The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP
February 22, 2011

The Committee on Investments and the Investment Advisory Group met jointly on the above date by teleconference at the following locations: Covel Commons, South Bay Room, Los Angeles campus; 1111 Franklin Street, Room 10325, Oakland; and 777 California Avenue, Palo Alto.

Members present:	Representing the Committee on Investments: Regents De La Peña, Kieffer, Makarechian, Marcus, Schilling, and Wachter; Advisory members Anderson and Hallett; Staff Advisor Herbert Representing the Investment Advisory Group: Members Fong, Martin, Rogers, and Taylor, Consultants Gilman and Lehmann
In attendance:	Secretary and Chief of Staff Griffiths, Associate Secretary Shaw, General Counsel Robinson, Chief Investment Officer Berggren, Executive Vice President Taylor, and Recording Secretary McCarthy

The meeting convened at 1:35 p.m. with Committee Vice Chair Marcus presiding.

1. **PUBLIC COMMENT SESSION**

The following person addressed the Committee:

Richard Kerr, Coalition of University Employees (CUE) Teamsters member and UCSF employee, expressed concern about the proposed change in private equity asset allocation from six to eight percent of the portfolio. He expressed his opinion that the University should be satisfied with the success the portfolio has had with private equity at six percent allocation. Mr. Kerr also expressed concern about certain aspects of private equity investments, such as debt overhang, fee structures, and carried interest.

2. **DECEMBER 2010 QUARTER AND FISCAL YEAR TO DATE INVESTMENT PERFORMANCE SUMMARY**

[Background material was mailed 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 Berggren began her summary of preliminary investment performance for the quarter ending December 2010 and the fiscal year to date by noting that all UC portfolios had excellent performance in the quarter, both relative and absolute. The University of California Retirement Plan (UCRP) was up 6.38 percent; the General Endowment Pool (GEP) rose six percent; the Short Term Investment Pool (STIP) rose 67 basis points (bps); and the Total Return Investment Pool (TRIP) rose

1.75 percent. Performance benefited primarily from asset selection in absolute return, equity, core fixed income, and real estate portions of the portfolios. Ms. Berggren stated that UCRP and GEP performance relative to their competitors was very good for the quarter.

Improved economic data, growth in China, and diminished concerns about a double-dip recession drove markets in 2010. Equity and fixed income performance were robust, particularly in the high yield debt, emerging market equity, and emerging market debt sectors. Ms. Berggren noted that the world market benefited from investors' increased willingness to take on risk, sparked by the Federal Reserve Board's quantitative easing, and significantly reduced concerns about sovereign debt. The Russell 3000 Index, which represents the U.S. equity market, benefited from very strong corporate profits, combined with significant monetary and fiscal stimulation.

Ms. Berggren stated that the emerging market sector had an excellent year, up 18.9 percent, reflecting a strong fundamental outlook and a turnaround from the global problems of 2008-09. The high yield debt sector had what Ms. Berggren characterized as a spectacular year, up 14.8 percent, reflecting strong performance in the first quarter, which, however, reversed itself in the fourth quarter.

Turning to UC funds' recent performance, Ms. Berggren noted that all funds delivered very strong returns, both for the fourth quarter and for the past six-month period. Both asset allocation and investments within asset classes contributed to performance. The funds benefited from an overweight in equities and fixed income. Manager selection in the absolute return was a driver of overall performance. For the six-month period, UCRP was up 16.21 percent; GEP rose 15.02 percent; STIP was up 1.4 percent; TRIP rose 7.5 percent; and the total UC Entity rose 12.7 percent.

Moving to longer-term performance, Ms. Berggren noted that returns have shown improvement over all time periods, although the past three, five, and ten-year periods have been very difficult for performance. While returns of the past year have been excellent, three-year returns on a balanced stock/bond portfolio have not been as low since just after the 2001 recession. Responding to Regent Kieffer's request at the November Committee meeting, Ms. Berggren presented data on UCRP returns for the past 20 years. UCRP outperformed its benchmark in 15 of the past 20 fiscal years. She noted that 2009 was the worst year for equity performance in a long time.

Turning to asset classes, Ms. Berggren explained that UCRP global equity was very strong, led by low inflation, improved growth in gross domestic product (GDP), and better than expected corporate earnings. Bonds were flat, reflecting slightly better than expected growth. Private equity and real estate returns are beginning to improve, with private equity up 6.4 percent in the last quarter and real estate up 6.36 percent. For 2010, U.S. equity, non-U.S. equity, and emerging markets were the best-performing asset classes.

Ms. Berggren discussed asset allocation for the quarter ending December 2010. UCRP had a 1.1 percent overweight in equities and a comparable underweight in fixed income. UCRP also had an underweight in real estate, absolute return, and real assets. GEP was overweight in equities and private equity, and underweight in fixed income, absolute return, and real estate.

Moving to an analysis of performance, Ms. Berggren detailed key contributors to performance by asset class. Core bonds contributed 13 bps to overall performance; Treasury Inflation-Protected Securities (TIPS) contributed five bps; real estate contributed six bps; and absolute return contributed 24 bps to overall excess performance, for a total of 33 bps for asset selection, meaning the selection within the asset class, and a total of 24 bps for the overall portfolio. Performance attribution as a result of asset allocation was slightly negative.

Ms. Berggren noted that the GEP benefited from its higher weighting in absolute return. Core bonds added six bps; TIPS added five bps; real estate added six bps; and absolute return added 104 bps, for a total of 108 bps from asset class selection and 100 bps for overall excess performance for GEP.

Ms. Berggren then discussed contribution to risk. In UCRP, U.S. equity and non-U.S. international developed equity contributed 70 percent of the total risk; 65 percent of the active risk came from non-U.S. and emerging market overweight. Private equity accounted for approximately 30 percent of active risk. In GEP, U.S. equity contributed about 60 percent of the active risk, with overweight in private equity, hedge funds, and the opportunistic sector contributing about 40 percent of risk. Ms. Berggren summarized that returns were very good across the board for the quarter and the past six-month period.

Regent Kieffer asked how the funds' performance relates to that of comparator institutions. Ms. Berggren responded that the funds' comparative performance was very good, with GEP returns in the top quartile of colleges and universities with endowments of over $1 billion, as reported to Cambridge Associates for the September 2010 quarter. While both portfolios performed well relative to their comparators, Ms. Berggren pointed out that the problem with such comparisons is that every institution's portfolio has a different level of risk. If managers take more risk, they could get higher returns. The institutions report only absolute numbers, which do not take into account the level of risk.

3. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of November 2, 2010 were approved, Regents De La Peña, Kieffer, Makarechian, Marcus, and Schilling (5) voting "aye."[1]

[1] Roll call vote required by the Bagley-Keene Open Meeting Act [Government Code §11123(b)(1)(D)] for all meetings held by teleconference.

4. **UNIVERSITY OF CALIFORNIA RETIREMENT PLAN / GENERAL ENDOWMENT POOL ASSET ALLOCATION REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' general investment consultant, Mercer Investment Consulting, recommended that the changes to the University of California Retirement Plan (UCRP) and General Endowment Pool (GEP) Investment Policy Statement be adopted with an effective date of March 1, 2011, as shown in Attachments 1 and 2, and summarized in Attachment 3.

[Background material was mailed 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 Berggren discussed a proposed updated to asset allocation policies in light of current economic and market conditions. She expressed her opinion that the near-term economic outlook is uncertain and will remain uncertain going forward; asset markets will remain volatile. In light of liquidity issues and the 2008 recession, her office reexamined its asset allocation policy and concluded that asset allocation requires a flexible approach. This analysis led to the recommended changes in asset allocation for both current and long-term policy.

Ms. Berggren summarized the current economic environment. The global recovery is uneven across regions, with above-trend growth in the United States, but slower growth in the rest of the developed world. Emerging market growth has continued to be robust, but the developed world faces difficult fiscal choices. Higher inflation and higher yields will be more likely, driven by emerging market growth and commodity prices.

Ms. Berggren described the selection process for asset allocation. Her office chose four realistic economic scenarios and estimated the asset returns in each scenario. The four scenarios included a "disaster" scenario in which all regions grow below trend leading to low inflation and a liquidity trap. The "bad" scenario portrays an environment of trend growth for emerging markets, with below-trend growth for the developed world. The "likely" scenario would involve above-trend growth for U.S. and emerging markets, with below-trend growth for non-U.S. developed economies. In the "good" scenario, all regions would show above-trend growth, with inflation from commodity pressures and supply constraints. Within each economic scenario an optimal asset mix was determined with the same risk as the current portfolio. Then, a global optimal portfolio was developed that performed well across scenarios. The recommended policy portfolio was compared with the global optimal portfolio. Her office concluded that the recommended portfolio has better performance and downside protection than the global optimal portfolio.

Ms. Berggren recommended a modest two percent increase in the long-term target weight of absolute return strategies in UCRP and GEP. The long-term target weight of private equity in UCRP would be increased two percent. The long-term weights of public equity would be modified to match the global equity market capitalization weights more closely.

Specifically, in the current policy, opportunistic and absolute return strategies would be combined in both UCRP and GEP. Real assets in GEP would be increased 50 basis points (bps), from 0.5 percent to one percent.

Ms. Berggren summarized proposed changes in UCRP long-term policy. Private equity would be increased from six percent to eight percent; absolute return strategies would be increased from 6.5 percent to 8.5 percent; developed non-U.S. equity would be decreased from 45 percent to 39.5 percent; and emerging market equity would be increased from five percent to seven percent. In GEP, absolute return strategies would be increased from 23.5 percent to 25.5 percent; developed equity would be decreased from 37 percent to 34.5 percent; and emerging market equity would be increased from five to six percent.

Ms. Berggren reviewed asset allocation for UCRP. Total equity allocation would remain unchanged at 57.5 percent in the current policy, but would be decreased in the long-term policy from 52 percent to 48.5 percent. Total fixed income allocation would remain the same in both the current and long-term policy. The reduction in equity allocation would be added to total alternatives in the long-term policy. In sum, Ms. Berggren recommended reducing equity allocation and increasing alternatives.

In GEP, the equity weight would stay at 45.5 percent in the current policy; in the long-term policy equity weight would be decreased from 44 percent to 42.5 percent. Fixed income allocation would be reduced slightly in the current policy, from 18 percent to 17.5 percent. Alternatives would be increased in the current policy, from 36.5 percent to 37 percent, and from 43.5 percent to 45 percent in the long-term policy.

Regent Kieffer asked how economic projections relate to the proposed changes in asset allocation. Ms. Berggren responded that the funds have had a high weight in equities. After analysis of all possible upcoming economic scenarios, her office concluded that the equity weight was high for the long-term. Additionally, a higher allocation to alternatives would provide more diversification. The proposed change would move the allocation closer to global weights for public equity.

Regent Makarechian asked whether the asset allocation is engineered to arrive at the target return. Ms. Berggren responded that the target 7.5 percent return is a long-term expectation, whereas the asset allocation review is based on a three-year time horizon. Her office tried to determine, given the high level of current risk, what asset allocation would result in the best performance over the upcoming three-year period. Regent Makarechian asked what return is predicted based on the asset allocation. Ms. Berggren responded that the predicted return is 6.13 percent, which Regent Makarechian noted is one percent short of the actuaries' predicted return. Ms. Berggren pointed out that this percentage would be for only a three-year time horizon, assumes the lowest five percent of return, and is probably a conservative estimate. Regent Makarechian asked how often the asset allocation would be changed, given current events in the Middle East and the Federal Reserve Board's recent order for bank stress tests.

Ms. Berggren stated that Regent Makarechian's question related to asset class ranges. Each asset class has a range within which asset allocation can be altered to respond to events. The Office of the Treasurer's portfolio management group meets weekly to examine all economic and other factors to consider if changes should be made to tactical asset allocation.

Investment Advisory Group Member Martin stated that he supports the recommended long-term allocations. He expressed his opinion that there are important tactical considerations such as concerns about inflation in emerging markets and lower equity markets in China, India, and Brazil. He noted that allocation timing is important and that tactics within categories such as emerging markets become important within the implementation of the asset allocation. He supported the recommendation to increase allocation in alternatives, particularly in hedge funds, since it is a more flexible format for investing. He stated that managers need to have a more flexible platform to make quick adjustments in a dynamic market. Ms. Berggren agreed that, particularly in absolute return, there are many available strategies.

Mr. Martin expressed concern about fixed income, which started to turn around in November after a decade-long boom. He stated that trade in the bond arena is overcrowded, since it has attracted risk-averse investors, and cautioned that there could be a significant withdrawal of investments from bonds when they start to fall in value. He urged caution, particularly in long-duration bonds. Ms. Berggren agreed with Mr. Martin's assessment and stated that her office has continued to increase its underweight in fixed income. Ms. Berggren noted that many investors do not understand the relationship between yield and prices in the bond market. She expressed her opinion that many investors are currently underweight in equities.

Regarding the Office of the Treasurer's weekly tactical determinations, Regent Kieffer asked how much of a change in allocation could occur over a period of a month in public equities. Ms. Berggren responded that currently her goal is to be 1.75 to two percent overweight in equities and 2.4 percent underweight in fixed income. She noted that tactical allocations can be changed fairly quickly, using passive equity and passive fixed income holdings. Regent Kieffer asked how the Committee would see such activity based on tactical choices. Ms. Berggren responded that the Office of the Treasurer employs a service to provide data on flows in and out of various asset classes on a weekly and monthly basis. Regent Kieffer asked how the Committee would see what tactical allocation changes have been made over a time period. Ms. Berggren responded that such activity could be seen on the Performance Attribution graph and data shown during her slide presentation for the prior item.

Regarding future asset allocation, Investment Advisory Group Consultant Lehmann asked whether it is correct to summarize the investment strategy in the market-neutral part of the public portfolio as valuating the public investments with no tilt toward or away from any asset class, so that any active returns would be the result of security selection within an asset class. He summarized the investment allocation changes as tilting toward absolute return and private equity as a result of active returns in both of those asset classes. Ms. Berggren responded that her office attempts to have excess returns in every asset class, although she agreed that the probability for that is currently slightly higher in the absolute return and private equity sectors. Ms. Berggren stated that the portfolios had more attribution from asset allocation historically, but that going forward she would expect attribution from both asset allocation and security selection.

Faculty Representative Anderson asked why the aggregate UCRP policy benchmark would be an appropriate benchmark for the UCRP cross-asset class. Ms. Berggren responded that her office had concluded that the aggregate UCRP policy benchmark was the only appropriate benchmark for the cross-asset allocation, because the objective in that asset class is to have investor cross-assets and the overall asset allocation in the UCRP and GEP is across assets. Mr. Anderson asked whether the bonus for the manager of the cross-asset class is based on that benchmark. Ms. Berggren responded that her office has not yet determined incentive compensation and that the current item is not about incentives and compensation. Mr. Anderson stated that the manager of that class could put the money into an index fund and that probably two years out of three the fund would out-perform the benchmark. Ms. Berggren responded that her objective is to find a number of managers who can provide unique opportunities in different tactical asset classes. She noted her office would utilize an "all-weather" manager who had expertise across all the asset classes, in addition to specific asset managers with expertise in specific asset classes. She stated that it is important to realize that this asset class is cross-asset allocation.

[At this point, Committee Chair Wachter joined the meeting and assumed the chair.]

Regarding benchmarks for the emerging market fixed income asset class, Mr. Anderson asked why a corporate bond index would be used for dollar-denominated assets and a government bond index used for local currency-denominated assets. The UCRP Investment Policy Statement states that the emerging market fixed income asset class would be divided into two parts, dollar-denominated and local currency. Investment consultant Terry Dennison of Mercer Investment Consulting responded that, while it would be preferable to have absolutely comparable benchmarks, realistically in many emerging markets there are not a breadth and depth of benchmarks. In those circumstances, Mercer feels that the best alternative is to use a corporate bond index for the dollar-denominated assets and a government bond index for local currency-based assets. Mr. Lehmann added that in emerging markets the quality of indices can be quite poor. He asked if Mr. Dennison meant that a good government index is the best index available in emerging markets. Mr. Dennison concurred and reiterated that for dollar-denominated emerging market fixed income assets, the proposed benchmark is the JP Morgan Emerging Markets Bond Index and for local currency-denominated assets the proposed benchmark is the JP Morgan Government Bond Index Emerging Markets Global Diversified.

Mr. Anderson pointed out that, since the proposed new benchmark for private equity is the private equity portfolio's actual performance, the fund performance would always be exactly at its benchmark, and asked what effect this new benchmark would have on the bonuses paid to supervisors of the private equity portfolio. Mr. Anderson stated the benchmark for the private equity asset class is currently a private equity index. The proposed benchmark for private equity would be whatever UC's own private equity asset class earns, and UC's private equity asset class would always be exactly at its benchmark, never better or worse. Mr. Anderson stated that this arrangement raised questions about how incentives would be provided to managers. He asked for an explanation for the reason for this proposed change, which would be a move away from comparing performance of UC's private equity asset class to a measure of how private equity is performing in the market. Ms. Berggren commented that this is a benchmark for performance of the portfolio, not for incentive or compensation purposes. There are instances where benchmarks for performance of the portfolio are different from benchmarks for incentives or compensation. She stated that the reason the benchmark for the private equity asset class was set at its actual performance is because it is virtually impossible to get an investable benchmark for private equity for portfolio performance purposes.

In response to a question from Committee Chair Wachter, Ms. Berggren stated that the new Financial Accounting Standards Board (FASB) rules have not made it any easier to find investable benchmarks. She explained that private equity is the most difficult asset class to benchmark, since nothing is investable. Mr. Lehmann stated that the best benchmark is provided by Sand Hill Econometrics, which is also not investable. While he agreed that there is no way to find an investable benchmark for this asset class, Committee Chair Wachter stated that private equity performance could be compared with that of private equity in another university's endowment fund. Ms. Berggren stated that incentive benchmarks are calculated by comparing performance with the comparable Cambridge Associates group. Incentives are used to tell how well an individual manager has performed relative to his universe, while portfolio benchmarks are used to determine how well the portfolio performed relative to investable benchmarks. Committee Chair Wachter commented that total performance does not evaluate the asset allocation as much as it evaluates the performance within the asset class, even though asset allocation is likely more important. Ms. Berggren pointed out that her office has considered asset allocation and security selection separately, so that their relative contributions to performance can be distinguished.

Committee Chair Wachter introduced Investment Advisory Group Member T. Gary Rogers. Mr. Rogers recently stepped down as Chairman of the Board of Directors of the Federal Reserve Board in San Francisco; he has been chairman of Levi Strauss and Company as well as chairman of Dreyer's Grand Ice Cream, Inc. for 30 years. He graduated from UC Berkeley and earned an M.B.A. from Harvard College. Mr. Rogers has been involved with the UCSF Foundation and was named Harvard Business School Business Leader of the Year.

Investment Advisory Group Member Rogers asked how UC benchmarks itself against the performance of other universities' endowment funds. Committee Chair Wachter replied that UC's consultants look at the portfolio's performance in relation to its own benchmarks, in terms of absolute performance, and in comparison with performance of other universities' portfolios, with the Wilshire 5000 Index, and with other pension funds. He reiterated his view that asset allocation affects performance more than security selection within the asset class does. Ms. Berggren emphasized that it is important to understand that performance is related to risk. No performance numbers of institutions are audited. In order to understand how an institution's portfolio has performed relative to another institution, the risk parameters of the investment committee approving the asset allocation must be considered.

Mr. Rogers asked whether UC should compare the performance of its endowment fund with other endowment funds that are roughly the same size as UC's. Committee Chair Wachter agreed that it is worthwhile to compare UC's endowment to other universities' endowment funds. Noting that the asset allocation of GEP is quite different from that of UCRP, he stated that, among other measures, UCRP should be compared to other pension funds such as the California Public Employees' Retirement System (CalPERS) or the California State Teachers' Retirement system (CalSTRS). He stressed the importance of having the best investment staff and for the Committee on Investments to assist with asset allocation. He noted that comparisons are necessary, but that they are done in hindsight.

Mr. Rogers indicated that the average endowment size in the Cambridge Associates universe is around one-half billion dollars and asked whether that is the proper comparator group for UC's endowment fund. While he acknowledged that it would not be appropriate to compare the performance of UC's endowment fund with only those of Ivy League schools, he stated that it could be possible to find a more appropriate comparator universe. He stated his opinion that, if other universities are consistently achieving higher levels of return in their endowment funds, UC should know what they are doing differently to achieve such returns.

Committee Chair Wachter explained that the investment strategy for UCRP and, to some degree, for GEP has slowly moved over the past five years toward the so-called Swensen model, which is used by many other universities' investment managers. This approach involves more outsourcing of managers, and increasing allocations to alternative investments, absolute return, and real assets. He pointed out that the slow pace of UC's move in that direction has both helped and hurt its investment returns. During the recent financial crisis, UC avoided the liquidity and risk problems experienced by some other universities. He recalled that Harvard had put $2 billion of alternative investments on the secondary market and later withdrew them because they received such unattractive bids. Other investors had to hold $1 billion in timber. UC did not have those problems. While Committee Chair Wachter concurred with Mr. Rogers' recommendation that UC compare its asset allocation with those of comparable universities' endowment funds, he pointed out that UC has in fact been making asset allocation changes in the direction of the Swensen model. He expressed his opinion that UC has executed this change well in GEP, but could have moved slightly more quickly in UCRP.

Mr. Martin expressed his opinion that the Committee is aware of the asset allocation of other universities' endowment funds and about the best practices in the field.

Committee Chair Wachter elaborated that UC investments in alternatives and private equity have done well, but that UC could increase its allocation to those areas. He noted that GEP has a higher allocation in those areas than does UCRP, although the allocation in both is less than the Swensen model. He agreed with Mr. Martin's comments that the Committee is aware of the differences in strategy which resulted in UC's relatively better performance during the financial crisis and relatively worse performance during the seven years preceding the crisis.

Regent Kieffer stated that it is important for the Committee members to know where to find information about comparisons with other universities' endowment funds before reading about it in the newspapers.

Mr. Anderson pointed out a typographical error on page four of both the UCRP and GEP Investment Policy Statements regarding the benchmark to the absolute return asset class in the attachments to the item. Secretary and Chief of Staff Griffiths stated that she would talk further with Mr. Anderson to remedy the problem before the item is submitted to the Board.

Mr. Lehmann commented that the asset allocation has been gradually moving for the past ten years in the direction discussed by Committee Chair Wachter. He emphasized the distinction between public and private institutions, in both their endowment and their retirement funds. UCRP is a public endowment fund; public endowment funds do not invest in the same way as private endowment funds, because they have different constituencies, different stakeholders, and are generally much more risk-averse, as UC is relative to Harvard or Stanford. Committee Chair Wachter concurred and expressed pride that UC's funds had performed well during the financial crisis. He agreed that UC's investment strategy must be balanced.

Ms. Berggren stated that her office would like to have the new policy targets in effect March 1, 2011, in order to move as quickly as possible toward long-term objectives.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer's recommendation and voted to present it to the Board, Regents De La Peña, Kieffer, Makarechian, Schilling, and Wachter (5) voting "aye."

5. **UNIVERSITY OF CALIFORNIA RETIREMENT PLAN / GENERAL ENDOWMENT POOL INVESTMENT POLICY AND GUIDELINE REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' general investment consultant, Mercer Investment Consulting, with the concurrence of the real estate consultant, recommended that the amendments to Appendices 7L, 7M, and 7N to the Investment Policy Statements of the University of California Retirement Plan (UCRP) and the University of California General Endowment Pool (GEP), as shown in Attachments 4 and 5, be approved, effective April 1, 2011.

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

Managing Director Jesse Phillips presented the annual investment policy and guideline review, and recommendations for UCRP and GEP, in the context of changes in the capital markets. The recommended changes would better enable UCRP and GEP to meet return and risk objectives.

In the private equity asset class, Mr. Phillips recommended increasing the target weight for buyouts from 45 percent to 70 percent and decreasing the target weight for venture capital from 40 percent to 25 percent. The international category, formerly ten percent, would be eliminated and included in buyouts, since buyouts are now viewed on a global basis. Allocation to venture capital would be reduced because there are currently limited opportunities in that area.

Mr. Phillips noted that there had previously been two benchmarks for private real estate: the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open End Diversified Core Equity (NFI-ODCE) for core strategies, and the actual return of the real estate portfolio for non-core strategies. In the view of the Office of the Treasurer and its real estate consultant, the portfolio is currently mature enough to use the single NFI-ODCE benchmark. Mr. Phillips stated that using a single benchmark for the entire portfolio would enable the proper evaluation of sector-weighting decisions. Committee Chair Wachter stated his support. Mr. Rob Kochis of the Townsend Group commented that this change in benchmark represents a shift toward a lower-risk strategy in real estate and would offer the opportunity to capture allocation decisions. He stated that the NFI-ODCE is the closest thing to an investable benchmark in real estate.

Continuing to discuss the private real estate asset class, Mr. Phillips called attention to the recommendation to change target weights of core real estate from 25 percent to 30 percent; of value-add strategies from 40 percent to 30 percent; and of opportunistic strategies from 25 percent to 30 percent. These changes represent a move from a heavier allocation to value-add strategies toward an allocation more equally weighted among the three strategies. The allowable ranges around these targets would be changed to achieve consistency, and the categories in the Property Diversification Guidelines would be changed to be consistent with industry practice and the benchmark. Mr. Phillips noted that the recommendations include provisions to clarify geographic diversification guidelines, to increase the upper limit on non-U.S. investments from 20 percent to 25 percent, and to clarify other terms related to the separate account program.

Turning to public real estate, Mr. Phillips recommended changing the performance benchmark from one that had been half U.S. and half global indices, to a single global public real estate benchmark, the FTSE European Public Real Estate Association (EPRA) National Association of Real Estate Investment Trusts (NAREIT) Global Real Estate Index, which includes liquid real estate securities from all global regions. He explained that this change would eliminate the prior U.S. bias in the benchmark, since non-U.S. Real Estate Investment Trusts (REIT) represent a larger and growing percentage of the global REIT universe. Using this benchmark would allow the Office of the Treasurer to evaluate regional weighting decisions properly.

In cross-asset class strategies, Mr. Phillips reported the recommendation to roll the opportunistic asset class into the broader absolute return strategies class. The Office of the Treasurer plans to focus this part of the absolute return portfolio on strategies that cross asset classes, in much the same way as many hedge funds do, looking at more liquid global firms that have ability in tactical asset allocation and which would be able to implement opportunities more quickly than could the Office of the Treasurer. Since the goal is to outperform the existing portfolio, the Office of the Treasurer and the Regents' general investment consultant recommend using the aggregate benchmark for the entire UCRP or GEP as the performance benchmark for this sector. Mr. Phillips noted if managers were chosen who are able to outperform the existing portfolio, then the overall investment objectives of each fund would be met.

Investment Advisory Group Consultant Lehmann stated his understanding that the performance of private equity had previously been discussed as an asset class, rather than compared to a specific benchmark. He asked if the real estate asset class would be linked to benchmarks. Mr. Phillips responded that his office used the same type of benchmark for private real estate as for private equity during a startup period, because the quarterly time-weighted returns had no relationship to any market. Since the size of the portfolio has increased, there are a number of fund investments and separate account investments. The aggregate returns from that portfolio would resemble returns from a diversified group of core-type, open-end real estate funds, which is precisely represented by the ODCE benchmark. Mr. Phillips concurred with Mr. Lehmann's interpretation that the ODCE benchmark is reliable enough that the private real estate asset class would not need to be discussed, whereas the private equity asset class would still need to be discussed.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer's recommendation and voted to present it to the Board, Regents De La Peña, Kieffer, Makarechian, Schilling, and Wachter (5) voting "aye."

6. **PRIVATE EQUITY PROGRAM REVIEW**

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

Managing Director of Private Equity and Real Assets Timothy Recker began his review of the private equity program with an industry update, noting that the overall financial market as well as the private equity market had been extremely volatile during the prior few years. While fundraising for private equity in the United States, Europe, and Asia had increased during 2005-07, there was a sharp decline after that period. Although the final numbers are not yet available, fundraising continued to decline in 2010, decreasing 16 percent from 2009 levels, which would leave 2010 as the worst fundraising year since 2003. The venture capital fundraising market was also extremely difficult. Since returns in that area have been challenged, investors have been reluctant to apply new capital to venture capital. The life sciences area has been particularly difficult for venture capitalists, with returns compressed and longer hold times required.

Turning to the leveraged buyout market, Mr. Recker discussed the debt market of leveraged loans and high-yield bonds. Mr. Recker noted that although there remains concern about the approaching wall of debt maturities coming due in 2013-14, it is his view that many companies will be able to refinance their debt. As a result of current market conditions, which Mr. Recker characterized as much more favorable than anticipated, many companies have been able to refinance their debt, which has been beneficial to the leveraged buyout market in general.

Mr. Recker commented that active managers of private equity have demonstrated the ability to create value in the current market, for example by buying debt back at significant discount. Chief Investment Officer Berggren added that many managers generated profits by buying the debt of companies in which they were invested. Mr. Recker noted that aggressive private equity managers who had paid a fairly high price for assets bought back those assets at distressed prices in early 2009, sometimes earning two times their original capital.

Mr. Recker turned to a brief history of returns for both buyout and venture capital. The internet boom, initial public offerings, and quick merger and acquisition exits resulted in very good venture capital returns in the mid to late 1990s; however, that market has not sustained itself. In the past decade, even top quartile returns have been extremely challenged and there have not been any meaningfully positive returns at the median level since 1997. Limited partners are much more skeptical of venture capital. While there has been recent excitement around Facebook and Groupon, Mr. Recker stated that interest in such a limited number of opportunities should not lead to an over-commitment to venture capital.

Mr. Recker discussed his group’s investment strategy of attempting to differentiate the portfolio through manager selection and strong due diligence. His group seeks alignment of interest with its managers, for instance looking at their general partner commitment, or how much money the manager is investing alongside of UC. A significant strategy is to focus on managers who create value, rather than rely on leverage. His group is disciplined in its re-investment decision process, seeking managers who are complementary to one another, and who would perform well in different economic scenarios. Mr. Recker also stresses care in capital asset allocation. He noted that his group was able to be nimble in the recent downturn, taking advantage of the University’s liquidity by buying assets on the secondary market. His group considers out-of-favor investment strategies, and constantly canvases the market for dislocations and resulting opportunistic investments. While his group’s expansion of its co-investment focus and capabilities has been a slow process, the group is gaining invaluable strategic insights regarding managers and their processes. Ms. Berggren expressed her opinion that the private equity group was particularly effective in picking up secondary deals, as well good pricing on desirable firms during the prior year when many endowments were having liquidity problems.

In response to a question from Committee Chair Wachter about pricing in the secondary market, Mr. Recker stated that price is relative to volume. In seeking to purchase what he characterized as “A plus” assets, Mr. Recker’s group chose to take an aggressive price stance, and therefore a lower volume position. During late 2008 to early 2009, he sought 35 percent returns. Mr. Recker’s view was that public equities were 50 percent depressed at the time, so he sought a private equity level return in addition to the 50 percent. For example, if he bought a $1.50 asset for $1.00, the asset would have to increase in value to the fair price of $1.50, and his goal was to make a private equity return on the $1.50, rather than on the $1.00 that he paid. These expectations were high relative to those of the group’s peers. As a result of these secondary purchases, the University was able to invest in two of the top buyout funds in the world and a top venture capital fund, moves that have positioned the portfolio well for the future.

Investment Advisory Group Member Rogers asked Mr. Recker if UC sits on the advisory boards of the venture funds. Mr. Recker stated that he or another member of his team sit on the advisory boards of most of the venture funds in which they invest.

Mr. Recker reviewed other actions the private equity group had taken during the economic downturn. In mid-2008, the group invested in unlevered credit opportunities, which proved to be good investments. Mr. Recker reported that he continued to invest during the downturn, building future value in the portfolio. His group invested cautiously in Europe, and began increasing its exposure in China in 2008. During 2008-09, the private equity team monitored its portfolio very actively, analyzing capital structures company by company to understand the health of the businesses in its buyout portfolio. Even in the depths of the downturn, Mr. Recker was confident in the health of the companies in the portfolio; he reported that his team’s evaluations have been borne out in subsequent performance.

Mr. Recker summarized that the private equity program currently invests in 95 firms and 182 funds. Private equity represents 6.6 percent of the UC Retirement Plan (UCRP) and 7.4 percent of the General Endowment Pool (GEP). The top ten relationships in the portfolio represent 32 percent of total exposure. The portfolio is well diversified across many industries and its diversification across geographic regions will continue to increase. The group’s investment in Asia has grown over the past few years, particularly in China.

Giving an overview of investments over time, Mr. Recker reported that, since 2002, private equity has been invested 29 percent in venture capital, 57 percent in leveraged buyouts, eight percent in distressed investments, and three percent each in energy and secondary investments. He emphasized that the investments in distressed assets were made during a two-year period. So, in 2007, 40 percent of the group’s investments were ones that could be characterized as defensive or distressed. Similarly, purchases of secondary assets represent three percent of the portfolio’s overall activity since 2002, but those purchases were concentrated in an 18 to 24-month period of intense activity.

Mr. Recker displayed a graph showing development of the private equity portfolio since 2002. He noted that the current ratio of two-thirds funded commitments and one-third unfunded is within the targeted range. The portfolio has reached its target allocation level in UCRP, because of the effect of the economic crisis on the size of UCRP and the growth of the private equity portfolio. Ms. Berggren noted that the portfolio did not start investing in buyouts until 2003. She recalled that the University was sued during that time period, and forced to disclose information that some managers considered proprietary; as a result, a number of the top venture firms refused to accept the University as an investor. Currently the buyout portfolio has matured and should begin to produce returns.

Mr. Recker displayed a graph showing the shift in the private equity portfolio over time from a venture capital focus to a buyout focus. Venture capital has become a smaller portion of the portfolio as opportunities in that area have decreased and funds have been shifted to take advantage of buyout opportunities. Additionally, co-investments have been added to the portfolio over the prior two years; Mr. Recker stated that he expects the co-investment portion of the portfolio to grow over time.

Mr. Recker reiterated that the portfolio had very strong performance relative to its peers during the economic downturn. He expects the recent strong performance of public equity markets to drive private equity returns in 2011. Private equity typically lags public equity, and it will take time for the public market gains to work their way through the private equity portfolio. On a one, three, and five-year basis, performance of UC private equity has outperformed the Russell 3000 Index by between 530 and 770 basis points. On a ten-year basis, private equity outperformed the Russell 3000 Index, but there is a significant discrepancy between buyout returns of 7.2 to 7.4 percent and venture capital returns, which were negative four to five percent. Mr. Recker stated that, going forward, his group would continue to invest with venture capital managers in whom they have a higher confidence. In response to a question from Committee Chair Wachter, Mr. Recker confirmed that the negative four percent ten-year return for venture capital would be worse if the investment in Google were removed.

Committee Chair Wachter recalled that when he joined the Committee, all private equity investments were in venture capital and that he had advocated moving into buyouts. Currently, the private equity portfolio contains both venture capital and buyouts, and Committee Chair Wachter cited this as an example of moving toward a better model. He expressed his opinion that one reason the private equity portfolio had been heavily invested in venture capital was because of proximity to Silicon Valley and the excellent technology research emanating from UC. He indicated that the change in the portfolio balance over the past six or seven years represents a more tactical allocation. Committee Chair Wachter noted that the recent ten-year period was difficult for venture capital investing. Mr. Recker stated that, going forward, venture capital should be a small, but high-returning, portion of the private equity portfolio, if the selection is right. Investment Advisory Group Member Martin commented that it is difficult to invest a great deal of capital in the best part of the venture industry. Committee Chair Wachter expressed his view that selection is relatively less important in buyout firms than in venture capital firms. Ms. Berggren stated that when the University started investing in the top California venture capital funds, it was the largest owner of those funds. She recalled that there were very few problems with those venture capital funds in the portfolio over a 30-year period, with returns at 22 percent entering the 2000s. She stated that buyouts can perform as well as venture capital and that there are more opportunities in buyout than in venture capital with much less risk.

In response to a question from Mr. Martin, Mr. Recker stated that his private equity investment team is very strong, consisting of four senior staff, supported by two more junior, post-M.B.A. staff. Investment Advisory Group Consultant Gilman commended Mr. Recker and his team on their results over the recent few years.

7. **INVESTMENT CONSULTANT REVIEW OF UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS SEPTEMBER 2010 QUARTER PERFORMANCE REPORTS**

[Background material was mailed 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 began his presentation by noting that his firm had performed its quarterly review of six key factors that affect risk and return for the ten campus foundations, as directed by Regents Policy 6201, Investment Policy for the University of California Campus Foundations. He summarized that he had no issues of concern to raise with the Regents, since the foundations are within tolerances on all six factors: investment policy and asset allocation relative to the policy, performance by asset class and relative to benchmarks, asset allocation target percentages, ranges for each asset class, policy benchmarks for each asset class and in total, and investment guidelines for each asset class as applicable.

Mr. Dennison pointed out that the UC Santa Barbara Foundation had adopted a 42 percent allocation to the alternative asset class and is still 18.4 percent below target, because the foundation is ramping up toward this target allocation. Mr. Dennison reported that all campus foundations' investment policies are within tolerance.

Investment Advisory Group Member Rogers commented that, if there is a correct asset allocation, it is surprising that the asset allocations across the campus foundations show significant variation. Committee Chair Wachter recalled that the Committee had decided several years prior not to require the campus foundations to stay within the UC Retirement Plan (UCRP) or General Endowment Plan (GEP) asset allocation policy, but rather to review the foundations' asset allocations annually. Mr. Dennison stated that three of the foundations are invested entirely in GEP and the Short Term Investment Pool (STIP); the other foundations manage themselves. Ms. Berggren pointed out that the foundations' benchmarks must be established before the performance period.

Mr. Dennison displayed a bar graph showing the foundations' actual asset allocations versus their benchmarks as of September 30, 2010. He pointed out that, while asset allocations vary among the foundations, they do not vary dramatically. Regent De La Peña asked what the Regents' responsibility would be if the Committee determined that a campus foundation's asset allocation was outside of a range that the Committee considered reasonable. Committee Chair Wachter stated that the Regents have fiduciary responsibilities over the campus foundations, and that thus far the review process has been working well. Ms. Berggren stated that the review by Mercer Investment Consulting is thorough and that the Committee is well-informed about the campus foundations. Investment Advisory Group Consultant Gilman commended Mr. Dennison for his review stating that it gave the Committee a good level of understanding of the foundations.

The meeting adjourned at 3:20 p.m.

Attest:

Secretary and Chief of Staff

ATTACHMENT 1

*****Revised*****

Additions shown by underscoring; deletions shown by strikethrough

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UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

INVESTMENT POLICY STATEMENT

Approved ~~September 16, 2010~~ March 17, 2011
Replaces version approved ~~March 24, 2010~~ September 16, 2011

APPENDIX 1
Effective: ~~October 1, 2010~~ March 1, 2011
Replaces Version Effective: ~~April 1, 2010~~ October 1, 2010

ASSET ALLOCATION, PERFORMANCE BENCHMARKS, AND REBALANCING POLICY

Based on the risk budget for the Retirement Fund, the Committee has adopted the following asset allocation policy, including asset class weights and ranges, benchmarks for each asset class, and the benchmark for the total Retirement Fund.
Criteria for including an asset class in the strategic policy include:

- Widely recognized and accepted among institutional investors
- Has low correlation with other accepted asset classes
- Has a meaningful performance history
- Involves a unique set of investors.

The Current Policy Allocation recognizes the current underinvestment in illiquid asset classes (real estate, real assets) and the corresponding need to set rebalancing ranges around this effective policy allocation until such time as long-term policy weights in these classes are achieved. The allowable ranges for each asset class and in total have been chosen to be consistent with budgets and ranges for total and active risk (see Appendix 2).

A. Strategic Asset Allocation and Ranges

	Current Policy Allocation	Long-Term Target Allocation	Allowable Ranges Minimum	Allowable Ranges Maximum
U.S. Equity	~~31%~~ 28.5%*	~~23%~~ 20.5%	~~26~~ 23.5*	~~36~~ 33.5*
Developed Non US Equity	22	~~22~~ 19.0	17	27
Emerging Mkt Equity	~~4~~ 5*	~~5~~ 7.0	~~2~~ 3*	~~6~~ 7*
Global Equity	2	2	1	3
US Fixed Income	12	12	9	15
High Yield Fixed Income	2.5	2.5	1.5	3.5
Emerging Mkt Fixed Income	2.5	2.5	1.5	3.5
TIPS	8	8	6	10
Absolute Return Strategy	~~5~~ ~~6.0~~* 6.5	~~6.5~~ 8.5	~~0~~ ~~1.0~~* 1.5	~~10~~ ~~11.0~~* 11.5
Real Assets	~~0.5~~ 1*	3	0	~~1.5~~ 2*
~~Opportunistic~~	~~0.5~~	~~0.5~~	~~0~~	~~1.5~~
Private Equity	6	~~6~~ 8.0	3	9
Real Estate	4	7	1	7
Liquidity	0	0	0	10
	100%	100%		
Combined Public Equity	~~59~~ 57.5*	~~52~~ 48.5	~~49~~ 47.5*	~~69~~ 67.5*
Combined Fixed Income	25	25	20	30
Combined Alternatives	~~16~~ 17.5*	~~23~~ 26.5	~~9~~ 10.5*	~~23~~ 24.5*

* Reflects incremental adjustments approved by the Regents' Consultant in accordance with Section C, note 3, from current targets toward long-term targets, made since the most recent amendment of the Statement.

B. Asset Class Performance Benchmarks

The Committee has adopted the following performance benchmarks for each asset class. Criteria for selection of a benchmark include:

- Unambiguous: the names and weights of securities comprising the benchmark are clearly delineated
- Investable: the option is to forego active management and simply replicate the benchmark
- Measurable: it is possible to readily calculate the benchmark's return on a reasonably frequent basis
- Appropriate: the benchmark is consistent with the Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflects Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	Benchmark
U.S. Equity	Russell 3000 Tobacco Free Index
Developed Non US Equity	MSCI World ex-US (Net Dividends) Tobacco Free
Emerging Mkt Equity	MSCI Emerging Market Free (Net Dividends)
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	Barclays Capital US Aggregate Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Emg Mkt Fixed Income	Dollar Denominated:~~33% times~~ JP Morgan Emerging Markets Bond Index Global Diversified ~~+ JP Morgan Government Bond Index Emerging Markets Global Diversified (67%)~~
Emg Mkt Fixed Income	Local Currency: JP Morgan Emerging Bond Index Emerging Markets Global Diversified
TIPS	Barclays Capital US TIPS Index
Absolute Return Strategy	Diversified: HFRX Absolute Return Index (50%) + HFRX Market Directional Index (50%)
Absolute Return Strategy	Cross Asset Class: Aggregate UCRP Policy Benchmark
Real Assets	Commodities: S&PGSCI Reduced Energy Index All Other: N/A (see below note ~~4~~ 3)
~~Opportunistic~~	~~See below note 5~~
Private Equity	N/A (see below note 2)
Real Estate	Public: ~~50% times the FTSE EPRA NAREIT US Index plus 50% times the~~ FTSE EPRA NAREIT Global ~~ex-US~~ Index
Real Estate	Private ~~(core strategies)~~: NCREIF Funds Index – Open end Diversified Core Equity (ODCE), lagged 3 months ~~Private (non-core strategies): N/A (see below note 3)~~

Notes on asset class benchmarks:

1. Global Equity: The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually and whenever changes occur.

2. Private Equity: *Long-term* portfolio returns will be compared to investable public equity alternatives as well as non-investable peer group indices. There is no appropriate market benchmark to use for *short-term* performance evaluation or decision making.
~~3. Private Real Estate (non-core strategies only): similar to Private Equity~~
~~4.~~ 3. Real Assets (all strategies ex-commodities): similar to Private Equity
~~5. Opportunistic: By their nature, unique or limited opportunity investments are difficult to benchmark, and there will not be a "one size fits all" benchmark for this category. The Regents' general investment consultant will establish the appropriate individual benchmark after the investment is chosen but before funding the investment. For any asset whose size at initial or subsequent purchase is greater than ½ of one percent of the total fund market value, the benchmark will be approved by the Chair of the Committee on Investments based on recommendation of the Regents' general investment consultant.~~

C. Total Retirement Fund Performance Benchmark

This is the composition of the total Fund performance benchmark referred to in the Investment Policy Statement, Part 4(d). The percentages below add to 100%.

Percentage	Benchmark
~~31%~~ 28.5*	× Russell 3000 Tobacco Free Index
22%	× MSCI World ex-US (Net Dividends) Tobacco Free
~~4%~~ 5*	× MSCI Emerging Market Free (Net Dividends)
2%	× MSCI All Country World Index Net – IMI – Tobacco Free
12%	× Barclays Capital US Aggregate Index
2.5%	× Merrill Lynch High Yield Cash Pay Index
2.5%	× [JP Morgan Emerging Markets Bond Index Global Diversified × ~~(~~33%~~)~~] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × ~~(~~67%~~)~~]
8%	× Barclays Capital US TIPS Index
~~5%~~ 6*	× [HFRX Absolute Return Index × ~~(~~50%~~)~~] + [HFRX Market Directional Index × ~~(~~50%~~)~~] [Abs. Ret. – Diversified]
0.5%	× Aggregate UCRP Policy Benchmark [Abs.Ret.-Cross Asset Class]
~~0.5%~~ 1*	× Aggregate Real Assets benchmark (see section B), with components weighted by their actual weights within the total real assets portfolio~~)~~
~~0.5% 1*~~	~~× Aggregate Opportunistic benchmark (see section B), with components weighted by their actual weights within the total opportunistic portfolio)~~
6%	× Actual return of private equity portfolio
4%	× Aggregate of Public and Private Real Estate benchmarks (see section B), with components weighted by their actual weights within the total real estate portfolio~~)~~

Notes on total fund benchmark:
1. The benchmark for private equity is replaced by the private equity portfolio's actual performance. This has the effect of neutralizing the active performance of this class for purposes of total fund performance evaluation. Similar comments apply to private real estate – non-core strategies (closed end funds) and Real Assets (all strategies ex commodities).

* Reflects incremental adjustments approved by the Regents' Consultant in accordance with Section C, note 3, from current targets toward long-term targets, made since the most recent amendment of the Statement.

2. The calculation of the total fund benchmark will assume a monthly rebalancing methodology.
3. In the event of a significant change in asset allocation, The Regents' generalist consultant may specify an alternative weighting scheme to be used during a transition period.

D. Rebalancing Policy

There will be periodic deviations in actual asset weights from the long-term/current policy asset weights specified above. Causes for periodic deviations are market movements, cash flows, and varying portfolio performance. Significant movements from the asset class policy weights will alter the intended expected return and risk of the Fund. Accordingly, the Investment Committee authorizes the Treasurer to rebalance the Fund when necessary to ensure adherence to the Investment Policy.

The Treasurer will monitor the actual asset allocation at least monthly. The Committee directs the Treasurer to take all actions necessary, within the requirement to act prudently, to rebalance assets to within the policy ranges in a timely and cost effective manner when actual weights are outside the prescribed ranges. The Treasurer may utilize derivative contracts (in accordance with Appendix 4) to rebalance the portfolio.

The Treasurer shall assess and manage the trade-off between the cost of rebalancing and the active risk associated with the deviation from policy asset weights. With approval from the Chair of the Committee, the Treasurer may delay a rebalancing program when the Treasurer believes the delay is in the best interest of the Plan. Results of rebalancing will be reported to the Committee at quarterly meetings.

ATTACHMENT 2

*****Revised*****

Additions shown by underscoring; deletions shown by strikethrough

UNIVERSITY OF CALIFORNIA GENERAL ENDOWMENT POOL

INVESTMENT POLICY STATEMENT

Approved ~~September 16, 2010~~ March 17, 2011
Replaces version dated ~~March 24, 2010~~ September 16, 2010

APPENDIX 1
Effective: ~~October 1, 2010~~ March 1, 2011
Replaces Version Effective: ~~April 1, 2010~~ October 1, 2010

ASSET ALLOCATION, PERFORMANCE BENCHMARKS, AND REBALANCING POLICY

Based on the risk budget for the GEP, the Committee has adopted the following asset allocation policy, including asset class weights and ranges, benchmarks for each asset class, and the benchmark for the total GEP.
Criteria for including an asset class in the strategic policy include:

- Widely recognized and accepted among institutional investors
- Has low correlation with other accepted asset classes
- Has a meaningful performance history
- Involves a unique set of investors

The Current Policy Allocation recognizes the current under-investment in illiquid asset classes (real estate, real assets) and the corresponding need to set rebalancing ranges around this effective policy allocation until such time as long-term policy weights in these classes are achieved. The allowable ranges for each asset class and in total have been chosen to be consistent with budgets and ranges for total and active risk.

A. Strategic Asset Allocation and Ranges

	Current Policy Allocation	Long Term Target Allocation	Allowable Ranges Minimum	Allowable Ranges Maximum
U.S. Equity	20%	~~19%~~18.5	15	25
Developed Non US Equity	18.5	~~18~~16.0	13.5	23.5
Emerging Mkt Equity	5	~~5~~ 6.0	3	7
Global Equity	2	2	1	3
US Fixed Income	~~8~~7.5	5	~~5~~4.5	~~11~~10.5
High Yield Fixed Income	3	2.5	2	4
Emerging Mkt Fixed Income	3	2.5	2	4
TIPS	4	2.5	2	6
Absolute Return	~~23.5~~24.0	~~23.5~~25.5	~~18.5~~19	~~28.5~~29
Real Assets	~~0.5~~1.0	3.0	0	~~1.5~~2
~~Opportunistic~~	~~0.5~~	~~0.5~~	~~0~~	~~1.5~~
Private Equity	7	9	4	10
Real Estate	5	7.5	2	8
Liquidity	0	0	0	10
	100%	100%		
Combined Public Equity	45.5	~~44~~42.5	35.5	55.5
Combined Fixed Income	~~18~~17.5	12.5	~~13~~12.5	~~23~~22.5
Combined Alternatives	~~36.5~~37.0	~~43.5~~45.0	~~26.5~~27.0	~~46.5~~47.0

* Alternatives category including, but not limited to: Real Estate, Private Equity, and Absolute Return Strategies

B. Asset Class Performance Benchmarks

The Committee has adopted the following performance benchmarks for each asset class. Criteria for selection of a benchmark include:

- Unambiguous: the names and weights of securities comprising the benchmark are clearly delineated
- Investable: the option is to forego active management and simply replicate the benchmark
- Measurable: it is possible to readily calculate the benchmark's return on a reasonably frequent basis
- Appropriate: the benchmark is consistent with The Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflecting Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	Benchmark
U.S. Equity	Russell 3000 Tobacco Free Index
Non US Eq. Devel.	MSCI World ex-US Net Tobacco Free
Emerging Mkt Eq	MSCI Emerging Market Free Net
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	~~Lehman~~ Barclays US Capital Aggregate Bond Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Emg Mkt Fixed Income	Dollar Denominated:~~33% times~~ JP Morgan Emerging Market Bond Index – Global Diversified, ~~plus 67% times the JP Morgan Global Bond Index – Emerging Markets – Global Diversified~~
Emg Mkt Fixed Income	Local Currency: JP Morgan Bond Index Emerging Market Global Diversified
TIPS	~~Lehman~~ Barclays Capital US TIPS Index
Absolute Return	~~50% x~~ Diversified: HFRX Absolute Return Index (50%) + ~~50%~~ HFRX Market Directional Index (50%)
Absolute Return	Cross Asset Class: Aggregate GEP Policy Benchmark
Real Assets	Commodities: S&PGSCI Reduced Energy Index All Other: N/A (see below note ~~4~~3)
~~Opportunistic~~	~~See below note 5~~
Private Equity	N/A (see below note 2)
Real Estate	Public: ~~50% times the FTSE EPRA NAREIT US Index return plus 50% times the~~ FTSE EPRA NAREIT Global ~~ex-US~~ Index return

Real Estate	Private ~~(core strategies)~~: NCREIF Funds Index– Open end Diversified Core Equity (ODCE), lagged three months ~~Private (non-core strategies): N/A (see below note 3)~~

Notes on asset class benchmarks:
1. Global Equity: The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually and whenever changes occur.
2. Private Equity: *Long term* portfolio returns will be compared to investable public equity alternatives as well as non-investable peer group indices. There is no appropriate market benchmark to use for *short term* performance evaluation or decision making.
~~3. Private Real Estate (non-core strategies only): similar to Private Equity~~
~~4~~3. Real Assets (all strategies ex-commodities): similar to Private Equity
~~5. Opportunistic: By their nature, unique or limited opportunity investments are difficult to benchmark, and there will not be a "one size fits all" benchmark for this category. The Regents' general investment consultant will determine the appropriate individual benchmark after the investment is chosen but before funding the investment. The benchmark for any asset whose size at initial or subsequent purchase is greater than ½ of one percent of the total fund market value will be approved by the Chair of the Committee on Investments based on recommendation of the Regents' general investment consultant.~~

C. Total GEP Performance Benchmark

This is the composition of the total GEP performance benchmark referred to in the Investment Policy Statement, Part 4(b). The percentages below add to 100%.

Percentage	**Benchmark**
~~19%~~20.0[*]	× Russell 3000 Tobacco Free Index
~~18%~~18.5[*]	× MSCI World ex-US Net Tobacco Free
5%	× MSCI Emerging Market Free Net
2%	× MSCI All Country World Index Net – IMI – Tobacco Free
~~8%~~7.5	× ~~Lehman~~ Barclays Capital US Aggregate Bond Index
3%	× Merrill Lynch High Yield Cash Pay Index
~~2.5%~~	~~× Citigroup World Government Bond Index ex-US~~
3%	× ~~33% times~~ [JP Morgan Emerging Market Bond Index – Global Diversified × 33%] + [~~, plus 67% times the~~ JP Morgan Global Bond Index —Emerging Markets – Global Diversified × 67%]
4%	× ~~Lehman~~ Barclays Capital US TIPS Index
23.5%	× ~~50% x~~ [HFRX Absolute Return Index ~~+~~ × 50%] + [HFRX Market Directional Index × 50%] [Abs. Ret. – Diversified]
0.5%	× Aggregate GEP Policy Benchmark [Abs. Ret. – Cross Asset Class]
~~0.5%~~1.0	× Aggregate Real Assets benchmark (see section B), with components weighted by their actual weights within the total real assets portfolio~~)~~

[*] Reflects incremental adjustments approved by the Regents' Consultant in accordance with Section C, note 3, from current targets toward long-term targets, made since the most recent amendment of the Statement.

~~0.5% × Aggregate Opportunistic benchmark (see section B, with components weighted by their actual weights within the total opportunistic portfolio)~~
7% × Actual return of private equity portfolio
5% × Aggregate of Public and Private Real Estate benchmarks (see section B), with components weighted by their actual weights within the total real estate portfolio~~)~~

Notes on Total Fund benchmark:
1. The benchmark for private equity is replaced by the private equity portfolio's actual performance. This has the effect of neutralizing the active performance of this class for purposes of total fund performance evaluation.
2. The calculation of the Total Fund benchmark will assume a monthly rebalancing methodology.
3. In the event of a significant change in asset allocation, The Regents' generalist consultant may specify an alternative weighting scheme to be used during a transition period.

D. Rebalancing Policy

There will be periodic deviations in actual asset weights from the long-term/current policy asset weights specified above. Causes for periodic deviations are market movements, cash flows, and varying portfolio performance. Significant movements from the asset class policy weights will alter the intended expected return and risk of the GEP. Accordingly, the Investment Committee authorizes the Treasurer to rebalance the GEP when necessary to ensure adherence to the Investment Policy.

The Treasurer will monitor the actual asset allocation at least monthly. The Committee directs the Treasurer to take all actions necessary, within the requirement to act prudently, to rebalance assets to within the policy ranges in a timely and cost effective manner when actual weights are outside the prescribed ranges. The Treasurer may utilize derivative contracts [in accordance with Appendix 4] to rebalance the portfolio.

The Treasurer shall assess and manage the trade-off between the cost of rebalancing and the active risk associated with the deviation from policy asset weights. With approval from the Chair of the Committee, the Treasurer may delay a rebalancing program when the Treasurer believes the delay is in the best interest of the GEP. Results of rebalancing will be reported to the Committee at quarterly meetings.

ATTACHMENT 3

UCRP RECOMMENDATION:

PENSION	Current Policy			Long Term Policy		
Asset Class	Current Policy (12/1/2010)	Proposed Current (eff. 3/1/2011)	Change	Long-Term Policy	Proposed Long-Term (eff. 3/1/2011)	Change
US Equity	28.5	28.5	-	23.0	20.5	(2.5)
Non US Devl Equity	22.0	22.0	-	22.0	19.0	(3.0)
Emerging Mkt Equity	5.0	5.0	-	5.0	7.0	2.0
Global Equity	2.0	2.0	-	2.0	2.0	-
Total Equity	**57.5**	**57.5**	-	**52.0**	**48.5**	(3.5)
Core Fixed Income	12.0	12.0	-	12.0	12.0	-
HYD	2.5	2.5	-	2.5	2.5	-
EMD	2.5	2.5	-	2.5	2.5	-
TIPS	8.0	8.0	-	8.0	8.0	-
Cash	-	-	-	-	-	-
Total Fixed Income	**25.0**	**25.0**	-	**25.0**	**25.0**	-
Absolute Return *	6.0	6.5	0.5	**6.5**	**8.5**	2.0
Real Assets	1.0	1.0	-	**3.0**	**3.0**	-
Opportunistic *	0.5	-	(0.5)	**0.5**	**0.0**	(0.5)
Private Equity	6.0	6.0	-	6.0	8.0	2.0
Real Estate	4.0	4.0	-	7.0	7.0	-
Total Alternatives	**17.5**	**17.5**	-	**23.0**	**26.5**	3.5
Grand Total	**100.0**	**100.0**	-	**100.0**	**100.0**	-
Public Equity	57.5	57.5	-	52.0	48.5	(3.5)
Fixed Income	25.0	25.0	-	25.0	25.0	-
Alternatives	17.5	17.5	-	23.0	26.5	3.5

* Absolute Return Strategies will include an additional allocation to Cross Asset Class Strategies. The "Opportunistic" Class will be folded into Absolute Return Strategies.

GEP RECOMMENDATION:

ENDOWMENT	Current Policy			Long Term Policy		
Asset Class	Current Policy (4/1/2010)	Proposed Current (eff. 3/1/2011)	Change	Long-Term Policy	Proposed Long-Term (eff. 3/1/2011)	Change
US Equity	**20.0**	**20.0**	-	**19.0**	**18.5**	(0.5)
Non US Devl Equity	**18.5**	**18.5**	-	**18.0**	**16.0**	(2.0)
Emerging Mkt Equity	5.0	5.0	-	5.0	6.0	1.0
Global Equity	2.0	2.0	-	**2.0**	**2.0**	-
Total Equity	**45.5**	**45.5**	-	**44.0**	**42.5**	(1.5)
Core Fixed Income	8.0	7.5	(0.5)	5.0	5.0	-
HYD	3.0	3.0	-	2.5	2.5	-
EMD	3.0	3.0	-	2.5	2.5	-
TIPS	4.0	4.0	-	2.5	2.5	-
Cash	-	-	-	-	-	-
Total Fixed Income	**18.0**	**17.5**	(0.5)	**12.5**	**12.5**	-
Absolute Return *	23.5	24.0	0.5	23.5	25.5	2.0
Real Assets	**0.5**	**1.0**	0.5	**3.0**	**3.0**	-
Opportunistic *	**0.5**	**0.0**	(0.5)	**0.5**	**0.0**	(0.5)
Private Equity	7.0	7.0	-	9.0	9.0	-
Real Estate	5.0	5.0	-	7.5	7.5	-
Total Alternatives	**36.5**	**37.0**	0.5	**43.5**	**45.0**	1.5
Grand Total	**100.0**	**100.0**	**0.0**	**100.0**	**100.0**	**0.0**
Public Equity	45.5	45.5	-	44.0	42.5	(1.5)
Fixed Income	18.0	17.5	(0.5)	12.5	12.5	-
Alternatives	36.5	37.0	0.5	43.5	45.0	1.5

* Absolute Return Strategies will include an additional allocation to Cross Asset Class Strategies. The "Opportunistic" Class will be folded into Absolute Return Strategies.

Additions shown by underscoring; deletions shown by strikethrough

APPENDIX 7L
Effective: ~~September 17, 2008~~ April 1, 2011
Replaces Version: ~~March 19, 2008~~ September 17, 2008

PRIVATE EQUITY INVESTMENT GUIDELINES

The purpose for portfolio guidelines is to clearly define performance objectives and to control risk. Portfolio guidelines to control risk should be subject to ongoing review.

Performance Objectives:
The objective of the private equity portfolio is to earn a return, after adjusting for risk, that exceeds the Russell 3000 Index return on a consistent basis over time.

Portfolio Guidelines:

1. Permissible investments include partnerships that invest in U.S venture capital, U.S. buyouts, and non-U.S. private equity. Permissible investments also include co-investments and direct equity investments (as limited in guidelines ~~12~~ 10 and 11 below).

2. Fund-of-funds partnerships are permitted, and the commitment to any individual fund-of-funds partnership is recommended not to exceed 35 percent of the total capital raised by the partnership. The maximum of 35 percent represents the ownership percentage of the partnership at each closing.

3. The policy allocation to U.S. buyouts is ~~45~~ 70 percent of the private equity portfolio with a minimum allocation of ~~30~~ 50 percent and maximum allocation of ~~70~~ 90 percent. U.S. buyouts are broadly defined as leveraged buyouts, growth capital buyouts, special situations, restructuring, and mezzanine funds. Real estate funds are not included.

4. The policy allocation to U.S. venture capital is ~~40~~ 25 percent of the private equity portfolio with a minimum allocation of ~~25~~ 15 percent and maximum allocation of ~~65~~ 40 percent. U.S. venture capital includes early, middle, and late stage private investments in new high growth businesses.

~~5. The policy allocation to non-U.S. private equity is 10 percent of the private equity portfolio with a minimum allocation of 0 percent and maximum allocation of 20 percent. Non- U.S. private equity includes private equity and venture capital partnerships operating in Europe, Asia, and Latin America.~~

~~6.~~5. The policy allocation to co-investments / direct equity investments is 5 percent of the private equity portfolio with a minimum allocation of 0 percent and a maximum allocation of 10 percent.

~~7.~~6. No single partnership commitment (including co-investments / direct equity investments) can represent, at the time of commitment, more than 5 percent of the current private equity allocation defined as the most recent quarter book value plus unfunded commitments plus approved target commitment for the current (one) year.

~~8.~~7. Investment in multiple funds of the same general partner is permitted. However, the total commitment to partnerships with the same general partner (including co-investments / direct equity investments), at the time of commitment, can not exceed 15 percent of the budgeted three year private equity allocation defined as current book value plus unfunded commitments plus approved commitment level for the current year and two subsequent years.

~~9.~~8. The commitment to any individual partnership is recommended not to exceed 20 percent of the total capital raised by the partnership. The maximum of 20 percent represents the ownership percentage of the partnership at each closing. Notwithstanding these limitations, commitments to any fund-of-funds partnership are recommended not to exceed 35 percent of the total capital raised by the partnership.

~~10.~~9. The private equity portfolio should be diversified across time as well. At the time the budget is set, no more than 30 percent of the budgeted three year private equity allocation (defined in the same way as in guideline #~~8~~7 above) can be committed to partnerships in any one year.

~~11.~~10. No single co-investment or direct investment company can represent, at the time of commitment, more than ~~$15~~ $20 million at cost. No single co-investment company combined with UC's share of the same portfolio company from partnership investments can represent, at the time of commitment, more than $30 million at cost.

~~12.~~11. Direct investments shall be limited to the following:

a. companies whose businesses are based on research or development initiated at the University of California or the UC-managed National Laboratories, and
b. investments which are made with an independent private equity firm or experienced private equity professional as partner

Additions shown by underscoring; deletions shown by strikethrough

APPENDIX 7M
Effective: ~~March 1, 2009~~ April 1, 2011
Replaces version: March ~~19, 2008~~1, 2009

PRIVATE REAL ESTATE INVESTMENT GUIDELINES

The purpose of the real estate investment guidelines is to define the investment objectives, philosophy, and specific guidelines for making investments and the benchmarks to measure performance.

These guidelines are applicable to the entire real estate program ("Program") consisting of investments made on behalf of the UCRP and GEP funds. The allocation of investments between the two funds will be managed by the Treasurer in accordance with the performance and risk objectives of those funds.

Allocations and ranges for the four principal strategies are shown below.

Strategic Allocations		
Strategy	**Allocation**	**Range**
REITS	10%	5%-20%
Core Real Estate	~~25~~30%	~~15~~10%-~~60~~80%
~~Enhanced~~Value-Added Strategies	~~40~~30%	~~20~~10%-50%
~~High Return~~Opportunistic Strategies	~~25~~30%	10%-~~30~~40%
Total	100%	

Core Real Estate, ~~Enhanced~~Value Added Strategies, and ~~High Return~~Opportunistic Strategies ~~are combined below under the heading~~constitute "Private Real Estate." ~~Enhanced~~Value Added and ~~High Return~~Opportunistic strategies together are referred to as "Non-Core." REITS are ~~referred to~~discussed in the section "Public Real Estate Securities (Appendix ~~7L 2~~7N)." The term "Program" will be interpreted in the context of private or public real estate.

Investment Guidelines ~~– Private~~

1. ~~When the Program is fully invested and mature, the~~The benchmark for evaluating the Program's investment performance will be the National Council of Real Estate Investment Fiduciaries (NCREIF) Funds Index – Open-end Diversified Core Equity Index ("NFI-ODCE"). The Program return is expected to meet or exceed this benchmark, on a rolling ~~five~~three year basis, after deducting all costs and expenses ("net returns"). ~~During an implementation period of three to five years from the effective date, the investment performance of the Core portion of the Program will be compared to the NFI-ODCE Index. During this same period, the investment performance of the non-Core portion, including~~

~~the separate accounts, is correctly measured as an internal rate of return (IRR), and will be compared to an appropriate universe of similar strategies (rather than to a time-weighted index) by the Real Estate consultant.~~

2. Investments shall be in limited liability investment vehicles such as limited partnerships, limited liability corporations, private REITs, and other ~~pooled~~commingled investment ~~funds~~Funds. Direct investments through discretionary separate accounts may be made through title holding corporations.

3. Investments shall be primarily equity-oriented, but may also include debt instruments ~~with equity-like returns~~ secured by real estate.

4. Specific property types in the Program shall be within the following ranges:

Property Diversification Guidelines	
Property Type	**Range**
Office	20%-50%
Apartments	15%-35%
Industrial	15%-35%
Retail	~~10~~15%-~~30~~35%
~~Other~~Hospitality	Up to 20%
Other (incl. student housing)	Up to 20%

5. Investments in the U.S. shall be diversified by geographic location ~~with no one metropolitan area exceeding 20% of the portfolio~~as follows:
   a. Exposure (current NAV) in any one NFI-ODCE region within the total Private program (commingled funds and separate accounts) not to exceed the weight of that region in the NFI-ODCE index by more than 5%.
   b. Exposure (current NAV) in any one Metropolitan Statistical Area (or Metropolitan Statistical Division, if applicable) within the Separate Account portfolio not to exceed 20% of the Separate Account program allocation ("allocation" meaning: NAV + Unfunded Commitments).

6. Investments outside the U.S. may not represent more than ~~20~~25% of the private real estate portfolio and at the portfolio level must be diversified by type and geographic location.

7. The Program's investment in any one fund shall not exceed 20% of the total capital being raised for that fund.

8. No more than 15% of the Program's ~~assets~~commingled Fund Net Asset Value + Unfunded Commitments shall be invested with a single ~~core~~ manager. ~~and no~~No more than ~~10~~25% of the Separate Account program allocation~~'s assets~~ shall be invested with a single ~~non-core~~ manager ~~(Enhanced or High Return)~~("allocation" meaning: NAV + Unfunded Commitments).

9. The Program's outstanding investment(s) with any given ~~sponsor, or related sponsors~~firm, including its affiliates and subsidiaries, may not exceed 20% of that ~~sponsor, or related sponsors',~~firm's total real estate equity under management.

10. In order to enhance the alignment of interests of the investor and the sponsor, the sponsor of a closed-end fund investment will be required to make a co-investment of at least 1%.

11. Leverage at the Program level shall not exceed 65% of the (gross) market value of the total assets ~~allocated to~~ of the Program. All leverage shall be non-recourse to the Regents, as trustee of UCRP, with respect to UCRP investments in the Program. All leverage shall be non-recourse to the Regents, a public corporation, with respect to GEP investments in the Program.

12. Letters of credit may be obtained or funding guarantees provided in favor of a lender in connection with the development and operation of a property managed by a ~~separate~~ Separate ~~account~~ Account manager through a property title holding corporation owned by the Regents as trustee of UCRP, or the Regents, a public corporation, with respect to GEP investments in the Program, provided that such letter or guarantee does not encumber any assets other than those previously committed to such separate account to fund such investment.

13. The acquisition price of any single property or collective investment vehicle (portfolio of properties) shall not exceed 5% of the total ~~Program dollar allocation (i.e., the target value of assets when the Program is fully invested)~~Separate Account program long-term allocation (that is, Net Asset Value + Unfunded Commitments + unused capacity consistent with the long-term policy targets of Real Estate). The Treasurer may approve the acquisition of properties greater than 5% but less than 10% of the total Program allocation.

14. Fund of Fund investments are permitted

15. Club deals and co-investments, in aggregate, shall not exceed 7.5% of total Program market value.

Note: Compliance with some of these guidelines will not be required until a sufficient number of investments have been made. The Treasurer will keep the Committee periodically informed as to the status of its compliance with these guidelines.

APPENDIX 7N
Effective: ~~May 17, 2007~~April 1, 2011
Replaces version: ~~new~~May 17, 2007

PUBLIC REAL ESTATE SECURITIES INVESTMENT GUIDELINES

The purpose for these performance objectives ("Objectives") and management guidelines ("Guidelines") is to clearly state the investment approach, define performance objectives and to control risk in the management of the Public Real Estate Securities allocation of the Fund ("the Program"). These Objectives and Guidelines shall be subject to ongoing review by the Committee. Capital market conditions, changes in the investment industry, new financial instruments, or a change in the Committee's risk tolerance, are among factors to be considered in determining whether the Guidelines shall be revised.

1. Investment Policy

a. Investment Objective

The primary investment objective of the Program is to generate a rate of return from investments in public real estate securities which exceeds the return on the global real estate securities market, measured by ~~50% times~~ the FTSE EPRA NAREIT ~~US Index return plus 50% times the FTSE EPRA NAREIT~~ Global ~~ex US~~ Index return ("Benchmark"), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by hiring multiple external investment managers ("Managers"). Each Manager's strategy will focus on a subset of the global real estate securities market in which the Manager is believed to have a competitive advantage in providing returns in excess of its respective benchmark on a risk adjusted basis. The Treasurer will monitor whether the aggregate of all externally managed portfolios adheres to these Guidelines, and in particular achieves the overall performance and risk objectives stated below. In addition, each Manager shall have written guidelines, which will detail its strategy, performance objectives, permitted investments, and restrictions. The Treasurer will monitor each Manager's adherence to its respective guidelines. In no case may a Manager's guidelines create potential conflict with the Guidelines for the Program.

c. Performance Objective

Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines. ~~The benchmark for evaluating investment performance for REIT managers (US only mandate) is the FTSE EPRA NAREIT US Index. The benchmark for non-US REIT managers is the FTSE EPRA NAREIT Global ex-US Index. The benchmark for global REIT managers (combined US and non-US mandate) is the FTSE EPRA NAREIT Global Index.~~The Program return is expected to meet or exceed a weighted aggregate of these benchmarks, on a consistent basis over time, after deducting all costs and expenses.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 450 basis points. Each Manager will have a unique active risk budget, relative to its style benchmark, which is appropriate to its individual strategy, and specified in its guidelines, and which will reflect the risk-return profile of its specific investment objectives.

e. Other Constraints and Considerations

- Managers shall comply with applicable State and Federal laws and regulations and the prudence requirement described in section 3(a) of the Policy.
- Managers shall act solely in the interest of the Fund's constituents.
- Implementation of this Program shall comply with the Fund's Policy.

2. Investment Guidelines

a. Asset Allocation

It is expected that the Program will be fully invested in equity and equity-related securities at all times. Any cash held by Managers of separate accounts for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The Treasurer or designated overlay manager may equitize this cash using appropriate derivatives contracts.

b. Types of Securities

The Program will be invested in diversified portfolios of real estate securities that are listed on national securities exchanges. Managers may also invest in stocks that are traded over-the-counter and in other real estate-related securities and private placements as limited in their guidelines. A real estate-related company is one in which the predominant share of EBITDA is derived from rental income and/or the equity ownership of real estate.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Lend securities
- Purchase commodities or commodity derivatives
- Purchase fixed income securities except for cash equivalents used for facilitating transactions
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Buy or write equity linked notes
- Employ economic leverage in the portfolio through borrowing or derivatives

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk and will exhibit portfolio risk characteristics similar to those of the Benchmark. The Treasurer is responsible for managing aggregate risk exposures. The following limitations apply:

- The Program's beta with respect to the Benchmark will not be significantly different from 1.0, as measured over the most recent 12 month period.
- Notwithstanding the overall diversification of the Program, the Treasurer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings within separate accounts of any security may not exceed 4.9% of that security's outstanding shares.

It is expected that each Manager's portfolio will be appropriately diversified, within limits established in its guidelines and relative to its performance objectives, to control risk, but without unduly restricting a Manager's ability to out-perform its benchmark. That is, an individual Manager's portfolio may be more concentrated than is appropriate for the Program's aggregate investments.

e. Managers shall employ best execution. Transactions may be directed to brokers/dealers designated by the Treasurer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The Treasurer may use derivative contracts (including but not limited to index futures and ETF's) for facilitating investment of cash flows related to contributions, withdrawals, or other asset allocation rebalancing.

3. Evaluation and Review

a. Policy and Guideline Review

The Treasurer shall review the Objectives and Guidelines at least annually, and report to the Committee on the impact of the Guidelines on the Program's performance.

b. Program performance and risk exposures shall be evaluated at multiple levels in accordance with the performance objectives of the Program and individual Managers.

4. Reporting

On a quarterly basis, the Treasurer shall provide the following reports to the Committee:

a. A performance attribution explaining differences in sector weights and returns (property type and/or geographical sectors, as appropriate), between the aggregate Program investments and the Benchmark, and an explanation of any material differences.

b. A forecast risk report, using the Treasurer's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the aggregate portfolio, the

Benchmark, and the active Program relative to the Benchmark, and an explanation of any material differences.

c. A summary of individual manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the Treasurer monthly and quarterly reports, including but not limited to:

a. A monthly performance statement for the portfolio (gross and net) and the benchmark, and provide the gross performance for the product Composite at least quarterly.
b. If available, a monthly or quarterly forecast risk report, using the Manager's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the portfolio relative to the benchmark.
c. A monthly or quarterly variance analysis, indicating sources of performance variances (difference between portfolio and benchmark return), and an explanation of any material differences.
d. A quarterly review of portfolio and strategy performance including a market outlook.
e. An annual statement of compliance with investment guidelines.

5. Definitions: See Appendix 8