MINUTES OF THE REGULAR MEETING OF THE BOARD OF TRUSTEES OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

JANUARY 8, 2018

CITY FINANCIAL TOWER 201 MERCHANT STREET, SUITE 1200 HONOLULU, HAWAII 96813

Trustees present: Mr. Emmit Kane, Chair

Mr. Jerome Rauckhorst, Vice Chair

Mr. Vincent Barfield Dr. Catherine Chan

Ms. Jackie Ferguson-Miyamoto

Dr. Genevieve Ley Mr. Colbert Matsumoto

Trustees excused: Ms. Laurel Johnston

Staff present: Mr. Thomas Williams, Executive Director

Ms. Donna Curry, Program Specialist

Mr. Karl Kaneshiro, Retirement Benefits Manager Mr. Vijoy Chattergy, Chief Investment Officer

Mr. Andrew Chen, Investment Specialist

Mr. Anthony Goo, Investment Officer – Liquid Markets Mr. Howard Hodel, Investment Officer – Risk Management Mr. Keith Miyamoto, Information Technology Manager Ms. Kathleen Shiroma, Information Technology Band C Ms. Sandra Straub, Information Technology Band C

Ms. Dale Kehau Kanae, Recording Secretary

Ms. Lori Kim, Secretary

Ms. Gerri Konishi, Member Home Loan Assistant

Ms. Wanda Kugiya, Secretary

Staff excused Ms. Kanoe Margol, Deputy Executive Director

Mr. Aaron Au, Investment Officer – Illiquid Markets

Mr. Ian Wetzel, Investment Specialist

Attorneys present: Mr. Kyle Chang, Deputy Attorney General (Counsel for the Board)

Ms. Elmira Tsang, Deputy Attorney General (Counsel for ERS Staff)

Ms. Jodi Yi, Deputy Attorney General (Counsel for ERS staff)

Guests present: Ms. Mary Bates, Pension Consulting Alliance, LLC

Mr. Neil Rue, Pension Consulting Alliance, LLC

Mr. Chae Hong, Aon Hewitt Investment Consulting, Inc. Mr. Joseph Newton, Gabriel, Roeder, Smith and Company Mr. Lewis Ward, Gabriel, Roeder, Smith and Company

Mr. Cade McNown, Kayne Anderson Capital Advisors, LP Mr. Albert Rabil, III, Kayne Anderson Real Estate Advisors

Ms. Caroline Freitas, Hawaii State Enterprise Technology Services Mr. Vince Hoang, Hawaii State Enterprise Technology Services

Mr. Arnold Kishi, Hawaii State Enterprise Technology Services

QUORUM/CALL TO ORDER

A quorum being present (Chair Kane, Vice Chair Rauckhorst, and Trustees Barfield, Chan, Ferguson-Miyamoto, and Ley), Chair Kane called the regular meeting of the Board of Trustees (Board) of the Employees' Retirement System of the State of Hawaii (ERS) to order at 9:03 a.m.

AMENDMENT OF THE AGENDA

Chair Kane requested that the Board amend the agenda to include the addition of the following as item number 9, under New Business and that the subsequent items be renumbered to reflect the addition:

9. Investment Manager Watch Status (First Hawaiian Bank).

On a motion made by Trustee Barfield, seconded by Trustee Ferguson-Miyamoto, and unanimously carried, the Board agreed to amend the agenda as requested by Chair Kane.

Deputy Attorney General, Kyle Chang, informed the Board on the revised Sunshine Law to be effective starting July 1, 2018, regarding amendments to Board agendas stating that amendments must be made six days prior to a scheduled Board meeting if the item is of reasonably major importance and will affect a significant number of persons.

PUBLIC COMMENT

Chair Kane called for public comment. There were no public present, therefore no public comments.

WELCOME AND INTRODUCTION OF NEW TRUSTEE

Executive Director, Thomas Williams welcomed and introduced Dr. Genevieve Ley as the newly elected Trustee to the Board.

ELECTION OF OFFICERS AND COMMITTEE ASSIGNMENTS

Chair Kane asked the Board for nominations of officers for the 2018 Board starting with nominations for Chair. Trustee Barfield nominated Chair Kane to continue as Chair of the Board. Chair Kane asked if there were any other nominations. No other nominations were given.

On a motion made by Trustee Barfield, seconded by Trustee Ferguson-Miyamoto, and unanimously carried the Board agreed that Trustee Kane continue as Chair of the Board for a term of one year or until a successor is elected.

Chair Kane then asked the Board for nominations for Vice Chair. Trustee Ferguson-Miyamoto nominated and requested that Vice Chair Rauckhorst also continue as Vice Chair. Chair Kane also asked if there were any other nominations. No other nominations were given.

On a motion made by Trustee Ferguson-Miyamoto, seconded by Trustee Barfield, and unanimously carried, the Board agreed that Trustee Rauckhorst continue as Vice Chair of the Board for a term of one year or until a successor is elected.

Chair Kane presented the proposed Committee Assignments as submitted. Each Committee remains the same with the exception that Trustee Johnston replace Trustee Machida, and Trustee Ley replace Trustee Frane. Trustee Chan will become Chair of the Audit Committee replacing former Chair, Trustee Frane.

ELECTION OF OFFICERS AND COMMITTEE ASSIGNMENTS (cont'd) On a motion made by Vice Chair Rauckhorst, seconded by Trustee Ferguson Miyamoto, and unanimously carried, the Board adopted the Committee Assignments set forth in Attachment A to these minutes.

RECESS

Chair Kane called for a recess at 9:10 a.m. and announced that the meeting would reconvene following the conclusion of the Chapter 91 proceedings and the Investment Committee meeting.

RECONVENE

A quorum being present (Chair Kane, Vice Chair Rauckhorst, and Trustees Barfield, Chan, Ferguson-Miyamoto, Ley, and Matsumoto), Chair Kane reconvened the meeting at 11:18 a.m.

AON HEWITT INVESTMENT CONSULTING, INC. – REAL ESTATE PORTFOLIO MEASUREMENT REPORT FOR 2ND QUARTER 2017 Mr. Chae Hong of Aon Hewitt Investment Consulting, Inc. (Aon) gave an oral and written presentation on the Real Estate Portfolio Measurement Report for 2nd Ouarter 2017. Some of the presentation discussed:

Real Estate Markets Performance and Overview

- Fundamentals healthy but moderating: Vacancy held fairly steady across core property types in second quarter, driven by no significant changes in new supply and demand trends. Industrial continued to outperform on a relative basis across the core property types; with Apartments underperforming. Rent growth, while still healthy in all core property types except Apartments, continue to demonstrate a waning in momentum; with more downside risk than upside potential medium term.
- Investors continue the hunt for yield.
- Portfolio structure important: Overall, real estate fundamentals and pricing remain at a mature point in the cycle.

Portfolio Funding Status and Real Estate Portfolio Composition HIERS' Summary of Portfolio Returns (Time-Weighted)

- HIERS' real estate portfolio has been strong across all risk spectrums (Core -Opportunistic), with the Opportunistic portfolio leading the way as one of the strongest drivers of performance with over a 20% return since inception
- Overall the portfolio is performing well with an 8.1% IRR and 1.5x equity multiple

HIERS Real Estate Portfolio Highlights

• \$650 million of commitments have been made in 2017, including subsequent to the second quarter

Significant Events

- Subsequent to quarter end, Simon Treacy, Global CIO and Head of BlackRock US Real Estate Equity has left the company due to personal reasons
 - Departure does not breach the Key Person threshold and Hayden Lee will be nominated to replace Simon subject to IAC approval.

Market Overview
Real Estate Portfolio
Infrastructure Portfolio
Timber Portfolio
Lowe Separate Account
Real Estate Separate Account Detail

Following his presentation, Mr. Hong left the meeting.

Chair Kane called a recess for lunch at 11:38 a.m.

RECESS

RECONVENE

ENTER EXECUTIVE SESSION

A quorum being present (Chair Kane, Vice Chair Rauckhorst, and Trustees Barfield, Chan, Ferguson-Miyamoto, Ley, and Matsumoto), Chair Kane reconvened the meeting at 11:50 a.m.

On a motion made by Vice Chair Rauckhorst, seconded by Trustee Ferguson-Miyamoto, and unanimously carried, the Board entered into Executive Session at 11:50 a.m.

- Pursuant to HRS § 92-5(a)(4), to consult with the Board's attorneys on questions and issues pertaining to the Board's power, duties, privileges, immunities, and liabilities regarding IT (Cyber Security); report and update.
- Pursuant to HRS § 92-5(a)(4), to update the Board regarding a pending securities class action suit that the ERS is involved in, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to such litigation, and appropriate action.
- Pursuant to HRS § 92-5(a)(4), to consult with the Board's attorneys on questions and issues pertaining to the Board's power, duties, privileges, immunities, and liabilities with respect to Special Deputy Attorneys General: Investment Counsel; appropriate action.
- Pursuant to HRS § 88-27.5(a)(1), to conduct discussions and deliberations relating to, and to make a decision upon an investment by the Employees' Retirement System in Kayne Anderson Real Estate Partners V, LP.
- Pursuant to HRS § 88-27.5(a)(1) and HRS § 92-5(a)(4), to conduct discussions and deliberations relating to, and to make a decision upon, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to, the Employees' Retirement System's investments managed by Oechsle International Advisors, LLC.

EXECUTIVE SESSION,
PURSUANT TO HRS § 925(a)(4), TO CONSULT WITH
THE BOARD'S
ATTORNEYS ON
QUESTIONS AND ISSUES
PERTAINING TO THE
BOARD'S POWERS,
DUTIES, PRIVILEGES,
IMMUNITIES, AND
LIABILITIES REGARDING
IT (CYBER SECURITY);
REPORT AND UPDATE

EXECUTIVE SESSION, PURSUANT TO HRS § 92-5(a)(4), TO UPDATE THE BOARD REGARDING A PENDING SECURITIES CLASS ACTION SUIT THAT THE ERS IS INVOLVED IN, AND TO CONSULT WITH THE BOARD'S ATTORNEYS ON QUESTIONS AND ISSUES PERTAINING TO THE BOARD'S POWER, DUTIES, PRIVILEGES, IMMUNITIES, AND LIABILITIES WITH RESPECT TO SUCH LITIGATION, AND APPROPRIATE ACTION

EXECUTIVE SESSION,
PURSUANT TO HRS § 925(A)(4), TO CONSULT
WITH THE BOARD'S
ATTORNEYS ON
QUESTIONS AND ISSUES
PERTAINING TO THE
BOARD'S POWER, DUTIES,
PRIVILEGES, IMMUNITIES,
AND LIABILITIES WITH
RESPECT TO SPECIAL
DEPUTY ATTORNEYS
GENERAL: INVESTMENT
COUNSEL; APPROPRIATE
ACTION

EXECUTIVE SESSION,
PURSUANT TO HRS § 8827.5(A)(1), TO CONDUCT
DISCUSSIONS AND
DELIBERATIONS
RELATING TO, AND TO
MAKE A DECISION UPON
AN INVESTMENT BY THE
EMPLOYEES'
RETIREMENT SYSTEM IN
KAYNE ANDERSON REAL
ESTATE PARTNERS V, LP

EXECUTIVE SESSION, PURSUANT TO HRS § 88-27.5(A)(1) AND HRS § 92-5(A)(4), TO CONDUCT **DISCUSSIONS AND DELIBERATIONS** RELATING TO, AND TO MAKE A DECISION UPON, AND TO CONSULT WITH THE BOARD'S ATTORNEYS ON **QUESTIONS AND ISSUES** PERTAINING TO THE BOARD'S POWERS, DUTIES, PRIVILEGES, IMMUNITIES, AND LIABILITIES WITH

RESPECT TO, THE
EMPLOYEES'
RETIREMENT SYSTEM'S
INVESTMENTS MANAGED
BY OECHSLE
INTERNATIONAL
ADVISORS, LLC
EXIT EXECUTIVE SESSION

On a motion made by Trustee Ferguson-Miyamoto, seconded by Vice Chair Rauckhorst, and unanimously carried, the Board exited executive session at 1:44 p.m.

ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017 Executive Director, Williams introduced Messrs. Joseph Newton, Senior Consultant & Actuary and Lewis Ward, Consultant of Gabriel, Roeder, Smith and Company (GRS) who presented the ERS's Valuation Results and a draft of ERS's 92nd Annual Actuarial Valuation Report for the year ending June 30, 2017.

Highlights discussed were:

Purpose of the Actuarial Valuation

 For ERS, the primary purpose of the annual actuarial valuation is to assess whether the current funding policy is expected to fully amortize the UAAL over a period of 30 years or less

2017 Valuation Highlights

- Key Changes
 - Legislation enacted to increase employer contribution rates (4-year phase-in of increases beginning in FY2018)
 - 13.6% estimated return on market value of assets for fiscal year ending June 30, 2017
 - Maui HHSC privatization
 - Produced small short-term reduction in unfunded actuarial accrued liability
 - More impactful is the loss of payroll which reduces future contribution levels and extends the funding period by one year
 - Loss of contributions from the loss of or reduction in size of an employer is borne by other employers in ERS

Sources of Impact

- Investments outperformed 7.00% assumption on market basis, mostly offsetting deferred losses from previous years
- Liabilities grew slightly faster than expected due to salary increases larger than current expectations
- Contributions in dollars are expected to be significantly larger in future years

Valuation Summary

- While it does not show in the current UAAL and funded ratio, the current actuarial assumptions and the contribution commitment from Act 17 (SB 936) have materially strengthened the outlook for ERS
- The scheduled employer contribution rates are expected to be adequate to satisfy HRS §88-122(e)(1), even with substantial adverse experience
- Positive outlook assumes the scheduled increases in contribution rates occur. It is imperative that the currently scheduled funding strategies are implemented and sustained.
- New experience study planned for period ending June 30, 2018 *Stress Test Summary*
- Actuarial valuation results show System is on target to be fully funded in

ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017 (cont'd)

ANNUAL REPORT TO THE LEGISLATURE REQUIRED BY ACT 85/2016 REGARDING THE ACTUARIAL ASSET AND LIABILITY STRESS TEST 2017

- less than 35 years
- Stress test shows that System is sustainable in a low return environment

On a motion made by Trustee Matsumoto, seconded by Trustee Ferguson-Miyamoto, and unanimously carried, the Board accepted GRS's draft of ERS's 92nd Annual Actuarial Valuation Report for the year ending June 30, 2017.

Executive Director, Williams gave a brief review of the annual report that was prepared and submitted to the legislature as required by Act 85, SLH 2017, relating to the stability of the System in the event of adverse future investment returns. Act 85 requires that the actuary of the ERS perform an annual stress test as defined by the legislation. Messrs. Newton and Ward remained for questions on the report.

The annual stress test must address the following scenarios:

- A 30-year projection of the ERS's assets, liabilities, pension debt, service
 costs, employee contributions, employer contributions, net amortization,
 benefit payments, payroll, and funded ratio assuming the current actuarial
 assumptions are met.
- Two 30-year projections of the same items above assuming the actual investment performance in future years is 2% less than the assumed rate of return, but with two different contribution policies.
 - The first scenario shows the projected items assuming that the employer contribution rate in future years would increase if necessary to meet the current funding policy of 30 years.
 - The second scenario shows the projected items assuming no change in the current statutory contribution rates.
- Two 30-year projections of the same items above assuming the actual investment performance in the first year is a negative 20% followed by a 20-year period where investment performance is 2% less than the assumed rate of nature, but with two different contribution policies.
 - The first scenario shows the projected items assuming that the employer contribution rate in future years would increase if necessary to meet the current funding policy of 30 years.
 - The second scenario shows the projected items assuming no change in the current statutory contribution rates.
- The estimated actuarial accrued liability, the total normal cost for each benefit tier, and the employer normal cost for each benefit tier under the current investment return assumption and using the 10-year average of the 30-year treasuries notes as of the valuation date.

Stress Test Summary Results

- Stress Test One, the ERS is expected to be fully funded (100% funded ratio) in fiscal year ending 2044. Assumes that employer contributions will decrease to the employer cost rate once full funding is achieved.
- Stress Test Two, first and second scenarios are identical as the funding period is never expected to exceed 30 years. The impact of the underperformance is a lengthening of the period of time until the plan is fully funded, but it is never expected to be more than 30 years from a future valuation date.
- Stress Test Three, first scenario, the employer contribution rates would increase in the year following the current statutory increases to 26% of pay for All Other Employees and 46.5% of pay for Police and Firefighters, and remain at those levels for the foreseeable future. Under the second scenario, the funded ratio would decline below 40% but the trust is never

ANNUAL REPORT TO THE LEGISLATURE REQUIRED BY ACT 85/2016 REGARDING THE ACTUARIAL ASSET AND LIABILITY STRESS TEST 2017 (cont'd)

LEGISLATIVE PROPOSALS RELATING TO THE EMPLOYEES' RETIREMENT SYSTEM FOR THE 2018 LEGISLATIVE SESSION exhausted. The funded ratio would begin to slowly climb once the 20-year period of 5% returns ends.

• The 10-year average of the 30-year treasury notes is 3.55% as of July 1, 2017.

Based on the information reviewed for this report, the stress test shows that the System is sustainable in return environments much lower than currently assumed.

As there were no questions from the Board and no action needed, Messrs. Newton and Ward left the meeting.

Ms. Donna Curry, Program Specialist, provided a list of ERS –related proposals for the 2018 Legislative Session. These six draft proposals were approved by the Department of Budget and Finance for the Governor's administrative package.

- BUF -04(18) Separate accounts for employer contribution advance payments.
- BUF -05(18) Amendment to retain unclaimed member benefits with ERS.
- BUF -06(18) Amendment for exempt and additional investment staff.
- BUF -07(18) Amendment to limit service-connected disability retirement and accidental death benefit provisions to cover only members for whom required contributions are made by employee and/or employer.
- BUF -08(18) Amendment to delete the acquisition of service by payroll deductions from July 1, 2020. Due to the change in calculation of purchase of service costs (to an actuarial cost) provided by Act 86/2015, the tax-qualified plan "employer pick-up" of contributions under payroll deductions may be found questionable by the IRS.
- BUF-09 (18) Amendment to delay ERs Hawaii Domestic Relations Orders implementation to July 1, 2020, and to add applicability of HiDRO for deferred vested members.

Ms. Donna Curry, Program Specialist, provided an annual report of the ERS in

accordance with the provisions of Act 87, Session Laws of Hawaii 2015. The ERS will provide status reports annually to the Legislature regarding the State

and County Departments' and Agencies' reporting of personnel and payroll

This report was for information only. No action was needed.

ANNUAL REPORT TO THE LEGISLATURE REQUIRED BY ACT 87/2015 REGARDING STATUS OF EMPLOYER REPORTING OF INFORMATION

information to the ERS through the 2020 legislative session.

This report was for information only. No action was needed.

ANNUAL REPORT TO THE LEGISLATURE REQUIRED BY ACT 260/2007 REGARDING THE HAWAII TARGETED INVESTMENT PROGRAM (HiTIP) Mr. Vijoy Chattergy, Chief Investment Officer, provided an annual report of the ERS in accordance with the provisions of Act 260, Session Laws of Hawaii 2007. The ERS will provide a publicly available report annually to the Legislature regarding the Hawaii Targeted Investment Program (HiTIP) related to Hawaii venture capital investments.

This report was for information only. No action was needed.

ANNUAL REPORT TO THE LEGISLATURE REQUIRED BY ACT 192/2007 REGARDING DIRECT Mr. Vijoy Chattergy, Chief Investment Officer, provided an annual report of the ERS in accordance with the provisions under Section 4 of Act 192, Session Laws of Hawaii 2007. The ERS will provide a publicly available report annually to the Legislature regarding Direct Holdings in Sudan Scrutinized

HOLDINGS IN SUDAN SCRUTINIZED COMPANIES

Companies.

INVESTMENT MANAGER WATCH STATUS (FIRST HAWAIIAN BANK)

This report was for information only. No action was needed.

Mr. Vijoy Chattergy, Chief Investment Officer, and Mr. Neil Rue of PCA recommend that First Hawaiian Bank be put on watch status due to a significant change at the senior management level.

On a motion made by Vice Chair Rauckhorst, seconded by Trustee Barfield, and unanimously carried, the Board approved placing First Hawaiian Bank on watch status due to a significant change in senior management.

BOARD OF TRUSTEES SCHEDULE OF MEETINGS FOR 2018 Chair Kane presented the Boards 2018 Schedule of Meetings, noting that the January 24, 2018 special meeting for the private equity was not listed on the calendar.

OPERATIONS REPORT – DECEMBER 2017 Executive Director, Williams presented the Operations Report as Ms. Kanoe Margol, Deputy Executive Director was absent stating that the report is mainly a receive and file.

EXECUTIVE DIRECTOR'S REPORT

Executive Director, Williams reported to the Board that he:

- Met with City Councils, Budget & Finance Committee Members, of Maui and Kauai on December 12 and 13, 2017, to present the preliminary actuarial valuation and stress test. They expressed concerns with the contribution rate increases and are looking for ways to lower the spiking costs as they relate to police and fire. There are substantial additional charges that are assessed to each County and it's within their means to control.
- Met with Senate Ways and Means and Finance House Committee, Senator Donovan Dela Cruz and Representative Sylvia Luke on January 2, 2018, regarding the B&F presentation of the Budget. Each of the Department Directors/Division Chiefs supported their budget submissions. We had three primary items, the Chief Compliance Officer, Internal Audit for KMH contract, and the \$1.5 million needed to implement computer programming for the HiDRO.
- Will attend a total of eight meetings scheduled to present the actuarial valuation with the House, Senate, Unions, City & County Finance Directors, ERS staff, and a special meeting for B&F.
- Is working with ERS staff on acquiring software (BoardWorks) for electronic posting of Board meeting materials and gave a brief description of the software.

ADJOURNMENT

On a motion made by Trustee Barfield, seconded by Trustee Ferguson-Miyamoto, and unanimously carried, the Board adjourned the meeting at 2:39 p.m.

REDACTED SIGNATURE

Thomas Williams
Executive Director

TW:dkik

ATTACHMENT A

BOARD OF TRUSTEES OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

OFFICERS & COMMITTEE ASSIGNMENTS

Proposed 1/8/18

BOARD MEMBERS

Emmit Kane, Chair
Jerry Rauckhorst, Vice Chair
Vince Barfield
Catherine Chan
Jackie Ferguson-Miyamoto
Laurel Johnston
Genevieve Ley
Colbert Matsumoto

ADMINISTRATIVE & LEGISLATIVE COMMITTEE

Jackie Ferguson-Miyamoto, Chair Catherine Chan Laurel Johnston Jerry Rauckhorst (Alternate)

COMPENSATION REVIEW COMMITTEE

Jerry Rauckhorst, Chair Colbert Matsumoto Vince Barfield Emmit Kane

INVESTMENT COMMITTEE

Vince Barfield, Chair Catherine Chan, Vice Chair Jackie Ferguson-Miyamoto Laurel Johnston Genevieve Ley Emmit Kane Colbert Matsumoto Jerry Rauckhorst

AUDIT COMMITTEE

Catherine Chan, Chair Jackie Ferguson-Miyamoto Genevieve Ley

GOVERNANCE POLICY (ad-hoc)

Colbert Matsumoto, Chair Vince Barfield Emmit Kane

KA'ANAPALI COMMITTEE (ad-hoc)

Colbert Matsumoto, Chair Vince Barfield Laurel Johnston