The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP
May 27, 2015

The Committee on Investments met on the above date by teleconference at the following locations: Plaza Room, De Neve Plaza, Los Angeles campus; and 1111 Broadway, 21st Floor, Oakland.

Members present: Representing the Committee on Investments: Regents Kieffer, Makarechian, Sherman, Wachter, and Zettel; Advisory Members Hare and Oved; Staff Advisor Coyne

Representing the Investment Advisory Group: Members Martin and Rogers, and Consultant Klosterman

In attendance: Regent Ortiz Oakley, Secretary and Chief of Staff Shaw, Chief Investment Officer Bachher, Executive Vice President and Chief Financial Officer Brostrom, Deputy General Counsel Friedlander, and Recording Secretary McCarthy

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

1. **PUBLIC COMMENT**

There were no speakers wishing to address the Committee.

2. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of February 20, 2015 were approved, Regents Kieffer, Makarechian, Sherman, Wachter, and Zettel (5) voting "aye."[1]

3. **UPDATE ON INVESTMENT PERFORMANCE FOR PERIODS ENDING MARCH 31, 2015**

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

Chief Investment Officer (CIO) Bachher reviewed investment highlights for the quarter and year ending March 31, 2015 for the approximately $100 billion managed by the Office of the CIO. On March 31, 2014, the UC Entity totaled $92 billion and has

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

continued to benefit from a robust equity market, growing to almost $100 billion during the year ending March 31, 2015. UC retirement plans hold $75 billion, with $20 billion in the defined contribution UC Retirement Savings Plan and $55 billion in the defined benefit UC Retirement Plan (UCRP). The General Endowment Pool (GEP) holds $8.5 billion, with another $15.5 billion in the working capital portfolios. Mr. Bachher commented that the Office of the CIO is focused on investing these various products separately according to their particular objectives.

Senior Portfolio Manager Satish Swamy discussed the fixed income portfolio. For a long time, global interest rates have been in a period of secular decline. In fact, in the prior quarter many developed market government bonds had negative interest rates, meaning that investors had to pay to invest. This framework made fixed income investing challenging. In addition, during the prior quarter there had been a currency war in the foreign exchange market, a concerted effort to weaken developed and emerging market currencies versus the U.S. dollar. Mr. Swamy expressed his view that although the Board of Governors of the Federal Reserve Board had been effective in slowing down the appreciation of the U.S. dollar, the dollar's secular appreciation was still strongly in place. Mr. Swamy observed that the price of oil had rallied about 30 to 40 percent since its earlier 70-percent decline. In summary, global monetary policy was distorting capital markets and encouraging risk-taking in this period of high uncertainty and volatility. In this environment, Mr. Swamy aimed to invest the fixed income portfolio in short-maturity instruments, such as high-quality, nongovernment credits. As a long-term investor, the University can be patient.

Senior Managing Director Scott Chan asserted that the biggest question about the equity market was whether it was currently overvalued. He expressed his view that equities were becoming increasingly richly valued globally, which should slow the pace of their appreciation. Low interest rates and increased liquidity have resulted in higher equity asset prices and an increase in risk. Mr. Chan predicted that the equity environment would become more volatile over time and said the Office of the CIO was positioning its equity portfolio accordingly. Equity performance was bifurcated across regions. In the past year the U.S. equity market rose 12 percent and the non-U.S. developed market fell one percent. That dynamic was shifting because of Japan's and Europe's quantitative easing and the devaluation of their currencies. Emerging market equities had struggled because of lower oil prices, the increase in the value of the U.S. dollar, and slower growth in China. The Office of the CIO was overweight in Chinese equities, which rose 24 percent in the past year.

Mr. Chan reported that the public equity portfolio generated excess returns of 3.6 percent in the GEP and 2.6 percent in the UCRP, attributable to three factors. First, the Office of the CIO shifted 15 percent of its public equity portfolio from passive to active management and good manager selection yielded excess returns. Second, equity risk was managed more actively. For example, the Office of the CIO intentionally underweighted European equities throughout 2014 and overweighted U.S. equities; then in advance of European quantitative easing, European equities were brought back to neutral weight while the currency was hedged. Third, a reduction by the Office of the CIO in the number of external public equity managers had reduced the number of public equities in the portfolio by about 50 percent. The Office of the CIO was choosing the best active managers while remaining diversified. These three themes would be key to the equity portfolio over the next few years.

Regent Kieffer asked Mr. Chan if he thought equities were currently overvalued. Mr. Chan responded that equity valuations had become richer and returns were likely to be more muted going forward.

Investment Advisory Group member Martin asked if equities in the developed markets in Europe were held in local currency. Mr. Chan responded that the Office of the CIO hedged the currency because it anticipated that Europe would use monetary policy to devalue its currency.

Committee Chair Wachter asked what percentage of the equity portfolio was passively managed. Mr. Bachher replied that 91 percent of the $8.6 billion GEP portfolio was actively managed by third-party external managers. Addressing management fees, Mr. Bachher said that the gross return on public equities in the GEP was 11.5 percent and fees were 1.7 percent, leaving a net return of 9.8 percent. Fixed income holdings comprised less than ten percent of the GEP and are managed internally by the Office of the CIO. Mr. Bachher affirmed that managing costs is an active focus of his office; however, the bulk of management fees are performance-based and it is worthwhile to pay for good performance. Management costs for like-sized peer endowments could be as low as one percent or 80 basis points. His office is working to finding the best balance between active and passive management, while achieving cost efficiency. While the majority of gains in the GEP were attributable to market increases that could be earned through passive investing, with the GEP policy benchmark gaining 6.2 percent, an additional 3.6 percent was earned through the active management of the Office of the CIO. Mr. Bachher reiterated Mr. Chan’s earlier comments about the reasons for this performance over the benchmark. Active management of the equity portfolio was increased from 75 percent to 90 percent, which helped performance in the rising equity market. The number of external managers had been reduced from 80 to about 40, and the number of equities reduced by half. The portfolio’s risk was better managed and the Office of the CIO’s strategy in European equities benefited returns.

Mr. Bachher commented that in alternative investments, which include absolute return or hedge funds, private equity, private real estate, the cross-asset class, and global real estate investment trusts (REITs), the two largest drivers of returns were absolute return and private real estate. Absolute return gained 9.9 percent for the year ending March 31, 2015, with good strategy selection helping returns. Valuations in private real estate were currently high, and the Office of the CIO benefited from the sale of real estate assets. Cash holdings increased to 4.5 percent and would be reinvested should opportunities present themselves. The Office of the CIO had also been a net seller in private equity because of robust valuations. While these market conditions would affect all the portfolios, they would have varying effects on the GEP, UCRP, and working capital portfolios.

Investment Advisory Group member Rogers asked Mr. Bachher if he thought there were any asset groups that were not currently over-valued in which the cash could be invested. Mr. Bachher responded that he had difficulty finding attractive assets in the current market. In real estate, there were opportunities for redevelopment and some areas in which his office had an information advantage. His office had benefited in the past year from its investments in China and Japan. Opportunities would present themselves, but must be viewed tactically and selectively.

Managing Director Sam Kunz discussed the UCRP. A review of the UCRP asset liability conducted by Mercer, Inc. and the Regents' consulting actuary, the Segal Company, was almost complete. A thorough review of the UCRP asset allocation would be conducted with a greater focus on liabilities and how they would drive the asset allocation. The UCRP returned 7.8 percent net for the year ending March 31, 2015, bringing its assets to $55 billion. Asset allocation was approximately 55 percent equities, 20 percent fixed income, 20 percent alternatives, and the balance in cash, representing a more defensive posture. Excess returns of 1.8 percent above the benchmark were driven by gains in equities and fixed income, whereas in the GEP excess returns were driven by alternatives. The UCRP holds a larger portion of fixed income than does the GEP. The rebalancing in the UCRP earlier in the year of $1.3 billion from U.S. to European equities contributed greatly to returns. The fixed income portfolio was currently positioned in higher-quality and shorter-duration holdings. Quality is also sought in the real estate portfolio, with opportunistic selling in real estate and private equity. The cross asset portfolio was liquidated during the year and would be completely liquidated by the end of June. All the proceeds have not been reinvested, with some going to build a cash position that could be used opportunistically during periods of volatility. Mr. Kunz pointed out that the equity asset class' contribution to UCRP volatility had dropped from 95 percent in 2005 to 75 percent. The beta of the portfolio has come down from a ten-year average of 0.62 to the current 0.51, indicating that good returns have been gained without relying excessively on equities. The UCRP portfolio Sharpe ratio was 1.4 compared with 1.1 for the benchmark, meaning that the UCRP portfolio generated 1.4 units of return for one unit of risk. Mr. Kunz summarized that the UCRP was positioned more defensively and had increased its cash position. Total equity allocation, including public and private, was below the policy allocation. The portfolio's sensitivity to the equity market had been reduced, which would enable capitalizing on opportunities when valuations were reduced.

Mr. Martin asked whether UCRP's performance over the benchmark was attributable to asset allocation or manager selection. Mr. Bachher responded that security selection had been the key driver of UCRP's performance in the past year.

Regent Makarechian asked Mr. Bachher about his investment plans for the cash portion of the portfolio, for instance gained by the sale of REITs. Mr. Bachher responded that his office constantly examines new opportunities, and is currently focused on higher-quality credit and being extremely selective in emerging markets. The Total Return Investment Pool (TRIP) portfolio had $1 billion in global REITs that would be shifted into fixed income. Regent Makarechian commented that the portfolio had a large cash position.

Committee Chair Wachter agreed that having cash would enable investing when opportunities presented themselves. Mr. Bachher noted that UCRP paid out $1.2 billion each year. Regent Sherman asked about the inflow to UCRP from employee contributions. Executive Vice President and Chief Financial Officer Brostrom responded that the University contributed $1.4 billion and employees contributed $800 million each year. Mr. Bachher commented that, while his office was exploring many investment opportunities, he would not recommend investing when valuations were high simply to meet policy benchmarks. Regent Sherman asked if the Office of the CIO was evaluating the portfolio by asking if it would purchase its holdings currently if it were starting fresh. Mr. Bachher answered in the affirmative; he had advised his staff to evaluate every portfolio's holdings regardless of valuations.

Senior Portfolio Manager Steven Sterman reported that assets of the working capital portfolios totaled almost $16 billion at the end of the first quarter of 2015. TRIP had $7.6 billion in assets, up from $7.1 billion as of March 31, 2014, with $500 million from market gains, driven by a 50-percent allocation to equities. In TRIP, 80 percent of the risk contribution was from equities, a proportion Mr. Sterman considered high for a working capital fund. TRIP returns above benchmark were $200 million, including a large portion from global REITs, which allocation would be reduced and moved to fixed income. TRIP's one-year return was 7.6 percent, with 100 basis points of value added above the benchmark. Mr. Sterman anticipated that returns would trend lower, as in the current fiscal year to date, with nine-month returns of about three percent. TRIP's allocation to the cross asset class was being reduced to zero and proceeds contributed to cash balances. Mr. Sterman expressed comfort with the cash holding given TRIP's risk profile and current market valuations, since the University can be a patient investor. Mr. Bachher said his office held two to three percent cash across all portfolios.

Regent Makarechian asked if the $200 million contribution to UCRP was net of incoming contributions. Mr. Bachher responded in the affirmative.

Mr. Swamy discussed the Short Term Investment Pool (STIP), which had a net return of 1.39 percent. He characterized the value added of $87 million above benchmark returns of $29 million as phenomenal. In the past ten years, STIP had been invested in high-quality, long-maturity corporate bonds, which are currently close to maturity. STIP's duration was currently less than one year, to protect against interest rate risk. The STIP asset allocation would be reviewed to ensure that it is appropriate for a cash portfolio. Mr. Swamy cautioned not to expect returns above benchmark of the same magnitude in the future. Mr. Bachher reiterated that the market environment was challenging, which made managing risk and costs even more important.

4. **TOTAL RETURN INVESTMENT POOL ASSET ALLOCATION AND INVESTMENT POLICY REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' General Investment Consultant recommended that the amendments to the Total Return Investment Pool Investment Policy Statement be adopted as shown in Attachment 1.

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

Committee Chair Wachter commented that the Total Return Investment Pool (TRIP) contains working capital funds that are liquid, but not needed immediately. A few years prior TRIP's asset allocation was changed to be more like that of the General Endowment Pool (GEP) and different from the Short Term Investment Pool (STIP) asset allocation. The TRIP asset allocation had generated excellent returns compared with STIP. In light of current market conditions and the purpose of TRIP, Chief Investment Officer (CIO) Bachher had reexamined the TRIP asset allocation.

Executive Vice President and Chief Financial Officer Brostrom recalled that TRIP had been established six years prior to hold excess liquidity at a time when the University faced massive cuts in State funding. TRIP had been successful in producing additional discretionary revenue for the campuses during a very difficult financial period. The current goal was to further optimize returns, both systemwide and for the campuses. Liquidity would be guaranteed centrally, enabling each campus to maximize the funds held in TRIP. Overall the mix would be 50 percent in TRIP and 50 percent in STIP. For example, the Berkeley campus had two-thirds of its working capital in TRIP, but UC Merced had only ten percent in TRIP because of its liquidity needs. A central guarantee would allow every campus to move to an optimal allocation to TRIP, generating even larger investment returns for the operating budget. The campuses were comfortable with this approach and Mr. Brostrom affirmed his opinion that it was the correct direction for TRIP to be evolving.

Regent Makarechian asked Mr. Brostrom for his estimate of the University's liquidity needs. Mr. Brostrom expressed his view that the University required $3 billion in liquidity. Overall, the University would need to hold $5 billion in STIP, since several categories of those funds were not accessible, such as bond proceeds that were required to be invested in STIP, funds from the campus foundations, and UC Retirement Plan (UCRP) inflows and outflows. Rating agencies have liquidity requirements, such as requiring UC's medical centers to each have 180 days cash on hand, which UC currently meets only on a pooled basis. The University would continue to discuss liquidity requirements with ratings agencies and could show that TRIP also contains some liquid assets. The proposed asset allocation for TRIP would contain more liquid assets, which would help support the University's position to the ratings agencies. The University also has lines of credit with banks. Since credit is currently inexpensive, accessing lines of credit may be preferable to sacrificing yield by holding excess funds in STIP. Investment Advisory Group member Martin agreed that many holdings in TRIP are liquid.

Investment Officer Susan Ardeshir discussed the proposed change to TRIP's asset allocation. The primary change would be to increase the fixed income allocation from 20 percent to 50 percent, and to reduce the equity or growth allocation from 50 percent to 35 percent. The cross asset class and Real Estate Investment Trusts (REITs) were being eliminated as distinct asset classes. The objective for TRIP would be to earn two to three percent higher returns than STIP, and for TRIP to have a moderate risk profile and adequate liquidity to meet stakeholders' needs.

Investment Advisory Group member Klosterman asked about the current duration of TRIP's fixed income portfolio and if that duration would remain the same with the proposed asset allocation change. Senior Portfolio Manager Steven Sterman responded that the current duration was approximately five years and that the fixed income benchmark would be the Barclays U.S. Aggregate Index, which has a duration of 5.5 years. The strategy would be to find as much yield as possible opportunistically without assuming duration risk. Core fixed income would be positioned with shorter maturities; yields of five to six percent would be layered in, and emerging market opportunities offering six to seven percent yields would be considered. Direct lending or other one-time opportunities could offer higher returns. The goal would be to have a shorter duration without sacrificing yield. Mr. Martin expressed his view that the current market was challenging and that duration risk must be a concern; interest rates have dropped, but may be near bottom. It may be possible to gain yield, but principal would suffer if rates begin to move up. Mr. Sterman agreed that it would not be advisable to take unwarranted risk in the current market environment.

Ms. Ardeshir reviewed the proposed changes to TRIP benchmarks. The equity benchmark would change to a single broad benchmark, the MSCI All Country IMI World Index ex Tobacco, from a different benchmark for each of five distinct types of equity holdings such as U.S., non-U.S. developed, emerging markets, opportunistic, and REITs, which contained an implicit underweight to non-U.S. developed markets and an overweight to emerging markets. With the proposed change, the Office of the CIO would have the flexibility and discretion to make allocations within the equity asset class according to market conditions. Committee Chair Wachter asked about the proposed benchmark for the equity asset class. Mr. Bachher responded that the MSCI All Country IMI World Index was an appropriate passive index with 51 percent U.S., 38 percent non-U.S. developed, and ten percent emerging market equities. The overall public equity allocation would be reduced from 50 percent to 35 percent. Committee Chair Wachter clarified that the current 50-percent allocation to equities included REITs and the proposed 35 percent allocation would not include REITs. Mr. Bachher agreed that, not including REITs, the equity allocation was being reduced from 40 percent to 35 percent. Mr. Bachher showed a graph illustrating the outstanding performance of publicly traded global real estate since 2008 and periods of UC investment at low price points. Mr. Bachher expressed his view that at current high valuations, REITs should be sold at a good profit and those funds transferred to fixed income. The MSCI ACWI index contains five percent global real estate.

Mr. Bachher summarized that the proposed TRIP asset allocation would be 35 percent equities, 50 percent fixed income, and 15 percent absolute return. In response to a question from Committee Chair Wachter, Mr. Bachher said the absolute return holdings would be liquid alternatives. His office would have the flexibility to invest opportunistically in illiquid holdings in any asset class up to ten percent. Committee Chair Wachter commented that the proposed asset allocation would reduce the equity volatility and risk of the TRIP portfolio. Given the current market climate, with the proposed allocation, fixed income would have to contain a fair amount of credit to yield better returns than those provided by government bonds in order to earn the expected 4.6 percent return. Mr. Sterman agreed. Mr. Bachher commented that the policy weights in the current fixed income TRIP portfolio were 75 percent credit and 25 percent government, so the TRIP portfolio already contained a large amount of credit. Changing to the Barclays U.S. Aggregate Index as the fixed income benchmark would mean in some ways that the Office of the CIO was changing the type of credit bets it takes within fixed income.

Mr. Klosterman commented on a chart showing projected future returns increasing from 4.6 percent for three years, to 5.2 percent for five years, and 5.6 percent for longer-term periods, and asked if the increases in returns were based on an expectation of increasing interest rates over time. Ms. Ardeshir responded that expected returns had been derived in consultation with Mercer and were debatable. If interest rates return to three percent it would be fair to assume an equity risk premium four to six percent above that. Ms. Ardeshir suggested an amendment to the recommendation that would give the Office of the CIO the flexibility to invest up to ten percent of the TRIP portfolio in private investments.

Mr. Martin observed that prevalent current thinking holds this to be the bottom of the yield cycle, but a different scenario could play out wherein the world economy slows down and interest rates would be reduced even further or stay low for an extended period of time. Both possibilities must be considered.

Regent Sherman asked why the recommended asset allocation was chosen when the option of 37 percent equities, 43 percent fixed income, and 20 percent alternatives had a better risk-return ratio and the same standard deviation. Ms. Ardeshir responded that her office had concluded it would not be desirable to increase absolute return in the TRIP portfolio to 20 percent. The allowable ranges around the recommended allocations would permit flexibility plus or minus five percent. Mr. Bachher agreed that he had questioned increasing the absolute return allocation from ten to 20 percent. Regent Sherman asked how quickly the recommended allocations could be achieved. Mr. Bachher said that process had already begun within allowable ranges. Global REITs had already been reduced from $1 billion to $420 million. Moving assets into public fixed income would be more easily accomplished than other opportunities in credit and private lending.

Regent Sherman commented that the two working capital portfolios contained $16 billion when only $5 billion was needed to cover the University’s liquidity needs. He asked how the excess funds could be transferred to the GEP. Mr. Brostrom commented that STIP and TRIP were not centrally controlled, but rather are tens of thousands of funds held for individual professors or principal investigators, or short-term research grants. Those funds cannot be put into the GEP. In recent years many UC campuses have created funds functioning as endowments from excess TRIP returns; these funds could be used by the chancellors, a procedure Mr. Brostrom actively encourages. Ms. Ardeshir agreed that two campuses had elected that option. The Office of the CIO was working with campuses to identify other such opportunities.

Ms. Ardeshir summarized the proposed changes to the TRIP asset allocation and suggested another amendment to the recommendation. The benchmark for the 15 percent absolute return allocation would be changed from 50 percent HFRX Absolute Return Index and 50 percent HFRX Market Directional Index to only the HFRX Absolute Return Index, since there would be no market directional bets taken within TRIP's absolute return portfolio. Mr. Bachher displayed a graph showing returns since January 2002 for the HFRX Absolute Return Index and the HFRX Market Directional Index, indicating more volatility in the Market Directional Index. A 50-50 blend of those two indices had been used as the benchmark because it was also used for the UCRP and GEP benchmark for absolute return. Mr. Bachher commented that using 100 percent HFRX Absolute Return Index as the benchmark would be appropriate, since the absolute return asset class would be implemented differently in the TRIP portfolio. Mr. Bachher added that the earlier proposed amendment permitting up to ten percent of the TRIP portfolio to be invested in private assets would provide the flexibility to invest in private assets across all asset classes as opportunities arose.

Committee Chair Wachter asked about the Barclays U.S. Aggregate Index, proposed as the benchmark for the fixed income portion of the TRIP portfolio. Ms. Ardeshir described the Index as being primarily credit, government, and collateralized debt. Mr. Bachher added that the Barclays U.S. Aggregate Index contained 46 percent U.S. government, 23 percent credit, and 31 percent collateralized holdings. Committee Chair Wachter observed that the Barclays U.S. Aggregate Index did not resemble the fixed income holdings of the Office of the CIO. Regent Sherman expressed his view that the Index would be a good target for UC holdings. Ms. Ardeshir noted that the Index would be a target for UC's passive holdings. In addition, UC's fixed income team would make opportunistic investments such as in high-yield emerging market debt or non-agency securities. Mr. Bachher emphasized that from time to time UC's holdings would differ from the benchmark because of active management decisions that would attempt to outperform the passive benchmark over the long term. Committee Chair Wachter asked about the collateralized, securitized credit portion of the Index. Mr. Sterman clarified that the collateralized portion of the benchmark Index was agency mortgage-backed securities.

Committee Chair Wachter referred to a chart showing current policy weights to various categories of fixed income holdings compared with the weights in the proposed fixed income benchmark, the Barclays U.S. Aggregate Index, noting that they were quite dissimilar. Mr. Sterman said the existing fixed income benchmark varied from the Barclays U.S. Aggregate Index by having a higher weight of credit and a small amount of government securities. The Office of the CIO's fixed income portfolio did not currently resemble the Barclays U.S. Aggregate Index. While that Index would serve as the benchmark for the TRIP fixed income portfolio, the Office of the CIO does not intend that its fixed income holdings would always resemble those in that Index, since the Office would invest more opportunistically. Committee Chair Wachter asked what allocations within its fixed income portfolio the Office of the CIO intended to hold. Mr. Bachher reiterated that the Barclays U.S. Aggregate Index would be the benchmark his office would strive to outperform. His office would be opportunistic from time to time, but its holdings would change to more closely resemble the Barclays U.S. Aggregate Index. Mr. Sterman added that more government securities would be added to the fixed income portfolio. Over the long term, high-yield and emerging market debt holdings would likely each average about five percent of the fixed income portfolio, but those percentages would change based on opportunities. Another five to ten percent of the fixed income portfolio could be used to reduce duration and manage risk by means of unconstrained bond strategies. Mr. Bachher emphasized the importance of managing risk in the fixed income portfolio.

Investment Advisory Group member Rogers expressed support for the proposed asset allocation, which was simpler with fewer small categories. Regent Sherman pointed out that absolute portfolio returns were more important than returns relative to benchmarks. Committee Chair Wachter explained that, contrary to some public perception, the fixed income portfolio was dynamic and could contain many different types of holdings, some involving risk.

Committee Chair Wachter stated that the recommendation had several amendments proposed. Mr. Bachher summarized that the benchmark for the absolute return asset class would be 100 percent the HFRX Absolute Return Index. The second amendment would add the ability to invest up to ten percent of the asset mix in private assets. A third amendment would change the asset class titles Public Equity to Equity/Growth, and Fixed Income to Income.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer and Regents' General Investment Consultant's recommendation as amended and voted to present it to the Board, Regents Kieffer, Makarechian, Sherman, Wachter, and Zettel (5) voting "aye."

5. **AMENDMENT OF INVESTMENT POLICY STATEMENT FOR UNIVERSITY OF CALIFORNIA RETIREMENT SAVINGS PROGRAM**

The Chief Investment Officer recommended that the Investment Policy Statement for the UC Retirement Savings Program be amended, as shown in Attachment 2.

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

Chief Investment Officer (CIO) Bachher introduced Associate CIO and Chief Operating Officer Arthur Guimaraes to discuss the defined contribution UC Retirement Savings Program (DC Plan), which held just over $20 billion, making it the second largest public defined contribution plan in the nation and 15th largest of all defined contribution plans. The Program continued to grow, with more than $1 billion in annual contributions, effectively doubling its total assets in the past ten years, from $11 billion in 2005 to just over $20 billion. More than 430,000 participants were invested across three products, the Tax Deferred 403(b) Plan, the 457(b) Deferred Compensation Plan, and the DC Plan.

The Committee was being asked to approve a routine change to the Investment Policy Statement to remove outdated language distinguishing core and non-core funds, and to add three new funds. As of July 2015, the fund choices available for participants in these plans would be streamlined to align with industry best practices, to reduce duplication, and to improve the Office of the CIO's ability to monitor the investment options. Mercer Inc. advised the Office of the CIO of the trend among DC plans toward consolidation of investment options. For example, in 2013 the California Public Employees' Retirement System reduced its investment offerings from 12 to seven funds; the California State Teachers' Retirement System reduced its offerings to 23. The UC DC Plan currently offered 64 investment choices. Mr. Bachher observed that the number of investment options had been reduced from 200 three years prior to 100 a year prior; the current 64 options would be reduced to 20.

Mr. Bachher had recommended a full review of the DC Plan's investment choices, given the Plan's growing assets and its increasing importance in the budget framework negotiated with Governor Brown. The Office of the CIO was committed to offering DC Plan participants the best possible product in the most cost-effective manner. Other options to improve the DC Plan would likely be suggested by Mercer. Mr. Guimaraes said the prior default investment option had been the UC Savings Fund, effectively a $4.5 billion cash fund, representing almost one-quarter of the DC Plan's assets. The UC Savings Fund has earned returns of one percent over three years and 1.3 percent over five years, returns that do not leave much after inflation. Mr. Guimaraes noted the opportunity to communicate to plan participants about investment options that could improve participants' retirement readiness. He also cited possible plan improvements such as automatic enrollment and escalation of contributions, features common to 61 percent of defined contribution plans of over $1 billion, 41 percent of higher education defined contribution plans, and 91 percent of plans for new employees including those in higher education.

Regent Makarechian asked about progress in UCPath toward automatic enrollment in the DC Plan. Mr. Bachher responded that he was not aware of its status in that regard.

Mr. Bachher said the Policy Statement had referenced core and non-core funds, with core funds being those managed by the Office of the CIO. The simpler menu of 20 investment choices eliminated the need for this distinction.

Regent Makarechian observed that the UC Retirement Savings Program had $1.1 billion in annual contributions and $439 million in withdrawals. Mr. Guimaraes agreed that the net cash flow was about $700 million annually. Mr. Bachher anticipated growth of this Program in the future because of increased participation of UC faculty and staff.

Staff Advisor Coyne expressed appreciation on the part of staff for the possibility of increasing education of staff about contributing to and managing their own investment portfolios. She asked how the default investment could be changed to an investment other than the UC Savings Plan. Mr. Guimaraes said that in 2014 the default investment had been changed for all three plans from the UC Savings Fund to the target date funds. This change was not retroactive, so those participants who had invested in the UC Savings Fund by default would still be invested in that fund unless they had changed it. Mr. Bachher confirmed that the change in default investment could be made only going forward.

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

6. **UPDATE ON SUSTAINABLE INVESTING**

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

Chief Investment Officer (CIO) Bachher commented that this presentation would provide an update on the Office of the CIO's position as an investor and the growing importance of considering sustainability in assessing investments and their risks. Sustainability includes consideration of environmental, social, and governance (ESG) issues, including climate change, water, gender equality, food scarcity, and many more issues that long-term investors must consider.

Office of the CIO intern Ophir Bruck recalled that he had been a student advocate for sustainable investing. Soon after graduating from UC Berkeley about eight months prior, Mr. Bruck was invited by Mr. Bachher to become an intern in the Office of the CIO. His presentation would involve what he has learned in his work and through the Office of the CIO's implementation of the recommendations of the Task Force on Sustainable Investing (Task Force) approved by the Regents eight months prior.

Mr. Bruck expressed the commitment of the Office of the CIO to strengthen relationships among its stakeholders, including students, faculty, staff, UC foundations, and the public, by listening and learning from them. With the help of the student Regent and Regent-designate, Mr. Bachher and Mr. Bruck have participated in town hall discussions at various UC campuses, communicating what is being done in the Office of the CIO about sustainable investing and answering questions. A section would be added to the website of the Office of the CIO to communicate the Office's progress in sustainable investing and to provide a way for website visitors to ask questions.

The Office of the CIO is learning about sustainable investing by becoming an active member of peer networks such as the United Nations-sponsored Principles for Responsible Investment (PRI). The Office of the CIO joined a PRI year-long project focusing on climate change and ways to measure and manage climate change risks in investment portfolios. The Office of the CIO would also leverage the University's knowledge base by consulting UC experts and hosting forums on ESG issues at various UC campuses.

The Office of the CIO's Framework on Sustainable Investment outlines its beliefs on sustainable investment and how those beliefs will be implemented. The Office of the CIO can influence corporate behavior by leveraging its voice as a shareholder through active ownership. For example, the Office of the CIO signed a letter to the Group of Seven finance ministers urging them to sign an ambitious climate agreement at the United Nations climate negotiations in December, and declared support for a shareholder resolution on the ballot at BP's and Shell Oil Company's annual general meetings asking those companies to stress test their business models against possible future climate change scenarios. The Office of the CIO signed a letter to the Securities and Exchange Commission asking it to increase its stringency around disclosure of climate change risks for oil and gas companies. The Office of the CIO is communicating its expectations around ESG to its own external managers, and integrating ESG into its ongoing due diligence in manager selection and monitoring. Mr. Bruck reported that the Office of the CIO is developing a business plan for investing in solutions, a key recommendation of the Task Force, and collaborating with peer networks to explore ways to access the best ESG investment opportunities.

Mr. Bachher announced that UC Davis Executive Director of Energy and Sustainability Amy Jaffe would join the CIO's team and would use her extensive experience in the energy, oil, and gas industries to advise the Office, an example of bringing the intellectual resources of the Unviersity to bear on investment decisions. Developing deeply considered decisions should have lasting impact on sustainable solutions.

Regent-designate Oved asked if the ESG commitment was mandated. Mr. Bachher described the ESG commitment as a set of principles rather than a policy. The next step would be to define the Office of the CIO's values and principles relating to sustainable investing. Regent-designate Oved asked why sustainable investing had not been made a higher priority as a policy with a mechanism of accountability for maintaining principles of sustainable investing. Committee Chair Wachter commented that the Office of the CIO's investment policies are formal rules, while sustainable investing would be more flexible. He anticipated that in the future sustainable investing would be even more important than it is today. The Office of the CIO also has to focus on earning sufficient returns and it would not be desirable to impose strict investment rules. Mr. Bachher added that he is striving to build a long-term culture around sustainable investing in the Office of the CIO. Regent-designate Oved asked if a relevant benchmark could be established for sustainable investing. Mr. Bruck observed that the Office of the CIO had done some benchmarking exercises comparing its investments with those of leaders in sustainable investing. Mr. Bachher commented that the Office of the CIO had received accolades for its work in sustainability, such as being ranked first among all universities in the world in the Global Universities Index by the Asset Owners Disclosure Project. Investment Advisory Group member Rogers expressed support for a balanced and fact-based approach to sustainable investing, emphasizing the need to maintain investment returns.

7. **UPDATE ON UC VENTURES**

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

Chief Investment Officer Bachher introduced Senior Advisor Ashby Monk and Director Michele Cucullu. Ms. Cucullu provided an update on the strategy and business plan for UC Ventures, a vehicle that would be capitalized with $250 million to invest in UC innovation. Meetings have been held with UC stakeholders in an effort to create a robust strategy. Most importantly, UC Ventures would attempt to generate a commercial rate of return, leveraging UC's competitive advantages, innovation, and entrepreneurship. UC Ventures would invest in opportunities across the University. UC is one of the most vibrant systems of innovation, receiving ten percent of total academic research funds provided by the U.S. government. In fiscal year 2013, UC spent close to $6 billion on funded research projects.

An independent team would operate UC Ventures at arm's length, similar to an external manager. UC Ventures would draw on investment opportunities from UC faculty researchers, staff, and alumni. Investments would be primarily in early stage opportunities. Ms. Cucullu commented that the anticipated deal flow of 50 percent life science, 25 percent information technology, and 25 percent a combination of energy, materials science, and agriculture would guide strategy for recruitment of the UC Ventures team, whose partners should reflect that mix. The Office of the CIO intends to build an inclusive community of capital and expertise, bringing in venture capital investors to support UC Ventures' activity. The team would have the competitive advantage of the potential of adding subsequent Office of the CIO capital to deals that exceed UC Ventures' capital limits.

Mr. Monk discussed the guiding principles of achieving outstanding performance through UC Ventures by developing a set of assets that makes it likely that UC Ventures would achieve outstanding financial performance. UC Ventures' strategy would be three-pronged. First, ten percent of UC Ventures' initial funding would be used to seed local, profit-seeking investment funds that would find opportunities on UC campuses. Mr. Monk expressed the Office of the CIO's belief that the relationships crucial for building transformational businesses are closely held and require involved work with local funds based on UC campuses. Second, UC Ventures would establish a syndicate partner strategy through which it would be a trusted partner, rather than a competitor, of the venture capital community. The UC Ventures team would syndicate all deals greater than $1 million with a pre-approved set of well-known, established investors, which would also serve as a check on the quality of potential investments. Third, an on-ramp strategy would be developed for UC Ventures' portfolio companies that have exceeded UC Ventures' investment capacity. The Office of the CIO would seek to have the option to take up those rights in situations where it could bring along a co-investor willing to invest on the same terms as the Office of the CIO, providing a mechanism for the Office of the CIO to have privileged access to University investment opportunities. At the same time, the Office of the CIO would provide UC Ventures and its portfolio's companies with access to its network of peers around the world, such as sovereign funds, pension funds, or corporate venture capital arms that are interested in the deal flow that UC Ventures would curate. The Office of the CIO would, on a selective basis, invite those partners to participate in certain deals. Mr. Monk summarized the three parts of the strategy as a local funds strategy, a syndication approach, and establishing an on-ramp to provide UC Ventures with a unique ability to raise capital for its companies.

Ms. Cucullu discussed the current status of UC Ventures. Extensive talks had been held with stakeholders including, faculty, staff, entrepreneurs, and alumni to help refine UC Ventures' strategies. Meetings had been held with a number of recruiters to begin the process of selecting a recruiter to search for UC Ventures' team members. The support for UC Ventures from UC campuses, corporate venture groups, entrepreneurs, technology companies, and recruiters has been impressive. The Office of the CIO plans to launch UC Ventures in the fall or winter of 2015.

Mr. Monk emphasized the unique access available to the University. The largest institutional investors with assets of $50 billion to $1 trillion are very interested in investing in California's technical innovation, but often opportunities are not available through public markets. Most of the value currently being created in Silicon Valley is in private companies. UC Ventures could serve as a unique, proprietary, and scalable opportunity for such investors to participate in the innovation economy. The Office of the CIO hopes that UC Ventures would form the cornerstone of its venture capital strategy for years to come.

UC Ventures could have a broader effect on the Office of the CIO, because the cultivation of UC's competitive advantage was transforming the way UC's peers and partners view UC. During the past 14 months, the Office of the CIO has held discussions with prominent family offices, the largest sovereign wealth funds, and a number of Silicon Valley's highest-caliber technology companies, in large part because of creating the innovative UC Ventures. These efforts have resulted in an overall change in the tone of conversations with external managers and the benefits may go beyond UC Ventures to other aspects of the Office of the CIO's portfolio. Mr. Bachher commented that the spillover effects from his office's work on UC Ventures have already been impressive. For example, real estate deals have been accomplished that grew from a conversation that was originally about UC Ventures. The next important step would be to put a UC Ventures team in place.

Committee Chair Wachter expressed support for UC Ventures as curator of UC innovations. UC Ventures would require the cooperation of the UC community, since UC innovators could seek funding for their entrepreneurial endeavors from other investors. Committee Chair Wachter expressed his view that the private technology market was currently extremely over-valued. UC Ventures was a long-term endeavor that could survive market corrections. The University should invest in UC innovation. The success of UC Ventures would be based on recruiting an excellent team, challenging in the current extremely competitive market for technology and biotechnology talent. UC Ventures would require sufficient funding to be viable in this environment. He suggested that the Committee consider additional investment of $250 million in UC Ventures should it prove initially promising.

Investment Advisory Group member Rogers expressed agreement with Committee Chair Wachter's comments, expressing strong support for UC, while noting the difficulty of succeeding in the venture capital arena. He supported UC Ventures' approach of leveraging support of experienced venture capital professionals to partner with UC. He encouraged beginning UC Ventures carefully, perhaps concentrating on the Berkeley campus, given its history of innovation and the current extremely active technology environment in San Francisco and the East Bay. UC Ventures should build on successful incubators and accelerators already existing on UC campuses, such as the California Institute for Quantitative Biosciences (QB3). By positioning itself to supply some of the many needs of a startup company such as free incubator space, in return UC Ventures could ask for a right of first refusal on the company's first capital raise. Such an arrangement would allow UC Ventures to gain privileged access, but would not be overly burdensome.

Regent Zettel asked who would choose the candidates for UC Ventures' leadership team. Ms. Cucullu responded that arrangements to engage a search firm were being finalized. The Office of the CIO would use resources from across the University in the interview process. A number of candidates have expressed interest and all referrals would also be considered. Mr. Bachher agreed that candidates from within the Office of the CIO would be considered. The UC Innovation Council and the Committee on Investments would also be resources. The recruitment process would be as exhaustive as possible.

Regent Zettel asked how transparency would be achieved when UC Ventures would be operated at arm's length. Mr. Bachher responded that quarterly updates would be given to the Committee, with a more robust update annually. Without violating confidentiality or legal protections, every possible way would be sought to achieve transparency, which would also help to establish confidence in UC Ventures. Committee Chair Wachter suggested choosing a few people from the Committee or the Investment Advisory Group to assist Mr. Bachher in recruiting UC Ventures' leadership team. He cautioned that potential candidates should be treated with the confidentiality expected in the venture capital arena. He emphasized the importance of recruiting an excellent leadership team for UC Ventures, given the challenge of succeeding in this difficult endeavor.

Regent Kieffer expressed support for the Office of the CIO's thoughtful approach. He asked how companies funded as start-ups through the local funding strategy would be considered subsequently for further investment. Ms. Cucullu responded that ten percent of UC Ventures' funding would be allocated to the local funding strategy in local investment funds that would seek investment in innovation at the campus level. Those opportunities would be evaluated by UC Ventures opportunistically as they arise. Regent Kieffer asked if these local investment funds would already be in existence. Ms. Cucullu responded that they could be existing funds or ones being created. Mr. Bachher added that procedures for investment would be consistent across all campuses. Many incubators and accelerators already exist on UC campuses and some are considering establishing a pool of capital to invest in opportunities. Key criteria would be that the group must be unique, deeply tied to the campus, and endorsed by the campus. To be considered for funding from UC Ventures, a local fund would have to raise the first $1 million of outside capital on its own. In exchange for funding, UC Ventures would ask for right of first refusal for subsequent investment opportunities. Regent Kieffer asked if UC Ventures would ever be the first investor in a local fund. Mr. Bachher answered in the negative. UC Ventures' investment should lead to other investment from the venture capital community. Once the investment model for UC Ventures is established, Mr. Bachher anticipated it would be applied across the UC system.

Mr. Martin expressed support for capturing value from UC innovation. The syndicate partner strategy would be important to gain the expertise of established venture capital firms in investing and in building successful companies.

Regent Makarechian commented that the execution of the UC Ventures business plan by its leadership would be crucial and compensating its leadership adequately would be critical. Successful partners in venture capital firms earn very high compensation, with which it would be difficult for the University to compete. Mr. Bachher responded that the governance structure of UC Ventures would be important and that he anticipated UC Ventures would be established more as an independent team with set management and capital budgets. Regent Kieffer suggested that compensation decisions for UC Ventures could be made in the Committee. Committee Chair Wachter commented that he was unaware of a compensation model in the venture capital realm for less than two percent of assets under management and 20 percent of profits earned. He expressed concern about the University's ability to hire top-flight talent if it offered lower compensation and suggested that UC Ventures could be structured as a management company. Regent Sherman agreed and suggested requiring that UC Ventures be offered the first opportunity to fund UC campus start-ups before outside capital is sought. Committee Chair Wachter observed that incentives could be offered for seeking funding from UC Ventures. Mr. Bachher expressed his view that market-based compensation for leadership in this asset class should be structured in a way to attract the best talent, since potential earnings are substantial.

The meeting adjourned at 4:25 p.m.

Attest:

Secretary and Chief of Staff

Effective: ~~August 1, 2013~~July 23, 2015
Replaces version effective: ~~January 1, 2011~~ August 1, 2013

TOTAL RETURN INVESTMENT POOL (TRIP)
INVESTMENT ~~GUIDELINES~~POLICY

The purpose for ~~these performance objectives~~this investment policy ("Policy~~Objectives~~") ~~and management guidelines (Guidelines")~~ is to clearly state the investment approach, define performance objectives and to control risk in the management of the University's Total Return Investment Pool, or TRIP ("Pool~~rogram~~" or "Portfolio"). Th~~ese Objectives and Guidelines~~ is Policy shall be subject to ongoing review by the Committee on Investments. Capital market conditions, changes in the investment industry, new financial instruments, or a change in the Committee on Investments' risk tolerance, are among factors to be considered in determining whether the ~~Guidelines~~ Policy shall be revised.

This policy provides the framework for the management of the investments of the "Pool". The purpose of a policy statement is to document the investment management process by

- Identifying the key roles and responsibilities relating to the ongoing management of the Pool's assets;
- Recognize and ameliorate the agency issues among the parties responsible for various aspects of investment management;
- Setting forth an investment structure for the Pool's assets;
- This structure includes various asset classes and acceptable ranges that, in aggregate, are expected to produce a sufficient investment return over the long term while prudently managing risk;
- This strategy should provide guidance in all market environments, and should be based on a clear understanding of worst case outcomes;
- Establishing formalized criteria to measure, monitor, and evaluate the Programs performance results on a regular basis; and
- Encouraging effective communication among all fiduciaries, including external parties engaged to execute investment strategies.

1. ~~Investment Policy~~Framework

a. Background

~~The~~ TRIP is an investment pool established by The Regents and is available to UC Campuses and ~~-~~certain other related entities. ~~The~~ TRIP allows UC organizations to maximize return on their ~~long~~intermediate-term working capital, subject to risk tolerance and liquidity management practices established with the Office of the President and Campuses~~an acceptable level of risk~~, by taking advantage of the economies of scale of investing in a larger pool and investing across a broad range of asset classes.

b. Key responsibilities in the oversight and management of the Pool are as follows:

1. Under the authority granted in Regents Bylaw, The Regents has appointed a standing Committee on Investments ("Committee"), which is charged with

oversight responsibility for the management of investments on behalf of The Regents, which oversight of the management of the Pool's assets and, with the approval of The Regents, the establishment of investment policies for the Pool.

2. Under the Regents Bylaws, the Committee is directed to establish a system of custodianship for all securities.

3. Under Regents Bylaws, The Regents has delegated to the Chief Investment Officer general responsibility for all investment matters, including the implementation of investment policies established by The Regents for the Pool. References to the "Chief Investment Officer" below shall be understood, depending on the context, to mean the "Office of the Chief Investment Officer."

~~Incorporation of Regents Investment Policies~~

~~1. Investment governance, philosophy, policies and oversight procedures for this Program will be similar to those for the University of California Retirement Plan (UCRP) and General Endowment Pool (GEP), as specified in the Investment Policies for the UCRP.~~

~~2. Relevant policies from Sections 1-3 of the UCRP Investment Policy Statement are incorporated by reference into this Policy.~~

c. Investment Objective

~~The Objective of the Program is to generate a rate of return, after all costs and fees, in excess of the policy benchmark, and consistent with liquidity, cash flow requirements, and risk budget. See Section 2 for asset allocation and benchmark. As its name implies,~~ TRIP is managed according to a total return objective, and will be subject to interest rate risk, credit risk, equity risk, foreign exchange risk, commodity risk, and investment manager risk, and ~~(~~implementation~~)~~ risk. It is appropriate for longer-term investors who can accept this volatility in exchange for higher expected return. While the program will generally invest in liquid, marketable securities, there will at times be a trade-off of illiquidity for higher expected return. The Objective of the Program is to generate a rate of return, after all costs and fees, in excess of the policy benchmark, and consistent with liquidity, cash flow requirements, and risk budget. See Section 2 for asset allocation and benchmark.

d. Investment Strategy

The Program shall be implemented by the Chief Investment Officer, using a combination of internal and external management ("Managers"), employing actively managed strategies where appropriate. Active strategies will include both sector allocation and security selection. The Chief Investment Officer will monitor the Program's adherence to the Policy.~~se Guidelines.~~

e. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be ~~300~~ 200 basis points. This budget is consistent with the ranges around the combined asset classes (2a below), and incorporates both asset / sector allocation and security selection differences from the aggregate benchmark.

Each Manager or asset class segment will have a unique active risk budget, relative to its asset class 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.

f. Other Constraints and Considerations

1. Managers shall comply with applicable State and Federal laws and regulations.
2. Managers shall at all times act with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.
3. Managers shall act solely in the interest of the Program's owners.

2. Investment Guidelines

a. Strategic Asset Allocation and Allowable Ranges

Asset Category	Target Allocation	Lower Bound	Upper Bound
Public Equity	35.0	30.0	40.0
Fixed Income	50.0	45.0	55.0
Absolute Return	15.0	5.0	25.0
TOTAL	100.0		

b. Total TRIP Performance Benchmark

The composition of the TRIP performance benchmark is given below, and assumes monthly rebalancing:

Percentage	Performance Benchmark
35.0%	× MSCI All Country IMI World Index ex Tobacco (Net)
50.0%	× Barclays US Aggregate Index
15.0%	× HFRX Absolute Return Index (50%) + HFRX Market Directional Index (50%)

~~Asset Category~~	~~Target Allocation~~	~~Lower Bound~~	~~Upper Bound~~
~~U.S. Equity~~	~~15.0%~~	~~10.0%~~	~~20.0%~~
~~Non-U.S. Devel. Equity~~	~~7.5~~	~~5.0~~	~~10.0~~
~~Emerging Market Equity~~	~~7.5~~	~~5.0~~	~~10.0~~
~~Opportunistic Equity~~	~~10.0~~	~~7.5~~	~~12.5~~
~~Global REITS~~	~~10.0~~	~~7.5~~	~~12.5~~
~~U.S. Core Gov't.~~	~~2.5~~	~~0~~	~~5.0~~
~~U.S. Core Credit~~	~~7.5~~	~~5.0~~	~~10.0~~
~~High Yield Debt~~	~~5.0~~	~~2.5~~	~~7.5~~
~~Emerging Market Debt~~	~~5.0~~	~~2.5~~	~~7.5~~
~~Absolute Return~~	~~10.0~~	~~7.5~~	~~12.5~~
~~Cross Asset Class~~	~~20.0~~	~~15.0~~	~~25.0~~
~~Liquidity~~	~~-~~	~~0~~	~~10.0~~

~~TOTAL~~	~~100.0~~		
~~Public Equity~~	~~50.0~~	~~35.0~~	~~65.0~~
~~Fixed Income~~	~~20.0~~	~~10.0~~	~~30.0~~
~~Alternatives~~	~~30.0~~	~~22.5~~	~~37.5~~
~~TOTAL~~	~~100.0~~		

~~b. Total TRIP Performance Benchmark~~

~~This is the composition of the total TRIP performance benchmark, which reflects the weights in the "Target Allocation" above:~~

~~Percentage~~	~~Performance Benchmark~~
~~15.0%~~	~~× Russell 3000 Index (Tobacco Free)~~
~~7.5%~~	~~× MSCI World ex U.S. Index (Net) (unhedged) (Tobacco Free)~~
~~7.5%~~	~~× MSCI Emerging Market Index (Net)~~
~~10.0%~~	~~× MSCI All Country World Index (Net)~~
~~10.0%~~	~~× FTSE / EPRA / NAREIT Global REIT Index~~
~~2.5%~~	~~× Barclays U.S. Aggregate Government Index~~
~~7.5%~~	~~× Barclays U.S. Aggregate Credit Index~~
~~5.0%~~	~~× BofA / Merrill Lynch HY Cash Pay BB/B rated Index~~
~~5.0%~~	~~× JP Morgan Emerging Markets Bond Index Global Diversified~~
~~10.0%~~	~~× HFRX Absolute Return Index (50%) + HFRX Market Directional Index (50%)~~
~~20.0%~~	~~× Aggregate TRIP Policy Benchmark~~

~~Notes on Total Program benchmark:~~

~~1. The calculation of the Total Program benchmark will assume a monthly rebalancing methodology.~~

~~2. 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.~~

c. Rebalancing Policy

There will be periodic deviations in actual asset weights from the 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 Chief Investment Officer to rebalance the Fund when necessary to ensure adherence to the Investment Policy within the given risk budget.

The Chief Investment Officer will monitor the actual asset allocation at least monthly. The Committee directs the Chief Investment Officer 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 Chief Investment Officer may utilize derivative contracts (in accordance with the Derivatives Policy ~~found in Appendix 4 of the UCRP Investment Policy Statement~~) to rebalance the portfolio.

The Chief Investment Officer 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 Chief Investment Officer may delay a rebalancing program when the Chief Investment Officer believes the delay is in the best interest of the Plan.

d. Asset Class Guidelines

The Program will be invested in a diversified portfolio of equity, fixed income, and other securities. Each Segment of the Program, as defined above, will be subject to the Regents' ~~Asset Class~~Investment guidelines that ~~is~~ are appropriate and in effect for that Segment. ~~These Guidelines are found in the Appendices to the UCRP Investment Policy Statement, and are hereby incorporated by reference.~~

Managers may utilize derivative contracts and strategies in accordance with the Derivatives Policy ~~found in Appendix 4 of the UCRP Investment Policy Statement~~, and may employ leverage as circumscribed in the relevant asset class guidelines.

e. 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 Chief Investment Officer is responsible for managing aggregate risk exposures.

It is expected that each Manager's portfolio will be appropriately diversified, within limits and restrictions 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.

~~f. Restrictions~~

~~The Managers may **not:**~~

- ~~Purchase securities of tobacco related companies, as per the UCRP Investment Policy Statement, section 5b.~~
- ~~Invest in mutual funds or group trusts unless specifically allowed in their guidelines.~~
- ~~Buy party-in-interest securities.~~
- ~~Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted.~~

~~Subject to the limitations above, the Managers have complete discretion with regard to choosing sector weights, issuers, and maturities.~~

3. Policy Review, Monitoring, and Reporting~~Evaluation and Review~~

a. Policy Review

The Chief Investment Officer shall review the Policy, objectives and guidelines at least annually, and report to the Committee on Investments the impact of the Program.

b. Monitoring and Evaluation

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

c. Reporting

The Chief Investment Officer shall provide and receive the following reports:

1. A summary of Program investments and risks.
2. A summary of Program performance, on an absolute and benchmark relative basis.
3. A performance attribution explaining differences in sector weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.

~~a. Policy and Guideline Review~~

~~The Chief Investment Officer shall review the Objectives and Guidelines at least annually, and report to the Committee on Investments 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 Objectives of the Program and individual Managers.~~

~~4. Reporting~~

~~On a quarterly basis, the Chief Investment Officer shall provide the following reports to the Committee on Investments:~~

~~a. A summary of Program investments and risks.~~

~~b. A summary of Program performance, on an absolute and benchmark relative basis.~~

~~c. A performance attribution explaining differences in sector weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.~~

Each Manager will be required to provide the Chief Investment Officer 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. Quarterly review of portfolio and strategy performance including a market outlook.

e. Annual statement of compliance with investment guidelines.

~~5.~~4. Investment Operations and Restrictions

~~a.~~ University Financial Management may establish limitations on Campus investments to maintain sufficient short term liquidity for University cash needs, and restrictions on withdrawals as is appropriate for the investment of the ~~longer-term~~ assets.
~~b.~~ Annual distributions will be made to participating UC entities, according to a spending rate ~~which will be reviewed and approved annually by the Committee on Investments~~.

~~6. Definitions: See Appendix 8 of the UCRP Investment Policy Statement~~

UNIVERSITY OF CALIFORNIA RETIREMENT SAVINGS PROGRAM

DEFINED CONTRIBUTION PLAN, TAX DEFERRED 403(b) PLAN, and 457(b) DEFERRED COMPENSATION PLAN

INVESTMENT POLICY STATEMENT

This version dated ~~November 14, 2013~~July 23, 2015

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University of California Retirement Savings Program
Investment Policy Statement

1. Introduction, Scope, and Purpose

This Investment Policy Statement ("Policy" or "IPS") provides the framework for the management of the investments of the University of California Retirement Savings Program ("UCRSP" or the "Program"), which includes the Defined Contribution (DC) Plan, the Tax Deferred 403(b) Plan, and the 457(b) Deferred Compensation Plan~~,~~ (collectively "the Plans"). The purpose of this policy statement is to assist the Committee by:

- Identifying the key roles and responsibilities relating to the ongoing investment management of the Program;
- Setting forth an investment structure and guidelines for the Program;
- Establishing formalized criteria to measure, monitor, and evaluate performance results on a regular basis; and
- Encouraging effective communication among all fiduciaries, including external parties engaged to execute investment strategies.

~~The Policy applies to a core set of investment options ("Core Fund Options") selected and monitored by the Office of the Chief Investment Officer (CIO) as provided in Section 5. The Policy does not extend to the Fidelity and Calvert mutual funds that have been retained as Program investment options as an accommodation to participants. Nor does it apply to mutual funds selected by participants through the individual brokerage accounts option provided through the record keeper.~~

~~References to "Program Options" refer only to the Core Fund Options referenced in Section 5.~~ If any term of the IPS should conflict with the Plan Documents, the terms and conditions in the Plan Documents will prevail. The IPS will be periodically reviewed to determine if amendments are appropriate based on changed circumstances such as the market environment or the needs of the Program.

2. Program Objectives and Participant Risks

a. The primary objective of the Program is to facilitate retirement savings for employees and retirees by providing a set of ~~Core~~ Fund Options that allow participants to tailor the investment of their retirement savings assets to their unique risk and return preferences at reasonable costs.

b. Participants are responsible for their investment decisions; they bear the financial risk for their investment choices. After making the initial decisions on investments, each participant has the responsibility to reallocate assets in his or her personal account as the participant's circumstances or the market environment changes.

c. The investment objectives of the ~~Core~~ Fund Options offered by asset class selected by the Office of the CIO are shown in Section 5.A and 5.B.

d. A description of the principal risks that impact the Program and participants can be found in Section 5.C.

3. Fiduciary Responsibilities and Oversight on Investments

The fiduciary oversight structure of the Plans aligns Regental oversight of the Plans through the Committee on Finance, which oversees the administration of the Plans, and the Committee on Investments, which recommends investment policy for the Plans for Regental approval and oversees the investment management function carried out by the Office of the CIO.

Under the terms of the Plans, the fiduciaries must act with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. The fiduciaries must comply with existing and future applicable state and federal laws and regulations. In addition, fiduciaries must act for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the Plans. They also must act in accordance with the terms of the Plans.

Key investment responsibilities in the oversight and management of the Program are as follows:

a. ~~Under the authority granted by the Regents' Bylaws 10.1.b and 12.5.a, t~~The Regents have appointed a standing Committee on Investments ("Committee")~~,~~ charged with responsibility for the management of investments on behalf of the Regents. The Committee's responsibilities include the ~~establishment of investment policies for the Program and~~ oversight of the ~~Core~~ Fund Options and, with the approval of The Regents, the establishment of investment policies for the Program.

b. ~~Under Regents Bylaw 21.4, t~~The Regents have delegated to the CIO responsibility for implementation of investment policies established by T~~t~~he ~~Committee~~ Regents for the Program.

c. Furthermore, the Regents have designated the CIO as the primary fiduciary for investment functions of the Program, including the selection of asset classes and ~~Core~~ Fund Options and the monitoring of investment performance. References to the "Chief Investment Officer" or "CIO" shall be understood, depending on the context, to mean the "Office of the CIO" in the Plan documents.

d. All transactions undertaken on behalf of the ~~Core~~ Fund Options are undertaken solely in the interests of the Program's participants and their beneficiaries.

Responsibilities of the CIO:

a. Develop and implement criteria for selecting appropriate asset classes and specific ~~Core~~ Fund Options within those classes for the Program as shown in Section 5.A and 5.B, after consultation with the Retirement Savings Program Advisory Committee ("RSPAC") and the appropriate constituent groups in the University community.

b. Create and implement a process to monitor and evaluate the Program's investment structure and the ~~Core~~ Fund Options and, based on such periodic evaluations and consultation with appropriate parties, make changes to either the asset classes or ~~Core~~ Fund Options.

c. Select investment professionals ("managers") with demonstrated experience and expertise who are responsible for managing specific portfolios consistent with the Investment Guidelines contained in Section 5.

d. Select mutual fund options as needed to provide the required diversity within an asset class, taking into account value and fees.

e. Establish and implement procedures for the selection, monitoring, evaluation, and termination of investment managers, which are found in the next section (Selection, Monitoring, Evaluation, and Reporting of Investment Options).

f. Instruct CIO employees that duties must be performed consistent with CFA Institute Code of Ethics and Standards of Professional Conduct for all employees of the CIO and relevant consultants and managers. These are found at: http://www.cfapubs.org/doi/pdf/10.2469/ccb.v2010.n14.1 and incorporated by reference.

g. Enforce other ethics guidelines as needed, consistent with other University policies and guidelines.

h. Participate in securities lending programs, when advisable, as a means to augment income for the Plans, with the Plan custodian or approved list of qualified third parties. Income generated by the lending program is used to offset Plan expenses.

i. Instruct the Plans' custodian bank to vote all proxies on behalf of the Regents according to guidelines established by the Regents.

Responsibilities of the Retirement Savings Program Advisory Committee (RSPAC):

a. RSPAC was established by the Regents to obtain feedback from the University community on the P~~p~~lans and to discuss coordination of issues that arise between the administrative and investment functions. RSPAC is comprised of the CIO, the Plan Administrator, and other members who serve at the request of the Executive Vice President - ~~Business Operations~~Chief Operating Officer (COO). RSPAC includes representatives from the Office of the CIO, ~~Business Operations~~Office of the COO, and the Office of the General Counsel. External consultants are invited to provide advice and counsel on an as-needed basis. Members serve on RSPAC without compensation. An appointed committee member can resign at any time.

b. RSPAC responsibilities include:
   - Assessing the quality of services provided by ~~investment managers~~vendors against established criteria and/or benchmarks;
   - Reviewing Program fees and expenses;
   - Providing input on the annual report to the Regents;
   - Retaining consultants necessary to assist in reviewing administrative and investment performance;
   - Formulating goals, proposing long-range improvements, developing policy, and setting priorities for the Retirement Savings Program.

4. Selection, Monitoring, Evaluation, and Reporting on Investment Managers and ~~Core~~ Fund Options

a. When selecting investment managers, the CIO follows a due-diligence process to make prudent selections. The process involves analyzing investment manager candidates in terms of certain:

i. **Qualitative Characteristics,** such as the manager's key personnel, investment philosophy, investment strategy, research orientation, decision-making process, and risk controls.
ii. **Quantitative Characteristics** demonstrated by the manager, such as CFA Institute-compliant composite return data, risk-adjusted rates of return (e.g., information ratios), and other risk factors.
iii. **Organizational Factors**, such as type and size of firm, ownership structure, client-servicing capabilities, record of gaining and keeping clients, and fees.

b. The CIO considers other factors as part of the due-diligence process as facts and circumstances warrant.

c. The CIO uses third-party database(s) to access appropriate screening information and ensure an unbiased and objective search process.

d. Investments included within a ~~Core~~ Fund Option will be chosen to:
i. Cover a risk/return spectrum of appropriate investment classes;
ii. Provide distinct risk/return characteristics;
iii. Offer well-~~-~~diversified and professionally managed options;
iv. Provide, in aggregate, a participant with the opportunity to structure a portfolio with risk and return characteristics consistent with the participant's risk tolerance and return objectives; and
v. Offer reasonable fees for the asset class and investment style.

e. Investment consultants may be appointed to review investment performance of the Program as a whole or with respect to specific ~~Core~~ Fund Options, to assist in the development of the Program's investment policies, to monitor and report on investment risks, and to provide independent assessment of investments proposed by the CIO.

f. The ~~Core~~ Fund Options of the Program are reviewed no less than quarterly to assess whether Investment Guidelines continue to be appropriate and are met.

g. The CIO prepares ~~quarterly~~ performance reports on the ~~Core~~ Fund Options for the RSPAC, the Committee, and the Regents.

h. Investment performance results for the ~~Core~~ Fund Options are calculated and verified at least monthly by an external, independent performance consultant.

i. The CIO monitors the conduct of the Plans' custodian, trustee, and record keeper.

j. The CIO establishes performance benchmarks and overall investment guidelines ("Investment Guidelines") for each ~~Core~~ Fund Option. See Section 5.A.

k. The following factors govern review and/or termination of investment managers because of qualitative, quantitative, or organizational concerns. This list is representative and other factors may exist.
i. Significant underperformance of the previously agreed-upon benchmark over the cumulative performance period, with proper adjustment for the manager's active risk;
ii. Significant organizational changes, including departure of key investment professionals;
iii. Implementation of significant change in strategy;
iv. Involvement in material litigation;
v. Involvement in an Security and Exchange Commission or other securities investigation;
vi. Acquisition by or of another firm.

l. The CIO may deem it appropriate to terminate or place an investment manager on notice, or to take no action at that time.

  i. In cases in which the manager is placed on notice, the manager will be informed of this decision in writing. The manager may be removed from this status upon exhibiting significant organizational and/or performance changes.
  ii. Should the investment manager fail to exhibit the desired changes, the CIO will conduct further discussions and analysis to determine if termination is warranted.
  iii. The decision to retain or terminate a manager will be made at the discretion of the CIO. However, a systematic process will be carried out. A decision to retain will depend on ~~that depends on~~ the CIO's confidence in the investment firm to perform in the future.

5. ~~Core~~ Fund Options Investment Guidelines

A. Asset Class, ~~Core~~ Fund Options, and Benchmarks

Asset Class	**~~Core~~ Fund Options**	**Benchmark***
Equity	UC Equity Fund	85% (less the actual private equity weight from the prior month end) times the Russell 3000 TF[1] Index return, plus 15% times the MSCI World ex-US TF[1] Index return, plus the actual private equity weight of the previous month end times the actual return of the private equity portfolio~~.~~
	UC Domestic Equity Index Fund	Russell 3000 TF Index[1]
	UC International Index Fund	MSCI World ex-US TF Index [1]
	Vanguard FTSE Social Index Fund	FTSE 4Good US Select Index
	Vanguard Small Cap Index Fund	MSCI US Small Cap 1750 Index
	Vanguard REIT Index Fund	MSCI US REIT Index
	DFA Emerging Markets Portfolio	MSCI Emerging Markets Net Index
	Fidelity Growth Company Fund	S&P 500 TF Index
	Fidelity Diversified International Fund	MSCI World ex-US TF Index
	Calvert Capital Accumulation Fund	Russell 2500 TF Index
Fixed Income	UC Bond Fund	Barclays US Aggregate Index
	UC TIPS Fund	Barclays US TIPS Index
	UC Short Term TIPS Fund	Barclays 1-3 Year US TIPS Index
Asset Allocation	UC Pathway Funds (Target Date Income Fund to Target Date 2060 Fund)	Each Fund has a custom benchmark, which is the weighted sum of the Benchmarks of the component Funds, where the weights used are the policy weights of each Pathway Fund.
	UC Balanced Growth Fund	48% times the Benchmark of the UC Equity Fund, 17% times the MSCI World ex-US TF Index, 5% times MSCI Emerging Markets Net Index, 4% times the MSCI US REIT Index, 18% times the Barclays US Aggregate Index, and 8% times the Barclays 1-3 Year US TIPS Index
Capital Preservation	UC Savings Fund	Income Return of the 2-Year Constant Maturity Treasury Index
	UC ICC Fund (closed to new investments)	Income Return of the 5-Year Constant Maturity Treasury Index

Asset Class	**Fund Options**	**Benchmark***
	Dreyfus Treasury Prime Cash Management Fund	Citigroup 3-Month T-Bill Index

* See Glossary for Description of Benchmarks.
[1] The abbreviation "TF" is used for "Tobacco Free."

B. Investment Objectives, Strategy, and Management Style

~~Core~~ Fund	Investment Objective	Investment Strategy / Management Style
UC Equity Fund	The Fund seeks to maximize long-term capital appreciation through investing in various equity-related asset classes.	The Equity Fund asset allocation policy consists of 80% U.S. equity, 15% non-U.S. developed equity, and 5% private equity. The Fund's U.S. equity and non-U.S. developed equity allocations are passively* managed by State Street Global Advisors. The Fund's private equity allocation is managed by a diversified group of Buyout* and Venture Capital* firms, and is chosen and overseen by the Office of the Chief Investment Officer's Private Equity Group.
UC Domestic Equity Index Fund	The Fund seeks to provide broad and diversified exposure to the U.S. equity market.	The Fund is passively managed by State Street Global Advisors and is invested in a Russell 3000 Tobacco Free (TF) Index Fund.
UC International Index Fund	The Fund seeks to provide broad and diversified exposure to Developed Country (ex-US) equity markets.	The Fund is passively managed by State Street Global Advisors and is invested in a MSCI World ex-US Tobacco Free (TF) Index Fund.
Vanguard FTSE Social Index Fund	The Fund seeks to provide broad and diversified exposure to U.S. equity securities, which have been screened for certain social and environmental criteria.	The Fund is passively managed by Vanguard and is invested in FTSE4Good US Select Index Fund. This index is composed primarily of large- and mid-cap stocks that have been screened for certain social and environmental criteria by the Index sponsor (which is independent of Vanguard).
Vanguard Small Cap Index Fund	The Fund seeks to provide broad and diversified exposure to the smaller capitalization companies in the U.S. equity market.	The Fund is passively managed by Vanguard and is invested in a MSCI US Small Cap 1750 Index Fund. This index is a broadly diversified index of stocks of smaller U.S. companies.
Vanguard REIT Index Fund	The Fund seeks to provide a high level of income and moderate long-term capital appreciation by investing in publicly traded equity US REITs.	The Fund is passively managed by Vanguard and is invested in a MSCI US REIT Index Fund. This index is a broadly diversified index of U.S. Real Estate Investment Trusts* stocks.

Fund	Investment Objective	Investment Strategy / Management Style
DFA Emerging Markets Portfolio	The Fund seeks to achieve long-term capital appreciation by investing in stocks issued in or domiciled in Emerging Market countries.	The Emerging Markets Portfolio is actively managed by Dimensional Fund Advisors (DFA). It invests broadly in large capitalization companies across the seventeen emerging market* and frontier market* countries approved by DFA. The portfolio maintains limits on single-country exposure to reduce market and political risk.
Fidelity Growth Company Fund	The Fund seeks capital appreciation by investing in common stocks of domestic and foreign issuers.	Normally invests primarily in common stocks of domestic and foreign issuers that Fidelity Management & Research Company (FMR) believes offer the potential for above-average growth. Growth may be measured by factors such as earnings or revenue. Uses fundamental analysis of each issuer's financial condition and industry position, and market and economic conditions to select investments.
Fidelity Diversified International Fund	The Fund seeks capital growth by investing in foreign markets.	Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets.
Calvert Capital Accumulation Fund	The Fund seeks long-term capital appreciation by investing in common stocks of mid-size U.S. companies.	The fund invests primarily in the common stocks of mid-size U.S. companies. The adviser currently defines mid-cap companies as those whose market capitalization falls within the range of the Russell Midcap Growth Index. The fund seeks to invest in companies and other enterprises that demonstrate positive environmental, social and governance performance as they address corporate responsibility and sustainability challenges. It may also invest up to 25% of its net assets in foreign securities. The fund is non-diversified.
UC Bond Fund	The Fund seeks to maximize long-term investment returns by investing in intermediate-term debt securities.	The Fund is actively managed by the Office of the Chief Investment Officer Fixed Income group. It utilizes extensive analysis of economic and political factors using a “top-down” approach and fundamental, “bottom-up” analysis for individual security selection. It maintains a diversified portfolio primarily of high-quality debt securities, denominated in U.S. Dollars.

Fund	**Investment Objective**	**Investment Strategy / Management Style**
UC TIPS Fund	The Fund seeks to provide long-term return and inflation protection consistent with an investment in U.S. Government inflation-indexed securities or TIPS.*	The Fund invests in inflation-indexed securities* issued by the U.S. Treasury. The Fund is actively managed by the Office of the Chief Investment Officer's Fixed Income group but its performance tends to track closely with the return on the Benchmark.
UC Short Term TIPS Fund	The Fund seeks to provide returns more closely correlated with realized inflation over the near term and to offer investors the potential for less volatility of returns relative to a longer duration TIPS fund.	The Fund invests in inflation-indexed securities* issued by the U.S. Treasury with a shorter duration focus typically 1-3 years. The Fund is actively managed by the Office of the Chief Investment Officer Fixed Income group but its performance tends to track closely with the return on the Benchmark.
UC Pathway Funds (Pathway Income Fund to Pathway Fund 2060)	The Funds in this series are designed for investors who want a single, diversified approach to saving for retirement. The UC Pathway Funds are managed to adjust the investment risk level lower as each approaches its specified target date.	Each Pathway Fund is diversified across several asset classes (stocks, bonds, and short-term investments) by investing in a variety of Core Funds. Over time, the amount invested in equity-related funds is gradually reduced, while the amount invested in fixed income-related funds is increased.
UC Balanced Growth Fund	The Fund seeks to provide long-term growth and income through a single balanced portfolio of equity and fixed income securities; the portfolio maintains a similar asset allocation as the University of California Retirement Plan (UCRP).	The Fund is comprised of a variety of Core Funds. It is rebalanced periodically to maintain a fixed ratio of the underlying Core Funds. The proportion of each constituent Fund is chosen to mirror the asset allocation of the UCRP (making allowance for asset classes included in UCRP but not available as Core Funds).
UC Savings Fund	The Fund seeks to maximize interest income returns, while protecting principal, in order to provide a stable, low-risk investment, with attractive returns that attempts to exceed the rate of inflation.	The Fund is actively managed by the Office of the Chief Investment Officer's Fixed Income group, and invests solely in fixed-income securities issued by the U.S. Treasury, U.S. government agencies and U.S. government-sponsored enterprises (GSEs) such as Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. The maturity of all investments must be five years or less.
UC ICC Fund (closed to new investments)	The Fund seeks to maximize interest income, while protecting principal. The Fund strives to provide income returns that exceed the rate of inflation.	The Fund is actively managed by the Associate CIO of the Office of the Chief Investment Officer, and invests solely in insurance company contracts* and other short-term fixed income securities.

Fund	**Investment Objective**	**Investment Strategy / Management Style**
Dreyfus Treasury Prime Cash Management Fund	The Fund seeks as high a level of current income as is consistent with the preservation of capital and the maintenance of liquidity.	The Fund is actively managed by Dreyfus, and only invests in securities issued or guaranteed as to principal and interest by the U.S. government.

* See Glossary for additional description.

C. Risk Factors

The UC Retirement Savings Program offers ~~the Core~~ Fund Options, which include a full range of asset classes. Participants in the Program should consider their unique needs and goals, along with any savings held outside of the Program, when building an appropriately diversified asset allocation of funds.

There are many factors that can affect the value of the individual investments within each of the ~~Core~~ Fund Options. These vary depending on the type of investment – e.g., equity securities respond to such factors as economic conditions, individual company earnings performance, and market liquidity, while fixed income securities are particularly sensitive to changes in interest rates and credit risks. Fund managers attempt to identify and analyze these and other potential risks in managing the funds, although they cannot guarantee that their decisions will produce the desired results.

"Risk" refers to the possibility of loss of principal, or alternatively to a rate of investment return below expectations or requirements. While volatility (price fluctuation) is not synonymous with risk, it is true that high volatility on the downside results in loss, and therefore higher volatility is associated with higher risk. Volatility, however results in realized losses *only if securities are sold after a fall in price*.

It is expected (but not assured) that for diversified portfolios, in the long run, higher risk is necessary to achieve higher expected returns. Thus, the length of an individual's investment horizon will to some degree determine the appropriate amount of investment risk. All risk factors can be partially mitigated by diversification, both within a fund and across a person's entire assets.

Market Risk – the broad risk that securities prices may fluctuate, due to a variety of factors, potentially reducing the value of an investment.

Individual Company or Issuer Risk – the value of an individual stock or corporate bond may vary according to a number of factors directly related to the company's own performance, such as: management expertise, the company's financial condition, changes in demand for the company's products, changes in the regulatory environment, etc.

Concentration Risk (non-diversification) – the risk of having too much money invested in a few individual issuers, similar industries, or countries, thereby exposing a Fund to greater risks resulting from adverse economic, political, regulatory, geographic, or credit developments.

Credit Risk – the risk that a company will be unable to repay its debt obligations, relating to a variety of factors such as financial weakness or bankruptcy, litigation, and/or adverse political or regulatory developments. This risk is often quantified by credit ratings issued by several leading ratings agencies, such as Moody's and Standard & Poor's.

Prepayment Risk – Prepayment features on debt securities can increase volatility and affect returns, as cash flows may have to be reinvested at lower yields.

Interest Rate Risk – as interest rates rise, the market value of fixed income investments normally falls. The prices of fixed income securities with longer time to maturity (duration) tend to be more sensitive to changes in interest rates, and therefore more volatile, than those with shorter durations.

Liquidity Risk – the risk that certain securities may be difficult to buy or sell at various times in the markets, resulting in potentially unfavorable prices. Liquidity can be affected by a variety of factors, such as security type, general market conditions, and credit risk.

Foreign Security Risk – foreign securities may carry greater risk than domestic securities for a variety of reasons such as increased political risks; smaller or less liquid markets; higher transaction costs; less rigorous accounting and reporting standards for corporations; and changes in currency rates vs. the U.S. dollar. This last factor may be most significant, as the value of foreign currencies may fluctuate considerably over short periods of time, potentially reducing the market value of the security.

D. Glossary

1. **Active Management:** an investment approach in which securities are purchased in different proportions than in the Benchmark in the expectation of earning a greater return than would be earned by replicating the Benchmark portfolio ("passive" investing).
2. **Passive Management (Indexing):** an investment approach designed to track the performance of a particular market index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.
3. **Buyout:** The purchase of a company's shares in which the acquiring party gains controlling interest of the targeted firm. Incorporating a buyout strategy is a common technique used to gain access to new markets and is one of the most common methods for inorganically growing a business.
4. **Venture Capital:** Money provided by investors to startup firms and small businesses with perceived long-term growth potential. This is an important source of funding for startups that do not have access to capital markets. It typically entails high risk for the investor, but it has the potential for above-average returns.
5. **Developed Market Country:** A country which achieved an advanced stage of economic development, whose securities markets have met certain standards for stability and are included in one or more index provider's Developed Markets indexes; to be distinguished from "Emerging Markets."
6. **Emerging Market Country:** A country at varying stages of economic development, whose securities markets have only recently met certain standards for stability and been included in one or more index provider's Emerging Markets indexes; to be distinguished from "Developed Markets."
7. **Frontier Market Country:** Less advanced capital markets from the developing world. Frontier markets are countries with investable stock markets that are less established than those in the emerging markets. They are also known as "pre-emerging markets."
8. **REIT (Real Estate Investment Trust):** A security that sells like a stock on the major exchanges and invests in real estate directly, either through properties or mortgages. REITs receive special tax considerations and typically offer investors high yields, as well as a highly liquid method of investing in real estate.
9. **TIPS (Treasury Inflation Protected Securities):** U.S. Treasury notes and bonds that are designed to protect future purchasing power. The principal value is adjusted for changes in inflation, and a fixed interest rate is accrued on the inflation-adjusted principal.
10. **Insurance Company Contracts:** A contract with a highly rated, financially sound insurance company, which guarantee a fixed annual rate of interest for a specified time period and the repayment of principal at the end of that time period. Insurance contract guarantees are backed by the general account assets of the issuing insurance company and are not insured or guaranteed by any third party.

E. Description of Benchmarks

1. **Russell 3000 Tobacco Free Index:** Measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market excluding companies manufacturing tobacco products.
2. **MSCI World ex-US Tobacco Free Index:** A free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The index consists of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.
3. **FTSE4Good US Select Index:** Composed primarily of large- and mid-cap stocks that have been screened for certain social and environmental criteria by the Index sponsor, which is independent of the Fund manager.
4. **MSCI Emerging Markets Net Index:** A free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 21 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.
5. **S&P 500 Index:** An American stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ.
6. **Russell 2500 Tobacco Free Index:** The Russell 2500 Index measures the performance of the 2,500 smallest companies in the Russell 3000 Index, or about 19% of its total capitalization, based on their market capitalization and index membership.

~~4.~~

~~5.~~7. **MSCI US Small Cap 1750 Index:** ~~Represents the universe of small capitalization companies in the U.S. equity market. This index targets for inclusion 1,750 companies and represents, as of October 29, 2004, approximately 12% of the capitalization of the U.S. equity market.~~Comprised of the remaining smallest 1,750 companies in the US Investable Market 2500 Index of the US equity market and designed to measure the performance of the small cap segment. The index represents, as of April 14, 2015, approximately 11.5% of the free float-adjusted market capitalization of the US equity market.

~~6.~~8. **MSCI US REIT Index:** A free float market capitalization weighted index that is comprised of Equity REITs securities that belong to the MSCI US Investable Market 2500 Index.

~~7.~~9. **Income Return of the 2-Year Constant Maturity Treasury Index:** The average yield of a range of Treasury securities, all adjusted to the equivalent of a 2-year maturity.

~~8.~~10. **Income Return of the 5-Year Constant Maturity Treasury Index:** The average yield of a range of Treasury securities, all adjusted to the equivalent of a 5-year maturity.

~~9.~~11. **Citigroup 3-Month T-Bill Index:** Measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.

~~10.~~12. **Barclays U.S. Aggregate Index:** Covers the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), Asset

Backed Securities, and Collateralized Mortgage Backed Securities. Issues are market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index. Securities must have a minimum quality investment grade by middle rating of Moody's, S&P, and Fitch.

~~11.~~13. **Barclays U.S. TIPS Index:** Covers all publicly issued U.S. Treasury-issued inflation linked bonds (linked to the U.S. Consumer Price Index). Issues are market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index.

~~12.~~14. **Barclays 1-3 Year U.S. TIPS Index:** Covers publicly issued U.S. Treasury issued inflation linked bonds (linked to the U.S. Consumer Price Index) with a maturity between 1-3 years. Issues are market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index.