The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP

December 10, 2014

The Committee on Investments met on the above date by teleconference at the following locations: Covel Commons, Los Angeles campus; 1111 Broadway, 14th Floor, Oakland; Student Center, Aliso Beach A, Irvine campus.

Members present: Representing the Committee on Investments: Regents De La Peña, Saifuddin, Sherman, and Wachter; Advisory Member Hare; Staff Advisors Acker and Coyne

Representing the Investment Advisory Group: Members Crane, Martin, and Rogers, and Consultants Klosterman and Lehmann

In attendance: Secretary and Chief of Staff Shaw, Chief Investment Officer Bachher, Executive Vice President and Chief Financial Officer Brostrom, Senior Counsel Shanle, and Recording Secretary McCarthy

The meeting convened at 1:30 p.m. with Committee Chair Wachter presiding.

1. APPROVAL OF MINUTES OF PREVIOUS MEETING

Committee Chair Wachter explained that, because of the lack of a quorum, the minutes of the meetings of September 12 and September 17, 2014 would not be approved.

2. PUBLIC COMMENT

There were no speakers wishing to address the Committee.

3. INVESTMENT PERFORMANCE UPDATE AS OF SEPTEMBER 30, 2014

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Chief Investment Officer (CIO) Bachher stated that this update would focus on investment results as of September 30, 2014, although he noted that much has changed in the financial markets since that time. He recalled the key objectives he had discussed at the prior Committee meeting. Reviewing long-term asset allocations, which he said were the primary drivers of performance, would be a major focus of the Office of the CIO in the current year. Each portfolio would be optimized according to its objectives. Mr. Bachher expressed his continued belief that markets are entering a period of lower returns in which managing costs would be critical. His office was reviewing its relationships with each of its external managers to ensure that the cost adds value. Active management would continue to play an increasing role in driving returns. In each portfolio, the Office of the CIO was looking for opportunities to move from passively to actively managed investments when opportunities arise. It would be important to take advantage of the size and scale of the $91 billion UC Entity, its long-term investment horizon, and the unique competitive advantages the University offers.

Committee Chair Wachter asked about Mr. Bachher's plans to bring recommendations to the Committee for changes to asset allocation. Mr. Bachher stated that his office had begun work on evaluating asset allocations with Mercer Investments, Inc., and would bring recommendations to future Committee meetings. Committee Chair Wachter noted that the policy guidelines allow the Office of the CIO to make asset allocation changes within a permissible band above and below the policy allocation. This band had been widened following the 2008 financial crisis to allow the Office of the CIO more flexibility.

Mr. Bachher stated that the UC Entity was invested 47 percent in equities, 20 percent in alternative investments, and the balance in bonds. The U.S. markets continued to grow, albeit at a slow rate, but more than markets in other parts of the world. The U.S. gross domestic product in the third quarter increased at an annual rate of 3.9 percent. The quantitative easing program of the Federal Reserve Board of Governors ended and markets anticipate interest rate increases sometime in 2015. Labor markets continued to improve in the United States; unemployment edged down to 5.8 percent. The biggest surprise has been the dramatic decline in oil prices. The U.S. markets were continuing to do well, but the rest of the world was having a more difficult time. Europe and Japan have accelerated their quantitative easing. There was a current flight to quality in the United States that was supporting asset prices. Mr. Bachher expressed his view that this risk-seeking environment from investors around the world should not encourage investing in assets that could be challenged by slower economic growth. In mid-September, U.S. equity markets declined almost ten percent. The markets quickly rebounded; since that time, U.S. markets had risen 17 percent.

In the year ending September 30, 2014, the General Endowment Pool (GEP) increased, from $7.3 billion to $8.1 billion, with most earnings coming from market gains plus 170 basis points (bps) of value added. The GEP was invested 41.5 percent in equities, at policy weight, reduced from its prior slight equity overweight, reflecting the cautious outlook of the Office of the CIO toward the equity market. The Office of the CIO was building up cash in each of its portfolios, to have liquidity to take advantage of attractively priced investment opportunities. The reduction in the earlier overweight to equities was used to increase cash.

The GEP was invested almost 50 percent in alternative assets. The Office of the CIO was examining its private equity portfolio to find opportunities to monetize assets without prospects for further price appreciation, and for which an attractive market exists. The Office of the CIO had been a net seller of $400 million of assets from its private equity portfolio through attractive selling opportunities in the secondary market. Addressing risk in the equity portion of the GEP, Mr. Bachher displayed a graph showing that, while the GEP's ten-year average beta was 0.56, its current beta was 0.45, indicating decreasing sensitivity to movement in the U.S. equity market. Since 2006, the risk had been reduced in the GEP portfolio, without sacrificing returns on a risk-adjusted basis.

Mr. Bachher stated that the UC Retirement Plan (UCRP) had $52.1 billion in assets under management as of September 30, 2014, up from $47 billion a year prior. There were twice as many active participants as retirees in the UCRP. The pension plan had about $1 billion in outflows and $0.5 billion in contributions annually, which would have resulted in a net cash outflow of $0.5 billion. Significantly, $700 million was transferred to the UCRP from the Short Term Investment Pool (STIP) between August and November 2014. Most of the increase in the UCRP was attributable to market gains.

Investment Advisory Group consultant Klosterman asked if future UCRP projections indicated a net cash inflow or outflow. Mr. Bachher observed that the net cash flow would continue to be approximately $1 billion in outflow and $0.5 billion in contributions annually. UCRP currently had a funding ratio of 87 percent.

Regent Sherman asked about the GEP's projected cash flow. Mr. Bachher said the payout per unit from the GEP was 4.75 percent of a rolling 60-month average of the market value of a unit invested in the GEP. Executive Vice President and Chief Financial Officer Brostrom added that most fundraising proceeds go to the campus foundations rather than the GEP. Investment Advisory Group member Martin requested a ten-year forecast of GEP cash flow. Mr. Bachher said he would provide those figures.

In response to a question from Investment Advisory Group consultant Lehmann, Mr. Brostrom stated that UCRP contributions were currently 22 percent of payroll, with 14 percent from the University and eight percent from employees. The UCRP unfunded liability would be shrinking.

Mr. Bachher said the UCRP's asset allocation included 53 percent to public equities and 22 percent to fixed income. As in the GEP, equity performance was a driver of returns. UCRP's former overweight to public equities had been reduced and its cash position was increased to more than $1 billion, providing liquidity to invest in attractive opportunities. As markets have risen, finding opportunities to invest at attractive prices would be challenging. UCRP's exposure to Treasury Inflation-Protected Securities was reduced in the past quarter. During the past eight months, the Office of the CIO had been optimizing its public equity portfolio by examining ways to earn higher returns by increasing cost efficiency. Employing too many external managers can result in paying higher costs for returns similar to index fund returns. The number of external public equity managers currently had been reduced from 70 to 40, with the savings adding to cash reserves. Mr. Bachher displayed a graph showing that the rolling two-year UCRP beta was currently about 0.5, a position he viewed as preferable given current market conditions.

Discussing UC working capital portfolios, Mr. Bachher said that the STIP portfolio had been reduced by $700 million, which was transferred to UCRP, as discussed earlier. The

University's total liquidity pool, consisting of STIP and the Total Return Investment Pool (TRIP), held $14.1 billion as of September 30, 2014. The $7.3 billion TRIP portfolio holds working capital that can be invested for longer duration. Cash inflow to TRIP is from funds that the campuses have decided to move from STIP. The TRIP portfolio should earn two to three percent higher returns than STIP. TRIP's annual returns as of September 30, 2014 were significantly higher, indicating that TRIP's asset allocation of 50 percent equities and 20 percent liquid alternatives, giving the portfolio more of an equity-type risk profile, should be reexamined. Mr. Bachher displayed a chart showing TRIP's rolling two-year beta, indicating more equity risk than he considered appropriate in TRIP, given market conditions. In general terms, Mr. Bachher anticipated that TRIP's equity allocation would be reduced from 50 percent to close to 30 percent, with the fixed income allocation increased from 30 percent to 50 percent, and liquid alternative assets remaining between 15 to 20 percent. Alternative assets would include absolute return and hedge fund strategies that would be less correlated with equity markets.

STIP held $6.8 billion in assets under management as of September 30, 2014. As explained earlier, STIP had a cash outflow of $700 million that was transferred to UCRP. With short-term interest rates close to zero, the STIP benchmark is close to zero. Value added above the benchmark was the result of credit risk taken in the portfolio.

To conclude, Mr. Bachher expressed his view that equity markets were currently quite highly priced. Oil and energy prices were having a significant effect. As a global investor, the Office of the CIO was looking for investment opportunities at attractive valuations. Given current markets, the Office of the CIO would examine its portfolios to determine whether the value of some of its holdings had been realized and the current market offered an opportunity to sell. For the balance of the year, the Office of the CIO would focus on shifting asset allocations based on its revised capital market assumptions and managing the various portfolios differently according to their purposes. His office would seek investment managers who value UC's size, scale, and horizon as a long-term investor.

Committee Chair Wachter asked for more information about STIP's outperforming its benchmark, for STIP's average duration, and its holdings' ratings. Senior Managing Director Randolph Wedding responded that STIP's benchmark was the return on a Two-Year U.S. Treasury Note. STIP's duration was currently consistent with that benchmark, or two years, with 25 to 30 percent of the portfolio invested at very short durations of overnight to three months, to provide for cash flow needs such as payroll and the University's other liquidity needs. Another portion of the STIP portfolio not needed for immediate liquidity was invested in holdings with longer durations of up to 5.5 years, taking advantage of higher yields. Mr. Wedding said the STIP portfolio contained investment-grade, high credit quality corporate bonds, with an average credit rating of AA-. He recalled that, at the end of 2008, the Federal Reserve Board had lowered interest rates effectively to zero, where rates had remained since. At the beginning of that period the Office of the CIO took advantage of opportunities to invest in some attractive five-year corporate bonds that have helped STIP outperform its benchmark. Mr. Wedding added that, when interest rates rise, STIP returns would lag its benchmark.

Regent Sherman asked about the duration of fixed income holdings in TRIP. Mr. Wedding said the biggest portion of TRIP's fixed income holdings was investment-grade credit, with the benchmark of Barclays U.S. Aggregate Credit Index, which had a current duration of about 5.5 years. Regent Sherman characterized the benchmark duration as intermediate term and Mr. Wedding agreed, noting that, as a total return portfolio, TRIP is not meant to provide short-term liquidity.

Committee Chair Wachter recommended reviewing STIP's two-year benchmark. Mr. Bachher stated that he and Executive Vice President and Chief Financial Officer Brostrom have been examining ways to collaborate with campuses regarding possible uses of TRIP proceeds. Generally campuses should expect STIP to earn very short term rates, much like a bank account; TRIP would earn rates one to three percent higher than STIP's. At the other end of the spectrum is the GEP with a longer duration, where campuses could earn endowment-like returns. In upcoming months, the Office of the CIO would review and bring recommendations to the Committee for changes to asset allocations, benchmarks, and Investment Policy Guidelines. Committee Chair Wachter recalled that when the TRIP was initiated, it was managed similarly to STIP. Subsequently TRIP's asset allocation had been changed to be almost like that of the GEP. Since TRIP funds include campus funds with a five- to seven-year investment horizon, it should be invested differently from the GEP, which has a longer time horizon. Consideration of TRIP's asset allocation should include recognition of whose money it holds and the purpose of those funds.

Committee Chair Wachter asked Mr. Bachher to introduce some new staff of the Office of the CIO. Mr. Bachher stated that in the fixed income area, Mr. Wedding would be retiring on March 31, 2015, after long and distinguished service to the Office of the CIO, exemplified by the outstanding investment returns he achieved. Mr. Wedding and Mr. Bachher hoped to find a new head of fixed income in the coming months. Committee Chair Wachter echoed the praise of Mr. Wedding's accomplishments, in particular his steady and outstanding performance during the 2008 financial crisis.

Mr. Bachher said Paul Teng, who had been with the Office of the CIO for several years, had recently been appointed Deputy Head of Public Equity Investments. An active search was ongoing for a head of public equities. Brian Gibson is a senior advisor to the CIO. Mr. Gibson had 40 years of experience in both private and public markets culminating in work with large pension plans including the Ontario Teachers' Pension Plan where he led both public equities and absolute return. Arthur Guimaraes, from the Alberta Investment Management Corporation, is the Chief Operating Officer. Sam Kunz, former CIO of the Policemen's Annuity and Benefit Fund of Chicago, is the Managing Director for Asset Allocation and Investment Strategy. Mr. Bachher emphasized the importance of creating a culture in the Office of the CIO so that its investment beliefs are embodied by the entire organization.

Mr. Klosterman asked Mr. Bachher to comment on valuations and investment weights within equities. Mr. Teng stated that, as Mr. Bachher indicated earlier, the overall weight in equities had been decreased with the proceeds held in cash. Within equities, the portfolio was overweight U.S. equities relative to developed non-U.S. equities, based on a belief that U.S. equities were currently more attractive than other developed market equities. The portfolio was close to its policy benchmark in emerging market equities. Within emerging market equities, the portfolio's performance had been helped by its overweight to markets considered attractive such as China and India, relative to less attractive markets such as Brazil and Russia.

4. **INVESTMENT CONSULTANT REVIEW OF UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS SECOND QUARTER 2014 AND ANNUAL PERFORMANCE REPORT**

[Background material was provided to the Committee in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Mr. Terry Dennison of Mercer Investment Consulting (Mercer) discussed the investment performance of the UC campus foundations. Mr. Dennison said that Mercer had tried to bring the foundations' performance data in closer alignment with the reporting dates of the Office of the CIO. Data in the current Annual Endowment report show that as of June 30, 2014 most campus foundations with partial or total allocation to the General Endowment Pool (GEP) had significant positive returns above benchmarks for all periods. The two campus foundations invested completely in the GEP, UC Santa Cruz and UC Merced, had the highest returns of the ten foundations for all time periods shown. Those foundations with purely market-priced portfolios, such as UC Riverside, were affected immediately by market conditions, while foundations holding assets that were not market-priced would not be affected so directly by market changes. Three-, five-, and seven-year performance of all campus foundations were relatively similar and good with some exceptions. For five- and seven-year periods, most foundations had returns higher than their benchmarks. The majority of the foundations had favorable risk/return positioning relative to the median of the Mercer Trust – Foundation and Endowment Universe. Based on the June 30, 2014 report, Mercer had no issues or concerns to bring to the Regents.

Mr. Dennison displayed a graph showing individual campus foundation assets under management. Campus foundation assets were increasing, with the UC Berkeley and UCLA foundations each holding well over $1 billion, UCSF approaching $1 billion, and UC San Diego with $0.5 billion. Mr. Dennison displayed graphs showing the foundations' asset allocations and performance for periods from one year to ten years compared with the Mercer Trust – Foundation and Endowment Universe. Most of the campus foundations and the GEP were well above the median, with some performing above the fifth percentile for the recent quarter and year to date. In response to a question from Committee Chair Wachter, Mr. Dennison said Mercer's performance universe was obtained from Investor Force, Inc. and was a representative mixture of public and private universities of various sizes. Committee Chair Wachter pointed out that the percentile rankings for some of the foundations for some periods of time were not good. For example, UC Berkeley's foundation performance percentile ranking was 80th for the quarter, 31st for the calendar year to date, 50th for five years, 53rd for seven years, and

12th for ten years. Committee Chair Wachter added that the Committee on Investments has the responsibility only to review the foundations' performance and asset allocations to ensure they are not unreasonable. Investment Advisory Group consultant Lehmann commented that a foundation's performance could not be evaluated without taking in account its asset allocation. The campus foundations with smaller assets under management would have limited ability to invest in alternative assets. Committee Chair Wachter observed that the Office of the CIO had a wide variety of very well-managed investment vehicles available to the campus foundations. He questioned why the small foundations would not want to take advantage of being able to invest in the GEP at very low cost and gain the investment advantages available to a large endowment. Mr. Lehmann stated that most campus foundations were managed very conservatively. Investment Advisory Group member Martin expressed his view that the campus foundations' risk profiles were generally appropriate.

Committee Chair Wachter said that, given the bull market of the past five years, it would be appropriate for the Office of the CIO to communicate cooperatively to the campus foundations the availability of investing in the GEP. Regent Sherman observed that the GEP's returns have been better than the campus foundations' returns. Mr. Martin responded that this had not always been the case, but that for recent periods the GEP was among the best-performing university endowments in the nation. Mr. Lehmann said the GEP's recent performance was a result of changes to its asset allocation in recent years. Committee Chair Wachter recalled that the GEP's asset allocation had been changed slowly over a period of seven or eight years.

Investment Advisory Group member Rogers expressed support for communicating the good returns of the GEP to the campus foundations. The campus foundations could be interested in investing in the more sophisticated and larger GEP. He said it was part of the responsibility of the Committee on Investments to oversee the entire $12 billion of UC endowment funds including the campus foundations.

Mr. Martin pointed out that the campus foundations often prefer to manage their own funds. Committee Chair Wachter agreed that some of the campus foundations with larger assets under management had lower returns, but still preferred to manage their own foundations.

Mr. Dennison displayed a graph showing the foundations' annualized net performance for one- through seven-year periods, including benchmark returns and returns above or below benchmarks. He commented that for one-year periods several foundations had substantial value added above their benchmarks; a few foundations, particularly the larger ones, had returns that lagged their benchmarks. Three-year returns were much the same. Values added or detracted were smaller for seven-year returns. A graph showing risk/return analysis indicated that most campus foundations had returns above the median and risk below the median.

Mr. Dennison discussed Mercer's efforts to report on the campus foundations' performance without the one-quarter lag in comparison with the reporting period for the

Office of the CIO's portfolios. These efforts are complicated by the delay in obtaining audited returns from the campus foundations. Mercer had asked the foundations to submit preliminary data, but the campus foundations had expressed concern about possibly having two sets of publicized returns, one preliminary and one final. Mercer was working with the Office of the CIO to find a method to provide the information on a more current basis. Committee Chair Wachter expressed his view that more current returns should be available, with the possible exception of private equity returns. It was not necessary for the Committee's initial review that the returns be audited. For some of its oversight purposes, it was not useful for the Committee to review returns that were almost six months old. Regent Sherman agreed that aside from private equity, other returns could be reported more currently. Mr. Bachher suggested taking a fresh look at what information would be required from the campus foundations to yield more timely reporting, using estimates if necessary, and adjusting Committee on Investments meeting dates if that would be helpful. He said it would not be appropriate to require the campus foundations to report several different sets of numbers. To be able to discuss performance results, it is necessary to have the most recent information possible. Committee Chair Wachter suggested that Mercer's presentation to the Committee provide more analysis of the campus foundations' performance and asset allocation.

Committee Chair Wachter asked for updates on UC Ventures and the framework for sustainable investing initiative. Regarding sustainability, Mr. Bachher reported that, since the September Committee meeting, his office had been engaged in learning what UC's peers and other endowment funds worldwide were doing to address the issue of climate change, environmental, social, and governance (ESG) factors, and the debate about fossil fuels. The Office of the CIO was beginning to assemble a set of findings that it would share with the Committee at a future meeting. Mr. Bachher expressed his confidence that the Office of the CIO's implementation path regarding sustainable investing was the right one, although it would not be easy. The Office of the CIO was adding staff to assist with its sustainability effort.

Mr. Bachher reported that a good deal of interest has been expressed in UC Ventures from both within and outside of the University. Since September, the Office of the CIO had been learning about various possible models for UC Ventures and would work with various stakeholders to develop a business plan. The Committee would be updated at a future meeting.

The meeting adjourned at 3:00 p.m.

Attest:

Secretary and Chief of Staff