AGENDA

A REGULAR MEETING OF THE REAL ASSETS COMMITTEE

AND BOARD OF INVESTMENTS*

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CA

9:00A.M., WEDNESDAY, SEPTEMBER 12, 2018**

The Committee may take action on any item on the agenda, and agenda items may be taken out of order.

I. CALL TO ORDER

II. APPROVAL OF THE MINUTES

A. Approval of the Minutes of the Regular Real Estate Committee Meeting of June 13, 2018.

III. PUBLIC COMMENT

IV. NON-CONSENT ITEMS

A. Recommendation as submitted by Jonathan Grabel, Chief Investment Officer and John McClelland, Principal Investment Officer: That the Committee approve the RFI Recommendation-Real Estate Administrative Services.
(Memo dated August 28, 2018)

V. REPORTS

A. Real Assets and Inflation Hedge Implementation Plan for Infrastructure and Natural Resources & Commodities Sub-Asset Categories.
James Rice, Principal Investment Officer
Kevin Bassi, Senior Investment Analyst
(Presentation dated September 12, 2018)

V. REPORTS (Continued)

B. Real Estate Investment Strategy-Review
John McClelland, Principal Investment Officer
Amit Aggarwal, Investment Officer
Cindy Rivera, Investment Analyst
(Memo dated August 30, 2018)

VI. REPORT ON STAFF ACTION ITEMS

VII. GOOD OF THE ORDER

VIII. ADJOURNMENT

The Board of Investments has adopted a policy permitting any member of the Board to attend a standing committee meeting open to the public. Members of the Board of Investments who are not members of the Committee may attend and participate in a meeting of a Committee but may not vote, make a motion, or second on any matter discussed at the meeting. The only action the Committee may take at the meeting is approval of a recommendation to take further action at a subsequent meeting of the Board.

**Although the meeting is scheduled for 9:00* a.m., it can start anytime thereafter, depending on the length of the Board of Investment meeting preceding it. Please be on call.

Documents subject to public disclosure that relate to an agenda item for an open session of the Board of Investments that are distributed to members of the Board of Investments less than 72 hours prior to the meeting will be available for public inspection at the time they are distributed to a majority of the Board of Investments Members at LACERA's offices at 300 N. Lake Avenue, Suite 820, Pasadena, CA 91101, during normal business hours of 9:00 a.m. to 5:00 p.m. Monday through Friday.

Persons requiring an alternative format of this agenda pursuant to Section 202 of the Americans with Disabilities Act of 1990 may request one by calling Cynthia Guider at (626) 564-6000, from 8:30 a.m. to 5:00 p.m. Monday through Friday, but no later than 48 hours prior to the time the meeting is to commence. Assistive Listening Devices are available upon request. American Sign Language (ASL) Interpreters are available with at least three (3) business days notice before the meeting date.

MINUTES OF THE REGULAR MEETING OF THE REAL ESTATE COMMITTEE

AND BOARD OF INVESTMENTS

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CA

8:00 A.M., WEDNESDAY, JUNE 13, 2018

PRESENT: Michael Schneider, Chair

Ronald Okum, Vice Chair

David Green

Wayne Moore

ABSENT: Gina Sanchez

Shawn Kehoe, Alternate

MEMBERS AT LARGE:

Herman Santos

David Muir

Joseph Kelly

STAFF, ADVISORS, PARTICIPANTS

Jonathan Grabel, Chief Investment Officer
John McClelland, Principal Investment Officer
Trina Sanders, Investment Officer
Amit Aggarwal, Investment Officer
Mike Romero, Senior Investment Analyst
Kevin Bassi, Senior Investment Analyst

Meketa Investment Group
Leo Festino, Managing Partner
Tim Filla, Vice President

The Townsend Group
Jennifer Young Stevens, Principal
Micolyn Magee, Principal
Robert Miranda, Vice President

I. CALL TO ORDER

The meeting was called to order at 8:00 a.m., in the Board Room of Gateway Plaza.

II. APPROVAL OF THE MINUTES

A. Approval of the Minutes of the Regular Meeting of April 11, 2018

Mr. Green made a motion, Mr. Okum seconded, to approve the minutes of the regular meeting of April 11, 2018. The motion passed unanimously.

III. PUBLIC COMMENT

There were no requests from the public to speak.

IV. NON-CONSENT AGENDA

A. Recommendation as submitted by Trina Sanders, Investment Officer and Kevin Bassi, Senior Investment Analyst: That the Committee approve the Real Estate Objectives, Policies and Procedures to the Board of Investments for adoption. (Memo dated June 1, 2018)

Mrs. Sanders and Mr. Bassi were both present and answered questions from the Committee.

Mr. Green made a motion, Mr. Okum seconded, to approve the recommendation. The motion passed unanimously.

B. Recommendation as submitted by John McClelland, Principal Investment Officer; Amit Aggarwal, Investment Officer; and Mike Romero, Senior Investment Analyst: That the Committee advance the following proposed actions relating to the 2018-2019 Real Estate Investment Plan to the Board of Investments:

1. Approve the proposed Real Estate Investment Plan for fiscal year 2018-2019 and;
2. Approve allocation of up to $550 million ($450 million in the Real Assets and Inflation Hedging and $100 million in the Growth category) for investment by the Fund's separate account equity managers.

Mr. McClelland was present and answered questions from the Committee.

Mr. Okum made a motion, Mr. Green seconded, to approve the recommendations. The motion passed unanimously.

V. REPORT

A. Real Estate Performance Measurement Report 4th Quarter 2017
The Townsend Group
Jennifer Young Stevens, Principal
Micolyn Magee, Principal
Robert Miranda, Vice President
(Memo dated May 31, 2018)

Mrs. Stevens and Mr. Miranda answered questions from the Committee.

VI. REPORT ON STAFF ACTION ITEMS
There were no items to report.

VII. GOOD OF THE ORDER
There was nothing to report.

VIII. ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at approximately at 8:44 a.m.

August 28, 2018

TO: Each Member
Real Asset Committee

FROM: Jon Grabel
Chief Investment Officer

John McClelland
Principal Investment Officer

FOR: September 12, 2018 Real Assets Committee Meeting

SUBJECT: **RFI RECOMMENDATION**
REAL ESTATE ADMINISTRATIVE SERVICES

RECOMMENDATION

Advance a recommendation to conduct a Request for Information for Real Estate Administrative Services for approval by the Board of Investments.

BACKGROUND

The real estate investment program requires a substantial amount of operational-related work to administer. Commingled vehicles make periodic capital calls and distributions. The Fund's separate account activities utilize special purpose entities (or SPEs), such as Title Holding Companies (or THCs) to hold title to real estate. Each THC requires a significant amount of maintenance to protect the integrity of the entity. Further, there are frequent transfers of funds from an entity to/from a LACERA account. The large amount of administrative activity necessitated by these structures requires the full-time equivalent (FTE) of several employees and creates compliance and operational risk to the Fund.

Staff suggests that a Request for Information be issued to determine whether there is an outside service provider that could perform the real estate-related administrative and operational-related tasks currently done in-house at a reasonable cost while increasing internal controls and transparency to the Fund. A possible additional benefit to the Fund could be making higher and better use of its employees. Incremental benefits may include enhanced performance reporting, entity level accounting, fee transparency and Fund level risk metrics. This process may result in consolidation of the use of external bank accounts and service providers and better aggregate the book of record for the real estate program.[1] It is important to note that third party service providers perform these functions for all other asset categories.

[1] The current book of record for real estate is The Townsend Group and FASD.

DISCUSSION

The operational and administrative responsibilities incident with the real estate investment activity of the Fund impact several groups within the organization, including the Executive Office, the Legal Office, Financial Accounting Services Division (FASD) and the Investment Office. Each group devotes significant FTEs to tasks such as:

- Establishing legal SPEs
    - Preparing articles of incorporation
    - Making necessary filings in states of operations
    - Obtaining appropriate federal and state identification numbers
    - Engaging legal service agents in each state where property is held
    - Engaging auditors
    - Maintaining corporate records
    - Holding mandatory corporate meetings
    - Declaring and making dividend distributions to the shareholder

- Establishing and maintaining accounting records
    - Fee validation
    - Book to market value reconciliation

- Creating separate bank accounts for each SPE
    - Administering bank account signature authority

- Reviewing and approving each capital call and distribution

- Preparing wire transfer requests/documentation as needed to/from each SPE to/from LACERA

- Reconciling amounts funded/received for each SPE

Personnel involved in these and related activity include the Assistant Chief Executive Officer, Chief Investment Officer, Principal Investment Officer, Investment Officer, Senior Staff Counsel, Para-legal, Senior Accountant, Staff Accountant, and Finance Analysts I, II, and III. The numerous and detailed tasks that are necessitated by the investment structure create risk to LACERA of compliance lapses or administrative errors.

Providers of fund administrative services have developed increased capability to address the needs and requirements of private real estate investors. They are structurally organized to handle the large amount of detailed activity that is incident to real estate investing.

MANDATE DESCRIPTION

Staff proposes investigating the possibility that LACERA could utilize the services of a fund administrator for real estate. Such a service provider could improve operational accuracy and efficiency. Substantial LACERA resources could be freed up for potential enhanced value creation.

The evaluation of prospective service providers would balance internal controls, portfolio insights and expenses.

According to an eVestment survey conducted in 2018, sixteen firms were identified that provide fund administration services relating to real assets, including real estate. Only five firms reported more than $50 billion of Assets Under Administration (AUA). **TABLE 1** lists the five firms.

TABLE 1
Fund Administration Firms
In Excess of $50 billion of AUA

Company Name	Real Assets AUA ($ in billions)
State Street	$ 165
BNY Mellon Alt. Inv. Svcs.	$ 115
Citco Fund Services	$ 112
RBC I&TS	$ 88
SS&C GlobeOp	$ 76

Source: eVestment Industry Survey. Alternative Fund Administration 2018, May 8, 2018

Staff considers these five firms to be most likely to respond to an RFI from LACERA. However, staff suggests that an open RFI is appropriate and the RFI would not be limited to the five firms listed on TABLE 1.

SCOPE OF WORK

The suggested scope of work would include the administrator performing as much of the administrative and operational tasks relating to LACERA's real estate investment program as possible. Tasks would relate to both commingled fund and separate account activities.

The fund administrator would be charged with:

1. Establishing and maintaining bank accounts as required by LACERA's activity
2. Reviewing and acting on capital draws and distributions
3. Preparing records and reconciliations of investment and banking activity
4. Providing monthly reports on investment and banking activity
5. Reporting investment activity to LACERA's master custodian
6. Fee validation
7. Ability to act as the book of record for Real Estate
8. Ability to calculate performance measurement
9. Other duties as determined by a review of the internal operation-related activities

MINIMUM QUALIFICATIONS

Staff proposes an open search be conducted in order to maximize the chances of identifying the best qualified firms that can meet LACERA's needs. Consequently, only two minimum qualifications are suggested.

1. The service provider must have at least three years of history providing fund and program administration services relating to real estate.
2. The service provider must have at least three institutional clients for which real estate fund administration services are provided.

PROPOSED TIMELINE

The proposed timeline for the RFI is outlined in **TABLE 2** below.

TABLE 2
PROPOSED RFI TIMELINE

Date	Task
September 2018	Real Assets Committee
October 2018	Board of Investments
November 2018	Issue RFI
December 2018	RFI Responses Due
December 2018-January 2019	Evaluate RFIs
February 2019	Report Results to Board of Investments

CONCLUSION

Fund administration service providers have expanded into real estate and may now offer LACERA a viable way to improve operational accuracy and efficiency while freeing up staff resources. An RFI would allow a complete evaluation of the costs and benefits of using such a service provider. Staff would report findings and conclusions, and possibly a recommendation, to the Board for consideration.

Real Assets and Inflation Hedge Implementation Plan

Real Assets Committee

September 12, 2018

Jim Rice – Principal Investment Officer
Kevin Bassi – Senior Investment Analyst

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Overview

- On May 9, 2018, the Board of Investments approved the Real Assets and Inflation Hedge category
- Four sub-categories fall under this new category:
  - Infrastructure
  - Natural Resources and Commodities
  - TIPS
  - Core and Value Add Real Estate
    - Real Estate rolls up into Real Assets but will be managed independently under existing OPP
- LACERA investment staff will initially implement the allocation through initial investments in liquid strategies for Infrastructure and Natural Resources
- TIPS will be implemented through a separate search process for a passive implementation

Current Allocation vs. New Asset Allocation Policy

Asset Category Sub-Strategy	Current Allocation % as of end of 1Q18	New Policy Target %	Difference* (New Policy - Current)
Real Assets and Inflation Hedges	**12.4**	**17**	**4.6**
Core and Value Added Real Estate	9.6	7	(2.6)
Natural Resources & Commodities	2.8	4	1.2
Infrastructure	0.0	3	3.0
TIPS	0.0	3	3.0

* Numbers rounded to maintain calculation accuracy.

Current Asset Weights vs. New Allocation Policy

Change in Allocation by Functional Category
New Targets vs Existing Weights (June 30, 2018)

	Real Assets and Inflation Hedges
Change, ($B)	+2.6
Change, % of Total Fund	↑4.6%
Policy Band Size	+/- 3%
Movement To Be Within Policy Band	↑ 1.6%

Implementation Goals Over Next 10-12 Months

- Create Objectives and Procedures (O&P) document
- Develop Annual Investment Plan
- Complete Search for Consultant
- Incorporate Benchmarks for Asset and Sub-Asset Category Performance Measurement
- Staff the Asset Class with Two New Positions

Objectives and Procedures (O&P)

- Objectives and Procedures of the new asset class include:
  - Program Objectives
  - Proposed Investment Structure
  - Portfolio Benchmarks
  - Description of Investment Categories and Strategy Types
  - Portfolio Guidelines and Risk Parameters
  - Geographic Allocation
  - Roles and Responsibilities of Board, Staff, Consultant and Custodian

Objectives Procedures (O&P)

- Objectives and Procedures of the new asset class include:
  - Program Procedures
    - Investment Vehicle Guidelines
    - Fees
    - Sourcing and Due Diligence
    - Approval Process
    - Rebalancing and Redemption
    - Performance Reporting
    - Program Policies
    - Risk Management
      - Coordination with broader Policies (e.g., Responsible Contractor, Derivatives)

Annual Investment Plan

- Guide Real Asset investment activities of the Fund during the year
- Short-term efforts towards meeting long-term objectives stated in the Real Assets O&P
- Investment Pacing and Capital Planning
- Market Outlook
- Geographic Allocation
- Proposed Structure and Its Evolution

Consultant Search

- A RFP has been approved and launched to obtain the services of a Consultant
- Consultant will be expected to assist LACERA on manager selection decisions, asset category research support, special projects, portfolio management and risk evaluation
- Responding firms will be expected to meet Minimum Qualifications that have been approved by the Board
- Single RFP for Real Assets, Credit and Hedge Funds is be conducted

Benchmarking

- Incorporate appropriate asset category and sub-asset category benchmarks to measure performance
- Consider use of other indices and data sets to provide additional context for evaluating performance

Path to New Allocation:
Real Assets

Current % of Fund: 12.4% New Policy Target: 17%
Previous Policy Target: 12%

Portfolio of Existing Real Assets

- Core Real Estate
- Value Added Real Estate
- Commodities

Implementation Phase I

- Add TIPS
- Issue RFI for Completion Portfolio for Public Market Real Assets*

Implementation Phase II

- Add Private Infrastructure
- Add Private Natural Resources
- Use Completion Portfolio to Fund Private Investments*

* Subject to BOI Approval.

Path to New Allocation:

Approved Committee Structure

Existing Committee Names	New Name	Changes	Asset Oversight
Real Estate	Real Assets	+ Commodities + **TIPS** + Private Natural Resources + **Infrastructure** - Real Estate Debt	• Real Estate • Commodities • **TIPS** • Private Natural Resources • **Infrastructure**

Approved New Asset Allocation Targets and Ranges

Asset Category Sub-Strategy	**Current Allocation % as of end of 2Q18**	**New Policy Target %**	**Allowable Band Above Policy Target**	**Allowable Band Below Policy Target***
Real Assets and Inflation Hedges	**12.4**	**17**	**+3**	**-3**
Core and Value Added Real Estate	9.6	7	+3	-3
Natural Resources & Commodities	2.8	4	+2	-2
Infrastructure	0.0	3	+1	-3
TIPS	0.0	3	+2	-3

* Minimum allowable % is greater of zero or policy target less "allowable band below policy target."

Timeline: Interim Policy Allocations*

Asset Category Sub-Strategy	2Q18 Actual Allocation	3Q18 Previous Policy Target %	Interim Policy Target % effective 2Q19	New Final Policy Target % effective 4Q19
Real Assets and Inflation Hedges	**12.4**	**12**	**15**	**17**
Core and Value Added Real Estate	9.6	9	8	7
Natural Resources & Commodities	2.8	3	3	4
Infrastructure	0.0	0	2	3
TIPS	0.0	0	2	3

* Subject to BOI Approval.

Projected Timeline of Implementation Goals

- Benchmark – Incorporate recommendations, if approved, at September BOI meeting
- Objectives and Procedures – 1Q19
- Annual Investment Plan – 1Q19
- Consultant RFP – 1Q19
- Staffing – Two positions to be filled by 1Q19

Current Staff Assisting With Real Assets Duties

- LACERA investment staff members are assisting with the initial Real Assets and Inflation Hedge implementation tasks. Those staff members are:
  - Amit Aggarwal – Investment Officer, Real Estate
  - Calvin Chang – Senior Investment Analyst, Private Equity
  - Elin Szymanowski – Investment Officer, Private Equity
  - Inga Tadevosyan – Investment Analyst, Real Estate
  - Jim Rice – Principal Investment Officer, Real Assets and Inflation Hedge
  - Kevin Bassi – Senior Investment Analyst, Real Estate
  - Mike Romero – Senior Investment Analyst, Real Estate
  - Shelly Tilaye – Senior Investment Analyst, Private Equity
  - Trina Sanders – Investment Officer, Real Estate
  - Fixed Income team overseeing RFP for TIPS

LACERA

August 31, 2018

TO: Each Member
Real Assets Committee

FROM: John McClelland, Principal Investment Officer
Amit Aggarwal, Investment Officer
Cindy Rivera, Investment Analyst

FOR: September 12, 2018 Real Assets Committee Meeting

SUBJECT: **REAL ESTATE INVESTMENT STRATEGY-REVIEW**

INTRODUCTION

LACERA works with managers and general partners using separate accounts and commingled funds as vehicles for real estate investing. This memo serves to identify some of the key strategies being pursued and how they fit within the Board-approved asset allocation targets. A brief real estate market overview and update on LACERA's current real estate portfolio status precedes the domestic and international strategy discussions.

REAL ESTATE MARKET OVERVIEW

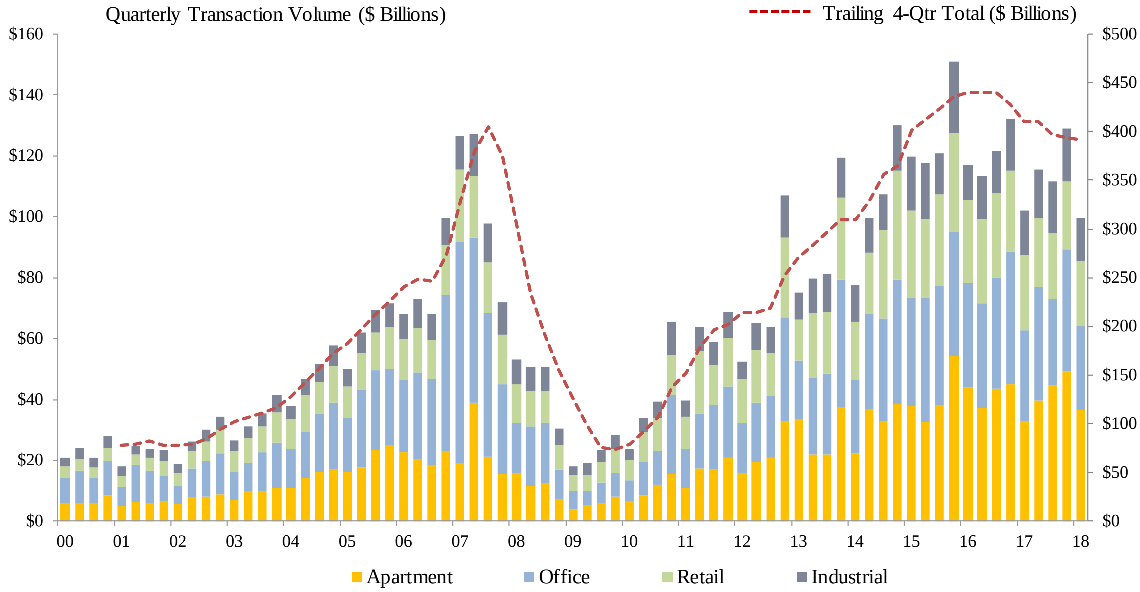
Real Estate Equity

The U.S. real estate market appears to be healthy. The national vacancy rate is near its lowest point in 17 years and below its 20 year average in every major sector.[1] Rents are rising at about 3% annually and the net operating income (NOI) nearly 5% annually, well above inflation of about 2%.[2]

Capital markets' demand for real estate is strong. During 2017, $393 billion of commercial real estate was transacted, marking it the third-highest commercial real estate deal volume on record.[3] **Chart 1** shows the quarterly transaction volumes from the year 2000 to 1Q 2018.

[1] NCREIF as of March 31, 2018
[2] CBRE-EA (rents); NCREIF (NOI); Bureau of Statistics (CPI inflation) as of March 31, 2018
[3] Real Asset Capital Analytics (RCA)

Chart 1
Quarterly Transaction Volume
By Property Type



Source: CoStar Portfolio Strategy 1Q 2018

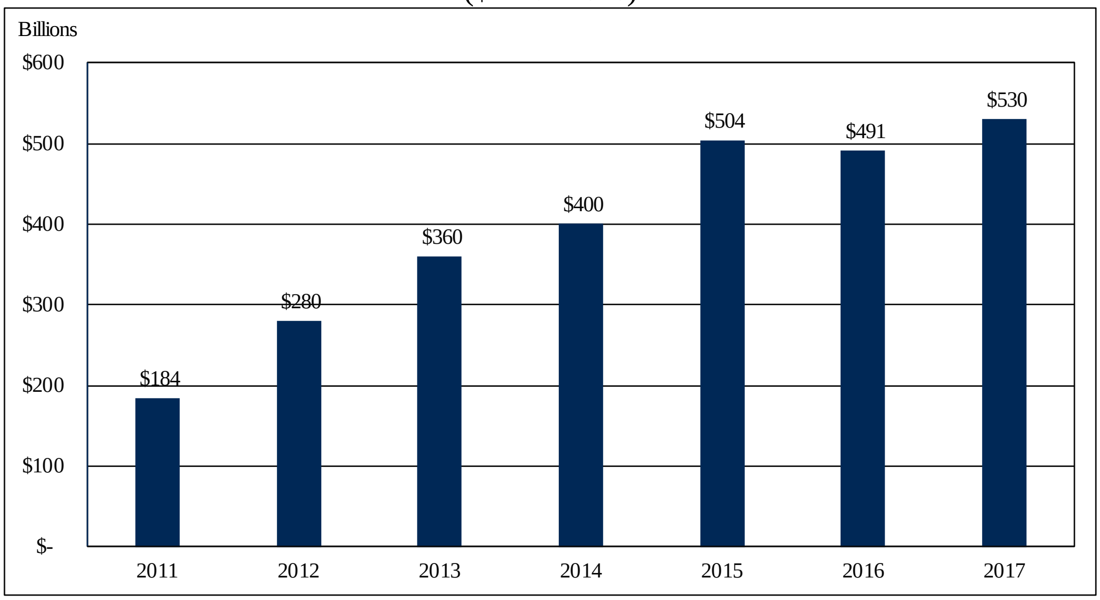
However, transaction volumes are not increasing in all sectors of the market. For example, retail ended 2017 with a difficult year. Concerns over tenant demand and internet disruption has dampened investor sentiment for retail, and lowered transaction volume by 18% quarter-over-quarter on a trailing four-quarter basis. For the other property types, investment trends have remained consistent, with apartments and industrial investments exceptionally strong in 2017.

Real Estate Debt

Similarly, the commercial real estate debt market has been robust, recording the strongest year in 2017 in terms of loan volume. As illustrated in **Chart 2** below, commercial real estate debt closed at a record-high of $530 billion; the total amount of mortgage debt outstanding grew to $3.1 trillion; and for most capital sources, mortgage delinquency rates were at or near all-time lows.[4]

[4] Commercial/Multifamily Real Estate Finance (CREF) Markets 2018, Mortgage Bankers Association

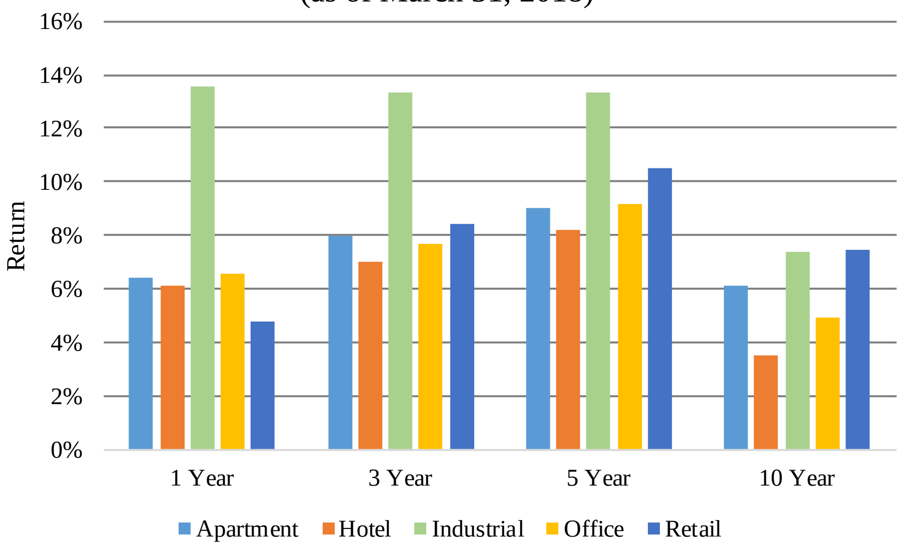
Chart 2
Total Loan Originations
2011-2017
($ in billions)



Source: MBA CREF Database

After a strong recovery following the Global Financial Crisis, real estate returns have moderated. **Chart 3** below illustrates the NCREIF Property Index (NPI) total return by property type for the last 10 years. Industrial properties have generated the highest returns during the most recent five years.

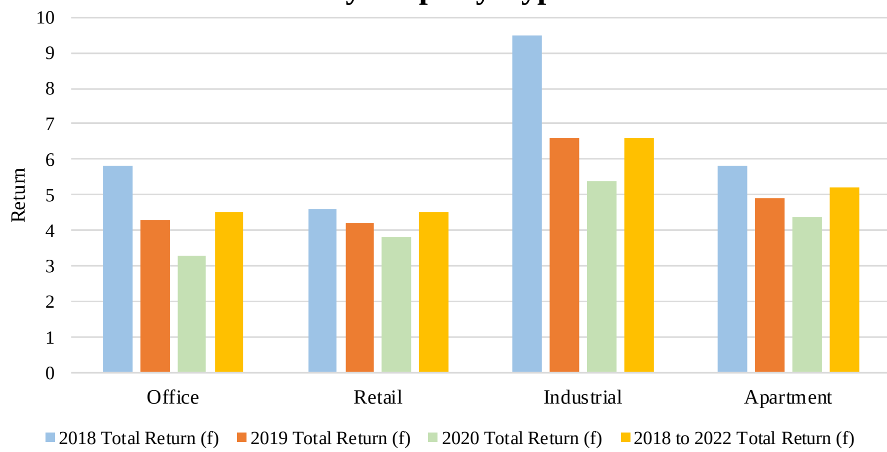
Chart 3
NPI Total Returns By Property Type
(as of March 31, 2018)



Source: NCREIF Property Index 1Q 2018

However, lower returns are expected from real estate over the next five years. The PREA Consensus NPI forecast shows investor expectations are steady with forecast returns moderating to an average of 5.2% annual return over the next five years. Industrial is expected to remain the strongest performer, followed by apartments, retail and office as shown in **Chart 4** below.

Chart 4
Average Forecast Total Returns
By Property Type



Source: PREA Consensus Forecast Survey of the NCREIF Property Index 2Q 2018

INVESTMENT TYPES

LACERA began the 2018-2019 fiscal year over allocated to real estate and thus anticipated being a net seller. Staff anticipates LACERA selling approximately $1 billion of real estate assets, mainly core, and buying approximately $500 million of real estate assets. **Table 1** illustrates the current portfolio composition relative to target allocations as a percentage of the LACERA Total Fund.

Table 1
Functional Asset Class Overlay and Real Estate
Asset Allocation Targets
(as of March 31, 2018, $ in millions)

Functional Asset Class/Strategy	Current Market Value		Target		Difference
	$	%	$	%	
Real Assets and Inflation Hedges	$5,363	9.6%	$3,892	7.0%	($1,471)
Growth	$793	1.4%	$1,112	2.0%	$319
Credit	$119	0.2%	$556	1.0%	$437
Total	**$6,275**	**11.3%**	**$5,560**	**10.0%**	**($715)**

Risk Profile

Core (part of Real Assets and Inflation Hedges)

Staff expects a modest amount of core investing due to the over allocation to real estate in Real Assets and Inflation Hedges. The limited new investments would likely replace older properties that are sold. Selective core investments are pursued to provide durable income, an inflation hedge, diversification and stability to the portfolio. Core properties are operationally stable and demonstrate occupancy levels at acquisition of at least 80%. Additionally, core property investments are generally underwritten to be long term holds, typically 7 to 10 years, with a hold/sale analysis performed at least annually. Appreciation usually contributes to around 30% or less of the total expected return.

Value-Add (part of Real Assets and Inflation Hedges)

Very limited, if any, new value-add investing is anticipated due to the over allocation to real estate in the Real Assets and Inflation Hedges asset class overlay. Nonetheless, some attractive value-add opportunities are being underwritten by staff. One involves low income workforce housing and another, small-bay industrial properties. Both of these opportunities are being sponsored by emerging managers in commingled fund vehicles and are currently being underwritten. Due to historically poor performance in the value-add sector by the separate account managers, no new value-add investments are anticipated to be generated by the managers.

High Return (part of Growth)

High return investments, part of the Growth asset class overlay, are under the asset allocation target for real estate. Select new apartment and industrial development opportunities are being considered by the separate account managers. Build-to-core and build-to-suit opportunities tend to be most attractive. Recent commingled fund commitments in high return investments have been made for funds such as Aermont, Angelo, Gordon and another upcoming fund recommendation. For such funds, market dislocations have created and continue to create opportunities. Nonetheless, managers and general partners are cognizant of the late stage of the economic expansion leading to greater selectivity.

Leverage

Leverage would be used on a case-by-case basis to enhance investment returns. In today's low interest rate environment, leverage typically enhances equity returns. The maximum loan-to-value permitted on any single investment is 50% for core, 65% for value-add, and 80% for high return. The total leverage limit is 50% on the overall real estate portfolio. Leverage would only be utilized if it enhances the investment's returns. As of March 31, 2018, leverage on the LACERA real estate portfolio is 36.4%.

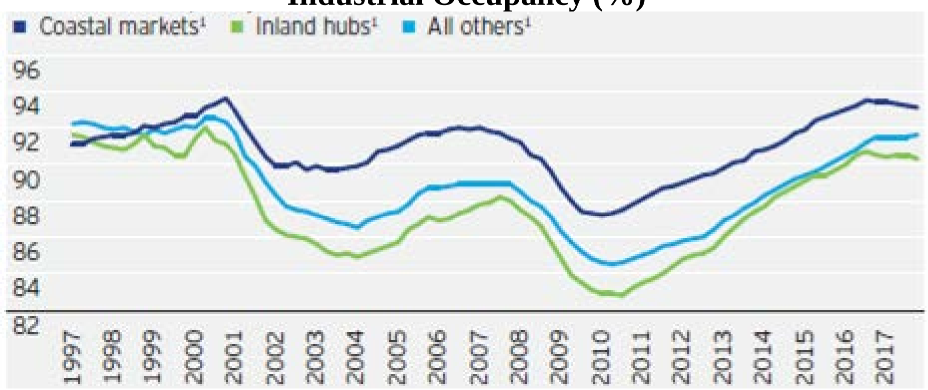
INVESTMENT THEMES

Considering the current real estate market and investment types outlined above, LACERA separate account managers are pursuing the following six investment themes: (i) build-to-core industrial; (ii) creative office; (iii) lifestyle retail; (iv) medical office building; (v) self-storage; and (vi) student housing.

Build-to-Core Industrial

A build-to core strategy for industrial will consist of the ground-up development of an industrial building(s), leasing, and then having the option of selling, and hopefully realizing a high return, or holding and reclassifying the completed investment as a core holding. Therefore, a build-to-core investment starts as high return (or Growth) and upon completion, is evaluated for transition to core (or Real Assets and Inflation Hedges). **Chart 5** below shows the most attractive markets for industrial development in the near-term are coastal markets such as Los Angeles Area, SF Bay Area, Seattle and South Florida. Over the last 20 years, occupancy levels in coastal markets have consistently outperformed inland hubs and others.

Chart 5
Industrial Occupancy (%)



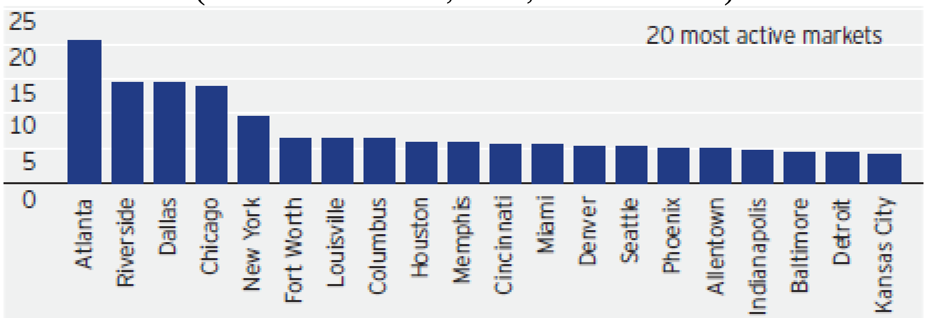
1 Coastal markets: Seattle, San Jose, Oakland, Los Angeles, Orange County, Riverside, New York, Newark, Fort Lauderdale, Miami, Houston; Inland hubs: Atlanta, Chicago, Dallas, Fort Worth; All others: The remaining 111 markets of the 126 tracked by CBRE-EA that are not coastal markets or inland hubs.
Source: Invesco Real Estate based on data from CBRE-EA as of Q4 2017

Build-to-core industrial development opportunities are pursued on a selective basis. Particularly attractive are unique development opportunities where the site, location, project design and strong market fundamentals justify the development risk. Developments are only pursued in markets where:

- Existing properties are being sold at pricing at or above replacement cost
- Market rents justify new construction; and
- Competitive new construction is limited

In terms of oncoming new industrial supply, the five most active markets (and perhaps to be avoided) are Atlanta, Riverside, Dallas, Chicago, and New York. **Chart 6** shows a leveling off of industrial space under construction beyond these top five markets.

Chart 6
Industrial Space Under Construction
(as of December 31, 2017, SF in millions)



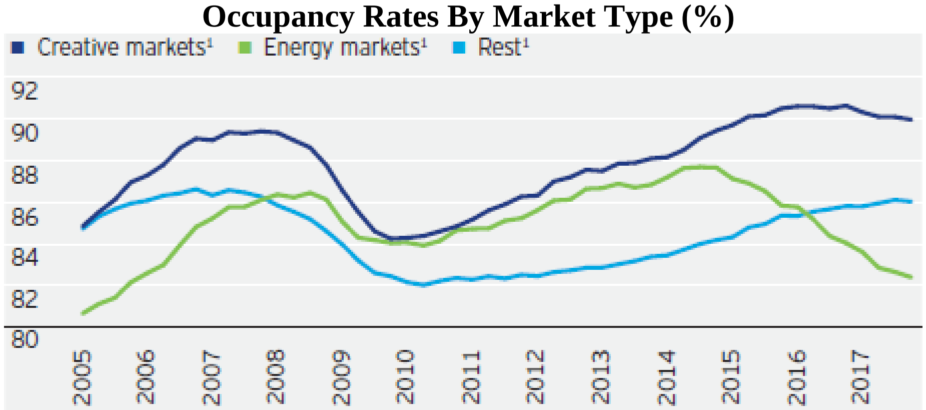
Source: Invesco Real Estate based on data from CBRE-EA as of Q4 2017

Creative Office

The strongest office fundamentals are in the tech/creative segment. Creative office is a term that refers to non-traditional office space. Frequently, there is not carpeting on floors, ceilings are open, there are few walls and an open environment that is designed to facilitate employee interaction and collaboration. Markets where there is a significant amount of creative office may be characterized as "creative markets". Creative markets have exhibited the highest occupancy rates by market type since 2005, and recent investment behaviors continue to support this trend as demonstrated in **Chart 7** below. Offices positioned to attract and retain talent with co-working/flexible spaces are favored by office tenants. Though demand is moderating, newer creative office buildings have dominated this cycle.

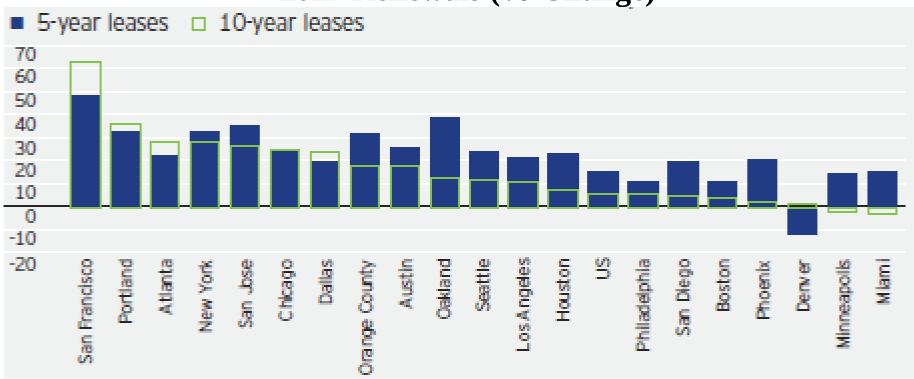
Creative office is selectively considered. In particular, markets with strong job growth and rent growth momentum such as Austin, Boston, West Los Angeles, Midtown South NY, Portland, San Francisco, San Jose, and Seattle are targeted.

Chart 7
Occupancy Rates By Market Type (%)



Source: Invesco Real Estate based on data from CBRE-EA as of February 2018
1 Creative markets: Austin, Boston, West LA, Midtown South NY, Portland, San Francisco, San Jose, Seattle; Energy markets: Houston, Denver, Pittsburgh; Rest: The remaining 114 markets of the 126 tracked by CBRE-EA that are not creative or energy markets.

Chart 8
Office Rent Mark-To-Market
2017 Renewals (% Change)

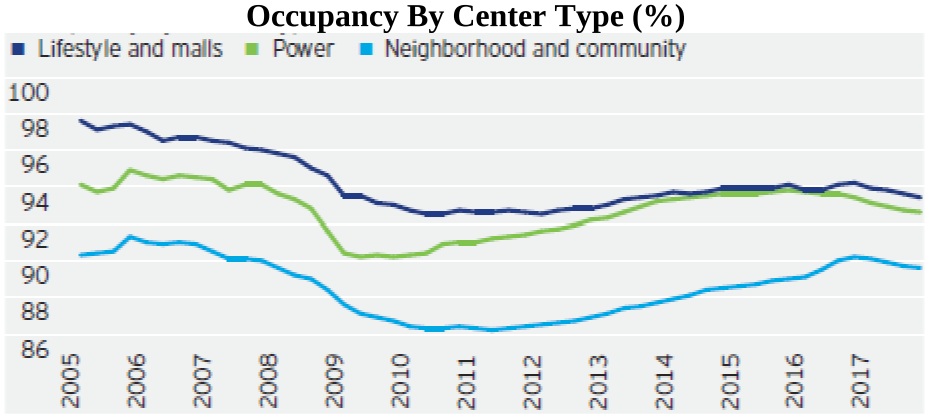


Source: Invesco Real Estate based on data from CBRE-EA as of February 2018

Lifestyle Retail

While growing online sales are impacting traditional retail, lifestyle retail is growing in importance. "Lifestyle retail" refers to centers of 100,000 to 500,000 square feet that are open air and have several upscale retailers. They have high architectural, fashion and entertainment components. Shopping centers that provide a better experience (e.g., playground, entertainment, restaurants, bars), have higher occupancy rates than other types of retail. **Chart 9** below shows lifestyle retail and malls have maintained the highest occupancy rates by center type in over 10 years.

Chart 9
Occupancy By Center Type (%)



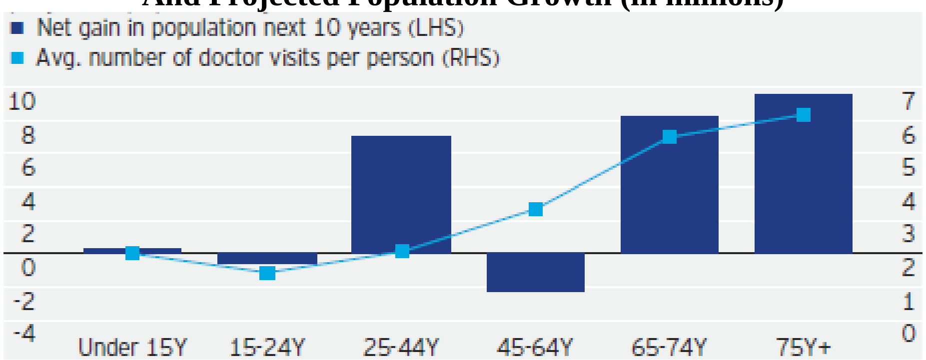
Source: Invesco Real Estate based on data from CBRE-EA and Moody's Analytics as of February 2018
E-commerce sales are shown as a share of total retail sales, excluding autos and parts, food and drinking places, and fuel dealers.

Well-located lifestyle retail centers in densely populated locations with high pedestrian traffic are being considered for investment. Emphasis is placed on urban infill and supply constrained locations in established, high density, relatively affluent trade areas with limited prospects for building new competitor centers. Focus is also placed on grocery-anchored centers with leading supermarket and drugstore chains in the trade area. Grocery-anchored neighborhood centers in fringe metropolitan locations easily cannibalized by big box discount retailers (e.g., Wal-Mart and

Target) are avoided. Core retail properties with excessive exposure to anchor tenants facing strong competition from e-commerce retailers are also avoided unless compelling re-tenanting opportunities are available.

Medical Office Building (MOB)
Aging demographics and shifts in healthcare delivery support increased demand for medical office buildings. Rapid growth in the senior population (i.e., the aging Baby Boomers generation) notably increases healthcare needs as shown in **Chart 10**.

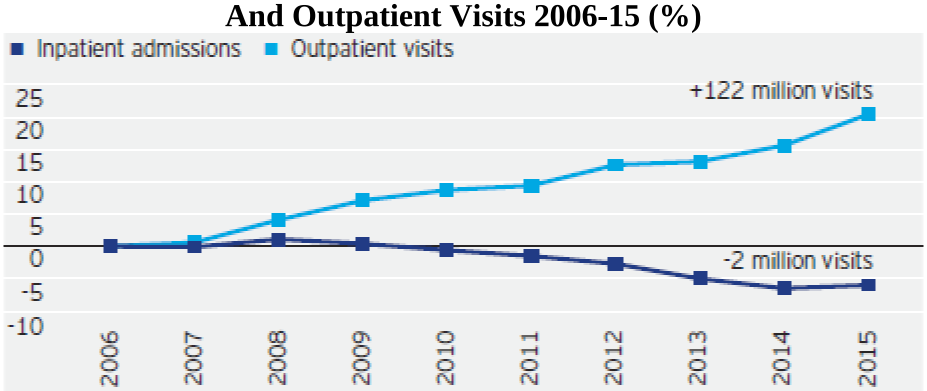
Chart 10
Avg. Annual Doctor's Office Visits By Age Group (#)
And Projected Population Growth (in millions)



Source: Invesco Real Estate based on data from the National Center for Health Statistics and Medpac/ American Hospital Association as of March 2018

Recent technological advances have also supported growing demand for MOBs by enabling more procedures to occur in MOBs rather than at traditional (and more expensive) hospitals. Since 2006, the cumulative change in total outpatient admissions has outpaced inpatient admissions with a growing differential.

Chart 11
Cumulative Change in Total Inpatient Admissions
And Outpatient Visits 2006-15 (%)



Source: Invesco Real Estate based on data from the National Center for Health Statistics and Medpac/ American Hospital Association as of March 2018

MOB investment performance is driven by proximity and connection to strong healthcare networks and high demand for tenants' services within a service area. As a result, medical office buildings are also pursued outside of the target markets if the investments present compelling risk-adjusted returns. Core medical office properties situated near hospitals, medical centers, or senior housing are considered if they have amenities, finishes, and parking appropriate for the market, with flexible floor plans. Buildings with unusual floor plans not matching current market tenant demand are not pursued. Single tenant properties and special purpose buildings are avoided unless a compelling risk-return proposition is offered.

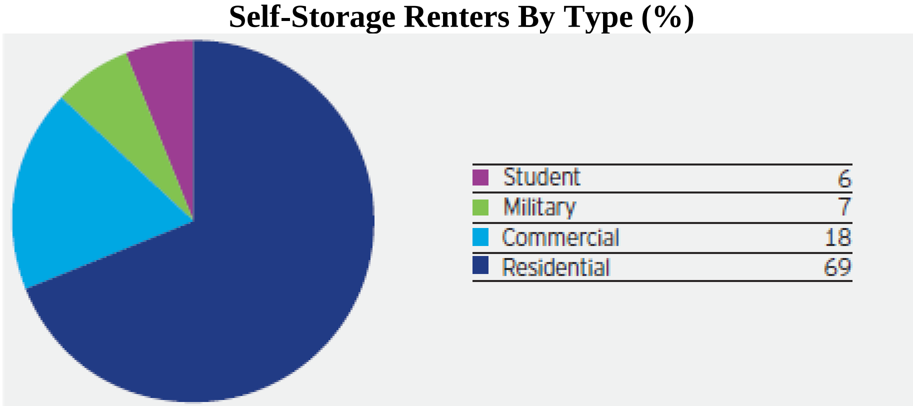
Within a core platform, MOB investments require more selectivity, especially with respect to the targeted market and submarket. Properties with strong major tenants and defensive lease rollover schedules in well-established submarkets generally produce more modest cash flows, but can appreciate in value during expansionary economic cycles. With that in mind, more so than other product types, the timing of such acquisitions and dispositions is important; shorter-term hold strategies may be the best way to assure maximum return performance.

Self-Storage

Due to its countercyclical and de-linked nature, self-storage properties are desirable in this economic climate and provide good diversification to the current LACERA portfolio. A recommended self-storage strategy is to target core and high return (development) assets. The primary strategy is to target portfolios in locations that demonstrate attributes for growth. Desirable self-storage assets are either be managed by sophisticated operators (current) or transferred to operators that can achieve greater efficiencies through streamlined operations.

As shown in **Chart 12** below, the demand base for self-storage is broad, which supports the sector in both good and bad times. Residential renters account for the largest self-storage renter type with 69%, followed by commercial renters with 18%. Additionally, occupancy is high and relatively stable (over 90% since 2013) as shown in **Chart 13**.

Chart 12
Self-Storage Renters By Type (%)

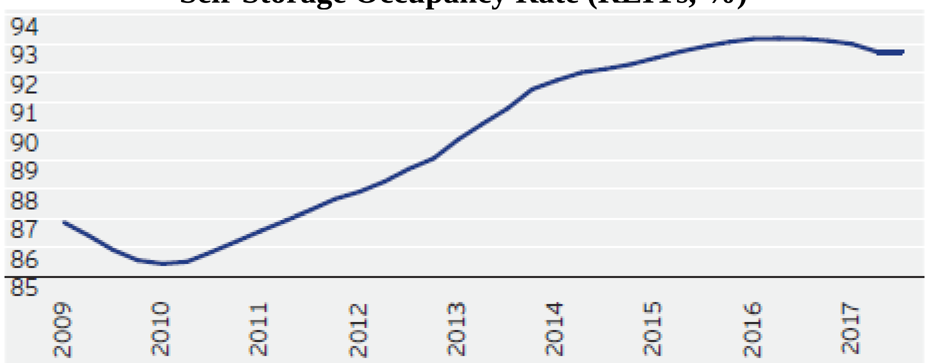


Source: Invesco Real Estate based on data from Self-Storage Association and REIT company reports as of March 2018

Since market demographics, trade area, visibility, and access are the primary drivers of performance (versus size of metro area), investments in the 100 largest metro areas (as measured by population) are preferred. However, the focus is to acquire portfolios where the majority of the

NOI comes from the top 50-75 markets, allowing only a small amount to come from markets outside the top 100.

Chart 13
Self-Storage Occupancy Rate (REITs, %)



Source: Invesco Real Estate based on data from Self-Storage Association and REIT company reports as of March 2018

Student Housing

Shifting demographic trends and changing consumer preferences among college students have led to the growth of the student housing market. Due to some state budget cuts, large universities are less able to build new on-campus housing to compete with privately-owned properties.[5] Student housing investment performance is largely driven by proximity and connection to college/university campuses. As a result, student housing investments are pursued outside of the target markets proximate to college campuses if the investments present compelling risk-adjusted returns.

Well-located garden-style, mid and high-rise student housing properties are targeted. Emphasis is placed on acquiring garden style, mid and high-rise properties located close to universities as well as near mass transit centers and retail hubs. Separate account managers pursue select student housing properties located near colleges and universities with an enrollment greater than 8,000 students.

[5] National Real Estate Investor, December 12, 2017.

GEOGRAPHY

The portfolio continues to have a strong home-country bias. As of March 31, 2018, 95% of the portfolio is invested in the U.S. LACERA's international activity is expected to enhance geographic diversification and commitments are made across multiple vintage years, risk categories and general partners. International investments are executed via commingled funds, either closed- or open-ended. The Real Estate Implementation Plan calls for up to 15% of the real estate allocation to be invested internationally over the next three to five years.[6]

Domestic

Most investment activity by the separate account managers will be focused in major U.S. markets. Primary markets (e.g., New York City, Boston, Washington D.C., Los Angeles, and San Francisco) have historically attracted the most investor interest, resulting in the highest level of liquidity for real estate. However, core pricing is now rising above prior peaks, leading LACERA's managers to look to strong secondary markets such as Houston, Denver, Dallas, Austin, Portland, San Diego and Nashville for better returns. Lack of affordable housing in primary markets has driven renters and homeowners (particularly Millennials) towards secondary markets. Businesses and technology firms are now opening up satellite offices and signing new creative office leases in secondary markets. **Exhibit 1** below shows some markets that may be considered for the LACERA portfolio.

Exhibit 1
Target Markets & Property Types

[6] The Real Estate Implementation Plan was adopted by the Board in October 2016.

International
The main rationale for investing internationally in core is to diversify the portfolio. Core investments will likely be made using open-ended commingled funds due to the longer hold periods of the investments. The currency for core investments is not hedged. Non-core investments, on the other hand, will most likely be made using closed-ended funds. The primary rationale for non-core investments is to take advantage of opportunities where expected returns exceed returns for similar U.S.-based strategies. The currency may be hedged if economically feasible.

Each international investment is presented to the Board for consideration. At that time, specific strategies and the rationale for them is articulated.

LACERA's active commitments to date appear in **Table 2** and are described in further detail below.

Table 2
International Commingled Fund Commitments
(amounts in millions)

Fund Name	BOI Approved	Category	Region	Committed Amount
Europa Fund IV	8/8/12	High Return	Europe	€ 50.0
Invesco Real Estate Asia Fund	1/9/13	Core	Asia	$100.0
Prologis Targeted Europe Logistics Fund	12/11/13	Core	Europe	€ 100.0
Capman Nordic Real Estate II	5/10/17	Value-Add	Europe	€ 50.0
AEW Value Investors Asia III	12/13/17	Value-Add	Asia	$50.0
Heitman Asia-Pacific Property Investors	2/14/18	Value-Add	Asia	$50.0
Angelo Gordon Europe Realty II	3/5/18	High Return	Europe	$50.0
Aermont Capital Real Estate IV	8/8/18	High Return	Europe	€ 50.0
Total*				**$540.3**

*EUR/USD conversion rate of 1.161165 as of 8/31/2018.

Core
As of March 31, 2018 LACERA has two core open-ended fund commitments internationally. One of the funds is in Europe and the other in Asia.

LACERA made a €100 million commitment to Prologis Targeted Europe Logistics Fund (PTELF) in December 2013. PTELF pursues a low risk, core strategy of acquiring and operating industrial properties located in primary distribution hubs in Western Europe. The fund targets a net 5%-6% annual dividend yield to investors and is expected to generate a net levered IRR of 9%-10% over the long term (10 years). The since-inception net return to LACERA from PTELF is 13.5%.[7]

[7] As of March 31, 2018.

LACERA made a $100 million commitment to Invesco Real Estate Asia Fund in January 2013. The fund is pursuing investments in major metropolitan areas across Asia Pacific across all property types. The assets acquired will consist of existing, leased, income producing properties that are suitable for long-term holds by institutional investors. The target return for the fund is 8%-10% net of fees. Income is expected to deliver 4%-5% of the annual return. The since-inception net return to LACERA from the Invesco fund is 8.4%.[8]

Value-Add

As of March 31, 2018 LACERA has three actively investing value-add closed-end fund commitments internationally. One of the funds is in Europe and the other two are in Asia. International value-add investments generally target net IRRs of 12%-15%.

LACERA made a €50 million commitment to CapMan Nodic Real Estate II (CapMan II) in May 2017. The fund is pursuing value-add opportunities in markets considered to be most liquid, demonstrating growth characteristics with attractive demographics, technology and urbanization attributes throughout the Nordic region (Sweden, Denmark, Finland and Norway). CapMan II is assembling a portfolio of diversified investments primarily in office, retail and the residential sectors of the largest cities of the Nordic region.

LACERA made a $50 million commitment to AEW Value Investors Asia III (AEW II) in December 2017. The fund is pursuing properties with a value-add focus, and upon stabilization, evaluates them for sale. The fund is focusing on three property types: office, retail and limited residential in five specific Asian markets, including Sydney, Singapore, Hong Kong, Seoul and Shanghai. Furthermore, secondary markets such as Melbourne, Beijing, Taipei and Kuala Lumpur are considered.

LACERA made a $50 million commitment to Heitman Asia-Pacific Property Investor in February 2018. The fund is pursuing investments in office, retail, logistics/warehouse and residential and may invest up to 50% of the fund in specialty categories such as self-storage, student housing, and medical office. The fund targets investments in the developed, and relatively liquid, Asian markets of: Sydney, Melbourne, Brisbane, Tokyo, Osaka, Hong Kong, Seoul and Singapore.

High Return

As of August 15, 2018 LACERA has five actively investing high return closed-end fund commitments internationally. Four commitments to Europe and one to a global fund. International high return investments generally target a net IRR of 15%-18%.

LACERA made a €50 million commitment to Europa Capital Fund IV in August 2012. The fund pursued investment opportunities in the more liquid prime markets of Europe such as U.K., France and Germany. The fund acquired assets that required repositioning and/or transformation from poor quality real estate into institutional quality. The fund utilized local partners to source opportunities throughout Europe.

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[8] As of March 31, 2018.

LACERA made a $50 million commitment to Angelo, Gordon Realty Fund II in March 2018. The fund's main emphasis is to purchase sub-performing and distressed real estate assets and debt (loan-to-own). The business plans may range from modest lease-up and operations improvement to significant value-add/opportunistic strategy. The fund is investing in the most liquid and institutional markets in Western Europe such as the U.K., the Netherlands, Germany, France, Ireland, Spain, Italy and the Nordics. They are focusing on assets such as office, retail, residential, industrial and hotels.

LACERA made a €50 million commitment to Aermont Fund IV in August 2018. The fund's strategy is to invest in situations where major value-creation initiatives, operational leverage and/or value arbitrage may be implemented to generate attractive risk adjusted returns. Aermont will seek to proactively target large, complex investments consistent with those strategies. Aermont's typical investment size is around €100 million per transaction. Aermont will pursue the creation, transformation, restructuring or growth of the fund's investments so that they are attractive as prime properties or leading businesses to institutional investors upon exit.

SUMMARY

Each separate account manager has presented a manager investment plan to LACERA outlining and supporting the investment strategies they propose pursuing for the Fund. Each strategy is supported by manager-prepared research as they attempt to compete for good investments within a capital-rich environment. Although the research included is general in nature and not location specific, site-specific research is reviewed for each investment prior to being approved by the managers.

Noted and Reviewed:

Jonathan Grabel
Chief Investment Officer

JM/dr