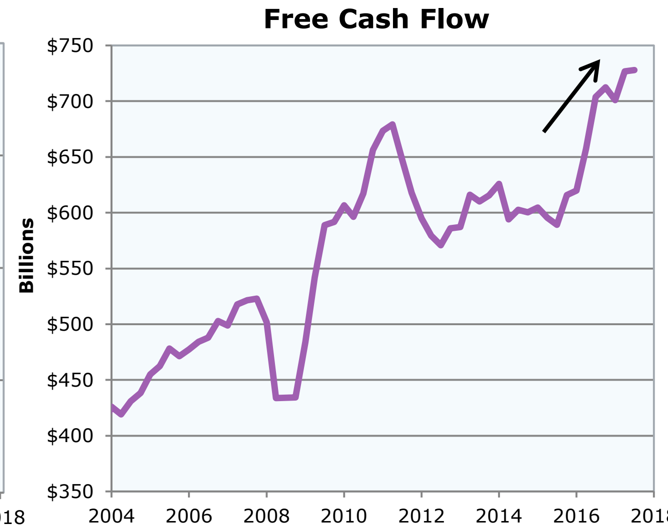
[1] YTD through 6/30/18
Source: Federal Reserve Flow of Funds, Bloomberg
Data as of: 9/30/18 (Foreign Net Buying of U.S. IG Corporate Bonds Next Release: 12/6/18)

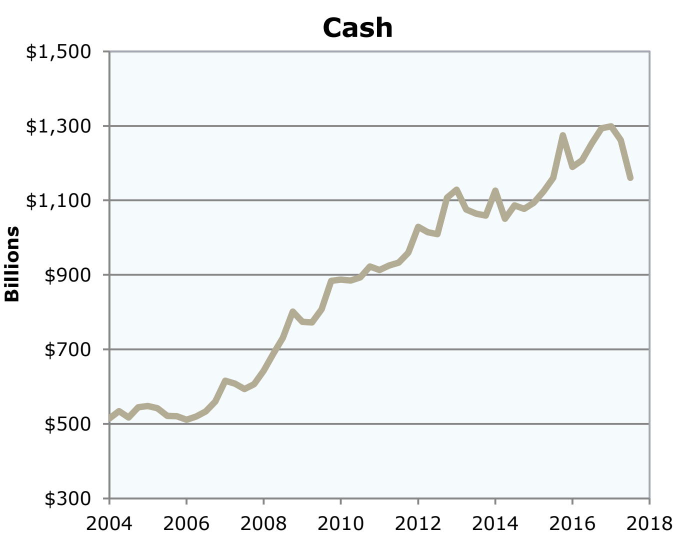
Corporate Credit Fundamentals Remain Solid

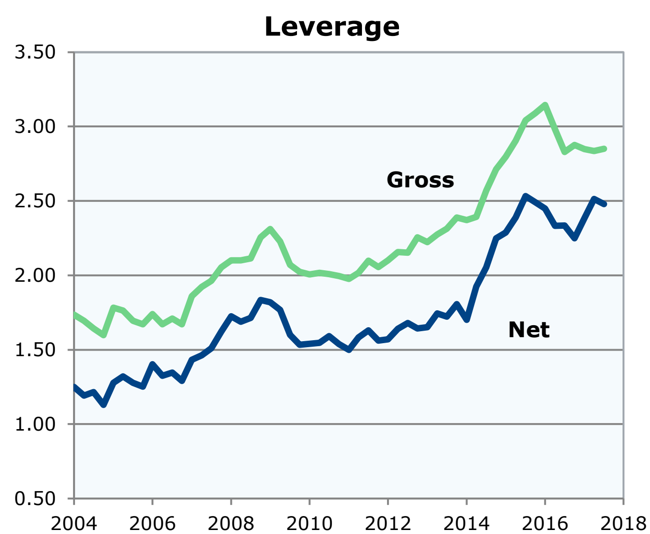
Revenue, Profits and Free Cash Flow are Trending Up

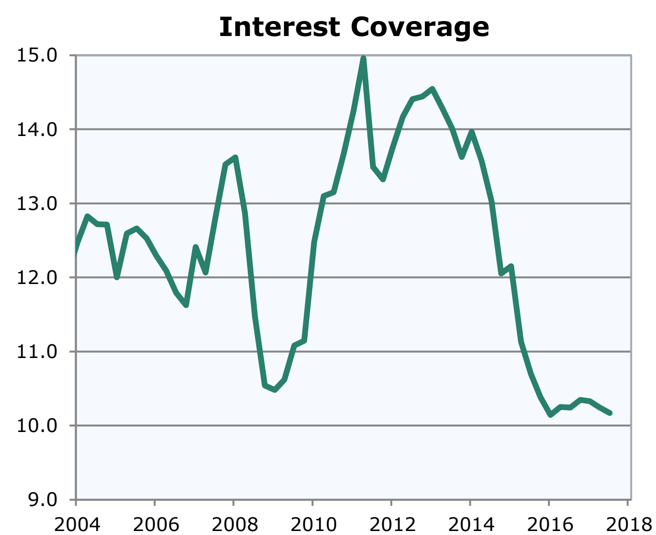






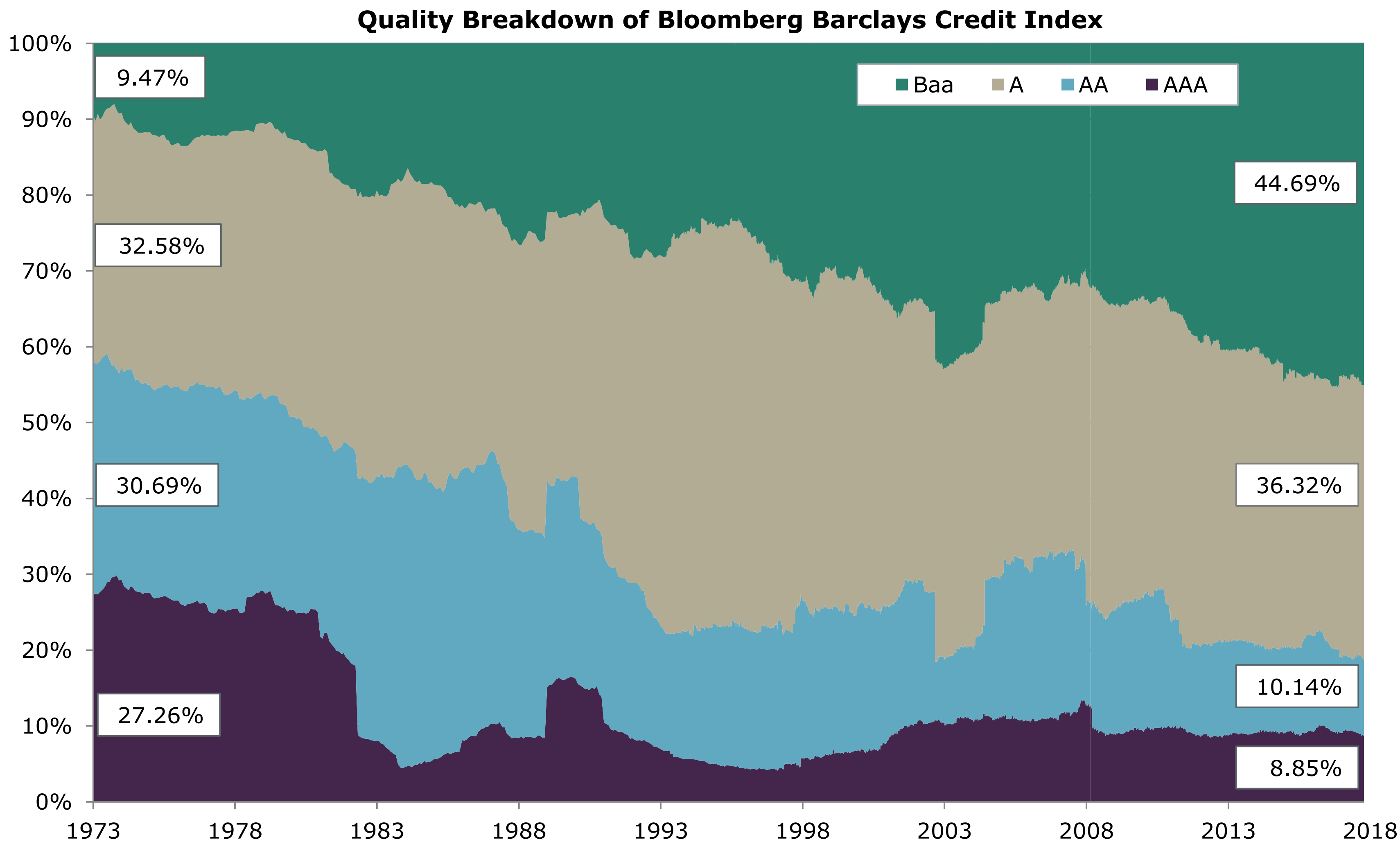






Source: J.P. Morgan, Bloomberg
Data as of: 6/30/18 (Next Release: 12/31/18)

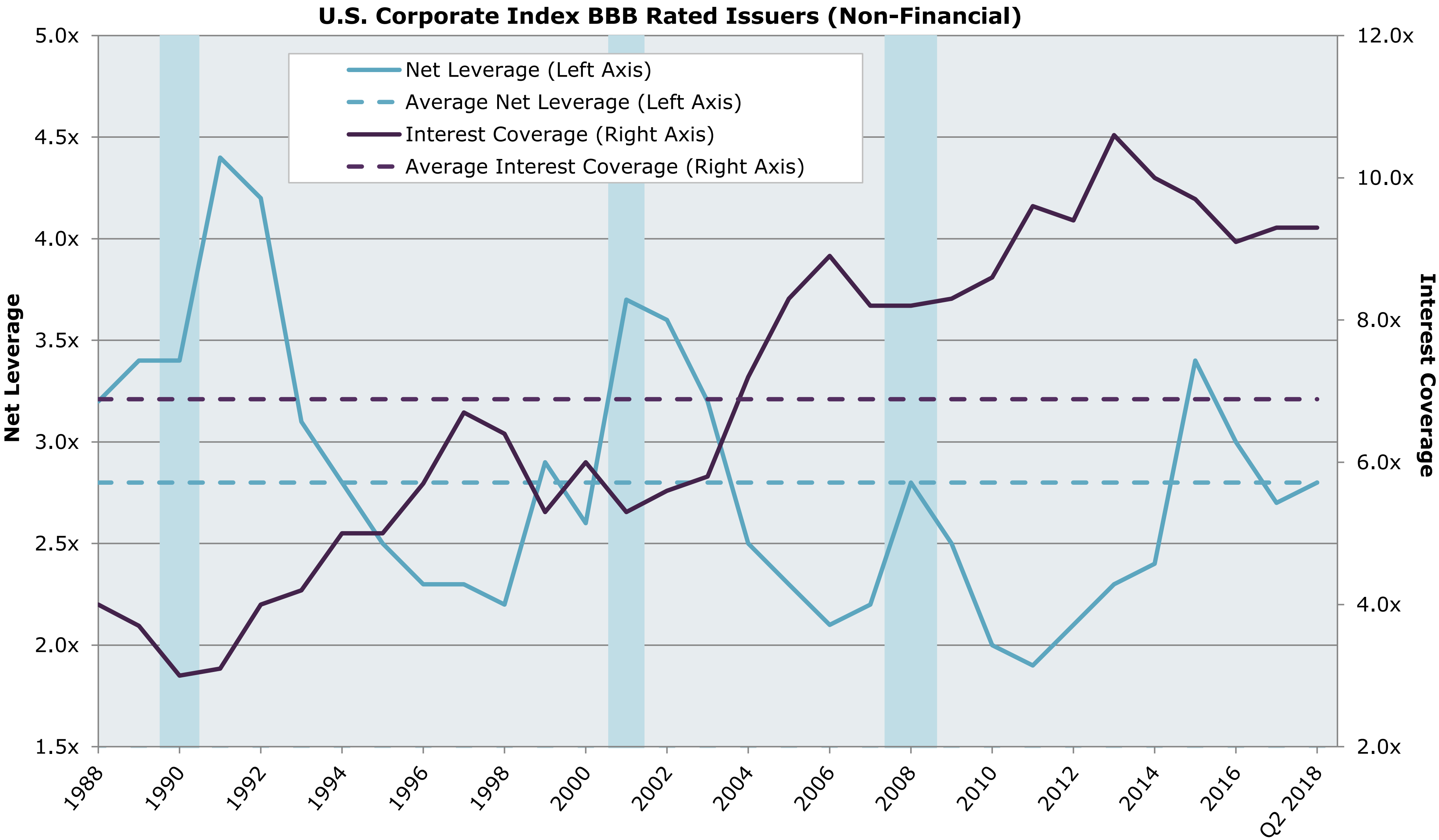
BBB is the Rating of Choice
Intentional Optimization of Balance Sheets



Source: Bloomberg Barclays
Data as of: 10/31/18

BBB Rated Issuers: Leverage and Interest Coverage

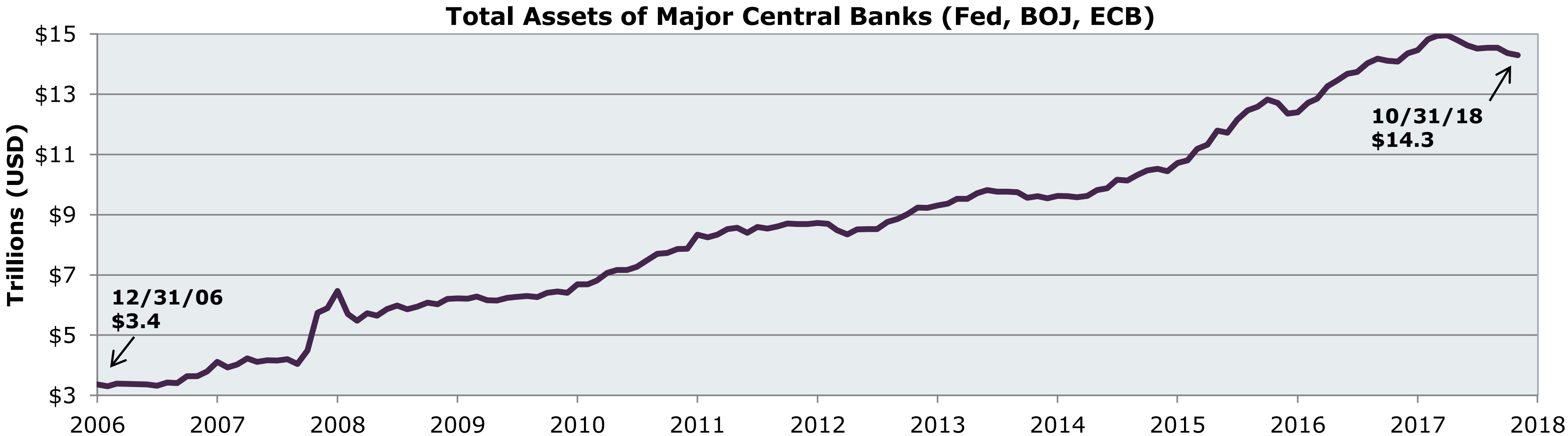
Current Ratios in Line or Better than Historical Averages

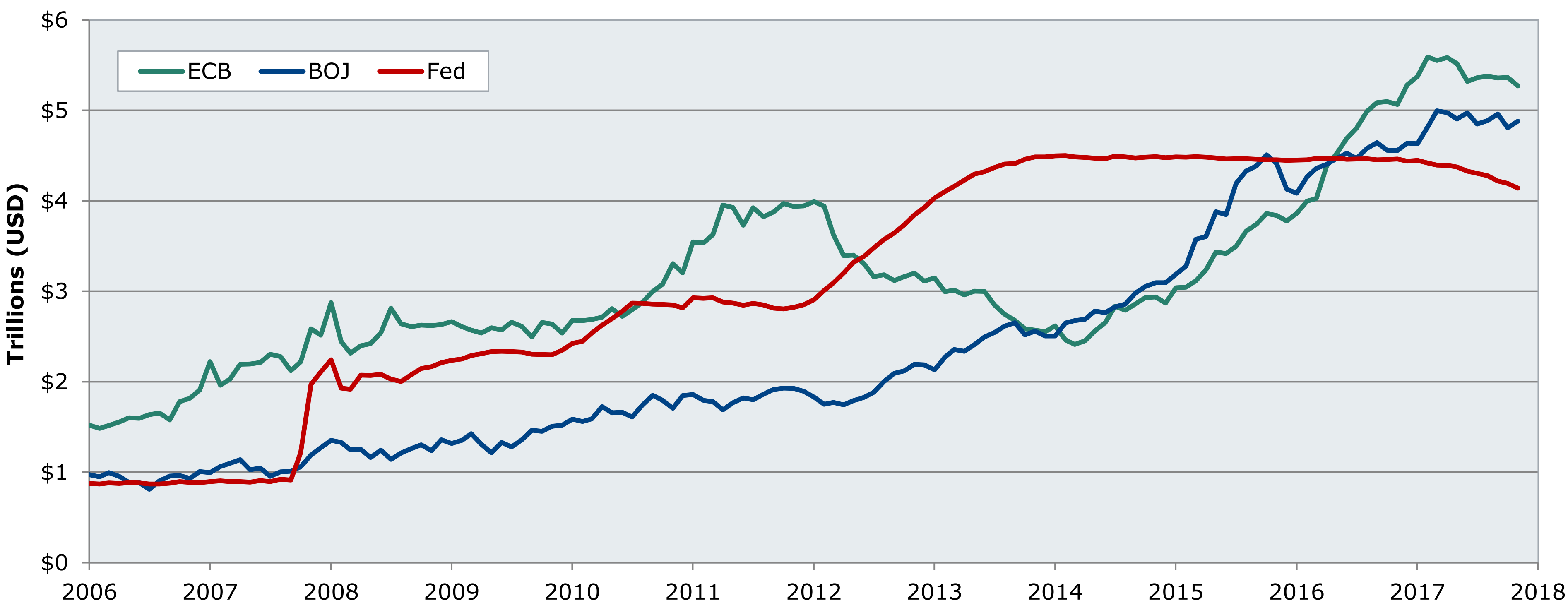


Source: Factset, Compustat, Bloomberg Barclays Indices, Barclays Research
Data as of: 9/19/18

Abundant Liquidity From Major Global Central Banks

The Balance Sheet Unwind Will be Very Gradual

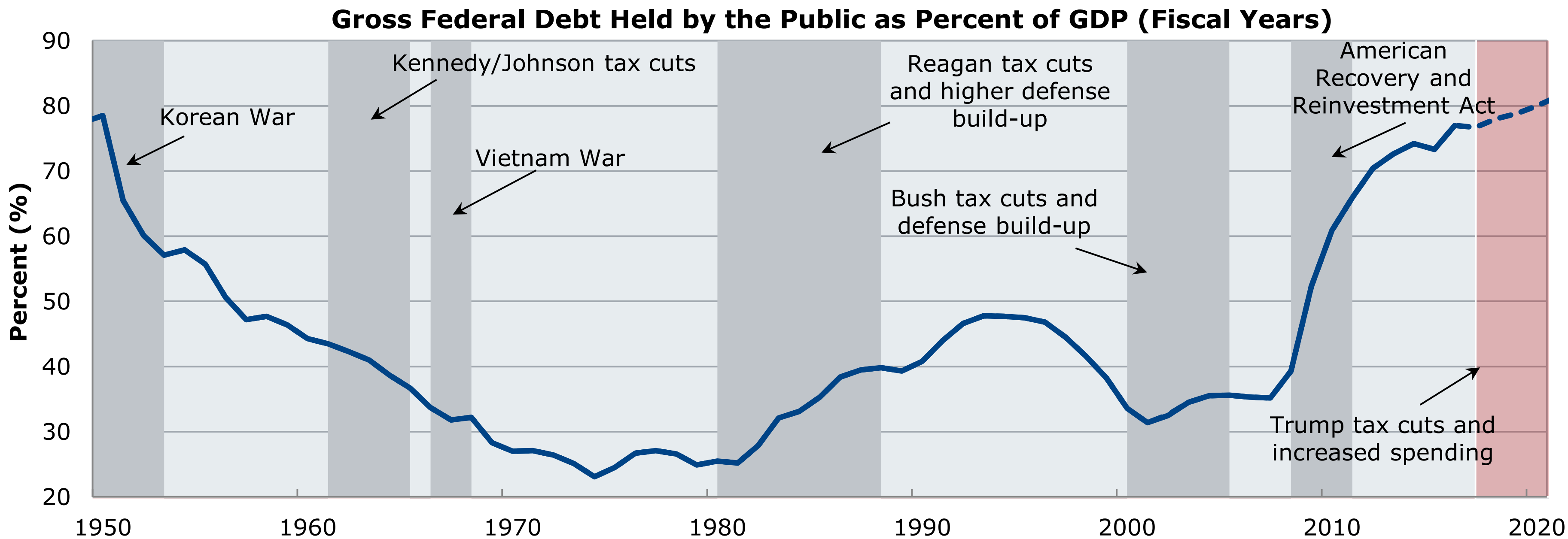


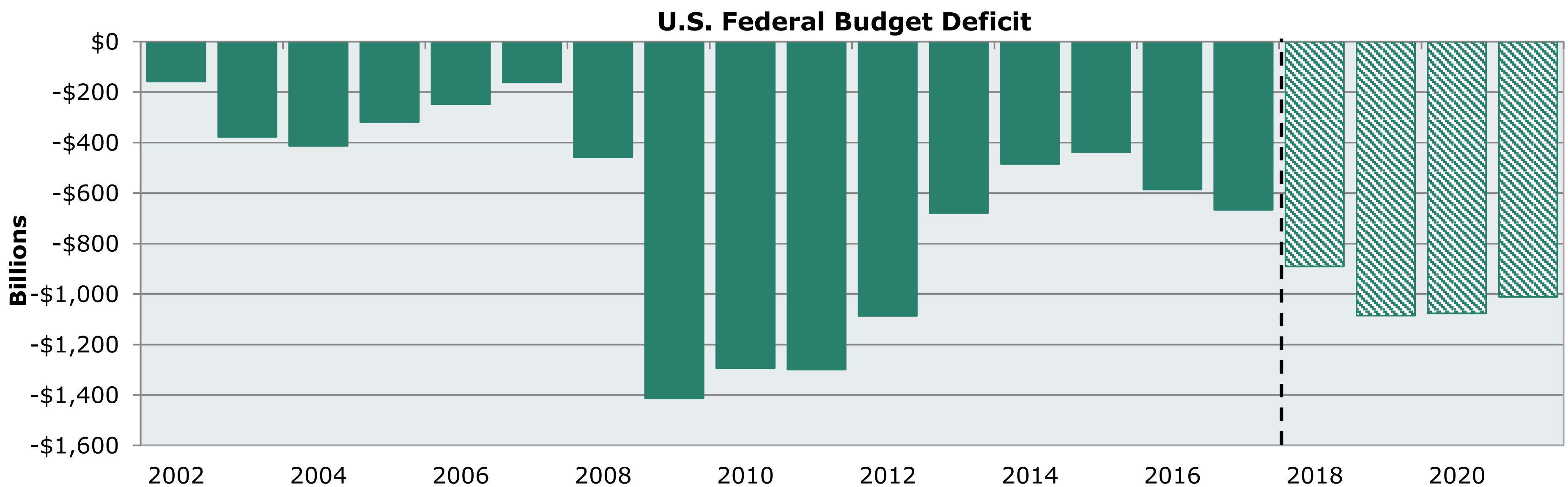


Source: Fed, ECB, BoJ, Bloomberg
Data as of: 10/31/18

Growing Awareness of Federal Deficit

Increased U.S. Treasury Issuance a Cause for Concern





Source: Nomura, Office of Management and Budget, Bloomberg
Data as of: 6/30/18

Appendix

Baird Advisors

Portfolio Management Team

Gary Elfe, CFA
MD, Research Director Emeritus
39 Years of Investment Experience

Mary Ellen Stanek, CFA
MD, Chief Investment Officer
39 Years of Investment Experience

Charles Groeschell
MD, Senior Portfolio Manager
38 Years of Investment Experience

Jay Schwister, CFA
MD, Research Director
33 Years of Investment Experience

Warren Pierson, CFA
MD, Deputy Chief Investment Officer
32 Years of Investment Experience

Duane McAllister, CFA
MD, Senior Portfolio Manager
31 Years of Investment Experience

Jeffrey Simmons, CFA
MD, Senior Portfolio Manager
30 Years of Investment Experience

Daniel Tranchita, CFA
MD, Senior Portfolio Manager
28 Years of Investment Experience

Sharon deGuzman
MD, Senior Portfolio Manager
27 Years of Investment Experience

Jeffrey Schrom, CFA
MD, Senior Portfolio Manager
23 Years of Investment Experience

Patrick Mutsune, CFA
MD, Senior Investment & Systems Analyst
20 Years of Investment Experience

Meghan Dean, CFA
MD, Senior Portfolio Manager
18 Years of Investment Experience

Patrick Brown, CFA
MD, Senior Investment Analyst
14 Years of Investment Experience

Andrew O'Connell, CFA
SVP, Senior Investment Analyst
10 Years of Investment Experience

Abhishek Pulakanti, CFA, FRM
SVP, Senior Investment Analyst
10 Years of Investment Experience

Erik Schleicher, CFA
VP, Portfolio Manager
14 Years of Investment Experience

Joseph Czechowicz, CFA
VP, Portfolio Manager
11 Years of Investment Experience

Ian Elfe, CFA
VP, Senior Investment Analyst
9 Years of Investment Experience

Alice Ambrowiak, CFA, CPA
VP, Investment Analyst
16 Years of Investment Experience

John Cremer, CFA
Investment Analyst
6 Years of Investment Experience

Allison Parra
Investment Analyst
2 Years of Investment Experience

Kristiyan Trukov
Investment Analyst
1 Year of Investment Experience

Jaclyn Godwin
Investment Analyst
1 Year of Investment Experience

Baird Resource Partners

Legal & Compliance	Information Technology	Human Resources	Finance	Research (Equity & Credit)
(68)	(198)	(52)	(64)	(124)

Baird Advisors

Other Investment Professional Staff

Portfolio Management Support Team

Mary Hoppa
MD, Operations Manager
31 Years of Investment Related Experience

Tara Haley
SVP, Portfolio Analyst
19 Years of Investment Related Experience

Amy Johnson
SVP, Portfolio Analyst
16 Years of Investment Related Experience

Janet Kube
VP, Portfolio Analyst
39 Years of Investment Related Experience

Monica Augustine
VP, Portfolio Manager Specialist
38 Years of Investment Related Experience

Mary Walters
VP, Portfolio Manager Specialist
31 Years of Investment Related Experience

Carisa Oppermann
VP, Portfolio Analyst
15 Years of Investment Related Experience

Janna Goihl
VP, Portfolio Analyst
15 Years of Investment Related Experience

Bridget Kempf
VP, Portfolio Analyst
10 Years of Investment Related Experience

Erika Haska
AVP, Portfolio Manager Specialist
24 Years of Investment Related Experience

Margaret Lynn
AVP, Portfolio Manager Specialist
12 Years of Investment Related Experience

Alvin Nevels
Portfolio Manager Specialist
34 Years of Investment Related Experience

Adela Ortiz
Portfolio Analyst
15 Years of Investment Related Experience

Betty Varga
Portfolio Manager Specialist
8 Years of Investment Related Experience

Alyssa Dahms
Portfolio Analyst
7 Years of Investment Related Experience

Lauren Vollrath
Portfolio Analyst
5 Years of Investment Related Experience

Allison Mayer
Portfolio Analyst
4 Years of Investment Related Experience

Kiersten Lesko
Portfolio Analyst
4 Years of Investment Related Experience

Client Service Team

Richard Whittow, CEBS
Managing Director
38 Years of Investment Related Experience

Peter Hammond
Managing Director
25 Years of Investment Related Experience

Heidi Schneider, CFA, CPA
Managing Director
23 Years of Investment Related Experience

Michael Possley
Managing Director
18 Years of Investment Related Experience

Randall North
Senior Vice President
29 Years of Investment Related Experience

Dustin Hutter, CPA
Senior Vice President
19 Years of Investment Related Experience

Adrianne Limjoco
Senior Vice President
17 Years of Investment Related Experience

Devon Norwood
Senior Vice President
12 Years of Investment Related Experience

Kathleen Ruidl
Vice President
13 Years of Investment Related Experience

Tiaira Johnson
Client Service Specialist
8 Years of Investment Related Experience

Caroline Murphy
Client Service Specialist
6 Years of Investment Related Experience

Markita Hughey
Client Service Specialist
4 Years of Investment Related Experience

Madelynn Wallen
Client Service Specialist
3 Years of Investment Related Experience

Brett Dawsey
Client Service Specialist
1 Year of Investment Related Experience

Brian Jacobs, CPA
Business Analyst
1 Year of Investment Related Experience

Baird Resource Partners

Legal & Compliance	Information Technology	Human Resources	Finance	Research (Equity & Credit)
(68)	(198)	(52)	(64)	(124)

Baird Advisors

Portfolio Management Team

Formulation of Investment Outlook & Portfolio Strategy

Mary Ellen Stanek, CFA	MD, Chief Investment Officer	39 years
Gary Elfe, CFA	MD, Research Director Emeritus	39 years
Charles Groeschell	MD, Senior Portfolio Manager	38 years
Jay Schwister, CFA	MD, Research Director	33 years
Warren Pierson, CFA	MD, Deputy Chief Investment Officer	32 years
Duane McAllister, CFA	MD, Senior Portfolio Manager-Muni	31 years
Jeffrey Simmons, CFA	MD, Senior Portfolio Manager	30 years
Daniel Tranchita, CFA	MD, Senior Portfolio Manager	28 years
Sharon deGuzman	MD, Senior Portfolio Manager	27 years
Jeffrey Schrom, CFA	MD, Senior Portfolio Manager	23 years
Patrick Mutsune, CFA	MD, Senior Investment & Systems Analyst	20 years
Meghan Dean, CFA	MD, Senior Portfolio Manager	18 years
Patrick Brown, CFA	MD, Senior Investment Analyst	14 years
Andrew O'Connell, CFA	SVP, Senior Investment Analyst	10 years
Abhishek Pulakanti, CFA, FRM	SVP, Senior Investment Analyst	10 years
Erik Schleicher, CFA	VP, Portfolio Manager-Muni	14 years
Joseph Czechowicz, CFA	VP, Portfolio Manager-Muni	11 years
Ian Elfe, CFA	VP, Senior Investment Analyst	9 years
Alice Ambrowiak, CFA, CPA	VP, Investment Analyst	16 years
John Cremer, CFA	Investment Analyst	6 years
Allison Parra	Investment Analyst	2 years
Kristiyan Trukov	Investment Analyst	1 year
Jaclyn Godwin	Investment Analyst	1 year

Key Areas of Focus:

- Portfolio Construction & Risk Monitoring
- Credit
- MBS/ABS

Baird Resource Partners

Legal & Compliance	Information Technology	Human Resources	Finance	Research (Equity & Credit)
(68)	(198)	(52)	(64)	(124)

Baird Advisors

BAIRD

Portfolio Management Support Team

Mary Hoppa	MD, Operations Manager	31 years
Tara Haley	SVP, Portfolio Analyst	19 years
Amy Johnson	SVP, Portfolio Analyst	16 years
Janet Kube	VP, Portfolio Analyst	39 years
Monica Augustine	VP, Portfolio Manager Specialist	38 years
Mary Walters	VP, Portfolio Manager Specialist	31 years
Carisa Oppermann	VP, Portfolio Analyst	15 years
Janna Goihl	VP, Portfolio Analyst	15 years
Bridget Kempf	VP, Portfolio Analyst	10 years
Erika Haska	AVP, Portfolio Manager Specialist	24 years
Margaret Lynn	AVP, Portfolio Manager Specialist	12 years
Alvin Nevels	Portfolio Manager Specialist	34 years
Adela Ortiz	Portfolio Analyst	15 years
Betty Varga	Portfolio Manager Specialist	8 years
Alyssa Dahms	Portfolio Analyst	7 years
Lauren Vollrath	Portfolio Analyst	5 years
Allison Mayer	Portfolio Analyst	4 years
Kiersten Lesko	Portfolio Analyst	4 years

Client Service Team

Richard Whittow, CEBS	Managing Director	38 years
Peter Hammond	Managing Director	25 years
Heidi Schneider, CFA, CPA	Managing Director	23 years
Michael Possley	Managing Director	18 years
Randall North	Senior Vice President	29 years
Dustin Hutter, CPA	Senior Vice President	19 Years
Adrianne Limjoco	Senior Vice President	17 years
Devon Norwood	Senior Vice President	12 years
Kathleen Ruidl	Vice President	13 years
Tiaira Johnson	Client Service Specialist	8 years
Caroline Murphy	Client Service Specialist	6 years
Markita Hughey	Client Service Specialist	4 years
Madelynn Wallen	Client Service Specialist	3 years
Brett Dawsey	Client Service Specialist	1 year
Brian Jacobs, CPA	Business Analyst	1 year

Baird Resource Partners

Legal & Compliance	Information Technology	Human Resources	Finance	Research (Equity & Credit)
(68)	(198)	(52)	(64)	(124)

Benefits for LACERS

- Long-term relationships focused on client and direct communication
- Experienced management team implementing proven investment discipline
  - Structured, risk-controlled process
  - No derivatives, no non-$ currency exposure, no leverage
  - Focus on ***bottom-up*** added value from sector allocation and security selection
- Total focus on fixed income management
- Culture and resources key to future success
- Importance of the relationship to Baird Advisors

Important Disclosures

Investors should consider the investment objectives, risks, charges and expenses of the fund carefully before investing. This, and other information can be found in the prospectus or summary prospectus. A prospectus or summary prospectus may be obtained by visiting www.bairdfunds.com. Please read the prospectus or summary prospectus carefully before you invest or send money.

Performance data quoted represents past performance. Past performance does not guarantee future results. Investment return and principal value of an investment in the fund will fluctuate so that an investor's shares when redeemed, may be worth more or less than their original cost. The funds' current performance may be lower or higher than the performance data quoted. For performance current to the most recent month-end, please visit www.bairdfunds.com.

Funds may invest in U.S. dollar denominated foreign securities which involve additional risks such as the potential for political and economic instability and less strict regulation. The Fund may also invest in mortgage and asset-backed securities which include interest rate and prepayment risks more pronounced than those of other fixed income securities.

Baird Funds are offered through Robert W. Baird & Co., a registered broker/dealer, member NYSE and SIPC. Robert W. Baird & Co. also serves as investment advisor for the Fund and receives compensation for these services as disclosed in the current prospectus.

Lipper rankings are based on average annual total returns for the 1, 3, 5, 10-year/life periods for each respective Lipper category. Baird Core Plus Bond Fund is ranked among the Core Plus Bond Funds, Baird Aggregate and Intermediate Bond Funds are ranked among the Core Bond Funds, Baird Short-Term Bond Fund is ranked among the Short Investment Grade Debt Funds, Baird Quality Intermediate Municipal and Baird Core Intermediate Municipal Bond Funds are ranked among the Intermediate Municipal Debt Funds, Baird Ultra Short Bond Fund is ranked among the Ultra-Short Obligations Funds, and Baird Short-Term Municipal Bond Fund is ranked among the Short Municipal Debt Funds. Each fund is ranked based on average annual total returns assuming reinvestment of dividends and capital gains, distributions, at net asset value and the deduction of all fund expenses. Past performance is no guarantee of future results.

Morningstar categories: Baird Core Plus, Aggregate, and Intermediate Bond Funds are ranked within the Intermediate-Term Bond Fund category (Overall: 887 funds, 3-year period: 887, 5-year period: 785, 10-year period: 568). Baird Short-Term Bond Fund is ranked within the Short-Term Bond Fund category (Overall: 472 funds, 3-year period: 472, 5-year period: 399, 10-year period: 260). Baird Ultra Short Bond Fund is ranked within the Ultrashort Bond Fund category (Overall: 144 funds, 3-year period: 144). Baird Quality Intermediate and Baird Core Intermediate Municipal Bond Funds are ranked within the Municipal National Intermediate Bond Fund category (Overall: 260 funds, 3-year period: 260, 5-year period: 227, 10-year period: 151). Baird Short-Term Municipal Bond Fund is ranked within the Municipal National Short Bond Fund category (Overall: 179 funds, 3-year period: 179).

The quality profile is calculated on a market value-weighted basis using the highest credit quality rating given by S&P, Moody's or Fitch for each security in the fund.

LACERS

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Report to Investment Committee

From: Neil M. Guglielmo, General Manager

Agenda of: **DECEMBER 11, 2018**

ITEM: **V**

SUBJECT: **PRESENTATION BY NORTHERN TRUST REGARDING SECURITIES LENDING ACTIVITY REPORT FOR THE PERIOD JULY 1, 2017 TO JUNE 30, 2018**

Recommendation:

That the Investment Committee receive and file this report.

Discussion:

Background and Overview

LACERS' securities lending program (program) seeks to generate income for LACERS' investment portfolio by lending public markets securities owned by LACERS to qualified borrowers. Securities loans are collateralized fully based on the fair value of the borrowed securities; collateral may consist of cash or securities. Income is generated from fees paid by borrowers and the investment of cash collateral in high-quality, short-term investments. The program involves risks, notably cash collateral investment risk, that may result in principal losses to LACERS. Since 1991, The Northern Trust Company (Northern Trust), LACERS' Master Custodian Bank, has administered the program and served as the cash collateral investment manager.

The program is governed by the LACERS Securities Lending Policy (Policy) and customized investment manager guidelines (guidelines). Pursuant to the Policy, Northern Trust, with the assistance of staff, has prepared the attached annual securities lending report for the Board. The report highlights LACERS' securities lending activity and earnings for the fiscal year ending June 30, 2018, and will be presented by Northern Trust. LACERS' securities lending program is in compliance with the Policy and guidelines.

Strategic Plan Impact Statement

LACERS' participation in the securities lending program is consistent with Goal IV (achieve satisfactory long-term risk adjusted investment returns). The presentation and discussion of the policy, guidelines, and performance information is consistent with Goal V (uphold good governance practices which affirm transparency, accountability, and fiduciary duty).

This report was prepared by Eduardo Park, Investment Officer I, Investment Division.

RJ:BF:EP

Attachment: LACERS Securities Lending Report for the Period Ending June 30, 2018

NORTHERN TRUST

LACERS

Securities Lending Activity Report

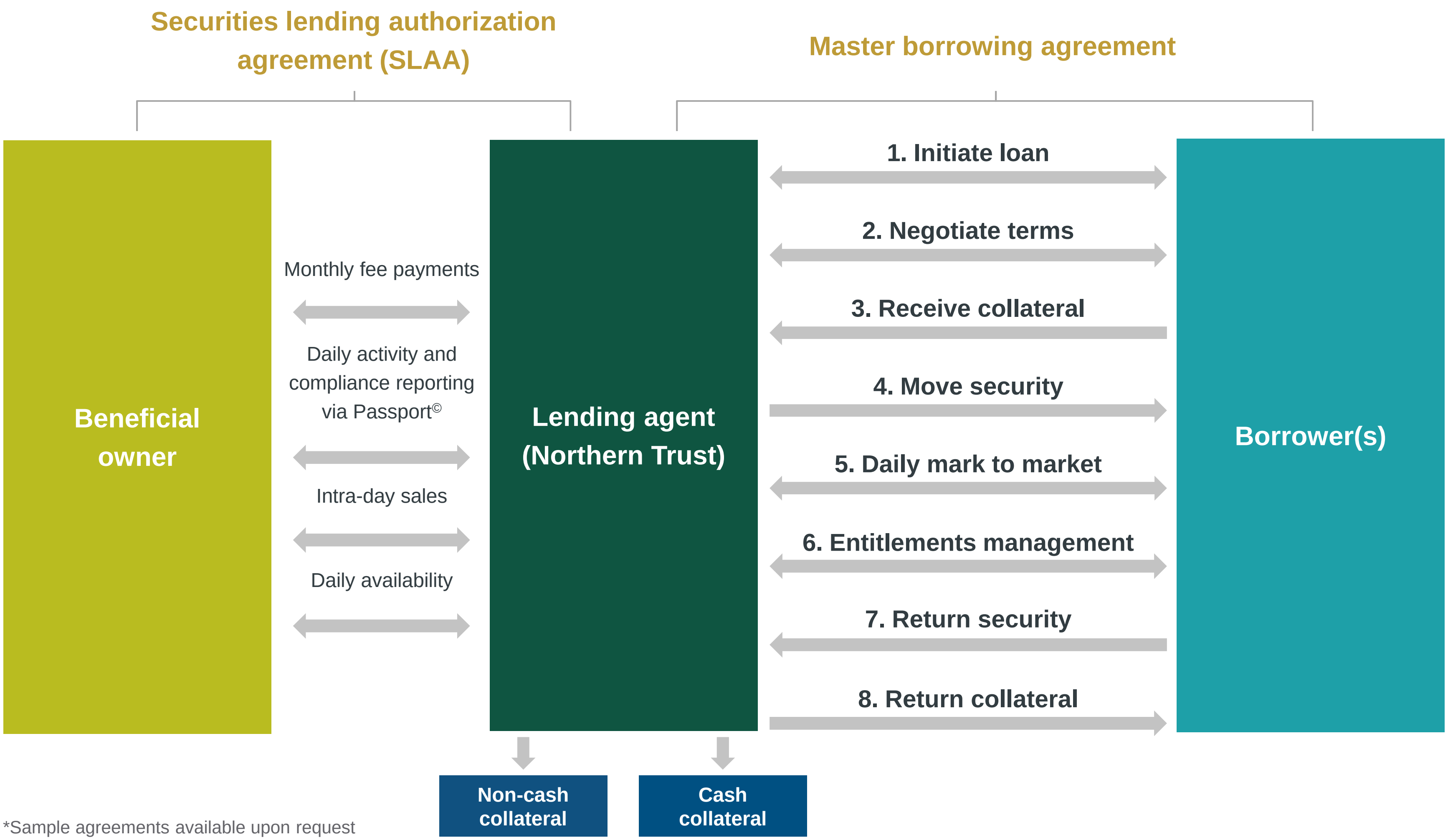
For the Period July 1, 2017 to June 30, 2018

Don Anderson
Senior Vice President
Global Securities Lending

NORTHERN TRUST

SECURITIES LENDING TRANSACTION PROCESS

The life cycle of a loan



*Sample agreements available upon request

SECURITIES LENDING INCOME COMPONENTS

Understanding how securities lending income is generated.

Total securities lending spread

Reinvestment spread: *Basis points earned from reinvestment of cash collateral*	**Intrinsic value spread:** *Basis points earned from lending security to borrower, based on intensity of borrower demand*
Yield on cash collateral investment – fed funds rate	*Fed funds rate – rebate rate*

Yield on cash collateral investment

Federal funds (or benchmark) rate

Rebate rate
(Positive, > 0%, is paid to borrower. Negative, < 0%, is paid by borrower)

Reinvestment spread + Intrinsic value spread = **Total securities lending spread**
Total securities lending spread x Loan volume = **Total gross securities lending income**

HOW REVENUE IS GENERATED

Example: Northern Trust lends $25 million of US Equity

Non-Cash Loan

The $25 million market value loan is for 30 days collateralized by a US Treasury.

1	Receive non-cash collateral valued at **$25,500,000** (102%)	
2	Fee charged to borrower on the value of the loan (20 bps)	$4,167
3	Gross revenue (gross spread 20 bps) credited to client monthly	$4,167
4	Monthly lender's fee (@ 30%)	$1,250
5	**Net client earnings**	**$2,917**

Cash Loan

The $25 million market value loan is for 30 days collateralized with cash (federal funds at 2.00%)

1	Receive cash collateral valued at **$25,500,000** (102%)	
2	Cash collateral invested in a collateral pool at yield of 2.10%	$44,625
3	Rebate paid to borrower at rate of 1.80%	$(38,250)
4	Gross Revenue (gross spread 30 bps)	$6,375
5	Monthly lender's fee (@ 30%)	$1,913
6	**Net client earnings**	**$4,462**

Gross Spread = Lending Spread + Investment Spread
Lending Spread = Fed Funds – Rebate Rate
Investment Spread = Reinvestment Yield – Fed Funds

GLOBAL SECURITIES LENDING

Designed to enhance the return of an overall investment program without interfering with the investment strategy

We strive to extract the highest amount of intrinsic value from each loan, while mitigating risk for the benefit of our clients.

Who We Are

A core business within Northern Trust and an industry leader in terms of size, scale and innovation.

- 435 clients from 30 countries
- $1.2 trillion of lendable securities*
- $162 billion of loans outstanding*
- 68 approved borrowers at parent level

Who We Serve

- Corporations
- Endowments and Foundations
- Public Funds
- Mutual Funds
- Insurance
- Government
- Taft Hartley

What We Do

- Cash Management
- Risk Management
- Customized participation and collateral selection
- Lend in 35 countries and 54 worldwide Equity & Fixed Income markets
- 24-hour trading
  - — *Supported by our single, multi-currency proprietary platform*
  - — *Locations in Hong Kong, London, Toronto, Sydney and Chicago*

*Average for September 2018
Source: Northern Trust

GLOBAL COVERAGE, LOCAL EXPERTISE

Northern Trust lends in 35 countries with a local presence in 9 locations and over 200 staff

Trading Locations

- Chicago
- London
- Toronto
- Hong Kong
- Sydney

Operational Locations

- Chicago
- London
- Hong Kong
- Bangalore
- Manilla
- Limerick

MANAGING RISK

Risk management is instrumental to our program

Borrower

Borrower defaults and collateral is not sufficient to cover

Mitigating factors:

- Credit review of borrowers
- Over-collateralization
- Daily marking
- Indemnification
- Risk analysis tools

Trade Settlement

Fund sells securities and borrower doesn’t return in time for trade to settle

Mitigating Factors:

- Timely communication
- Automated reallocations
- Trade settlement protection

Cash Collateral Reinvestment

Cash collateral investment becomes impaired or decreases in value

Mitigating Factors:

Client approved guidelines
Dedicated team of fixed income research analysis
Daily automated compliance

Interest Rate

Loan rebate rate exceeds earnings on cash collateral investments

Mitigating Factors:

- Weekly gap analysis
- Shared risk and stress testing of portfolio

RISK MANAGEMENT OVERSIGHT

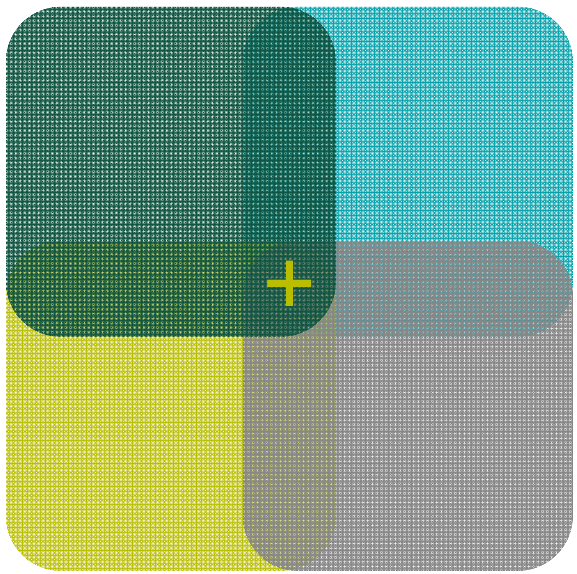
We manage risk through our independent senior oversight committees

Capital Markets Credit Committee

- Monitors the financial viability of borrowers
- Sets limits for Northern Trust's balance sheet and securities lending program. Approves limits for counterparty group, counterparties and specific products

Collateralized Product Risk Committee

- Approves new collateral types and margin levels for loans and reviews borrowers exposures and risk analysis
- Establishes loan/collateral product limits and undertakes periodic stress testing



Securities Lending Collateral Committee

- Monitors collateral pools and separately managed accounts
- Primary oversight of cash collateral pool governance

Credit Risk Management Committee, Securities Approval Group

- Approves cash investment credit issuers, counterparties, and instruments
- Provides guidance and oversight of investment risk associated with cash reinvestment activity

TECHNOLOGY

Strong performance achieved through a single, global trading platform

Industry Trade Platform

- Facilitate quick and accurate matching of borrower needs with our supply
- Allow our trading team to focus on higher value trades

Data Providers

- Compare our program against the industry and our clients against their peers
- Provide industry data to improve loan pricing decisions

Global Securities Lending (GSL)

Proprietary trading system

Electronic links with custody, depository systems and industry trade platform

Automates the vast majority of loans

Cash Collateral Management

- Aladdin
- Northern Trust Investments Short Duration team manages cash collateral
- Passport® reporting available for cash collateral positions and characteristics

Passport® reporting

Earnings	Borrower Exposure	Collateralization
At loan level, security level, asset class, account level, and entity level.	Market Value and collateral value by borrower	Collateralization levels, cash and noncash holdings

CUSTOMIZED TO MEET YOUR RISK AND RETURN OBJECTIVES

Collateral options tailored to LACERS' risk level

- Cash: Separately Managed Account
  - Principal preservation, liquidity management, competitive yield
  - Managed by Northern Trust Asset Management
- Non-cash: held in a separate account
  - Includes: US Treasuries and Agencies, highly rated OECD debt, major equity indices

Reporting

- Quarterly market update calls
- Monthly borrower ratings update
- Annual GASB Reporting

Additional Customization Alternatives

- Asset class, country limits, seasonal restrictions, minimum return parameters
- Borrower-specific caps or restricting certain borrowers from your program entirely

KEY MARKET TRENDS AND OBSERVATIONS:

MACRO ECONOMIC TRENDS

Market Developments

- Broad based macro-economic indicators remained supportive of longer-term global growth. However, protectionist policies and trade tensions represent a risk to momentum
- FOMC raised US interest rates in September. One more increase is expected in December, driven by a strong labour market and solid growth outlook. The market is expecting additional rate moves in 2019
- While it will cease asset purchases in December, the ECB reaffirmed policy rates will remain unchanged through the first half of 2019
- UK data has remained resilient, leading to a rate increase in August. Future path largely dependent on Brexit negotiations
- In Asia, the positive outlook has become more cautious following the imposition of additional tariffs and escalation of rhetoric between China and the US. With no solution in sight, negative sentiment looks set to continue in the near term, which will likely have a detrimental impact on APAC markets.

INDUSTRY TRENDS

Trading

- A rise in market volatility has been the catalyst for quantitative based strategy funds to be more active. Fundamental based Long/Short strategy funds remain more subdued
- Growth of quantitative based hedge funds is driving need for increased automation across the industry
- Directional demand for Corporate Bonds and Equity dominated by key sector trends (i.e. retail, financial services, telecommunications)
- Regulation, balance sheet requirements, and cross-currency dynamics are driving demand for government bonds
- Borrower's balance sheet usage and funding cost sensitivities continues to soften yield enhancement demand globally.

Regulatory

The regulatory environment continues to influence borrower demand. Key trends include:

- **"HQLA"** - Elevated demand for High Quality Liquid Assets (HQLA), particularly over sensitive reporting periods
- **Term -** Increased demand to source supply on a term basis to help meet funding and liquidity ratios
- **Regulatory Capital -** New regulatory capital efficient trade structures - examples include; Collateral Pledge and Central Clearing model (CCPs)
- **Beneficial Owners**- Entity type and jurisdiction increasingly relevant as these impact borrower's regulatory capital usage.

CENTRAL BANKING ACTIVITY

Albeit not without fits and starts, global growth remains a key macro theme and central banks are slowly removing monetary accommodations

U.S. Federal Reserve (FED)

- Market impact of the continued Fed balance sheet reductions has been muted but questions are forming about the Fed's terminal balance sheet size
- Fed hiking cycle continued in September, and expected to continue in December as well
- Tax reform expected to add to economic activity later in 2018 and the first half of 2019
- Labor conditions remain solid and inflation has reached the Fed's target, but wage growth remains relatively sluggish

The European Central Bank (ECB)

- Asset purchase program continues but will be tapered in the Fall of 2018 and will cease new purchases by the end of the year.
- The Eurozone is continuing its economic recovery albeit with some slowing of the positive momentum
- Monetary easing broadly seen as less necessary
- ECB indicated rates will not rise at least until the end of the summer 2019

The Bank of England (BOE)

- The Monetary Policy Committee (MPC) raised their overnight bank rate to 75 basis points in August with a unanimous decision
- Next hike is uncertain given recent softer economic data
- Brexit remains the critical unknown for the near term future of the UK economy.

COLLATERAL REINVESTMENT TRENDS

How market dynamics affect our cash portfolio positioning

Market dynamics

- The credit spread widening of the first half of the year has abated
- The government yield increase in the first half due to increased supply, has also abated
- Markets are pricing in one more Fed hike in 2018, with the market split on the path of hikes in 2019
- Flattening yield curve across all durations tenors remains a critical focus of fixed income markets

Current portfolio positioning

- Broadly neutral portfolio duration
- Strong overnight liquidity positions focused on repurchase agreements and time deposits of financial institutions
- Longer-dated trades of floating-rate credit instruments are preferred over fixed-rate offerings.
- Shorter interest rate reset securities are preferred as long as spreads allow for proper risk-return dynamics

INVESTMENT PROFILE: LACERS CUSTOM CASH COLLATERAL FUND

JUNE 30, 2018

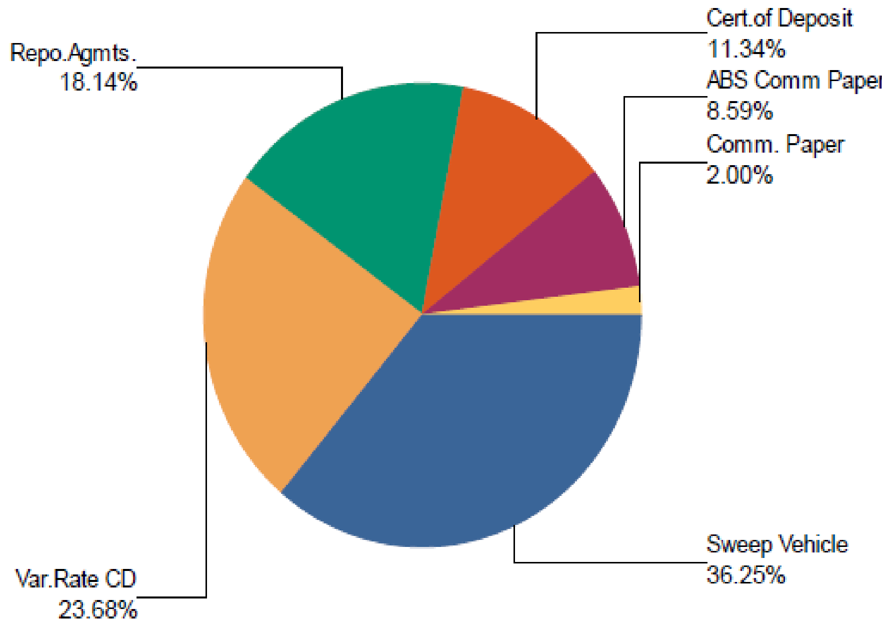
◆ Asset Allocation & Characteristics Report

LACERSCF - LACERS Custom Fund - USD

Characteristics		
Total Book Value (in USD)	793,826,535	
Weighted Average Maturity (Interest Reset Date)	27 Days	
Weighted Average Maturity (Maturity Date)	56 Days	
Average Equivalent Quality Rating	A1+	
Total Number of Issues	30	
Quality Distribution	**Percentage**	
A1+ (SHORT TERM)	83.22%	
A1 (SHORT TERM)	16.78%	
Maturity Breakdown Distribution	**Interest Reset**	**Maturity Date**
Overnight	54.36%	51.21%
2 - 15 Days	2.52%	1.26%
16 - 30 Days	16.49%	1.89%
31 - 60 Days	7.37%	15.93%
61 - 97 Days	14.23%	12.97%
98 - 180 Days	4.41%	10.70%
181 - 270 Days	0.00%	0.63%
271 - 366 Days	0.63%	5.42%

Industry/Sector Distribution	Percentage
Banking Ind.	72.65%
Broker/Dealer	18.75%
Finance & Ins	8.59%

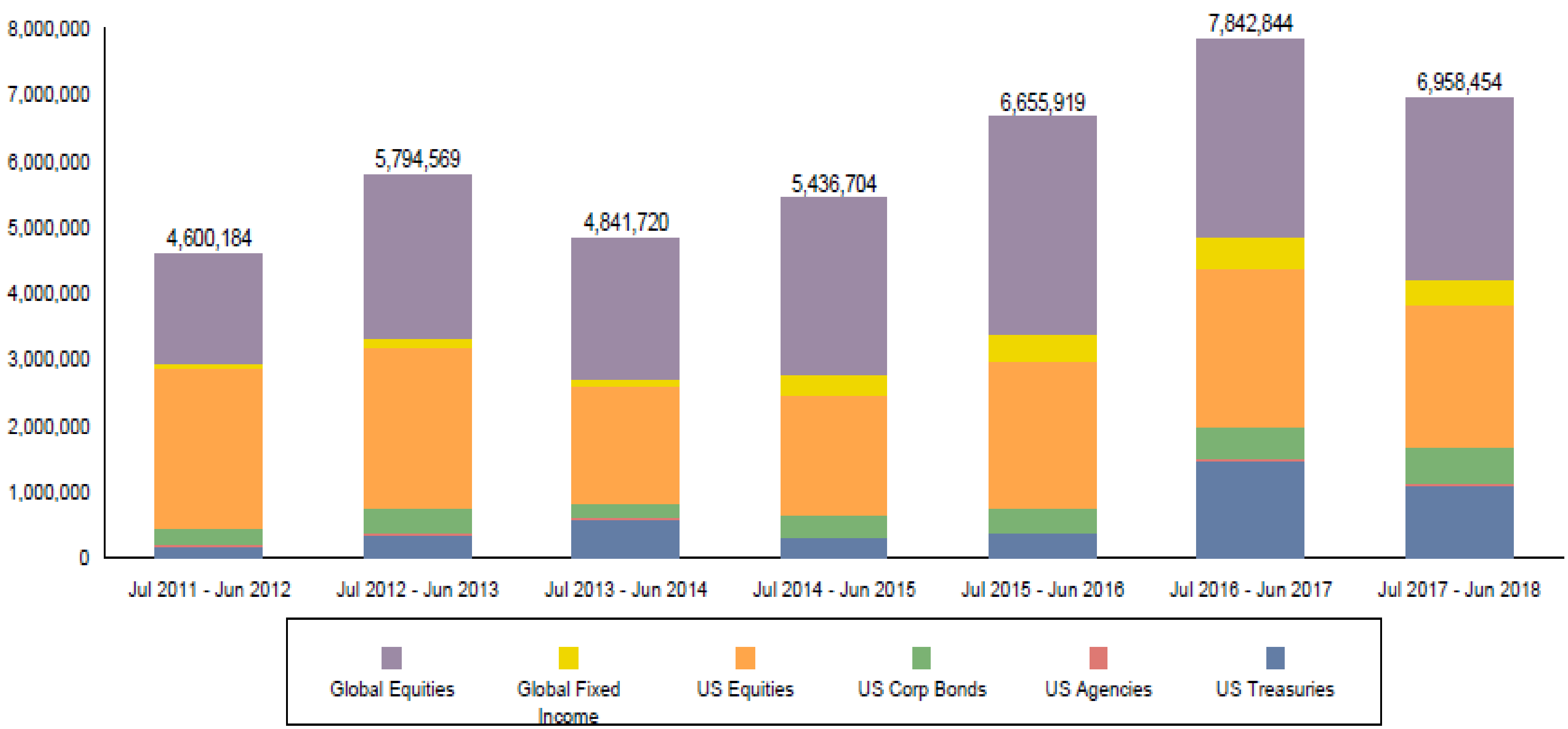
Cash Collateral Asset Class Breakdown



NOTE: This information was created using the best unaudited data available to us and may not be completely reliable, accurate, or timely. Data is prepared on a settled basis, which may differ from traded basis data on the Cash Collateral Holdings report. "Traded Basis" reflects pending trades.

HISTORICAL EARNINGS SUMMARY

♦ LOS ANGELES CITY EMPLOYEES



PERFORMANCE SCORECARD: LENDING & INVESTMENT BREAKDOWN

Northern Trust Securities Lending

Performance Scorecard - Lending and Investment Breakdown

From July, 2017 to June, 2018 **(USD) ****

◆ LOS ANGELES CITY EMPLOYEES

	Market Value (USD)		% on	Gross Earnings (USD)			Spread (bps)			Gross BP Return	Net Earnings (USD)		
Security Type	Avg. on Loan	Avg. Available	Loan	Lending	Investment	Total	Lending	Investment	Overall	(bp) *	Lending	Investment	Total
US Treasuries	828,045,628	1,186,962,890	69.8%	53,841	1,229,367	1,283,208	0.6	14.6	15.3	10.7	45,781	1,044,983	1,090,764
US Agencies	20,011,362	142,057,808	14.1%	-10,450	40,550	30,100	-5.2	20.0	14.8	2.1	-8,882	34,468	25,586
US Corp Bonds	102,120,706	822,695,647	12.4%	490,724	157,352	648,077	47.4	15.2	62.6	7.8	417,142	133,767	550,908
US Equities	537,196,223	4,386,940,854	12.2%	2,062,076	501,047	2,563,123	37.9	9.2	47.1	5.8	1,753,432	426,152	2,179,584
Global Sovereign	36,113,634	221,250,634	16.3%	183,461	53,017	236,478	50.1	14.5	64.6	10.5	155,949	45,068	201,017
Global Agencies	3,870,780	65,382,729	5.9%	13,460	7,926	21,386	34.3	20.2	54.5	3.2	11,442	6,737	18,179
Global Corp Bonds	35,869,273	300,911,943	11.9%	114,937	57,197	172,135	31.6	15.7	47.3	5.6	97,704	48,623	146,327
Global Equities	465,169,406	4,678,254,683	9.9%	3,000,240	230,147	3,230,387	63.6	4.9	68.5	6.8	2,550,434	195,655	2,746,089
Total	**2,028,397,011**	**11,804,457,187**	**17.2%**	**5,908,290**	**2,276,604**	**8,184,894**	**28.7**	**11.1**	**39.8**	**6.8**	**5,023,000**	**1,935,454**	**6,958,454**

When cash is taken as collateral on applicable loans, Rebates are based on an industry [standard] overnight benchmark rate.

* Gross Basis Point Return equals On Loan Spread multiplied by % on Loan. GBPR is the measure of total return on a given asset class or portfolio.

** Market Value and Earnings were converted using the month-end FX rate.

PERFORMANCE SCORECARD: DATE RANGE COMPARISON

Northern Trust Securities Lending

Performance Scorecard - Client (Date Range Comparison)

(USD) **

◆ **LOS ANGELES CITY EMPLOYEES**

Security Type	Market Value (USD) Avg. on Loan	Market Value (USD) Avg. Available	% on Loan	Gross Earnings (USD)	On Loan Spread (bp)	Gross BP Return (bp) *	Net Earnings (USD)
From July, 2017 to June, 2018							
US Treasuries	828,045,628	1,186,962,890	69.8%	1,283,208	15.3	10.7	1,090,764
US Agencies	20,011,362	142,057,808	14.1%	30,100	14.8	2.1	25,586
US Corp Bonds	102,120,706	822,695,647	12.4%	648,077	62.6	7.8	550,908
US Equities	537,196,223	4,386,940,854	12.2%	2,563,123	47.1	5.8	2,179,584
Global Fixed Income	75,853,687	587,545,305	12.9%	429,999	55.9	7.2	365,523
Global Equities	465,169,406	4,678,254,683	9.9%	3,230,387	68.5	6.8	2,746,089
Total	**2,028,397,011**	**11,804,457,187**	**17.2%**	**8,184,894**	**39.8**	**6.8**	**6,958,454**
From July, 2016 to June, 2017							
US Treasuries	692,853,444	1,093,290,385	63.4%	1,721,596	24.5	15.5	1,463,392
US Agencies	11,579,795	126,904,598	9.1%	55,740	47.5	4.3	47,380
US Corp Bonds	92,027,846	837,459,925	11.0%	565,395	60.6	6.7	480,625
US Equities	509,279,134	3,862,917,676	13.2%	2,797,355	54.2	7.1	2,378,666
Global Fixed Income	86,442,623	556,127,302	15.5%	588,503	67.1	10.4	500,253
Global Equities	453,722,752	3,995,246,774	11.4%	3,496,794	76.0	8.6	2,972,528
Total	**1,845,905,593**	**10,471,946,659**	**17.6%**	**9,225,383**	**49.3**	**8.7**	**7,842,844**
Variance							
US Treasuries	135,192,184	93,672,505	6.4%	-438,388	-9.2	-4.9	-372,628
US Agencies	8,431,567	15,153,210	5.0%	-25,640	-32.6	-2.2	-21,794
US Corp Bonds	10,092,860	-14,764,278	1.4%	82,681	2.0	1.1	70,283
US Equities	27,917,089	524,023,178	-0.9%	-234,231	-7.1	-1.4	-199,082
Global Fixed Income	-10,588,936	31,418,004	-2.6%	-158,504	-11.2	-3.2	-134,730
Global Equities	11,446,654	683,007,909	-1.4%	-266,407	-7.5	-1.8	-226,439
Total	**182,491,418**	**1,332,510,527**	**-0.4%**	**-1,040,489**	**-9.5**	**-1.9**	**-884,390**

PERFORMANCE SCORECARD: TOP TEN EARNING SECURITIES

Northern Trust Securities Lending

Page 1 of 1

Top 10 Net Earnings Report

From July 2017 To June 2018

- **LOS ANGELES CITY EMPLOYEES**

Rank	Security Name	CUSIP/SEDOL	Net Earnings	% Of Total Net Earnings	Market Value On Loan (USD)	Average % Utilization	Average Spread
1	EQUINOR ASA NOK2.50	7133608	136,350.36	1.96	6,409,585.29	31.87	247.51
2	ADR ECOPETROL S A SPONSORED AD	279158109	90,760.39	1.30	6,880,442.71	69.85	150.28
3	ADR ALIBABA GROUP HOLDING LTD SI	01609W102	73,122.44	1.05	42,511,913.23	89.79	19.83
4	UNITED STATES OF AMER INFL INDXD	912828H45	69,146.76	0.99	54,266,958.87	90.57	14.50
5	FRONTIER COMMUNICATIONS CORP (	35906A306	55,013.31	0.79	346,596.88	86.84	1,789.06
6	APPLIED OPTOELECTRONICS INC COM	03823U102	52,994.64	0.76	254,039.62	90.74	2,348.30
7	UNITED STATES TREAS INFL NTS 0.37	912828XL9	52,242.56	0.75	39,794,872.73	88.40	14.96
8	UNITED STATES OF AMER TREAS NOT	912828WU0	51,306.04	0.74	42,663,414.25	76.65	13.68
9	NEXTAGE CO LTD NPV	BBQ2ZC3	50,301.74	0.72	915,775.36	83.09	632.88
10	GUNOSY INC NPV	BWTW152	45,037.96	0.65	535,299.93	62.33	972.98
	Sub Total Of Top 10 Securities		676,276.20	9.72	194,578,898.87	80.89	39.71
	All Other		6,282,177.87	90.28	1,833,818,122.44	15.86	39.16
	Total		6,958,454.07	100.00	2,028,397,021.31	17.18	39.21

IMPORTANT INFORMATION

LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Report to Investment Committee

From: Neil M. Guglielmo, General Manager

Agenda of: **DECEMBER 11, 2018**

ITEM: **VI**

SUBJECT: **INVESTMENT MANAGER CONTRACT WITH AEGON USA INVESTMENT MANAGEMENT, LLC REGARDING THE MANAGEMENT OF AN ACTIVE U.S. HIGH YIELD FIXED INCOME PORTFOLIO AND POSSIBLE COMMITTEE ACTION**

Recommendation

That the Committee recommend to the Board a one-year contract extension with Aegon USA Investment Management, LLC for the management of an active U.S. high yield fixed income portfolio.

Discussion

Background

The Board hired Aegon USA Investment Management, LLC (AUIM) in June 2013 to manage an active U.S. high yield fixed income portfolio benchmarked against the Bloomberg Barclays U.S. Corporate High Yield 2% Capped Index. AUIM employs a fundamental research-based investing strategy that is guided by the macroeconomic environment. The investment process consists of three steps: 1) analysis of global macroeconomics, interest rates, and asset allocation; 2) credit research and security selection; and 3) portfolio construction. Investment risks are monitored and reviewed throughout the process. The strategy is managed by a team of four portfolio managers led by Jim Schaeffer, Head of U.S. Leveraged Finance. LACERS' portfolio was valued at $381 million as of October 31, 2018. Approximately $185 million of these funds came from high yield fixed income assets previously managed by Franklin Advisors, Inc. The current contract expires on March 31, 2019.

On October 23, 2018, the Board approved both high yield fixed income and hybrid high yield/bank loan investment manager searches to provide appropriate diversification and enhanced performance to these particular segments of the Credit Opportunities asset class. These searches are expected to launch in early 2019.

Organization

AUIM has 314 employees and is headquartered in Cedar Rapids, Iowa, with a satellite office in Chicago, Illinois. The firm is a subsidiary of Aegon Asset Management, the global investment management arm of Aegon N.V., a multinational insurance and financial services company. As of October 31, 2018, AUIM had $98 billion of total assets under management, with $7.5 billion of assets under management in the U.S. high yield fixed income strategy.

Due Diligence
AUIM's investment philosophy, strategy, and process have not changed since the inception of the contract in 2013. Due to a regulatory agency investigation, AUIM was placed on "On Watch" status on October 5, 2017, for an initial one-year period pursuant to the LACERS Manager Monitoring Policy (Policy). Specifically, AUIM and several affiliated companies were investigated by the Securities and Exchange Commission for compliance issues with certain mutual funds occurring between July 2011 and June 2015. These mutual funds were unrelated to the high yield fixed income strategy and LACERS' investment. During the one-year watch period, staff conducted quarterly conference calls, meetings in LACERS offices, and on-site due diligence. The regulatory investigation was settled satisfactorily in August 2018. Gary Black, hired as AUIM's Chief Executive Officer in 2016 (subsequent to the mutual fund issues), has prioritized transparency and building critical functional areas such as compliance to mitigate organizational risks. Staff and NEPC, LLC (NEPC), LACERS' General Fund Consultant, verified these claims during an on-site due diligence inspection conducted in October 2018. Despite staff's satisfactory assessment of the firm, staff and NEPC will retain AUIM on "On Watch" status for an additional one-year period to evaluate improvements in the business culture.

Performance
As of October 31, 2018, AUIM's performance since inception has been nearly flat compared with the performance of its benchmark. AUIM is in compliance with the performance criteria of the Policy.

Annualized Performance as of 10/31/18 (Net-of-Fees)							
	3-Month	1-Year	2-Year	3-Year	4-Year	5-Year	Since Inception^
AUIM	-0.74	0.46	4.81	6.07	4.41	4.73	5.30
Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index	-0.32	0.98	4.87	6.60	4.41	4.69	5.32
% of Excess Return	*-0.42*	*-0.52*	*-0.06*	*-0.53*	*0.00*	*0.04*	*-0.02*

^Inception Date: 6/30/13

Calendar year performance is presented in the table below as supplemental information.

Calendar Year Performance as of 10/31/18 (Net-of-Fees)					
	YTD 2018	2017	2016	2015	2014
AUIM	0.61	7.85	15.41	-3.94	4.10
Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index	0.93	7.50	17.13	-4.43	2.46
% of Excess Return	*-0.32*	*0.35*	*-1.72*	*0.49*	*1.64*

Fees
LACERS pays AUIM an effective fee of 37.8 basis points (0.38%), which is approximately $1.5 million annually based on the value of LACERS' assets as of October 31, 2018. The fee ranks in the 19th percentile of fees charged by similar managers in the space (i.e., 81% of like-managers have higher fees).

General Fund Consultant Opinion
NEPC concurs with this recommendation.

Strategic Plan Impact Statement
A contract renewal with Aegon USA Investment Management, LLC will allow the fund to maintain a diversified exposure to the U.S. high yield fixed income market, which is expected to help achieve satisfactory long-term risk adjusted investment returns (Goal IV). The discussion of the investment manager's profile, strategy, performance, and management fee structure are consistent with Goal V (uphold good governance practices which affirm transparency, accountability, and fiduciary duty).

This report was prepared by Jimmy Wang, Investment Officer I, Investment Division.

RJ:BF:WL:JW:ap

Attachments: A) Consultant Recommendation – NEPC
B) Workforce Composition

NEPC, LLC

To: Los Angeles City Employees' Retirement System Investment Committee

From: NEPC, LLC

Date: December 11, 2018

Subject: Aegon USA Investment Management, LLC – Contract Extension

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Recommendation

NEPC recommends Los Angeles City Employees' Retirement System (LACERS) extend the contract that is currently in place with Aegon USA Investment Management, LLC ('Aegon') for a period of one year from the date of contract expiry.

Background

Aegon was hired into the Credit Opportunities asset class on June 20, 2013 to provide the Plan with U.S. non-investment grade public markets fixed income (high yield) exposure. The portfolio's strategy is benchmarked against the Barclays Capital U.S. High Yield 2% Issuer Cap Index.

As of September 30, 2018, Aegon managed $389.9 million, or 2.2% of Plan assets in a High Yield Fixed Income separately managed account with an asset-based fee of 0.38% (37.8 basis points) annually. This fee ranks in the 19th percentile among its peers in the eVestment U.S. High Yield Fixed Income Universe. In other words, 81% of the 204 high yield fixed income products included in the peer universe have a higher fee than the LACERS account. The performance objective is to outperform the Bloomberg Barclays U.S. High Yield 2% Issuer Cap Index by at least 0.50%, net of fees, annualized over a full market cycle (normally three-to-five years). The Aegon account is currently under 'Watch' status according to LACERS' manager monitoring policy due to being investigated by the SEC. The firm ultimately settled with the SEC in August 2018 and over the past three years has hired seven new personnel in their compliance department and updated policies, procedures and monitoring of pre/post trades. The firm also appointed a new CEO, Gary Black, in 2016.

Aegon Asset Management US is a wholly owned subsidiary of Aegon N.V. which is a public company listed on the Euronext Amsterdam (stock exchange) and New York Stock Exchange. Aegon N.V. is an international life insurance, pension and asset management group headquartered in the Netherlands operating in over 20 countries throughout Europe, Asia and the Americas with brands such as Transamerica, Aegon and Blue Square Reinsurance under its umbrella. Aegon Asset Management US primarily manages active fixed income portfolios and has 85 accounts, $99.3 billion in assets under management ('AUM') and 314 employees; 76 employees are investment professionals. A majority of the firm's AUM is made up of insurance assets (75%) and sub-advised business (22%); Public Funds assets make up 1.2% of total AUM. The firm's High Yield Fixed Income product has approximately $7.72 billion in total assets under management with 20 accounts in total; 15 accounts are taxable clients with 5 accounts being tax-exempt (public fund and foundation/endowment).

The LACERS High Yield Fixed Income portfolio is co-managed by four portfolio managers; Jim Schaeffer, Deputy CIO/ Co-Head of Fixed Income, Kevin Bakker and Ben Miller, Co-Heads of High Yield and Derek Thoms, High Yield Portfolio Manager. Mr. Schaeffer has been with Aegon since 2004 and is responsible for top-down portfolio themes, risk positioning and process oversight. Messrs. Bakker, Miller and Thoms are responsible for day-to-day portfolio management and have been in the role for 11, 12 and three years respectively. The portfolio management team is supported by 18 credit research analysts, five distressed debt analysts as well as 14 additional personnel covering other segments of the credit landscape in emerging markets (8 analysts), bank loans (2 analysts) and top-down strategy (4 analysts). The team has been relatively stable since Bradley Beman, CIO/ Director of High Yield left the firm in January 2015.

The team seeks to achieve their outperformance target primarily through issue selection informed by top-down macro insights and has a philosophical view that unexpected changes in the business cycle can create investment opportunities. Broad diversification is used to mitigate individual credit risk and aids in managing liquidity risk across industries and credit quality tiers. Typically, the portfolio will hold 125-175 issuers.

The portfolio construction process incorporates the portfolio management and research teams collaboratively to assess the relative attractiveness of names entering the portfolio. Quantitative and qualitative factors are aggregated and tested against valuation, technical metrics and investor sentiment. Sector and industry allocations are informed by the bottom-up top-down process with the portfolio's benchmark being viewed as a jumping-off point rather than a blueprint. The process results in a portfolio that can vary significantly from benchmark characteristics and historically has resulted in the ability to tactically position the portfolio defensively when warranted as well as being able to dial-up the risk profile as the process uncovers opportunities.

Performance

Referring to Exhibit 1, since inception of the High Yield Fixed Income portfolio on July 1, 2013, the strategy has underperformed the Bloomberg Barclays U.S. High Yield 2% Issuer Cap Index by 0.01%, returning 5.72%, net of fees. The portfolio ranked in the 22nd percentile in its peer universe since July 1, 2013. The information ratio was -0.01 and active risk, as measured by tracking error was 1.06%. In the one-year period ended September 30, 2018, the portfolio underperformed the index by 0.18% and ranked 41st in its peer universe. Underperformance in the trailing one-year was driven by security selection within BB and B rated credits as well as exposures in Energy, Technology and Basic Industry. The portfolio also had a higher quality (lower risk) bias with exposure to off-index investment-grade credit (4.4%) and underweights to CCC credits.

Since July 1, 2013, referring to Exhibit 2, much of the historical underperformance is a result of negative relative performance in the second quarter of 2016, where exposure to Energy issues resulted in a near two percent relative drawdown.

Conclusion

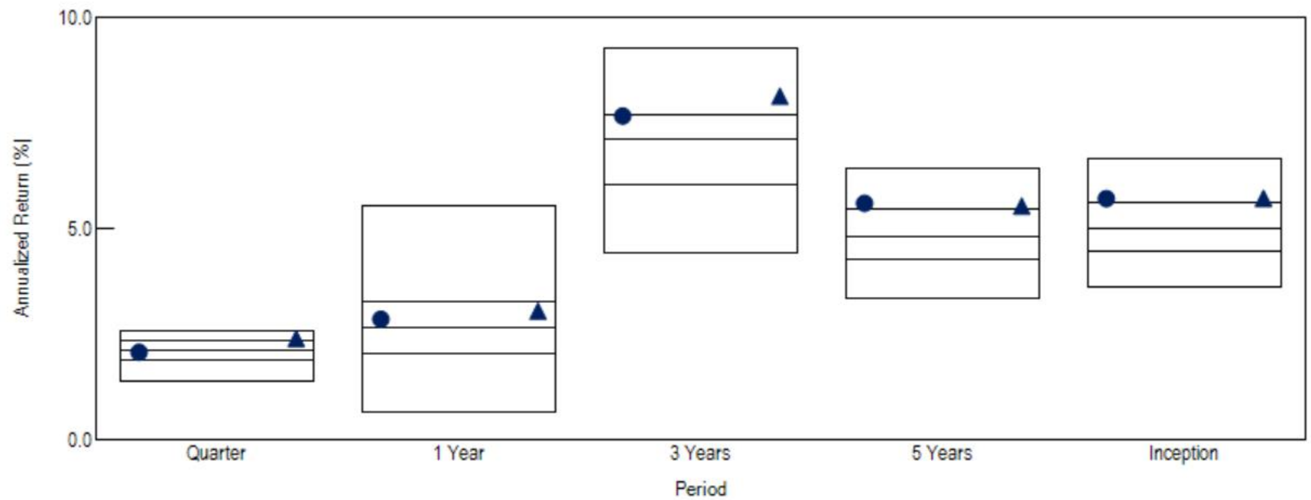
Aegon has performed substantially flat against its benchmark since July 1,2013. The firm settled a SEC investigation and reorganized many processes related to the firm’s risk, compliance, marketing, product development, audit and legal functions. The firm’s personnel, investment strategy and investment results provide NEPC with confidence that the high yield team at Aegon may be able to reproduce these results going forward. NEPC recommends a contract extension for a period of one year from the period of contract expiry.

The following tables provide specific performance information, net of fees referenced above.

ATTACHMENT A

Exhibit 1

eV US High Yield Fixed Inc Net Return Comparison
Ending September 30, 2018

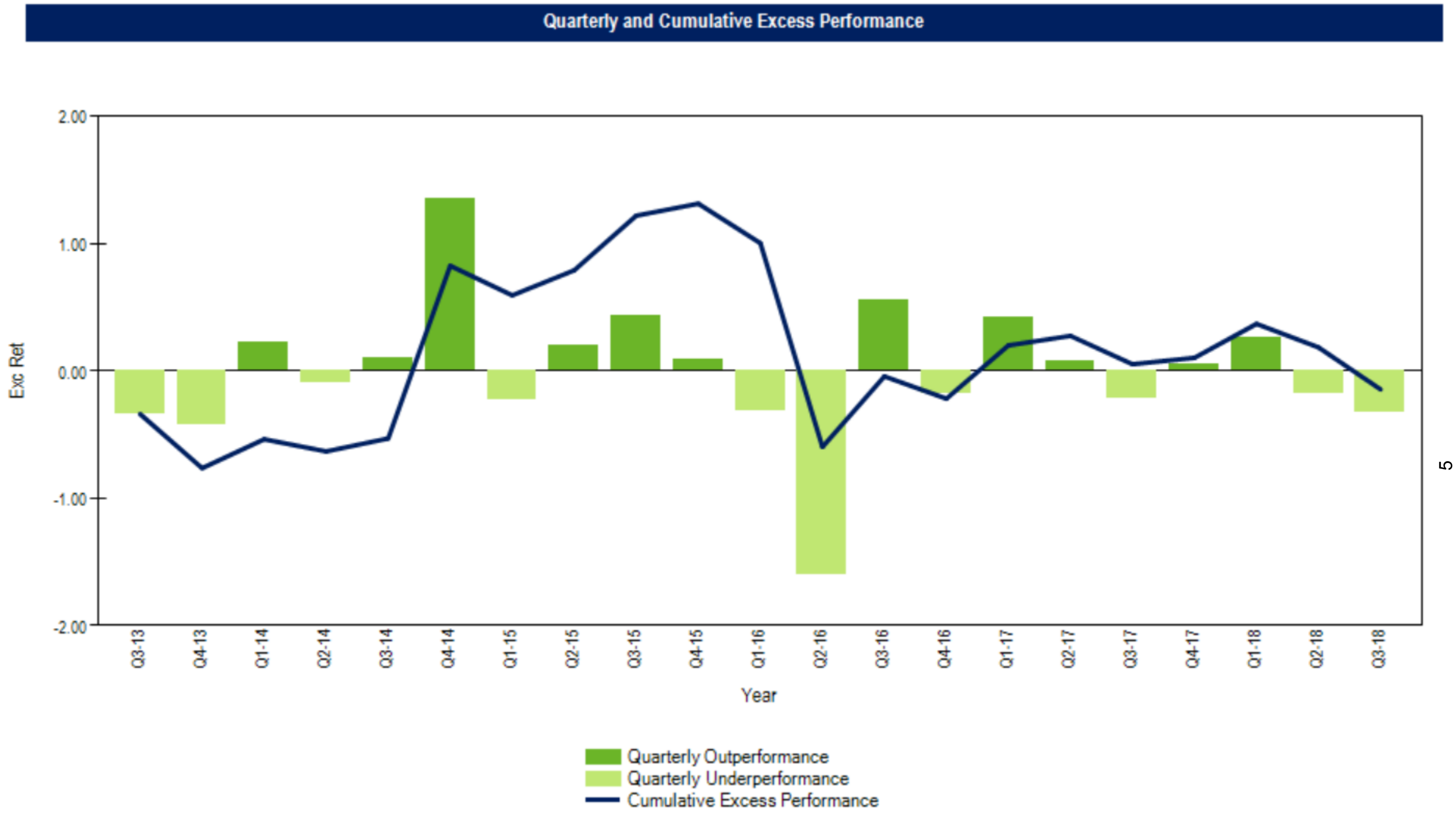


	Return (Rank)									
5th Percentile	2.59		5.53		9.29		6.44		6.67	
25th Percentile	2.34		3.26		7.70		5.49		5.61	
Median	2.12		2.66		7.13		4.83		5.00	
75th Percentile	1.89		2.05		6.06		4.27		4.46	
95th Percentile	1.37		0.65		4.43		3.36		3.63	
# of Portfolios	100		99		95		80		79	
● **AEGON USA**	2.07	(57)	2.86	(41)	7.68	(26)	5.61	(22)	5.72	(22)
▲ **BBgBarc US High Yield 2% Issuer Cap TR**	2.40	(20)	3.05	(33)	8.15	(14)	5.55	(24)	5.73	(22)

4

ATTACHMENT A

Exhibit 2



ATTACHMENT B

Vendor **Aegon USA Investment Management, LLC** Date Completed: **October 24, 2018**
Address

Category

TOTAL COMPOSITION OF WORK FORCE*									
Occupation	**African American Full Time**	**Hispanic Full Time**	**Asian or Pacific Islander Full Time**	**American Indian/ Alaskan Native Full Time**	**Caucasian (Non Hispanic) Full Time**	**Total Employees Full Time**	**Percent (%) Minority Full Time**	**Gender Male Full Time**	**Gender Female Full Time**
Officials & Managers	0	1	2	0	26	**29**	**10.34%**	25	4
Professionals	6	8	18	0	234	**266**	**12.03%**	146	120
Technicians	0	0	0	0	0	**0**	**0.00%**	0	0
Sales Workers	0	0	0	0	0	**0**	**0.00%**	0	0
Office/Clerical	0	0	3	0	16	**19**	**15.79%**	6	13
Semi-Skilled	0	0	0	0	0	**0**	**0.00%**	0	0
Unskilled	0	0	0	0	0	**0**	**0.00%**	0	0
Service Workers	0	0	0	0	0	**0**	**0.00%**	0	0
Other	0	0	0	0	0	**0**	**0.00%**	0	0
Total	**6**	**9**	**23**	**0**	**276**	**314**	**12.10%**	**177**	**137**

*As of 9/30/2018
** 24 employees have chosen not to disclose race. These individuals are listed under Caucasian (Non-Hispanic).

LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Report to Investment Committee

Agenda of: **DECEMBER 11, 2018**

Lita Payne for
From: Neil M. Guglielmo, General Manager

ITEM: **VII**

SUBJECT: **LACERS INVESTMENT POLICY STATEMENT REVIEW AND POSSIBLE COMMITTEE ACTION**

Recommendation

That the Investment Committee consider and provide comments regarding the proposed Investment Policy Statement amendments.

Discussion

The Board's review of the LACERS Investment Policy (IP) began in early 2015 on a section-by-section basis and was approved on October 24, 2017. However, two specific policy sections – Private Equity Investment Policy and Emerging Investment Manager Policy – were deferred until the next annual review of the IP.

The current IP was reviewed recently by staff and LACERS' three investment consultants. Proposed policy amendments are contained in the redline version. Staff requests that the Committee consider the proposed amendments and review other policy sections as appropriate.

Strategic Plan Impact Statement
Revising the LACERS Investment Policy Statement will assist LACERS with achieving satisfactory long-term risk adjusted investment returns (Goal IV); upholding good governance practices which affirm transparency, accountability and fiduciary duty (Goal V); and maximizing organizational effectiveness and efficiency (Goal VI).

This report was prepared by Eduardo Park, Investment Officer I, Investment Division.

RJ:BF:EP

Attachments: A) Investment Policy Statement – Proposed Changes (Redline Version)
B) Investment Policy Statement – Original Version as of October 24, 2017

1.1 INVESTMENT POLICY

~~Adopted~~Proposed: ~~October 24, 2017~~December 11, 2018

TABLE OF CONTENTS

Section 1 INVESTMENT POLICY

I. INTRODUCTION

This document provides a framework for the investment management of the assets of the Los Angeles City Employees' Retirement System ("LACERS" and hereafter known as the "System"). Its purpose is to assist the Board of Administration (the "Board") in effectively supervising and monitoring the investments of the System, with the support of the LACERS staff (the "Staff"). Specifically, it will address:

A. The general goals of the investment program;
B. The policies and procedures for the management of the investments;
C. Specific asset allocations, rebalancing procedures, and investment guidelines;
D. Performance objectives; and
E. Responsible parties.

The System establishes this investment policy in accordance with Section 1106 of the Charter of the City of Los Angeles for the systematic administration of the City Employees' Retirement Fund. Since its creation, the Board's activities have been directed toward fulfilling the primary purpose of the System, as described in Section 1106:

> "…to provide benefits to system participants and their beneficiaries and to assure prompt delivery of those benefits and related services; to minimize City contributions; and to defray the reasonable expenses of administering the system."

The System is a department of the City government and is governed by a seven member Board of Administration and assisted by a general manager. In the formation of this investment policy and goal statement, a primary consideration of the Board has been its awareness of the stated purpose of the System. The Board's investment activities are designed and executed in a manner that will fulfill these goals.

This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure that prudence and care is taken in the execution of the investment program.

II. INVESTMENT GOAL STATEMENT

The System's general investment goals are broad in nature. The following goals, consistent with the above described purpose, City Charter citations, and State Constitution are adopted:

A. The overall goal of the System's investment assets is to provide plan participants with post-retirement benefits as set forth in the System documents. This will be accomplished through a carefully planned and executed investment program.
B. A secondary objective is to achieve an investment return that will allow the percentage of covered payroll the City must contribute to the System to be maintained or reduced, and will provide for an increased funding of the System's liabilities.

C. The System's assets will be managed on a total return basis. While the System recognizes the importance of the preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns. The Board's investment policy has been designed to produce a total portfolio, long-term real (above inflation) positive return above the Policy benchmark on a net-of-fee basis as referenced in the quarterly Portfolio Performance Review ("PPR"). Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification. As a result, investment strategies are considered primarily in light of their impacts on total plan assets subject to the provisions set forth in Section 1106 of the City Charter with consideration of the Board's responsibility and authority as established by Article 16, Section 17 of the California State Constitution.

D. The System's investment program shall, at all times, comply with existing applicable local, state, and federal regulations.

E. All transactions undertaken will be for the sole benefit of the System's participants and beneficiaries and for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses associated with the System.

F. The System has a long-term investment horizon and uses an asset allocation, which encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.

G. Investment actions are expected to comply with "prudent person" standards as described:

> "…with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims (sometimes referred to as the 'prudent person' rule)." [1]

The "standard of care" will encompass investment and management decisions evaluated not in isolation but in the context of the portfolio as a whole and as part of an overall investment strategy having risk and return objectives reasonably assigned. The circumstances that the System may consider in investing and managing the investment assets include any of the following:

1. General economic conditions;
2. The possible effect of inflation or deflation;
3. The role that each investment or course of actions plays within the overall portfolio;
4. The expected total return from income and the appreciation of capital;
5. Needs for liquidity, regularity of income, and preservation or appreciation of capital;
6. A reasonable effort to verify facts relevant to the investment and management of assets.

[1] ERISA 404(a)(1) (B).

III. DUTIES OF RESPONSIBLE PARTIES

A. Duties of the Board or its Designate(s)

The Board has the responsibility for the administration of the System for the benefit of plan participants, although it is not the intent of the Board of Retirement to become involved in the day-to-day investment decisions. The Board or its designee(s) will adhere to the following procedures in the management of the Board's assets:

1. The Board develops and approves policies and guidelines for the execution of the Board's investment program. Only the Board in its sole discretion can delegate its decision-making authority regarding the investment program. Staff will be responsible for the implementation and administration of these decisions.
2. A formal review of the Board's Investment Policy and investment structure, asset allocation, and financial performance will be conducted annually or more frequently as the need arises. The review will include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in applicable regulations, long-term capital market assumptions, actuarial assumptions, or the System's financial condition.
3. The Board shall review investments quarterly, or as needed, to ensure that policy guidelines continue to be met. The Board shall monitor investment returns on both an absolute basis and relative to appropriate benchmarks, as well as peer group comparisons. The source of information for these reviews shall come from Staff, outside consultants, the custodian, investment managers, etc.
4. The Board may retain investment consultants to provide such services as conducting performance reviews, asset allocation, manager reviews, and investment research.
5. The Board shall be responsible for taking appropriate action if investment objectives are not being met or if policies and guidelines are not being followed. Reviews for separate portfolios managed by external managers will focus on the following areas:
   a) Manager compliance to the Policy guidelines.
   b) Material changes in the managers' organizations, such as investment philosophy, personnel changes, acquisitions or losses of major accounts, etc. The managers will be responsible for keeping the Board advised of any material changes in personnel, investment strategy, or other pertinent information potentially affecting performance.
   c) Investment performance relative to each manager's stated performance benchmark(s) as set forth in the manager's investment guidelines.
6. The Board shall expect Staff to administer the System's investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, management, consulting and custodial fees, transaction costs, and other administrative costs chargeable to the Board.

7. The Board shall be responsible for selecting qualified investment managers, consultants, and custodian.
8. Voting of proxies in stocks held by the System will be done according to Board policy.
9. The Board may delegate certain duties of the Board to the Investment Committee as specified in the Investment Committee Charter.

B. **Duties of the Staff**

The Board's Investment Staff provides analysis and recommendations to the Board on a wide variety of investments and investment related matters. Additionally, the Investment Staff oversees and directs the implementation of Board policies and manages the System on a day-to-day basis. Furthermore, staff responsibilities include the following details:

1. Invests the System's cash without requiring Board's permission as set forth elsewhere in the Board's Investment Guidelines.
2. Monitors investment managers for adherence to appropriate policies and guidelines.
3. Evaluates and manages the relationships with brokers, managers, consultants, and custodian(s) to the System to ensure that they are providing all of the necessary assistance to Board and to Staff.
4. Conducts the manager search process, as approved by the Board, with assistance from consultants as needed.
5. The Staff will manage Portfolio restructuring resulting from portfolio rebalancing or manager terminations with the assistance of consultants and managers, as needed.
6. The Staff and its designee(s) shall be responsible for organizing and/or participating in any special research for the Board.
7. The Staff shall ensure that Investment Managers conform to the terms of their contracts and that performance-monitoring systems are sufficient to provide the Board with the most timely, accurate, and useful information as possible.
8. The Staff shall advise and keep the Board apprised of any other events of investment significance.

C. **Duties of the Investment Managers**

The Investment Managers shall perform the following duties:

1. Contract by written agreement with the Board to invest within approved guidelines.
2. Provide the Board with proof of liability and fiduciary insurance coverage.
3. Be an SEC-Registered Investment Advisor under the 1940 Act or an authorized bank or trust, and be recognized as providing demonstrated expertise during a number of years in the management of institutional, tax-exempt assets within a defined investment specialty.

4. Adhere to the investment management style concepts and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.
5. Obtain best execution for all transactions for the benefit of the System with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the System, and, where appropriate, facilitate soft dollar credits and the recapture of commissions for the System's benefit.
6. Reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian and the Board's Investment Staff.
7. Maintain frequent and open communication with the Board and Staff on all significant matters pertaining to the System, including, but not limited to, the following issues:
   a) Major changes in the Investment Manager's investment outlook, investment strategy, and portfolio structure;
   b) Significant changes in ownership, organizational structure, financial condition, or senior personnel;
   c) Any changes in the Portfolio Manager or other personnel assigned to the System;
   d) Each significant client that terminates its relationship with the Investment Manager, within 30 days of such termination;
   e) All pertinent issues that the Investment Manager deems to be of significant interest or material importance; and
   f) Meet with the Board and/or Staff on an as-needed basis.

D. **Duties of the Master Custodian**

The Master Custodian shall be responsible to the Board for the following duties:

1. Provide complete global custody and depository services for the designated accounts.
2. Manage a Short Term Investment Fund (STIF) for investment of any un-invested cash, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.
3. Provide in a timely and effective manner a monthly report of the Investment activities implemented by the investment managers. Prepare a quarterly report containing absolute and relative investment performance.
4. Collect all income and realized principal realizable, and properly report it on the periodic statements.
5. Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions. The statements should be based on accurate security values for both cost and market. These reports should be provided within acceptable time frames.

6. Report situations where accurate security pricing, valuation, and accrued income are either not possible or subject to considerable uncertainty.
7. Assist the System to complete such activities as the annual audit, transaction verification, or unique issues as required by the Board.
8. Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.

E. **Duties of the General Fund Consultant**

The General Fund Consultant shall be responsible for the following:

1. Review quarterly performance including performance attribution on the Board's managers and total assets, including a check on guideline compliance and adherence to investment style and discipline.
2. Make recommendations for Board presentation regarding investment policy and strategic asset allocation.
3. Assist the Board in the selection of qualified investment managers and in the review of existing managers, including monitoring changes in personnel, ownership and the investment process.
4. Assist the Board in the selection of a qualified custodian if necessary.
5. Provide topical research and education on investment subjects as requested by the Board or Investment Staff.

IV. ASSET ALLOCATION POLICY

The policies and procedures of the Board's investment program are designed to maximize the probability that the investment goals will be fulfilled. Investment policies will evolve as the System's conditions change and as investment conditions warrant. The Board reviews the Asset Allocation Policy strategically approximately every three years and on a tactical basis more frequently.

The Board adopts and implements the Asset Allocation Policy that is predicated on a number of factors, including:

A. A projection of actuarial assets, liabilities, benefit payments, and required contributions;
B. Historical and expected long-term capital market risk and return behavior;
C. An assessment of future economic conditions, including inflation and interest rate levels; and
D. The current and projected funding status of the System.

This policy provides for diversification of assets in an effort to maximize the investment return of the System consistent with market conditions. Asset allocation modeling identifies the asset classes the System will utilize and the percentage that each class represents of the total plan assets. Due to the fluctuation of market values, positioning within a specified range is acceptable and constitutes compliance with the policy. It is anticipated that an extended period of time may be required to fully implement the Asset Allocation Policy and that periodic revisions will occur. The Board will monitor and assess the actual asset allocation versus policy and will rebalance as appropriate.

The Board will implement the Asset Allocation Policy using investment managers to invest the assets of the System's portfolio components subject to investment guidelines. Equity managers may not hold more than 10% of the market value of their portfolios in cash without Board approval, unless otherwise specified in their manager guidelines. The long-term asset allocation targets and ranges for the investments of the System's assets are presented in the latest Board-approved Asset Liability Study and Asset Allocation Policy.

The Board will allocate segments of the System's assets to each investment manager and specify guidelines, objectives and standards of performance, which are to apply to each manager's portfolio. These decisions will encompass allocating segments of the System assets, and segments of individual asset classes, between active and passive investment management, the active risk of the portfolio and to provide broad market exposure.

V. INVESTMENT POLICY

The Board will retain external investment managers to manage the System's assets using a specific style and methodology. Public external investment managers have been delegated authority for determining investment strategy, security selection, and timing. Public external investment managers are subject to the Board's policy and individual investment manager guidelines, legal restrictions, and other Board direction. Performance objectives will also be developed for each manager. The performance of each portfolio will be monitored and evaluated on a regular basis relative to each portfolio component's benchmark return and, if available, relative to a peer group of managers following similar investment styles. Private market investment managers shall manage the System's assets pursuant to the respective asset class policy and the partnership fund's limited partnership agreement or other applicable legal documents.

Investment actions are expected to comply with "prudent person" standards. Each investment manager will be expected to know the rules of the Board and comply with those rules. It is each manager's responsibility to identify policies that have an adverse impact on performance and to initiate discussion toward possible improvement of the rules of the Board.

The Board will also review each investment manager's adherence to its investment policy and any material changes in the manager's organization (e.g., personnel changes, new business developments, etc.). The investment managers retained by the Board will be responsible for informing the Board of such material changes within a reasonable timeframe as articulated within their respective investment guidelines.

Investment managers under contract to the Board shall have discretion to establish and execute transactions with securities broker/dealer(s). The investment managers will attempt to obtain best execution with respect to every portfolio transaction. The following transactions will be prohibited: net short sales; selling on margin; writing options other than covered options; "prohibited transactions" as defined under the Employee Retirement Income Security Act (ERISA); and, transactions that involve a broker acting as a "principal," where such broker is also the investment manager making the transaction. The investments of the Board's assets will be subject to the following general policies.

A. **Manager Selection**

The selection of investment managers is accomplished in accordance with all applicable local, state, and federal laws and regulations. Each investment manager, consultant, and custodian functions under a formal contract that delineates responsibilities and appropriate performance expectations. Section VII describes LACERS' Manager Search and Selection Policy which articulates the process that will be employed for each public markets manager search.

B. **Manager Authority**

The Board's investment managers shall direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; Board rules or direction, applicable local, state, and federal statutes and regulations and individual management investment plans and executed contracts.

C**. Brokerage Policy**

The Board directs all investment managers trading public securities to utilize brokers who shall fulfill brokerage transactions for System assets in accordance with best execution. Subsequently, all LACERS public equity managers are to utilize commission recapture brokers on a best efforts basis. Commission recapture is a program designed to reduce fund expenses and increase cash flow by returning a portion of the commissions that external investment managers pay to brokers. Staff will provide to the Board an annual report summarizing commission and recapture activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

D. **Proxy Voting**

Proxy voting rights will be managed with the same care, skill, diligence, and prudence as is exercised in managing other assets. Proxy voting rights will be exercised in the sole interest of the System's members and beneficiaries in accordance with all applicable statutes consistent with the Board Proxy Voting Policy, which is found in Section XIV of this policy statement.

E. **Securities Lending**

The Board has authorized the execution of a "Securities Lending Program," which may be managed by the Board's custodian or delegated to a third-party provider. The Board will monitor and review the program. This program is described in the Securities Lending Policy (Section XV of this document) and in the Securities Lending Agreement of the securities lending provider. The initial collateral levels will not be less than 102% of the market value of the borrowed securities, or not less than 105% if the borrowed securities and collateral are denominated in different currencies. Marking to market is performed every business day, and the borrower is required to deliver additional collateral when necessary. Stringent cash and non-cash collateral guidelines specify eligible investments, credit quality standards, and diversification, maturity and liquidity requirements.

F. **Derivatives**

The Board's investment managers may be permitted, under the terms of individual investment guidelines, to use derivative instruments as set forth in each manager's investment guidelines to control portfolio risk. Derivatives are contracts or securities whose returns are derived from the movement of the pricing of other securities. The returns are to be consistent with the manager's mandate from the returns of other securities, indices, or allowable derivative instruments that include, but are not limited to, futures and forwards. Examples of appropriate applications of derivative strategies include hedging interest rates and currency risks, maintaining exposure to a desired asset class while effecting asset allocation changes, and adjusting portfolio duration for fixed income. In no circumstances can managers borrow funds to purchase derivatives. Managers must ascertain and carefully monitor the creditworthiness of any counterparties involved in derivative transactions.

G. **Rebalancing**

The investment portfolio shall, on an ongoing basis in accordance with market fluctuations, be rebalanced to remain within the range of targeted allocations and distributions among investment advisors. The Board has a long-term investment horizon and utilizes an asset allocation that encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.

Rebalancing is not primarily intended to be used for tactical asset allocation. The Board will not attempt to time the rise or fall of the investment markets by moving away from long-term targets because (1) market timing may result in lower returns than buy-and-hold strategies; (2) there is little or no evidence that one can consistently and accurately predict market timing opportunities; and (3) rebalancing too often may result in excessive transaction costs. Recognizing the risks of market timing, the Board may authorize staff to rebalance assets within or among asset classes without breaching Board-established asset allocation policy threshold bands. Such rebalancing would be subject to an annually approved Tactical Asset Allocation Plan (TAAP) in order to enhance incremental performance during periods of market dislocations. The Board will renew the TAAP before the start of each fiscal year.

The Board delegates the responsibility of rebalancing to the Chief Investment Officer, who will seek the concurrence of the General Fund Consultant. Rebalancing generally will occur when the market values of asset classes (e.g., equities, fixed income, etc.) or sub-asset classes (e.g., large cap value, emerging markets, etc.) exceed their respective thresholds as established by the Board's approved asset allocation and asset class risk budgets.

The portfolio will be monitored daily, but reviewed by senior investment staff (i.e., Chief Investment Officer or Chief Operating Officer) at the beginning of each month to determine the need to rebalance asset classes or sub-asset classes within approved policy bands. Rebalancing will be conducted in a timely manner, taking into consideration associated costs and operational circumstances and market conditions. Rebalancing will be accomplished by using routine cash flows, such as contributions and benefit payments, by reallocating assets across asset classes, investment mandates, and investment managers.

Asset classes temporarily may remain outside of their ranges due to operational and implementation circumstances to include, but not limited to, illiquidity that prevents immediate rebalancing of certain asset classes such as private equity and private real estate; potential asset shifts pending in the portfolio over the next 12 months such as hiring/termination of a manager(s); an asset allocation review of the entire portfolio; or a structural review of a given asset class.

The Chief Investment Officer shall inform the Board in a timely manner of all rebalancing activity.

H. **Evaluation of Policy**

The Investment Policy Statement shall be reviewed by the Board at least annually, with the assistance of the Staff and investment consultant(s), and revised as necessary.

VI. GENERAL INVESTMENT OBJECTIVES AND GUIDELINES

The general investment objective is to outperform the overall policy portfolio benchmark. The overall policy portfolio benchmark consists of weighted asset class benchmarks for each asset class as determined by the Board. The long term policy benchmarks are listed below:

Asset Class	Benchmark
Domestic Equity	Russell 3000
Non-U.S. Equity	MSCI ACWI ex-U.S.
Fixed Income	BC U.S. Aggregate
Credit Opportunities	~~65~~15% BC U.S. HY Capped + 45% Credit Suisse Leveraged Loans Index + ~~35~~20% J.P. Morgan EMBI-GD + 20% J.P. Morgan GBI EM-GD
Private Equity	Russell 3000 + 300 bps
Private Real Estate	NFI-ODCE + 80 bps
Public Real Assets	U.S. Consumer Price Index + 5%
Cash	90-Day Treasury Bill

The portfolio is formally monitored by the Board quarterly versus its policy benchmark and also compared to the System's actuarial return target.~~ of 7.25%.~~

The Board will utilize the following portfolio investment components to fulfill the asset allocation targets and LACERS total fund performance goals established in this document.

A. **Equities**

Section 1 INVESTMENT POLICY

The Board expects that over the long run, total returns of equities will be higher than the returns of fixed income securities, but they may be subject to substantial volatility during shorter periods. Equity investment managers retained by the Board will follow specific investment styles and will be evaluated against specific market indices that represent their investment styles. Additionally, in the case of active managers, investment results may also be compared to returns of a peer group of managers with similar styles. The components of the System's equity holdings, the benchmarks for the various equity portfolios, and the general guidelines are listed below:

1. **Domestic Equities**

   a) **Index Funds/Core** – These investments will provide broadly diversified, core exposure through index funds to the U.S. equity market, primarily in large capitalization companies. Index funds provide primary liquidity for asset allocation.

   b) **Large Cap Growth Stocks** – The principal characteristic of the large cap stock component is its emphasis in stocks with market capitalization generally ranging above $10.0 billion. The Board's large growth stock allocation provides exposure to stocks of large capitalization whose valuations are more directly tied to future earnings prospects. Often, growth stocks sell at higher prices relative to expected or historical earnings growth. Growth stock volatility tends to be higher than value stocks, although such stocks generally outperform during rising markets while trailing the market in flat or declining periods.

   c) **Large Cap Value Stocks** – The principal characteristic of the large cap stock component is its emphasis in stocks with market capitalization generally ranging above $10.0 billion. As a more defensive portion of the equity portfolio, value stocks, covering the upper range of market capitalization, are expected to outperform the broad market during periods of flat or declining trends while underperforming during rising markets. Value stocks typically exhibit higher dividend yield, lower P/E ratios, and lower Price/Book ratios.

   d) **Mid Cap Core Stocks** – The principal characteristic of the mid-cap core stock component is its emphasis in stocks with market capitalization generally ranging from $3.0 billion to $10.0 billion.

   e) **Small Cap Core Stocks** – The principal characteristic of the small cap core stock component is its emphasis in stocks with market capitalization generally ranging from $250 million to $3.0 billion.

   f) **Small Cap Value Stocks** – The principal characteristic of the small value stock component is its emphasis in stocks with market capitalization generally ranging from $250 million to $3.0 billion, which are generally characterized by faster growth and higher long-term returns during periods of flat or declining trends. Value stocks typically exhibit higher dividend yield, lower P/E ratios, and lower Price/Book ratios.

   g) **Small Cap Growth Stocks** – The principal characteristic of the small growth stock component is its emphasis in stocks with market capitalization from $250 million to $2.0 billion, which are generally characterized by faster growth and higher long-term returns during rising markets. Growth stock volatility tends to be higher than value stocks.

The benchmarks for the domestic equity portfolios may include the following indices:

Large Cap Core Stocks	S&P 500 Index
	Russell 1000 Index
Large Cap Value Stocks	Russell 1000 Value Index
Large Cap Growth Stocks	Russell 1000 Growth Index
Mid Cap Core Stocks	Russell Midcap Index
Small Cap Core Stocks	Russell 2000 Index
Small Cap Value Stocks	Russell 2000 Value Index
Small Cap Growth Stocks	Russell 2000 Growth Index

General U.S. equity guidelines for active managers include the following:

(1) No securities shall be purchased on margin or sold short.

(2) American Depository Receipts (ADRs) are permissible investments.

(3) Convertible securities can be held in equity portfolios and will be considered equity holdings.

(4) Managers shall not purchase the stock (or securities convertible into stock) of any single corporation if the purchase would cause this portfolio to include more than 5% of the outstanding voting stock of a company.

(5) Exchange listed futures and options on equity instruments may be used only if employed in a risk-reducing fashion.

Any exemption from the general equity guidelines requires prior written approval from the Board.

2. **Non-U.S. Equities**

a) **Index Funds/Core Non-U.S. Stocks** – This portfolio provides broadly diversified equity markets outside the U.S. and, consequently, plays a significant role in diversifying the Board's portfolio. This segment will concentrate on larger companies in established equity markets around the world utilizing a macro approach.

b) **Developed Markets Core** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets.

c) **Developed Markets Value** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Value Index or the MSCI EAFE Value

Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets. Versus the non-U.S. equity developed markets opportunity set, these stocks are further characterized by having higher than market dividend yields, lower than market book value, and lower than market earnings growth. As a result, these stocks provide incremental diversification versus developed markets core stocks.

d) **Developed Markets Growth** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Growth Index or the MSCI EAFE Growth Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets. Versus the non-U.S. equity developed markets opportunity set, these stocks are further characterized by having lower than market dividend yields, higher than market book value, and higher than market earnings growth. As a result, these stocks provide incremental diversification versus developed markets core stocks.

e) **Small Cap Core** – This segment is comprised of non-U.S. stocks of the developed markets countries listed within the MSCI EAFE Small Cap Index. These stocks represent small cap companies which may have global products and customers or which may be dominant firms within their local country/regional markets. These stocks will generally have a market capitalization of less than $2 billion and exhibit high earnings growth and low dividend yields. These stocks provide incremental diversification versus large cap developed market stocks.

f) **Emerging Markets Core** – This component is comprised of equity positions in companies located in emerging, rapidly growing countries around the world. The companies tend to be large cap and may have global products or customers or they may be dominant firms within their local countries/regions. Because these are countries that are typically in the early development stages of economic growth, the returns in these countries are higher and more volatile on a year-to-year basis.

g) **Emerging Markets Value** – This portfolio contains value-oriented stocks of companies domiciled in non-U.S. emerging markets countries. These companies are large cap companies which, versus the broader emerging markets indexes, have lower price-to-book, higher dividend yields and lower earnings growth rates.

h) **Emerging Markets Growth** – This portfolio contains growth-oriented stocks of companies domiciled in non-U.S. emerging markets countries. These companies are large cap companies which, versus the broader emerging markets indexes, have higher price-to-book, lower dividend yields and higher earnings growth rates.

~~h)~~i) **Emerging Markets Small Cap** – This portfolio contains equity positions in smaller capitalization companies located in emerging, rapidly growing countries around the world. The stocks represent small cap companies and in general will have a market capitalization of less than $2 billion and exhibit high earnings growth and low dividend yields. These stocks provide incremental diversification versus larger capitalization emerging market stocks.

The benchmarks for the international equity portfolios may include the following indices:

Developed Markets Core (Passive)	MSCI World ex-U.S. Index
Developed Markets Core (Active)	MSCI EAFE Index
Developed Markets Value	MSCI EAFE Value Index
Developed Markets Growth	MSCI World ex-U.S. Growth Index
Non-U.S. Small Cap	MSCI EAFE Small Cap Index
Emerging Markets Core	MSCI Emerging Markets Free Index
Emerging Markets Value	MSCI Emerging Markets Value Index
Emerging Markets Growth	MSCI Emerging Markets Growth Index
Emerging Markets Small Cap	MSCI Emerging Small Cap Index

General Non-U.S. equity guidelines for active managers include the following:

(1) Portfolios shall be comprised of cash equivalents, debt instruments convertible into equity securities, forward foreign exchange contracts, GDR's, ADRs, and equity securities of companies domiciled outside the U.S. including established and emerging countries.

(2) Managers will have discretion to hedge currencies of the countries in which their portfolio is invested to protect the value of the portfolio from currency risk. A manager’s hedge ratio may not exceed 100% of the portfolio’s value, at market, without obtaining prior approval from the Board.

(3) No securities shall be purchased on margin or sold short.

(4) Managers shall not purchase the stock (or securities convertible into stock) of any single corporation if the purchase would cause this portfolio to include more than 5% of the outstanding voting stock of a company

(5) Exchange listed futures and options on equity instruments may be used only if employed in a risk-reducing fashion.

Any exemption from the general equity guidelines requires prior written approval from the Board.

B. **Fixed Income**

The primary role of the fixed income portfolio is to provide a more stable investment return and to generate income while diversifying the System’s investment assets. The fixed income portfolios will be managed on a total return basis, following specific investment styles and evaluated against specific market indices that represent a specific investment style or market segment. In addition, investment results may also be compared to returns of a peer group of managers investing with a similar style. The fixed income holdings are comprised of the following mandates.

1. **Core Fixed Income** – This segment will provide core exposure to the U.S. fixed income market including Treasury and government agency bonds, corporate debt, mortgages, and asset-backed securities. The portfolio will be primarily comprised of issues with duration within 30% of the benchmark. Overall portfolio quality will be at least investment grade rated.

2. **Index Bonds** – This passive fixed income portfolio is intended to track the characteristics of the benchmark.

3. **Credit Opportunities**

   The objective of the asset class is to provide one or more of the following contributions over the long term (i.e., market cycle or longer) to the LACERS total investment program:

   a) Real return above inflation of between 3% and 5%;
   b) Diversification versus LACERS' two main asset classes: equities and bonds; and,
   c) Income

   The target allocation to Credit Opportunities ~~is 5% with~~will include flexible rebalancing given the public/private composition of the asset class. Generally, the actual allocation will be kept within or ± ~~2~~4% of this target allocation objective.

   Investments will primarily be characterized by their underlying holdings of asset types. The credit opportunities investment program can be comprised of both public and private credit opportunities strategies. The following strategies will be considered as appropriate for consideration and implementation within LACERS' credit opportunities investment program:

   a) **U.S and Non-U.S. High Yield Bonds** – Below investment grade (i.e., <BBB/Baa) rated bonds issued by public corporations with a perceived higher risk of default. Investors in these securities hope to benefit from spread tightening relative to investment grade bonds and from their higher overall yields, i.e., income.

   b) **Emerging Markets Debt (Local, Hard, Sovereign and Corporate)** – Debt issued by the governments ("sovereign") of developing, or emerging, countries. Additionally, debt issued by corporations domiciled within emerging markets countries can be investment grade or below investment grade rated debt. Also can be issued in a foreign external, or "hard", currency (e.g., U.S. dollars, Euros, etc.) or in the country's local currency. Investors in these securities hope to benefit from spread tightening relative to investment grade and/or domestic bonds and from their higher overall yields.

   c) **Leveraged Loans** – Loans extended to high yield (i.e., below investment grade) or levered borrowers, generally by banks or other financial institutions. The loans are *not* levered – the borrowers are. Hence, there is a perceived higher risk of default. Leveraged loans tend to have short maturities and are higher in the capital structure than regular debt of the company. Investors in these securities hope to achieve higher than investment grade bond returns due to their higher yields.

d) **Distressed Debt** – Debt of issuers that 1) are sufficiently financially impaired where there is a high risk of default or bankruptcy, 2) have already defaulted on financial obligations, or 3) have entered into bankruptcy proceedings. Investors in these securities hope to achieve high returns through financial or other restructuring at the issuing company.

e) **Opportunistic or Special Debt Situations** – Debt which may not fit within the preceding categories that may offer a unique investment opportunity due to broader economic or financial conditions.

~~e)~~f) **Direct Lending** – Includes loans that are primarily floating rate debt obligations made to non-investment grade borrowers. Private direct lending involves a limited number of investors that structure terms of a transaction directly with a middle market or small corporate borrower. There is generally a limited public market with a middle market or small corporate borrower. Additionally, there is generally a limited public market for these loans and they are usually refinanced prior to maturity or held to maturity by one or a relatively small number of investors. Investors expect to earn a yield which is higher than publicly traded corporate debt to compensate for a higher degree of risk.

The primary return objective for the LACERS' Credit Opportunities program is to outperform a custom weighted benchmark of ~~65~~15% Barclays Capital U.S. High Yield Capped Index plus 45% Credit Suisse Leveraged Loans Index + ~~35~~20% J.P. Morgan ~~Emerging Markets Bond Index – Global Diversified ("~~EMBI Global Diversified Index ~~— GD")~~ + 20% J.P. Morgan GBI EM Global Diversified Index.~~by 50 basis points net of fees~~ over a market cycle. Performance evaluation on a risk-adjusted basis shall consider the diversification impact of Credit Opportunities on the LACERS Total Fund. Returns will be calculated after management fees.

The benchmarks for the various fixed income portfolios may include the following indices:

Core Fixed Income	BC Aggregate Bond Index
Intermediate Fixed Income	BC U.S. Govt/Credit Intermediate Bond Index
High Yield Bonds	BC U.S. High Yield 2% Capped Index
Emerging Market Debt	50% J.P. Morgan EMBI Global Diversified Index + 50% J.P. Morgan GBI EM Global Diversified Index
Bank Loans	Credit Suisse Leveraged Loans Index
Direct Lending	Credit Suisse Leveraged Loans Index

General fixed income guidelines include the following:

a) **Core Fixed Income**

(1) The total portfolio's average rating will be A or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 20%, in aggregate, invested in non-dollar denominated bonds and non-investment grade bonds are permitted.

(4) No securities shall be purchased on margin or sold short.

b) **Credit Opportunities**

High Yield Bonds

(1) The total portfolio's average rating will be B or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 20%, in aggregate, invested in non-dollar denominated bonds and investment grade bonds are permitted.

(4) No securities shall be purchased on margin or sold short.

Bank Loans

(1) No more than 5% of any single portfolio holding will be invested in any one issuer.

(2) No more than 40%, in aggregate, invested in securities of non-U.S. issuers.

(3) No more than 20% of the portfolio invested in loans or bonds that are not first lien secured debt and no more than 10% invested in non-secured debt.

(4) No more than 30% of the portfolio's holdings in loans or bonds with a Moody's issue rating of Caa1 or lower.

(5) No securities shall be purchased on ma~~r~~rgin or sold short.

Emerging Markets Debt Bonds

(1) The total portfolio's average rating will be BBB/Baa or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 30%, in aggregate, invested in out of benchmark securities.

(4) No more than 10%, in aggregate, invested in U.S. and non-U.S. developed markets bonds

(5) No securities shall be purchased on margin or sold short.

Direct Lending

(1) Portfolio will consist of low-to-middle market (<$75 million EBITDA) senior secured or unitranche direct loans.

(2) At least 70% of the portfolio will be invested in senior secured loans.

(3) No more than 10% of the portfolio will be invested in unitranche loans.

~~D.~~C. Private Equity

This portfolio is expected to provide portfolio diversification and additional return to the System's public markets portfolio. Examples of private equity holdings will include venture capital, leveraged buyouts, distressed debt, and special situations funds. The Private Equity Investment Policy is within Section X of this document.

~~E.~~D. Real Assets

The objective of the asset class is to provide one or more of the following contributions over the long term (i.e., market cycle or longer) to the LACERS total investment program:

1. Real return above inflation of between 3% and 5%;
2. Inflation hedge;
3. Diversification versus LACERS' two main asset classes: equities and bonds; and,
4. Income

The target allocation to Real Assets ~~is 10% with~~will include flexible rebalancing given the public/private composition of this asset class. Generally, the public actual allocation will be kept within ~~30% (or~~ ± ~~3~~2%~~)~~ of this target allocation objective.

Investments will primarily be characterized by their underlying holdings of asset types. The real assets investment program will be comprised of both public and private real asset strategies. The following strategies will be considered as appropriate for consideration and implementation within LACERS' real assets investment program:

1. **Private Real Estate** – This portfolio is expected to provide portfolio diversification and increase returns due to real estate's low correlation with the returns from equities and fixed income. The Private Real Estate Investment Policy is included in Section XI of this document.
2. **Public Real Estate "REITS"** – Publicly traded companies that trade on major stock exchanges and invest directly in real estate either through properties or mortgages. A distinguishing characteristic of this investment strategy versus private real estate is the improved liquidity and yield orientation.
3. **Treasury Inflation Protection Securities ("TIPS") or Global Inflation-Linked Bonds** – Securities where the principal value adjusts to reflect changes in the U.S. CPI or other sovereign-linked inflation measures upward or downward, but never below the original face amount at maturity. Semi-annual coupon payments are based upon the bond's adjusted principal which provides a direct inflation link.
4. **Commodities/Natural Resources** – Financial instruments, such as individual stocks, stock baskets or futures which represent companies or markets where the prices are directly linked to the ownership or trading of physical commodities/natural resources or companies whose primary source of revenues are tied directly or indirectly to the

management, ownership or trading of physical commodities/natural resources. Commodities/natural resources are raw materials which are inputs to the production of goods and services. Thus, changes in commodities/natural resources prices typically lead inflation. Higher commodities/natural resources prices lead to increased prices goods and services, hence, a directly link to inflation.

5. **Timber/Farmland** – These are a hybrid investment strategy in that similar to commodities, they provide final and raw material in the production of goods and services and will tend to lead inflation. However, as private investments, they are similar to private real estate in that a potential increase in property value exists due to changes in supply and demand factors that influence inflation.
6. **Master Limited Partnerships (“MLPs”)** – An MLP is a publicly traded partnership that combines individual limited partnerships into one entity to make the ownership interests more marketable with a general partner operating the business. MLPs are high income assets that should provide a consistent yield in between REITS and High Yield Bonds. As equities, they are also expected to earn returns commensurate with traditional public equities. An MLP is a pass-through entity that is taxed at the unit holder (i.e., share holder) level and not subject to tax at the partnership level. However, tax exempt investors may produce Unrelated Business Taxable Income (“UBTI”), which means tax-exempt investors engaged in a ‘business’ outside of the purpose for their exemption may be subject to UBTI. The businesses of MLPs are related to the extraction, production, and distribution of natural resources or energy infrastructure.
7. **Infrastructure** – Private markets investments in essential physical infrastructure such as toll roads, bridges, airports and utilities accessed by most citizens and designed to provide a steady income stream via tolls, leases, etc. Income stream is periodically adjusted by owners and inflation escalation provisions are often “built in” to provide a direct link to inflation. Capital appreciation also directly linked to primary economic drivers such as inflation.
8. **Oil and Gas Limited Partnerships** – Private markets investments in limited partnerships which have the objective of exploring/develop/market oil/gas sources. Returns are primarily driven by an income stream as well as from profits earned at the end of the partnership. However, returns are influenced by rate at which oil and gas flow from source. Thus, this is considered a highly risky, speculative investment strategy.
9. **Multi-Asset Real Asset/Return Strategies** – Bundled public markets or combination private/public markets real assets and/or real return strategies where the investment objective is to provide a real return above inflation over a market cycle. The investment manager has the discretion to select the combination of real asset strategies and to establish the exposure to each respective real asset strategy.

The primary return objective for the LACERS’ Real Assets program is to outperform the U.S. Consumer Price Index (“CPI”) plus 5% over multiple market cycles and to outperform a secondary custom benchmark comprised of the weighted average of the underlying strategy benchmarks over a full market cycle, with appropriate consideration of risk.

Performance evaluation on a risk-adjusted basis shall consider the diversification impact of Real Assets on the LACERS Total Fund. Returns will be calculated after management fees.

The benchmarks for the various real assets portfolios may include the following indices:

Private Real Estate	NFI-ODCE Index + 80 basis points
Public Real Estate "REITS"	FTSE NAREIT All Equity Index
U.S. TIPS	BC U.S. TIPS Index
Commodities	Bloomberg Commodity Index

General real assets guidelines include the following:

a) **Private Real Estate** (see Private Real Estate Policy within Section XI of this document)

b) **Public Real Estate**

(1) At least 90% of the portfolio investments must be invested in REITS.

(2) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(3) For prudent diversification of the portfolio, the maximum amount that can be invested in any one issue shall be the greater of 7.5% of the portfolio or 125% of the index weight.

(4) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 3%. In total, out of benchmark securities shall not exceed 10% of the portfolio market value at time of purchase.

(5) At no time shall the Account own more than 5% of the outstanding voting securities of any one issuer. No issue shall be purchased in the portfolio if more than 15% of the outstanding voting shares of the company are held by LaSalle in the total of all its accounts. All debt and all preferred stock of an issuer are each considered a single class for this purpose.

(6) No more than 50% in any one property type, including Regional Malls, Strip Shopping Centers, Apartments, Offices, Industrial, Healthcare, Manufactured Homes, Factory Outlets, and Other.

(7) No more than 40% in any one geographic region, including Northeast, Mideast, Southeast, Southwest, East North Central, West North Central, Pacific, and Mountain.

c) **Treasury Inflation-Protected Securities ("TIPS")**

(1) The total portfolio's average rating will be AAA by Moody's or Standard & Poor's.

(2) At least 80% of the portfolio investments must be invested in TIPS.

(3) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(4) The maximum effective duration shall be no more than 120% of the benchmark duration.

(5) The maximum asset allocation to a single security shall not exceed 200% of the benchmark weighting.

(6) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 5%. In total, out of benchmark securities shall not exceed 20% of the portfolio market value at time of purchase.

(7) Securities of emerging market country (countries as defined by the J.P. Morgan EMBI Global Diversified Index) issuers are limited to a maximum of 5% of the portfolio market value.

d) **Commodities**

(1) At least 80% of the portfolio investments must be invested in publicly traded commodities.

(2) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(3) The maximum asset allocation to a single security shall not exceed 5%.

(4) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 5%. In total, out of benchmark securities shall not exceed 20% of the portfolio market value at time of purchase.

VII. MANAGER SEARCH AND SELECTION POLICY

The purpose of the Manager Search and Selection Policy is to provide a comprehensive framework for the manager search and selection decision making process for the liquid market strategies. It specifically defines responsibilities and processes for the LACERS Board, Staff and General Fund Consultant.

A. **Roles and Responsibilities**

Role of Board	Role of Staff	Role of General Fund Consultant
• The Board is responsible for the authorization of the search for the investment manager(s). • The Board reviews and adopts the active and passive investment manager minimum qualifications based upon the written recommendation provided by the Staff and General Fund Consultant. • The Board reviews the semifinalist candidates as presented in the investment manager candidate evaluation report prepared by the Staff and General Fund Consultant. • Upon the completion of Staff's due diligence, the Board interviews investment manager finalist candidates. • The Board authorizes the selection and hiring of investment manager(s). • The Board may delegate certain Board duties to the Investment Committee as described in the Investment Committee Charter.	• Staff, with input from the General Fund Consultant, recommends mandates for Board approval. • Staff is responsible for the implementation of the manager search and selection process. • Staff develops a written set of minimum qualifications. Unique criteria not specified in the pre-approved minimum qualifications list will require Board approval. • Upon Staff concurrence of the semi-finalists, Staff and the General Fund Consultant provides the Board a written investment manager candidate evaluation and comparison report which will summarize the methodology for developing the list of semi-finalist candidates from the Qualified Respondents. • Staff conducts due diligence on the semi-finalist firms as reviewed by the Board. • Based on the findings of the due diligence, Staff will present a list of suitable semi-finalist candidates as finalist candidate(s) for the Board to interview.	• The General Fund Consultant works with Staff to develop a manager search initiation recommendation. • The General Fund Consultant works with Staff on additional written minimum qualifications for Board approval as necessary. • The General Fund Consultant applies the System's minimum qualifications and any additional Board-approved criteria in order to arrive at list of "Qualified Respondents" who pass the minimum qualifications. • The General Fund Consultant employs the investment manager candidate evaluation process to arrive at a list of semi-finalist candidates for Staff to then review and conduct due diligence upon. The investment manager candidate evaluation process will utilize the Evaluation Criteria as summarized in Section VII.B and may be adjusted as necessary.

B. **Sequential Search and Selection Process**

1. Staff and General Fund Consultant recommend mandate(s) for approval by the Board.
2. The Board authorizes the search of specific mandate(s).
3. Staff and General Fund Consultant develop minimum qualifications for the search and will seek Board approval for unique minimum qualifications not specified in Section VII.C & Section VII.D.
4. The General Fund Consultant applies the minimum qualifications and any additional Board criteria to the Request for Proposal (RFP).
5. The General Fund Consultant develops a list of respondents that meet the minimum qualifications ("Qualified Respondents").
6. The General Fund Consultant employs the investment manager candidate evaluation process to arrive at a list of semi-finalist candidates for Staff to review and approve.
7. Staff and General Fund Consultant provide for the Board's review an investment manager candidate evaluation and comparison report which summarizes the methodology for developing a list of semi-finalist candidates from the list of Qualified Respondents.
8. Staff conducts due diligence on the semi-finalist firms.
9. Based on the findings of the due diligence, Staff develops a suitable list of finalist candidate(s) for the Board to interview.
10. The Board interviews the investment manager finalist candidates.
11. The Board authorizes the selection and hiring of investment manager(s) based on the information presented in the interview and Staff's report.

C. **Evaluation Criteria**

Evaluation Criteria - Active		Weighting
Qualitative Assessment		70%
Organization/People	*30%*	
Investment Process	*40%*	
Risk Management	*30%*	
Quantitative Assessment[2]		20%
Expected Fees		10%

Evaluation Criteria - Passive		Weighting
Qualitative Assessment		10%
Organization/People	*50%*	
Product AUM	*50%*	
Tracking Error		40%
Expected Fees		50%

D. **Active Investment Management – Search and Selection Criteria**

Minimum qualifications will focus on the key characteristics required by the LACERS Board and Staff for a candidate firm to receive consideration for hire. The following minimum

[2]The quantitative assessment includes, but is not limited to, a skill test, information ratio, consistency means test and batting average.

qualifications will be applied for all active, liquid market strategy investment manager searches.

a) Firm is a registered investment advisor under the Investment Advisors Act of 1940 or possesses bank exemption.

b) Must have a proven and verifiable track record, which conforms to the CFA Institute's Global Investment Performance Standards ("GIPS"), of at least five (5) years as of the most recent quarter end.

c) At least 60% of rolling four (4) quarter information ratios (i.e., excess return divided by excess risk) must be positive versus a mandate-appropriate benchmark, gross of fees, for the last five (5) years (12 of 20 quarters).

d) Strategy AUM must be of sufficient size that LACERS' expected mandate size would not comprise more than 25% of the proposed product assets.

Staff and the General Fund Consultant submits revised and/or additional minimum qualifications for each active, liquid market investment manager search as deemed appropriate given the mandate and asset class.

E. **Passive Investment Management – Search and Selection Criteria**

The following minimum qualifications will be used for all passive investment manager searches

a) Firm is a registered investment advisor under the Investment Advisors Act of 1940 or possesses bank exemption.

b) Must have a proven and verifiable track record, which conforms to the CFA Institute's Global Investment Performance Standards ("GIPS"), of at least five (5) years as of the most recent quarter end.

c) Strategy AUM must be of sufficient size that LACERS' expected mandate size would not comprise more than 50% of the proposed product assets.

F. **Emerging Managers**

The recommendation by Staff and the General Fund Consultant to initiate a search will include the expected number of firms that may meet LACERS' investment management search minimum criteria segregated by emerging and non-emerging investment managers. Emerging managers, as defined by LACERS' Emerging Investment Manager Policy (within Section IX of this document), will be highlighted in the investment management candidate evaluation summary report to the Board.

VIII. MANAGER MONITORING POLICY (LIQUID MARKETS STRATEGIES)

A. Purpose

The purpose of this policy is to:

1. provide a disciplined, methodical process for determining whether to retain or terminate managers of liquid markets strategies due to poor relative performance, organizational or personnel issues, or other factors which reduce LACERS' conviction in the manager/strategy;
2. establish general guidelines for monitoring the effectiveness of implementing the liquid markets investment strategies for which the investment managers are retained;
3. provide a detailed framework and criteria for placing a manager "On Watch" status;
4. provide a systematic, consistent, and objective framework for recommending or electing to retain or terminate a manager.

LACERS' objective is to determine the likelihood of future success of the strategy; therefore, it is important that retention/termination decisions focus on qualitative aspects of each manager's investment philosophy, strategy and process, as well as quantitative assessment of past and current performance.

It is also important to consider that each manager's situation is unique, and must be analyzed on an individual basis, taking into account any unique circumstances affecting the manager and its relationship with LACERS.

Liquid market strategies are strategies where the securities are publicly traded on daily priced exchanges or via the bond auction markets and which are housed within separate account portfolios, mutual funds, or commingled/collective funds with at least monthly liquidity. For investment managers that are not classified as liquid, mainly Private Equity and Real Estate, separate policies have been set up in Section X and XI, respectively.

B. Monitoring and Evaluation

Investment managers will be monitored in the following areas:

1. Investment performance relative to a specific benchmark and an appropriate peer group;
2. Investment risk relative to specific benchmark and an appropriate peer group;
3. Performance per unit of risk relative to specific benchmark and an appropriate peer group (information ratio);
4. Adherence to the investment manager's philosophy, process, and stated investment style/strategy;
5. Organizational and personnel continuity;

6. Compliance with Investment Manager Guidelines and Investment Policy.

LACERS' Staff and the General Fund Consultant will review and evaluate investment managers, quantitatively and qualitatively, using the following procedures:

1. Quarterly quantitative review of performance and risk relative to its specific benchmark and an appropriate peer group of active managers over various measurement periods (normally three to five years);
2. Quarterly review of portfolio characteristics, performance trends, style consistency, and risk expectations (standard deviation and tracking error);
3. Annual due diligence meeting at LACERS' office;
4. Every three years (generally) conduct due diligence meeting at the investment manager's office, unless significant organizational change warrants immediate evaluation;
5. More frequent, detailed and formal review of investment managers "On Watch" (see Section VIII.C below).

Following any evaluation, Staff and General Fund Consultant will determine whether the investment managers will be placed "On Watch" if it fails to meet two or more quantitative and/or qualitative factors as listed in Section VIII.E and VIII.F. However, in situations where there is organizational or personnel changes which directly impact the product in which LACERS is invested, no additional factors would be required to place the firm in "On Watch" status.

C. **Managers "On Watch"**

LACERS shall notify investment managers in writing of their status should they be placed "On Watch". Typically, "On Watch" status applies for one year from the initial placement date. However, the review period can be extended beyond the one year period based on the progress the investment manager is making such that the quantitative or qualitative factors listed in Section VIII.E and VIII.F are resolved.

The Board is updated on a quarterly basis of all managers' performance, status, and "On Watch".

Managers "On Watch" will receive no additional funding from rebalancing, contributions or other sources. However, funds may be withdrawn for rebalancing or liquidity needs.

D. **Newly-Hired Managers**

Quantitative factors will be evaluated quarterly, but shall not cause a manager to be placed "On Watch" until three years or more after inception, unless the manager demonstrates performance that is materially inconsistent with expectations or experiences organizational issues.

Section 3 MANAGER MONITORING POLICY (LIQUID MARKETS STRATEGIES)

E. **Quantitative Factors**

Factor	Trigger	Action
Annualized **net** performance relative to its benchmark for trailing **3-years**	Underperforms (net of fees) in 8 of 12 previous quarters	Place “On Watch” and notify manager
Annualized **net** performance relative to its benchmark for trailing **5-years**	Underperforms (net of fees)	Place “On Watch” and notify manager
Moving average tracking error (TE) for **3-years**	Greater than two standard deviations from ‘Since inception’ mean TE[3]	Place “On Watch” and notify manager
Moving average tracking error (TE) **for 5-years**	Greater than two standard deviations from ‘Since inception’ mean TE[4]	Place “On Watch” and notify manager
Moving average **net** Information Ratio for trailing **5-years**	Falls below 0.20.	Place “On Watch”, if fails another quantitative factor
PASSIVE MANDATES Annualized **net** performance relative to its benchmark for trailing **1-year**	Underperforms (net of fees) by more than 0.2%.	Place “On Watch” and notify manager
Annualized average tracking error (TE) for 1-year	Greater than 1%	Place “On Watch” and notify manager

[3] Or over at least a 5-year period using pre-hire data if inception less than five years.
[4] Or over at least a 10-year period using pre-hire data if inception less than ten years.

F. **Qualitative Factors**

A significant and potentially adverse event related to, but not limited to, any of the following qualitative issues or events may result in placing the investment manager on the “On Watch” status or an immediate termination.

Criteria	Factor	Action
Organization	Change in firm ownership and/or structure	Place “On Watch”, if determined that change might detrimentally affect performance and strategy
	Loss of one or several key personnel, specifically personnel on LACERS portfolio product	Place “On Watch”, if determined the turnover will impair the firm’s investment capabilities
	Significant loss of clients and/or assets under management	Place “On Watch”, if there is a high client turnover and high volume of outflows
	Significant and persistent lack of responsiveness to LACERS requests	Place “On Watch”, if service deterioration inhibits ability to monitor
	Regulatory agencies’ investigation and/or material litigation	Place “On Watch”, if nature, seriousness, and likely impact of charges on the firm and investment product warrant
Strategy and Risk Control	Deviation from stated investment philosophy, style and process	Place “On Watch” if deviation persists for more than 4 quarters. Terminate if no longer consistent with LACERS objective
	Risk management controls and procedures	Place “On Watch” for repeated guideline or policy violations

G. **Courses of Action**

After placing an investment manager “On Watch” status the following steps will be taken:

1. Staff will contact the investment manager and formally inform them of their status in writing. Notification shall indicate the reasons why the firm is “On Watch” and request the investment manager to explain and to provide plan of action to remove itself from “On Watch” status;

2. Staff and/or General Fund Consultant will meet with the investment manager, either in person or telephonically, following receipt of a written response from them;
3. Staff shall monitor the progress of the investment manager's implementation of the plan of action;
4. After the initial one year period, Staff and General Fund Consultant shall determine whether to remove the manager from "On Watch" status or continue the "On Watch" status. Staff may recommend a manager termination subject to the Board's approval.

If deemed necessary, the Board may request the investment manager to appear before the Board to explain the situation. Non-compliance with respect to the Board request shall be cause for an immediate termination recommendation by Staff to the Board.

H. **Halting of Trading Activity**

Investment managers may be required to halt trading activity by the Chief Investment Officer as soon as practicable due to unusual and significant operational risk factors that are deemed to have a material impact on the System; and, without immediate action taken by the Chief Investment officer, could result in material harm or impairment to LACERS' portfolio. Halting of the trading activity is subject to the concurrence of LACERS General Manager and General Fund Consultant. The Chief Investment Officer shall report the action(s) at the next scheduled Board meeting. Authorization to resume trading activity by the Chief Investment Officer requires the concurrence of LACERS General Manager and the General Fund Consultant.

I. **Termination**

The Board reserves the right to terminate an investment manager for any reason regardless of status. Grounds for investment manager termination may include, but are not limited to, the following reasons:

1. Failure to comply with the guidelines agreed upon for management of the Board's portfolio, including holding restricted issues;
2. Failure to achieve performance objectives specified in the manager's guidelines;
3. Significant deviation from the manager's stated investment philosophy and/or process;
4. Loss of key personnel;
5. Evidence of illegal or unethical behavior by the investment management firm;
6. Lack of willingness to cooperate with reasonable requests by the Board for information, meetings or other material related to its portfolios;
7. Loss of confidence by the Board in the investment manager;
8. A change in the System's asset allocation program, which necessitates a shift of assets to another sector.

The Board will carefully review any one of these factors; however, the presence of any one of these factors may not necessarily result in a termination.

Upon the Board's approval of termination, Staff will notify the investment manager in writing of the termination process and the date on which to cease all trading based on operational needs. Staff will keep the Board informed of the termination progress.

All of LACERS investment management contracts under the Manager Monitoring Policy (Liquid Markets Strategies) allow LACERS to terminate the manager, with or without cause, after 30 days' written notice.

IX. EMERGING INVESTMENT MANAGER POLICY

A. Policy Objectives

The objective of this Emerging Investment Manager Policy (“Policy”) is to identify investment firms with the potential to add value to the LACERS investment portfolio (“Fund”) that would otherwise not be identified by the standard LACERS institutional investment manager search process. The Board believes that smaller investment management organizations may generate superior performance returns because of the increased market flexibility associated with smaller asset bases. The Policy provides criteria for LACERS to identify appropriate investment management organizations in their early business stages.

Consistent with the Board’s fiduciary responsibility, the goal of this Policy is to locate and fund emerging investment managers with successful histories of generating positive alpha at an appropriate level of active risk. LACERS may consider an emerging investment manager mandate as part of any investment manager search undertaken by the Board, after Staff and the appropriate fund consultant have determined that the emerging manager return and risk characteristics of the mandate under consideration are no less favorable than comparable, non-emerging investment manager opportunities available for that mandate.

The Board recognizes that emerging investment managers may not possess the organizational depth and resources of larger investment management firms, and may represent a greater business risk. The Board also recognizes that prudent management of the System requires that emerging investment managers, once retained, will manage significantly smaller amounts of LACERS’ assets than larger investment management firms. Each of these issues will result in greater oversight and administrative responsibilities for LACERS’ staff, and will consequently be part of the evaluation whenever emerging investment managers are being considered for inclusion in a manager search.

Managers hired pursuant to this Emerging Investment Manager Policy will be held accountable to the same performance, reporting, and retention standards as all other LACERS investment managers within the same asset class.

B. Emerging Investment Manager Goals

Public Markets: The Emerging Investment Manager aspirational policy goal for public market asset classes is 10%. Two metrics will be calculated at least annually to compare actual results versus the goal: 1) Asset Class Metric: total market value of all emerging investment managers accounts within a respective public market asset class divided by total market value of the respective public market asset class; and 2) Manager Search Metric: total dollars approved for contract with an Emerging Manager(s) divided by the total dollars approved for funding the respective investment manager search.

Private Markets: The Emerging Investment Manager aspirational policy goal for private market asset classes is 10%. Two metrics will be calculated at least annually to compare actual results versus the goal: 1) Asset Class Metric: total dollar commitments of all emerging investment manager partnerships within a respective asset class divided by the total dollar market value of the respective asset class; and 2) Manager Search Metric: total dollar commitments provided to Emerging Managers within a specific private market asset class divided by the total dollar value of all investment commitments in the same private market asset class over rolling 36-month periods.

C. **Emerging Investment Manager Minimum Criteria**

The following minimum criteria for firms to qualify as LACERS Emerging Investment Manager status under this Policy are as follows:

1. Public Market Asset Classes – *U.S. Equities, Non-US Equities, Core Fixed Income*
   a) The firm will have no more than $2 billion in total firm assets under management at the time of hire.
   b) The firm must have a minimum of $50 million assets under management in the strategy being considered.
   c) The firm must have been in existence for a minimum of one year.
   d) The portfolio manager must have a minimum of five years of verifiable experience managing the strategy being considered. The experience must include a GIPS-compliant performance track history attributable to the portfolio manager for the most recent 36-month period of the five-year verifiable experience requirement.
   e) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.
   f) At the time of hire, funding in the investment strategy shall not exceed 20% of the total strategy AUM at the time of actual funding.

2. Private Market Asset Classes – *Private Equity, Real Assets (not including Real Estate), Credit Opportunities*
   a) The General Partner will have no more than $~~500 million~~1 billion in firm-wide assets (based on the fair market value) of the previous fund at the time staff concurred on the proposed commitment plus ~~unfunded commitments at the time LACERS makes its commitment.~~ the current amount of the drawdown commitment of the previous fund.
   b) First- or second-time institutional fund for a General Partner.
   c) The Fund shall have a minimum fund size of $100 million in committed capital inclusive of LACERS' pending commitment.*
   d) The firm must have been in existence for a minimum of one year.
   e) The firm must have a minimum track record of five years. Any firm with a track record of less than five years may utilize track records established at prior firms

when performance can be clearly attributed to the emerging firm's key individuals and/or the specific team associated with the strategy being considered.

f) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.

g) No Limited Partner can represent more than 30% of the total Fund's* capital.

h) LACERS' commitment in the strategy being considered shall not exceed 10% of the projected final closing fund size or $~~2~~30 million, whichever is lower.

**Excludes co-investments or sidecar investment vehicles.*

3. Private Market Asset Class – *Private Real Estate*

a) The General Partner will have no more than $~~500 million~~2 billion in firm-wide assets (based on the fair market value) of the previous fund at the time staff concurred on the proposed commitment plus the current amount of the drawdown commitment of the previous fund.

~~a) unfunded commitments at the time LACERS makes its commitment.~~

b) First- or second-time institutional fund for a given General Partner.

~~b)~~c) The Fund shall have a minimum fund size of $150 million in committed capital inclusive of LACERS pending commitment.*

~~c)~~d) The firm must have been in existence for a minimum of one year.

~~d)~~e) The firm must have a minimum track record of five years. Any firm with a track record of less than five years may utilize track records established at prior firms when performance can be clearly attributed to the emerging firm's key individuals and/or the specific team associated with the strategy being considered.

~~e)~~f) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.

~~f)~~g) No client can represent more than 30% of the total Fund's* capital.

~~g)~~h) LACERS commitment in the strategy being considered shall not exceed 10% of the projected final closing fund size or $~~2~~30 million, whichever is lower.

**Excludes co-investments or sidecar investments.*

D. **Provisions for Post-Emerging Firms**

1. Public Markets

LACERS expects that successful emerging investment management firms will grow beyond the maximum $2 billion in assets under management. An emerging investment manager firm under contract to LACERS that successfully grows its assets under management and meets the minimum investment manager search criteria may be considered for a larger-sized mandate subject to (at minimum) meeting the Manager

Search and Selection Criteria provided in the LACERS Manager Search and Selection Policy (Section VII of this document).

2. Private Markets

LACERS expects that successful emerging investment management firms will grow beyond raising first- and second-time partnership funds. Opportunities for participating in subsequent funds may be considered provided that the strategy meets the criteria of LACERS' Private Equity Investment Policy, Private Real Estate Investment Policy, Credit Opportunities Strategy Statement, or another asset class policy unique to a respective private markets mandate.

E. **Reporting**

Staff will report to the Board on the status of Emerging Investment Managers hired and retained on an annual calendar year basis. The annual report will include:

1. Names of Emerging Investment Manager firms hired during the calendar year.
2. Dollar amounts awarded to Emerging Managers.
3. Report of Emerging Investment Manager Goals Metrics pursuant to Section IX.B of this Policy.
4. List of all investment manager searches.
5. Staff and consultant efforts to increase the visibility of LACERS Emerging Investment Manager searches and Emerging Investment Manager representation within the total Fund portfolio.
6. Individual manager performance.

X. PRIVATE EQUITY INVESTMENT POLICY

A. Introduction

This Private Equity Investment Policy ("Private Equity Policy") sets forth guidelines that provide a general framework for selecting, building, and managing LACERS' investments in private equity, including corporate finance/buyout, special situations (including distressed debt, distressed turnaround and mezzanine strategies), venture capital partnerships, co-investments, secondaries, and other privately structured investments with like return and risk characteristics of private equity.

B. Investment Objectives

1. Return

On a relative basis, the return objective for the LACERS' private equity portfolio ("Private Equity Portfolio") is 300 bps over the Russell 3000 Index net of fees, expenses, and carried interest.

Returns are measured over the life of the partnership and become meaningful for periods past the J-Curve. The valuation methodology used by general partners should conform to industry and regulatory standards. Additionally, the IRR performance in the first few years of a partnership's life may be negative due to the J-curve effect.

2. Risk

Private equity investments are illiquid and have a long-term holding period. When invested alongside publicly traded assets, the asset class increases diversification and reduces risk at the System level. Nonetheless, LACERS expects that the Private Equity Consultant will take all appropriate measures to reduce risks that are not compensated adequately for by expected return. Such measures include, but are not limited to, diversification (as detailed in Section X.D.3 below) and due diligence.

C. Scope

The Private Equity Consultant is engaged by LACERS to select new investments, monitor existing investments, and provide advice in accordance with the Private Equity Policy. This Private Equity Policy establishes the framework for the management of the Private Equity Portfolio. The Private Equity Consultant will be evaluated annually as consultant and investment manager for the Private Equity Portfolio based upon the following: portfolio performance; quality of analytical and technical work; expertise in the private equity asset class; responsiveness to requests from the LACERS Board of Administration ("Board") and LACERS Investment Staff ("Staff"); availability to attend Board meetings and meetings with Staff with reasonable advance notice; consulting and advising on LACERS' portfolio, including information on selected private equity related topics; identifying and mitigating risks; and proactively informing Staff of new investment opportunities or risks in the marketplace.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

The Private Equity Consultant has discretion to buy, sell, or otherwise effect investment transactions pursuant to the roles and responsibilities defined in Section X.F, for all new partnerships up to and including $~~2~~50 million and for all follow-on partnerships up to and including $100~~40~~ million. Recommendations that exceed those amounts must be presented by the Private Equity Consultant to Staff for review and evaluation, and to the Board for approval. Non-U.S. dollar commitments to private equity shall be equal or less than the maximum U.S. dollar-equivalent limits as of the day Staff concurs with the Private Equity Consultant. Non-U.S. dollar commitments to private equity may exceed the U.S. dollar currency equivalent maximum commitment limits after the date of Staff's concurrence due to foreign currency exchange rate fluctuations, and require no further Board approval.

D. **Investment Guidelines**

1. **Eligible Investments**

LACERS will invest in top tier limited partnership interests of pooled vehicles covering the broad spectrum of private investments as follows:

a) Private equity partnerships – including corporate finance/buyout, special situations, and venture capital. Special situations is a broad investment strategy, which includes mezzanine and distressed debt partnerships, fund-of-funds (both direct and secondary), industry-focused, and multi-stage "generalist" partnerships;

b) Co-investments – direct investments made alongside a partnership;

c) Direct secondary purchases – purchases of an existing partnership interest or pool of partnership interests from an investor;

d) Other privately structured investments that are deemed appropriate within LACERS' risk profile that may include direct investments;~~.~~

~~d)~~e) Consider sale of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s).

2. **Limitation on Percent of Partnership's Total Commitment**

LACERS' commitment to any given partnership shall not exceed 20% of that partnership's total commitments without the Board's approval.

3. **Diversification**

The Private Equity Consultant, on behalf of LACERS, will diversify the following sources of risk in the Private Equity Portfolio.

a) Partnerships

(1) No more than 15% of the Private Equity Portfolio's total exposure (market value plus unfunded commitments) to private equity may be attributable to partnerships by the same manager at the time the commitment is made.

(2) The Private Equity Consultant shall diversify the Portfolio across vintage years when possible.

(3) The geographic distribution of investments shall be monitored for diversification by the Private Equity Consultant.

The Private Equity Consultant shall monitor investments with respect to industry. In the event that the current cost-basis associated with a single industry exceeds 25% of the cost basis of the Private Equity Portfolio, the Private Equity Consultant shall attempt to reduce this exposure by limiting future commitments to partnerships with an explicit focus on the industry in question and with the understanding that industry exposure at an investment level will be managed at the discretion of the general partner.

b) Sub-asset Classes

(1) Assets committed to venture capital shall be diversified across the stages of venture capital (e.g., early-stage, mid-stage, late-stage, and growth equity).

(2) Assets committed to corporate finance/buyouts shall be diversified by target company size (e.g., mega, large, mid, and small).

In addition to the diversification criteria listed above, LACERS' Board along with the Private Equity Consultant will adopt optimal sub-asset allocation targets, which will be updated periodically to reflect general changes in the economy.

The current optimal sub-asset class allocation ranges and targets for LACERS' private equity investments are highlighted in the most recent Private Equity Annual Strategic Plan.

4. **Illiquidity**

Private equity investments are not designed to meet the short-term liquidity needs of LACERS. The investments in this asset class are illiquid until the partnerships, at their discretion, sell investments and distribute proceeds.

5. **Distributions**

Staff is responsible for the final disposition of distributions from partnerships.

E. **Review of Investment Guidelines**

The Private Equity Consultant and Staff periodically will review investment guidelines as set forth in Section X.D (above) and recommend changes if necessary.

F. Roles and Responsibilities

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Strategy/Policy	• Select Private Equity Consultant. • Approve asset class funding level. • Review and approve the Private Equity Annual Strategic Plan which includes allocation targets and ranges.	• With Private Equity Consultant and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.	• With staff and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.
Investment Selection	• Review investment analysis reports. • Review and approve investments in new management groups of amounts greater than $~~2~~50 million prior to investment. • Review and approve investments in follow-on partnerships of amounts greater than $~~40~~ 100 million prior to investment.	• Refer investments and forward to Private Equity Consultant for preliminary screening. • Conduct meetings with potential new investments prior to recommending to the Board, if practical. • In conjunction with Private Equity Consultant, invest up to $~~2~~50 million for new partnerships, and up to $~~40~~ 100 million for follow-on funds without Board approval. If staff opposes, refer to Board for decision. • In conjunction with Private Equity Consultant, make recommendations to Board for approval for investments over $~~2~~50 million in new partnerships, or over $~~40~~ 100 million in follow-on funds. • Execute agreements.	• Conduct extensive analysis and due diligence on investments. • Recommend for Board approval investments over $~~2~~50 million for new managers, or over $~~40~~ 100 million in follow-on funds. • With staff concurrence, approve investment of up to $~~2~~50 million for new partnerships, and up to $~~40~~ 100 million in follow-on funds. • Provide investment analysis report for each new investment and sale of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s).~~.~~ • Communicate with staff regarding potential opportunities undergoing extensive analysis and due diligence. • Coordinate meetings between staff, Board, and general partner upon request. • Negotiate legal documents.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

Investment Monitoring	• Review quarterly, annual, and other periodic monitoring reports. • Approve sale of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s)	• Review quarterly, annual and other periodic monitoring reports prepared by the Private Equity Consultant. • Conduct meetings with existing managers periodically. • Attend annual partnership meetings when appropriate. • Fund capital calls and distributions. • Review Private Equity Consultant's recommendations on amendments~~.~~ and consents. • Execute amendments to agreements and consents. • Manage and approve the wind-down and/or dissolve private equity fund investment(s) with private equity consultant's concurrence. • Manage and execute the sale of partnership interest on the secondary market or to other limited partner(s) or potential buyer(s).	• Maintain regular contact with existing managers in the portfolio to ascertain significant events within the portfolio. • Recommend amendments and consents to staff for approval. • Provide quarterly, annual, and other periodic monitoring reports.

XI. PRIVATE REAL ESTATE INVESTMENT POLICY

This Real Estate Investment Policy sets forth a general framework for managing LACERS' investments in real estate. This policy provides that the LACERS' real estate program shall be planned, implemented, and monitored through the coordinated efforts of the Board, the General Fund Consultant, Staff, the Real Estate Consultant, and the Investment Managers. Additionally, this policy is subject to the guidelines set forth by LACERS in the Marketing Cessation Policy and in the Third Party Marketing and Referrals Disclosure Policy, as amended from time to time by the Board, or as stated under applicable laws or regulations.

The Real Estate Consultant, along with Staff, shall prepare an Annual Real Estate Strategic Plan, as defined below, to be considered and acted upon by the Board that will address the specific goals and guidelines to be achieved and followed in the Real Estate Portfolio each year. The Annual Real Estate Strategic Plan shall be consistent with the guidelines set forth in this policy.

A. **Real Estate**

For purposes of this policy, real estate shall be defined to include investments that are private equity or debt positions in real property. Investments may be leveraged or unleveraged. As further set forth in this policy, LACERS will invest primarily in discretionary commingled funds (e.g., limited liability companies, real estate investment trusts, and limited partnerships) owned with other suitable institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds). As further set forth in this policy, LACERS also may invest in real estate assets on a direct ownership basis through a discretionary separate account vehicle. Such investments will be evaluated on a case by case basis, but at a minimum, need to provide a compelling opportunity, which is consistent with the Real Estate Portfolio's investment objectives and overrides or outweighs the benefits of commingled fund investments.

B. **Fiduciary Standards**

The investment and management of the Real Estate Portfolio shall be accomplished in a manner consistent with the "prudent person" standard of fiduciary care. This level of care requires that all LACERS' fiduciaries act reasonably to accomplish the stated investment objectives and to safeguard the System on behalf of LACERS' participants and their beneficiaries. The implementation of this Real Estate Policy, including the selection of investment managers, shall be completed in a manner that enhances the Real Estate Portfolio's diversification, thereby reducing risk by limiting exposure to any one investment, manager, real estate property type, geographic region, or other defined risk factor.

C. **Scope**

This Real Estate Policy sets forth the objectives, policies, and processes and procedures related to the implementation and oversight of the Real Estate Portfolio. Specifically, the objectives outlined herein define the desired risk level and return expectations governing the Real Estate Portfolio; the policies provide guidelines governing investment styles to manage defined risk exposures within the asset class; the investment processes and procedures and roles and responsibilities describes the investment process and allocation of duties among the Board, Staff, the Managers, and the Real Estate Consultant.

LACERS has engaged the Real Estate Consultant on a non-discretionary basis to assist the Board and Staff to implement and revise this policy when necessary. The Real Estate Consultant's duties and responsibilities, which are further defined in Section XI.H include selecting Managers, including performing due diligence and recommending new investments; monitoring existing investments; and generally providing advice to Staff and the Board with respect to the Portfolio. The Real Estate Consultant shall conduct a review of this policy, in conjunction with the Board and Staff, at a minimum of once per year, and set forth any strategic and tactical recommendations in the Annual Real Estate Strategic Plan.

D. **Investment Objectives**

The main investment objective with respect to the Real Estate Portfolio is to maximize returns given the defined level of risk, as determined by the Board. While it is necessary to use active asset management strategies to maximize total investment returns (i.e., income and appreciation returns), investment principal is to be safeguarded within the Portfolio's framework of prudence and managed risk. Although real estate investments are illiquid and have a long-term holding period, investing in this asset class should improve the System's fund level risk-adjusted returns by enhancing overall diversification, which reduces total portfolio risk. Specifically, the objectives of LACERS with respect to the Real Estate Portfolio include the following:

1. **Attractive Risk-Adjusted Returns**

To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns. As discussed in Section XI.G below, the benchmarks for the Portfolio will be the NFI-ODCE Index plus 80 basis points.

2. **Increased Portfolio Diversification/Reduced Portfolio Risk**

To use real estate to enhance overall diversification and, in turn, reduce overall risk of the System's assets, given the historically low to negative return correlations that exist between real estate and other asset classes.

3. **International Investments**

To access international real estate markets through private equity and debt real estate investments. By so doing, the Real Estate Portfolio will obtain exposure to diverse economies, populations, and currencies.

4. **Significant Current Cash Yields**

To invest in real estate assets, which will generate a significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value add and core investments.

5. **Inflation-Hedge**

To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation.

6. **Preservation of Principal**

To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

E. **Investment Guidelines**

LACERS shall establish a long-term target allocation to real estate (the “Target Allocation”). The Target Allocation will fluctuate according to the relative values among the Real Estate Portfolio and the allocations to other asset classes of LACERS. To accomplish and maintain the Target Allocation, the Real Estate Consultant may recommend committing in excess of the Target Allocation percentage in order to meet full allocation objectives. The Real Estate Portfolio allocation percentage actually achieved quarterly may vary from the Target Allocation within a reasonable range as determined by the Board and Staff from time to time.

Eligible real estate funds will range from core open-end funds to opportunistic closed-end funds, and may also include separate investment accounts with selected fund managers; however, the Real Estate Portfolio will be comprised primarily of commingled fund vehicles. Separate accounts represent opportunities wherein LACERS would be the sole or significant equity sponsor for an investment manager pursuing a specifically targeted opportunity or defined strategy. As the sole or significant equity sponsor, LACERS would likely be entitled to voting and control rights generally not available to commingled fund investors.
The following investment guidelines set forth investment parameters consistent with the risk and return objectives of the Real Estate Portfolio.

1. **Portfolio Composition – Risk Strategy Mix**

The Real Estate Portfolio shall be comprised of two different but complementary risk/return categories or risk strategies. These categories or risk strategies generally define the three basic risk and return levels ranging from low to high risk associated with institutional real estate investments. These categories or strategies are referred to as core and core plus or non-core, as defined below.

a) **Core and Core Plus**

Equity investment in operating and substantially-leased (i.e., at least at market occupancy levels) institutional quality real estate in the traditional property types (i.e., apartment, office, retail, industrial, and hotel). Assets are located in significant metropolitan markets with reasonable population sizes and economies. Net returns historically have been in the 6% to 9% range (net of fees) with annual standard deviation near 8.0%. Of note, core investments typically feature current income as a large portion of overall return (i.e., up to 70%), and appreciation that generally matches or exceeds inflation. Low leverage is utilized (i.e., 50% or less on a portfolio basis). Core debt investments include first mortgage loans secured by the previously defined core equity real estate assets. Such mortgage loans are either newly originated or are existing but performing loans with reasonable borrowers (e.g., credit), reasonable terms (e.g., loan to value of less than 50% and debt service coverage of 1.25 or greater) and institutional-quality management (e.g., an institutional investment manager with reasonable experience and track record in managing first mortgage loan investments). During periods of market illiquidity, core equity investments can provide high going-in income returns and provide a reasonable inflation-hedge so long as markets are not over-supplied. Core Plus investments typically will target a higher leverage ratio (around 50% on a loan-to-value basis) and allocate slightly more to non-operating real estate investments, around 20%.

b) **Non-Core**

Value Add

Value add investments are functional, high quality assets with specific property issues, such as high vacancy, significant upcoming lease expirations, or below market rents. These are debt or equity investments that typically require rehabilitation, redevelopment, development, lease-up, and/or repositioning. Levered returns historically have been in the 10% to 14% range (net of fees). Value add investments also typically feature both current income and appreciation as components of overall return, and frequently involve the repositioning of distressed assets (i.e., not fully leased and operating) and potentially the purchase of interests in real estate operating companies (“REOCs”). Value add investments typically are expected to generate above-core returns through the leasing-up of a property, which increases the end value by increasing in-place income and, in many cases, ultimately decreasing the capitalization rate upon disposition. Value add investments are typically more dependent on appreciation returns than core investments, with purchase prices based on in-place income or asset replacement cost (i.e., at a discount to replacement cost). During periods of market illiquidity, value equity investments can provide high going-in income returns and pricing at significant discounts to replacement costs. During periods of market liquidity, value equity investments include new development projects (i.e., acquire land, obtain entitlements, construct building and lease or sell), which require significant expertise and underwriting. Moderate leverage is utilized for these investments (i.e., targeting 50% to 65% on a portfolio basis).

Opportunistic

Equity or debt investment in real estate properties, operating companies, and other investment vehicles involving significant investment risk, including real estate, financial restructuring, and non-real estate risk. Levered returns have been 15% or higher (net of fees) with significant annual standard deviation. Opportunistic investing includes distressed assets, financial restructurings, and/or financial engineering opportunities (e.g., foreclosing on a mortgage and selling the equity interest) and potentially the purchase of REOCs. Investment may also be made in non-traditional property types (e.g., self-storage) which typically contain greater risk. Opportunistic investments typically have even greater appreciation potential than value add investments (e.g., 50% of total returns); correspondingly, these investments offer a higher return potential and a higher risk profile than core or value add investments. In many cases, since appreciation is the primary goal of opportunistic investing, many are originated with little if any in-place income and therefore less current income as a portion of total return. These investments historically have experienced higher return performance during periods of market illiquidity (e.g., early 1990’s in the U.S.). Higher leverage is used (i.e., up to 80% with some funds).

Core and core plus and non-core exposure targets shall be evaluated at a minimum of once per year and set forth in an Annual Real Estate Strategic Plan and approved by the Board. When making investment recommendations, the Real Estate Consultant shall evaluate the impact of the prospective investment on the Real Estate Portfolio’s risk/return exposures based on the existing portfolio net asset value.

2. **Risk Mitigation**

a) **Leverage**

Leverage is a significant risk factor that shall have exposure guidelines and monitoring requirements, as set forth in Section XI.E.7 of this Real Estate Policy.

b) **Diversification**

Diversification is an important tool in reducing real estate portfolio risk and accomplishing superior risk-adjusted returns. The Real Estate Portfolio shall be diversified by risk factors which can be reduced through diversification (e.g., geographic region and property type). Diversification reduces the impact on the portfolio of any one investment or any single investment manager to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio.

It is expected that at various points in time, the Real Estate Portfolio may have a significant exposure to a single property type or location to take advantage of opportunities available in the market which are projected to generate superior returns. When making investment recommendations, the Real Estate Consultant shall consider as part of its investment recommendation the impact on Real Estate Portfolio diversification and risk and return. As part of the Annual Real Estate Strategic Plan, the Real Estate Consultant shall provide annually, or more frequently when market conditions require, the risk factor (e.g., property type and region) ranges which it believes provide reasonable diversification given the expected market conditions. The following describe the various diversification guidelines that will be utilized.

Property Type

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information, and industry indices' diversification. Property type portfolio exposure levels have had a significant impact on institutional investor returns since property types have performed differently during economic cycles.

Real estate investments may include investments other than the traditional property types, such as healthcare facilities, manufactured housing, infrastructure, timber and farmland. The Real Estate Consultant shall include a section in each Annual Real Estate Strategic Plan, reviewing the Real Estate Portfolio's property-type exposures and investment objectives relating thereto.

Geographic Region

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information and industry indices' diversification. The importance of location to the long-term value of real estate is based on local economic fundamentals and the other risk attributes (e.g., weather, earthquake and local government impact) of regional areas.

The Real Estate Consultant shall include in each Annual Real Estate Strategic Plan investment guidelines and targets related to the Real Estate Portfolio's allocation to geographic regions.

3. **Investment Life Cycle**

Investment life cycle refers to the stage of development of a real estate investment. The stages of development include the following: (1) land or pre-development (i.e., un-entitled or partially entitled land); (2) development/redevelopment (i.e., in process of entitling or constructing improvements); (3) leasing (i.e., less than full or market occupancy); and (4) operating (i.e., greater than market occupancy). As a result of the risks associated with development, at no time shall the Real Estate Portfolio have an exposure exceeding 30% to total non-operating investments (i.e., the total of pre-development/land, development/redevelopment and leasing). Also, the Real Estate Consultant shall monitor the Real Estate Portfolio's exposure to different life cycles through the quarterly performance report, which shall indicate the Real Estate Portfolio's non-operating investment exposure and whether a non-compliance issue exists.

4. **Permissible Investment Structures/Vehicles and Private Allocations**

The Real Estate Portfolio may include private real estate equity and debt investments. Private equity real estate investments may include any investment made in equity interests in real estate assets (i.e., land and assets deriving most of their income return from rents paid by tenants subject to lease agreements) or companies through private placements, including REOCs and Real Estate Investment Trusts ("REITs"). Typical property types include the following: office, retail, rental apartments, for sale residential, industrial and hotel. Private debt investments may include structured investments, which provide for stated preferred returns, which may be accrued or paid on a current basis. Private debt investments may also include loans secured by senior or junior mortgage or deed of trust agreements.

5. **Investment Vehicles**

Investment vehicle exposure ranges shall be used to mitigate portfolio risk including enhancing portfolio liquidity. The following discussion provides a summary of the advantages and disadvantages of the investment vehicles, which shall be used in developing the Real Estate Portfolio.

a) **Open-End Commingled Funds**

The open-end fund investments shall be made primarily to provide (1) reasonable property type and geographic diversification, (2) exposure to larger properties (i.e., over $50 million) or certain countries, and (3) reasonable liquidity (i.e., ability to redeem within 90 days). The Real Estate Consultant shall complete reasonable due diligence in evaluating open-end commingled funds consistent with this policy. Open-end commingled fund vehicles may include, but are not limited to, insurance company separate accounts, group trusts, limited liability companies, single purpose corporations or any other vehicle that is determined by the Real Estate Consultant to be consistent with the Real Estate Policy.

b) **Closed-End Commingled Funds**

The closed-end fund investments shall be made primarily to obtain exposure to reasonably diversified portfolios of value add and opportunistic investments. The primary advantages of closed-end funds are that they provide access to talented management teams with focused niche value add and opportunistic strategies. Also, management teams typically co-invest and rely on incentive fees, which combined enhance the alignment of investor and manager interests. The Real Estate Consultant shall complete reasonable due diligence in selecting closed-end fund investments. Co-investment by the manager of a fund or by investors in the fund is acceptable providing: (1) the co-investor(s) have similar investment objectives regarding risk/return exposures and holding periods, (2) control and voting rights with respect to investment decisions are deemed reasonable, and (3) reasonable buy/sell or other agreements exist to allow for the resolution of investor disagreements. Closed-end funds typically have terms of no less than seven years and are therefore illiquid.

c) **Separate Account Vehicles**

Separate accounts may be used to make private equity/debt investments. Separate accounts offer the primary advantage of control over the manager, the strategy, the asset investment and sales decisions, and the capital. The Real Estate Consultant shall complete reasonable due diligence in selecting the Managers for direct investment separate accounts.

Direct Investments

LACERS may make direct equity/debt investments using separate account vehicles; however, such investments require careful consideration. Transaction costs and management expenses are high and there may be a significant time commitment by the Staff. Separate account direct investments shall be made only when the opportunity is compelling, as determined by the Staff, the Real Estate Consultant, and the Board. To be compelling, a direct investment needs to: (1) be in compliance with this Real Estate Policy; (2) be consistent with the strategic needs of LACERS, as set forth in the Annual Real Estate Strategic Plan; and (3) present an investment opportunity that provides benefits to LACERS that outweigh or override those provided by commingled funds, as previously described. The Real Estate Consultant shall assist the Staff with any direct investments by recommending a Manager and by completing an independent report, which summarizes and evaluates the manager due diligence completed. The report shall include a summary of findings and conclusions and shall be retained by the Staff on file for review.

Direct investments shall also include any private REOC investments. These include full or joint venture ownership of an operating company, which may be used to acquire a single asset, to implement a niche investment strategy or to serve another purpose as defined by the Real Estate Consultant and approved by the Staff and the Board.

Each direct investment strategy, fee structure and level of investment discretion shall be defined by the Real Estate Consultant and approved by the Staff and the Board. The Manager shall complete an annual budget review, as defined by the Real Estate Consultant, and a hold/sell analysis, for each direct investment. Since the sale or refinancing of a direct investment interest is required to return invested capital, such investments are considered illiquid.

6. **Manager/Investment Concentration**

LACERS shall limit its exposure to any single Manager or investment, and be subject to other investment restrictions to reduce risk, as further defined below.

a) **Maximum Manager Allocation**

No single manager (including any allocation to pooled funds and/or separate accounts) shall be allocated more than thirty percent (30%) of the Real Estate Portfolio's total allocation at the time of the prospective investment commitment. The allocation amount calculation shall include all of the Real Estate Portfolio's investment commitments remaining to the Manager plus the net asset value of the existing investments at the time of measurement or at the time of a prospective investment allocation.

b) **Maximum Investment Commitment**

The Real Estate Portfolio's maximum investment commitment to a non-core commingled fund or a separate account Manager shall be limited to fifteen percent (15%) of the Real Estate Portfolio's allocation to real estate at the time of the prospective investment commitment.

c) **Commingled Fund Guidelines**

The Real Estate Portfolio's investment in a single open-ended commingled fund shall not exceed twenty percent (20%) of the total net market value of the commingled fund at the time of the prospective investment. The Real Estate Portfolio's investment in a single closed-end commingled fund shall not exceed twenty percent (20%) of the total investor commitments to the fund at the time of closing of the commitment period of the prospective investment. LACERS shall not consider investments in a commingled fund that has less than $150 million in committed capital inclusive of LACERS pending commitment.

d) **Maximum Individual Separate Account Investment**

The Real Estate Portfolio's maximum investment in any single separate account investment shall be limited to a maximum of ten percent (10%) of the Real Estate Portfolio's total allocation to real estate at the time of the prospective separate account investment, unless otherwise approved by the Board.

The Real Estate Consultant and the Staff shall be responsible for reviewing separate account allocations and commingled fund terms to ensure they are consistent with or have incorporated the applicable restrictions previously described. Even though a prospective commingled fund or separate account allocation may be in compliance with the Real Estate Policy restrictions, the Real Estate Consultant shall complete reasonable due diligence with respect to each prospective investment to determine whether it is appropriate for recommendation to the Staff and the Board. The Real Estate Consultant may consider a number of factors in determining whether investments are reasonable and appropriate for institutional investors, including the following: the level of investment by institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds); the size of the organization; the experience of key personnel; the track record of key personnel in investments comparable to the strategy to be undertaken; and the financial condition of the firm.

7. **Leverage**

Leverage is a significant risk factor, the importance of which is magnified during an economic downturn when decreasing property values and stricter lending terms can lead to unexpected increased leverage levels and decreased equity interests. The Real Estate Consultant shall set forth reasonable leverage targets given market conditions in the Annual Real Estate Strategic Plan. When making a new investment recommendation, the Real Estate Consultant shall consider the impact on the Portfolio’s leverage guidelines and targets at the time of the prospective investment.

Additionally, the Real Estate Consultant shall monitor the Real Estate Portfolio’s leverage to evaluate compliance with the above stated guidelines through the quarterly performance report.

8. **Specialized Investments**

LACERS has in the past, and as determined by the Staff, the Board, and the Real Estate Consultant, may continue to allocate to unique investment strategies and/or investment firms, as further described below.

a) **Unique Investment Strategies**

Unique investment strategies include those that have collateral benefit objectives, which include job creation, community development, green or environmental objectives (e.g., reduce the use of carbon based fuels), and underserved market initiatives (e.g., defined by geography such as urban or inner city and by demographics such as minority or lower income areas). While such strategies offer attractive benefits, the Real Estate Consultant shall focus its evaluation on whether the expected return projected for the investment is reasonable given the level of risk. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation is reasonable and consistent with that of a comparable real estate strategy not providing the same collateral benefits.

b) **Unique Managers**

Unique Managers include those that are Emerging Managers pursuant to the LACERS Emerging Investment Manager Policy. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation to the unique Manager is reasonable. In so doing, the Real Estate Consultant needs to evaluate comprehensively any factors of the unique Manager that may adversely affect investment performance and conclude that such factors are not likely to affect return performance materially and adversely.

F. **Investment Processes And Procedures**

1. **Real Estate Manager Selection Process**

The following discussion describes the process by which LACERS selects Managers and investments.

a) **Universe of Potential Manager Candidates**

The Real Estate Consultant, pursuant to the Annual Real Estate Strategic Plan, will initiate a Manager search by creating a global list of potential candidates for selection based on the Staff and Real Estate Consultant's initial search criteria. The Real Estate Consultant shall provide information from its databases regarding the candidates to be reviewed with the Staff. The Staff will set forth any additional candidates to be considered. The Real Estate Consultant and the Staff will consolidate their lists to create a single list of potential candidates.

b) **Minimum Manager Qualifications**

The Manager requirements include that the Manager have $200 million of assets at a minimum under management and no less than three (3) years of real estate investment experience or a demonstrable track record of three (3) years of real estate investment experience.

c) **Manager Candidate Summaries**

The Real Estate Consultant shall complete a brief summary of the Manager candidates, including descriptions of their meeting Manager criteria established by the Real Estate Consultant and the Staff relating to the Managers' organization, track record, personnel, alignment of interests, terms and fees. The Real Estate Consultant will screen these summaries and recommend the finalists for further due diligence to the Staff.

d) **Due Diligence**

After the Staff and the Real Estate Consultant select the finalists, the Real Estate Consultant shall complete a comprehensive due diligence review. The comprehensive due diligence review includes an in-depth analysis of the firm's background, organization, personnel, strategy and other related factors. The Real Estate Consultant shall invite the Staff to participate in completing due diligence activities.

e) **Selection and Approval**

After completing the due diligence report, the Staff and Real Estate Consultant will recommend a candidate for consideration to the Board, which will make the final decision.

f) **Term Negotiation**

The Staff, Real Estate Consultant and the legal counsel will negotiate the Manager contract and propose a side letter if necessary. The final contract shall be executed by LACERS' General Manager or the appropriate party or parties authorized by the Board.

2. **Monitoring Process and Performance Measurement**

The Real Estate Consultant and the Staff, when available, will meet with managers on a periodic basis to determine the progress being made in the fund. These discussions may occur at annual investor meetings or in face-to-face or telephone meetings either at the Manager's or the Real Estate Consultant's offices.

Investment Managers will send financial reports and capital account statements on a regularly scheduled basis to the Real Estate Consultant and LACERS. Quarterly Portfolio Performance Review Reports ("PPR") shall be prepared by the Real Estate Consultant. The PPR is a comprehensive reporting and evaluation system addressing each investment. The PPR system shall provide such information as may be required by LACERS to understand and administer its investments and shall include attributes for both the Managers and the total portfolio. These attributes include: income, appreciation, gross and net returns for the portfolio and each manager, cash flow, internal rate of return calculations, diversification, comparisons to relevant industry performance indices, and information reporting standards.

G. **Benchmark Returns**

While no return objectives are stated by strategy, relative performance comparisons will be made to various indices to provide additional perspective on performance and/or facilitate attribution analysis. The return objectives are as follows:

LACERS' Real Estate Portfolio Benchmark Guideline	
Strategy	**Return Objectives Over Rolling 5-year Periods**
Core Real Estate	NFI-ODCE Index
Non-Core Real Estate	NFI-ODCE Index + 200 basis points
Timber	NCREIF Timberland Index, gross of fees

Portfolio Benchmark

With respect to private real estate investments, The Real Estate Consultant, the Staff and the Board shall use the NFI-ODCE plus 80 basis points over a rolling 5-year period as its benchmark.

H. **Roles and Responsibilities**

The following duties have been established to manage the risks involved with investing in real estate. Set forth below is the delegation of the major roles and responsibilities of each participant:

1. **Duties of the Board**
   a) Establish the role of the real estate investment program in light of the total System objectives.
   b) Consider and act upon the allocation to real estate and approve any adjustments to the allocation which may from time to time be necessary.
   c) Review, consider, and act upon the Annual Real Estate Policy (objectives, policies and procedures) and the Annual Real Estate Strategic Plan for the real estate program.
   d) Interview, consider, and act upon the Staff recommendations for selection, retention and removal of the Managers and/or the Real Estate Consultant and the selection of Manager investments.
   e) Review the real estate portfolio on a quarterly basis to evaluate the investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan.

2. **Duties of the Staff**
   a) Update and communicate with the Board and Investment Managers on issues and matters of the Policy.
   b) Provide the Board with education and analysis that is independent from the Real Estate Consultant to the extent time and resources allow.
   c) Be familiar with the asset class and stay informed of developments in industry as they occur.
   d) Oversee the Real Estate Consultant's preparation of the Annual Real Estate Strategic Plan for the real estate program. Present and recommend, along with the Real Estate Consultant, the Real Estate Policy and Annual Real Estate Strategic Plan to the Board.
   e) Oversee and review the performance of the Real Estate Consultant and the Managers on a periodic basis and discuss findings with the Board.
   f) Bring any non-conforming items or significant issues to the attention of the Board.
   g) Document and monitor funding procedures.
   h) Complete any other activity as directed by the Board.
   i) Conduct or assist in conducting due diligence on prospective investment opportunities as LACERS' resources permit.

j) Prepare investment documentation with the Real Estate Consultant.

3. **Duties of the Manager**

a) Adhere to reporting and performance measurement standards and comply with generally accepted accounting principles ("GAAP") applied on a fair market value basis.

b) Execute and perform its duties under the terms of the investment vehicle documents.

c) Provide timely requests for capital contributions.

d) Provide quarterly financial statements, annual reports and other investment information requested by the Staff and/or the Real Estate Consultant.

e) Conduct annual meetings to discuss important developments regarding investment and management issues.

4. **Duties of the Real Estate Consultant**

LACERS engaged the Real Estate Consultant on a non-discretionary basis to select new investments, to monitor existing investments, and to provide advice in accordance with the investment objectives for the real estate portfolio. The Real Estate Consultant's services to LACERS may include but are not limited to the following:

a) Report directly to the Board and Staff on matters of policy.

b) Bring any non-conforming items or significant issues to the attention of the Staff and the Board.

c) Complete due diligence on potential investments and preparation of the due diligence report.

d) Monitor the performance of the real estate portfolio and compliance with approved policy.

e) Prepare the Annual Real Estate Strategic Plan for the real estate program, in consultation with the Staff, and present the Annual Real Estate Strategic Plan to the Board for review.

f) Review proposed real estate investments and recommend prudent investments, structure and controls. Monitor investments and ventures through completion and disposition, including satisfaction of conditions to funding, partnership and financial issues.

g) Assist Staff with the review and preparation of documents related to new investments approved by the Board consistent with the Real Estate Consultant's recommendation.

h) Prepare reports on a periodic basis for the Board to evaluate investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan. The evaluation system shall provide such information as may be required by LACERS to understand and administer its investments.

i) Assist the Staff in the Annual Real Estate Strategic Plan portfolio review.

j) Provide Board and Staff with topical research and education on investment subjects that are relevant to LACERS.

k) Review the Real Estate Policy annually and notify LACERS if any revisions are needed thereto.

l) Monitor and report on risk.

m) Provide ongoing real estate education information and seminars to the Board.

5. **Duties of Legal Counsel**

The legal counsel selected by LACERS along with the Office of the Los Angeles City Attorney will represent LACERS and will review all real estate related documents and provide advice for special investment situations as needed.

XII. RISK MANAGEMENT POLICY

The Board implements its risk management policy by monitoring the portfolio's compliance through the adoption of investment policies, guidelines, and procedures. The Board establishes reasonable risk parameters to ensure prudence and care in the management of the System's assets, while allowing flexibility in capturing investment opportunities as they may occur.

A. Purpose

A successful investment process fully integrates practical risk management concepts into a comprehensive framework that applies to all parties that monitor or manage assets on behalf of the System, including the Board, General Fund Consultant, Staff, investment managers, and other third parties involved in the investment of System's assets. Investment risk management is essential to prudent investment of pension plan assets because it improves the likelihood that the System is adequately compensated for the risks taken, and helps to avoid unexpected and unintended investment risk.

The purpose of this Policy is to provide a comprehensive framework for the management of investment risk of the System's assets at the total System, asset class and individual manager level in support of the fiduciary obligations of the Board and consistent with governing principles and other policies of the System. It specifically defines responsibilities, objectives, processes, and risk measures pertinent to investment risks incurred when investing plan assets to meet or exceed stated pension goals and objectives.

This Policy is dynamic and expected to be updated periodically with LACERS plan objectives, technology, and regulatory and/or market environment changes.

B. Roles and Responsibilities

1. **Duties of the Board**
   a) The Board adopts and implements the long-term investment strategy through the System's asset allocation policy. This decision drives the long term performance, exposures, and risk of the System. The asset allocation decision provides the basis for monitoring strategic ("beta") investment risk.
   b) The Board is also responsible for the asset class structure decisions. This decision drives the long term excess performance and excess risk for each of the asset classes in which the System invests. The target asset class structure provides the basis for monitoring active ("alpha") investment risk.
2. **Duties of the Staff:**
   a) Staff monitors risks associated with the investment managers in accordance with the Manager Monitoring Policy described in Section VIII. Staff evaluates both qualitative and quantitative risk factors on a regular basis and conducts the due diligence in to the context of the total plan assets.
   b) Staff reviews the asset allocation as determined by the Board, on a daily basis and rebalances the portfolio according to the Rebalancing Policy in Section V.G.

c) Staff also reviews any variance from the manager's investment guidelines and notifies the manager to become compliant.

d) Staff reviews on a quarterly basis industry standard risk and return metrics of the System.

3. **Duties of the Consultant:**

a) The consultant provides quarterly performance and risk metrics for Staff's review.

b) The consultant, as described in the Asset Allocation Policy in Section IV., conducts an asset allocation study every three years, or as needed, with updated risk and return capital market expectations

c) The consultant is responsible for developing the data necessary for the risk budgets to aid in the decision making process for the Board.

The risk management processes and guidelines established below determine the amount of risk the Board may use to implement these key decisions. Consultant and Staff will establish monitoring standards and periodically update these standards as conditions warrant.

C. **Risk Guidelines**

System Level

The largest driver of the System's total risk and return comes from the strategic asset allocation as approved by the Board. The Board determines the appropriate asset allocation through an asset-liability analysis where the Board evaluates multiple decision factors in order to determine the optimal asset allocation policy. The decision factors include, but are not limited to, funding status of The System, distribution of expected returns, new cash flow and distribution of employer cost. As part of that decision making process, the Board evaluates several optimal portfolios with varying risk profiles and takes into account the actuarial discount rate assumption.

Asset Class Risk Budgets

The next greatest driver of the System's return and risk is the asset class structure. Asset class structure decisions involve determining which strategies will be included within the asset class, the allocations to these strategies, and setting the active versus passive exposure.

A "risk budget" represents the amount of active risk the Board is willing to assume for each asset class. The Board adopts a risk budgeting approach to construct, measure, and monitor asset classes that include active and passive strategies. The Board believes that this approach provides an objective and systematic yet flexible means of constructing asset classes in a way which will maximize the probability of meeting long term asset class objectives while managing the risk of its public markets asset classes in a proactive manner.

LACERS' Risk Budgeting Process

In order to arrive at the optimal risk budget objective for each asset class, the Board engages in an objective, disciplined process that will be uniformly applied to all asset classes that include active and passive strategies. This process involves a mean variance optimization approach which employs the following inputs for each strategy under consideration by the Board:

1. Expected excess return over the asset class benchmark
2. Expected excess risk over the asset class benchmark
3. Expected correlations between strategy excess returns
4. Constraints to ensure prudent exposures to strategies and risk factors

The objective of this mean variance optimization exercise is to arrive at an excess risk target (i.e., the risk budget) which maximizes the excess return desired by the Board. The risk budget reflects the amount of excess risk the Board is willing to take for that desired excess return.

Expected Excess Return

The expected excess return (i.e., "alpha") is the excess return a strategy should produce over a market cycle net of fees. This excess return will be forward looking based upon the following criteria:

1. Market efficiency
2. Manager's historical information ratio
3. Strategy characteristics
4. Peer universe historical excess return

Expected Excess Risk

The expected excess risk (i.e., "tracking error") is the excess risk of a strategy as measured by standard deviation of the excess return. This excess risk assumption can be either forward looking or based upon historical actual excess risk as produced by the strategy under consideration versus the asset class benchmark. In order for historical excess risk to be employed in the risk budgeting process, the strategy must have at least 60 months of data points. If the strategy under consideration does not have 60 months of data points, then a forward looking expected excess risk assumption will be employed.

Expected Excess Correlations

Correlation is a measure of the degree to which asset class returns move together. In structuring asset classes, the Board seeks to avoid having too much exposure to common factor risks and to maximize the diversification potential of the strategies ultimately employed within the asset class. Expected excess correlations will be calculated using historical excess (versus the asset class benchmark) returns when available. If an insufficient excess return history exists (i.e., less than 60 months of data), then Consultant or Staff will employ their respective risk analytics to determine a reasonable excess correlation on a forward looking basis.

Framework for Policy Implementation

The risk budgeting process outlined above will be conducted in conjunction with the Board's asset/liability valuation process. The frequency of this process will be at least every three years or sooner if warranted based upon changes in market conditions or benefits to plan participants. The Board may choose at that time to revise or retain its existing risk budget as a result of this process.

The risk budgeting process will also be conducted at any time a strategy or manager change is contemplated so that alternative strategies or managers can be evaluated in the context of the entire asset class structure to determine the impact on the Board's asset class risk budget. This will be done in order to objectively evaluate alternatives in a disciplined, holistic fashion. The Board may choose to revise its risk budget target as a result of this evaluation process. Additionally, the risk budgeting process will be conducted when actual excess risk has been outside of the target risk budget range for four rolling 60-month periods in order to determine whether strategy/manager allocations should be altered or replaced altogether.

D. **Measurement and Monitoring of LACERS Risk Guidelines**

The Board periodically monitors actual strategic and active asset class risks versus the Board's respective risk target and asset class risk budgets. The Board is provided periodic fund risk reports which are used to analyze, evaluate, and detail exposures and drivers of System's risks.

The focus of the Board's monitoring activity is rolling 60-month periods. The Consultant will measure and monitor strategic and active asset class expected risk and return on a quarterly basis, Staff will review the information, and report to the Board its findings, including the key drivers of risk and return, as part of the quarterly performance report.

XIII. GEOPOLITICAL RISK INVESTMENT POLICY

A. Introduction

This policy is intended to provide a framework to address such issues as social unrest, labor standards, human rights violations, and environmental concerns.

B. LACERS Board's Fiduciary Responsibilities

Consistent with the California Constitution, the City Charter, and City Administrative Codes, and as set forth in the LACERS Investment Policy Statement, the Board must follow the standards set for all retirement board commissioners.

The Constitution imposes fiduciary responsibility on the commissioners of the Board to:

1. Administer the System's assets;
2. Exercise a high degree of care, skill, prudence and diligence;
3. Diversify investments to minimize risk and maximize return; and,
4. Specifically emphasizes that their duty to the System's members come first, before any other duty.

The System is sensitive to concerns that environmental, social, and corporate governance geopolitical issues may affect the performance of investment portfolios (through time and to varying degrees across companies, sectors, regions, and asset classes). Importantly, the System's ownership of securities in a corporation does not signify approval of all of a company's policies, products, or actions.

Investments shall not be selected or rejected based solely on geopolitical risk factors. Accordingly, a company's possible risky geopolitical conduct can only be taken into consideration if the conduct is deemed to demonstrate a negative effect on the investment performance of the company, and ultimately the System.

C. Process for Identifying and Mitigating Corporate Governance Geopolitical Risks to the LACERS Portfolio

1. The LACERS Staff will keep the Board apprised of geopolitical problems and issues, and take into account actions of other like prudent investors.
2. Once identified, the Board shall decide whether to address these issues in a particular case based on the size of the interest that the System holds in the business and the effect of the business' violation of the System's Geopolitical Risk Factors on investment returns.
3. The Board will direct the Staff to solicit feedback from the investment managers holding the security exposed to geopolitical risk as well as conduct independent study to research the impact of the risk.

4. Upon the Board determination of a company's behavior presenting a potential investment loss to the System, the Board shall promptly direct the Staff to seek a change in the company's behavior.
5. Staff will engage, in a constructive manner, corporate management whose actions are inconsistent with this Policy to seek a change in corporate behavior.
6. After all reasonable efforts have been made to engage management constructively, the Board may determine whether it is prudent to hold such investments or whether it is prudent to sell such investments.
7. At such time, the System will work with the investment manager whose portfolio holds the investment, consultant(s) and fiduciary counsel to determine a prudent course of action.
8. Should the Board decide to take action to divest, Staff will communicate the decision to all of the System's investment managers to adhere to the Board's actions going forward.

D. **Geopolitical Risk Factors**

Respect for Human Rights • Judicial System • Arbitrary or Unlawful Deprivation of Life • Disappearance • Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment • Arbitrary Arrest, Detention, or Exile • Arbitrary Interference with Privacy, Family, Home, or Correspondence • Use of Excessive Force and Violations of Humanitarian Law in Internal Conflicts • Governmental Attitude Regarding International and Non-Governmental Investigation of Alleged Violations of Human Rights
Respect for Civil Liberties • Freedom of Speech and Press • Freedom of Peaceful Assembly and Association • Freedom of Religion • Freedom of Movement Within the Country, Foreign Travel, Emigration, and Repatriation • Civil Unions/Same Sex Marriage
Respect for Political Rights • The Right of Citizens to Change Their Government
Discrimination Based on Race, Sex, Sexual Orientation, Disability, Language, or Social Status • Women/Gender • Children • Persons With Disabilities • National/Racial/Ethnic Minorities • Indigenous People

Section 8 GEOPOLITICAL RISK INVESTMENT POLICY

• Gender Identity • Age Discrimination
Worker Rights • The Right of Association • The Right to Organize and Bargain Collectively • Prohibition of Forced or Bonded Labor • Status of Child Labor Practices and Minimum Age for Employment • Acceptable Conditions of Work • Trafficking in Persons
Environmental • Air Quality • Water Quality • Climate Change • Land Protection
War/Conflicts/Acts of Terrorism • Internal/External Conflict • War • Acts of Terrorism • Party to International Conventions and Protocols

XIV. PROXY VOTING POLICY

A. Introduction

As good corporate governance practices are widely believed to increase shareholder value, public retirement systems across the country are becoming more active in encouraging good corporate governance practices among companies in which they own stock.

As such the core objectives of LACERS Proxy Policy are:

1. Manage proxy voting rights with the same care, skill, diligence and prudence as is exercised in managing other assets.
2. Exercise proxy voting rights in the sole interest of the System's members and beneficiaries in accordance with all applicable statutes consistent with the Board proxy policy.
3. Provide a framework for voting shares responsibly and in a well-reasoned manner.
4. Align the interests of shareowners and corporate management to build long-term sustainable growth in shareholder value for the benefit of the System.

These primary objectives shall be considered whenever the Board and/or Corporate Governance Committee considers policy, reviews proxy voting issues, recommends corporate governance investment activities, or takes other corporate governance-related actions.

B. Statement of Purpose

The Board has formulated this policy to provide a guideline for proxy voting. This policy is set forth in the best interest of LACERS investment program to support sound corporate governance practices that maximize shareholder value.

All applications of this policy are executed by an outside proxy voting agent. The policy will be reviewed on a bi-annual basis. The proxy voting agent provides quarterly voting reports summarizing all votes cast during that time period. These reports are reviewed for compliance with the proxy voting policy.

Section 9 PROXY VOTING POLICY

1. BOARD OF DIRECTORS

Electing directors is the single most important stock ownership right that shareholders can exercise. Shareholders can promote healthy corporate governance practices and influence long-term shareholder value by electing directors who share shareholder views. In evaluating proxy items related to a company's board, director accountability, independence and competence are of prime importance to ensure that directors are fit for the role and best able to serve shareholders' interests.

No.	Issue	LACERS Position	Rationale
1.1	ELECTION OF DIRECTORS IN UNCONTESTED ELECTIONS	LACERS supports company management in principle VOTING AGENT'S DISCRETION	It is prudent to vote for the prescribed full slate of directors as long as the slate of directors will conduct themselves in the best interest of the shareholders. Director nominees should be evaluated based on accountability, responsiveness to shareholders, independence from company management, and competence and performance.
1.2	BOARD INDEPENDENCE	FOR	At a minimum, a majority of the board should consist of directors who are independent. Corporate boards should strive to obtain board composition made up of a substantial majority (at least two-thirds) of independent directors.[5]
1.3	MAJORITY THRESHOLD VOTING FOR THE ELECTION OF DIRECTORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Under a plurality system, a board-backed nominee in an uncontested election needs to receive only a single affirmative vote to claim his or her seat in the boardroom. Even if holders of a substantial majority of the votes cast "withhold" support, the director nominee wins the seat. Under the majority vote standard, a director nominee must receive support from holders of a majority of the votes cast in order to be elected (or re-elected) to the board. In contested elections where there are more nominees than seats, a carve-out provision for plurality should exist.
1.4	SEPARATE CHAIR AND CEO	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A CEO who also heads a board is less accountable than one who must answer to an independent chairman as well as fellow directors. However, there could be times when it makes sense for one person to wear two hats. On balance, there appears to be more gained and less lost from separating the two jobs at major companies. The Board generally favors the separation of the chairman and CEO. However, the Board believes it may be in the best interests of a corporation and the shareholders to have one person fulfilling both positions in smaller companies.

[5] CalPERS. Global Principles of Accountable Corporate Governance. February 16, 2010. 8.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
1.5	LIMITING BOARD SIZE	FOR	Proposals that allow management to increase or decrease the size of the board at its own discretion are often used by companies as a takeover defense. Shareholders should support management proposals to fix the size of the board at a specific number of directors, thereby preventing management (when facing a proxy contest) from increasing the size of the board without shareholder approval.[6]
1.6	COMMITTEE INDEPENDENCE	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	The key board committees – audit, compensation, and nominating committees – should be composed exclusively of independent directors if they currently do not meet that standard. The company's board (not the CEO) should appoint the committee chairs and members. Committees should be able to select their own service providers to assist them in decision making.
1.7	DIRECTOR QUALIFICATIONS AND RESTRICTIONS Requires directors to own a minimum amount of stock; impose tenure limits; establishing a minimum or maximum age requirement	AGAINST	Establishing a minimum amount of stock ownership could preclude very qualified candidates from sitting on the board. Tenure limits and age restrictions could force out experienced and knowledgeable board members.
1.8	LIABILITY AND INDEMNIFICATION OF OFFICERS AND DIRECTORS	CASE-BY-CASE VOTING AGENT'S DISCRETION	This indemnifies corporate officers and directors against personal liability suits as a result of their official status. This indemnification is necessary to attract and keep the best-qualified individuals. However, officers' and directors' liability should not be limited or fully indemnified for acts that are serious violations of fiduciary obligations such as gross negligence or intentional misconduct.
1.9	OBLIGATION OF BOARDS TO ACT ON SHAREHOLDER PROPOSALS RECEIVING MAJORITY SUPPORT To ensure that the voices of the owners of the firm are heard.	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Boards are responsible for ensuring that the voices of the owners of the firm are heard. If the majority of shareholders have indicated they desire a particular governance change, the board should support the proposal in question.
1.10	DIRECTOR REMOVAL BY SHAREHOLDERS	FOR	Shareholders should have the right to remove directors or fill director vacancies. Lack of such a policy could allow management to protect themselves from various shareholder initiatives.

[6] LACERA. Domestic Proxy Voting Guidelines. April 22, 2009. 21.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
1.11	SHAREHOLDER ADVISORY COMMITTEES	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	It is often difficult for directors to communicate to and hear from shareholders, because shareholders tend to be numerous, unidentified, dispersed, and silent. This proposal establishes committees of shareholders to make communication easier and more effective. However, establishment of such committees can be time consuming and expensive. The Board prefers the establishment of such committees where there is no other available mechanism to communicate with the company boards.
1.12	PROXY CONTESTS	CASE-BY-CASE VOTING AGENT'S DISCRETION	A proxy contest is a strategy that involves using shareholders' proxy votes to replace the existing members of a company's board of directors. By removing existing board members, the person or company launching the proxy contest can establish a new board of directors that is better aligned with their objectives. Proxy contests should be examined on a case-by-case basis considering factors such as the company's performance relative to peers, strategy of incumbents vs. dissidents, experience of director candidates, current management's track record, etc.
1.13	REIMBURSEMENT OF PROXY SOLICITATION EXPENSES	CASE-BY-CASE VOTING AGENT'S DISCRETION	Most expenditures incurred by incumbents in a proxy contest are paid by the company. In contrast, dissidents are generally reimbursed only for proxy solicitation expenses, if they gain control of the company. Dissidents who have only gained partial representation may also be reimbursed in cases where the board and a majority of shareholders approve. In successful proxy contests, new management will often seek shareholder approval for the use of company funds to reimburse themselves for the costs of proxy solicitation.

2. AUDIT-RELATED

Shareholders must rely on company-produced financial statements to assess company performance and the values of their investments. External auditors play an important role by certifying the integrity of these financial reports provided to shareholders. To ensure that an external auditor is acting in shareholders' best interest, the auditor must be independent, objective, and free of potential conflicts of interest.

No.	Issue	LACERS Position	Rationale
2.1	RATIFYING AUDITORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	The Board generally supports a company's choice of audit firms unless an auditor has a financial interest in or association with the company and is therefore not independent; there is reason to believe that the independent auditor has rendered an inaccurate opinion of the company's financial position; or fees are excessive as defined by ISS (Non-audit fee > audit fees + audit related fees + tax compliance/preparation fees).
2.2	LIMITING NON-AUDIT SERVICES BY AUDITORS	FOR	Auditor independence may be impaired if an auditor provides both audit-related and non-audit related services to a company and generates significant revenue from these non-audit services. The Board believes that a company should have policies in place to limit non-audit services and prevent conflicts of interest.
2.3	ROTATION OF AUDITORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A long-standing relationship between a company and an audit firm may compromise auditor independence for various reasons including an auditor's closeness to client management, lack of attention to detail due to staleness and redundancy, and eagerness to please the client.[7] Enron and Anderson is a prime example of this situation. The Board believes it may be prudent to rotate auditors every 5 to 7 years.
2.4	ELECTION OF THE AUDIT COMMITTEE Section 404 of the Sarbanes-Oxley Act requires that companies document and assess the effectiveness of their internal controls. The Audit Committee should be comprised of the independent directors	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Companies with significant material weaknesses identified in the Section 404 disclosures potentially have ineffective internal financial reporting controls, which may lead to inaccurate financial statements, hampering shareholder's ability to make informed investment decisions, and may lead to the destruction in public confidence and shareholder value. The Audit Committee is ultimately responsible for the integrity and reliability of the company's financial information, and its system of internal controls, and should be held accountable.

[7] Arel, Barbara, Brody, Richard G. & Pany, Kurt. "Audit Firm Rotation and Audit Quality."The CPA Journal (January 2005). November 12, 2010.

Section 9 PROXY VOTING POLICY

3. COMPENSATION

The Board endorses executive compensation plans that align management and shareholders' interest. Executive pay programs should be fair, competitive, reasonable, and appropriate. Pay-for-performance plans should be a central tenet of executive compensation and plans should be designed with the intent of increasing long-term shareholder value. Executives should not be incentivized to take excessive risks that could threaten long-term corporate viability and shareholder value.

No.	Issue	LACERS Position	Rationale
3.1	EXECUTIVE COMPENSATION APPROVED BY THE BOARD OF DIRECTORS	FOR	While some corporations allow compensation issues to be left to management, it is more prudent to have a compensation committee, composed of independent directors, approve, on an annual basis, executive compensation, including the right to receive any bonus, severance or other extraordinary payment. If a company does not have a compensation committee, then executive compensation should be approved by a majority vote of independent directors. The Board normally prefers to support the company's recommendation of executive compensation issues.
3.2	INDEPENDENT COMPENSATION CONSULTANT	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A company's board and/or compensation committee should have the power to hire an independent consultant – separate from the compensation consultants working with corporate management – to assist with executive compensation issues to avoid conflicts of interest. Disclosure should be provided about the company's, board's, and/or compensation committee's use of compensation consultants, such as company name, business relationship(s) and fees paid.
3.3	PAY FOR PERFORMANCE	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A significant portion of an executive's pay should be tied to performance over time through the use of short and long-term performance-based incentives to align management and shareholders' interests. From a shareholders' perspective, performance is gauged by the company's stock performance over time. The attainment of executives' incentive goals should ultimately translate into superior shareholder returns in the long-term. Standard stock options and time-vested restricted stock are not considered performance-based since general market volatility alone can increase their value.
3.4	ADVISORY VOTES ON COMPENSATION (SAY ON PAY) – SHAREHOLDER PROPOSALS	FOR	A non-binding "say on pay" vote would encourage the board's compensation committee to be more careful about doling out unduly rich rewards that promote excessive risk-taking. It also would be a quick and effective way for a board to gauge whether shareowners think the company's compensation practices are in their best interests.[8]

[8] "Executive Compensation." Council of Institutional Investors. 2008. November 12, 2010.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
3.5	ADVISORY VOTES ON COMPENSATION (SAY ON PAY) – MANAGEMENT PROPOSALS	CASE-BY-CASE VOTING AGENT'S DISCRETION	The advent of "say on pay" votes for shareholders in the U.S. is providing a new communication mechanism and impetus for constructive engagement between shareholders and managers/directors on pay issues. In general, the management say on pay (MSOP) ballot item is the primary focus of voting on executive pay practices -- dissatisfaction with compensation practices can be expressed by voting against MSOP rather than withholding or voting against the compensation committee.[9]
3.6	SAY ON PAY BALLOT FREQUENCY	FOR	The Board supports an annual MSOP for many of the same reasons it supports annual director elections rather than a classified board structure: because it provides the highest level of accountability and direct communication by enabling the MSOP vote to correspond to the information presented in the accompanying proxy statement for the annual shareholders' meeting. Having MSOP votes only every two or three years, potentially covering all actions occurring between the votes, would make it difficult to create meaningful and coherent communication that the votes are intended to provide.
3.7	STOCK OPTION PLANS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Stock options align the interests of management with the interests of shareholders. The Board prefers that options should be issued at or above fair market value. There should be no re-pricing of underwater options (stock options with little or no value due to poor performance), nor should there be a replenishment feature (automatic increases in the shares available for grant each year). Management must monitor the amount of dilution that stock options create. The total cost of the stock option plan should be reasonable relative to peer companies. The Board normally supports the use of stock options as a part of executive and management compensation.
3.8	HOLDING PERIOD FOR EQUITY COMPENSATION AWARDS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Executives should be required to hold a substantial portion of their equity awards, including shares received from option exercises, while they are employed at a company or even into retirement. Equity compensation awards are intended to align management interests with those of shareholders, and allowing executives to sell or hedge these shares while they are employees of the company undermines this purpose.[10]
3.9	EXCLUDING PENSION FUND INCOME	FOR	Earnings generated by a pension plan should not be included for executive compensation purposes.

[9] Institutional Shareholder Services. 2010 U.S. Proxy Voting Guidelines Summary. February 25, 2010. 38.
[10] Institutional Shareholder Services. 2010 Public Fund U.S. Proxy Voting Guidelines. 25.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
3.10	CLAWBACK OF INCENTIVE PAY	FOR	A company should recoup incentive payments made to executives and former executives if it is determined that the incentives were calculated from erroneous data, such as fraudulent or misstated financial results, and these incentive payments would not have been earned if correctly calculated.
3.11	GOLDEN PARACHUTES Golden parachutes are compensation arrangements that pay corporate managers after they leave their positions.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Golden parachutes can have a number of positive results: they can reduce management resistance to change, they help attract and retain competent talent, and they provide appropriate severance. Excessive golden parachutes not offered to other employees can damage their morale and can have a dilutive effect on shareholder wealth. A general rule is that the parachute should not exceed three times base salary. The Board is opposed to the payment of excessive executive compensation. Therefore, golden parachute agreements should be submitted to shareholders for ratification.
3.12	CHANGE OF CONTROL TRIGGERING UNJUSTIFIED ACCRUAL OF BENEFITS	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	A change of control event should not result in an acceleration of vesting of all unvested stock options or lapsing of vesting/performance requirements on restricted stock/performance shares, unless there is a loss of employment or substantial change in job duties for an executive.
3.13	GOLDEN COFFINS	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Golden coffins are death-benefit packages awarded to the heirs of high ranking executives who die during employment with a company. Benefits awarded can include, but are not limited to, unearned salary and bonuses, accelerated stock options and perquisites. The Board is against excessive executive compensation, but recognizes that offering golden coffin benefits may be necessary to attract top talent.
3.14	SUPPLEMENTAL EXECUTIVE RETIREMENT PLANS (SERPS)	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	SERPs are executive-only retirement plans designed as a supplement to employee-wide plans. These plans may be structured to contain special provisions not offered in employee-wide plans such as above market interest rates and excess service credits. Incentive compensation may also be used in calculating retirement benefits, resulting in better benefit formulas than employee-wide plans and increased costs to the company. The Board supports SERPs if these plans do not contain excessive benefits beyond what is offered under employee-wide plans.
3.15	PROPOSALS TO LIMIT EXECUTIVE COMPENSATION OR OTHER BENEFITS	AGAINST	Executive pay should not have a blanket limit such as being capped at a specified multiple of other workers' pay. There should not be an absolute limit to retirement benefits, nor a mandate that stipulates that there be salary reductions based on corporate performance.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
3.16	DIRECTOR COMPENSATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	This is normally automatically approved unless the program is exceptional or abusive. Directors should be compensated with a mix of cash and stock, with the majority, but not all, of the compensation in stock to align their interests with shareholders. There should be no blanket limits on directors' compensation, but pay should be commensurate with expected duties and experience. The Board normally prefers to support company management's decision. The Board prefers that compensation issues be decided by a majority vote of the independent directors.
3.17	NON-EMPLOYEE DIRECTOR RETIREMENT BENEFITS	AGAINST	Since non-employee directors are elected representatives of shareholders and not company employees, they should not be offered retirement benefits, such as defined benefit plans or deferred stock awards, nor should they be entitled to special post-retirement perquisites.[11]
3.18	DISCLOSURE OF EXECUTIVE COMPENSATION	FOR	The Board supports shareholder proposals seeking additional disclosure of executive compensation.
3.19	EMPLOYEE STOCK OWNERSHIP PROGRAMS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	On one hand, ESOPs have the potential for motivating and rewarding employees. On the other hand, there is concern about their use as management entrenchment devices and their potential dilutive effects on existing shareholder value. The Board believes that future purchasers must bear the same risk as current shareholders. Employee wealth obtained through stock ownership should be tied to shareholder value. The Board prefers no retroactive compensation. The Board supports the use of ESOPs.
3.20	401(K) EMPLOYEE BENEFIT PLANS	FOR	A 401(k) plan provides a highly visible benefit to employees that can be used to attract and retain quality personnel. The Board supports proposals to implement a 401(k) savings plan for employees.
3.21	OMNIBUS BUDGET RECONCILIATION ACT (OBRA) OF 1993 - RELATED COMPENSATION PROPOSALS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	IRS Section 162(m) of OBRA, prohibits a company from deducting more than $1 million of an executive's compensation for tax purposes unless certain prescribed actions are taken to link compensation to performance such as establishment of performance goals by a compensation committee of outside directors and shareholder approval of the compensation plan. The Board generally supports proposals to approve new compensation plans or amend existing compensation plans to comply with Section 162(m) if the company can obtain tax benefits and increase shareholder value, and the plans do not result in excessive executive compensation.

11 Council of Institutional Investors. Corporate Governance Policies. 22.

4. SHAREHOLDER RIGHTS & TAKEOVER DEFENSES

Companies should feature shareholder rights in their corporate governance principles to allow shareholders the opportunity to participate directly in monitoring management. A 2003 study by the National Bureau of Economic Research found that "firms with weaker shareholder rights earned significantly lower returns, were valued lower, had poor operating performance, and engaged in greater capital expenditure and takeover activity."[12]

No.	Issue	LACERS Position	Rationale
4.1	ACCESS TO PROXY PROCESS	FOR	Access proposals allow shareholders who own a significant number of shares to access management's proxy material to evaluate and propose voting recommendations on proxy proposals and director nominees, and to nominate their own candidates to the board. These proposals are based on the belief that shareholder access rights provide for increased corporate accountability and healthy communication.
4.2	ADVANCE NOTICE REQUIREMENTS	LACERS supports this issue in principle. VOTING AGENT'S DISCRETION	Advance notice bylaws, holding requirements, disclosure rules and any other company imposed regulations on the ability of shareholders to solicit proxies beyond those required by law should not be so onerous as to deny sufficient time or otherwise make it impractical for shareholders to submit nominations or proposals and distribute supporting proxy materials.[13]
4.3	CLASSIFIED BOARDS AND STAGGERED BOARDS A structure for a board of directors in which a portion of the directors serve for different term lengths.	LACERS opposes this issue in principle. VOTING AGENT'S DISCRETION	Although shareholders need some form of protection from hostile takeover attempts, and boards need tools and leverage in order to negotiate effectively with potential acquirers, a classified board tips the balance of power too much toward incumbent management at the price of potentially ignoring shareholder interests.
4.4	CONFIDENTIAL VOTING A shareholder's voting position is kept confidential.	FOR	Shareholders over whom management have some power (for example, employee shareholders, money managers who stand to gain or lose company business, banks, insurance companies and companies with interlocking boards) may be deterred from voting against management if they know their votes will become known to management. Companies that can discover who is voting in which way prior to the meeting also have an advantage not enjoyed by any shareholder supporting or opposing any issue on the ballot, and in targeting those shareholders who vote against management and pressuring them to change their votes.

[12] Gompers, Paul, Ishii, Joy & Metrick, Andrew. 2003. "Corporate Governance and Equity Prices," The Quarterly Journal of Economics, MIT Press, vol. 118(1), pages 107-155, February.
[13] Council of Institutional Investors. Corporate Governance Policies. 8.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
4.5	CUMULATIVE VOTING Allows each shareholder to take the voting rights he or she has with respect to director candidates and accumulates them to vote for only one director, or for a smaller number of directors.	FOR	Cumulative voting enhances shareholders' abilities to elect a single director or a small number of directors, thus increasing their ability to have a voice on the board even when they lack the voting power to affect change-in-control or other major decisions. Some fear that allowing cumulative voting can allow or encourage disruptive or predatory shareholders.
4.6	SHAREHOLDER'S RIGHT TO ACT INDEPENDENTLY OF MANAGEMENT -- CALLING SPECIAL MEETINGS AND ACTING BY WRITTEN CONSENT	FOR	These include giving shareholders the ability to call a special meeting of shareholders without management's consent, and the ability to act by written consent (saving the costs and difficulties of holding a meeting). Most corporations support the retention, restoration, or creation of these rights. Shareholders need realistic mechanisms to protect their interests in situations where their interests are not aligned with management interest.
4.7	SUPERMAJORITY PROVISIONS Voting majority that is higher than those set by state law.	AGAINST	Sets a level of approval for specified actions that is higher than the minimum set by state law. These requirements often exceed the level of shareholder participation at a meeting, making action that requires a supermajority all but impossible.
4.8	LINKED (BUNDLED) PROPOSALS Combining more than one proposal.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Linked proposals often include "sweeteners" to entice shareholders to vote for a proposal (that includes other items) that may not be in the shareholders' best interest. The Board normally opposes linked proposals where one or more of the linked proposals is in opposition to the Board's proxy position.
4.9	VOTES TO ABSTAIN MEANS A CASTED VOTE	FOR	Counting abstained votes in the total pool of all votes cast.
4.10	BROKER VOTING RESTRICTIONS	FOR	Broker non-votes and abstentions should be counted only for purposes of a quorum.
4.11	FAIR PRICING	FOR	Fair price provisions prevent two-tier tender offers in which a buyer offers a premium price for only enough shares to obtain a controlling interest. It is unfair to pay some shareholders (those that did not tender in the first group) less than other shareholders.
4.12	GREEN MAIL Greenmail is the practice of shareholders accumulating a large block of stock in a company, then selling the stock back to the company at an above market price in exchange for agreeing not to attempt to take control for a lengthy period of time.	AGAINST	A vote of the holders of a majority of the outstanding shares of common stock, regardless of class, shall be required to approve any corporate decision related to the finances of a company which will have a material effect upon the financial position of the company and the position of the company's shareholders.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
4.13	POISON PILLS A method used by boards, which prevent anyone from acquiring a large portion of the company stock for a corporate takeover.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Poison pills can consist of a wide variety of provisions adopted by boards without shareholder approval, designed to make it financially unattractive – indeed, often financially devastating – for a shareholder to purchase more than a small percentage of the company's stock, often by triggering the creation of a large number of new stocks or warrants that dilute the offending shareholder's interest to the point of making it virtually valueless. The Board is normally opposed to the use of poison pills.
4.14	NET OPERATING LOSS (NOL) POISON PILLS See 4.13 for poison pill definition.	CASE-BY-CASE VOTING AGENT'S DISCRETION	NOLs may be used to reduce future income tax payments and have become valuable assets to many corporations. If a corporation experiences an ownership change as defined by Section 382 of the tax code, then its ability to use a pre-change NOL in a post-change period could be substantially limited or delayed.[14] NOL pills are adopted as a takeover deterrent to preserve the tax benefit of NOLs.
4.15	POISON PILLS – ALLOW FOR SHAREHOLDER VOTE	FOR	Since poison pills ultimately impact the wealth of shareholders, the Board supports voting measures that allow for the shareholders to vote on matters pertaining to the use of poison pills.
4.16	RE-INCORPORATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Corporations may wish to reincorporate in another state to take advantage of favorable corporate law, while providing maximized shareholder values and operational flexibility. On the other hand, reincorporation laws of other states could be such as to limit shareholder rights or reduce shareholder wealth. The Board normally supports company management's decisions on re-incorporation matters.
4.17	STATE ANTI-TAKEOVER LAWS	CASE-BY-CASE VOTING AGENT'S DISCRETION	State anti-takeover laws seek to deter hostile takeover attempts of state-based corporations with the intent of keeping target companies locally based and preserving jobs. These laws may also complicate friendly mergers and impose great costs and delays on shareholders and stakeholders in the corporation. Most state anti-takeover provisions allow companies to "opt in" or "opt out" of coverage via shareholder vote.
4.18	TARGETED SHARE PLACEMENTS Placing stock in the hands of friendly investors	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Targeted share placements (or "White Squire" placements) occur when a company puts large blocks of stock or convertible securities into the hands of a friendly investor or group of investors. This is often an inexpensive method of raising cash for a company. The Board prefers that company management seeks authorization before establishing a targeted share placement but supports this corporate action.

[14] Nathan, Charles. "Recent Poison Pill Development and Trends." May 12, 2009. The Harvard Law School Forum on Corporate Governance and Financial Regulation.

Section 9 PROXY VOTING POLICY

5. CAPITAL STRUCTURE

Corporate financing decisions can have a significant impact on shareholder value, particularly when these decisions may result in common share dilution. As a result, shareholders must analyze all management proposals to modify capital structure to determine whether these financing decisions are in their best interests.

No.	Issue	LACERS Position	Rationale
5.1	INCREASES IN THE NUMBER OF AUTHORIZED SHARES OF STOCK	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Companies need the flexibility of issuing additional shares for stock splits, stock dividends, financings, acquisitions, employee benefit plans and general corporate purposes. The Board prefers that increases should not exceed three times the number of existing outstanding shares and that the company specify a purpose for the proposed increase.
5.2	ONE SHARE, ONE VOTE Each share of common stock, regardless of its class, shall be entitled to vote in proportion to its relative share of the total common stock equity of the corporation.	FOR	The right to vote is inviolate and may not be abridged by any circumstances or by any action of any person. Each share of common stock, regardless of its class, shall be treated equally in proportion to its relative share in the total common stock equity of the corporation, with respect to any dividend, distribution, redemption, tender or exchange offer. In matters reserved for shareholder action, procedural fairness and full disclosure are required.
5.3	PAR VALUE ADJUSTMENT OF COMMON STOCK	FOR	In extraordinary cases when a stock price falls below its par value, a company wishing to issue additional stock would be unable to do so without reducing par value. Companies may also propose reductions in par value to conform to state legislative changes in the required minimum level of par value.[15]
5.4	PREEMPTIVE RIGHTS Provides current stockholders an option to maintain their relative ownership position.	AGAINST	Preemptive rights require a company issuing new shares to offer them to their existing shareholders first, in proportion to their existing holdings. This gives current shareholders the ability to maintain their relative equity position as a shareholder. Preemptive rights generally have limited importance, given the increase in the size and liquidity of the secondary market and their potential for abuse.
5.5	DEBT RESTRUCTURING	CASE-BY-CASE VOTING AGENT'S DISCRETION	As part of a debt restructuring plan, a company may propose to increase and issue common and/or preferred shares. These proposals should be evaluated considering dilution to existing shareholders, potential changes in company control, the company's current financial position, terms of the offer, whether bankruptcy is imminent and alternatives.

[15] Institutional Shareholder Services. U.S. Proxy Voting Manual. 2006. November 12, 2010.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
5.6	CONVERSION OF SECURITIES	CASE-BY-CASE VOTING AGENT'S DISCRETION	Proposals to convert securities, such as converting preferred stock to common shares, should be evaluated based on the dilution to existing shareholders, the conversion price relative to market value, financial issues, control issues, termination penalties, and conflicts of interest.
5.7	SHARE REPURCHASES Corporations buy back a portion of the outstanding shares.	FOR	The Board normally favors of share repurchase plans if the company boards feel that the stock is undervalued or there is a legitimate corporate purpose.
5.8	REVERSE STOCK SPLITS	FOR	A reverse stock split reduces the number of shares owned and increases the share price proportionately. A reverse stock split has no effect on the value of what shareholders own. Companies often reverse split their stock when they believe the price of their stock is too low to attract investors to buy their stock or to avoid being delisted.[16] If the number of authorized shares is not proportionately reduced with a reverse stock split, then LACERS treats these proposals as a request to increase authorized shares.
5.9	BLANK CHECK PREFERRED STOCK Blank check preferred stock is authorized stock over which the board has complete discretion to set voting rights, dividend rates, and redemption and conversion privileges.	AGAINST	There is the potential for abusing this kind of stock by the board. Although some guidelines note that blank check preferred stock gives management great flexibility, and this might be valuable and in the corporate interest, in general it is felt that this kind of flexibility, free of shareholder control, is insufficient justification for the creation of this type of stock.

[16] “Reverse Stock Splits.” Securities and Exchange Commission. 2000. November 12, 2010. <http://www.sec.gov/answers/reversesplit.htm>.

6. CORPORATE RESTRUCTURINGS

Corporate restructurings, such as mergers and leveraged buyouts, can have a major effect on shareholder value. Many of these transactions require shareholder approval and must be examined carefully to determine whether they are in the best financial interests of the shareholders.

No.	Issue	LACERS Position	Rationale
6.1	ASSET SALES	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Asset sales should be evaluated based on the impact on the balance sheet/working capital, value received for the asset, and potential elimination of inefficiencies. The Board generally supports management decisions to sell assets.
6.2	GOING PRIVATE TRANSACTIONS (LEVERAGED BUYOUTS AND MINORITY SQUEEZEOUTS)	CASE-BY-CASE VOTING AGENT'S DISCRETION	Going private transactions such as leveraged buyouts and minority squeezeouts should be evaluated on a case-by-case basis taking into account the following: offer price and imbedded premium, fairness opinion, how the deal was negotiated, conflicts of interest, other alternatives/offers considered, and the risk to shareholders if the attempt to take the company private fails.
6.3	LIQUIDATIONS	CASE-BY-CASE VOTING AGENT'S DISCRETION	Liquidation proposals are generally bad news for long-term investors. They usually occur after a prolonged period of declines in earnings and share prices. However, liquidation may be an attractive option if the sale of the firm's assets on a piece-meal basis can be accomplished at a higher-than-market price. Liquidation proposals should be evaluated based on management's efforts to pursue other alternatives, appraised value of assets, the compensation plan for executives managing the liquidation, and the likelihood of bankruptcy if the liquidation proposal is not approved.[17]
6.4	MERGERS AND ACQUISITIONS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Case-by-case votes are recommended on mergers or acquisitions since the circumstances by which they arise are unique. The Board supports the company management's decision on mergers and acquisitions when such decision is based upon the findings of a thorough due diligence process and is in the best interest of the shareholders.
6.5	SPIN-OFFS	CASE-BY-CASE VOTING AGENT'S DISCRETION	Corporations may seek to streamline their operations by spinning off less productive or unrelated subsidiary businesses. The spun-off companies are expected to be worth more as independent entities than as parts of a larger business. Spin-offs are evaluated case-by-case depending on the tax and regulatory advantages, planned use of sale proceeds, managerial incentives, valuation of spinoff, fairness opinion, benefits to the parent company, conflicts of interest, corporate governance changes, and changes in the capital structure.

[17] Institutional Shareholder Services. U.S. Proxy Voting Manual. 2006. November 12, 2010.

7. MISCELLANEOUS CORPORATE GOVERNANCE			
No.	**Issue**	**LACERS Position**	**Rationale**
7.1	ANNUAL MEETING DATE & LOCATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Mandatory rotation of the annual meeting would not significantly increase stockholders' access to management since there are convenient alternatives available to interested stockholders. It would decrease the company's flexibility without a material benefit to stockholders. The Board normally supports company management's decision on this issue.
7.2	CORPORATE NAME CHANGE	FOR	A company may seek a name change to better portray its strategic image or re-brand itself. The Board supports company management's decision on this issue.
7.3	CORPORATION CHARTER & BYLAW AMENDMENTS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Charters and bylaws should not be amended without shareholder approval unless the changes are of a housekeeping nature such as minor corrections or updates.

Section 9 PROXY VOTING POLICY

8. SOCIAL & ENVIRONMENTAL

On November 13, 2007, the Board adopted the United Nations Principles for Responsible Investment ("Principles"), a policy of global best practices for environmental, social, and governance (“ESG”) investing. LACERS current proxy voting agent, Institutional Shareholder Services, (“ISS”), is a signatory to the Principles and incorporates them into its proxy analysis process. Therefore, when considering how to vote on most ESG proposals, investment staff relies on the research expertise and voting recommendations of ISS.

No.	Issue	LACERS Position	Rationale
8.1	DIVERSIFICATION OF BOARDS	LACERS supports this issue in principle VOTING AGENT’S DISCRETION	Women and minorities have played major and responsible roles not only in government, higher education, law and medicine, but also in communications, electronics, and finance. The Board normally prefers to support diversification on company boards. However, the Board recognizes that such a mandate carried out without regard to the selection of the most highly qualified candidates might not be in the best interest of these companies.
8.2	CORPORATE BOARD MEMBERS SHOULD WEIGH SOCIO-ECONOMIC, LEGAL AND FINANCIAL FACTORS WHEN EVALUATING TAKEOVER BIDS	CASE-BY-CASE BASIS. VOTING AGENT’S DISCRETION	While broad social and environmental issues are of concern to everyone, institutional shareholders acting as representatives of their beneficiaries must consider, specifically, the impact of the proposal on the target company. A decision on whether to support or oppose such proposals shall focus on the financial aspects of social and environmental proposals. If a proposal would have a negative impact on the company's financial position or adversely affect important operations, LACERS would oppose the resolution. Conversely, if a proposal would have a clear and beneficial impact on the company's finances or operations, LACERS would support the proposal.
8.3	INDEPENDENT REVIEW OF COMPANY OR PLANT OPERATIONS	AGAINST	An independent review of company or plant operations which will be provided at company expense to the shareholders to consider the cost of and alternatives to the present or proposed projects on the primary operation. This process would be costly and time-consuming.
8.4	DISCLOSURE OF OFFICERS, DIRECTORS AND INVOLVED OUTSIDERS’ GOVERNMENTAL AFFILIATIONS	AGAINST	Miscellaneous issues include disclosures of lists of officers, directors and involved outsiders who have served in any governmental capacity during the previous five years. In addition, disclosure includes the lists of law firms employed by the companies, rundowns on fees and the revelation as to whether any elected or appointed official have partnership interest in the retained law firms. To the extent that potential conflicts of interest cannot be controlled by corporate procedures, professional ethics, and law, these disclosures will make no difference.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
8.5	CORPORATE AFFIRMATION OF ITS NON-COERCIVE POLITICAL PRACTICES	AGAINST	This affirmation is intended to ensure that the corporation avoids a number of coercive political practices such as distribution of contribution cards in favor of one political party. Since these practices are illegal, the issue is moot.
8.6	LIMITING CORPORATE PHILANTHROPY	AGAINST	These proposals place restrictions and additional reporting obligations upon management's right to make corporate contributions to charitable, educational, community or related organizations. Most companies give money to charity. Because most companies must compete, those that do not contribute to charity risk damaging their good names.
8.7	STAKEHOLDERS' INTEREST BEFORE OR EQUAL WITH SHAREHOLDERS' INTEREST	ABSTAIN	Stakeholders include customers, suppliers, employees, communities, creditors and shareholders. Stakeholders are important to the success of the corporation and therefore the interests of each must be considered by directors and management. However, boards should not put the non-shareholder/stakeholder interests ahead of or on an equal footing with shareholders in terms of the corporation's ultimate purpose.
8.8	ALL OTHER ESG ISSUES	VOTING AGENT'S DISCRETION	Investment staff relies on the research expertise and voting recommendations of ISS for other ESG issues not addressed by this policy.

Section 9 PROXY VOTING POLICY

9. ISSUES NOT ADDRESSED BY POLICY

For proxy issues not addressed by this policy that are market specific, operational or administrative in nature, and likely non-substantive in terms of impact, LACERS gives ISS discretion to vote these items.

Substantive issues not covered by this policy and which may potentially have a significant economic impact for LACERS shall be handled accordingly:

1) ISS shall alert investment staff of substantive proxy issue not covered by policy as soon as practicable;
2) Investment staff and/or the General Manager make shall determine whether the item requires Corporate Governance Committee (“Committee”) and/or Board of Administration (“Board”) consideration;
3) If the issue does not require Committee and Board consideration, then staff will vote the issue based on available research;
4) If the issue requires Committee and Board consideration, then the item will be prepared and presented to the Committee and Board for consideration. Following Committee and Board action, staff will then have the issue voted accordingly.
5) If time constraints prevent a formal gathering of the Committee and Board, then LACERS Board approved Corporate Governance Actions Protocol, as reprinted below, shall apply and staff will then have the issue voted accordingly.

CORPORATE GOVERNANCE ACTIONS POLICY
Board Adopted December 2008

From time to time LACERS receives requests from other pension funds or from affiliated organizations for support of various corporate governance actions. Many of the actions requested, such as requests to sign action letters, would otherwise appear to be consistent with existing Board policy. However, occasionally there is not adequate time to convene a Committee or Board meeting in advance to consider the matter.

The proposed Corporate Governance Actions Policy requires that one staff member plus one Board member both agree that the subject to be voted/acted on falls within the letter or spirit of adopted Board policy. If both agree, the measure will be executed by the General Manager or her designee.

The designated staff person will be the Chief Investment Officer (CIO). The designated Board member will be the Chair of the Corporate Governance Committee. In the absence of the CIO, the General Manager will become the designated staff member. In the absence of the Chair of the Corporate Governance Committee, the Board Chair will become the designated Board member.

XV. SECURITIES LENDING POLICY

A. Objectives

The primary goal of LACERS' Securities Lending Program ("Program") is to enhance returns for the System by lending securities owned by LACERS to qualified borrowers. The Program features customized guidelines for prudent risk controls and is designed to not interfere with LACERS' overall investment strategy.

B. Scope

The securities lending agent ("Agent"), pursuant to the securities lending contract, is responsible for locating creditworthy securities borrowers, facilitating securities lending transactions, managing collateral pledged by borrowers, providing daily mark-to-market, and acting in a fiduciary capacity in carrying out its lending duties on behalf of LACERS. The Agent may manage two distinct types of collateral with the goal to maximize net income, split between the Agent and the System, consistent with the safety of principal, maintenance of liquidity and LACERS' guidelines.

Cash collateral is reinvested by the Agent in a separate account based on LACERS' guidelines. Guidelines for the cash collateral separate account are provided in detail in the securities lending contract and address the eligible investments, credit quality, diversification, liquidity, and trading for the Program.

Non-cash collateral is held in a separate account established expressly for LACERS. Guidelines for the non-cash collateral separate account are provided in detail in the securities lending contract and address collateralization levels, eligible instruments, credit quality, and diversification.

C. Roles and Responsibilities

1. **The Board:**
   a) Reviews and approves the Securities Lending Policy.
   b) Modifies or terminates the Program.
   c) Selects and terminates the Securities Lending Agent.
   d) Reviews the Program's overall performance.
2. **Staff:**
   a) Oversees the performance of the lending agent and the cash collateral investment manager in carrying out the objectives of the Program and complying with pre-determined guidelines.
   b) Consistent with the Program objectives and the securities lending contract, reviews, approves, and removes the counterparties as proposed by the Agent.
   c) If the Board is unable to convene in a timely manner to address unusual and significant risk factors that are deemed to have a material adverse impact (e.g. a material reduction in cash reinvestment market liquidity) on the integrity of the Program, LACERS' General Manager and Chief Investment Officer may decide

jointly to modify or suspend the Program. The Chief Investment Officer shall report the action(s) and reasons for such action(s) at the next scheduled Board meeting.

d) Reports to the Board an annual report summarizing securities lending activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

3. **The Agent:**

a) Ensures that counterparties that borrow LACERS' securities are qualified pursuant to LACERS' approved credit standards.

b) Indemnifies LACERS against borrower default.

c) Accepts and invests collateral according to collateral investment guidelines agreed upon with LACERS.

d) Provides the following reports to LACERS:

Reporting Requirements of the Agent		
Ad hoc Reports	Monthly Reports	Quarterly Reports
• Any borrower defaults within a practicable time frame. • Any violations of LACERS' guidelines with a plan for correction within a practicable time frame.	• Volume and lending spreads for the Program. • Total income received by LACERS and by the Agent for borrowing activity. • Investment management activities and risk characteristics of the collateral investment portfolio including sector allocation, quality exposures, maturity exposures, borrower exposures, average days' liquidity, etc.	• LACERS lending activity, earnings, risk characteristics and general trends in the security lending marketplace.

D. **Potential Risks**

LACERS acknowledges the following primary risks of its securities lending activities:

1. **Counterparty Risk**

Counterparty risk arises when the borrower defaults on the return of the securities on loan to the lender. This risk is mitigated by LACERS' guideline requirements that borrowed securities are over-collateralized and marked to market on a daily basis by the Agent. Additionally, the Agent is bound by the securities lending contract to indemnify LACERS for any shortfalls in collateral in the event of a borrower default.

2. **Cash Reinvestment Risk**

Cash reinvestment risk arises when the investments in the cash collateral separate account become impaired or decrease in value, potentially resulting in a collateral deficiency and loss of principal. LACERS' guidelines are designed to minimize cash reinvestment risk.

3. **Interest Rate Risk**

Interest rate risk arises when the rebate rate that LACERS pays to the borrowers exceeds the return on the cash collateral investments. The Agent monitors and manages the interest rate exposure of the cash collateral pool versus the Agent's current interest rate forecast by using statistical analysis. Any negative earnings that occur as a result of interest rate risk will be shared between LACERS and the Agent at the same percentage as the fee arrangement.

4. **Other Risks**

Trade settlement and operational risks associated with securities lending are assumed by the Agent. Corporate actions such as voting rights remain with the security and will become the right of the borrower when the security is on loan. LACERS can still vote proxies for those shares not on loan or may instruct the Agent to return shares so that any specific proxy can be voted.

XVI. SECURITIES LITIGATION POLICY

A. Purpose

The Board adopts this Securities Litigation Policy to establish procedures and guidelines for monitoring, evaluating, and participating in both securities class actions and other securities-related litigation as appropriate to protect and maximize the recovery value of LACERS' assets.

B. Objective

The objective of the Securities Litigation Policy is to carry out the Board's fiduciary obligation to monitor securities class actions and other securities-related litigation in which LACERS has an interest, and to participate in such actions and recover damages when appropriate to protect and maximize the recovery value of LACERS' assets.

C. Guidelines

1. Use of Outside Experts As Needed

LACERS may engage the services of its custodian bank, third-party vendors, and with the concurrence of the City Attorney's Office, outside counsel, to assist LACERS to monitor securities litigation cases in which LACERS may have an interest, evaluate LACERS' potential losses, provide recommendations concerning whether to take an active role in the litigation, and/or represent LACERS in cases in which the Board has agreed to seek an active role.

2. Threshold for Determinations by the Board to Actively Participate

a) Domestic Securities Actions

The Board shall make a determination, based upon the analysis and recommendation provided by Staff and the City Attorney's Office, whether to take an active role in a particular domestic securities class action, including whether to seek lead plaintiff status or pursue an independent action, where: (1) the estimated recoverable damages to LACERS exceed two million dollars ($2,000,000.00); or (2) the estimated recoverable damages to LACERS exceed one million dollars ($1,000,000.00) and LACERS joins with one or more City of Los Angeles retirement plans in pursuing an independent action. In making its determination, the Board shall weigh the potential damages incurred by the Plan, the potential recovery that may be obtained if such claim is pursued, and the likelihood of the plaintiffs' success in the action based upon the merits of the action.

b) **Foreign Securities Actions**

The Board shall make a determination, based upon the analysis and recommendation provided by Staff and the City Attorney's Office, whether to participate (Opt-In) in a particular foreign securities action—a lawsuit brought or pending outside of the United States involving securities purchased by LACERS or on LACERS' behalf on a foreign securities exchange—where the estimated recoverable damages to LACERS exceed one million U.S. dollars (US$ 1,000,000.00). In foreign securities actions, in addition to the core considerations concerning damages, administrative burdens, and liability, the Board also shall weigh carefully the quality and financial stability of the foreign legal counsel and the defense cost funding guarantor.

3. **Diligent Asset Recovery in All Cases**

In cases in which LACERS has not assumed an active role but has suffered losses, LACERS shall ensure that it obtains its fair share of any recovery in which it has filed a valid claim.

D. **Operational Roles And Responsibilities To Implement The Securities Litigation Policy**

1. **The Board**

a) Pursuant to the Guidelines set forth in Section C.2 of the Securities Litigation Policy, and upon considering the recommendations of Staff, the City Attorney's Office, and/or any outside counsel engaged to assist the City Attorney's Office, the Board shall make the final determination whether to actively participate in a particular action.

b) Consistent with Charter Section 275 and Section D.4 of the Securities Litigation Policy, the Board shall make recommendations of one or more outside law firms to assist the City Attorney's Office in discharging the duties required by the Securities Litigation Policy.

c) As set forth in Charter Section 273(a), the Board shall have the authority to approve or reject any settlement of litigation.

2. **Custodian Bank and/or Third-Party Vendor**

LACERS' Custodian Bank and/or Third-Party Vendor shall be responsible for:

a) Reviewing all securities actions brought or pending within the United States or a foreign jurisdiction in which LACERS has suffered losses.

b) Timely filing complete and accurate proof of claims forms on LACERS' behalf, including the necessary supporting documents and information, necessary to recover damages in every securities class action brought or pending within the United States in which LACERS has suffered losses.

c) Providing timely notice to LACERS of each settlement recovery, with sufficient time to allow LACERS to opt-out of domestic actions, and/or opt-in to foreign actions. LACERS Staff shall have the authority to determine, and to communicate to the

Custodian Bank and/or Third-Party Vendor, the deadline for such notice in each particular case.

d) Providing quarterly reports to LACERS Staff and the City Attorney's Office regarding these functions, including any securities litigation proceeds recovered.

e) Providing outside securities litigation monitoring counsel which has been engaged by LACERS pursuant to Section D.4 of the Securities Litigation Policy with access to LACERS' securities holdings and transaction information in order to enable such counsel to identify losses associated with existing and potential lawsuits.

3. **LACERS Staff**

LACERS Staff shall be responsible for:

a) Monitoring the functions performed by the Custodian Bank and/or Third-Party Vendor as described above and shall keep the Board apprised of any unusual or extraordinary events.

b) Working with the City Attorney's Office to provide support and information regarding securities holdings and activity for litigation purposes.

c) Preparing for the Board an annual report summarizing securities class action activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

d) Assisting the City Attorney's Office to evaluate and recommend to the Board outside counsel law firms to assist the City Attorney's Office in discharging its duties under the Securities Litigation Policy.

e) Assisting the City Attorney's Office to provide recommendations to the Board concerning whether to take an active role in a particular action pursuant to the Guidelines set forth in the Securities Litigation Policy.

4. **The City Attorney's Office**

The City Attorney's Office, assisted by Staff and outside counsel as needed, shall be responsible for:

a) Identifying and recommending to the Board qualified outside law firms to assist the City Attorney's Office with monitoring, evaluating, and recommending cases in which LACERS should consider taking an active role under the Securities Litigation Policy. The Board shall recommend one or more such firms to be engaged as outside securities litigation monitoring counsel to assist the City Attorney, subject to the written consent of the City Attorney's Office. Once engaged, outside securities monitoring counsel shall be authorized to receive access to LACERS' securities holdings and transaction information from the Custodian Bank and/or Third Party Vendor, as provided by Section D.2 of the Securities Litigation Policy.

b) Identifying and recommending to the Board qualified outside law firms that would be competent to serve as lead counsel, supervised by the City Attorney's Office, in a particular securities case in which LACERS has sought to serve as lead plaintiff or as plaintiff in an opt-out case. The Board shall recommend one or more such firms, subject to the written consent of the City Attorney's Office, to be placed upon a list of approved lead counsel candidates that would be eligible to submit proposals to represent LACERS in a particular case.

c) Providing recommendations to the Board concerning whether to take an active role in a particular action pursuant to the Guidelines set forth in the Securities Litigation Policy.

d) Once the Board has made a determination to seek an active role in a particular case, preparing Requests for Proposal for distribution to the firms that have been placed upon the list of approved lead counsel candidates, evaluating proposals, and recommending one or more finalist firms to the Board.

e) Assisting Staff to provide the Board with status reports as needed to keep the Board apprised of major developments in cases in which LACERS is a party and/or lead plaintiff.

f) Assisting LACERS in its role as lead plaintiff in a class action or as a plaintiff in an opt-out case, including supervising the law firm appointed to serve as lead counsel. Such supervision may include participation in significant motions and settlement discussions when permitted by parties or the court, and filing objections concerning attorney fee requests.

XVII. APPENDIX: GLOSSARY

ASSET CATEGORIES

Cash/Cash Equivalent: Cash equivalent securities with a maturity less than or equal to fifteen months are considered to include interest bearing or discount instruments, money market funds, corporate issued commercial paper, bank issued Certificates of Deposit, bankers acceptances, fully collateralized repurchase agreements or participation in commingled (cash equivalents) funds managed by a bank, insurance company, or other professional cash equivalents investment manager. Both U.S. and foreign securities issued in U.S. markets are permissible.

Commodities: Physical commodities are the raw inputs (e.g., oil, wheat, gold, etc.) into the production of goods. Commodities investment is conducted through futures, the prices of which are directly tied to the underlying physical commodity. Commodities are real assets and are expected to provide inflation hedging in commodities-driven inflationary environments.

Convertibles: A preferred stock or bond that can be exchanged for common stock of the issuing company. The conversion is at the investor's option and usually must occur within a specified time limit. Convertibles may be considered fixed income or equity investments when calculating investment returns and determining asset allocation.

Direct Placements: Sale of securities to a long-term institutional investor such as a pension fund without the use of underwriters.

Fixed Income: Debt instruments of corporations, government or agencies characterized by a fixed or variable interest rate and stated maturity date. Included are marketable bonds, cash equivalents and Rule 144A securities. Certain fixed income assets, such as cash equivalents, are often categorized separately.

Preferred Stock: A security which has preference over common stock (but not bonds) with regard to dividends and the distribution of assets in the event of a corporate liquidation. Preferred stock combines elements of both common stock and bond forms of investment.

Private Equity: Equity investments in companies that do not trade publicly on an organized exchange. They may include private equity, venture capital, buyout, mezzanine financing, distressed securities, natural resources and hedge funds. These investments are frequently made in some pooled format, usually a limited partnership or limited liability corporation.

Private Real Estate: Land and all physical property related to it, including buildings, landscaping, and all rights to the air above and earth below the property. Assets not directly associated with the land are considered personal property.

Public Equities: Shares that represent ownership of a publicly traded corporation. Included in this category are publicly traded common stocks, rights, warrants, convertible securities and American and Global Depository Receipts.

REITS: Real Estate Investment Trusts. Publicly-traded stocks of real estate investment companies the assets of which are 100% comprised of income producing real estate such as apartments, shopping centers, etc. or the mortgages of real estate property assets.

Total Fund: All assets of the fund including equities, fixed income, cash equivalents, cash and other securities.

Treasury Inflation Protected Securities (TIPS): Debt instruments of the U.S. Government that adjust monthly for changes in inflation as represented by the non-seasonally adjusted U.S. CPI-Urban. Similar to other fixed income instruments, TIPS have a fixed interest rate component and stated maturity.

EQUITY TERMS

American Depository Receipts (ADRs): Negotiable certificate issued by a U.S. bank for shares of stock issued by a foreign corporation. The securities are held in a custodial account, either at the issuing bank or an agent. ADRs are registered with the Securities and Exchange Commission, and give the holder the same benefits of ownership as shareholders. Two types of American Depository Receipts include sponsored ADRs, which are approved and promoted by the issuing corporation; and unsponsored ADRs, which are not backed by the issuer. ADRs are priced in U.S. dollars, and trade on stock exchanges and over-the-counter markets in the same fashion as U.S. issued securities.

Debt-to-Equity: Quantifies a firm's financial leverage. It is the long-term debt of the company divided by shareholder's equity. Higher levels of debt are often associated with earnings volatility.

Dividend: A payment to owners of common or preferred stock. Dividends are usually paid out of the current earnings of a corporation. On preferred stock shares, the dividend is usually a fixed amount. On common stock shares, the dividend will vary with the fortunes of the corporation. Dividends are usually declared and paid quarterly.

Dividend Growth: Measures the average percentage increase, over the trailing five years, of the per share dividend.

Dividend Yield: The annual per share dividend divided by the market price of the security. Higher dividend yields tend to support the price of the security.

Global Depository Receipts (GDRs): Negotiable certificate held in the bank of one country representing a specific number of shares of a stock traded on an exchange of another country. While American Depositary Receipts allow international companies to offer shares to U.S. citizens, GDR's allow companies in Europe, Asia, the United States and Latin America to offer shares in markets around the world.

Market Capitalization: The number of common shares outstanding multiplied by the per share price of the stock which represents the market's valuation of a company.

Price-Earnings (P/E) Ratio: The market price of a share of common stock divided by the company's earnings per share.

Price-to-Book: The market price of a share of common stock divided by the company's per share book value.

Return on Equity: A firm's net profit divided by its shareholder's equity. It is one of two basic factors (the other being earnings retention ratio) that determine a firm's earnings growth rate.

FIXED INCOME TERMS

Accrued Interest: Interest accumulated on a bond since the last interest payment was made. The buyer of the bond pays the market price plus accrued interest.

Asset Backed Bond: Securities that are formed when similar assets or receivables, such as credit card receivables, auto loan receivables or home equity receivables, are pooled together and undivided interests in the pool are sold. The principal and interest payments are "passed-through" to the bondholders.

Banking Demand (Demand Deposit): Checking account balances or other accounts, which, without prior notice to the bank, can be withdrawn or transferred.

Bid-Ask Spread: The difference between the price a buyer is willing to pay (bid) for a security and the price an owner is willing to receive for the security.

Bond: An interest-bearing or discounted certificate of debt issued by~~s~~ corporations, municipalities, governments and governmental agencies that represent a loan to the issuer and obligates the issuer to pay the bondholder a specified sum of money, usually semiannually, and to repay the principal amount of the loan at maturity.

Certificate of Deposit: A receipt from a bank for funds deposited for a stated period of time and normally paying a stated rate of interest.

Convexity: A measurement of the sensitivity of a fixed income security's duration given changes in interest rates. The higher a bond's convexity, the less sensitive it is to interest rate changes versus a comparable duration security and the opposite is true when comparing lower convexity bonds versus similar duration bonds.

Section 12 GLOSSARY

Coupon: Interest rate on a bond that the issuer agrees to pay to the bondholder until maturity, expressed as an annual percentage of face value. More simply, the periodic interest payment made to bond owners during the life of a bond.

Credit spread: The difference in yield between Treasuries and non-Treasuries of similar maturity, duration, convexity etc. Credit spread is generally viewed as the premium assigned by investors to the default risk of a bond.

Debenture: A promissory note backed by the general credit of a corporation -- usually not secured by a mortgage or lien on any specified property.

Duration: A calculation measuring the price sensitivity of a bond or other financial instrument to changes in interest rates while taking into consideration its coupon and maturity.

Fed: The seven-member governing board that oversees Federal Reserve Banks establishes monetary policy (interest rates, availability of credit, etc.) and monitors the economic health of the country.

Federal Reserve Bank: One of 12 regional banks in the Federal Reserve System. The role of each bank is to monitor the commercial and savings banks in their region to ensure they follow Federal regulations. The reserve banks also provide central bank services such as check collection, access to the Fed's wire network and credit advances from the Fed's discount window. Reserve banks act as depositories for banks in their region.

Inflation: The overall general upward price movement of goods and services in an economy, usually measured by the Consumer Price Index in the U.S. Inflation is one of the major risks to investors over the long term because it erodes the purchasing power of their investments.

Interest Rate: Cost of money or credit expressed as a percentage rate per period of time usually one year.

Maturity: The date on which a bond becomes due and the issuer redeems or pays the face value or principal.

Mortgage-Backed Asset: Securities that are formed when mortgages are pooled together and undivided interests in the pool are sold. The principal and interest payments are usually "passed-through" to the certificate holders.

Sector Swap: Exchange of one security or asset for another, often done to alter the quality, change the duration, or increase the yield to maturity.

Yield Curve: A graph showing the relationship between yields and maturities of fixed income securities issued by the same or similar issuers having the same risk characteristics. Normally, the curve slopes upward and to the right because short-term investments have lower yields than long-term investments. From time to time, the curve may become inverted, when short-term yields are higher than long-term yields.

DERIVATIVE TERMS

Cash Settlement Contract: The feature of certain futures contracts or options that allows delivery or exercise to be conducted with an exchange of cash rather than the physical transfer of assets.

Covered Option: A strategy in which the writer sells options while simultaneously owning an equivalent position in the underlying security.

Credit Default Swap: A derivative instrument that transfers the credit risk from the buyer to the seller in exchange for a specified premium. The seller receives a quarterly payment from the buyers in exchange for absorbing the risk inherent in owning the credit. The buyer receives payment only when a credit event occurs such as: bankruptcy, failure to pay, obligation acceleration, restructuring or sovereign repudiation/debt moratorium.

Counterparty: Entity, usually an investment bank and/or broker/dealer, through which an OTC financial transaction is completed or traded. Counterparties may be known or unknown to the investor.

Derivative: Instruments or contracts whose value is determined by the price of the asset to which the contract is tied.

Forward Contract: A customized transaction in which two parties agree to the purchase or the sale of a security, currency or commodity at some future time under such conditions as the two agree upon. Those who use forward contracts often expect to make or take physical delivery of the commodity or financial instrument.

Futures Contract: A standardized agreement between two parties to purchase or sell an asset or currency at a later date at a fixed price. The contract trades on a futures exchange and is subject to a daily mark-to-market procedure.

Interest Rate Swap: Agreements between two parties to exchange types of cash flows. They are derivative securities because their payoffs are determined by the price of the underlying financial security. Swaps trade in dealer markets or are directly negotiated.

Option: A contract that gives one party the right, but not the obligation, to buy or sell an asset, currency, or a futures contract for a fixed price over a specific period of time.

Naked (uncovered) Option: A short option position in which the writer does not own an equivalent position in the underlying security.

Over the Counter ("OTC"): Non-exchange traded derivatives, usually swaps, which are established with select counterparties.

PRIVATE EQUITY TERMS

Additional Fees: The amount of capital an investor pays into a fund/investment that does not count against the investors' commitment. Additional fees typically consist of management fees or late-closing interest expenses.

Capital Committed: An investor's financial obligation to provide a set amount of capital to the investment.

Capital Contributed: Capital contributed from an investor's capital commitment to fund partnership investments, organizational expenses and management fees and partnership expenses.

Capital Distributed: Cash or stock disbursed to the investors of an investment.

Co- Investment: A co-investment is a direct investment made alongside a partnership.

Corporate Finance/Buyout: Partnerships seeking to make controlling and non-controlling investments in established companies that have the potential to achieve greater value through improved performance.

Cost Basis: Capital contributions less return of principal.

Direct Investment: A direct investment is a purchased interest of an operating company.

Fund-Of-Funds: An investment vehicle that invests in other private equity partnerships.

Fund/Investment Size: The total amount of capital committed by investors to a fund.

Investment Category: Used to identify investments in one of the following categories: co-investments, direct investments, fund-of-funds, primary funds, secondary fund-of-funds, or secondary purchases.

Investment Strategy: A sub-classification of a partnership's investment type, such as co-investment, direct investment, corporate finance/buyout, mezzanine, real estate, special situation, or venture capital.

Life Cycle Period: The current stage of a partnership depending on the percentage contributed to date. Life cycle periods are investment and realization.

J-Curve/J-Curve Effect: Period in which partnerships are making investments and drawing management fees, which results in capital account balances that are less than cumulative contributions.

Mezzanine: An investment strategy involving the purchase of subordinated debt. These securities exist between the senior debt and equity of a holding's capital structure. Subordinated debt carries a lower level of risk than pure equity structures because they generate current income and have a more senior position in the company's capital structure.

Net Internal Rate Of Return ("IRR"): The discount rate that equates the net present value of the partnership's cash outflows with its inflows and residual value at the time of calculation. The calculation is net of management fees and the general partner's carried interest.

Originator: The institution responsible for recommending a client commit to an investment.

Ownership Percentage: The investor's percent of ownership as measured by capital committed divided by fund or investment size.

Paid-In Capital: The amount of capital an investor has contributed to a partnership, which includes capital contributions and additional fees.

Pooled Average IRR: An IRR calculation that aggregates cash flows (paid-in capital and capital distributed) and the reported market values of each investment within a portfolio to create one portfolio investment and return.

Portfolio Holding Exposure: The limited partner's pro-rata allocation to an underlying investment based on its ownership percentage of the partnership.

Primary Fund: Defines when the investor acquired an interest in the partnership. Primary fund is the investment category when an investor participates in a closing at the inception of the partnership.

Private Equity Partnership: A professionally managed pool of capital that generally invests in unlisted companies or securities. Common investment strategies include corporate finance/buyout, mezzanine, special situations, and venture capital.

Realized Multiple: Ratio of cumulative distributions to paid-in capital.

Return On Investment ("ROI"): A calculation based on the total value (market value plus distributions) divided by paid-in capital for an investment.

Reported Market Value: The investment's capital account balance at quarter end, which includes the general partner's reported value of the underlying holdings and other assets and liabilities.

Secondary Fund-Of-Funds: A private equity vehicle formed to purchase active partnership interests from an investor.

Secondary Purchase: A purchase of an existing partnership interest or pool of partnership interests from an investor.

Special Situation: Partnerships that make investments using a unique strategy. Examples include distressed and turnaround, industry focused and multi-stage partnerships.

Top Tier Fund: A fund managed by a general partner that has a demonstrated track record of superior performance measured against its peers by its given strategy or a fund managed by a general partner that, based on the Private Equity Consultant's extensive expertise, has the requisite skill set and market opportunity to prospectively produce superior performance compared to its peers by a given strategy.

Total Exposure: Calculated by the summation of market value and unfunded commitments.

Venture Capital: An investment strategy that provides start-up or growth capital to companies in the early stages of development. Venture investments generally involve a greater degree of risk, but have the potential for higher returns.

Vintage Year: The year in which a partnership makes its first capital call for an investment into a portfolio company/holding.

PRIVATE REAL ESTATE TERMS

The following is a list of commonly used terms in Real Estate Investments and their respective definitions.

Appreciation Return: Expressed as a percentage, the return generated by the Capital Appreciation of a property or portfolio over the period of analysis.

Capital Appreciation: The change in market value of property or portfolio over the period of analysis, adjusted for Capital Improvements and Partial Sales for the period.

Capital Expenditures: Investment of cash or the creation of a liability to acquire or improve an asset, e.g., land, buildings, building additions, site improvements, machinery, equipment; as distinguished from cash outflows for expense items that are normally considered part of the current period's operations.

Capital Improvements: Expenditures that cure or arrest deterioration of property or add new improvements and appreciably prolong its life. By comparison, repairs merely maintain property in an efficient operating condition.

Section 12 GLOSSARY

Capitalization Rate: The Capitalization Rate or Cap Rate is a ratio used to estimate the value of income producing properties. It is computed by dividing the annual net operating income by the sales price or value of a property.

Commingled Funds: A term applied to all open-end and closed-end pooled investment vehicles designed for institutional tax-exempt investors. A commingled fund may be organized as a group trust, partnership, corporation, insurance company separate account or other multiple ownership entity.

Open-end Fund: A commingled fund with no finite life that allows continuous entry and exit of investors, and typically engages in on-going investment purchase and sale activities.

Closed-end Fund: A commingled fund with a stated maturity (termination) date, with few or no additional investors after the initial formation of the fund. Closed-end funds typically purchase a portfolio of properties to hold for the duration of the fund and, as sales occur, typically do not re-invest the sales proceeds.

Diversification Attributes:

Equity: Direct undivided ownership in real estate that has not been financed using borrowed funds.

Leveraged Equity: Direct undivided ownership in real estate that has been financed using borrowed funds

Equity Oriented Debt: A mortgage loan with a stated interest rate in addition to equity participation by the lender via annual cash flow and/or sale proceeds or refinancing proceeds.

Traditional Debt: A mortgage loan payable at one or more stated interest rates.

Life Cycle:

Pre-development: Raw land.

Development: Properties under construction including preparation and installation of infrastructure.

Leasing: Completed construction that is less than 60% leased and that has been available for occupancy one year or less.

Operating: Properties with greater than 60% average leasing, or that have been available for occupancy for more than one year.

Section 12 GLOSSARY

Redevelopment: Properties that are undergoing substantial expansion or re-tenanting, rehabilitation or remodeling.

Property Size: Property size categories refer to gross asset value of each property. The dollar amount entered in each category should reflect net asset value within each category.

Property Type:

Office: Low-rise, mid-rise and high-rise office buildings and office parks.

Industrial: Warehouse, manufacturing, office showroom, flex space and research and development.

Retail: Neighborhood center, community center, regional center, super regional center, fashion/specialty center, power center, theme/festival center and outlet center.

Residential: High-rise elevator projects, low-rise projects and garden type projects.

Hotel/Motel: Hotels, resorts and motels.

Timberland: Timber, timberland and mineral rights.

Agriculture: Row crops, permanent crops, pasture/ranch and agribusinesses.

Vacant Land: Undeveloped land.

Other: Mobile home parks, self storage facilities, etc.

Gross Asset Value: The fee simple or leased fee market value of an investment, without regard to the debt balance or ownership percentages.

Gross Income: The income or loss of a portfolio or entity, resulting after deducting all expenses, (except for portfolio and asset management fees), but before realized and unrealized gains and losses on investments.

Income Return: Expressed as a percentage, the component of return derived from property operations during the period of analysis.

Lease Expiration Exposure Schedule: A tabulation listing the total leasable square footage of all current leases that expire in each of the next five years, without regard to renewal options.

Net Assets: Total Assets on a market value basis less total liabilities on a market value basis.

Section 12 GLOSSARY

Net Investment Income (Net Income): The income or loss of a portfolio or entity resulting after deducting all expenses, including portfolio and asset management fees, but before realized and unrealized gains and losses on investments.

Net Operating Income: Rental and other income of property, less operating expenses other than Capital Expenditures and mortgage debt service.

Net Sales Proceeds: Proceeds from the sale of an asset or part of an asset less brokerage commissions, closing costs, and marketing expenses.

Partial Sales: The sale of an interest in real estate which is less than the whole property. This may include, for example, a sale of easement rights, parcel of land or retail pad, or a single building of a multi-building investment. (See Net Sales Proceeds)

Principal Payments: The return of invested capital to the lender, as compared to interest payments, which represents a return on invested capital.

Separate Accounts: A term applied to an investment vehicle for investors with the ability to commit substantial funds to real estate assets who may prefer to invest through individual portfolios specifically tailored to their unique investment requirements. Separate accounts provide clients with a greater degree of control and enable them to capitalize on specific investment opportunities.

Time Weighted Annual Rate of Return: The yield for a year calculated by geometrically compounding the previous four quarters' returns.

Total Assets: The sum of all gross investments, cash and equivalents, receivables, and other assets presented on the Statement of Assets and Liabilities.

Total Return: The sum of the quarterly income and appreciation returns.

Weighted Average Equity: The denominator of the fraction used to calculate investment level Income, Appreciation, and Total returns on a quarterly basis, consisting of the Net Assets at the beginning of the period adjusted for Weighted Contributions and Distributions.

STATISTICAL TERMS

Active Risk: Annualized standard deviation of the difference between the portfolio return and its benchmark return. Used interchangeably with tracking error.

Active Share: A measure of dispersion between a manager’s portfolio and the portfolio benchmark based upon the individual portfolio holdings versus volatility, which is used to calculate tracking error, another measure of dispersion. A Yale study[18] found high active share portfolios tended to outperform low active share portfolios.

Alpha: A measure of risk adjusted return that represents that part of a return above or below a benchmark and is typically attributed to investment skill.

Attribution: The result of investment performance analysis whereby the key sources of value-added or detracted versus the benchmark are identified and quantified in terms of the contribution to value-added or detracted from that source.

Basis Point: One one-hundredth of one percent, i.e., 100 basis points = 1%.

Beta: A measure of the extent to which the returns on a given stock or portfolio move with the stock market.

Correlation: A statistic describing the goodness of fit about a linear relationship between two variables (returns). It measures the degree to which two variables (assets) move in tandem, with -1 corresponding to perfect negative correlation (vary inversely) and +1 corresponding to perfect positive correlation (move together). A value of zero would indicate no relationship between the two variables.

Information Coefficient ("IC"): a measure of investment manager skill which, together with a measure of breadth provides the manager information ratio according to the Fundamental Law of Active Management[19]. Similar to the correlation coefficient, the IC ranges between 0 and +1.

Information Ratio: A measure of the level of reward per unit of risk. The information ratio is calculated by dividing the alpha (difference between the portfolio return and the benchmark return) by the standard deviation of the alpha.

Mean: The traditional average; it is calculated by adding up all the numbers and dividing the total by the number of observations.

Mean Absolute Deviation: The average value of differences from the mean, where the differences are evaluated without regard to sign. It is a measure of dispersion.

Median: The median is the 50th percentile. The median of the sample would be the rate of return that is greater than 50% of all the returns in the sample. Half the sample has a higher return and the other half a lower return.

Negative Semi-variance: This measure considers only downside dispersion. Since measures of dispersion are frequently used to measure risk in securities and portfolios,

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[18] Cremers, K.J. Martijn, and Antii Petajisto, 2009. "How Active is your Fund Manager? A New Measure That Predicts Performance", *Review of Financial Studies* 22 (9): 3329-65

[19] Grinold, Richard C. and Ronald N.Kahn, *Active Portfolio Management*, 2nd ed., New York: McGraw-Hill (2000)

the amount of uncertainty as to future value is one definition of risk. Some investors find this definition difficult to accept because they feel that only below-average expectations represent risk.

Range: The difference between the minimum and maximum in a series.

R-Squared (R2): The proportion of a portfolio's variability that is explained by the relation between the portfolio and the market.

Standard Deviation: This measure is the square root of the variance. The standard deviation is a useful and widely used measure because, for a normal, or bell-shaped, distribution, 68 percent of the observations fall within one standard deviation and 95 percent fall within two standard deviations. Since it is usually reasonable to suggest that distributions in finance are normal, a good estimate of the dispersion of a distribution around its average is provided by the standard deviation measure. In a portfolio context, the higher the standard deviation, the higher the risk associated with a given level of return on that portfolio.

Tracking Error: Annualized standard deviation of the difference between the portfolio return and its benchmark return. Used interchangeably with active risk.

Variance: The variance is a true measure of the width of the distribution. Variance relates each observation to the average by squaring each number (multiplying a negative number by itself produces a positive number).

DESCRIPTION OF MANAGER STYLES

Equity Styles

Bottom Up: A method of analysis that begins with fundamental factors at the company or micro economic level.

Currency Overlay: Strategy to use currency futures, forwards, and options as an overlay on existing international portfolios to protect against losses in currency movements.

Enhanced Index: In general, a manager utilizing this style attempts to outperform an index by analyzing quantifiable characteristics of a given stock or sector. The strategy is characterized by low to moderate levels of active risk.

Growth: Seeks investments whose future potential for growth is above the growth expectation for securities in general. From an analytical perspective, growth portfolios will generally exhibit the following characteristics:

Projected Earnings Growth – greater than the index
Price to Earnings Ratio – generally greater than the index
Price to Book Ratio – generally greater than the index

Five Year Earnings Growth Rate – greater than the index

Index/Passive: An index strategy would strive to match the return of the appropriate index by holding a portfolio of securities that closely tracks the index.

International Equity Active Country and Sector/Passive Security Selection: Through an overall review of economic, social, and political issues worldwide, decisions are made with respect to the allocation of investments among countries and sectors. The investment decisions are implemented through passive security selection.

Large Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell 1000 Index.

Mid Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell Mid Cap Index.

Quantitative: Stock selection and portfolio construction are implemented through computerized models which consistently employ fixed criteria and/or decision rules which may or may not involve manual intervention.

Small Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell 2000 Index.

Top Down: A method of analysis that begins with broad macro economic topics associated with an economy and industry.

Value: Investments in equities whose potential is temporarily unrecognized by other investors. Value stocks typically are companies whose assets, future cash flows, products or services are overly discounted relative to the broader market. Typically, value portfolios will exhibit the following characteristics:

Price to Book Ratio – less than the index
Price to Earnings Ratio – less than the index
Dividend Yield – greater than the index

Fixed Income Styles

Bank Loans: Managers that invest in short and intermediate term senior subordinated debentures of below investment grade issuers. This debt is adjustable rate and may provide modest inflation protection in a rising rate environment. Also, these debentures are higher in the capital structure than high yield bonds, which affords greater creditor protection in stressed environments in addition to a shorter duration.

Core: Seeks investments in the large, more liquid sectors such as governments, mortgage-backs and investment grade corporates, that do not represent significant deviation from a given index in terms of sector, quality, coupon and maturity exposures.

While some over/under weighting may occur in the portfolio, these will result from the manager's security selection process and not represent a deliberate attempt to bias the portfolio.

Core Plus: A core plus manager has the latitude to invest the portfolio in core sectors as well as high yield (below investment grade) non-dollar denominated and/or the debt of emerging markets.

Emerging Market Debt: Seeks investment in either investment grade or below investment grade debt of sovereign or corporate issuers domiciled in emerging market countries. This debt can be "hard currency" (i.e., dollar) denominated or denominated in the local currency of the issuing entity.

High Yield: Seeks investments in below investment grade corporate securities.

Intermediate: Managers that invest in shorter than market duration securities with an average portfolio duration range of between three and four years. Securities invested in will range across sectors and could be either investment grade and/or non-investment grade rated. Portfolios can also include non-U.S. issued securities in addition to securities issued in the U.S.

Medium-Grade: Seeks investments from the complete range of global fixed income sectors. The medium-grade manager has broad latitude to invest the portfolio's assets in opportunistic sectors such as high-yield (below investment grade) non-dollar, emerging markets and convertible debt investments. The manager may use investment grade sectors as a defensive alternative to opportunistic sectors.

Inflation Protected: Invests in fixed instruments that have a real and inflation-linked return component. The securities are typically issued by government entities. An example would be the Treasury Inflation Protected Securities (TIPS) issued by the United States Government.

Structured credit: A traditional bond that has had its repayment structure altered to produce non-traditional payoffs derived from one or more of the underlying assets rather than from the borrower's (i.e., issuer's) cash flow. Structured credits are a blend of bonds and derivatives (usually swaps). Often, downside risk is protected beyond a certain level.

RATES OF RETURN

Capital Appreciation (Depreciation): Both realized and unrealized gains or losses in the market value of a portfolio from beginning to end of the time period being measured.

Dollar-Weighted Return: This rate is also called the internal rate of return (IRR). It is sensitive to the timing and size of cash flows. The rate of return for each sub-period such as a month or a quarter is weighted by the dollars invested in that period. Thus, the cash flows in the fund, as well as investment performance, will have an impact on calculated returns. The dollar-weighted return is important in measuring the actual growth of a fund over time.

Income Return: The rate of return attributable to interest and/or dividends.

Market Value: The market value of an asset is the realizable value at any point in time. In practice, publicly traded stocks are valued at the day's closing price and bonds are generally valued at the day's final bid price. Different pricing services can result in different market prices especially in the bond market.

Real Rate of Return: The rate of return earned from an investment's income/loss and appreciation/depreciation after being adjusted for inflation. The most common measure of inflation is the U.S. Bureau of Labor Statistics' All Urban Consumer Price Index (CPIU).

Time-Weighted Rate of Return: The amount and timing of cash flows do not impact time-weighted rates of returns since the returns for each sub-period are equally weighted. Since investment managers have little control over cash flow, time-weighted returns are an appropriate method of analyzing the manager's performance.

Total Fund Total Rate of Return: The "overall" rate which reflects the combination of income as well as realized and unrealized appreciation or depreciation for all segments or portfolios in the total plan.

<u>TIME PERIODS</u>

Annualized: A rate of return for a time frame that is less than or greater than one year expressed as an average annual return.

Compound Annual: A compound average annual rate of return for a period greater than 1 year expressed in annual terms.

Rolling Time Period: A series of investment returns each covering a specified period of time with each new return in the series encompassing the most recent return of the period and dropping the oldest return of the period. For example, a rolling one-year return, calculated monthly would consist of the previous 12 monthly returns. The next return in the series would be calculated at the end of the following month. It would consist of the current monthly return and the previous 11 months (dropping the oldest return in the series).

Trailing Period: A time period that immediately precedes a specified date. For example, as of December 31, 20X1, the trailing 9 months would include the period April 1, 20X1 to December 31, 20X1.

Unannualized: A rate of return for a period of less than one year or greater than one year. An unannualized return that represents cumulative results that is for a month, quarter, five quarters or any other non-twelve month period.

RELATIVE PERFORMANCE RANKING

Policy Index (Policy Portfolio): A weighted combination of two or more indices. The Policy Index is constructed to match a fund by weighting the indices in the same ratio as the fund's target commitment to the different asset classes such as equities, bonds, real estate and cash.

Median: The median is the 50th percentile. The median of the sample would be the rate of return that is greater than 50% of all the returns in the sample. Half the sample has a higher return and the other half a lower return.

Percentile Rank: Time-weighted rates of return are percentile ranked against the Universe. For example, a fund's rate of return may rank in the 20th percentile of the sample. This value indicates that 80% of the funds in the sample had worse performance. The highest percentile rank is 1 while the lowest is 100. Bar graphs may be divided by percentiles with the top of each bar denoting the tenth percentile followed by lines for the 25th, 50th, 75th and 90th percentiles.

Quartiles: Percentile rankings are divided by the first, second and third quartiles. The first quartile is the 25th percentile, the second is the 50th percentile (or median) and the third is the 75th percentile.

Reasonable (as it pertains to a portfolio risk level relative to the Index): A reasonable risk level relative to the Index means that, if portfolio risk is substantially above the risk of the Index, portfolio return should also be substantially above the return of the Index. Conversely, if portfolio return were substantially less than the Index, then portfolio risk would also be expected to be less than that of the Index. Under normal market conditions, reasonable means a combination of risk and return that yields a return to risk ratio for the portfolio that is equal to or greater than that of the Index which serves as the portfolio's performance benchmark.

Typical Market Cycle: A typical market cycle is the recurrence of periods of significant appreciation and depreciation of asset values. One cycle extends from a price or market value baseline through one substantial rise and one decline and back to the base line. The length of a typical or fair market cycle varies across asset classes, depending on the frequency and duration of changes in those economic factors that drive the market value of the assets. For those assets that trade on auction markets and are sensitive to short-term business cycle activity, such as equity and fixed income securities, the typical market cycle has historically been approximately three years. For those assets whose market values are not based on quoted prices and which are sensitive to longer-term demographic changes, such as private real estate or private equity, the typical market cycle has historically been approximately seven to ten years.

INDICES

Fixed Income

Barclays Capital Aggregate: An aggregate of the Government/Corporate Bond Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The index contains fixed rate debt issues with at least one-year maturity, $100 million par value outstanding, and investment grade ratings by Moodys, S&P or Fitch (in that order). Returns are market-value weighted inclusive of accrued interest.

Barclays Capital Universal: This index contains the Barclays Capital Aggregate index bonds plus approximately 10% of the remaining index includes U.S. High Yield, Eurodollar, Emerging Markets, 144A Private Placements, and CMBS bonds.

Barclays Capital U.S. Govt/Credit Intermediate: This index is a sub-component of the Barclays Capital Aggregate index. Bonds consist of the U.S. Treasury, U.S. Agency (non-MBS), and U.S. Investment-grade credit holdings with a maturity range of 1 to 10 years.

Bond Rating Methodology: Bond ratings are intended to characterize the risk associated with holding a particular bond or categories of bonds. These ratings are the risk assessed by the market and that the bond issuer must pay to attract purchasers to the bond. These ratings are expressed as a series of letters and sequences.

Rating Categories in Descending Order:

AAA: The best quality rating, stable cash flows, very protective bond covenant, very low probability of default.

Aa: The second best rating. Stable cash flows, less protective bond covenants, very low probability of default.

A: Stable cash flows, less protective bond covenant, long-term probability of default is higher than AAA or Aa.

Baa: Medium quality rating, reliable cash flows short term, less-reliable cash flows long term, bond covenants offer limited protection. Moderate probability of default. Downgrade to a lower rating is also possible. Baa bonds are the lowest rating still considered ‘investment grade.’

Ba thru B: Highly speculative. Long-term assurance of cash flows and protective elements are low. Purchasers of these bonds generally specialize in assessing credit risk of specific bond issues. Much higher spreads versus investment grade bonds provide the incentive for purchasers. High default or downgrade risk.

Caa thru C: Poor standing. Either close to default or in default. Highly probable loss of principal.

D: Coupon payments were not paid on the due date which puts the bond In default. Unless both protective covenants and issuer assets are adequate (not likely), holder loses all likelihood of recovering principal.

Equity

Down Jones Industrial Average: This index is the price-weighted average of 30 actively traded blue chip stocks.

NASDAQ: A market value weighted index that measures all domestic and non-U.S. based securities, more than 4700 companies listed on the NASDAQ stock market.

Russell Midcap Value: Contains Russell Midcap stocks having less than average value orientation and are included in the Russell 1000 Growth Index.

Russell Midcap Value: Contains Russell Midcap stocks having less than average growth orientation and are included in the Russell 1000 Value Index.

Russell 1000: Consists of the 1000 largest securities in the Russell 3000 Index. The Russell 1000 is capitalization-weighted.

Russell 1000 Growth: Contains Russell 1000 stocks having greater than average growth orientation. Stocks tend to exhibit lower dividend yields and higher price-to-book ratios, price-earnings ratios and forecast growth values than the Value universe. The index is capitalization-weighted (as opposed to equal-weighted).

Russell 1000 Value: Contains those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe. Russell 1000 Value is capitalization-weighted.

Russell 2000: Contains the smallest 2,000 stocks in the Russell 3000 Index, representing approximately 11% of the Russell 3000 total market capitalization. The index is capitalization-weighted (as opposed to equal-weighted).

Russell 2000 Growth: Contains those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 2000 Value: Contains those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Section 12 GLOSSARY

Russell 3000: Measures performance of the 3000 largest U.S. companies based on total market capitalization. This index represents approximately 98% of the investable U.S. equity market. The Russell 3000 is capitalization-weighted.

Standard and Poors 500: The S&P, which represents approximately 75% of NYSE market capitalization and 30% of NYSE issues, contains 500 industrial, utility, transportation and financial companies in the U.S. markets (mostly NYSE issues). The S&P is capitalization-weighted (as opposed to equal-weighted), calculated on a total return basis with dividends reinvested.

FTSE All Share: An arithmetic, market value-weighted average of approx. 680 securities representing 98-99% of the UK market capitalization, FTSE All-Share is the aggregation of the FTSE 100, FTSE 250 and FTSE Small Cap Indices.

Morgan Stanley All Country World except USA: An arithmetic, market value-weighted average of approx. 1800 securities from outside the United States. The index is calculated on a total return basis, including reinvestment of gross dividends before deduction of withholding taxes.

Morgan Stanley Capital International Emerging Market Free: Contains securities of the following counties which are available to all investors regardless of local status: Argentina, Brazil, Chile, Colombia, Greece, India, Indonesia, Israel, Jordan, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Portugal, South Africa, Sri Lanka, Thailand, Turkey and Venezuela.

Morgan Stanley Capital International EAFE: An arithmetic, market value-weighted average of over 900 securities from Europe, Australia, and the Far East. The index is calculated on a total return basis, including reinvestment of gross dividends before deduction of withholding taxes. The following countries are represented: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Malaysia, Netherlands, New Zealand, Norway, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

Real Assets

Barclays Capital Treasury Inflation Protected Securities Index: The TIPS Index contains approximately 30 U.S. Treasury-issued inflation protected securities of varying maturities up to 20 years.

Bloomberg Commodity Index Total Return (formerly Dow Jones UBS Commodities Index): comprised of 24 commodity futures index constituents including: Natural Gas, WTI Crude Oil, Brent Crude Oil, Unleaded Gasoline, Heating Oil, Live Cattle, Lean Hogs, Wheat, Corn, Soybeans, Soybean Oil, Sugar, Cotton, Coffee, Cocoa, Aluminum, Copper, Zinc, Nickel, Gold, Silver, Lead, Tin and Platinum.

Section 12 GLOSSARY

NCREIF Property Index: The NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Data is collected quarterly from a membership of investment managers and plan sponsors. Returns are gross of fees; include income, realized gains/losses, and appreciation/depreciation; and are market-value weighted. Property values are determined by consistent appraisal methodology and sold properties are removed in the quarter of the sale (the historical data remains). Current quarter performance is preliminary.

Financial Times Securities Exhange ("FTSE") NAREIT U.S. Real Estate Index: Includes all REITS listed on the NYSE and Nasdaq indices. The index excludes LLPs and LLCs. The sectors are as follow: Healthcare, Self-Storage, Office/Industrial, Residential, Retail and Lodging/Resorts.

Cash

90-Day Treasury Bills: An average of the last three 90-day treasury bill issues' monthly return equivalents of yield averages, which are not marked to market. Month-end discount yields are converted to bond-equivalent yields, then a simple average is taken, and that number is decompounded to a monthly return using the actual number of days in the month and a 365-day year.

Policy Benchmarks

Current:

Domestic Equity	19% Russell 3000
Non U.S. Equity	27% MSCI ACWI ex-U.S.
Fixed Income	13.75% BC U.S. Aggregate
Credit Opportunities	12.25% [15% BC U.S. HY Capped + 45% Credit Suisse Leveraged Loans Index + 20% J.P. Morgan EMBI-GD + 20% J.P. Morgan GBI EM-GD]
Private Equity	14% Russell 3000 + 300 bps
Private Real Estate	7% NFI-ODCE + 80 bps
Public Real Assets	6% U.S. Consumer Price Index + 5%
Cash	1% 90-Day Treasury Bill

TOTAL: 19% U.S. Equity; 27% Non-U.S. Equity; 13.75% Fixed Income; 12.25% Credit Opportunities; 14% Private Equity; 7% Private Real Estate; 6% Public Real Assets; 1% Cash

1/10/2012 through ~~???~~April 10, 2018

Domestic Equity	24% Russell 3000
Non U.S. Equity	29% MSCI ACWI ex-U.S.
Fixed Income	19% BC U.S. Aggregate
Credit Opportunities	5% 65% BC U.S. HY Capped+ 35% J.P.EMBI-GD

Private Equity	12% Russell 3000 + 300 bps
Private Real Estate	5% NFI-ODCE + 80 bps
Public Real Assets	5% U.S. Consumer Price Index + 5%
Cash	1% 90-Day Treasury Bill

TOTAL: 24% U.S. Equity; 29% Non-U.S. Equity; 19% Fixed Income; 5% Credit Opportunities; 12% Private Equity; 5% Private Real Estate; 5% Public Real Assets; 1% Cash

7/1/2007 through 12/31/2011:

U.S. Equity	43% Russell 3000
Non U.S. Equity	20% MS ACWI ex U.S. Net Div
Core Fixed Income	24% BC Universal
Real Estate	5% NCREIF
Alternative	7% Russell 3000 plus 400 bps annually. Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.
Cash	1% 90 day Treasury Bill

TOTAL: 43% U.S. Equity: 20% Non U.S. Equity; 24% Core Fixed; 5% Real Estate; 7% Alternative; 1% Cash

1/01/2007 through 6/30/2007:

U.S. Equity	44% Russell 3000
Non-U.S. Equity	20% MS ACWI ex U.S. GD
Core Fixed Income	25% BC Universal
Real Estate	4% NCREIF
Alternative	6% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 44% U.S. Equity; 20% Non-U.S. Equity; 25% Core Fixed; 4% Real Estate; 6% Alternative; 1% Cash

3/31/2006 through 9/30/2006:

U.S. Equity	45% Russell 3000
Non-U.S. Equity	21% MS ACWI ex U.S. GD
Core Fixed Income	25% BC Universal
Real Estate	3% NCREIF
Alternative	5% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 45% U.S. Equity; 21% Non-U.S. Equity; 25% Core Fixed; 3% Real Estate; 5% Alternative; 1% Cash

6/30/2001 through 3/31/2006:

U.S. Equity	40% Russell 3000
Non-U.S. Equity	18% MS ACWI ex U.S. GD
Core Fixed Income	27% BC Universal
Real Estate	7% NCREIF
Alternative	7% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 40% U.S. Equity; 18% Non-U.S. Equity; 27% Core Fixed; 7% Real Estate; 7% Alternative; 1% Cash

01/01/2001 through 6/30/2001:

U.S. Equity	40% Russell 3000
Non-U.S. Equity	18% MS ACWI ex U.S. GD
U.S. Fixed	25% BC Universal
Non-U.S. Fixed	6% JP Morgan World Government Hedged
Real Estate	5% NCREIF
Alternative	5% “15%”
Cash	1% 90-day Treasury Bill

TOTAL: 40% U.S. Equity; 18% Non-U.S. Equity; 25% U.S. Fixed; 6% Non-U.S. Fixed; 5% Real Estate; 5% Alternative; 1% Cash

01/01/2000 through 12/31/2000:

U.S. Equity	43% Russell 3000
Non-U.S. Equity	21% MSCI EAFE
U.S. Fixed	25% BC Aggregate thru 6/30/00, BC Universal as of 7/1/00
Non-U.S. Fixed	6% JP Morgan World Government Hedged
Real Estate	2% NCREIF
Alternative	2% “15%”
Cash	1% 90-day Treasury Bill

TOTAL: 43% U.S. Equity; 21% Non-U.S. Equity; 25% U.S. Fixed; 6% Non-U.S. Fixed; 2% Real Estate; 2% Alternative; 1% Cash

Through 12/31/99:

U.S. Equity	40% consisting of 33.75% S&P 500; 35.0% Russell 1000 Value; 12.5% Russell 1000 Growth; 12.5% Russell 2000 Value; 6.25% Russell 2000 Growth
Non-U.S. Equity	20% consisting of 25% MSCI EAFE; 22.5% MSCI Pacific; 15% TOPIX; 12.5% MSCI Europe; 25% MSCI Emerging Markets Free x Malaysia
U.S. Fixed	25.5% consisting of 17.65% BC Intermediate Government Corporate; 11.76% Intermediate Government; 7.84% BC Long Government Corporate; 3.92% BC Long Government; 58.8% BC Aggregate
Non-U.S. Fixed	7% JPM World

Real Estate	3% NCREIF
Alternative	3% "15%"
Cash	1.5% 90-day Treasury Bills

TOTAL: 40% U.S. Equity; 25.5% Fixed Income; 20% International Equity; 7% JPM Global Hedged; 3% NCRIEF; 3% Alternative 15%; 1.5% Treasury Bills

1 Yr: One-year rate of return. The linked quarterly returns of the previous four quarters.

X Yr Ann: X year annualized rate of return. The one-year equivalent return of the X year cumulative return.

X Yr Cum: X year cumulative rate of return. The linked quarterly returns of the previous X years.

ASSET ALLOCATION

Market $: Net assets at market value including receivables, payables and accrued interest.

Market %: Market value as a percent of the total fund's market value.

Target %: Investment policy.

Invest %: Market value excluding cash and equivalents as a percent of total market value.

INVESTMENT PERFORMANCE

Time: The internal rate of return (accounting for daily cash flows) monthly based on trade-date, full accrual accounting, and using market values. For periods of greater than one month, a time series of linked monthly returns is maintained, introducing a time weighted effect. The private investment returns are lagged one quarter. The LACERS total fund return is dollar weighted to include private investments.

Market at Target: The weighted return made up of market returns weighted by LACERS' target allocation.

Market at Actual: The weighted return made up of market returns weighted by LACERS' actual allocation.

UNIVERSE COMPARISON

Universe comparisons will be specified in the quarterly Portfolio Performance Reports and LACERS will use broadly used universe comparisons as determined by the General Fund Consultant.

INVESTMENT IMPACT

Allocation: Market returns weighted by LACERS' actual asset allocation less market returns weighted by LACERS' target allocation.

Management: The difference between a) market returns weighted by LACERS' sector allocation and b) market returns weighted by LACERS' actual asset allocation; added to the difference between c) fund returns and d) market returns weighted by LACERS' sector allocation.

Overall: Actual returns less market returns weighted by LACERS' target allocation.

RISK

Mean Rate of Return: The geometric average of twenty quarterly returns, annualized.

Standard Deviation: The standard deviation (one sigma) of twenty quarterly returns, annualized.

CHARACTERISTICS

Historic Beta: The beta of stocks currently owned in the portfolio compared to the S&P 500. The security-level beta is vendor supplied and the index is predetermined. In the U.S., The S&P 500 is traditionally used in beta calculations; other indexes cannot be substituted in the beta calculation. When the index is other than the S&P 500, the index beta is also in comparison to the S&P 500.

Return on Equity: The Return on Equity calculation is After-Tax Net Income divided by Owners Equity. The return on equity relates a company's profitability to its shareholder's equity. A high ROE indicates that the portfolio is invested in companies that have been profitable. This measure is also impacted by financial leverage. The portfolio ROE is based on the combined ROE's of all stocks in the portfolio.

Section 1 INVESTMENT POLICY

1.1 INVESTMENT POLICY

Adopted: October 24, 2017

TABLE OF CONTENTS

Section 1 INVESTMENT POLICY

I. INTRODUCTION

This document provides a framework for the investment management of the assets of the Los Angeles City Employees' Retirement System ("LACERS" and hereafter known as the "System"). Its purpose is to assist the Board of Administration (the "Board") in effectively supervising and monitoring the investments of the System, with the support of the LACERS staff (the "Staff"). Specifically, it will address:

A. The general goals of the investment program;
B. The policies and procedures for the management of the investments;
C. Specific asset allocations, rebalancing procedures, and investment guidelines;
D. Performance objectives; and
E. Responsible parties.

The System establishes this investment policy in accordance with Section 1106 of the Charter of the City of Los Angeles for the systematic administration of the City Employees' Retirement Fund. Since its creation, the Board's activities have been directed toward fulfilling the primary purpose of the System, as described in Section 1106:

> "…to provide benefits to system participants and their beneficiaries and to assure prompt delivery of those benefits and related services; to minimize City contributions; and to defray the reasonable expenses of administering the system."

The System is a department of the City government and is governed by a seven member Board of Administration and assisted by a general manager. In the formation of this investment policy and goal statement, a primary consideration of the Board has been its awareness of the stated purpose of the System. The Board's investment activities are designed and executed in a manner that will fulfill these goals.

This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure that prudence and care is taken in the execution of the investment program.

II. INVESTMENT GOAL STATEMENT

The System's general investment goals are broad in nature. The following goals, consistent with the above described purpose, City Charter citations, and State Constitution are adopted:

A. The overall goal of the System's investment assets is to provide plan participants with post-retirement benefits as set forth in the System documents. This will be accomplished through a carefully planned and executed investment program.
B. A secondary objective is to achieve an investment return that will allow the percentage of covered payroll the City must contribute to the System to be maintained or reduced, and will provide for an increased funding of the System's liabilities.

C. The System's assets will be managed on a total return basis. While the System recognizes the importance of the preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns. The Board's investment policy has been designed to produce a total portfolio, long-term real (above inflation) positive return above the Policy benchmark on a net-of-fee basis as referenced in the quarterly Portfolio Performance Review ("PPR"). Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification. As a result, investment strategies are considered primarily in light of their impacts on total plan assets subject to the provisions set forth in Section 1106 of the City Charter with consideration of the Board's responsibility and authority as established by Article 16, Section 17 of the California State Constitution.

D. The System's investment program shall, at all times, comply with existing applicable local, state, and federal regulations.

E. All transactions undertaken will be for the sole benefit of the System's participants and beneficiaries and for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses associated with the System.

F. The System has a long-term investment horizon and uses an asset allocation, which encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.

G. Investment actions are expected to comply with "prudent person" standards as described:

> "…with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims (sometimes referred to as the 'prudent person' rule)." [1]

The "standard of care" will encompass investment and management decisions evaluated not in isolation but in the context of the portfolio as a whole and as part of an overall investment strategy having risk and return objectives reasonably assigned. The circumstances that the System may consider in investing and managing the investment assets include any of the following:

1. General economic conditions;
2. The possible effect of inflation or deflation;
3. The role that each investment or course of actions plays within the overall portfolio;
4. The expected total return from income and the appreciation of capital;
5. Needs for liquidity, regularity of income, and preservation or appreciation of capital;
6. A reasonable effort to verify facts relevant to the investment and management of assets.

[1] ERISA 404(a)(1) (B).

III. DUTIES OF RESPONSIBLE PARTIES

A. Duties of the Board or its Designate(s)

The Board has the responsibility for the administration of the System for the benefit of plan participants, although it is not the intent of the Board of Retirement to become involved in the day-to-day investment decisions. The Board or its designee(s) will adhere to the following procedures in the management of the Board's assets:

1. The Board develops and approves policies and guidelines for the execution of the Board's investment program. Only the Board in its sole discretion can delegate its decision-making authority regarding the investment program. Staff will be responsible for the implementation and administration of these decisions.
2. A formal review of the Board's Investment Policy and investment structure, asset allocation, and financial performance will be conducted annually or more frequently as the need arises. The review will include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in applicable regulations, long-term capital market assumptions, actuarial assumptions, or the System's financial condition.
3. The Board shall review investments quarterly, or as needed, to ensure that policy guidelines continue to be met. The Board shall monitor investment returns on both an absolute basis and relative to appropriate benchmarks, as well as peer group comparisons. The source of information for these reviews shall come from Staff, outside consultants, the custodian, investment managers, etc.
4. The Board may retain investment consultants to provide such services as conducting performance reviews, asset allocation, manager reviews, and investment research.
5. The Board shall be responsible for taking appropriate action if investment objectives are not being met or if policies and guidelines are not being followed. Reviews for separate portfolios managed by external managers will focus on the following areas:
   a) Manager compliance to the Policy guidelines.
   b) Material changes in the managers' organizations, such as investment philosophy, personnel changes, acquisitions or losses of major accounts, etc. The managers will be responsible for keeping the Board advised of any material changes in personnel, investment strategy, or other pertinent information potentially affecting performance.
   c) Investment performance relative to each manager's stated performance benchmark(s) as set forth in the manager's investment guidelines.
6. The Board shall expect Staff to administer the System's investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, management, consulting and custodial fees, transaction costs, and other administrative costs chargeable to the Board.
7. The Board shall be responsible for selecting qualified investment managers, consultants, and custodian.

8. Voting of proxies in stocks held by the System will be done according to Board policy.

9. The Board may delegate certain duties of the Board to the Investment Committee as specified in the Investment Committee Charter.

B. **Duties of the Staff**

The Board's Investment Staff provides analysis and recommendations to the Board on a wide variety of investments and investment related matters. Additionally, the Investment Staff oversees and directs the implementation of Board policies and manages the System on a day-to-day basis. Furthermore, staff responsibilities include the following details:

1. Invests the System's cash without requiring Board's permission as set forth elsewhere in the Board's Investment Guidelines.
2. Monitors investment managers for adherence to appropriate policies and guidelines.
3. Evaluates and manages the relationships with brokers, managers, consultants, and custodian(s) to the System to ensure that they are providing all of the necessary assistance to Board and to Staff.
4. Conducts the manager search process, as approved by the Board, with assistance from consultants as needed.
5. The Staff will manage Portfolio restructuring resulting from portfolio rebalancing or manager terminations with the assistance of consultants and managers, as needed.
6. The Staff and its designee(s) shall be responsible for organizing and/or participating in any special research for the Board.
7. The Staff shall ensure that Investment Managers conform to the terms of their contracts and that performance-monitoring systems are sufficient to provide the Board with the most timely, accurate, and useful information as possible.
8. The Staff shall advise and keep the Board apprised of any other events of investment significance.

C. **Duties of the Investment Managers**

The Investment Managers shall perform the following duties:

1. Contract by written agreement with the Board to invest within approved guidelines.
2. Provide the Board with proof of liability and fiduciary insurance coverage.
3. Be an SEC-Registered Investment Advisor under the 1940 Act or an authorized bank or trust, and be recognized as providing demonstrated expertise during a number of years in the management of institutional, tax-exempt assets within a defined investment specialty.

4. Adhere to the investment management style concepts and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.
5. Obtain best execution for all transactions for the benefit of the System with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the System, and, where appropriate, facilitate soft dollar credits and the recapture of commissions for the System's benefit.
6. Reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian and the Board's Investment Staff.
7. Maintain frequent and open communication with the Board and Staff on all significant matters pertaining to the System, including, but not limited to, the following issues:
    a) Major changes in the Investment Manager's investment outlook, investment strategy, and portfolio structure;
    b) Significant changes in ownership, organizational structure, financial condition, or senior personnel;
    c) Any changes in the Portfolio Manager or other personnel assigned to the System;
    d) Each significant client that terminates its relationship with the Investment Manager, within 30 days of such termination;
    e) All pertinent issues that the Investment Manager deems to be of significant interest or material importance; and
    f) Meet with the Board and/or Staff on an as-needed basis.

D. **Duties of the Master Custodian**

The Master Custodian shall be responsible to the Board for the following duties:

1. Provide complete global custody and depository services for the designated accounts.
2. Manage a Short Term Investment Fund (STIF) for investment of any un-invested cash, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.
3. Provide in a timely and effective manner a monthly report of the Investment activities implemented by the investment managers. Prepare a quarterly report containing absolute and relative investment performance.
4. Collect all income and realized principal realizable, and properly report it on the periodic statements.
5. Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions. The statements should be based on accurate security values for both cost and market. These reports should be provided within acceptable time frames.

6. Report situations where accurate security pricing, valuation, and accrued income are either not possible or subject to considerable uncertainty.
7. Assist the System to complete such activities as the annual audit, transaction verification, or unique issues as required by the Board.
8. Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.

E. **Duties of the General Fund Consultant**

The General Fund Consultant shall be responsible for the following:

1. Review quarterly performance including performance attribution on the Board's managers and total assets, including a check on guideline compliance and adherence to investment style and discipline.
2. Make recommendations for Board presentation regarding investment policy and strategic asset allocation.
3. Assist the Board in the selection of qualified investment managers and in the review of existing managers, including monitoring changes in personnel, ownership and the investment process.
4. Assist the Board in the selection of a qualified custodian if necessary.
5. Provide topical research and education on investment subjects as requested by the Board or Investment Staff.

IV. ASSET ALLOCATION POLICY

The policies and procedures of the Board's investment program are designed to maximize the probability that the investment goals will be fulfilled. Investment policies will evolve as the System's conditions change and as investment conditions warrant. The Board reviews the Asset Allocation Policy strategically approximately every three years and on a tactical basis more frequently.

The Board adopts and implements the Asset Allocation Policy that is predicated on a number of factors, including:

A. A projection of actuarial assets, liabilities, benefit payments, and required contributions;
B. Historical and expected long-term capital market risk and return behavior;
C. An assessment of future economic conditions, including inflation and interest rate levels; and
D. The current and projected funding status of the System.

This policy provides for diversification of assets in an effort to maximize the investment return of the System consistent with market conditions. Asset allocation modeling identifies the asset classes the System will utilize and the percentage that each class represents of the total plan assets. Due to the fluctuation of market values, positioning within a specified range is acceptable and constitutes compliance with the policy. It is anticipated that an extended period of time may be required to fully implement the Asset Allocation Policy and that periodic revisions will occur. The Board will monitor and assess the actual asset allocation versus policy and will rebalance as appropriate.

The Board will implement the Asset Allocation Policy using investment managers to invest the assets of the System’s portfolio components subject to investment guidelines. Equity managers may not hold more than 10% of the market value of their portfolios in cash without Board approval, unless otherwise specified in their manager guidelines. The long-term asset allocation targets and ranges for the investments of the System's assets are presented in the latest Board-approved Asset Liability Study and Asset Allocation Policy.

The Board will allocate segments of the System’s assets to each investment manager and specify guidelines, objectives and standards of performance, which are to apply to each manager’s portfolio. These decisions will encompass allocating segments of the System assets, and segments of individual asset classes, between active and passive investment management, the active risk of the portfolio and to provide broad market exposure.

V. INVESTMENT POLICY

The Board will retain external investment managers to manage the System’s assets using a specific style and methodology. Public external investment managers have been delegated authority for determining investment strategy, security selection, and timing. Public external investment managers are subject to the Board’s policy and individual investment manager guidelines, legal restrictions, and other Board direction. Performance objectives will also be developed for each manager. The performance of each portfolio will be monitored and evaluated on a regular basis relative to each portfolio component's benchmark return and, if available, relative to a peer group of managers following similar investment styles. Private market investment managers shall manage the System’s assets pursuant to the respective asset class policy and the partnership fund’s limited partnership agreement or other applicable legal documents.

Investment actions are expected to comply with "prudent person" standards. Each investment manager will be expected to know the rules of the Board and comply with those rules. It is each manager's responsibility to identify policies that have an adverse impact on performance and to initiate discussion toward possible improvement of the rules of the Board.

The Board will also review each investment manager's adherence to its investment policy and any material changes in the manager's organization (e.g., personnel changes, new business developments, etc.). The investment managers retained by the Board will be responsible for informing the Board of such material changes within a reasonable timeframe as articulated within their respective investment guidelines.

Investment managers under contract to the Board shall have discretion to establish and execute transactions with securities broker/dealer(s). The investment managers will attempt to obtain best execution with respect to every portfolio transaction. The following transactions will be prohibited: net short sales; selling on margin; writing options other than covered options; "prohibited transactions" as defined under the Employee Retirement Income Security Act (ERISA); and, transactions that involve a broker acting as a "principal," where such broker is also the investment manager making the transaction. The investments of the Board's assets will be subject to the following general policies.

A. **Manager Selection**

The selection of investment managers is accomplished in accordance with all applicable local, state, and federal laws and regulations. Each investment manager, consultant, and custodian functions under a formal contract that delineates responsibilities and appropriate performance expectations. Section VII describes LACERS' Manager Search and Selection Policy which articulates the process that will be employed for each public markets manager search.

B. **Manager Authority**

The Board's investment managers shall direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; Board rules or direction, applicable local, state, and federal statutes and regulations and individual management investment plans and executed contracts.

C**. Brokerage Policy**

The Board directs all investment managers trading public securities to utilize brokers who shall fulfill brokerage transactions for System assets in accordance with best execution. Subsequently, all LACERS public equity managers are to utilize commission recapture brokers on a best efforts basis. Commission recapture is a program designed to reduce fund expenses and increase cash flow by returning a portion of the commissions that external investment managers pay to brokers. Staff will provide to the Board an annual report summarizing commission and recapture activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

D. **Proxy Voting**

Proxy voting rights will be managed with the same care, skill, diligence, and prudence as is exercised in managing other assets. Proxy voting rights will be exercised in the sole interest of the System's members and beneficiaries in accordance with all applicable statutes consistent with the Board Proxy Voting Policy, which is found in Section XIV of this policy statement.

E. **Securities Lending**

The Board has authorized the execution of a "Securities Lending Program," which may be managed by the Board's custodian or delegated to a third-party provider. The Board will monitor and review the program. This program is described in the Securities Lending Policy (Section XV of this document) and in the Securities Lending Agreement of the securities lending provider. The initial collateral levels will not be less than 102% of the market value of the borrowed securities, or not less than 105% if the borrowed securities and collateral are denominated in different currencies. Marking to market is performed every business day, and the borrower is required to deliver additional collateral when necessary. Stringent cash and non-cash collateral guidelines specify eligible investments, credit quality standards, and diversification, maturity and liquidity requirements.

F. **Derivatives**

The Board's investment managers may be permitted, under the terms of individual investment guidelines, to use derivative instruments as set forth in each manager's investment guidelines to control portfolio risk. Derivatives are contracts or securities whose returns are derived from the movement of the pricing of other securities. The returns are to be consistent with the manager's mandate from the returns of other securities, indices, or allowable derivative instruments that include, but are not limited to, futures and forwards. Examples of appropriate applications of derivative strategies include hedging interest rates and currency risks, maintaining exposure to a desired asset class while effecting asset allocation changes, and adjusting portfolio duration for fixed income. In no circumstances can managers borrow funds to purchase derivatives. Managers must ascertain and carefully monitor the creditworthiness of any counterparties involved in derivative transactions.

G. **Rebalancing**

The investment portfolio shall, on an ongoing basis in accordance with market fluctuations, be rebalanced to remain within the range of targeted allocations and distributions among investment advisors. The Board has a long-term investment horizon and utilizes an asset allocation that encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.

Rebalancing is not primarily intended to be used for tactical asset allocation. The Board will not attempt to time the rise or fall of the investment markets by moving away from long-term targets because (1) market timing may result in lower returns than buy-and-hold strategies; (2) there is little or no evidence that one can consistently and accurately predict market timing opportunities; and (3) rebalancing too often may result in excessive transaction costs.

The Board delegates the responsibility of rebalancing to the Chief Investment Officer, who will seek the concurrence of the General Fund Consultant. Rebalancing generally will occur when the market values of asset classes (e.g., equities, fixed income, etc.) or sub-asset classes (e.g., large cap value, emerging markets, etc.) exceed their respective thresholds as established by the Board's approved asset allocation and asset class risk budgets.

The portfolio will be monitored daily, but reviewed by senior investment staff (i.e., Chief Investment Officer or Chief Operating Officer) at the beginning of each month to determine the need to rebalance asset classes or sub-asset classes within approved policy bands. Rebalancing will be conducted in a timely manner, taking into consideration associated costs and operational circumstances and market conditions. Rebalancing will be accomplished by using routine cash flows, such as contributions and benefit payments, by reallocating assets across asset classes, investment mandates, and investment managers.

Asset classes temporarily may remain outside of their ranges due to operational and implementation circumstances to include, but not limited to, illiquidity that prevents immediate rebalancing of certain asset classes such as private equity and private real estate; potential asset shifts pending in the portfolio over the next 12 months such as hiring/termination of a manager(s); an asset allocation review of the entire portfolio; or a structural review of a given asset class.

The Chief Investment Officer shall inform the Board in a timely manner of all rebalancing activity.

H. **Evaluation of Policy**

The Investment Policy Statement shall be reviewed by the Board at least annually, with the assistance of the Staff and investment consultant(s), and revised as necessary.

VI. GENERAL INVESTMENT OBJECTIVES AND GUIDELINES

The general investment objective is to outperform the overall policy portfolio benchmark. The overall policy portfolio benchmark consists of weighted asset class benchmarks for each asset class as determined by the Board. The long term policy benchmarks are listed below:

Asset Class	Benchmark
Domestic Equity	Russell 3000
Non-U.S. Equity	MSCI ACWI ex-U.S.
Fixed Income	BC U.S. Aggregate
Credit Opportunities	65% BC U.S. HY Capped + 35% J.P. EMBI-GD
Private Equity	Russell 3000 + 300 bps
Private Real Estate	NFI-ODCE + 80 bps
Public Real Assets	U.S. Consumer Price Index + 5%
Cash	90-Day Treasury Bill

The portfolio is formally monitored by the Board quarterly versus its policy benchmark and also compared to the actuarial return target of 7.5%.

The Board will utilize the following portfolio investment components to fulfill the asset allocation targets and LACERS total fund performance goals established in this document.

A. **Equities**

The Board expects that over the long run, total returns of equities will be higher than the returns of fixed income securities, but they may be subject to substantial volatility during shorter periods. Equity investment managers retained by the Board will follow specific investment styles and will be evaluated against specific market indices that represent their investment styles. Additionally, in the case of active managers, investment results may also be compared to returns of a peer group of managers with similar styles. The components of the System’s equity holdings, the benchmarks for the various equity portfolios, and the general guidelines are listed below:

1. **Domestic Equities**

   a) **Index Funds/Core** – These investments will provide broadly diversified, core exposure through index funds to the U.S. equity market, primarily in large capitalization companies. Index funds provide primary liquidity for asset allocation.

   b) **Large Cap Growth Stocks** – The principal characteristic of the large cap stock component is its emphasis in stocks with market capitalization generally ranging above $10.0 billion. The Board's large growth stock allocation provides exposure to stocks of large capitalization whose valuations are more directly tied to future earnings prospects. Often, growth stocks sell at higher prices relative to expected or historical earnings growth. Growth stock volatility tends to be higher than value stocks, although such stocks generally outperform during rising markets while trailing the market in flat or declining periods.

   c) **Large Cap Value Stocks** – The principal characteristic of the large cap stock component is its emphasis in stocks with market capitalization generally ranging above $10.0 billion. As a more defensive portion of the equity portfolio, value stocks, covering the upper range of market capitalization, are expected to outperform the broad market during periods of flat or declining trends while underperforming during rising markets. Value stocks typically exhibit higher dividend yield, lower P/E ratios, and lower Price/Book ratios.

   d) **Mid Cap Core Stocks** – The principal characteristic of the mid-cap core stock component is its emphasis in stocks with market capitalization generally ranging from $3.0 billion to $10.0 billion.

   e) **Small Cap Core Stocks** – The principal characteristic of the small cap core stock component is its emphasis in stocks with market capitalization generally ranging from $250 million to $3.0 billion.

   f) **Small Cap Value Stocks** – The principal characteristic of the small value stock component is its emphasis in stocks with market capitalization generally ranging from $250 million to $3.0 billion, which are generally characterized by faster growth and higher long-term returns during periods of flat or declining trends. Value stocks typically exhibit higher dividend yield, lower P/E ratios, and lower Price/Book ratios.

   g) **Small Cap Growth Stocks** – The principal characteristic of the small growth stock component is its emphasis in stocks with market capitalization from $250 million to $2.0 billion, which are generally characterized by faster growth and higher long-term returns during rising markets. Growth stock volatility tends to be higher than value stocks.

The benchmarks for the domestic equity portfolios may include the following indices:

Large Cap Core Stocks	S&P 500 Index
	Russell 1000 Index
Large Cap Value Stocks	Russell 1000 Value Index

Large Cap Growth Stocks	Russell 1000 Growth Index
Mid Cap Core Stocks	Russell Midcap Index
Small Cap Core Stocks	Russell 2000 Index
Small Cap Value Stocks	Russell 2000 Value Index
Small Cap Growth Stocks	Russell 2000 Growth Index

General U.S. equity guidelines for active managers include the following:

(1) No securities shall be purchased on margin or sold short.

(2) American Depository Receipts (ADRs) are permissible investments.

(3) Convertible securities can be held in equity portfolios and will be considered equity holdings.

(4) Managers shall not purchase the stock (or securities convertible into stock) of any single corporation if the purchase would cause this portfolio to include more than 5% of the outstanding voting stock of a company.

(5) Exchange listed futures and options on equity instruments may be used only if employed in a risk-reducing fashion.

Any exemption from the general equity guidelines requires prior written approval from the Board.

2. **Non-U.S. Equities**

a) **Index Funds/Core Non-U.S. Stocks** – This portfolio provides broadly diversified equity markets outside the U.S. and, consequently, plays a significant role in diversifying the Board's portfolio. This segment will concentrate on larger companies in established equity markets around the world utilizing a macro approach.

b) **Developed Markets Core** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets.

c) **Developed Markets Value** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Value Index or the MSCI EAFE Value Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets. Versus the non-U.S. equity developed markets opportunity set, these stocks are further characterized by having higher than market dividend yields, lower than market book value, and lower than market earnings growth. As a result, these stocks provide incremental diversification versus developed markets core stocks.

d) **Developed Markets Growth** – This segment is comprised of non-U.S. stocks of countries listed within the MSCI World ex-U.S. Growth Index or the MSCI EAFE

Growth Index. These stocks represent large cap, mature companies generally with global products and customers or which are dominant firms within their local country/regional markets. Versus the non-U.S. equity developed markets opportunity set, these stocks are further characterized by having lower than market dividend yields, higher than market book value, and higher than market earnings growth. As a result, these stocks provide incremental diversification versus developed markets core stocks.

e) **Small Cap Core** – This segment is comprised of non-U.S. stocks of the developed markets countries listed within the MSCI EAFE Small Cap Index. These stocks represent small cap companies which may have global products and customers or which may be dominant firms within their local country/regional markets. These stocks will generally have a market capitalization of less than $2 billion and exhibit high earnings growth and low dividend yields. These stocks provide incremental diversification versus large cap developed market stocks.

f) **Emerging Markets Core** – This component is comprised of equity positions in companies located in emerging, rapidly growing countries around the world. The companies tend to be large cap and may have global products or customers or they may be dominant firms within their local countries/regions. Because these are countries that are typically in the early development stages of economic growth, the returns in these countries are higher and more volatile on a year-to-year basis.

g) **Emerging Markets Value** – This portfolio contains value-oriented stocks of companies domiciled in non-U.S. emerging markets countries. These companies are large cap companies which, versus the broader emerging markets indexes, have lower price-to-book, higher dividend yields and lower earnings growth rates.

h) **Emerging Markets Growth** – This portfolio contains growth-oriented stocks of companies domiciled in non-U.S. emerging markets countries. These companies are large cap companies which, versus the broader emerging markets indexes, have higher price-to-book, lower dividend yields and higher earnings growth rates.

The benchmarks for the international equity portfolios may include the following indices:

Developed Markets Core (Passive)	MSCI World ex-U.S. Index
Developed Markets Core (Active)	MSCI EAFE Index
Developed Markets Value	MSCI EAFE Value Index
Developed Markets Growth	MSCI World ex-U.S. Growth Index
Non-U.S. Small Cap	MSCI EAFE Small Cap Index
Emerging Markets Core	MSCI Emerging Markets Free Index
Emerging Markets Value	MSCI Emerging Markets Value Index
Emerging Markets Growth	MSCI Emerging Markets Growth Index

General Non-U.S. equity guidelines for active managers include the following:

(1) Portfolios shall be comprised of cash equivalents, debt instruments convertible into equity securities, forward foreign exchange contracts,

GDR's, ADRs, and equity securities of companies domiciled outside the U.S. including established and emerging countries.

(2) Managers will have discretion to hedge currencies of the countries in which their portfolio is invested to protect the value of the portfolio from currency risk. A manager's hedge ratio may not exceed 100% of the portfolio's value, at market, without obtaining prior approval from the Board.

(3) No securities shall be purchased on margin or sold short.

(4) Managers shall not purchase the stock (or securities convertible into stock) of any single corporation if the purchase would cause this portfolio to include more than 5% of the outstanding voting stock of a company

(5) Exchange listed futures and options on equity instruments may be used only if employed in a risk-reducing fashion.

Any exemption from the general equity guidelines requires prior written approval from the Board.

B. **Fixed Income**

The primary role of the fixed income portfolio is to provide a more stable investment return and to generate income while diversifying the System's investment assets. The fixed income portfolios will be managed on a total return basis, following specific investment styles and evaluated against specific market indices that represent a specific investment style or market segment. In addition, investment results may also be compared to returns of a peer group of managers investing with a similar style. The fixed income holdings are comprised of the following mandates.

1. **Core Fixed Income** – This segment will provide core exposure to the U.S. fixed income market including Treasury and government agency bonds, corporate debt, mortgages, and asset-backed securities. The portfolio will be primarily comprised of issues with duration within 30% of the benchmark. Overall portfolio quality will be at least investment grade rated.

2. **Index Bonds** – This passive fixed income portfolio is intended to track the characteristics of the benchmark.

3. **Credit Opportunities**

   The objective of the asset class is to provide one or more of the following contributions over the long term (i.e., market cycle or longer) to the LACERS total investment program:

   a) Real return above inflation of between 3% and 5%;
   b) Diversification versus LACERS' two main asset classes: equities and bonds; and,
   c) Income

The target allocation to Credit Opportunities is 5% with flexible rebalancing given the public/private composition of the asset class. Generally, the actual allocation will be kept within or + 2% of this target allocation objective.

Investments will primarily be characterized by their underlying holdings of asset types. The credit opportunities investment program can be comprised of both public and private credit opportunities strategies. The following strategies will be considered as appropriate for consideration and implementation within LACERS' credit opportunities investment program:

a) **U.S and Non-U.S. High Yield Bonds** – Below investment grade (i.e., <BBB/Baa) rated bonds issued by public corporations with a perceived higher risk of default. Investors in these securities hope to benefit from spread tightening relative to investment grade bonds and from their higher overall yields, i.e., income.

b) **Emerging Markets Debt (Local, Hard, Sovereign and Corporate)** – Debt issued by the governments ("sovereign") of developing, or emerging, countries. Additionally, debt issued by corporations domiciled within emerging markets countries can be investment grade or below investment grade rated debt. Also can be issued in a foreign external, or "hard", currency (e.g., U.S. dollars, Euros, etc.) or in the country's local currency. Investors in these securities hope to benefit from spread tightening relative to investment grade and/or domestic bonds and from their higher overall yields.

c) **Leveraged Loans** – Loans extended to high yield (i.e., below investment grade) or levered borrowers, generally by banks or other financial institutions. The loans are *not* levered – the borrowers are. Hence, there is a perceived higher risk of default. Leveraged loans tend to have short maturities and are higher in the capital structure than regular debt of the company. Investors in these securities hope to achieve higher than investment grade bond returns due to their higher yields.

d) **Distressed Debt** – Debt of issuers that 1) are sufficiently financially impaired where there is a high risk of default or bankruptcy, 2) have already defaulted on financial obligations, or 3) have entered into bankruptcy proceedings. Investors in these securities hope to achieve high returns through financial or other restructuring at the issuing company.

e) **Opportunistic or Special Debt Situations** – Debt which may not fit within the preceding categories that may offer a unique investment opportunity due to broader economic or financial conditions.

The primary return objective for the LACERS' Credit Opportunities program is to outperform a custom weighted benchmark of 65% Barclays Capital U.S. High Yield Capped Index plus 35% J.P. Morgan Emerging Markets Bond Index – Global Diversified ("EMBI—GD") by 50 basis points net of fees over a market cycle. Performance evaluation on a risk-adjusted basis shall consider the diversification impact of Credit Opportunities on the LACERS Total Fund. Returns will be calculated after management fees.

The benchmarks for the various fixed income portfolios may include the following indices:

Core Fixed Income	BC Aggregate Bond Index
Intermediate Fixed Income	BC U.S. Govt/Credit Intermediate Bond Index
High Yield Bonds	BC U.S. High Yield 2% Capped Index
Emerging Market Debt	J.P. Morgan EMBI Global Diversified Index

General fixed income guidelines include the following:

a) **Core Fixed Income**

(1) The total portfolio's average rating will be A or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 20%, in aggregate, invested in non-dollar denominated bonds and non-investment grade bonds are permitted.

(4) No securities shall be purchased on margin or sold short.

b) **Credit Opportunities**

High Yield Bonds

(1) The total portfolio's average rating will be B or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 20%, in aggregate, invested in non-dollar denominated bonds and investment grade bonds are permitted.

(4) No securities shall be purchased on margin or sold short.

Emerging Markets Debt Bonds

(1) The total portfolio's average rating will be BBB/Baa or better by Moody's or Standard & Poor's.

(2) No more than 5% of any single portfolio will be invested in any one issuer, with the exception of U.S. Treasury or Federal Agency issues.

(3) No more than 30%, in aggregate, invested in out of benchmark securities.

(4) No more than 10%, in aggregate, invested in U.S. and non-U.S. developed markets bonds

(5) No securities shall be purchased on margin or sold short.

C. **Private Equity**

This portfolio is expected to provide portfolio diversification and additional return to the System's public markets portfolio. Examples of private equity holdings will include venture capital, leveraged buyouts, distressed debt, and special situations funds. The Private Equity Investment Policy is within Section X of this document.

D. **Real Assets**

The objective of the asset class is to provide one or more of the following contributions over the long term (i.e., market cycle or longer) to the LACERS total investment program:

1. Real return above inflation of between 3% and 5%;
2. Inflation hedge;
3. Diversification versus LACERS' two main asset classes: equities and bonds; and,
4. Income

The target allocation to Real Assets is 10% with flexible rebalancing given the public/private composition of this asset class. Generally, the actual allocation will be kept within 30% (or ± 3%) of this target allocation objective.

Investments will primarily be characterized by their underlying holdings of asset types. The real assets investment program will be comprised of both public and private real asset strategies. The following strategies will be considered as appropriate for consideration and implementation within LACERS' real assets investment program:

1. **Private Real Estate** – This portfolio is expected to provide portfolio diversification and increase returns due to real estate's low correlation with the returns from equities and fixed income. The Private Real Estate Investment Policy is included in Section XI of this document.

2. **Public Real Estate "REITS"** – Publicly traded companies that trade on major stock exchanges and invest directly in real estate either through properties or mortgages. A distinguishing characteristic of this investment strategy versus private real estate is the improved liquidity and yield orientation.

3. **Treasury Inflation Protection Securities ("TIPS") or Global Inflation-Linked Bonds** – Securities where the principal value adjusts to reflect changes in the U.S. CPI or other sovereign-linked inflation measures upward or downward, but never below the original face amount at maturity. Semi-annual coupon payments are based upon the bond's adjusted principal which provides a direct inflation link.

4. **Commodities/Natural Resources** – Financial instruments, such as individual stocks, stock baskets or futures which represent companies or markets where the prices are directly linked to the ownership or trading of physical commodities/natural resources or companies whose primary source of revenues are tied directly or indirectly to the management, ownership or trading of physical commodities/natural resources. Commodities/natural resources are raw materials which are inputs to the production of goods and services. Thus, changes in commodities/natural resources prices typically

lead inflation. Higher commodities/natural resources prices lead to increased prices goods and services, hence, a directly link to inflation.

5. **Timber/Farmland** – These are a hybrid investment strategy in that similar to commodities, they provide final and raw material in the production of goods and services and will tend to lead inflation. However, as private investments, they are similar to private real estate in that a potential increase in property value exists due to changes in supply and demand factors that influence inflation.
6. **Master Limited Partnerships ("MLPs")** – An MLP is a publicly traded partnership that combines individual limited partnerships into one entity to make the ownership interests more marketable with a general partner operating the business. MLPs are high income assets that should provide a consistent yield in between REITS and High Yield Bonds. As equities, they are also expected to earn returns commensurate with traditional public equities. An MLP is a pass-through entity that is taxed at the unit holder (i.e., share holder) level and not subject to tax at the partnership level. However, tax exempt investors may produce Unrelated Business Taxable Income ("UBTI"), which means tax-exempt investors engaged in a 'business' outside of the purpose for their exemption may be subject to UBTI. The businesses of MLPs are related to the extraction, production, and distribution of natural resources or energy infrastructure.
7. **Infrastructure** – Private markets investments in essential physical infrastructure such as toll roads, bridges, airports and utilities accessed by most citizens and designed to provide a steady income stream via tolls, leases, etc. Income stream is periodically adjusted by owners and inflation escalation provisions are often "built in" to provide a direct link to inflation. Capital appreciation also directly linked to primary economic drivers such as inflation.
8. **Oil and Gas Limited Partnerships** – Private markets investments in limited partnerships which have the objective of exploring/develop/market oil/gas sources. Returns are primarily driven by an income stream as well as from profits earned at the end of the partnership. However, returns are influenced by rate at which oil and gas flow from source. Thus, this is considered a highly risky, speculative investment strategy.
9. **Multi-Asset Real Asset/Return Strategies** – Bundled public markets or combination private/public markets real assets and/or real return strategies where the investment objective is to provide a real return above inflation over a market cycle. The investment manager has the discretion to select the combination of real asset strategies and to establish the exposure to each respective real asset strategy.

The primary return objective for the LACERS' Real Assets program is to outperform the U.S. Consumer Price Index ("CPI") plus 5% over multiple market cycles and to outperform a secondary custom benchmark comprised of the weighted average of the underlying strategy benchmarks over a full market cycle, with appropriate consideration of risk. Performance evaluation on a risk-adjusted basis shall consider the diversification impact of Real Assets on the LACERS Total Fund. Returns will be calculated after management fees.

The benchmarks for the various real assets portfolios may include the following indices:

Private Real Estate	NFI-ODCE Index + 80 basis points
Public Real Estate “REITS”	FTSE NAREIT All Equity Index
U.S. TIPS	BC U.S. TIPS Index
Commodities	Bloomberg Commodity Index

General real assets guidelines include the following:

a) **Private Real Estate** (see Private Real Estate Policy within Section XI of this document)

b) **Public Real Estate**

(1) At least 90% of the portfolio investments must be invested in REITS.

(2) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(3) For prudent diversification of the portfolio, the maximum amount that can be invested in any one issue shall be the greater of 7.5% of the portfolio or 125% of the index weight.

(4) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 3%. In total, out of benchmark securities shall not exceed 10% of the portfolio market value at time of purchase.

(5) At no time shall the Account own more than 5% of the outstanding voting securities of any one issuer. No issue shall be purchased in the portfolio if more than 15% of the outstanding voting shares of the company are held by LaSalle in the total of all its accounts. All debt and all preferred stock of an issuer are each considered a single class for this purpose.

(6) No more than 50% in any one property type, including Regional Malls, Strip Shopping Centers, Apartments, Offices, Industrial, Healthcare, Manufactured Homes, Factory Outlets, and Other.

(7) No more than 40% in any one geographic region, including Northeast, Mideast, Southeast, Southwest, East North Central, West North Central, Pacific, and Mountain.

c) **Treasury Inflation-Protected Securities (“TIPS”)**

(1) The total portfolio’s average rating will be AAA by Moody’s or Standard & Poor’s.

(2) At least 80% of the portfolio investments must be invested in TIPS.

(3) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(4) The maximum effective duration shall be no more than 120% of the benchmark duration.

(5) The maximum asset allocation to a single security shall not exceed 200% of the benchmark weighting.

(6) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 5%. In total, out of benchmark securities shall not exceed 20% of the portfolio market value at time of purchase.

(7) Securities of emerging market country (countries as defined by the J.P. Morgan EMBI Global Diversified Index) issuers are limited to a maximum of 5% of the portfolio market value.

d) **Commodities**

(1) At least 80% of the portfolio investments must be invested in publicly traded commodities.

(2) Up to 5% of the net asset value of the Portfolio (excluding Futures) may be held in cash at any one time.

(3) The maximum asset allocation to a single security shall not exceed 5%.

(4) For out of benchmark securities, the maximum asset allocation to a single issuer shall not exceed 5%. In total, out of benchmark securities shall not exceed 20% of the portfolio market value at time of purchase.

VII. MANAGER SEARCH AND SELECTION POLICY

The purpose of the Manager Search and Selection Policy is to provide a comprehensive framework for the manager search and selection decision making process for the liquid market strategies. It specifically defines responsibilities and processes for the LACERS Board, Staff and General Fund Consultant.

A. Roles and Responsibilities

Role of Board	Role of Staff	Role of General Fund Consultant
• The Board is responsible for the authorization of the search for the investment manager(s). • The Board reviews and adopts the active and passive investment manager minimum qualifications based upon the written recommendation provided by the Staff and General Fund Consultant. • The Board reviews the semifinalist candidates as presented in the investment manager candidate evaluation report prepared by the Staff and General Fund Consultant. • Upon the completion of Staff's due diligence, the Board interviews investment manager finalist candidates. • The Board authorizes the selection and hiring of investment manager(s). • The Board may delegate certain Board duties to the Investment Committee as described in the Investment Committee Charter.	• Staff, with input from the General Fund Consultant, recommends mandates for Board approval. • Staff is responsible for the implementation of the manager search and selection process. • Staff develops a written set of minimum qualifications. Unique criteria not specified in the pre-approved minimum qualifications list will require Board approval. • Upon Staff concurrence of the semi-finalists, Staff and the General Fund Consultant provides the Board a written investment manager candidate evaluation and comparison report which will summarize the methodology for developing the list of semi-finalist candidates from the Qualified Respondents. • Staff conducts due diligence on the semi-finalist firms as reviewed by the Board. • Based on the findings of the due diligence, Staff will present a list of suitable semi-finalist candidates as finalist candidate(s) for the Board to interview.	• The General Fund Consultant works with Staff to develop a manager search initiation recommendation. • The General Fund Consultant works with Staff on additional written minimum qualifications for Board approval as necessary. • The General Fund Consultant applies the System's minimum qualifications and any additional Board-approved criteria in order to arrive at list of "Qualified Respondents" who pass the minimum qualifications. • The General Fund Consultant employs the investment manager candidate evaluation process to arrive at a list of semi-finalist candidates for Staff to then review and conduct due diligence upon. The investment manager candidate evaluation process will utilize the Evaluation Criteria as summarized in Section VII.B and may be adjusted as necessary.

B. **Sequential Search and Selection Process**

1. Staff and General Fund Consultant recommend mandate(s) for approval by the Board.
2. The Board authorizes the search of specific mandate(s).
3. Staff and General Fund Consultant develop minimum qualifications for the search and will seek Board approval for unique minimum qualifications not specified in Section VII.C & Section VII.D.
4. The General Fund Consultant applies the minimum qualifications and any additional Board criteria to the Request for Proposal (RFP).
5. The General Fund Consultant develops a list of respondents that meet the minimum qualifications ("Qualified Respondents").
6. The General Fund Consultant employs the investment manager candidate evaluation process to arrive at a list of semi-finalist candidates for Staff to review and approve.
7. Staff and General Fund Consultant provide for the Board's review an investment manager candidate evaluation and comparison report which summarizes the methodology for developing a list of semi-finalist candidates from the list of Qualified Respondents.
8. Staff conducts due diligence on the semi-finalist firms.
9. Based on the findings of the due diligence, Staff develops a suitable list of finalist candidate(s) for the Board to interview.
10. The Board interviews the investment manager finalist candidates.
11. The Board authorizes the selection and hiring of investment manager(s) based on the information presented in the interview and Staff's report.

C. **Evaluation Criteria**

Evaluation Criteria - Active		Weighting
Qualitative Assessment		70%
Organization/People	*30%*	
Investment Process	*40%*	
Risk Management	*30%*	
Quantitative Assessment[2]		20%
Expected Fees		10%

Evaluation Criteria - Passive		Weighting
Qualitative Assessment		10%
Organization/People	*50%*	
Product AUM	*50%*	
Tracking Error		40%
Expected Fees		50%

D. **Active Investment Management – Search and Selection Criteria**

Minimum qualifications will focus on the key characteristics required by the LACERS Board and Staff for a candidate firm to receive consideration for hire. The following minimum

[2]The quantitative assessment includes, but is not limited to, a skill test, information ratio, consistency means test and batting average.

qualifications will be applied for all active, liquid market strategy investment manager searches.

a) Firm is a registered investment advisor under the Investment Advisors Act of 1940 or possesses bank exemption.

b) Must have a proven and verifiable track record, which conforms to the CFA Institute's Global Investment Performance Standards ("GIPS"), of at least five (5) years as of the most recent quarter end.

c) At least 60% of rolling four (4) quarter information ratios (i.e., excess return divided by excess risk) must be positive versus a mandate-appropriate benchmark, gross of fees, for the last five (5) years (12 of 20 quarters).

d) Strategy AUM must be of sufficient size that LACERS' expected mandate size would not comprise more than 25% of the proposed product assets.

Staff and the General Fund Consultant submits revised and/or additional minimum qualifications for each active, liquid market investment manager search as deemed appropriate given the mandate and asset class.

E. **Passive Investment Management – Search and Selection Criteria**

The following minimum qualifications will be used for all passive investment manager searches

a) Firm is a registered investment advisor under the Investment Advisors Act of 1940 or possesses bank exemption.

b) Must have a proven and verifiable track record, which conforms to the CFA Institute's Global Investment Performance Standards ("GIPS"), of at least five (5) years as of the most recent quarter end.

c) Strategy AUM must be of sufficient size that LACERS' expected mandate size would not comprise more than 50% of the proposed product assets.

F. **Emerging Managers**

The recommendation by Staff and the General Fund Consultant to initiate a search will include the expected number of firms that may meet LACERS' investment management search minimum criteria segregated by emerging and non-emerging investment managers. Emerging managers, as defined by LACERS' Emerging Investment Manager Policy (within Section IX of this document), will be highlighted in the investment management candidate evaluation summary report to the Board.

VIII. MANAGER MONITORING POLICY (LIQUID MARKETS STRATEGIES)

A. Purpose

The purpose of this policy is to:

1. provide a disciplined, methodical process for determining whether to retain or terminate managers of liquid markets strategies due to poor relative performance, organizational or personnel issues, or other factors which reduce LACERS' conviction in the manager/strategy;
2. establish general guidelines for monitoring the effectiveness of implementing the liquid markets investment strategies for which the investment managers are retained;
3. provide a detailed framework and criteria for placing a manager "On Watch" status;
4. provide a systematic, consistent, and objective framework for recommending or electing to retain or terminate a manager.

LACERS' objective is to determine the likelihood of future success of the strategy; therefore, it is important that retention/termination decisions focus on qualitative aspects of each manager's investment philosophy, strategy and process, as well as quantitative assessment of past and current performance.

It is also important to consider that each manager's situation is unique, and must be analyzed on an individual basis, taking into account any unique circumstances affecting the manager and its relationship with LACERS.

Liquid market strategies are strategies where the securities are publicly traded on daily priced exchanges or via the bond auction markets and which are housed within separate account portfolios, mutual funds, or commingled/collective funds with at least monthly liquidity. For investment managers that are not classified as liquid, mainly Private Equity and Real Estate, separate policies have been set up in Section X and XI, respectively.

B. Monitoring and Evaluation

Investment managers will be monitored in the following areas:

1. Investment performance relative to a specific benchmark and an appropriate peer group;
2. Investment risk relative to specific benchmark and an appropriate peer group;
3. Performance per unit of risk relative to specific benchmark and an appropriate peer group (information ratio);
4. Adherence to the investment manager's philosophy, process, and stated investment style/strategy;
5. Organizational and personnel continuity;

6. Compliance with Investment Manager Guidelines and Investment Policy.

LACERS' Staff and the General Fund Consultant will review and evaluate investment managers, quantitatively and qualitatively, using the following procedures:

1. Quarterly quantitative review of performance and risk relative to its specific benchmark and an appropriate peer group of active managers over various measurement periods (normally three to five years);
2. Quarterly review of portfolio characteristics, performance trends, style consistency, and risk expectations (standard deviation and tracking error);
3. Annual due diligence meeting at LACERS' office;
4. Every three years (generally) conduct due diligence meeting at the investment manager's office, unless significant organizational change warrants immediate evaluation;
5. More frequent, detailed and formal review of investment managers "On Watch" (see Section VIII.C below).

Following any evaluation, Staff and General Fund Consultant will determine whether the investment managers will be placed "On Watch" if it fails to meet two or more quantitative and/or qualitative factors as listed in Section VIII.E and VIII.F. However, in situations where there is organizational or personnel changes which directly impact the product in which LACERS is invested, no additional factors would be required to place the firm in "On Watch" status.

C. **Managers "On Watch"**

LACERS shall notify investment managers in writing of their status should they be placed "On Watch". Typically, "On Watch" status applies for one year from the initial placement date. However, the review period can be extended beyond the one year period based on the progress the investment manager is making such that the quantitative or qualitative factors listed in Section VIII.E and VIII.F are resolved.

The Board is updated on a quarterly basis of all managers' performance, status, and "On Watch".

Managers "On Watch" will receive no additional funding from rebalancing, contributions or other sources. However, funds may be withdrawn for rebalancing or liquidity needs.

D. **Newly-Hired Managers**

Quantitative factors will be evaluated quarterly, but shall not cause a manager to be placed "On Watch" until three years or more after inception, unless the manager demonstrates performance that is materially inconsistent with expectations or experiences organizational issues.

Section 3 MANAGER MONITORING POLICY (LIQUID MARKETS STRATEGIES)

E. **Quantitative Factors**

Factor	**Trigger**	**Action**
Annualized **<u>net</u>** performance relative to its benchmark for trailing **<u>3-years</u>**	Underperforms (net of fees) in 8 of 12 previous quarters	Place "On Watch" and notify manager
Annualized **<u>net</u>** performance relative to its benchmark for trailing **<u>5-years</u>**	Underperforms (net of fees)	Place "On Watch" and notify manager
Moving average tracking error (TE) for **3-years**	Greater than two standard deviations from 'Since inception' mean TE[3]	Place "On Watch" and notify manager
Moving average tracking error (TE) **for 5-years**	Greater than two standard deviations from 'Since inception' mean TE[4]	Place "On Watch" and notify manager
Moving average **<u>net</u>** Information Ratio for trailing **<u>5-years</u>**	Falls below 0.20.	Place "On Watch", if fails another quantitative factor
PASSIVE MANDATES Annualized **<u>net</u>** performance relative to its benchmark for trailing **<u>1-year</u>**	Underperforms (net of fees) by more than 0.2%.	Place "On Watch" and notify manager
Annualized average tracking error (TE) for 1-year	Greater than 1%	Place "On Watch" and notify manager

[3] Or over at least a 5-year period using pre-hire data if inception less than five years.

[4] Or over at least a 10-year period using pre-hire data if inception less than ten years.

F. **Qualitative Factors**

A significant and potentially adverse event related to, but not limited to, any of the following qualitative issues or events may result in placing the investment manager on the "On Watch" status or an immediate termination.

Criteria	Factor	Action
Organization	Change in firm ownership and/or structure	Place "On Watch", if determined that change might detrimentally affect performance and strategy
	Loss of one or several key personnel, specifically personnel on LACERS portfolio product	Place "On Watch", if determined the turnover will impair the firm's investment capabilities
	Significant loss of clients and/or assets under management	Place "On Watch", if there is a high client turnover and high volume of outflows
	Significant and persistent lack of responsiveness to LACERS requests	Place "On Watch", if service deterioration inhibits ability to monitor
	Regulatory agencies' investigation and/or material litigation	Place "On Watch", if nature, seriousness, and likely impact of charges on the firm and investment product warrant
Strategy and Risk Control	Deviation from stated investment philosophy, style and process	Place "On Watch" if deviation persists for more than 4 quarters. Terminate if no longer consistent with LACERS objective
	Risk management controls and procedures	Place "On Watch" for repeated guideline or policy violations

G. **Courses of Action**

After placing an investment manager "On Watch" status the following steps will be taken:

1. Staff will contact the investment manager and formally inform them of their status in writing. Notification shall indicate the reasons why the firm is "On Watch" and request the investment manager to explain and to provide plan of action to remove itself from "On Watch" status;

2. Staff and/or General Fund Consultant will meet with the investment manager, either in person or telephonically, following receipt of a written response from them;
3. Staff shall monitor the progress of the investment manager's implementation of the plan of action;
4. After the initial one year period, Staff and General Fund Consultant shall determine whether to remove the manager from "On Watch" status or continue the "On Watch" status. Staff may recommend a manager termination subject to the Board's approval.

If deemed necessary, the Board may request the investment manager to appear before the Board to explain the situation. Non-compliance with respect to the Board request shall be cause for an immediate termination recommendation by Staff to the Board.

H. **Halting of Trading Activity**

Investment managers may be required to halt trading activity by the Chief Investment Officer as soon as practicable due to unusual and significant operational risk factors that are deemed to have a material impact on the System; and, without immediate action taken by the Chief Investment officer, could result in material harm or impairment to LACERS' portfolio. Halting of the trading activity is subject to the concurrence of LACERS General Manager and General Fund Consultant. The Chief Investment Officer shall report the action(s) at the next scheduled Board meeting. Authorization to resume trading activity by the Chief Investment Officer requires the concurrence of LACERS General Manager and the General Fund Consultant.

I. **Termination**

The Board reserves the right to terminate an investment manager for any reason regardless of status. Grounds for investment manager termination may include, but are not limited to, the following reasons:

1. Failure to comply with the guidelines agreed upon for management of the Board's portfolio, including holding restricted issues;
2. Failure to achieve performance objectives specified in the manager's guidelines;
3. Significant deviation from the manager's stated investment philosophy and/or process;
4. Loss of key personnel;
5. Evidence of illegal or unethical behavior by the investment management firm;
6. Lack of willingness to cooperate with reasonable requests by the Board for information, meetings or other material related to its portfolios;
7. Loss of confidence by the Board in the investment manager;
8. A change in the System's asset allocation program, which necessitates a shift of assets to another sector.

The Board will carefully review any one of these factors; however, the presence of any one of these factors may not necessarily result in a termination.

Upon the Board's approval of termination, Staff will notify the investment manager in writing of the termination process and the date on which to cease all trading based on operational needs. Staff will keep the Board informed of the termination progress.

All of LACERS investment management contracts under the Manager Monitoring Policy (Liquid Markets Strategies) allow LACERS to terminate the manager, with or without cause, after 30 days' written notice.

IX. EMERGING INVESTMENT MANAGER POLICY

A. Policy Objectives

The objective of this Emerging Investment Manager Policy ("Policy") is to identify investment firms with the potential to add value to the LACERS investment portfolio ("Fund") that would otherwise not be identified by the standard LACERS institutional investment manager search process. The Board believes that smaller investment management organizations may generate superior performance returns because of the increased market flexibility associated with smaller asset bases. The Policy provides criteria for LACERS to identify appropriate investment management organizations in their early business stages.

Consistent with the Board's fiduciary responsibility, the goal of this Policy is to locate and fund emerging investment managers with successful histories of generating positive alpha at an appropriate level of active risk. LACERS may consider an emerging investment manager mandate as part of any investment manager search undertaken by the Board, after Staff and the appropriate fund consultant have determined that the emerging manager return and risk characteristics of the mandate under consideration are no less favorable than comparable, non-emerging investment manager opportunities available for that mandate.

The Board recognizes that emerging investment managers may not possess the organizational depth and resources of larger investment management firms, and may represent a greater business risk. The Board also recognizes that prudent management of the System requires that emerging investment managers, once retained, will manage significantly smaller amounts of LACERS' assets than larger investment management firms. Each of these issues will result in greater oversight and administrative responsibilities for LACERS' staff, and will consequently be part of the evaluation whenever emerging investment managers are being considered for inclusion in a manager search.

Managers hired pursuant to this Emerging Investment Manager Policy will be held accountable to the same performance, reporting, and retention standards as all other LACERS investment managers within the same asset class.

B. Emerging Investment Manager Goals

<u>Public Markets</u>: The Emerging Investment Manager aspirational policy goal for public market asset classes is 10%. Two metrics will be calculated at least annually to compare actual results versus the goal: 1) Asset Class Metric: total market value of all emerging investment managers accounts within a respective public market asset class divided by total market value of the respective public market asset class; and 2) Manager Search Metric: total dollars approved for contract with an Emerging Manager(s) divided by the total dollars approved for funding the respective investment manager search.

<u>Private Markets</u>: The Emerging Investment Manager aspirational policy goal for private market asset classes is 10%. Two metrics will be calculated at least annually to compare

actual results versus the goal: 1) Asset Class Metric: total dollar commitments of all emerging investment manager partnerships within a respective asset class divided by the total dollar market value of the respective asset class; and 2) Manager Search Metric: total dollar commitments provided to Emerging Managers within a specific private market asset class divided by the total dollar value of all investment commitments in the same private market asset class over rolling 36-month periods.

C. **Emerging Investment Manager Minimum Criteria**

The following minimum criteria for firms to qualify as LACERS Emerging Investment Manager status under this Policy are as follows:

1. Public Market Asset Classes – *U.S. Equities, Non-US Equities, Core Fixed Income*
    a) The firm will have no more than $2 billion in total firm assets under management at the time of hire.
    b) The firm must have a minimum of $50 million assets under management in the strategy being considered.
    c) The firm must have been in existence for a minimum of one year.
    d) The portfolio manager must have a minimum of five years of verifiable experience managing the strategy being considered. The experience must include a GIPS-compliant performance track history attributable to the portfolio manager for the most recent 36-month period of the five-year verifiable experience requirement.
    e) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.
    f) At the time of hire, funding in the investment strategy shall not exceed 20% of the total strategy AUM at the time of actual funding.

2. Private Market Asset Classes – *Private Equity, Real Assets (not including Real Estate), Credit Opportunities*

    a) The General Partner will have no more than $500 million in firm-wide assets plus unfunded commitments at the time LACERS makes its commitment.
    b) First- or second-time institutional fund for a General Partner.
    c) The Fund shall have a minimum fund size of $100 million in committed capital inclusive of LACERS' pending commitment.*
    d) The firm must have been in existence for a minimum of one year.
    e) The firm must have a minimum track record of five years. Any firm with a track record of less than five years may utilize track records established at prior firms when performance can be clearly attributed to the emerging firm's key individuals and/or the specific team associated with the strategy being considered.

f) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.

g) No Limited Partner can represent more than 30% of the total Fund's* capital.

h) LACERS' commitment in the strategy being considered shall not exceed 10% of the projected final closing fund size or $20 million, whichever is lower.

**Excludes co-investments or sidecar investment vehicles.*

3. Private Market Asset Class – *Private Real Estate*

a) The General Partner will have no more than $500 million in firm-wide assets plus unfunded commitments at the time LACERS makes its commitment.

b) First- or second-time institutional fund for a given General Partner.

c) The Fund shall have a minimum fund size of $150 million in committed capital inclusive of LACERS pending commitment.*

d) The firm must have been in existence for a minimum of one year.

e) The firm must have a minimum track record of five years. Any firm with a track record of less than five years may utilize track records established at prior firms when performance can be clearly attributed to the emerging firm's key individuals and/or the specific team associated with the strategy being considered.

f) No person or entity, other than the principals and/or employees of the firm, shall own more than forty-nine percent (49%) interest of the firm.

g) No client can represent more than 30% of the total Fund's* capital.

h) LACERS commitment in the strategy being considered shall not exceed 10% of the projected final closing fund size or $20 million, whichever is lower.

**Excludes co-investments or sidecar investments.*

D. **Provisions for Post-Emerging Firms**

1. Public Markets

LACERS expects that successful emerging investment management firms will grow beyond the maximum $2 billion in assets under management. An emerging investment manager firm under contract to LACERS that successfully grows its assets under management and meets the minimum investment manager search criteria may be considered for a larger-sized mandate subject to (at minimum) meeting the Manager Search and Selection Criteria provided in the LACERS Manager Search and Selection Policy (Section VII of this document).

2. Private Markets

LACERS expects that successful emerging investment management firms will grow beyond raising first- and second-time partnership funds. Opportunities for participating in subsequent funds may be considered provided that the strategy meets the criteria of

LACERS' Private Equity Investment Policy, Private Real Estate Investment Policy, Credit Opportunities Strategy Statement, or another asset class policy unique to a respective private markets mandate.

E. **Reporting**

Staff will report to the Board on the status of Emerging Investment Managers hired and retained on an annual calendar year basis. The annual report will include:

1. Names of Emerging Investment Manager firms hired during the calendar year.
2. Dollar amounts awarded to Emerging Managers.
3. Report of Emerging Investment Manager Goals Metrics pursuant to Section IX.B of this Policy.
4. List of all investment manager searches.
5. Staff and consultant efforts to increase the visibility of LACERS Emerging Investment Manager searches and Emerging Investment Manager representation within the total Fund portfolio.
6. Individual manager performance.

X. PRIVATE EQUITY INVESTMENT POLICY

A. Introduction

This Private Equity Investment Policy ("Private Equity Policy") sets forth guidelines that provide a general framework for selecting, building, and managing LACERS' investments in private equity, including corporate finance/buyout, special situations (including distressed debt, distressed turnaround and mezzanine strategies), venture capital partnerships, co-investments, secondaries, and other privately structured investments with like return and risk characteristics of private equity.

B. Investment Objectives

1. Return

On a relative basis, the return objective for the LACERS' private equity portfolio ("Private Equity Portfolio") is 300 bps over the Russell 3000 Index net of fees, expenses, and carried interest.

Returns are measured over the life of the partnership and become meaningful for periods past the J-Curve. The valuation methodology used by general partners should conform to industry and regulatory standards. Additionally, the IRR performance in the first few years of a partnership's life may be negative due to the J-curve effect.

2. Risk

Private equity investments are illiquid and have a long-term holding period. When invested alongside publicly traded assets, the asset class increases diversification and reduces risk at the System level. Nonetheless, LACERS expects that the Private Equity Consultant will take all appropriate measures to reduce risks that are not compensated adequately for by expected return. Such measures include, but are not limited to, diversification (as detailed in Section X.D.3 below) and due diligence.

C. Scope

The Private Equity Consultant is engaged by LACERS to select new investments, monitor existing investments, and provide advice in accordance with the Private Equity Policy. This Private Equity Policy establishes the framework for the management of the Private Equity Portfolio. The Private Equity Consultant will be evaluated annually as consultant and investment manager for the Private Equity Portfolio based upon the following: portfolio performance; quality of analytical and technical work; expertise in the private equity asset class; responsiveness to requests from the LACERS Board of Administration ("Board") and LACERS Investment Staff ("Staff"); availability to attend Board meetings and meetings with Staff with reasonable advance notice; consulting and advising on LACERS' portfolio, including information on selected private equity related topics; identifying and mitigating risks; and proactively informing Staff of new investment opportunities or risks in the marketplace.

The Private Equity Consultant has discretion to buy, sell, or otherwise effect investment transactions pursuant to the roles and responsibilities defined in Section X.F, for all new partnerships up to and including $25 million and for all follow-on partnerships up to and including $40 million. Recommendations that exceed those amounts must be presented by the Private Equity Consultant to Staff for review and evaluation, and to the Board for approval. Non-U.S. dollar commitments to private equity shall be equal or less than the maximum U.S. dollar-equivalent limits as of the day Staff concurs with the Private Equity Consultant. Non-U.S. dollar commitments to private equity may exceed the U.S. dollar currency equivalent maximum commitment limits after the date of Staff's concurrence due to foreign currency exchange rate fluctuations, and require no further Board approval.

D. **Investment Guidelines**

1. **Eligible Investments**

LACERS will invest in top tier limited partnership interests of pooled vehicles covering the broad spectrum of private investments as follows:

a) Private equity partnerships – including corporate finance/buyout, special situations, and venture capital. Special situations is a broad investment strategy, which includes mezzanine and distressed debt partnerships, fund-of-funds (both direct and secondary), industry-focused, and multi-stage "generalist" partnerships;
b) Co-investments – direct investments made alongside a partnership;
c) Direct secondary purchases – purchases of an existing partnership interest or pool of partnership interests from an investor;
d) Other privately structured investments that are deemed appropriate within LACERS' risk profile that may include direct investments.

2. **Limitation on Percent of Partnership's Total Commitment**

LACERS' commitment to any given partnership shall not exceed 20% of that partnership's total commitments without the Board's approval.

3. **Diversification**

The Private Equity Consultant, on behalf of LACERS, will diversify the following sources of risk in the Private Equity Portfolio.

a) Partnerships
   (1) No more than 15% of the Private Equity Portfolio's total exposure (market value plus unfunded commitments) to private equity may be attributable to partnerships by the same manager at the time the commitment is made.
   (2) The Private Equity Consultant shall diversify the Portfolio across vintage years when possible.

(3) The geographic distribution of investments shall be monitored for diversification by the Private Equity Consultant.

The Private Equity Consultant shall monitor investments with respect to industry. In the event that the current cost-basis associated with a single industry exceeds 25% of the cost basis of the Private Equity Portfolio, the Private Equity Consultant shall attempt to reduce this exposure by limiting future commitments to partnerships with an explicit focus on the industry in question and with the understanding that industry exposure at an investment level will be managed at the discretion of the general partner.

b) Sub-asset Classes

(1) Assets committed to venture capital shall be diversified across the stages of venture capital (e.g., early-stage, mid-stage, late-stage, and growth equity).

(2) Assets committed to corporate finance/buyouts shall be diversified by target company size (e.g., mega, large, mid, and small).

In addition to the diversification criteria listed above, LACERS' Board along with the Private Equity Consultant will adopt optimal sub-asset allocation targets, which will be updated periodically to reflect general changes in the economy.

The current optimal sub-asset class allocation ranges and targets for LACERS' private equity investments are highlighted in the most recent Private Equity Annual Strategic Plan.

4. **Illiquidity**

Private equity investments are not designed to meet the short-term liquidity needs of LACERS. The investments in this asset class are illiquid until the partnerships, at their discretion, sell investments and distribute proceeds.

5. **Distributions**

Staff is responsible for the final disposition of distributions from partnerships.

E. **Review of Investment Guidelines**

The Private Equity Consultant and Staff periodically will review investment guidelines as set forth in Section X.D (above) and recommend changes if necessary.

F. Roles and Responsibilities

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Strategy/Policy	• Select Private Equity Consultant. • Approve asset class funding level. • Review and approve the Private Equity Annual Strategic Plan which includes allocation targets and ranges.	• With Private Equity Consultant and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.	• With staff and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.
Investment Selection	• Review investment analysis reports. • Review and approve investments in new management groups of amounts greater than $25 million prior to investment. • Review and approve investments in follow-on partnerships of amounts greater than $40 million prior to investment.	• Refer investments and forward to Private Equity Consultant for preliminary screening. • Conduct meetings with potential new investments prior to recommending to the Board, if practical. • In conjunction with Private Equity Consultant, invest up to $25 million for new partnerships, and up to $40 million for follow-on funds without Board approval. If staff opposes, refer to Board for decision. • In conjunction with Private Equity Consultant, make recommendations to Board for approval for investments over $25 million in new partnerships, or over $40 million in follow-on funds. • Execute agreements.	• Conduct extensive analysis and due diligence on investments. • Recommend for Board approval investments over $25 million for new managers, or over $40 million in follow-on funds. • With staff concurrence, approve investment of up to $25 million for new partnerships, and up to $40 million in follow-on funds. • Provide investment analysis report for each new investment. • Communicate with staff regarding potential opportunities undergoing extensive analysis and due diligence. • Coordinate meetings between staff, Board, and general partner upon request. • Negotiate legal documents.
Investment Monitoring	• Review quarterly, annual, and other periodic monitoring reports.	• Review quarterly, annual and other periodic monitoring reports prepared by the Private Equity Consultant. • Conduct meetings with existing managers periodically. • Attend annual partnership meetings when appropriate. • Fund capital calls and distributions. • Review Private Equity Consultant's recommendations on amendments. • Execute amendments to agreements and consents.	• Maintain regular contact with existing managers in the portfolio to ascertain significant events within the portfolio. • Recommend amendments and consents to staff for approval. • Provide quarterly, annual, and other periodic monitoring reports.

XI. PRIVATE REAL ESTATE INVESTMENT POLICY

This Real Estate Investment Policy sets forth a general framework for managing LACERS' investments in real estate. This policy provides that the LACERS' real estate program shall be planned, implemented, and monitored through the coordinated efforts of the Board, the General Fund Consultant, Staff, the Real Estate Consultant, and the Investment Managers. Additionally, this policy is subject to the guidelines set forth by LACERS in the Marketing Cessation Policy and in the Third Party Marketing and Referrals Disclosure Policy, as amended from time to time by the Board, or as stated under applicable laws or regulations.

The Real Estate Consultant, along with Staff, shall prepare an Annual Real Estate Strategic Plan, as defined below, to be considered and acted upon by the Board that will address the specific goals and guidelines to be achieved and followed in the Real Estate Portfolio each year. The Annual Real Estate Strategic Plan shall be consistent with the guidelines set forth in this policy.

A. Real Estate

For purposes of this policy, real estate shall be defined to include investments that are private equity or debt positions in real property. Investments may be leveraged or unleveraged. As further set forth in this policy, LACERS will invest primarily in discretionary commingled funds (e.g., limited liability companies, real estate investment trusts, and limited partnerships) owned with other suitable institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds). As further set forth in this policy, LACERS also may invest in real estate assets on a direct ownership basis through a discretionary separate account vehicle. Such investments will be evaluated on a case by case basis, but at a minimum, need to provide a compelling opportunity, which is consistent with the Real Estate Portfolio's investment objectives and overrides or outweighs the benefits of commingled fund investments.

B. Fiduciary Standards

The investment and management of the Real Estate Portfolio shall be accomplished in a manner consistent with the "prudent person" standard of fiduciary care. This level of care requires that all LACERS' fiduciaries act reasonably to accomplish the stated investment objectives and to safeguard the System on behalf of LACERS' participants and their beneficiaries. The implementation of this Real Estate Policy, including the selection of investment managers, shall be completed in a manner that enhances the Real Estate Portfolio's diversification, thereby reducing risk by limiting exposure to any one investment, manager, real estate property type, geographic region, or other defined risk factor.

C. Scope

This Real Estate Policy sets forth the objectives, policies, and processes and procedures related to the implementation and oversight of the Real Estate Portfolio. Specifically, the objectives outlined herein define the desired risk level and return expectations governing the Real Estate Portfolio; the policies provide guidelines governing investment styles to manage defined risk exposures within the asset class; the investment processes and procedures and roles and responsibilities describes the investment process and allocation of duties among the Board, Staff, the Managers, and the Real Estate Consultant.

LACERS has engaged the Real Estate Consultant on a non-discretionary basis to assist the Board and Staff to implement and revise this policy when necessary. The Real Estate Consultant's duties and responsibilities, which are further defined in Section XI.H include selecting Managers, including performing due diligence and recommending new investments; monitoring existing investments; and generally providing advice to Staff and the Board with respect to the Portfolio. The Real Estate Consultant shall conduct a review of this policy, in conjunction with the Board and Staff, at a minimum of once per year, and set forth any strategic and tactical recommendations in the Annual Real Estate Strategic Plan.

D. **Investment Objectives**

The main investment objective with respect to the Real Estate Portfolio is to maximize returns given the defined level of risk, as determined by the Board. While it is necessary to use active asset management strategies to maximize total investment returns (i.e., income and appreciation returns), investment principal is to be safeguarded within the Portfolio's framework of prudence and managed risk. Although real estate investments are illiquid and have a long-term holding period, investing in this asset class should improve the System's fund level risk-adjusted returns by enhancing overall diversification, which reduces total portfolio risk. Specifically, the objectives of LACERS with respect to the Real Estate Portfolio include the following:

1. **Attractive Risk-Adjusted Returns**

To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns. As discussed in Section XI.G below, the benchmarks for the Portfolio will be the NFI-ODCE Index plus 80 basis points.

2. **Increased Portfolio Diversification/Reduced Portfolio Risk**

To use real estate to enhance overall diversification and, in turn, reduce overall risk of the System's assets, given the historically low to negative return correlations that exist between real estate and other asset classes.

3. **International Investments**

To access international real estate markets through private equity and debt real estate investments. By so doing, the Real Estate Portfolio will obtain exposure to diverse economies, populations, and currencies.

4. **Significant Current Cash Yields**

To invest in real estate assets, which will generate a significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value add and core investments.

5. **Inflation-Hedge**

To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation.

6. **Preservation of Principal**

To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

E. **Investment Guidelines**

LACERS shall establish a long-term target allocation to real estate (the "Target Allocation"). The Target Allocation will fluctuate according to the relative values among the Real Estate Portfolio and the allocations to other asset classes of LACERS. To accomplish and maintain the Target Allocation, the Real Estate Consultant may recommend committing in excess of the Target Allocation percentage in order to meet full allocation objectives. The Real Estate Portfolio allocation percentage actually achieved quarterly may vary from the Target Allocation within a reasonable range as determined by the Board and Staff from time to time.

Eligible real estate funds will range from core open-end funds to opportunistic closed-end funds, and may also include separate investment accounts with selected fund managers; however, the Real Estate Portfolio will be comprised primarily of commingled fund vehicles. Separate accounts represent opportunities wherein LACERS would be the sole or significant equity sponsor for an investment manager pursuing a specifically targeted opportunity or defined strategy. As the sole or significant equity sponsor, LACERS would likely be entitled to voting and control rights generally not available to commingled fund investors.
The following investment guidelines set forth investment parameters consistent with the risk and return objectives of the Real Estate Portfolio.

1. **Portfolio Composition – Risk Strategy Mix**

The Real Estate Portfolio shall be comprised of two different but complementary risk/return categories or risk strategies. These categories or risk strategies generally define the three basic risk and return levels ranging from low to high risk associated with institutional real estate investments. These categories or strategies are referred to as core and core plus or non-core, as defined below.

a) **Core and Core Plus**

Equity investment in operating and substantially-leased (i.e., at least at market occupancy levels) institutional quality real estate in the traditional property types (i.e., apartment, office, retail, industrial, and hotel). Assets are located in significant metropolitan markets with reasonable population sizes and economies. Net returns historically have been in the 6% to 9% range (net of fees) with annual standard deviation near 8.0%. Of note, core investments typically feature current income as a large portion of overall return (i.e., up to 70%), and appreciation that generally matches or exceeds inflation. Low leverage is utilized (i.e., 50% or less on a portfolio basis). Core debt investments include first mortgage loans secured by the previously defined core equity real estate assets. Such mortgage loans are either newly originated or are existing but performing loans with reasonable borrowers (e.g., credit), reasonable terms (e.g., loan to value of less than 50% and debt service coverage of 1.25 or greater) and institutional-quality management (e.g., an institutional investment manager with reasonable experience and track record in managing first mortgage loan investments). During periods of market illiquidity, core equity investments can provide high going-in income returns and provide a reasonable inflation-hedge so long as markets are not over-supplied. Core Plus investments typically will target a higher leverage ratio (around 50% on a loan-to-value basis) and allocate slightly more to non-operating real estate investments, around 20%.

b) **Non-Core**

Value Add

Value add investments are functional, high quality assets with specific property issues, such as high vacancy, significant upcoming lease expirations, or below market rents. These are debt or equity investments that typically require rehabilitation, redevelopment, development, lease-up, and/or repositioning. Levered returns historically have been in the 10% to 14% range (net of fees). Value add investments also typically feature both current income and appreciation as components of overall return, and frequently involve the repositioning of distressed assets (i.e., not fully leased and operating) and potentially the purchase of interests in real estate operating companies (“REOCs”). Value add investments typically are expected to generate above-core returns through the leasing-up of a property, which increases the end value by increasing in-place income and, in many cases, ultimately decreasing the capitalization rate upon disposition. Value add investments are typically more dependent on appreciation returns than core investments, with purchase prices based on in-place income or asset replacement cost (i.e., at a discount to replacement cost). During periods of market illiquidity, value equity investments can provide high going-in income returns and pricing at significant discounts to replacement costs. During periods of market liquidity, value equity investments include new development projects (i.e., acquire land, obtain entitlements, construct building and lease or sell), which require significant expertise and underwriting. Moderate leverage is utilized for these investments (i.e., targeting 50% to 65% on a portfolio basis).

Opportunistic

Equity or debt investment in real estate properties, operating companies, and other investment vehicles involving significant investment risk, including real estate, financial restructuring, and non-real estate risk. Levered returns have been 15% or higher (net of fees) with significant annual standard deviation. Opportunistic investing includes distressed assets, financial restructurings, and/or financial engineering opportunities (e.g., foreclosing on a mortgage and selling the equity interest) and potentially the purchase of REOCs. Investment may also be made in non-traditional property types (e.g., self-storage) which typically contain greater risk. Opportunistic investments typically have even greater appreciation potential than value add investments (e.g., 50% of total returns); correspondingly, these investments offer a higher return potential and a higher risk profile than core or value add investments. In many cases, since appreciation is the primary goal of opportunistic investing, many are originated with little if any in-place income and therefore less current income as a portion of total return. These investments historically have experienced higher return performance during periods of market illiquidity (e.g., early 1990's in the U.S.). Higher leverage is used (i.e., up to 80% with some funds).

Core and core plus and non-core exposure targets shall be evaluated at a minimum of once per year and set forth in an Annual Real Estate Strategic Plan and approved by the Board. When making investment recommendations, the Real Estate Consultant shall evaluate the impact of the prospective investment on the Real Estate Portfolio's risk/return exposures based on the existing portfolio net asset value.

2. **Risk Mitigation**

a) **Leverage**

Leverage is a significant risk factor that shall have exposure guidelines and monitoring requirements, as set forth in Section XI.E.7 of this Real Estate Policy.

b) **Diversification**

Diversification is an important tool in reducing real estate portfolio risk and accomplishing superior risk-adjusted returns. The Real Estate Portfolio shall be diversified by risk factors which can be reduced through diversification (e.g., geographic region and property type). Diversification reduces the impact on the portfolio of any one investment or any single investment manager to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio.

It is expected that at various points in time, the Real Estate Portfolio may have a significant exposure to a single property type or location to take advantage of opportunities available in the market which are projected to generate superior returns. When making investment recommendations, the Real Estate Consultant shall consider as part of its investment recommendation the impact on Real Estate Portfolio diversification and risk and return. As part of the Annual Real Estate Strategic Plan, the Real Estate Consultant shall provide annually, or more frequently when market conditions require, the risk factor (e.g., property type and region) ranges which it believes provide reasonable diversification given the expected market conditions. The following describe the various diversification guidelines that will be utilized.

Property Type

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information, and industry indices' diversification. Property type portfolio exposure levels have had a significant impact on institutional investor returns since property types have performed differently during economic cycles.

Real estate investments may include investments other than the traditional property types, such as healthcare facilities, manufactured housing, infrastructure, timber and farmland. The Real Estate Consultant shall include a section in each Annual Real Estate Strategic Plan, reviewing the Real Estate Portfolio's property-type exposures and investment objectives relating thereto.

Geographic Region

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information and industry indices' diversification. The importance of location to the long-term value of real estate is based on local economic fundamentals and the other risk attributes (e.g., weather, earthquake and local government impact) of regional areas.

The Real Estate Consultant shall include in each Annual Real Estate Strategic Plan investment guidelines and targets related to the Real Estate Portfolio's allocation to geographic regions.

3. **Investment Life Cycle**

Investment life cycle refers to the stage of development of a real estate investment. The stages of development include the following: (1) land or pre-development (i.e., un-entitled or partially entitled land); (2) development/redevelopment (i.e., in process of entitling or constructing improvements); (3) leasing (i.e., less than full or market occupancy); and (4) operating (i.e., greater than market occupancy). As a result of the risks associated with development, at no time shall the Real Estate Portfolio have an exposure exceeding 30% to total non-operating investments (i.e., the total of pre-development/land, development/redevelopment and leasing). Also, the Real Estate Consultant shall monitor the Real Estate Portfolio's exposure to different life cycles through the quarterly performance report, which shall indicate the Real Estate Portfolio's non-operating investment exposure and whether a non-compliance issue exists.

4. **Permissible Investment Structures/Vehicles and Private Allocations**

The Real Estate Portfolio may include private real estate equity and debt investments. Private equity real estate investments may include any investment made in equity interests in real estate assets (i.e., land and assets deriving most of their income return from rents paid by tenants subject to lease agreements) or companies through private placements, including REOCs and Real Estate Investment Trusts ("REITs"). Typical property types include the following: office, retail, rental apartments, for sale residential, industrial and hotel. Private debt investments may include structured investments, which provide for stated preferred returns, which may be accrued or paid on a current basis. Private debt investments may also include loans secured by senior or junior mortgage or deed of trust agreements.

5. **Investment Vehicles**

Investment vehicle exposure ranges shall be used to mitigate portfolio risk including enhancing portfolio liquidity. The following discussion provides a summary of the advantages and disadvantages of the investment vehicles, which shall be used in developing the Real Estate Portfolio.

a) **Open-End Commingled Funds**

The open-end fund investments shall be made primarily to provide (1) reasonable property type and geographic diversification, (2) exposure to larger properties (i.e., over $50 million) or certain countries, and (3) reasonable liquidity (i.e., ability to redeem within 90 days). The Real Estate Consultant shall complete reasonable due diligence in evaluating open-end commingled funds consistent with this policy. Open-end commingled fund vehicles may include, but are not limited to, insurance company separate accounts, group trusts, limited liability companies, single purpose corporations or any other vehicle that is determined by the Real Estate Consultant to be consistent with the Real Estate Policy.

b) **Closed-End Commingled Funds**

The closed-end fund investments shall be made primarily to obtain exposure to reasonably diversified portfolios of value add and opportunistic investments. The primary advantages of closed-end funds are that they provide access to talented management teams with focused niche value add and opportunistic strategies. Also, management teams typically co-invest and rely on incentive fees, which combined enhance the alignment of investor and manager interests. The Real Estate Consultant shall complete reasonable due diligence in selecting closed-end fund investments. Co-investment by the manager of a fund or by investors in the fund is acceptable providing: (1) the co-investor(s) have similar investment objectives regarding risk/return exposures and holding periods, (2) control and voting rights with respect to investment decisions are deemed reasonable, and (3) reasonable buy/sell or other agreements exist to allow for the resolution of investor disagreements. Closed-end funds typically have terms of no less than seven years and are therefore illiquid.

c) **Separate Account Vehicles**

Separate accounts may be used to make private equity/debt investments. Separate accounts offer the primary advantage of control over the manager, the strategy, the asset investment and sales decisions, and the capital. The Real Estate Consultant shall complete reasonable due diligence in selecting the Managers for direct investment separate accounts.

Direct Investments

LACERS may make direct equity/debt investments using separate account vehicles; however, such investments require careful consideration. Transaction costs and management expenses are high and there may be a significant time commitment by the Staff. Separate account direct investments shall be made only when the opportunity is compelling, as determined by the Staff, the Real Estate Consultant, and the Board. To be compelling, a direct investment needs to: (1) be in compliance with this Real Estate Policy; (2) be consistent with the strategic needs of LACERS, as set forth in the Annual Real Estate Strategic Plan; and (3) present an investment opportunity that provides benefits to LACERS that outweigh or override those provided by commingled funds, as previously described. The Real Estate Consultant shall assist the Staff with any direct investments by recommending a Manager and by completing an independent report, which summarizes and evaluates the manager due diligence completed. The report shall include a summary of findings and conclusions and shall be retained by the Staff on file for review.

Direct investments shall also include any private REOC investments. These include full or joint venture ownership of an operating company, which may be used to acquire a single asset, to implement a niche investment strategy or to serve another purpose as defined by the Real Estate Consultant and approved by the Staff and the Board.

Each direct investment strategy, fee structure and level of investment discretion shall be defined by the Real Estate Consultant and approved by the Staff and the Board. The Manager shall complete an annual budget review, as defined by the Real Estate Consultant, and a hold/sell analysis, for each direct investment. Since the sale or refinancing of a direct investment interest is required to return invested capital, such investments are considered illiquid.

6. **Manager/Investment Concentration**

LACERS shall limit its exposure to any single Manager or investment, and be subject to other investment restrictions to reduce risk, as further defined below.

a) **Maximum Manager Allocation**

No single manager (including any allocation to pooled funds and/or separate accounts) shall be allocated more than thirty percent (30%) of the Real Estate Portfolio's total allocation at the time of the prospective investment commitment. The allocation amount calculation shall include all of the Real Estate Portfolio's investment commitments remaining to the Manager plus the net asset value of the existing investments at the time of measurement or at the time of a prospective investment allocation.

b) **Maximum Investment Commitment**

The Real Estate Portfolio's maximum investment commitment to a non-core commingled fund or a separate account Manager shall be limited to fifteen percent (15%) of the Real Estate Portfolio's allocation to real estate at the time of the prospective investment commitment.

c) **Commingled Fund Guidelines**

The Real Estate Portfolio's investment in a single open-ended commingled fund shall not exceed twenty percent (20%) of the total net market value of the commingled fund at the time of the prospective investment. The Real Estate Portfolio's investment in a single closed-end commingled fund shall not exceed twenty percent (20%) of the total investor commitments to the fund at the time of closing of the commitment period of the prospective investment. LACERS shall not consider investments in a commingled fund that has less than $150 million in committed capital inclusive of LACERS pending commitment.

d) **Maximum Individual Separate Account Investment**

The Real Estate Portfolio's maximum investment in any single separate account investment shall be limited to a maximum of ten percent (10%) of the Real Estate Portfolio's total allocation to real estate at the time of the prospective separate account investment, unless otherwise approved by the Board.

The Real Estate Consultant and the Staff shall be responsible for reviewing separate account allocations and commingled fund terms to ensure they are consistent with or have incorporated the applicable restrictions previously described. Even though a prospective commingled fund or separate account allocation may be in compliance with the Real Estate Policy restrictions, the Real Estate Consultant shall complete reasonable due diligence with respect to each prospective investment to determine whether it is appropriate for recommendation to the Staff and the Board. The Real Estate Consultant may consider a number of factors in determining whether investments are reasonable and appropriate for institutional investors, including the following: the level of investment by institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds); the size of the organization; the experience of key personnel; the track record of key personnel in investments comparable to the strategy to be undertaken; and the financial condition of the firm.

7. **Leverage**

Leverage is a significant risk factor, the importance of which is magnified during an economic downturn when decreasing property values and stricter lending terms can lead to unexpected increased leverage levels and decreased equity interests. The Real Estate Consultant shall set forth reasonable leverage targets given market conditions in the Annual Real Estate Strategic Plan. When making a new investment recommendation, the Real Estate Consultant shall consider the impact on the Portfolio's leverage guidelines and targets at the time of the prospective investment.

Additionally, the Real Estate Consultant shall monitor the Real Estate Portfolio's leverage to evaluate compliance with the above stated guidelines through the quarterly performance report.

8. **Specialized Investments**

LACERS has in the past, and as determined by the Staff, the Board, and the Real Estate Consultant, may continue to allocate to unique investment strategies and/or investment firms, as further described below.

a) **Unique Investment Strategies**

Unique investment strategies include those that have collateral benefit objectives, which include job creation, community development, green or environmental objectives (e.g., reduce the use of carbon based fuels), and underserved market initiatives (e.g., defined by geography such as urban or inner city and by demographics such as minority or lower income areas). While such strategies offer attractive benefits, the Real Estate Consultant shall focus its evaluation on whether the expected return projected for the investment is reasonable given the level of risk. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation is reasonable and consistent with that of a comparable real estate strategy not providing the same collateral benefits.

b) **Unique Managers**

Unique Managers include those that are Emerging Managers pursuant to the LACERS Emerging Investment Manager Policy. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation to the unique Manager is reasonable. In so doing, the Real Estate Consultant needs to evaluate comprehensively any factors of the unique Manager that may adversely affect investment performance and conclude that such factors are not likely to affect return performance materially and adversely.

F. **Investment Processes And Procedures**

1. **Real Estate Manager Selection Process**

The following discussion describes the process by which LACERS selects Managers and investments.

a) **Universe of Potential Manager Candidates**

The Real Estate Consultant, pursuant to the Annual Real Estate Strategic Plan, will initiate a Manager search by creating a global list of potential candidates for selection based on the Staff and Real Estate Consultant's initial search criteria. The Real Estate Consultant shall provide information from its databases regarding the candidates to be reviewed with the Staff. The Staff will set forth any additional candidates to be considered. The Real Estate Consultant and the Staff will consolidate their lists to create a single list of potential candidates.

b) **Minimum Manager Qualifications**

The Manager requirements include that the Manager have $200 million of assets at a minimum under management and no less than three (3) years of real estate investment experience or a demonstrable track record of three (3) years of real estate investment experience.

c) **Manager Candidate Summaries**

The Real Estate Consultant shall complete a brief summary of the Manager candidates, including descriptions of their meeting Manager criteria established by the Real Estate Consultant and the Staff relating to the Managers' organization, track record, personnel, alignment of interests, terms and fees. The Real Estate Consultant will screen these summaries and recommend the finalists for further due diligence to the Staff.

d) **Due Diligence**

After the Staff and the Real Estate Consultant select the finalists, the Real Estate Consultant shall complete a comprehensive due diligence review. The comprehensive due diligence review includes an in-depth analysis of the firm's background, organization, personnel, strategy and other related factors. The Real Estate Consultant shall invite the Staff to participate in completing due diligence activities.

e) **Selection and Approval**

After completing the due diligence report, the Staff and Real Estate Consultant will recommend a candidate for consideration to the Board, which will make the final decision.

f) **Term Negotiation**

The Staff, Real Estate Consultant and the legal counsel will negotiate the Manager contract and propose a side letter if necessary. The final contract shall be executed by LACERS' General Manager or the appropriate party or parties authorized by the Board.

2. **Monitoring Process and Performance Measurement**

The Real Estate Consultant and the Staff, when available, will meet with managers on a periodic basis to determine the progress being made in the fund. These discussions may occur at annual investor meetings or in face-to-face or telephone meetings either at the Manager's or the Real Estate Consultant's offices.

Investment Managers will send financial reports and capital account statements on a regularly scheduled basis to the Real Estate Consultant and LACERS. Quarterly Portfolio Performance Review Reports ("PPR") shall be prepared by the Real Estate Consultant. The PPR is a comprehensive reporting and evaluation system addressing each investment. The PPR system shall provide such information as may be required by LACERS to understand and administer its investments and shall include attributes for both the Managers and the total portfolio. These attributes include: income, appreciation, gross and net returns for the portfolio and each manager, cash flow, internal rate of return calculations, diversification, comparisons to relevant industry performance indices, and information reporting standards.

G. **Benchmark Returns**

While no return objectives are stated by strategy, relative performance comparisons will be made to various indices to provide additional perspective on performance and/or facilitate attribution analysis. The return objectives are as follows:

LACERS' Real Estate Portfolio Benchmark Guideline	
Strategy	**Return Objectives Over Rolling 5-year Periods**
Core Real Estate	NFI-ODCE Index
Non-Core Real Estate	NFI-ODCE Index + 200 basis points
Timber	NCREIF Timberland Index, gross of fees

Portfolio Benchmark

With respect to private real estate investments, The Real Estate Consultant, the Staff and the Board shall use the NFI-ODCE plus 80 basis points over a rolling 5-year period as its benchmark.

H. **Roles and Responsibilities**

The following duties have been established to manage the risks involved with investing in real estate. Set forth below is the delegation of the major roles and responsibilities of each participant:

1. **Duties of the Board**
   a) Establish the role of the real estate investment program in light of the total System objectives.
   b) Consider and act upon the allocation to real estate and approve any adjustments to the allocation which may from time to time be necessary.
   c) Review, consider, and act upon the Annual Real Estate Policy (objectives, policies and procedures) and the Annual Real Estate Strategic Plan for the real estate program.
   d) Interview, consider, and act upon the Staff recommendations for selection, retention and removal of the Managers and/or the Real Estate Consultant and the selection of Manager investments.
   e) Review the real estate portfolio on a quarterly basis to evaluate the investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan.

2. **Duties of the Staff**
   a) Update and communicate with the Board and Investment Managers on issues and matters of the Policy.
   b) Provide the Board with education and analysis that is independent from the Real Estate Consultant to the extent time and resources allow.
   c) Be familiar with the asset class and stay informed of developments in industry as they occur.
   d) Oversee the Real Estate Consultant’s preparation of the Annual Real Estate Strategic Plan for the real estate program. Present and recommend, along with the Real Estate Consultant, the Real Estate Policy and Annual Real Estate Strategic Plan to the Board.
   e) Oversee and review the performance of the Real Estate Consultant and the Managers on a periodic basis and discuss findings with the Board.
   f) Bring any non-conforming items or significant issues to the attention of the Board.
   g) Document and monitor funding procedures.
   h) Complete any other activity as directed by the Board.
   i) Conduct or assist in conducting due diligence on prospective investment opportunities as LACERS’ resources permit.

j) Prepare investment documentation with the Real Estate Consultant.

3. **Duties of the Manager**

a) Adhere to reporting and performance measurement standards and comply with generally accepted accounting principles ("GAAP") applied on a fair market value basis.

b) Execute and perform its duties under the terms of the investment vehicle documents.

c) Provide timely requests for capital contributions.

d) Provide quarterly financial statements, annual reports and other investment information requested by the Staff and/or the Real Estate Consultant.

e) Conduct annual meetings to discuss important developments regarding investment and management issues.

4. **Duties of the Real Estate Consultant**

LACERS engaged the Real Estate Consultant on a non-discretionary basis to select new investments, to monitor existing investments, and to provide advice in accordance with the investment objectives for the real estate portfolio. The Real Estate Consultant's services to LACERS may include but are not limited to the following:

a) Report directly to the Board and Staff on matters of policy.

b) Bring any non-conforming items or significant issues to the attention of the Staff and the Board.

c) Complete due diligence on potential investments and preparation of the due diligence report.

d) Monitor the performance of the real estate portfolio and compliance with approved policy.

e) Prepare the Annual Real Estate Strategic Plan for the real estate program, in consultation with the Staff, and present the Annual Real Estate Strategic Plan to the Board for review.

f) Review proposed real estate investments and recommend prudent investments, structure and controls. Monitor investments and ventures through completion and disposition, including satisfaction of conditions to funding, partnership and financial issues.

g) Assist Staff with the review and preparation of documents related to new investments approved by the Board consistent with the Real Estate Consultant's recommendation.

h) Prepare reports on a periodic basis for the Board to evaluate investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan. The evaluation system shall provide such information as may be required by LACERS to understand and administer its investments.

i) Assist the Staff in the Annual Real Estate Strategic Plan portfolio review.

j) Provide Board and Staff with topical research and education on investment subjects that are relevant to LACERS.

k) Review the Real Estate Policy annually and notify LACERS if any revisions are needed thereto.

l) Monitor and report on risk.

m) Provide ongoing real estate education information and seminars to the Board.

5. **Duties of Legal Counsel**

The legal counsel selected by LACERS along with the Office of the Los Angeles City Attorney will represent LACERS and will review all real estate related documents and provide advice for special investment situations as needed.

XII. RISK MANAGEMENT POLICY

The Board implements its risk management policy by monitoring the portfolio's compliance through the adoption of investment policies, guidelines, and procedures. The Board establishes reasonable risk parameters to ensure prudence and care in the management of the System's assets, while allowing flexibility in capturing investment opportunities as they may occur.

A. Purpose

A successful investment process fully integrates practical risk management concepts into a comprehensive framework that applies to all parties that monitor or manage assets on behalf of the System, including the Board, General Fund Consultant, Staff, investment managers, and other third parties involved in the investment of System's assets. Investment risk management is essential to prudent investment of pension plan assets because it improves the likelihood that the System is adequately compensated for the risks taken, and helps to avoid unexpected and unintended investment risk.

The purpose of this Policy is to provide a comprehensive framework for the management of investment risk of the System's assets at the total System, asset class and individual manager level in support of the fiduciary obligations of the Board and consistent with governing principles and other policies of the System. It specifically defines responsibilities, objectives, processes, and risk measures pertinent to investment risks incurred when investing plan assets to meet or exceed stated pension goals and objectives.

This Policy is dynamic and expected to be updated periodically with LACERS plan objectives, technology, and regulatory and/or market environment changes.

B. Roles and Responsibilities

1. **Duties of the Board**

   a) The Board adopts and implements the long-term investment strategy through the System's asset allocation policy. This decision drives the long term performance, exposures, and risk of the System. The asset allocation decision provides the basis for monitoring strategic ("beta") investment risk.

   b) The Board is also responsible for the asset class structure decisions. This decision drives the long term excess performance and excess risk for each of the asset classes in which the System invests. The target asset class structure provides the basis for monitoring active ("alpha") investment risk.

2. **Duties of the Staff:**

   a) Staff monitors risks associated with the investment managers in accordance with the Manager Monitoring Policy described in Section VIII. Staff evaluates both qualitative and quantitative risk factors on a regular basis and conducts the due diligence in to the context of the total plan assets.

   b) Staff reviews the asset allocation as determined by the Board, on a daily basis and rebalances the portfolio according to the Rebalancing Policy in Section V.G.

c) Staff also reviews any variance from the manager's investment guidelines and notifies the manager to become compliant.

d) Staff reviews on a quarterly basis industry standard risk and return metrics of the System.

3. **Duties of the Consultant:**

a) The consultant provides quarterly performance and risk metrics for Staff's review.

b) The consultant, as described in the Asset Allocation Policy in Section IV., conducts an asset allocation study every three years, or as needed, with updated risk and return capital market expectations

c) The consultant is responsible for developing the data necessary for the risk budgets to aid in the decision making process for the Board.

The risk management processes and guidelines established below determine the amount of risk the Board may use to implement these key decisions. Consultant and Staff will establish monitoring standards and periodically update these standards as conditions warrant.

C. **Risk Guidelines**

System Level

The largest driver of the System's total risk and return comes from the strategic asset allocation as approved by the Board. The Board determines the appropriate asset allocation through an asset-liability analysis where the Board evaluates multiple decision factors in order to determine the optimal asset allocation policy. The decision factors include, but are not limited to, funding status of The System, distribution of expected returns, new cash flow and distribution of employer cost. As part of that decision making process, the Board evaluates several optimal portfolios with varying risk profiles and takes into account the actuarial discount rate assumption.

Asset Class Risk Budgets

The next greatest driver of the System's return and risk is the asset class structure. Asset class structure decisions involve determining which strategies will be included within the asset class, the allocations to these strategies, and setting the active versus passive exposure.

A "risk budget" represents the amount of active risk the Board is willing to assume for each asset class. The Board adopts a risk budgeting approach to construct, measure, and monitor asset classes that include active and passive strategies. The Board believes that this approach provides an objective and systematic yet flexible means of constructing asset classes in a way which will maximize the probability of meeting long term asset class objectives while managing the risk of its public markets asset classes in a proactive manner.

LACERS' Risk Budgeting Process

In order to arrive at the optimal risk budget objective for each asset class, the Board engages in an objective, disciplined process that will be uniformly applied to all asset classes that include active and passive strategies. This process involves a mean variance optimization approach which employs the following inputs for each strategy under consideration by the Board:

1. Expected excess return over the asset class benchmark
2. Expected excess risk over the asset class benchmark
3. Expected correlations between strategy excess returns
4. Constraints to ensure prudent exposures to strategies and risk factors

The objective of this mean variance optimization exercise is to arrive at an excess risk target (i.e., the risk budget) which maximizes the excess return desired by the Board. The risk budget reflects the amount of excess risk the Board is willing to take for that desired excess return.

Expected Excess Return

The expected excess return (i.e., "alpha") is the excess return a strategy should produce over a market cycle net of fees. This excess return will be forward looking based upon the following criteria:

1. Market efficiency
2. Manager's historical information ratio
3. Strategy characteristics
4. Peer universe historical excess return

Expected Excess Risk

The expected excess risk (i.e., "tracking error") is the excess risk of a strategy as measured by standard deviation of the excess return. This excess risk assumption can be either forward looking or based upon historical actual excess risk as produced by the strategy under consideration versus the asset class benchmark. In order for historical excess risk to be employed in the risk budgeting process, the strategy must have at least 60 months of data points. If the strategy under consideration does not have 60 months of data points, then a forward looking expected excess risk assumption will be employed.

Expected Excess Correlations

Correlation is a measure of the degree to which asset class returns move together. In structuring asset classes, the Board seeks to avoid having too much exposure to common factor risks and to maximize the diversification potential of the strategies ultimately employed within the asset class. Expected excess correlations will be calculated using historical excess (versus the asset class benchmark) returns when available. If an insufficient excess return history exists (i.e., less than 60 months of data), then Consultant or Staff will employ their respective risk analytics to determine a reasonable excess correlation on a forward looking basis.

Framework for Policy Implementation

The risk budgeting process outlined above will be conducted in conjunction with the Board's asset/liability valuation process. The frequency of this process will be at least every three years or sooner if warranted based upon changes in market conditions or benefits to plan participants. The Board may choose at that time to revise or retain its existing risk budget as a result of this process.

The risk budgeting process will also be conducted at any time a strategy or manager change is contemplated so that alternative strategies or managers can be evaluated in the context of the entire asset class structure to determine the impact on the Board's asset class risk budget. This will be done in order to objectively evaluate alternatives in a disciplined, holistic fashion. The Board may choose to revise its risk budget target as a result of this evaluation process. Additionally, the risk budgeting process will be conducted when actual excess risk has been outside of the target risk budget range for four rolling 60-month periods in order to determine whether strategy/manager allocations should be altered or replaced altogether.

D. **Measurement and Monitoring of LACERS Risk Guidelines**

The Board periodically monitors actual strategic and active asset class risks versus the Board's respective risk target and asset class risk budgets. The Board is provided periodic fund risk reports which are used to analyze, evaluate, and detail exposures and drivers of System's risks.

The focus of the Board's monitoring activity is rolling 60-month periods. The Consultant will measure and monitor strategic and active asset class expected risk and return on a quarterly basis, Staff will review the information, and report to the Board its findings, including the key drivers of risk and return, as part of the quarterly performance report.

XIII. GEOPOLITICAL RISK INVESTMENT POLICY

A. Introduction

This policy is intended to provide a framework to address such issues as social unrest, labor standards, human rights violations, and environmental concerns.

B. LACERS Board's Fiduciary Responsibilities

Consistent with the California Constitution, the City Charter, and City Administrative Codes, and as set forth in the LACERS Investment Policy Statement, the Board must follow the standards set for all retirement board commissioners.

The Constitution imposes fiduciary responsibility on the commissioners of the Board to:

1. Administer the System's assets;
2. Exercise a high degree of care, skill, prudence and diligence;
3. Diversify investments to minimize risk and maximize return; and,
4. Specifically emphasizes that their duty to the System's members come first, before any other duty.

The System is sensitive to concerns that environmental, social, and corporate governance geopolitical issues may affect the performance of investment portfolios (through time and to varying degrees across companies, sectors, regions, and asset classes). Importantly, the System's ownership of securities in a corporation does not signify approval of all of a company's policies, products, or actions.

Investments shall not be selected or rejected based solely on geopolitical risk factors. Accordingly, a company's possible risky geopolitical conduct can only be taken into consideration if the conduct is deemed to demonstrate a negative effect on the investment performance of the company, and ultimately the System.

C. Process for Identifying and Mitigating Corporate Governance Geopolitical Risks to the LACERS Portfolio

1. The LACERS Staff will keep the Board apprised of geopolitical problems and issues, and take into account actions of other like prudent investors.
2. Once identified, the Board shall decide whether to address these issues in a particular case based on the size of the interest that the System holds in the business and the effect of the business' violation of the System's Geopolitical Risk Factors on investment returns.
3. The Board will direct the Staff to solicit feedback from the investment managers holding the security exposed to geopolitical risk as well as conduct independent study to research the impact of the risk.

4. Upon the Board determination of a company's behavior presenting a potential investment loss to the System, the Board shall promptly direct the Staff to seek a change in the company's behavior.
5. Staff will engage, in a constructive manner, corporate management whose actions are inconsistent with this Policy to seek a change in corporate behavior.
6. After all reasonable efforts have been made to engage management constructively, the Board may determine whether it is prudent to hold such investments or whether it is prudent to sell such investments.
7. At such time, the System will work with the investment manager whose portfolio holds the investment, consultant(s) and fiduciary counsel to determine a prudent course of action.
8. Should the Board decide to take action to divest, Staff will communicate the decision to all of the System's investment managers to adhere to the Board's actions going forward.

D. **Geopolitical Risk Factors**

Respect for Human Rights • Judicial System • Arbitrary or Unlawful Deprivation of Life • Disappearance • Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment • Arbitrary Arrest, Detention, or Exile • Arbitrary Interference with Privacy, Family, Home, or Correspondence • Use of Excessive Force and Violations of Humanitarian Law in Internal Conflicts • Governmental Attitude Regarding International and Non-Governmental Investigation of Alleged Violations of Human Rights
Respect for Civil Liberties • Freedom of Speech and Press • Freedom of Peaceful Assembly and Association • Freedom of Religion • Freedom of Movement Within the Country, Foreign Travel, Emigration, and Repatriation • Civil Unions/Same Sex Marriage
Respect for Political Rights • The Right of Citizens to Change Their Government
Discrimination Based on Race, Sex, Sexual Orientation, Disability, Language, or Social Status • Women/Gender • Children • Persons With Disabilities • National/Racial/Ethnic Minorities • Indigenous People

• Gender Identity • Age Discrimination
Worker Rights • The Right of Association • The Right to Organize and Bargain Collectively • Prohibition of Forced or Bonded Labor • Status of Child Labor Practices and Minimum Age for Employment • Acceptable Conditions of Work • Trafficking in Persons
Environmental • Air Quality • Water Quality • Climate Change • Land Protection
War/Conflicts/Acts of Terrorism • Internal/External Conflict • War • Acts of Terrorism • Party to International Conventions and Protocols

XIV. PROXY VOTING POLICY

A. Introduction

As good corporate governance practices are widely believed to increase shareholder value, public retirement systems across the country are becoming more active in encouraging good corporate governance practices among companies in which they own stock.

As such the core objectives of LACERS Proxy Policy are:

1. Manage proxy voting rights with the same care, skill, diligence and prudence as is exercised in managing other assets.
2. Exercise proxy voting rights in the sole interest of the System's members and beneficiaries in accordance with all applicable statutes consistent with the Board proxy policy.
3. Provide a framework for voting shares responsibly and in a well-reasoned manner.
4. Align the interests of shareowners and corporate management to build long-term sustainable growth in shareholder value for the benefit of the System.

These primary objectives shall be considered whenever the Board and/or Corporate Governance Committee considers policy, reviews proxy voting issues, recommends corporate governance investment activities, or takes other corporate governance-related actions.

B. Statement of Purpose

The Board has formulated this policy to provide a guideline for proxy voting. This policy is set forth in the best interest of LACERS investment program to support sound corporate governance practices that maximize shareholder value.

All applications of this policy are executed by an outside proxy voting agent. The policy will be reviewed on a bi-annual basis. The proxy voting agent provides quarterly voting reports summarizing all votes cast during that time period. These reports are reviewed for compliance with the proxy voting policy.

Section 9 PROXY VOTING POLICY

1. BOARD OF DIRECTORS
Electing directors is the single most important stock ownership right that shareholders can exercise. Shareholders can promote healthy corporate governance practices and influence long-term shareholder value by electing directors who share shareholder views. In evaluating proxy items related to a company's board, director accountability, independence and competence are of prime importance to ensure that directors are fit for the role and best able to serve shareholders' interests.

No.	Issue	LACERS Position	Rationale
1.1	ELECTION OF DIRECTORS IN UNCONTESTED ELECTIONS	LACERS supports company management in principle VOTING AGENT'S DISCRETION	It is prudent to vote for the prescribed full slate of directors as long as the slate of directors will conduct themselves in the best interest of the shareholders. Director nominees should be evaluated based on accountability, responsiveness to shareholders, independence from company management, and competence and performance.
1.2	BOARD INDEPENDENCE	FOR	At a minimum, a majority of the board should consist of directors who are independent. Corporate boards should strive to obtain board composition made up of a substantial majority (at least two-thirds) of independent directors.[5]
1.3	MAJORITY THRESHOLD VOTING FOR THE ELECTION OF DIRECTORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Under a plurality system, a board-backed nominee in an uncontested election needs to receive only a single affirmative vote to claim his or her seat in the boardroom. Even if holders of a substantial majority of the votes cast "withhold" support, the director nominee wins the seat. Under the majority vote standard, a director nominee must receive support from holders of a majority of the votes cast in order to be elected (or re-elected) to the board. In contested elections where there are more nominees than seats, a carve-out provision for plurality should exist.
1.4	SEPARATE CHAIR AND CEO	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A CEO who also heads a board is less accountable than one who must answer to an independent chairman as well as fellow directors. However, there could be times when it makes sense for one person to wear two hats. On balance, there appears to be more gained and less lost from separating the two jobs at major companies. The Board generally favors the separation of the chairman and CEO. However, the Board believes it may be in the best interests of a corporation and the shareholders to have one person fulfilling both positions in smaller companies.

[5] CalPERS. Global Principles of Accountable Corporate Governance. February 16, 2010. 8.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
1.5	LIMITING BOARD SIZE	FOR	Proposals that allow management to increase or decrease the size of the board at its own discretion are often used by companies as a takeover defense. Shareholders should support management proposals to fix the size of the board at a specific number of directors, thereby preventing management (when facing a proxy contest) from increasing the size of the board without shareholder approval.[6]
1.6	COMMITTEE INDEPENDENCE	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	The key board committees – audit, compensation, and nominating committees – should be composed exclusively of independent directors if they currently do not meet that standard. The company's board (not the CEO) should appoint the committee chairs and members. Committees should be able to select their own service providers to assist them in decision making.
1.7	DIRECTOR QUALIFICATIONS AND RESTRICTIONS Requires directors to own a minimum amount of stock; impose tenure limits; establishing a minimum or maximum age requirement	AGAINST	Establishing a minimum amount of stock ownership could preclude very qualified candidates from sitting on the board. Tenure limits and age restrictions could force out experienced and knowledgeable board members.
1.8	LIABILITY AND INDEMNIFICATION OF OFFICERS AND DIRECTORS	CASE-BY-CASE VOTING AGENT'S DISCRETION	This indemnifies corporate officers and directors against personal liability suits as a result of their official status. This indemnification is necessary to attract and keep the best-qualified individuals. However, officers' and directors' liability should not be limited or fully indemnified for acts that are serious violations of fiduciary obligations such as gross negligence or intentional misconduct.
1.9	OBLIGATION OF BOARDS TO ACT ON SHAREHOLDER PROPOSALS RECEIVING MAJORITY SUPPORT To ensure that the voices of the owners of the firm are heard.	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Boards are responsible for ensuring that the voices of the owners of the firm are heard. If the majority of shareholders have indicated they desire a particular governance change, the board should support the proposal in question.
1.10	DIRECTOR REMOVAL BY SHAREHOLDERS	FOR	Shareholders should have the right to remove directors or fill director vacancies. Lack of such a policy could allow management to protect themselves from various shareholder initiatives.

[6] LACERA. Domestic Proxy Voting Guidelines. April 22, 2009. 21.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
1.11	SHAREHOLDER ADVISORY COMMITTEES	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	It is often difficult for directors to communicate to and hear from shareholders, because shareholders tend to be numerous, unidentified, dispersed, and silent. This proposal establishes committees of shareholders to make communication easier and more effective. However, establishment of such committees can be time consuming and expensive. The Board prefers the establishment of such committees where there is no other available mechanism to communicate with the company boards.
1.12	PROXY CONTESTS	CASE-BY-CASE VOTING AGENT'S DISCRETION	A proxy contest is a strategy that involves using shareholders' proxy votes to replace the existing members of a company's board of directors. By removing existing board members, the person or company launching the proxy contest can establish a new board of directors that is better aligned with their objectives. Proxy contests should be examined on a case-by-case basis considering factors such as the company's performance relative to peers, strategy of incumbents vs. dissidents, experience of director candidates, current management's track record, etc.
1.13	REIMBURSEMENT OF PROXY SOLICITATION EXPENSES	CASE-BY-CASE VOTING AGENT'S DISCRETION	Most expenditures incurred by incumbents in a proxy contest are paid by the company. In contrast, dissidents are generally reimbursed only for proxy solicitation expenses, if they gain control of the company. Dissidents who have only gained partial representation may also be reimbursed in cases where the board and a majority of shareholders approve. In successful proxy contests, new management will often seek shareholder approval for the use of company funds to reimburse themselves for the costs of proxy solicitation.

2. AUDIT-RELATED

Shareholders must rely on company-produced financial statements to assess company performance and the values of their investments. External auditors play an important role by certifying the integrity of these financial reports provided to shareholders. To ensure that an external auditor is acting in shareholders' best interest, the auditor must be independent, objective, and free of potential conflicts of interest.

No.	Issue	LACERS Position	Rationale
2.1	RATIFYING AUDITORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	The Board generally supports a company's choice of audit firms unless an auditor has a financial interest in or association with the company and is therefore not independent; there is reason to believe that the independent auditor has rendered an inaccurate opinion of the company's financial position; or fees are excessive as defined by ISS (Non-audit fee > audit fees + audit related fees + tax compliance/preparation fees).
2.2	LIMITING NON-AUDIT SERVICES BY AUDITORS	FOR	Auditor independence may be impaired if an auditor provides both audit-related and non-audit related services to a company and generates significant revenue from these non-audit services. The Board believes that a company should have policies in place to limit non-audit services and prevent conflicts of interest.
2.3	ROTATION OF AUDITORS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A long-standing relationship between a company and an audit firm may compromise auditor independence for various reasons including an auditor's closeness to client management, lack of attention to detail due to staleness and redundancy, and eagerness to please the client.[7] Enron and Anderson is a prime example of this situation. The Board believes it may be prudent to rotate auditors every 5 to 7 years.
2.4	ELECTION OF THE AUDIT COMMITTEE Section 404 of the Sarbanes-Oxley Act requires that companies document and assess the effectiveness of their internal controls. The Audit Committee should be comprised of the independent directors	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Companies with significant material weaknesses identified in the Section 404 disclosures potentially have ineffective internal financial reporting controls, which may lead to inaccurate financial statements, hampering shareholder's ability to make informed investment decisions, and may lead to the destruction in public confidence and shareholder value. The Audit Committee is ultimately responsible for the integrity and reliability of the company's financial information, and its system of internal controls, and should be held accountable.

[7] Arel, Barbara, Brody, Richard G. & Pany, Kurt. "Audit Firm Rotation and Audit Quality."The CPA Journal (January 2005). November 12, 2010.

3. COMPENSATION

The Board endorses executive compensation plans that align management and shareholders' interest. Executive pay programs should be fair, competitive, reasonable, and appropriate. Pay-for-performance plans should be a central tenet of executive compensation and plans should be designed with the intent of increasing long-term shareholder value. Executives should not be incentivized to take excessive risks that could threaten long-term corporate viability and shareholder value.

No.	Issue	LACERS Position	Rationale
3.1	EXECUTIVE COMPENSATION APPROVED BY THE BOARD OF DIRECTORS	FOR	While some corporations allow compensation issues to be left to management, it is more prudent to have a compensation committee, composed of independent directors, approve, on an annual basis, executive compensation, including the right to receive any bonus, severance or other extraordinary payment. If a company does not have a compensation committee, then executive compensation should be approved by a majority vote of independent directors. The Board normally prefers to support the company's recommendation of executive compensation issues.
3.2	INDEPENDENT COMPENSATION CONSULTANT	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A company's board and/or compensation committee should have the power to hire an independent consultant – separate from the compensation consultants working with corporate management – to assist with executive compensation issues to avoid conflicts of interest. Disclosure should be provided about the company's, board's, and/or compensation committee's use of compensation consultants, such as company name, business relationship(s) and fees paid.
3.3	PAY FOR PERFORMANCE	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	A significant portion of an executive's pay should be tied to performance over time through the use of short and long-term performance-based incentives to align management and shareholders' interests. From a shareholders' perspective, performance is gauged by the company's stock performance over time. The attainment of executives' incentive goals should ultimately translate into superior shareholder returns in the long-term. Standard stock options and time-vested restricted stock are not considered performance-based since general market volatility alone can increase their value.
3.4	ADVISORY VOTES ON COMPENSATION (SAY ON PAY) – SHAREHOLDER PROPOSALS	FOR	A non-binding "say on pay" vote would encourage the board's compensation committee to be more careful about doling out unduly rich rewards that promote excessive risk-taking. It also would be a quick and effective way for a board to gauge whether shareowners think the company's compensation practices are in their best interests.[8]
No.	**Issue**	**LACERS Position**	**Rationale**

[8] "Executive Compensation." Council of Institutional Investors. 2008. November 12, 2010.

Section 9 PROXY VOTING POLICY

3.5	ADVISORY VOTES ON COMPENSATION (SAY ON PAY) – MANAGEMENT PROPOSALS	CASE-BY-CASE VOTING AGENT'S DISCRETION	The advent of "say on pay" votes for shareholders in the U.S. is providing a new communication mechanism and impetus for constructive engagement between shareholders and managers/directors on pay issues. In general, the management say on pay (MSOP) ballot item is the primary focus of voting on executive pay practices -- dissatisfaction with compensation practices can be expressed by voting against MSOP rather than withholding or voting against the compensation committee.[9]
3.6	SAY ON PAY BALLOT FREQUENCY	FOR	The Board supports an annual MSOP for many of the same reasons it supports annual director elections rather than a classified board structure: because it provides the highest level of accountability and direct communication by enabling the MSOP vote to correspond to the information presented in the accompanying proxy statement for the annual shareholders' meeting. Having MSOP votes only every two or three years, potentially covering all actions occurring between the votes, would make it difficult to create meaningful and coherent communication that the votes are intended to provide.
3.7	STOCK OPTION PLANS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Stock options align the interests of management with the interests of shareholders. The Board prefers that options should be issued at or above fair market value. There should be no re-pricing of underwater options (stock options with little or no value due to poor performance), nor should there be a replenishment feature (automatic increases in the shares available for grant each year). Management must monitor the amount of dilution that stock options create. The total cost of the stock option plan should be reasonable relative to peer companies. The Board normally supports the use of stock options as a part of executive and management compensation.
3.8	HOLDING PERIOD FOR EQUITY COMPENSATION AWARDS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Executives should be required to hold a substantial portion of their equity awards, including shares received from option exercises, while they are employed at a company or even into retirement. Equity compensation awards are intended to align management interests with those of shareholders, and allowing executives to sell or hedge these shares while they are employees of the company undermines this purpose.[10]
3.9	EXCLUDING PENSION FUND INCOME	FOR	Earnings generated by a pension plan should not be included for executive compensation purposes.

[9] Institutional Shareholder Services. 2010 U.S. Proxy Voting Guidelines Summary. February 25, 2010. 38.
[10] Institutional Shareholder Services. 2010 Public Fund U.S. Proxy Voting Guidelines. 25.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
3.10	CLAWBACK OF INCENTIVE PAY	FOR	A company should recoup incentive payments made to executives and former executives if it is determined that the incentives were calculated from erroneous data, such as fraudulent or misstated financial results, and these incentive payments would not have been earned if correctly calculated.
3.11	GOLDEN PARACHUTES Golden parachutes are compensation arrangements that pay corporate managers after they leave their positions.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Golden parachutes can have a number of positive results: they can reduce management resistance to change, they help attract and retain competent talent, and they provide appropriate severance. Excessive golden parachutes not offered to other employees can damage their morale and can have a dilutive effect on shareholder wealth. A general rule is that the parachute should not exceed three times base salary. The Board is opposed to the payment of excessive executive compensation. Therefore, golden parachute agreements should be submitted to shareholders for ratification.
3.12	CHANGE OF CONTROL TRIGGERING UNJUSTIFIED ACCRUAL OF BENEFITS	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	A change of control event should not result in an acceleration of vesting of all unvested stock options or lapsing of vesting/performance requirements on restricted stock/performance shares, unless there is a loss of employment or substantial change in job duties for an executive.
3.13	GOLDEN COFFINS	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Golden coffins are death-benefit packages awarded to the heirs of high ranking executives who die during employment with a company. Benefits awarded can include, but are not limited to, unearned salary and bonuses, accelerated stock options and perquisites. The Board is against excessive executive compensation, but recognizes that offering golden coffin benefits may be necessary to attract top talent.
3.14	SUPPLEMENTAL EXECUTIVE RETIREMENT PLANS (SERPS)	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	SERPs are executive-only retirement plans designed as a supplement to employee-wide plans. These plans may be structured to contain special provisions not offered in employee-wide plans such as above market interest rates and excess service credits. Incentive compensation may also be used in calculating retirement benefits, resulting in better benefit formulas than employee-wide plans and increased costs to the company. The Board supports SERPs if these plans do not contain excessive benefits beyond what is offered under employee-wide plans.
3.15	PROPOSALS TO LIMIT EXECUTIVE COMPENSATION OR OTHER BENEFITS	AGAINST	Executive pay should not have a blanket limit such as being capped at a specified multiple of other workers' pay. There should not be an absolute limit to retirement benefits, nor a mandate that stipulates that there be salary reductions based on corporate performance.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
3.16	DIRECTOR COMPENSATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	This is normally automatically approved unless the program is exceptional or abusive. Directors should be compensated with a mix of cash and stock, with the majority, but not all, of the compensation in stock to align their interests with shareholders. There should be no blanket limits on directors' compensation, but pay should be commensurate with expected duties and experience. The Board normally prefers to support company management's decision. The Board prefers that compensation issues be decided by a majority vote of the independent directors.
3.17	NON-EMPLOYEE DIRECTOR RETIREMENT BENEFITS	AGAINST	Since non-employee directors are elected representatives of shareholders and not company employees, they should not be offered retirement benefits, such as defined benefit plans or deferred stock awards, nor should they be entitled to special post-retirement perquisites.[11]
3.18	DISCLOSURE OF EXECUTIVE COMPENSATION	FOR	The Board supports shareholder proposals seeking additional disclosure of executive compensation.
3.19	EMPLOYEE STOCK OWNERSHIP PROGRAMS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	On one hand, ESOPs have the potential for motivating and rewarding employees. On the other hand, there is concern about their use as management entrenchment devices and their potential dilutive effects on existing shareholder value. The Board believes that future purchasers must bear the same risk as current shareholders. Employee wealth obtained through stock ownership should be tied to shareholder value. The Board prefers no retroactive compensation. The Board supports the use of ESOPs.
3.20	401(K) EMPLOYEE BENEFIT PLANS	FOR	A 401(k) plan provides a highly visible benefit to employees that can be used to attract and retain quality personnel. The Board supports proposals to implement a 401(k) savings plan for employees.
3.21	OMNIBUS BUDGET RECONCILIATION ACT (OBRA) OF 1993 - RELATED COMPENSATION PROPOSALS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	IRS Section 162(m) of OBRA, prohibits a company from deducting more than $1 million of an executive's compensation for tax purposes unless certain prescribed actions are taken to link compensation to performance such as establishment of performance goals by a compensation committee of outside directors and shareholder approval of the compensation plan. The Board generally supports proposals to approve new compensation plans or amend existing compensation plans to comply with Section 162(m) if the company can obtain tax benefits and increase shareholder value, and the plans do not result in excessive executive compensation.

[11] Council of Institutional Investors. Corporate Governance Policies. 22.

4. SHAREHOLDER RIGHTS & TAKEOVER DEFENSES

Companies should feature shareholder rights in their corporate governance principles to allow shareholders the opportunity to participate directly in monitoring management. A 2003 study by the National Bureau of Economic Research found that "firms with weaker shareholder rights earned significantly lower returns, were valued lower, had poor operating performance, and engaged in greater capital expenditure and takeover activity."[12]

No.	Issue	LACERS Position	Rationale
4.1	ACCESS TO PROXY PROCESS	FOR	Access proposals allow shareholders who own a significant number of shares to access management's proxy material to evaluate and propose voting recommendations on proxy proposals and director nominees, and to nominate their own candidates to the board. These proposals are based on the belief that shareholder access rights provide for increased corporate accountability and healthy communication.
4.2	ADVANCE NOTICE REQUIREMENTS	LACERS supports this issue in principle. VOTING AGENT'S DISCRETION	Advance notice bylaws, holding requirements, disclosure rules and any other company imposed regulations on the ability of shareholders to solicit proxies beyond those required by law should not be so onerous as to deny sufficient time or otherwise make it impractical for shareholders to submit nominations or proposals and distribute supporting proxy materials.[13]
4.3	CLASSIFIED BOARDS AND STAGGERED BOARDS A structure for a board of directors in which a portion of the directors serve for different term lengths.	LACERS opposes this issue in principle. VOTING AGENT'S DISCRETION	Although shareholders need some form of protection from hostile takeover attempts, and boards need tools and leverage in order to negotiate effectively with potential acquirers, a classified board tips the balance of power too much toward incumbent management at the price of potentially ignoring shareholder interests.
4.4	CONFIDENTIAL VOTING A shareholder's voting position is kept confidential.	FOR	Shareholders over whom management have some power (for example, employee shareholders, money managers who stand to gain or lose company business, banks, insurance companies and companies with interlocking boards) may be deterred from voting against management if they know their votes will become known to management. Companies that can discover who is voting in which way prior to the meeting also have an advantage not enjoyed by any shareholder supporting or opposing any issue on the ballot, and in targeting those shareholders who vote against management and pressuring them to change their votes.

[12] Gompers, Paul, Ishii, Joy & Metrick, Andrew. 2003. "Corporate Governance and Equity Prices," The Quarterly Journal of Economics, MIT Press, vol. 118(1), pages 107-155, February.

[13] Council of Institutional Investors. Corporate Governance Policies. 8.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
4.5	CUMULATIVE VOTING Allows each shareholder to take the voting rights he or she has with respect to director candidates and accumulates them to vote for only one director, or for a smaller number of directors.	FOR	Cumulative voting enhances shareholders' abilities to elect a single director or a small number of directors, thus increasing their ability to have a voice on the board even when they lack the voting power to affect change-in-control or other major decisions. Some fear that allowing cumulative voting can allow or encourage disruptive or predatory shareholders.
4.6	SHAREHOLDER'S RIGHT TO ACT INDEPENDENTLY OF MANAGEMENT -- CALLING SPECIAL MEETINGS AND ACTING BY WRITTEN CONSENT	FOR	These include giving shareholders the ability to call a special meeting of shareholders without management's consent, and the ability to act by written consent (saving the costs and difficulties of holding a meeting). Most corporations support the retention, restoration, or creation of these rights. Shareholders need realistic mechanisms to protect their interests in situations where their interests are not aligned with management interest.
4.7	SUPERMAJORITY PROVISIONS Voting majority that is higher than those set by state law.	AGAINST	Sets a level of approval for specified actions that is higher than the minimum set by state law. These requirements often exceed the level of shareholder participation at a meeting, making action that requires a supermajority all but impossible.
4.8	LINKED (BUNDLED) PROPOSALS Combining more than one proposal.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Linked proposals often include "sweeteners" to entice shareholders to vote for a proposal (that includes other items) that may not be in the shareholders' best interest. The Board normally opposes linked proposals where one or more of the linked proposals is in opposition to the Board's proxy position.
4.9	VOTES TO ABSTAIN MEANS A CASTED VOTE	FOR	Counting abstained votes in the total pool of all votes cast.
4.10	BROKER VOTING RESTRICTIONS	FOR	Broker non-votes and abstentions should be counted only for purposes of a quorum.
4.11	FAIR PRICING	FOR	Fair price provisions prevent two-tier tender offers in which a buyer offers a premium price for only enough shares to obtain a controlling interest. It is unfair to pay some shareholders (those that did not tender in the first group) less than other shareholders.
4.12	GREEN MAIL Greenmail is the practice of shareholders accumulating a large block of stock in a company, then selling the stock back to the company at an above market price in exchange for agreeing not to attempt to take control for a lengthy period of time.	AGAINST	A vote of the holders of a majority of the outstanding shares of common stock, regardless of class, shall be required to approve any corporate decision related to the finances of a company which will have a material effect upon the financial position of the company and the position of the company's shareholders.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
4.13	POISON PILLS A method used by boards, which prevent anyone from acquiring a large portion of the company stock for a corporate takeover.	LACERS opposes this issue in principle VOTING AGENT'S DISCRETION	Poison pills can consist of a wide variety of provisions adopted by boards without shareholder approval, designed to make it financially unattractive – indeed, often financially devastating – for a shareholder to purchase more than a small percentage of the company's stock, often by triggering the creation of a large number of new stocks or warrants that dilute the offending shareholder's interest to the point of making it virtually valueless. The Board is normally opposed to the use of poison pills.
4.14	NET OPERATING LOSS (NOL) POISON PILLS See 4.13 for poison pill definition.	CASE-BY-CASE VOTING AGENT'S DISCRETION	NOLs may be used to reduce future income tax payments and have become valuable assets to many corporations. If a corporation experiences an ownership change as defined by Section 382 of the tax code, then its ability to use a pre-change NOL in a post-change period could be substantially limited or delayed.[14] NOL pills are adopted as a takeover deterrent to preserve the tax benefit of NOLs.
4.15	POISON PILLS – ALLOW FOR SHAREHOLDER VOTE	FOR	Since poison pills ultimately impact the wealth of shareholders, the Board supports voting measures that allow for the shareholders to vote on matters pertaining to the use of poison pills.
4.16	RE-INCORPORATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Corporations may wish to reincorporate in another state to take advantage of favorable corporate law, while providing maximized shareholder values and operational flexibility. On the other hand, reincorporation laws of other states could be such as to limit shareholder rights or reduce shareholder wealth. The Board normally supports company management's decisions on re-incorporation matters.
4.17	STATE ANTI-TAKEOVER LAWS	CASE-BY-CASE VOTING AGENT'S DISCRETION	State anti-takeover laws seek to deter hostile takeover attempts of state-based corporations with the intent of keeping target companies locally based and preserving jobs. These laws may also complicate friendly mergers and impose great costs and delays on shareholders and stakeholders in the corporation. Most state anti-takeover provisions allow companies to "opt in" or "opt out" of coverage via shareholder vote.
4.18	TARGETED SHARE PLACEMENTS Placing stock in the hands of friendly investors	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Targeted share placements (or "White Squire" placements) occur when a company puts large blocks of stock or convertible securities into the hands of a friendly investor or group of investors. This is often an inexpensive method of raising cash for a company. The Board prefers that company management seeks authorization before establishing a targeted share placement but supports this corporate action.

[14] Nathan, Charles. "Recent Poison Pill Development and Trends." May 12, 2009. The Harvard Law School Forum on Corporate Governance and Financial Regulation.

5. CAPITAL STRUCTURE

Corporate financing decisions can have a significant impact on shareholder value, particularly when these decisions may result in common share dilution. As a result, shareholders must analyze all management proposals to modify capital structure to determine whether these financing decisions are in their best interests.

No.	Issue	LACERS Position	Rationale
5.1	INCREASES IN THE NUMBER OF AUTHORIZED SHARES OF STOCK	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Companies need the flexibility of issuing additional shares for stock splits, stock dividends, financings, acquisitions, employee benefit plans and general corporate purposes. The Board prefers that increases should not exceed three times the number of existing outstanding shares and that the company specify a purpose for the proposed increase.
5.2	ONE SHARE, ONE VOTE Each share of common stock, regardless of its class, shall be entitled to vote in proportion to its relative share of the total common stock equity of the corporation.	FOR	The right to vote is inviolate and may not be abridged by any circumstances or by any action of any person. Each share of common stock, regardless of its class, shall be treated equally in proportion to its relative share in the total common stock equity of the corporation, with respect to any dividend, distribution, redemption, tender or exchange offer. In matters reserved for shareholder action, procedural fairness and full disclosure are required.
5.3	PAR VALUE ADJUSTMENT OF COMMON STOCK	FOR	In extraordinary cases when a stock price falls below its par value, a company wishing to issue additional stock would be unable to do so without reducing par value. Companies may also propose reductions in par value to conform to state legislative changes in the required minimum level of par value.[15]
5.4	PREEMPTIVE RIGHTS Provides current stockholders an option to maintain their relative ownership position.	AGAINST	Preemptive rights require a company issuing new shares to offer them to their existing shareholders first, in proportion to their existing holdings. This gives current shareholders the ability to maintain their relative equity position as a shareholder. Preemptive rights generally have limited importance, given the increase in the size and liquidity of the secondary market and their potential for abuse.
5.5	DEBT RESTRUCTURING	CASE-BY-CASE VOTING AGENT'S DISCRETION	As part of a debt restructuring plan, a company may propose to increase and issue common and/or preferred shares. These proposals should be evaluated considering dilution to existing shareholders, potential changes in company control, the company's current financial position, terms of the offer, whether bankruptcy is imminent and alternatives.

[15] Institutional Shareholder Services. U.S. Proxy Voting Manual. 2006. November 12, 2010.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
5.6	CONVERSION OF SECURITIES	CASE-BY-CASE VOTING AGENT'S DISCRETION	Proposals to convert securities, such as converting preferred stock to common shares, should be evaluated based on the dilution to existing shareholders, the conversion price relative to market value, financial issues, control issues, termination penalties, and conflicts of interest.
5.7	SHARE REPURCHASES Corporations buy back a portion of the outstanding shares.	FOR	The Board normally favors of share repurchase plans if the company boards feel that the stock is undervalued or there is a legitimate corporate purpose.
5.8	REVERSE STOCK SPLITS	FOR	A reverse stock split reduces the number of shares owned and increases the share price proportionately. A reverse stock split has no effect on the value of what shareholders own. Companies often reverse split their stock when they believe the price of their stock is too low to attract investors to buy their stock or to avoid being delisted.[16] If the number of authorized shares is not proportionately reduced with a reverse stock split, then LACERS treats these proposals as a request to increase authorized shares.
5.9	BLANK CHECK PREFERRED STOCK Blank check preferred stock is authorized stock over which the board has complete discretion to set voting rights, dividend rates, and redemption and conversion privileges.	AGAINST	There is the potential for abusing this kind of stock by the board. Although some guidelines note that blank check preferred stock gives management great flexibility, and this might be valuable and in the corporate interest, in general it is felt that this kind of flexibility, free of shareholder control, is insufficient justification for the creation of this type of stock.

[16] “Reverse Stock Splits.” Securities and Exchange Commission. 2000. November 12, 2010. <http://www.sec.gov/answers/reversesplit.htm>.

6. CORPORATE RESTRUCTURINGS

Corporate restructurings, such as mergers and leveraged buyouts, can have a major effect on shareholder value. Many of these transactions require shareholder approval and must be examined carefully to determine whether they are in the best financial interests of the shareholders.

No.	Issue	LACERS Position	Rationale
6.1	ASSET SALES	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Asset sales should be evaluated based on the impact on the balance sheet/working capital, value received for the asset, and potential elimination of inefficiencies. The Board generally supports management decisions to sell assets.
6.2	GOING PRIVATE TRANSACTIONS (LEVERAGED BUYOUTS AND MINORITY SQUEEZEOUTS)	CASE-BY-CASE VOTING AGENT'S DISCRETION	Going private transactions such as leveraged buyouts and minority squeezeouts should be evaluated on a case-by-case basis taking into account the following: offer price and imbedded premium, fairness opinion, how the deal was negotiated, conflicts of interest, other alternatives/offers considered, and the risk to shareholders if the attempt to take the company private fails.
6.3	LIQUIDATIONS	CASE-BY-CASE VOTING AGENT'S DISCRETION	Liquidation proposals are generally bad news for long-term investors. They usually occur after a prolonged period of declines in earnings and share prices. However, liquidation may be an attractive option if the sale of the firm's assets on a piece-meal basis can be accomplished at a higher-than-market price. Liquidation proposals should be evaluated based on management's efforts to pursue other alternatives, appraised value of assets, the compensation plan for executives managing the liquidation, and the likelihood of bankruptcy if the liquidation proposal is not approved.[17]
6.4	MERGERS AND ACQUISITIONS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Case-by-case votes are recommended on mergers or acquisitions since the circumstances by which they arise are unique. The Board supports the company management's decision on mergers and acquisitions when such decision is based upon the findings of a thorough due diligence process and is in the best interest of the shareholders.
6.5	SPIN-OFFS	CASE-BY-CASE VOTING AGENT'S DISCRETION	Corporations may seek to streamline their operations by spinning off less productive or unrelated subsidiary businesses. The spun-off companies are expected to be worth more as independent entities than as parts of a larger business. Spin-offs are evaluated case-by-case depending on the tax and regulatory advantages, planned use of sale proceeds, managerial incentives, valuation of spinoff, fairness opinion, benefits to the parent company, conflicts of interest, corporate governance changes, and changes in the capital structure.

[17] Institutional Shareholder Services. U.S. Proxy Voting Manual. 2006. November 12, 2010.

Section 9 PROXY VOTING POLICY

7. MISCELLANEOUS CORPORATE GOVERNANCE			
No.	**Issue**	**LACERS Position**	**Rationale**
7.1	ANNUAL MEETING DATE & LOCATION	LACERS supports company management in principle VOTING AGENT'S DISCRETION	Mandatory rotation of the annual meeting would not significantly increase stockholders' access to management since there are convenient alternatives available to interested stockholders. It would decrease the company's flexibility without a material benefit to stockholders. The Board normally supports company management's decision on this issue.
7.2	CORPORATE NAME CHANGE	FOR	A company may seek a name change to better portray its strategic image or re-brand itself. The Board supports company management's decision on this issue.
7.3	CORPORATION CHARTER & BYLAW AMENDMENTS	LACERS supports this issue in principle VOTING AGENT'S DISCRETION	Charters and bylaws should not be amended without shareholder approval unless the changes are of a housekeeping nature such as minor corrections or updates.

Section 9 PROXY VOTING POLICY

8. SOCIAL & ENVIRONMENTAL

On November 13, 2007, the Board adopted the United Nations Principles for Responsible Investment ("Principles"), a policy of global best practices for environmental, social, and governance (“ESG”) investing. LACERS current proxy voting agent, Institutional Shareholder Services, (“ISS”), is a signatory to the Principles and incorporates them into its proxy analysis process. Therefore, when considering how to vote on most ESG proposals, investment staff relies on the research expertise and voting recommendations of ISS.

No.	Issue	LACERS Position	Rationale
8.1	DIVERSIFICATION OF BOARDS	LACERS supports this issue in principle VOTING AGENT’S DISCRETION	Women and minorities have played major and responsible roles not only in government, higher education, law and medicine, but also in communications, electronics, and finance. The Board normally prefers to support diversification on company boards. However, the Board recognizes that such a mandate carried out without regard to the selection of the most highly qualified candidates might not be in the best interest of these companies.
8.2	CORPORATE BOARD MEMBERS SHOULD WEIGH SOCIO-ECONOMIC, LEGAL AND FINANCIAL FACTORS WHEN EVALUATING TAKEOVER BIDS	CASE-BY-CASE BASIS. VOTING AGENT’S DISCRETION	While broad social and environmental issues are of concern to everyone, institutional shareholders acting as representatives of their beneficiaries must consider, specifically, the impact of the proposal on the target company. A decision on whether to support or oppose such proposals shall focus on the financial aspects of social and environmental proposals. If a proposal would have a negative impact on the company's financial position or adversely affect important operations, LACERS would oppose the resolution. Conversely, if a proposal would have a clear and beneficial impact on the company's finances or operations, LACERS would support the proposal.
8.3	INDEPENDENT REVIEW OF COMPANY OR PLANT OPERATIONS	AGAINST	An independent review of company or plant operations which will be provided at company expense to the shareholders to consider the cost of and alternatives to the present or proposed projects on the primary operation. This process would be costly and time-consuming.
8.4	DISCLOSURE OF OFFICERS, DIRECTORS AND INVOLVED OUTSIDERS’ GOVERNMENTAL AFFILIATIONS	AGAINST	Miscellaneous issues include disclosures of lists of officers, directors and involved outsiders who have served in any governmental capacity during the previous five years. In addition, disclosure includes the lists of law firms employed by the companies, rundowns on fees and the revelation as to whether any elected or appointed official have partnership interest in the retained law firms. To the extent that potential conflicts of interest cannot be controlled by corporate procedures, professional ethics, and law, these disclosures will make no difference.

Section 9 PROXY VOTING POLICY

No.	Issue	LACERS Position	Rationale
8.5	CORPORATE AFFIRMATION OF ITS NON-COERCIVE POLITICAL PRACTICES	AGAINST	This affirmation is intended to ensure that the corporation avoids a number of coercive political practices such as distribution of contribution cards in favor of one political party. Since these practices are illegal, the issue is moot.
8.6	LIMITING CORPORATE PHILANTHROPY	AGAINST	These proposals place restrictions and additional reporting obligations upon management's right to make corporate contributions to charitable, educational, community or related organizations. Most companies give money to charity. Because most companies must compete, those that do not contribute to charity risk damaging their good names.
8.7	STAKEHOLDERS' INTEREST BEFORE OR EQUAL WITH SHAREHOLDERS' INTEREST	ABSTAIN	Stakeholders include customers, suppliers, employees, communities, creditors and shareholders. Stakeholders are important to the success of the corporation and therefore the interests of each must be considered by directors and management. However, boards should not put the non-shareholder/stakeholder interests ahead of or on an equal footing with shareholders in terms of the corporation's ultimate purpose.
8.8	ALL OTHER ESG ISSUES	VOTING AGENT'S DISCRETION	Investment staff relies on the research expertise and voting recommendations of ISS for other ESG issues not addressed by this policy.

Section 9 PROXY VOTING POLICY

9. ISSUES NOT ADDRESSED BY POLICY

For proxy issues not addressed by this policy that are market specific, operational or administrative in nature, and likely non-substantive in terms of impact, LACERS gives ISS discretion to vote these items.

Substantive issues not covered by this policy and which may potentially have a significant economic impact for LACERS shall be handled accordingly:

1) ISS shall alert investment staff of substantive proxy issue not covered by policy as soon as practicable;
2) Investment staff and/or the General Manager make shall determine whether the item requires Corporate Governance Committee (“Committee”) and/or Board of Administration (“Board”) consideration;
3) If the issue does not require Committee and Board consideration, then staff will vote the issue based on available research;
4) If the issue requires Committee and Board consideration, then the item will be prepared and presented to the Committee and Board for consideration. Following Committee and Board action, staff will then have the issue voted accordingly.
5) If time constraints prevent a formal gathering of the Committee and Board, then LACERS Board approved Corporate Governance Actions Protocol, as reprinted below, shall apply and staff will then have the issue voted accordingly.

CORPORATE GOVERNANCE ACTIONS POLICY
Board Adopted December 2008

From time to time LACERS receives requests from other pension funds or from affiliated organizations for support of various corporate governance actions. Many of the actions requested, such as requests to sign action letters, would otherwise appear to be consistent with existing Board policy. However, occasionally there is not adequate time to convene a Committee or Board meeting in advance to consider the matter.

The proposed Corporate Governance Actions Policy requires that one staff member plus one Board member both agree that the subject to be voted/acted on falls within the letter or spirit of adopted Board policy. If both agree, the measure will be executed by the General Manager or her designee.

The designated staff person will be the Chief Investment Officer (CIO). The designated Board member will be the Chair of the Corporate Governance Committee. In the absence of the CIO, the General Manager will become the designated staff member. In the absence of the Chair of the Corporate Governance Committee, the Board Chair will become the designated Board member.

XV. SECURITIES LENDING POLICY

A. Objectives

The primary goal of LACERS' Securities Lending Program ("Program") is to enhance returns for the System by lending securities owned by LACERS to qualified borrowers. The Program features customized guidelines for prudent risk controls and is designed to not interfere with LACERS' overall investment strategy.

B. Scope

The securities lending agent ("Agent"), pursuant to the securities lending contract, is responsible for locating creditworthy securities borrowers, facilitating securities lending transactions, managing collateral pledged by borrowers, providing daily mark-to-market, and acting in a fiduciary capacity in carrying out its lending duties on behalf of LACERS. The Agent may manage two distinct types of collateral with the goal to maximize net income, split between the Agent and the System, consistent with the safety of principal, maintenance of liquidity and LACERS' guidelines.

Cash collateral is reinvested by the Agent in a separate account based on LACERS' guidelines. Guidelines for the cash collateral separate account are provided in detail in the securities lending contract and address the eligible investments, credit quality, diversification, liquidity, and trading for the Program.

Non-cash collateral is held in a separate account established expressly for LACERS. Guidelines for the non-cash collateral separate account are provided in detail in the securities lending contract and address collateralization levels, eligible instruments, credit quality, and diversification.

C. Roles and Responsibilities

1. **The Board:**
   a) Reviews and approves the Securities Lending Policy.
   b) Modifies or terminates the Program.
   c) Selects and terminates the Securities Lending Agent.
   d) Reviews the Program's overall performance.
2. **Staff:**
   a) Oversees the performance of the lending agent and the cash collateral investment manager in carrying out the objectives of the Program and complying with pre-determined guidelines.
   b) Consistent with the Program objectives and the securities lending contract, reviews, approves, and removes the counterparties as proposed by the Agent.
   c) If the Board is unable to convene in a timely manner to address unusual and significant risk factors that are deemed to have a material adverse impact (e.g. a material reduction in cash reinvestment market liquidity) on the integrity of the Program, LACERS' General Manager and Chief Investment Officer may decide

jointly to modify or suspend the Program. The Chief Investment Officer shall report the action(s) and reasons for such action(s) at the next scheduled Board meeting.

d) Reports to the Board an annual report summarizing securities lending activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

3. **The Agent:**

a) Ensures that counterparties that borrow LACERS' securities are qualified pursuant to LACERS' approved credit standards.

b) Indemnifies LACERS against borrower default.

c) Accepts and invests collateral according to collateral investment guidelines agreed upon with LACERS.

d) Provides the following reports to LACERS:

Reporting Requirements of the Agent		
Ad hoc Reports	Monthly Reports	Quarterly Reports
• Any borrower defaults within a practicable time frame. • Any violations of LACERS' guidelines with a plan for correction within a practicable time frame.	• Volume and lending spreads for the Program. • Total income received by LACERS and by the Agent for borrowing activity. • Investment management activities and risk characteristics of the collateral investment portfolio including sector allocation, quality exposures, maturity exposures, borrower exposures, average days' liquidity, etc.	• LACERS lending activity, earnings, risk characteristics and general trends in the security lending marketplace.

D. **Potential Risks**

LACERS acknowledges the following primary risks of its securities lending activities:

1. **Counterparty Risk**

Counterparty risk arises when the borrower defaults on the return of the securities on loan to the lender. This risk is mitigated by LACERS' guideline requirements that borrowed securities are over-collateralized and marked to market on a daily basis by the Agent. Additionally, the Agent is bound by the securities lending contract to indemnify LACERS for any shortfalls in collateral in the event of a borrower default.

2. **Cash Reinvestment Risk**

Cash reinvestment risk arises when the investments in the cash collateral separate account become impaired or decrease in value, potentially resulting in a collateral deficiency and loss of principal. LACERS' guidelines are designed to minimize cash reinvestment risk.

3. **Interest Rate Risk**

Interest rate risk arises when the rebate rate that LACERS pays to the borrowers exceeds the return on the cash collateral investments. The Agent monitors and manages the interest rate exposure of the cash collateral pool versus the Agent's current interest rate forecast by using statistical analysis. Any negative earnings that occur as a result of interest rate risk will be shared between LACERS and the Agent at the same percentage as the fee arrangement.

4. **Other Risks**

Trade settlement and operational risks associated with securities lending are assumed by the Agent. Corporate actions such as voting rights remain with the security and will become the right of the borrower when the security is on loan. LACERS can still vote proxies for those shares not on loan or may instruct the Agent to return shares so that any specific proxy can be voted.

XVI. SECURITIES LITIGATION POLICY

A. **Purpose**

The Board adopts this Securities Litigation Policy to establish procedures and guidelines for monitoring, evaluating, and participating in both securities class actions and other securities-related litigation as appropriate to protect and maximize the recovery value of LACERS' assets.

B. **Objective**

The objective of the Securities Litigation Policy is to carry out the Board's fiduciary obligation to monitor securities class actions and other securities-related litigation in which LACERS has an interest, and to participate in such actions and recover damages when appropriate to protect and maximize the recovery value of LACERS' assets.

C. **Guidelines**

1. **Use of Outside Experts As Needed**

LACERS may engage the services of its custodian bank, third-party vendors, and with the concurrence of the City Attorney's Office, outside counsel, to assist LACERS to monitor securities litigation cases in which LACERS may have an interest, evaluate LACERS' potential losses, provide recommendations concerning whether to take an active role in the litigation, and/or represent LACERS in cases in which the Board has agreed to seek an active role.

2. **Threshold for Determinations by the Board to Actively Participate**

a) **Domestic Securities Actions**

The Board shall make a determination, based upon the analysis and recommendation provided by Staff and the City Attorney's Office, whether to take an active role in a particular domestic securities class action, including whether to seek lead plaintiff status or pursue an independent action, where: (1) the estimated recoverable damages to LACERS exceed two million dollars ($2,000,000.00); or (2) the estimated recoverable damages to LACERS exceed one million dollars ($1,000,000.00) and LACERS joins with one or more City of Los Angeles retirement plans in pursuing an independent action. In making its determination, the Board shall weigh the potential damages incurred by the Plan, the potential recovery that may be obtained if such claim is pursued, and the likelihood of the plaintiffs' success in the action based upon the merits of the action.

b) **Foreign Securities Actions**

The Board shall make a determination, based upon the analysis and recommendation provided by Staff and the City Attorney's Office, whether to participate (Opt-In) in a particular foreign securities action—a lawsuit brought or pending outside of the United States involving securities purchased by LACERS or on LACERS' behalf on a foreign securities exchange—where the estimated recoverable damages to LACERS exceed one million U.S. dollars (US$ 1,000,000.00). In foreign securities actions, in addition to the core considerations concerning damages, administrative burdens, and liability, the Board also shall weigh carefully the quality and financial stability of the foreign legal counsel and the defense cost funding guarantor.

3. **Diligent Asset Recovery in All Cases**

In cases in which LACERS has not assumed an active role but has suffered losses, LACERS shall ensure that it obtains its fair share of any recovery in which it has filed a valid claim.

D. **Operational Roles And Responsibilities To Implement The Securities Litigation Policy**

1. **The Board**

a) Pursuant to the Guidelines set forth in Section C.2 of the Securities Litigation Policy, and upon considering the recommendations of Staff, the City Attorney's Office, and/or any outside counsel engaged to assist the City Attorney's Office, the Board shall make the final determination whether to actively participate in a particular action.

b) Consistent with Charter Section 275 and Section D.4 of the Securities Litigation Policy, the Board shall make recommendations of one or more outside law firms to assist the City Attorney's Office in discharging the duties required by the Securities Litigation Policy.

c) As set forth in Charter Section 273(a), the Board shall have the authority to approve or reject any settlement of litigation.

2. **Custodian Bank and/or Third-Party Vendor**

LACERS' Custodian Bank and/or Third-Party Vendor shall be responsible for:

a) Reviewing all securities actions brought or pending within the United States or a foreign jurisdiction in which LACERS has suffered losses.

b) Timely filing complete and accurate proof of claims forms on LACERS' behalf, including the necessary supporting documents and information, necessary to recover damages in every securities class action brought or pending within the United States in which LACERS has suffered losses.

c) Providing timely notice to LACERS of each settlement recovery, with sufficient time to allow LACERS to opt-out of domestic actions, and/or opt-in to foreign actions. LACERS Staff shall have the authority to determine, and to communicate to the

Custodian Bank and/or Third-Party Vendor, the deadline for such notice in each particular case.

d) Providing quarterly reports to LACERS Staff and the City Attorney's Office regarding these functions, including any securities litigation proceeds recovered.

e) Providing outside securities litigation monitoring counsel which has been engaged by LACERS pursuant to Section D.4 of the Securities Litigation Policy with access to LACERS' securities holdings and transaction information in order to enable such counsel to identify losses associated with existing and potential lawsuits.

3. **LACERS Staff**

LACERS Staff shall be responsible for:

a) Monitoring the functions performed by the Custodian Bank and/or Third-Party Vendor as described above and shall keep the Board apprised of any unusual or extraordinary events.

b) Working with the City Attorney's Office to provide support and information regarding securities holdings and activity for litigation purposes.

c) Preparing for the Board an annual report summarizing securities class action activity for the fiscal year. The report will be presented within four months following the end of the fiscal year.

d) Assisting the City Attorney's Office to evaluate and recommend to the Board outside counsel law firms to assist the City Attorney's Office in discharging its duties under the Securities Litigation Policy.

e) Assisting the City Attorney's Office to provide recommendations to the Board concerning whether to take an active role in a particular action pursuant to the Guidelines set forth in the Securities Litigation Policy.

4. **The City Attorney's Office**

The City Attorney's Office, assisted by Staff and outside counsel as needed, shall be responsible for:

a) Identifying and recommending to the Board qualified outside law firms to assist the City Attorney's Office with monitoring, evaluating, and recommending cases in which LACERS should consider taking an active role under the Securities Litigation Policy. The Board shall recommend one or more such firms to be engaged as outside securities litigation monitoring counsel to assist the City Attorney, subject to the written consent of the City Attorney's Office. Once engaged, outside securities monitoring counsel shall be authorized to receive access to LACERS' securities holdings and transaction information from the Custodian Bank and/or Third Party Vendor, as provided by Section D.2 of the Securities Litigation Policy.

b) Identifying and recommending to the Board qualified outside law firms that would be competent to serve as lead counsel, supervised by the City Attorney's Office, in a particular securities case in which LACERS has sought to serve as lead plaintiff or as plaintiff in an opt-out case. The Board shall recommend one or more such firms, subject to the written consent of the City Attorney's Office, to be placed upon a list of approved lead counsel candidates that would be eligible to submit proposals to represent LACERS in a particular case.

c) Providing recommendations to the Board concerning whether to take an active role in a particular action pursuant to the Guidelines set forth in the Securities Litigation Policy.

d) Once the Board has made a determination to seek an active role in a particular case, preparing Requests for Proposal for distribution to the firms that have been placed upon the list of approved lead counsel candidates, evaluating proposals, and recommending one or more finalist firms to the Board.

e) Assisting Staff to provide the Board with status reports as needed to keep the Board apprised of major developments in cases in which LACERS is a party and/or lead plaintiff.

f) Assisting LACERS in its role as lead plaintiff in a class action or as a plaintiff in an opt-out case, including supervising the law firm appointed to serve as lead counsel. Such supervision may include participation in significant motions and settlement discussions when permitted by parties or the court, and filing objections concerning attorney fee requests.

XVII. APPENDIX: GLOSSARY

ASSET CATEGORIES

Cash/Cash Equivalent: Cash equivalent securities with a maturity less than or equal to fifteen months are considered to include interest bearing or discount instruments, money market funds, corporate issued commercial paper, bank issued Certificates of Deposit, bankers acceptances, fully collateralized repurchase agreements or participation in commingled (cash equivalents) funds managed by a bank, insurance company, or other professional cash equivalents investment manager. Both U.S. and foreign securities issued in U.S. markets are permissible.

Commodities: Physical commodities are the raw inputs (e.g., oil, wheat, gold, etc.) into the production of goods. Commodities investment is conducted through futures, the prices of which are directly tied to the underlying physical commodity. Commodities are real assets and are expected to provide inflation hedging in commodities-driven inflationary environments.

Convertibles: A preferred stock or bond that can be exchanged for common stock of the issuing company. The conversion is at the investor's option and usually must occur within a specified time limit. Convertibles may be considered fixed income or equity investments when calculating investment returns and determining asset allocation.

Direct Placements: Sale of securities to a long-term institutional investor such as a pension fund without the use of underwriters.

Fixed Income: Debt instruments of corporations, government or agencies characterized by a fixed or variable interest rate and stated maturity date. Included are marketable bonds, cash equivalents and Rule 144A securities. Certain fixed income assets, such as cash equivalents, are often categorized separately.

Preferred Stock: A security which has preference over common stock (but not bonds) with regard to dividends and the distribution of assets in the event of a corporate liquidation. Preferred stock combines elements of both common stock and bond forms of investment.

Private Equity: Equity investments in companies that do not trade publicly on an organized exchange. They may include private equity, venture capital, buyout, mezzanine financing, distressed securities, natural resources and hedge funds. These investments are frequently made in some pooled format, usually a limited partnership or limited liability corporation.

Private Real Estate: Land and all physical property related to it, including buildings, landscaping, and all rights to the air above and earth below the property. Assets not directly associated with the land are considered personal property.

Section 12 GLOSSARY

Public Equities: Shares that represent ownership of a publicly traded corporation. Included in this category are publicly traded common stocks, rights, warrants, convertible securities and American and Global Depository Receipts.

REITS: Real Estate Investment Trusts. Publicly-traded stocks of real estate investment companies the assets of which are 100% comprised of income producing real estate such as apartments, shopping centers, etc. or the mortgages of real estate property assets.

Total Fund: All assets of the fund including equities, fixed income, cash equivalents, cash and other securities.

Treasury Inflation Protected Securities (TIPS): Debt instruments of the U.S. Government that adjust monthly for changes in inflation as represented by the non-seasonally adjusted U.S. CPI-Urban. Similar to other fixed income instruments, TIPS have a fixed interest rate component and stated maturity.

EQUITY TERMS

American Depository Receipts (ADRs): Negotiable certificate issued by a U.S. bank for shares of stock issued by a foreign corporation. The securities are held in a custodial account, either at the issuing bank or an agent. ADRs are registered with the Securities and Exchange Commission, and give the holder the same benefits of ownership as shareholders. Two types of American Depository Receipts include sponsored ADRs, which are approved and promoted by the issuing corporation; and unsponsored ADRs, which are not backed by the issuer. ADRs are priced in U.S. dollars, and trade on stock exchanges and over-the-counter markets in the same fashion as U.S. issued securities.

Debt-to-Equity: Quantifies a firm's financial leverage. It is the long-term debt of the company divided by shareholder's equity. Higher levels of debt are often associated with earnings volatility.

Dividend: A payment to owners of common or preferred stock. Dividends are usually paid out of the current earnings of a corporation. On preferred stock shares, the dividend is usually a fixed amount. On common stock shares, the dividend will vary with the fortunes of the corporation. Dividends are usually declared and paid quarterly.

Dividend Growth: Measures the average percentage increase, over the trailing five years, of the per share dividend.

Dividend Yield: The annual per share dividend divided by the market price of the security. Higher dividend yields tend to support the price of the security.

Global Depository Receipts (GDRs): Negotiable certificate held in the bank of one country representing a specific number of shares of a stock traded on an exchange of another country. While American Depositary Receipts allow international companies to offer shares to U.S. citizens, GDR's allow companies in Europe, Asia, the United States and Latin America to offer shares in markets around the world.

Market Capitalization: The number of common shares outstanding multiplied by the per share price of the stock which represents the market's valuation of a company.

Price-Earnings (P/E) Ratio: The market price of a share of common stock divided by the company's earnings per share.

Price-to-Book: The market price of a share of common stock divided by the company's per share book value.

Return on Equity: A firm's net profit divided by its shareholder's equity. It is one of two basic factors (the other being earnings retention ratio) that determine a firm's earnings growth rate.

FIXED INCOME TERMS

Accrued Interest: Interest accumulated on a bond since the last interest payment was made. The buyer of the bond pays the market price plus accrued interest.

Asset Backed Bond: Securities that are formed when similar assets or receivables, such as credit card receivables, auto loan receivables or home equity receivables, are pooled together and undivided interests in the pool are sold. The principal and interest payments are "passed-through" to the bondholders.

Banking Demand (Demand Deposit): Checking account balances or other accounts, which, without prior notice to the bank, can be withdrawn or transferred.

Bid-Ask Spread: The difference between the price a buyer is willing to pay (bid) for a security and the price an owner is willing to receive for the security.

Bond: An interest-bearing or discounted certificate of debt issued by~~s~~ corporations, municipalities, governments and governmental agencies that represent a loan to the issuer and obligates the issuer to pay the bondholder a specified sum of money, usually semiannually, and to repay the principal amount of the loan at maturity.

Certificate of Deposit: A receipt from a bank for funds deposited for a stated period of time and normally paying a stated rate of interest.

Convexity: A measurement of the sensitivity of a fixed income security's duration given changes in interest rates. The higher a bond's convexity, the less sensitive it is to interest rate changes versus a comparable duration security and the opposite is true when comparing lower convexity bonds versus similar duration bonds.

Section 12 GLOSSARY

Coupon: Interest rate on a bond that the issuer agrees to pay to the bondholder until maturity, expressed as an annual percentage of face value. More simply, the periodic interest payment made to bond owners during the life of a bond.

Credit spread: The difference in yield between Treasuries and non-Treasuries of similar maturity, duration, convexity etc. Credit spread is generally viewed as the premium assigned by investors to the default risk of a bond.

Debenture: A promissory note backed by the general credit of a corporation -- usually not secured by a mortgage or lien on any specified property.

Duration: A calculation measuring the price sensitivity of a bond or other financial instrument to changes in interest rates while taking into consideration its coupon and maturity.

Fed: The seven-member governing board that oversees Federal Reserve Banks establishes monetary policy (interest rates, availability of credit, etc.) and monitors the economic health of the country.

Federal Reserve Bank: One of 12 regional banks in the Federal Reserve System. The role of each bank is to monitor the commercial and savings banks in their region to ensure they follow Federal regulations. The reserve banks also provide central bank services such as check collection, access to the Fed's wire network and credit advances from the Fed's discount window. Reserve banks act as depositories for banks in their region.

Inflation: The overall general upward price movement of goods and services in an economy, usually measured by the Consumer Price Index in the U.S. Inflation is one of the major risks to investors over the long term because it erodes the purchasing power of their investments.

Interest Rate: Cost of money or credit expressed as a percentage rate per period of time usually one year.

Maturity: The date on which a bond becomes due and the issuer redeems or pays the face value or principal.

Mortgage-Backed Asset: Securities that are formed when mortgages are pooled together and undivided interests in the pool are sold. The principal and interest payments are usually "passed-through" to the certificate holders.

Sector Swap: Exchange of one security or asset for another, often done to alter the quality, change the duration, or increase the yield to maturity.

Yield Curve: A graph showing the relationship between yields and maturities of fixed income securities issued by the same or similar issuers having the same risk characteristics. Normally, the curve slopes upward and to the right because short-term investments have lower yields than long-term investments. From time to time, the curve may become inverted, when short-term yields are higher than long-term yields.

DERIVATIVE TERMS

Cash Settlement Contract: The feature of certain futures contracts or options that allows delivery or exercise to be conducted with an exchange of cash rather than the physical transfer of assets.

Covered Option: A strategy in which the writer sells options while simultaneously owning an equivalent position in the underlying security.

Credit Default Swap: A derivative instrument that transfers the credit risk from the buyer to the seller in exchange for a specified premium. The seller receives a quarterly payment from the buyers in exchange for absorbing the risk inherent in owning the credit. The buyer receives payment only when a credit event occurs such as: bankruptcy, failure to pay, obligation acceleration, restructuring or sovereign repudiation/debt moratorium.

Counterparty: Entity, usually an investment bank and/or broker/dealer, through which an OTC financial transaction is completed or traded. Counterparties may be known or unknown to the investor.

Derivative: Instruments or contracts whose value is determined by the price of the asset to which the contract is tied.

Forward Contract: A customized transaction in which two parties agree to the purchase or the sale of a security, currency or commodity at some future time under such conditions as the two agree upon. Those who use forward contracts often expect to make or take physical delivery of the commodity or financial instrument.

Futures Contract: A standardized agreement between two parties to purchase or sell an asset or currency at a later date at a fixed price. The contract trades on a futures exchange and is subject to a daily mark-to-market procedure.

Interest Rate Swap: Agreements between two parties to exchange types of cash flows. They are derivative securities because their payoffs are determined by the price of the underlying financial security. Swaps trade in dealer markets or are directly negotiated.

Option: A contract that gives one party the right, but not the obligation, to buy or sell an asset, currency, or a futures contract for a fixed price over a specific period of time.

Naked (uncovered) Option: A short option position in which the writer does not own an equivalent position in the underlying security.

Over the Counter ("OTC"): Non-exchange traded derivatives, usually swaps, which are established with select counterparties.

PRIVATE EQUITY TERMS

Additional Fees: The amount of capital an investor pays into a fund/investment that does not count against the investors' commitment. Additional fees typically consist of management fees or late-closing interest expenses.

Capital Committed: An investor's financial obligation to provide a set amount of capital to the investment.

Capital Contributed: Capital contributed from an investor's capital commitment to fund partnership investments, organizational expenses and management fees and partnership expenses.

Capital Distributed: Cash or stock disbursed to the investors of an investment.

Co- Investment: A co-investment is a direct investment made alongside a partnership.

Corporate Finance/Buyout: Partnerships seeking to make controlling and non-controlling investments in established companies that have the potential to achieve greater value through improved performance.

Cost Basis: Capital contributions less return of principal.

Direct Investment: A direct investment is a purchased interest of an operating company.

Fund-Of-Funds: An investment vehicle that invests in other private equity partnerships.

Fund/Investment Size: The total amount of capital committed by investors to a fund.

Investment Category: Used to identify investments in one of the following categories: co-investments, direct investments, fund-of-funds, primary funds, secondary fund-of-funds, or secondary purchases.

Investment Strategy: A sub-classification of a partnership's investment type, such as co-investment, direct investment, corporate finance/buyout, mezzanine, real estate, special situation, or venture capital.

Life Cycle Period: The current stage of a partnership depending on the percentage contributed to date. Life cycle periods are investment and realization.

J-Curve/J-Curve Effect: Period in which partnerships are making investments and drawing management fees, which results in capital account balances that are less than cumulative contributions.

Section 12 GLOSSARY

Mezzanine: An investment strategy involving the purchase of subordinated debt. These securities exist between the senior debt and equity of a holding's capital structure. Subordinated debt carries a lower level of risk than pure equity structures because they generate current income and have a more senior position in the company's capital structure.

Net Internal Rate Of Return ("IRR"): The discount rate that equates the net present value of the partnership's cash outflows with its inflows and residual value at the time of calculation. The calculation is net of management fees and the general partner's carried interest.

Originator: The institution responsible for recommending a client commit to an investment.

Ownership Percentage: The investor's percent of ownership as measured by capital committed divided by fund or investment size.

Paid-In Capital: The amount of capital an investor has contributed to a partnership, which includes capital contributions and additional fees.

Pooled Average IRR: An IRR calculation that aggregates cash flows (paid-in capital and capital distributed) and the reported market values of each investment within a portfolio to create one portfolio investment and return.

Portfolio Holding Exposure: The limited partner's pro-rata allocation to an underlying investment based on its ownership percentage of the partnership.

Primary Fund: Defines when the investor acquired an interest in the partnership. Primary fund is the investment category when an investor participates in a closing at the inception of the partnership.

Private Equity Partnership: A professionally managed pool of capital that generally invests in unlisted companies or securities. Common investment strategies include corporate finance/buyout, mezzanine, special situations, and venture capital.

Realized Multiple: Ratio of cumulative distributions to paid-in capital.

Return On Investment ("ROI"): A calculation based on the total value (market value plus distributions) divided by paid-in capital for an investment.

Reported Market Value: The investment's capital account balance at quarter end, which includes the general partner's reported value of the underlying holdings and other assets and liabilities.

Secondary Fund-Of-Funds: A private equity vehicle formed to purchase active partnership interests from an investor.

Secondary Purchase: A purchase of an existing partnership interest or pool of partnership interests from an investor.

Special Situation: Partnerships that make investments using a unique strategy. Examples include distressed and turnaround, industry focused and multi-stage partnerships.

Top Tier Fund: A fund managed by a general partner that has a demonstrated track record of superior performance measured against its peers by its given strategy or a fund managed by a general partner that, based on the Private Equity Consultant's extensive expertise, has the requisite skill set and market opportunity to prospectively produce superior performance compared to its peers by a given strategy.

Total Exposure: Calculated by the summation of market value and unfunded commitments.

Venture Capital: An investment strategy that provides start-up or growth capital to companies in the early stages of development. Venture investments generally involve a greater degree of risk, but have the potential for higher returns.

Vintage Year: The year in which a partnership makes its first capital call for an investment into a portfolio company/holding.

PRIVATE REAL ESTATE TERMS

The following is a list of commonly used terms in Real Estate Investments and their respective definitions.

Appreciation Return: Expressed as a percentage, the return generated by the Capital Appreciation of a property or portfolio over the period of analysis.

Capital Appreciation: The change in market value of property or portfolio over the period of analysis, adjusted for Capital Improvements and Partial Sales for the period.

Capital Expenditures: Investment of cash or the creation of a liability to acquire or improve an asset, e.g., land, buildings, building additions, site improvements, machinery, equipment; as distinguished from cash outflows for expense items that are normally considered part of the current period's operations.

Capital Improvements: Expenditures that cure or arrest deterioration of property or add new improvements and appreciably prolong its life. By comparison, repairs merely maintain property in an efficient operating condition.

Section 12 GLOSSARY

Capitalization Rate: The Capitalization Rate or Cap Rate is a ratio used to estimate the value of income producing properties. It is computed by dividing the annual net operating income by the sales price or value of a property.

Commingled Funds: A term applied to all open-end and closed-end pooled investment vehicles designed for institutional tax-exempt investors. A commingled fund may be organized as a group trust, partnership, corporation, insurance company separate account or other multiple ownership entity.

Open-end Fund: A commingled fund with no finite life that allows continuous entry and exit of investors, and typically engages in on-going investment purchase and sale activities.

Closed-end Fund: A commingled fund with a stated maturity (termination) date, with few or no additional investors after the initial formation of the fund. Closed-end funds typically purchase a portfolio of properties to hold for the duration of the fund and, as sales occur, typically do not re-invest the sales proceeds.

Diversification Attributes:

Equity: Direct undivided ownership in real estate that has not been financed using borrowed funds.

Leveraged Equity: Direct undivided ownership in real estate that has been financed using borrowed funds

Equity Oriented Debt: A mortgage loan with a stated interest rate in addition to equity participation by the lender via annual cash flow and/or sale proceeds or refinancing proceeds.

Traditional Debt: A mortgage loan payable at one or more stated interest rates.

Life Cycle:

Pre-development: Raw land.

Development: Properties under construction including preparation and installation of infrastructure.

Leasing: Completed construction that is less than 60% leased and that has been available for occupancy one year or less.

Operating: Properties with greater than 60% average leasing, or that have been available for occupancy for more than one year.

Section 12 GLOSSARY

Redevelopment: Properties that are undergoing substantial expansion or re-tenanting, rehabilitation or remodeling.

Property Size: Property size categories refer to gross asset value of each property. The dollar amount entered in each category should reflect net asset value within each category.

Property Type:

Office: Low-rise, mid-rise and high-rise office buildings and office parks.

Industrial: Warehouse, manufacturing, office showroom, flex space and research and development.

Retail: Neighborhood center, community center, regional center, super regional center, fashion/specialty center, power center, theme/festival center and outlet center.

Residential: High-rise elevator projects, low-rise projects and garden type projects.

Hotel/Motel: Hotels, resorts and motels.

Timberland: Timber, timberland and mineral rights.

Agriculture: Row crops, permanent crops, pasture/ranch and agribusinesses.

Vacant Land: Undeveloped land.

Other: Mobile home parks, self storage facilities, etc.

Gross Asset Value: The fee simple or leased fee market value of an investment, without regard to the debt balance or ownership percentages.

Gross Income: The income or loss of a portfolio or entity, resulting after deducting all expenses, (except for portfolio and asset management fees), but before realized and unrealized gains and losses on investments.

Income Return: Expressed as a percentage, the component of return derived from property operations during the period of analysis.

Lease Expiration Exposure Schedule: A tabulation listing the total leasable square footage of all current leases that expire in each of the next five years, without regard to renewal options.

Net Assets: Total Assets on a market value basis less total liabilities on a market value basis.

Net Investment Income (Net Income): The income or loss of a portfolio or entity resulting after deducting all expenses, including portfolio and asset management fees, but before realized and unrealized gains and losses on investments.

Net Operating Income: Rental and other income of property, less operating expenses other than Capital Expenditures and mortgage debt service.

Net Sales Proceeds: Proceeds from the sale of an asset or part of an asset less brokerage commissions, closing costs, and marketing expenses.

Partial Sales: The sale of an interest in real estate which is less than the whole property. This may include, for example, a sale of easement rights, parcel of land or retail pad, or a single building of a multi-building investment. (See Net Sales Proceeds)

Principal Payments: The return of invested capital to the lender, as compared to interest payments, which represents a return on invested capital.

Separate Accounts: A term applied to an investment vehicle for investors with the ability to commit substantial funds to real estate assets who may prefer to invest through individual portfolios specifically tailored to their unique investment requirements. Separate accounts provide clients with a greater degree of control and enable them to capitalize on specific investment opportunities.

Time Weighted Annual Rate of Return: The yield for a year calculated by geometrically compounding the previous four quarters' returns.

Total Assets: The sum of all gross investments, cash and equivalents, receivables, and other assets presented on the Statement of Assets and Liabilities.

Total Return: The sum of the quarterly income and appreciation returns.

Weighted Average Equity: The denominator of the fraction used to calculate investment level Income, Appreciation, and Total returns on a quarterly basis, consisting of the Net Assets at the beginning of the period adjusted for Weighted Contributions and Distributions.

STATISTICAL TERMS

Active Risk: Annualized standard deviation of the difference between the portfolio return and its benchmark return. Used interchangeably with tracking error.

Active Share: A measure of dispersion between a manager's portfolio and the portfolio benchmark based upon the individual portfolio holdings versus volatility, which is used to calculate tracking error, another measure of dispersion. A Yale study[18] found high active share portfolios tended to outperform low active share portfolios.

Alpha: A measure of risk adjusted return that represents that part of a return above or below a benchmark and is typically attributed to investment skill.

Attribution: The result of investment performance analysis whereby the key sources of value-added or detracted versus the benchmark are identified and quantified in terms of the contribution to value-added or detracted from that source.

Basis Point: One one-hundredth of one percent, i.e., 100 basis points = 1%.

Beta: A measure of the extent to which the returns on a given stock or portfolio move with the stock market.

Correlation: A statistic describing the goodness of fit about a linear relationship between two variables (returns). It measures the degree to which two variables (assets) move in tandem, with -1 corresponding to perfect negative correlation (vary inversely) and +1 corresponding to perfect positive correlation (move together). A value of zero would indicate no relationship between the two variables.

Information Coefficient ("IC"): a measure of investment manager skill which, together with a measure of breadth provides the manager information ratio according to the Fundamental Law of Active Management[19]. Similar to the correlation coefficient, the IC ranges between 0 and +1.

Information Ratio: A measure of the level of reward per unit of risk. The information ratio is calculated by dividing the alpha (difference between the portfolio return and the benchmark return) by the standard deviation of the alpha.

Mean: The traditional average; it is calculated by adding up all the numbers and dividing the total by the number of observations.

Mean Absolute Deviation: The average value of differences from the mean, where the differences are evaluated without regard to sign. It is a measure of dispersion.

Median: The median is the 50th percentile. The median of the sample would be the rate of return that is greater than 50% of all the returns in the sample. Half the sample has a higher return and the other half a lower return.

Negative Semi-variance: This measure considers only downside dispersion. Since measures of dispersion are frequently used to measure risk in securities and portfolios,

[18] Cremers, K.J. Martijn, and Antii Petajisto, 2009. "How Active is your Fund Manager? A New Measure That Predicts Performance", *Review of Financial Studies* 22 (9): 3329-65
[19] Grinold, Richard C. and Ronald N.Kahn, *Active Portfolio Management*, 2nd ed., New York: McGraw-Hill (2000)

the amount of uncertainty as to future value is one definition of risk. Some investors find this definition difficult to accept because they feel that only below-average expectations represent risk.

Range: The difference between the minimum and maximum in a series.

R-Squared (R2): The proportion of a portfolio's variability that is explained by the relation between the portfolio and the market.

Standard Deviation: This measure is the square root of the variance. The standard deviation is a useful and widely used measure because, for a normal, or bell-shaped, distribution, 68 percent of the observations fall within one standard deviation and 95 percent fall within two standard deviations. Since it is usually reasonable to suggest that distributions in finance are normal, a good estimate of the dispersion of a distribution around its average is provided by the standard deviation measure. In a portfolio context, the higher the standard deviation, the higher the risk associated with a given level of return on that portfolio.

Tracking Error: Annualized standard deviation of the difference between the portfolio return and its benchmark return. Used interchangeably with active risk.

Variance: The variance is a true measure of the width of the distribution. Variance relates each observation to the average by squaring each number (multiplying a negative number by itself produces a positive number).

DESCRIPTION OF MANAGER STYLES

Equity Styles

Bottom Up: A method of analysis that begins with fundamental factors at the company or micro economic level.

Currency Overlay: Strategy to use currency futures, forwards, and options as an overlay on existing international portfolios to protect against losses in currency movements.

Enhanced Index: In general, a manager utilizing this style attempts to outperform an index by analyzing quantifiable characteristics of a given stock or sector. The strategy is characterized by low to moderate levels of active risk.

Growth: Seeks investments whose future potential for growth is above the growth expectation for securities in general. From an analytical perspective, growth portfolios will generally exhibit the following characteristics:

Projected Earnings Growth – greater than the index
Price to Earnings Ratio – generally greater than the index
Price to Book Ratio – generally greater than the index

Five Year Earnings Growth Rate – greater than the index

Index/Passive: An index strategy would strive to match the return of the appropriate index by holding a portfolio of securities that closely tracks the index.

International Equity Active Country and Sector/Passive Security Selection: Through an overall review of economic, social, and political issues worldwide, decisions are made with respect to the allocation of investments among countries and sectors. The investment decisions are implemented through passive security selection.

Large Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell 1000 Index.

Mid Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell Mid Cap Index.

Quantitative: Stock selection and portfolio construction are implemented through computerized models which consistently employ fixed criteria and/or decision rules which may or may not involve manual intervention.

Small Capitalization Domestic Equity: Investments in a portfolio of securities that approximate the average market capitalization of the Russell 2000 Index.

Top Down: A method of analysis that begins with broad macro economic topics associated with an economy and industry.

Value: Investments in equities whose potential is temporarily unrecognized by other investors. Value stocks typically are companies whose assets, future cash flows, products or services are overly discounted relative to the broader market. Typically, value portfolios will exhibit the following characteristics:

Price to Book Ratio – less than the index
Price to Earnings Ratio – less than the index
Dividend Yield – greater than the index

Fixed Income Styles

Bank Loans: Managers that invest in short and intermediate term senior subordinated debentures of below investment grade issuers. This debt is adjustable rate and may provide modest inflation protection in a rising rate environment. Also, these debentures are higher in the capital structure than high yield bonds, which affords greater creditor protection in stressed environments in addition to a shorter duration.

Core: Seeks investments in the large, more liquid sectors such as governments, mortgage-backs and investment grade corporates, that do not represent significant deviation from a given index in terms of sector, quality, coupon and maturity exposures.

While some over/under weighting may occur in the portfolio, these will result from the manager's security selection process and not represent a deliberate attempt to bias the portfolio.

Core Plus: A core plus manager has the latitude to invest the portfolio in core sectors as well as high yield (below investment grade) non-dollar denominated and/or the debt of emerging markets.

Emerging Market Debt: Seeks investment in either investment grade or below investment grade debt of sovereign or corporate issuers domiciled in emerging market countries. This debt can be "hard currency" (i.e., dollar) denominated or denominated in the local currency of the issuing entity.

High Yield: Seeks investments in below investment grade corporate securities.

Intermediate: Managers that invest in shorter than market duration securities with an average portfolio duration range of between three and four years. Securities invested in will range across sectors and could be either investment grade and/or non-investment grade rated. Portfolios can also include non-U.S. issued securities in addition to securities issued in the U.S.

Medium-Grade: Seeks investments from the complete range of global fixed income sectors. The medium-grade manager has broad latitude to invest the portfolio's assets in opportunistic sectors such as high-yield (below investment grade) non-dollar, emerging markets and convertible debt investments. The manager may use investment grade sectors as a defensive alternative to opportunistic sectors.

Inflation Protected: Invests in fixed instruments that have a real and inflation-linked return component. The securities are typically issued by government entities. An example would be the Treasury Inflation Protected Securities (TIPS) issued by the United States Government.

Structured credit: A traditional bond that has had its repayment structure altered to produce non-traditional payoffs derived from one or more of the underlying assets rather than from the borrower's (i.e., issuer's) cash flow. Structured credits are a blend of bonds and derivatives (usually swaps). Often, downside risk is protected beyond a certain level.

RATES OF RETURN

Capital Appreciation (Depreciation): Both realized and unrealized gains or losses in the market value of a portfolio from beginning to end of the time period being measured.

Dollar-Weighted Return: This rate is also called the internal rate of return (IRR). It is sensitive to the timing and size of cash flows. The rate of return for each sub-period such as a month or a quarter is weighted by the dollars invested in that period. Thus, the cash flows in the fund, as well as investment performance, will have an impact on calculated returns. The dollar-weighted return is important in measuring the actual growth of a fund over time.

Income Return: The rate of return attributable to interest and/or dividends.

Market Value: The market value of an asset is the realizable value at any point in time. In practice, publicly traded stocks are valued at the day's closing price and bonds are generally valued at the day's final bid price. Different pricing services can result in different market prices especially in the bond market.

Real Rate of Return: The rate of return earned from an investment’s income/loss and appreciation/depreciation after being adjusted for inflation. The most common measure of inflation is the U.S. Bureau of Labor Statistics’ All Urban Consumer Price Index (CPIU).

Time-Weighted Rate of Return: The amount and timing of cash flows do not impact time-weighted rates of returns since the returns for each sub-period are equally weighted. Since investment managers have little control over cash flow, time-weighted returns are an appropriate method of analyzing the manager's performance.

Total Fund Total Rate of Return: The “overall” rate which reflects the combination of income as well as realized and unrealized appreciation or depreciation for all segments or portfolios in the total plan.

TIME PERIODS

Annualized: A rate of return for a time frame that is less than or greater than one year expressed as an average annual return.

Compound Annual: A compound average annual rate of return for a period greater than 1 year expressed in annual terms.

Rolling Time Period: A series of investment returns each covering a specified period of time with each new return in the series encompassing the most recent return of the period and dropping the oldest return of the period. For example, a rolling one-year return, calculated monthly would consist of the previous 12 monthly returns. The next return in the series would be calculated at the end of the following month. It would consist of the current monthly return and the previous 11 months (dropping the oldest return in the series).

Trailing Period: A time period that immediately precedes a specified date. For example, as of December 31, 20X1, the trailing 9 months would include the period April 1, 20X1 to December 31, 20X1.

Unannualized: A rate of return for a period of less than one year or greater than one year. An unannualized return that represents cumulative results that is for a month, quarter, five quarters or any other non-twelve month period.

RELATIVE PERFORMANCE RANKING

Policy Index (Policy Portfolio): A weighted combination of two or more indices. The Policy Index is constructed to match a fund by weighting the indices in the same ratio as the fund's target commitment to the different asset classes such as equities, bonds, real estate and cash.

Median: The median is the 50th percentile. The median of the sample would be the rate of return that is greater than 50% of all the returns in the sample. Half the sample has a higher return and the other half a lower return.

Percentile Rank: Time-weighted rates of return are percentile ranked against the Universe. For example, a fund's rate of return may rank in the 20th percentile of the sample. This value indicates that 80% of the funds in the sample had worse performance. The highest percentile rank is 1 while the lowest is 100. Bar graphs may be divided by percentiles with the top of each bar denoting the tenth percentile followed by lines for the 25th, 50th, 75th and 90th percentiles.

Quartiles: Percentile rankings are divided by the first, second and third quartiles. The first quartile is the 25th percentile, the second is the 50th percentile (or median) and the third is the 75th percentile.

Reasonable (as it pertains to a portfolio risk level relative to the Index): A reasonable risk level relative to the Index means that, if portfolio risk is substantially above the risk of the Index, portfolio return should also be substantially above the return of the Index. Conversely, if portfolio return were substantially less than the Index, then portfolio risk would also be expected to be less than that of the Index. Under normal market conditions, reasonable means a combination of risk and return that yields a return to risk ratio for the portfolio that is equal to or greater than that of the Index which serves as the portfolio's performance benchmark.

Typical Market Cycle: A typical market cycle is the recurrence of periods of significant appreciation and depreciation of asset values. One cycle extends from a price or market value baseline through one substantial rise and one decline and back to the base line. The length of a typical or fair market cycle varies across asset classes, depending on the frequency and duration of changes in those economic factors that drive the market value of the assets. For those assets that trade on auction markets and are sensitive to short-term business cycle activity, such as equity and fixed income securities, the typical market cycle has historically been approximately three years. For those assets whose market values are not based on quoted prices and which are sensitive to longer-term demographic changes, such as private real estate or private equity, the typical market cycle has historically been approximately seven to ten years.

Section 12 GLOSSARY

INDICES

Fixed Income

Barclays Capital Aggregate: An aggregate of the Government/Corporate Bond Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The index contains fixed rate debt issues with at least one-year maturity, $100 million par value outstanding, and investment grade ratings by Moodys, S&P or Fitch (in that order). Returns are market-value weighted inclusive of accrued interest.

Barclays Capital Universal: This index contains the Barclays Capital Aggregate index bonds plus approximately 10% of the remaining index includes U.S. High Yield, Eurodollar, Emerging Markets, 144A Private Placements, and CMBS bonds.

Barclays Capital U.S. Govt/Credit Intermediate: This index is a sub-component of the Barclays Capital Aggregate index. Bonds consist of the U.S. Treasury, U.S. Agency (non-MBS), and U.S. Investment-grade credit holdings with a maturity range of 1 to 10 years.

Bond Rating Methodology: Bond ratings are intended to characterize the risk associated with holding a particular bond or categories of bonds. These ratings are the risk assessed by the market and that the bond issuer must pay to attract purchasers to the bond. These ratings are expressed as a series of letters and sequences.

Rating Categories in Descending Order:

AAA: The best quality rating, stable cash flows, very protective bond covenant, very low probability of default.

Aa: The second best rating. Stable cash flows, less protective bond covenants, very low probability of default.

A: Stable cash flows, less protective bond covenant, long-term probability of default is higher than AAA or Aa.

Baa: Medium quality rating, reliable cash flows short term, less-reliable cash flows long term, bond covenants offer limited protection. Moderate probability of default. Downgrade to a lower rating is also possible. Baa bonds are the lowest rating still considered ‘investment grade.’

Ba thru B: Highly speculative. Long-term assurance of cash flows and protective elements are low. Purchasers of these bonds generally specialize in assessing credit risk of specific bond issues. Much higher spreads versus investment grade bonds provide the incentive for purchasers. High default or downgrade risk.

Caa thru C: Poor standing. Either close to default or in default. Highly probable loss of principal.

D: Coupon payments were not paid on the due date which puts the bond In default. Unless both protective covenants and issuer assets are adequate (not likely), holder loses all likelihood of recovering principal.

<u>Equity</u>

Down Jones Industrial Average: This index is the price-weighted average of 30 actively traded blue chip stocks.

NASDAQ: A market value weighted index that measures all domestic and non-U.S. based securities, more than 4700 companies listed on the NASDAQ stock market.

Russell Midcap Value: Contains Russell Midcap stocks having less than average value orientation and are included in the Russell 1000 Growth Index.

Russell Midcap Value: Contains Russell Midcap stocks having less than average growth orientation and are included in the Russell 1000 Value Index.

Russell 1000: Consists of the 1000 largest securities in the Russell 3000 Index. The Russell 1000 is capitalization-weighted.

Russell 1000 Growth: Contains Russell 1000 stocks having greater than average growth orientation. Stocks tend to exhibit lower dividend yields and higher price-to-book ratios, price-earnings ratios and forecast growth values than the Value universe. The index is capitalization-weighted (as opposed to equal-weighted).

Russell 1000 Value: Contains those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe. Russell 1000 Value is capitalization-weighted.

Russell 2000: Contains the smallest 2,000 stocks in the Russell 3000 Index, representing approximately 11% of the Russell 3000 total market capitalization. The index is capitalization-weighted (as opposed to equal-weighted).

Russell 2000 Growth: Contains those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 2000 Value: Contains those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Section 12 GLOSSARY

Russell 3000: Measures performance of the 3000 largest U.S. companies based on total market capitalization. This index represents approximately 98% of the investable U.S. equity market. The Russell 3000 is capitalization-weighted.

Standard and Poors 500: The S&P, which represents approximately 75% of NYSE market capitalization and 30% of NYSE issues, contains 500 industrial, utility, transportation and financial companies in the U.S. markets (mostly NYSE issues). The S&P is capitalization-weighted (as opposed to equal-weighted), calculated on a total return basis with dividends reinvested.

FTSE All Share: An arithmetic, market value-weighted average of approx. 680 securities representing 98-99% of the UK market capitalization, FTSE All-Share is the aggregation of the FTSE 100, FTSE 250 and FTSE Small Cap Indices.

Morgan Stanley All Country World except USA: An arithmetic, market value-weighted average of approx. 1800 securities from outside the United States. The index is calculated on a total return basis, including reinvestment of gross dividends before deduction of withholding taxes.

Morgan Stanley Capital International Emerging Market Free: Contains securities of the following counties which are available to all investors regardless of local status: Argentina, Brazil, Chile, Colombia, Greece, India, Indonesia, Israel, Jordan, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Portugal, South Africa, Sri Lanka, Thailand, Turkey and Venezuela.

Morgan Stanley Capital International EAFE: An arithmetic, market value-weighted average of over 900 securities from Europe, Australia, and the Far East. The index is calculated on a total return basis, including reinvestment of gross dividends before deduction of withholding taxes. The following countries are represented: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Malaysia, Netherlands, New Zealand, Norway, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

<u>Real Assets</u>

Barclays Capital Treasury Inflation Protected Securities Index: The TIPS Index contains approximately 30 U.S. Treasury-issued inflation protected securities of varying maturities up to 20 years.

Bloomberg Commodity Index Total Return (formerly Dow Jones UBS Commodities Index): comprised of 24 commodity futures index constituents including: Natural Gas, WTI Crude Oil, Brent Crude Oil, Unleaded Gasoline, Heating Oil, Live Cattle, Lean Hogs, Wheat, Corn, Soybeans, Soybean Oil, Sugar, Cotton, Coffee, Cocoa, Aluminum, Copper, Zinc, Nickel, Gold, Silver, Lead, Tin and Platinum.

Section 12 GLOSSARY

NCREIF Property Index: The NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Data is collected quarterly from a membership of investment managers and plan sponsors. Returns are gross of fees; include income, realized gains/losses, and appreciation/depreciation; and are market-value weighted. Property values are determined by consistent appraisal methodology and sold properties are removed in the quarter of the sale (the historical data remains). Current quarter performance is preliminary.

Financial Times Securities Exhange ("FTSE") NAREIT U.S. Real Estate Index: Includes all REITS listed on the NYSE and Nasdaq indices. The index excludes LLPs and LLCs. The sectors are as follow: Healthcare, Self-Storage, Office/Industrial, Residential, Retail and Lodging/Resorts.

Cash

90-Day Treasury Bills: An average of the last three 90-day treasury bill issues' monthly return equivalents of yield averages, which are not marked to market. Month-end discount yields are converted to bond-equivalent yields, then a simple average is taken, and that number is decompounded to a monthly return using the actual number of days in the month and a 365-day year.

Policy Benchmarks

Current:

Domestic Equity	24% Russell 3000
Non U.S. Equity	29% MSCI ACWI ex-U.S.
Fixed Income	19% BC U.S. Aggregate
Credit Opportunities	5% 65% BC U.S. HY Capped+ 35% J.P.EMBI-GD
Private Equity	12% Russell 3000 + 300 bps
Private Real Estate	5% NFI-ODCE + 80 bps
Public Real Assets	5% U.S. Consumer Price Index + 5%
Cash	1% 90-Day Treasury Bill

TOTAL: 24% U.S. Equity; 29% Non-U.S. Equity; 19% Fixed Income; 5% Credit Opportunities; 12% Private Equity; 5% Private Real Estate; 5% Public Real Assets; 1% Cash

7/1/2007 through 12/31/2011:

U.S. Equity	43% Russell 3000
Non U.S. Equity	20% MS ACWI ex U.S. Net Div
Core Fixed Income	24% BC Universal
Real Estate	5% NCREIF
Alternative	7% Russell 3000 plus 400 bps annually. Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.

Cash	1% 90 day Treasury Bill

TOTAL: 43% U.S. Equity: 20% Non U.S. Equity; 24% Core Fixed; 5% Real Estate; 7% Alternative; 1% Cash

<u>1/01/2007 through 6/30/2007:</u>

U.S. Equity	44% Russell 3000
Non-U.S. Equity	20% MS ACWI ex U.S. GD
Core Fixed Income	25% BC Universal
Real Estate	4% NCREIF
Alternative	6% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 44% U.S. Equity; 20% Non-U.S. Equity; 25% Core Fixed; 4% Real Estate; 6% Alternative; 1% Cash

<u>3/31/2006 through 9/30/2006:</u>

U.S. Equity	45% Russell 3000
Non-U.S. Equity	21% MS ACWI ex U.S. GD
Core Fixed Income	25% BC Universal
Real Estate	3% NCREIF
Alternative	5% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 45% U.S. Equity; 21% Non-U.S. Equity; 25% Core Fixed; 3% Real Estate; 5% Alternative; 1% Cash

<u>6/30/2001 through 3/31/2006:</u>

U.S. Equity	40% Russell 3000
Non-U.S. Equity	18% MS ACWI ex U.S. GD
Core Fixed Income	27% BC Universal
Real Estate	7% NCREIF
Alternative	7% Russell 3000 plus 400 bps annually (Calculated on a dollar-weighted basis, and holding cash flows at 0% return for the first 36 months.)
Cash	1% 90-day Treasury Bill

TOTAL: 40% U.S. Equity; 18% Non-U.S. Equity; 27% Core Fixed; 7% Real Estate; 7% Alternative; 1% Cash

<u>01/01/2001 through 6/30/2001:</u>

U.S. Equity	40% Russell 3000
Non-U.S. Equity	18% MS ACWI ex U.S. GD
U.S. Fixed	25% BC Universal
Non-U.S. Fixed	6% JP Morgan World Government Hedged
Real Estate	5% NCREIF

Alternative	5% “15%”
Cash	1% 90-day Treasury Bill

TOTAL: 40% U.S. Equity; 18% Non-U.S. Equity; 25% U.S. Fixed; 6% Non-U.S. Fixed; 5% Real Estate; 5% Alternative; 1% Cash

<u>01/01/2000 through 12/31/2000:</u>

U.S. Equity	43% Russell 3000
Non-U.S. Equity	21% MSCI EAFE
U.S. Fixed	25% BC Aggregate thru 6/30/00, BC Universal as of 7/1/00
Non-U.S. Fixed	6% JP Morgan World Government Hedged
Real Estate	2% NCREIF
Alternative	2% “15%”
Cash	1% 90-day Treasury Bill

TOTAL: 43% U.S. Equity; 21% Non-U.S. Equity; 25% U.S. Fixed; 6% Non-U.S. Fixed; 2% Real Estate; 2% Alternative; 1% Cash

<u>Through 12/31/99:</u>

U.S. Equity	40% consisting of 33.75% S&P 500; 35.0% Russell 1000 Value; 12.5% Russell 1000 Growth; 12.5% Russell 2000 Value; 6.25% Russell 2000 Growth
Non-U.S. Equity	20% consisting of 25% MSCI EAFE; 22.5% MSCI Pacific; 15% TOPIX; 12.5% MSCI Europe; 25% MSCI Emerging Markets Free x Malaysia
U.S. Fixed	25.5% consisting of 17.65% BC Intermediate Government Corporate; 11.76% Intermediate Government; 7.84% BC Long Government Corporate; 3.92% BC Long Government; 58.8% BC Aggregate
Non-U.S. Fixed	7% JPM World
Real Estate	3% NCREIF
Alternative	3% “15%”
Cash	1.5% 90-day Treasury Bills

TOTAL: 40% U.S. Equity; 25.5% Fixed Income; 20% International Equity; 7% JPM Global Hedged; 3% NCRIEF; 3% Alternative 15%; 1.5% Treasury Bills

1 Yr: One-year rate of return. The linked quarterly returns of the previous four quarters.

X Yr Ann: X year annualized rate of return. The one-year equivalent return of the X year cumulative return.

X Yr Cum: X year cumulative rate of return. The linked quarterly returns of the previous X years.

Section 12 GLOSSARY

ASSET ALLOCATION

Market $: Net assets at market value including receivables, payables and accrued interest.

Market %: Market value as a percent of the total fund's market value.

Target %: Investment policy.

Invest %: Market value excluding cash and equivalents as a percent of total market value.

INVESTMENT PERFORMANCE

Time: The internal rate of return (accounting for daily cash flows) monthly based on trade-date, full accrual accounting, and using market values. For periods of greater than one month, a time series of linked monthly returns is maintained, introducing a time weighted effect. The private investment returns are lagged one quarter. The LACERS total fund return is dollar weighted to include private investments.

Market at Target: The weighted return made up of market returns weighted by LACERS' target allocation.

Market at Actual: The weighted return made up of market returns weighted by LACERS' actual allocation.

UNIVERSE COMPARISON

Universe comparisons will be specified in the quarterly Portfolio Performance Reports and LACERS will use broadly used universe comparisons as determined by the General Fund Consultant.

INVESTMENT IMPACT

Allocation: Market returns weighted by LACERS' actual asset allocation less market returns weighted by LACERS' target allocation.

Management: The difference between a) market returns weighted by LACERS' sector allocation and b) market returns weighted by LACERS' actual asset allocation; added to the difference between c) fund returns and d) market returns weighted by LACERS' sector allocation.

Overall: Actual returns less market returns weighted by LACERS' target allocation.

RISK

Mean Rate of Return: The geometric average of twenty quarterly returns, annualized.

Section 12 GLOSSARY

Standard Deviation: The standard deviation (one sigma) of twenty quarterly returns, annualized.

CHARACTERISTICS

Historic Beta: The beta of stocks currently owned in the portfolio compared to the S&P 500. The security-level beta is vendor supplied and the index is predetermined. In the U.S., The S&P 500 is traditionally used in beta calculations; other indexes cannot be substituted in the beta calculation. When the index is other than the S&P 500, the index beta is also in comparison to the S&P 500.

Return on Equity: The Return on Equity calculation is After-Tax Net Income divided by Owners Equity. The return on equity relates a company's profitability to its shareholder's equity. A high ROE indicates that the portfolio is invested in companies that have been profitable. This measure is also impacted by financial leverage. The portfolio ROE is based on the combined ROE’s of all stocks in the portfolio.