The Regents of the University of California

INVESTMENTS COMMITTEE
September 15, 2020

The Investments Committee met on the above date by teleconference meeting conducted in accordance with Paragraph 3 of Governor Newsom's Executive Order N-29-20.

Members present: Regents Anguiano, Leib, Makarechian, Muwwakkil, Park, Sherman, Stegura, and Zettel; Ex officio members Drake and Pérez; Advisory members Horwitz, Lott, and Torres; Chancellors Hawgood, Khosla, Muñoz, and Wilcox; Advisor Zager; Staff Advisor Tseng

In attendance: Regents Butler, Kounalakis, and Ortiz Oakley, Regent-designate Zaragoza, Secretary and Chief of Staff Shaw, Managing Counsel Shanle, Chief Investment Officer Bachher, Executive Vice President and Chief Financial Officer Brostrom, and Recording Secretary Li

The meeting convened at 1:05 p.m. with Committee Chair Sherman presiding.

Committee Chair Sherman welcomed President Drake and invited him to make some remarks. President Drake recognized the role that the Committee and the Office of the Chief Investment Officer (CIO) played in maintaining the University's fiscal health. CIO Bachher and his team increased UC's excess liquidity, which would help campuses address budget constraints and lessen the impact of the current financial landscape on students, faculty, and staff.

1. **PUBLIC COMMENT**

Committee Chair Sherman explained that the public comment period permitted members of the public an opportunity to address University-related matters. The following persons addressed the Committee concerning the items noted.

A. Robert Byrd expressed concern about medical ethics at UCSF and urged President Drake to intervene. Mr. Byrd quoted UCSF research articles about the collection of fetal tissue and spoke of UCSF's unnecessary dependency on fetal organs.

B. Franceska Hinkamp, UCLA genetic counselor, spoke in opposition to UCLA Health contracting out genetic counseling work in violation of Regents Policy 5402: Policy Generally Prohibiting Contracting for Services. Genetic counselors at UCLA reported this to Labor Relations at the Office of the President (UCOP) and called on UCLA to terminate the contract after its pilot program ended.

C. Liz Rocha expressed concern about medical ethics at UCSF. She stated that there were records indicating that UCSF had been receiving two fetuses per month. Acquiring fetal organs through labor induction could result in up to 50 percent of fetuses being born alive. She called on the Regents to ensure that these fetuses were not being born alive and to comply with a California Public Records Act request. She asked that the Regents and President Drake support these endeavors.

D. Lehuanani DeFranco, member of Uprooted and Rising, called on UC to divest from the Thirty Meter Telescope (TMT) project. Project costs were currently $2.4 billion and rising. The project was a significant liability for UC given that 88 percent of Native Hawaiians opposed the TMT being built on Mauna Kea, according to a recent study. Ms. DeFranco regarded the project as an act of colonization and desecration and called on President Drake to invest in students instead.

E. Angelica Corella, UCLA staff member, asked that she be able to continue working full-time because her job was the main source of income for her family. She could not afford to be laid off or have her work hours reduced. She asked that the University find ways to keep staff employed.

F. Nusrat Molla, UC Davis student, called on the Regents to defund UC police departments (UCPD) and redirect that funding toward alternatives for student safety and programs that would create opportunities for underrepresented students of color.

G. Emma Barudi, UCLA student, called on the Regents to protect the employment of staff who served students. During this period of remote learning, students needed proper support and resources for their education and for their student advocacy work, as well as student mental health services.

H. Lance Magee spoke in opposition to research practices at UCSF. He claimed that organs were being harvested from live fetuses in the womb without anesthesia. Paying tribute to the Americans who fought in World War II, he opined that those heroes would not condone these practices.

I. Jean-Michel Ricard spoke in opposition to the TMT project on Mauna Kea. This was an exploitation of stolen, sacred land over the objection of its indigenous stewards, who never relinquished their sovereignty over the Kingdom of Hawaii. If UC continued to pursue this project, it would make a statement that human rights came second to the generation of knowledge.

J. Marina Dutra-Clark, UCLA genetic counselor, spoke in opposition to UCLA Health contracting out genetic counseling work in violation of Regents Policy 5402: Policy Generally Prohibiting Contracting for Services. Genetic counselors at UCLA reported this to UCOP Labor Relations and called on UCLA to terminate the contract after its pilot program ended.

K. Jam Cabacungan, UCSF nurse, called on UCSF to address employee concerns related to labor and COVID-19 more quickly. It took four months for employees to be notified about possible COVID-19 exposure and five months to secure personal protective equipment (PPE) for all employees working with patients with confirmed or suspected cases of COVID-19. Patients should be tested for COVID-19 even if they are undergoing an elective procedure. Ms. Cabacungan also asked that UCOP communicate to local management and employees its guidance on how leave should be used.

L. Sara Colgrove, UC Davis Medical Center nurse and member of the California Nurses Association (CNA), shared her experience as a float nurse. She was working near 12-hour shifts, with little time to eat or drink water. The hospital floor on which she was assigned lacked sufficient PPE and other supplies. She stated that UC Davis Medical Center had the highest employee infection rate among UC medical centers, and she called on the University to stockpile PPE, to implement universal N95 mask use for staff treating COVID-19–positive patients, and to stop the reuse of masks. She also asked that nurse staffing be increased.

M. Samuel Wilder King II, Executive Director of Imua TMT, spoke in support of the TMT project and regarded protesters' claims as false. He stated that a recent poll indicating that 88 percent of Native Hawaiians were opposed to the TMT project appeared to have self-selecting respondents. Mauna Kea was not sacred to Native Hawaiians, who abolished the *kapu* religion some 200 years ago. He implored Chair Pérez to meet with supporters of the TMT project.

N. Connor McCleskey, legal associate at Worth Rises, urged UC not to invest in H.I.G. Capital, which invested in prison industry corporations that profited from incarceration and immigration detention. In Mr. McCleskey's view, these investments had become indefensible in light of a global pandemic and the current movement for racial justice. These corporations relied on the over-policing of black and brown communities and drained their income while providing subpar services.

O. Naghmeh Dorrani, UCLA genetic counselor, spoke in opposition to UCLA Health contracting out genetic counseling work in violation of Regents Policy 5402: Policy Generally Prohibiting Contracting for Services. Genetic counselors at UCLA reported this to UCOP Labor Relations and called on UCLA to terminate the contract after its pilot program ended.

P. Melody Walls, UCSF staff member, called for an end to furloughs, pay reductions, and layoffs. Ms. Walls, a single mother caring for her grandchildren, had received a layoff notice effective November 2020. Her family been struggling during the COVID-19 pandemic, because both of her children had also been laid off.

Q. Veronica Ohara identified herself as *Kanaka Maoli* (Native Hawaiian) and spoke in support of the TMT project on Mauna Kea. Many Native Hawaiians and residents supported the project and needed it to recover from the economic impact of the COVID-19 pandemic. In Ms. Ohara's view, claims of Native Hawaiian genocide were unfounded, and the project was not oppressive because Native Hawaiians had always been astronomers. Mauna Kea was special to many Native

Hawaiians, who were also pragmatic about using natural resources to benefit themselves.

R. Suzannah Smith, UC Berkeley student and member of Berkeley Organization for Animal Advocacy, called on the University to stop investing in animal agriculture. Berkeley Organization for Animal Advocacy recently released its report on Seaboard Food, which faced allegations of human trafficking from the Micronesian government. Animal agriculture was a leading cause of climate change and exploited workers, as evidenced by recent COVID-19 outbreaks at meat packing and processing plants. Ms. Smith asked that UC shift to plant-based alternatives.

S. Sean Long, UC Riverside student, urged the Regents to abolish UCPD, which he regarded as unnecessary and oppressive. A growing number of students were also calling for abolition. UC could set the standard for institutional innovation.

T. Alyssa Giachino, representative of the Private Equity Stakeholder Project, stated that H.I.G. Capital invested in companies that profited from incarceration and detention. In 2019, the Private Equity Stakeholder Project and other organizations asked H.I.G. Capital to exit these investments. In one instance, prison infirmary nurses of once such company, Wellpath, reported sick call backlogs in one prison in Arkansas.

U. Bruna Gill, UC Berkeley graduate, spoke in opposition to the TMT project, particularly noting how the University's involvement in the project was negatively affecting its reputation. She stated that UC was profiting from its reputation of upholding environmentalism and human rights but not meeting expectations.

V. Grace Chang, UC Santa Barbara faculty member, spoke in opposition to the TMT project, which negatively affected the University's reputation of being an institution that advocated for social justice, racial justice, and anti-colonialism. The project was a poor investment that lacked much-needed National Science Foundation funding. She expressed her hope that President Drake could exercise his leadership and remove UC's involvement from the project.

W. Michelle Sandell, Hawaii resident, spoke in support of the TMT project on Mauna Kea. Many in Hawaii regarded astronomy as part of their community. She expressed her hope that Regents reach out to both opponents and proponents of the project and suggested that Imua TMT could help facilitate meetings with Native Hawaiians who supported the project.

X. Liko Martin spoke in opposition to the TMT project on Mauna Kea. He stated that the University of Hawaii Board of Regents fabricated rules to control the Native Hawaiian religion and way of life. The Hawaiian Kingdom had been overthrown, and Native Hawaiians were living under apartheid. Mr. Martin was being prosecuted for trespassing on land that originally belonged his family. He called on the University to rescind its support of the project and to advise other investors to divest from the project as well. He was not opposed to astronomy, but Hawaii had other needs in Hawaii, such as the restoration of the land.

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

Upon motion duly made and seconded, the minutes of the meeting of July 28, 2020 were approved, Regents Anguiano, Drake, Leib, Makarechian, Muwwakkil, Park, Pérez, Sherman, Stegura, and Zettel voting "aye."[1]

3. **REVIEW OF FISCAL YEAR 2019–2020 PERFORMANCE OF UC PENSION, ENDOWMENT, RETIREMENT SAVINGS PROGRAM, SHORT TERM AND TOTAL RETURNS INVESTMENTS PRODUCTS**

[Background material was provided to Regents 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 began the presentation by stating that asset allocation was a major driver of the University's investments performance, and he thanked the Committee for its guidance. The main areas of focus at the Office of the CIO were technology, U.S. leadership, the COVID-19 pandemic, Federal Reserve (Fed) policy, and climate change. Mr. Bachher predicted U.S. interest rates would remain at zero percent for the foreseeable future and noted the potential investment opportunities within a lower-rate environment. Despite short-term volatility in the equity market during the last six months, long-term investment in the equity market was needed to determine the value of its returns relative to bonds. Mr. Bachher presented a table of net returns for UC investments over the last 25 years. As of August 31, UC investments grew 47 percent to $140 billion in six years, with the endowment growing 81 percent and the pension growing 45 percent. There was $104.9 billion in retirement assets, with $75.7 billion in the pension and $29.2 billion in the UC Retirement Savings Program, $14.9 billion in the endowment, and $19.2 billion in working capital. Fifty-two percent of these assets was invested in public equity, 29 percent in public fixed income, 17 percent in private investments, and two percent in cash. Seventy percent of UC investments were in the U.S., 15 percent in Europe, 14 percent in Asia, and one percent elsewhere in the world.

The endowment was comprised of about 6,000 individual endowment funds that supported 285,216 students. The UC endowment had five percent returns in 2019–20, while campus endowments had 2.5 percent returns. The Office of the CIO's operation costs were 90 percent less than industry costs. Mr. Bachher noted that the current asset allocation of the endowment reflected what was approved at the July Regents meeting. The pension supported over 240,000 plan members and currently had a funding ratio close to 80 percent. Lower pension returns were the result of the Office of the CIO's conservative posturing. A new asset allocation for the pension would be proposed later in the meeting. Working capital accounted for nearly $19 billion of total investment assets. The Short Term Investment Pool (STIP) earned 1.8 percent over ten years, and the Total Return Investment

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

Pool (TRIP) earned 6.3 percent. The Blue and Gold Endowment, which was valued at $1.8 billion, was liquidated and returned to the campuses for their operating needs. Mr. Bachher shared that, in 12 years, the Office of the CIO would have managed the UC endowment for 100 years. The Office of the CIO was currently working with about 50 investment partners, and each professional managed about $4.5 billion, as opposed to the industry average of about $1.1 billion per professional. The Office of the CIO also saved $1 billion in fees and generated $2.4 billion of value added over the six years.

Regent Makarechian asked for clarification regarding the performance of the pension. Mr. Bachher replied that the pension grew 45 percent in the last six years, and the pension's annualized return over a five-year period was 5.4 percent. Some of the data presented came from the end of fiscal year 2019–20, while other data was to-date. The pension also had a net cash inflow due to borrowing from STIP, contributions from the State, and differences in contributions between employee and employer.

Regent Makarechian asked whether these pension numbers included the $2.5 billion UC borrowed. Mr. Bachher replied in the negative. Executive Vice President and Chief Financial Officer Brostrom stated that $3.3 billion from STIP and external borrowing was included in the UC Retirement Program (URCP) balance. Regent Makarechian asked for a schedule of what UC earned and what was sent to the campuses. It was important that campuses understand the difference between working capital and borrowed money. Mr. Brostrom stated that the amount must be adjusted for UCRP and campus foundation investments in STIP, mortgage origination loans, and receivables against the pension. As of August 31, there was about $10 billion in STIP, with $1.5 billion from the taxable working capital bond issue in July.

Regent Makarechian remarked that the University was not in a good cash position and stressed the importance of showing these numbers to the general public. He suggested focusing investments on private equity, which was generating much higher returns, and reconsidering asset allocation. Mr. Brostrom stated that UC had $10 billion in STIP liquidity, as well as other funds that could be liquidated, which was about 90 days' cash on hand. He expected to see lost revenues and increased expenses related to the pandemic.

Regent Zettel asked what constituted private investments in the endowment. Mr. Bachher responded that the endowment had real estate investments of about $1 billion, real assets at $600 million, and absolute return and private equity investments of about several billion dollars each, for a total of $7.5 billion. Regent Zettel asked whether this was a very aggressive asset allocation for raising capital. Mr. Bachher replied that the current target of 50 percent private assets was a comfortable asset allocation on both absolute and relative bases. For any pool of capital, he considered its liquidity needs and the return objectives.

Regent Zettel asked what was meant by a defensive posture. Mr. Bachher replied that this was the UC's cash position, which had grown higher than in a traditional asset allocation but was now earning close to zero during the pandemic.

Regent Stegura asked what help the 285,216 students received from the endowment, as well as the sources of that help. Mr. Bachher offered to provide a copy of an older annual report that explained how the endowment served students, faculty, and programs. He shared that an endowment from New Mexico that the Office of the CIO was managing now provided scholarships to that community.

Regent Pérez observed that the way the Office of the CIO used investments to serve the mission of the University differed from the approaches of other investment leaders. UC faced the challenge of protecting its core investment while thoughtfully using what was generated from that investment. Referring to the presentation materials, Regent Pérez asked whether the three campuses that managed their own endowments spent ten times more than what the Office of the CIO spent managing the UC endowment. Mr. Bachher responded in the affirmative. In his view, some efficiencies came with managing capital at scale. He encouraged campuses to consider the cost associated with how their money was managed.

Regent Pérez asked how campuses could benefit from adding their endowments to the General Endowment Pool (GEP) aside from the return rate. Mr. Bachher replied that it typically cost 25 basis points or more to outsource endowment management. The Office of the CIO would be able to provide services at one-tenth of the cost. Regent Pérez asked that Mr. Bachher provide models of what it would cost for the Office of the CIO to manage individual campus endowments. In his view, the Regents had an obligation to show campuses ways to increase returns and decrease costs. Mr. Bachher replied that these could be included in an annual report on campus foundations.

Committee Chair Sherman, noting that the delta was even greater for campuses that invested a significant portion of their assets, asked if the reduced number of investment managers provided better performance. Mr. Bachher responded in the affirmative. UC experienced its largest growth in assets in its public equity investments, from about $47 billion in 2014 to about $77 billion currently. Since 2014, UC reduced the number of public equity managers from about 60 to 15. Seventy percent of public equity assets were now passively managed, which cut costs. The actively managed 30 percent had earned several hundred basis points over the market. The Office of the CIO also incorporated hurdle rates and provided incentives for performance. Mr. Bachher offered to provide more data at a future meeting.

4. **APPROVAL OF UC PENSION ASSET ALLOCATION, AMENDMENT OF INVESTMENTS POLICY STATEMENTS AND GUIDELINES (REGENTS POLICY 6101) AND RESCISSION OF ASSET AND RISK ALLOCATION POLICIES (REGENT POLICY 6401)**

The Chief Investment Officer (CIO) recommended that the Investments Committee recommend that, effective as of July 1, 2020, the Regents:

A. Amend Regents Policy 6101: UC Retirement Plan (UCRP) Investment Policy Statement, as shown in Attachments 1 and 2.

B. Rescind Regents Policy 6401: University of California Retirement Plan Asset and Risk Allocation Policy as shown in Attachment 3.

It is recommended that the Regents confirm, ratify, and approve all actions heretofore taken on or after July 1, 2020 by the Office of the CIO consistent with the investment policies and guidelines included in the foregoing recommendations.

[Background material was provided to Regents 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 explained that asset allocation drove about 80 percent of a pool of capital's performance. With the COVID-19 pandemic and the new Federal Reserve (Fed) policy, interest rates were close to zero, and the Office of the CIO considered whether it could meet or exceed a 6.75 percent return rate, how fixed income would perform in the future, and how to incorporate private credit as an asset class. The Office of the CIO proposed increasing investments in public and private equity, private debt, and real assets, and decreasing investments in hedge funds, investment grade bonds, and emerging market bonds, for a new pension asset allocation of 53 percent in public equity, 17 percent in bonds, and 30 percent private market investments. Private debt would be added as its own asset class, as had been done in the endowment. The current ten-year return rate was 5.84 percent, which was below the 6.75 percent goal. The proposed pension asset allocation would increase the probability of achieving a return rate of 6.17 percent.

Director of Investment Risk Management Allen Kuo stated that the proposed asset allocation for the pension was based on simulations and that the proposed ten-year return rate was a median number. The median drawdown would be -18 percent, and the volatility of returns would increase by one percent. There would be no significant changes to macroeconomic risk factors.

Senior Managing Director of Fixed-Income Investments and Credit Research Steven Sterman stated that fixed income was providing no income, and there were lower return opportunities. The proposed asset allocation would reduce high-quality, core fixed income and would protect against higher interest rates in the future. The Office of the CIO would seek returns from growth fixed income, comprised mainly of high-yield, emerging markets and private credit, in order to reach return targets. With private credit, the Office of the CIO could engage in more due diligence, negotiate covenants, and provide a liquidity premium for better returns.

Director of Global Rates and Trading David Schroeder stated that the Office of the CIO had always tactically allocated Treasury Inflation-Protected Securities (TIPS) within the core fixed income portfolio and away from the dedicated TIPS portfolio. It was wise to purchase inflation protection that was inexpensive. Some investments in the UC Retirement Plan (UCRP) and TIPS outperformed Treasury Bonds of the same maturity. Given its fair performance, there was no plan to increase investment in TIPS.

Managing Director of Public Equity Investments Ronnie Swinkels stated that passively managed equities required a larger allocation because of the time it took to deploy capital. Valuations and risk were high for passive equities and were being monitored closely in case quick action had to be taken. UC's active equity managers tended to have a long-term horizon, which was beneficial during the COVID-19 pandemic, and considered opportunities in Europe and in emerging markets, where there were attractive valuations and managers were outperforming. He expected to continue in such a volatile environment for at least the next several months.

Mr. Bachher provided several other examples of changes to the asset allocation that aligned with the new endowment asset allocation, such as replacing the lagged real estate benchmark with a non-lagged benchmark.

Regent Makarechian asked whether the Office of the CIO had a distressed debt allocation. He expressed concern about UC possibly losing a large amount of money if it was heavily invested in debt in the current financial landscape. Mr. Kuo replied that distressed debt could be considered private debt, private equity, or hedge funds.

Regent Makarechian asked if, rather than placing distressed debt in its own allocation, the Office of the CIO would consider it as opportunities arise. Mr. Bachher replied that he and his team have assessed recent distressed credit opportunities for risk. In his view, private debt provided a way into new investment opportunities, and having a specific asset allocation would help the Office of the CIO track its performance. For now, distressed debt would be housed under private debt.

Regent Makarechian asked if there would be further allocations within private debt for specific types of debt, such as AAA-rated debt or high-yield bonds. Mr. Bachher replied that public high-yield bonds had a 2.5 percent allocation. Private debt was primarily non-investment-grade debt. Mr. Kuo explained that, once the Office of the CIO chooses a benchmark, it would consider the seniority, ratings, and leverage of the debt against that benchmark. Mr. Bachher added that, within private credit, there would be an allocation of corporate private credit, which was direct lending to corporations, and consumer loans. He stated that he would provide the Committee with a memorandum on private debt, which was a broad category that included royalties, capital financing, balance sheets, and distressed debt. Mr. Sterman stated that the private credit became more prominent after the last financial crisis. The private credit market was generally a below-investment-grade market comprised of loans, often senior secured floating rate loans, to corporations in order to sponsor leveraged buyouts.

Regent Makarechian asked about performance expectations this year given low interest rates. Mr. Bachher replied that the ten percent return on public equity at the start of this fiscal year was unlikely to continue. He regarded core fixed income and passive public equity as liquidity providers for other opportunities. The proposed asset allocation was a long-term strategy, but his team was also taking advantage of opportunities as they arose.

Advisor Zager asked if the 6.75 percent return was a nominal rate. Mr. Bachher responded in the affirmative. Mr. Zager asked Mr. Schroeder for his outlook on TIPS returns. Mr. Schroeder replied that he considered TIPS returns within the context of delivered inflation and pricing. TIPS returns were roughly fair, but he did not expect high returns relative to nominal bonds in the near term. The reaction function of the Federal Reserve (Fed) was changing, and modeled inflation might return to trend but not exceed trend. TIPS carried a duration of about eight years. Interest rates were expected to rise sometime in the future, which was why the Office of the CIO was opting for a shorter-duration benchmark for the pension. Richard Bookstaber, Chief Risk Officer at the Office of the CIO, stated that current Fed policy and government stimulus could possibly trigger a second rise in inflation. Government and corporate funding was functioning as “free money,” which could greatly increase the burden on debt. This could be a long-term risk. Mr. Zager noted that banks were doing much better than they were doing in 2008 and 2009, when they were not lending. This could add to inflation. Mr. Bookstaber stated that there would be advance indicators of inflation.

Regent Leib asked over what period of time these changes would be made. Mr. Bachher explained that the proposed changes stemmed from fixed income not performing as it once did, the new Fed policy of low interest rates, and the desire to seek new opportunities. Some changes could be made immediately, but increasing the private market allocation would take close to five years. He planned to review asset allocations annually.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer’s recommendation and voted to present it to the Board, Regents Anguiano, Drake, Leib, Makarechian, Park, Pérez, Sherman, Stegura, and Zettel voting “aye.”

5. **UPDATE ON UC INVESTMENTS ACTIVITIES TOWARDS DIVERSITY, EQUITY, AND INCLUSION AND SUSTAINABLE INVESTING**

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

Chief Investment Officer (CIO) Bachher stated that, while performance was a primary metric at the Office of the CIO, data has demonstrated that having diverse investment managers enhances performance. He underscored the importance of being both open-minded and intentional.

Chief Operating Officer Arthur Guimaraes explained some of the progress that had been made. Thus far, the Office of the CIO had invested $10 billion with women and diverse managers, with a commitment to invest an additional $2 billion, increased the number of black managers, and doubled the assets of black and Latino(a) managers. Last year, the Office of the CIO began conducting a demographic survey of its investment partners, and this year’s survey effort garnered prompt, positive responses. The team partnered with Morgan Stanley Capital International (MSCI) to determine the public companies that still held oil reserves, and PricewaterhouseCoopers was assessing UC’s separate accounts for these companies on a quarterly basis. The Office of the CIO was also working to leave commingled accounts with fossil fuel assets. UC's over $1 billion in clean energy investments over the last five years generated 1.7 gigawatts of clean power, enough for two million American homes per year. Last year, the Office of the CIO cast 2.7 billion shareholder votes to diversify boards and balance executive compensation, and it provided data for the UC Annual Report on Sustainability. In the last year, the Office of the CIO reduced the carbon footprint of its investments by 45 percent and was working to reduce investments in cement, which was responsible for a large amount of carbon emissions. In the next fiscal year, the Office of the CIO planned to implement a tracking system for qualified managers, develop a qualified pool of candidates and a diverse hiring panel with an equity advisor, and create a toolkit to help asset managers learn about diversity. New metrics had been developed based on these goals.

Committee Chair Sherman shared that the environmental, social, and governance (ESG) portfolio of the Japanese government's pension outperformed the market. A study from Harvard University and Northwestern University indicated that U.S. companies that improved their ESG issues significantly outperformed their competitors. These firms also performed better at the onset of the COVID-19 pandemic. He commended the Office of the CIO for these efforts, which ultimately supported UC students.

Regent Park asked if UC could challenge its peers to follow its example. Mr. Bachher provided examples of others in the public sector who incorporated diversity, equity, and inclusion (DEI) in their investing and were performing well. The Office of the CIO was seeking to learn from these examples. Mr. Bachher expressed his hope that other institutions were having similar conversations about DEI. Mr. Bachher was also being invited to speak to a number of boards about UC's divestment from fossil fuel companies. Mr. Guimaraes added that the Office of the CIO had begun to engage likeminded investors and funds worldwide. Mr. Bachher remarked that the Regents have led by their actions, such as removing the SAT admissions requirement and endorsing Proposition 16. These had significant foundational impact in California.

Regent Pérez stated that the recent conversation that Mr. Bachher hosted with Reverend Al Sharpton demonstrated the national attention on the University. He commended the Office of the CIO's efforts. There were union pension funds that were doing similar work. He noted that State Assembly Bill 979, which was awaiting Governor Newsom's approval, would require the boards of directors of California-based public companies to be more diverse. Regent Pérez expressed his appreciation for the holistic approach being taken.

Regent Leib asked how UC was encouraging larger public companies and investment companies to be more diverse. Mr. Bachher replied that the Office of the CIO needed to communicate its values to its investment partners in order to align their values with UC. In turn, these investment partners would share these values with the companies in which they have invested, thereby effecting change more quickly. Mr. Bachher perceived a palpable shift in the asset management industry. Mr. Guimaraes stressed the power of shareholder voting. Companies were noticing how UC was voting, and UC was making a difference.

President Drake remarked that these conversations had persisted for decades, but investors had been hesitant to make changes without the promise of desired performance. He recognized the Office of the CIO for its ability to vote and act according to its values while still performing well. This could encourage others to do the same.

The meeting adjourned at 3:55 p.m.

Attest:

Secretary and Chief of Staff

Attachment 1

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

[UCRP]

INVESTMENT POLICY STATEMENT

Effective: July 1, 2020
Replaces the UCRP Investment Policy Statement and UCRP Asset and Risk Allocation Policy effective March 15, 2018

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

POLICY SUMMARY/BACKGROUND

The purpose of this Investment Policy Statement ("Policy") is to define the objectives, policies and guidelines for the management and oversight of the University of California ("UC") Retirement Plan ("UCRP"). The management of UCRP is subject to state and federal regulations and laws, and all other University investment policies, which may not be listed in this document.

The Policy consists of the following sections:

1. Roles and Responsibilities
2. Objectives
3. Investment Guidelines
4. Strategic Allocation
5. Risk Management
6. Benchmarks
7. Rebalancing
8. Monitoring and Reporting
9. Policy Maintenance
10. No Right of Action
11. Disclosures

1. ROLES AND RESPONSIBILITIES

Board of Regents

The Board defines the goals and objectives of UCRP and is responsible for establishing and approving changes to this Policy. The Board of Regents may delegate the implementation of this policy to sub-committees, the Chief Investment Officer and investment advisors.

Chief Investment Officer

The Chief Investment Officer ("Office of the Chief Investment Officer", "OCIO", "UC Investments") is responsible for implementing the approved investment policies and developing investment processes and procedures for asset allocation, risk management, investment manager selection and termination, monitoring and evaluation, and the identification of management strategies that will improve the investment efficiency of UCRP assets.

Investment Managers

The OCIO may delegate to external Investment Managers responsibility for managing all or a portion of the assets. Any external Investment Managers will assume the roles and responsibilities of "investment manager" under Section 3(38) of ERISA, including but not limited to acknowledging in writing that such Investment Manager is a fiduciary with respect to the assets it manages on behalf of UCRP. The Investment Manager will accept assets and invest in compliance with all relevant laws, the Investment Manager's individual investment management agreement(s), and as applicable, the stated investment guidelines in this Policy.

Trustee/Custodian

The role of the Trustee/Custodian is to provide safekeeping, accounting and valuation of Trust assets.

2. OBJECTIVES

Overall Objective

The objective of UCRP is to provide retirement benefits, as described in the Plan document, to its participants and their beneficiaries. The overall investment goal of UCRP is to maximize the probability of satisfying the Plan's liabilities in conjunction with the Regents' funding policy.

Return Objective

UCRP seeks to maximize its return on investment, consistent with levels of investment risk that are prudent and reasonable given long-term capital market expectations and the overall objectives of UCRP. The performance of UCRP will be measured relative to its objectives (e.g. actuarial rate, funded status, inflation) and policy benchmarks found in this Policy.

Accordingly, the investment objectives and strategies emphasize a long-term outlook, and interim performance fluctuations will be viewed with the corresponding perspective. The Board acknowledges that over short time periods (i.e. one quarter, one year, and even three to five year time periods), returns will vary from performance objectives and the investment policy thus serves as a buffer against ill-considered action.

Risk Objective

While the Board recognizes the importance of the preservation of capital, it also recognizes that to achieve UCRP's overall objectives requires prudent risk-taking, and that risk is the prerequisite for generating investment returns. Therefore investment risk cannot be eliminated but should be managed. Risk exposures should be identified, measured, monitored and tied to responsible parties; and risk should be taken consistent with UCRP's objectives and the expectations for return from the risk exposures.

UCRP seeks a level of risk that is prudent and reasonable to maximize the probability of achieving its overall objective consistent with capital market conditions. The expected level of UCRP funded status volatility (i.e. surplus risk, or volatility of the change in UCRP assets relative to the change in UCRP liabilities) should be monitored and the Board seeks to minimize the probability of loss of funded status over a full market cycle.

Sustainability Objective

The Office of the Chief Investment Officer ("OCIO") shall incorporate environmental sustainability, social responsibility, and governance (ESG) into the investment evaluation process as part of its overall risk assessment in its investments decision making. ESG factors are considered with the same weight as other material risk factors influencing investment decision making.

The OCIO uses a proprietary sustainability framework to provide core universal principles that inform the decisions and assist in the process of investment evaluation. The OCIO manages the UCRP consistent with these sustainability principles. The Framework can be found on the OCIO website in the sustainability section.

3. INVESTMENT GUIDELINES

Permitted Investments

Below is a list of asset class types in which the UCRP may invest so long as they do not conflict with the constraints and restrictions described elsewhere in this document. The criteria used to determine which asset classes may be included are:

- Positive contribution to the investment objective of UCRP
- Widely recognized and accepted among institutional investors
- Diversification with some or all of the other accepted asset classes

Based on the criteria above, the types of assets for building the portfolio allocation are:

1. **Public Equity**
   Includes publicly traded common and preferred stock of issuers domiciled in US, Non-US, and Emerging (and Frontier) Markets. The objective of the public equity portfolio is to generate investment returns with adequate liquidity through a globally diversified portfolio of common and preferred stocks.

2. **Fixed Income**
   Fixed Income includes a variety of income related asset types. The portfolio will invest in core fixed income instruments, including government and investment grade corporate bonds, inflation linked securities, cash and cash equivalents, as well as higher returning growth fixed income assets including high yield and emerging markets debt. The UCRP can hold a mix of traditional (benchmark relative) strategies and unconstrained (benchmark agnostic) strategies. The objective of the core fixed income assets is to provide diversification relative to other higher risk assets and necessary liquidity for payment obligations and portfolio rebalancing needs. The growth fixed income assets are intended to provide diversification and long term growth by investing in higher yielding and less liquid growth fixed income opportunities.

3. **Private Equity**
   Private equity includes, but is not limited to, venture capital and buyout funds, direct investments, and co-investments in private companies. This includes investments in privately held companies and private investments in public entities which are illiquid. The objective of the portfolio is to earn higher returns than the public equity markets over the long term and take advantage of the illiquidity premium.

4. **Private Credit**
   Private credit includes debt issued by and loans made to companies through privately negotiated, non-public transactions, other debt backed private structures, such as consumer or asset backed loans. The objective of the portfolio is to earn higher returns than the public debt markets over the long term and take advantage of preferential yields, terms and other characteristics available through private transactions.

5. **Real Estate**
   Real estate includes private investments in real property and related debt investments. The

objectives of the real estate portfolio are to contribute to the diversification of the portfolio, generate returns through income and/or capital appreciation, and provide protection against unanticipated inflation.

6. **Real Assets**
   Real assets includes, but is not limited to, natural resources, timberland, energy, royalties, infrastructure, and commodities related equity and debt related investments. The objective of the real assets portfolio is to contribute to the diversification of the portfolio, generate returns through income and/or capital appreciation, and provide protection against unanticipated inflation.

7. **Absolute Return**
   Absolute return investments are expected to generate long-term real returns by exploiting market inefficiencies. The portfolio invests in a collection of strategies that includes, but is not limited to, strategy types such as Relative Value and Event Driven strategies. The objective of the portfolio is to provide diversification and generate capital appreciation.

8. **Derivatives**
   A derivative is a contract or security whose value is derived from another security or risk factor. There are three fundamental classes of derivatives – futures, options and swaps – each with many variations; in addition, some securities are combinations of derivatives or contain embedded derivatives. Use of derivatives to create economic leverage is prohibited, except for specific strategies only. Permitted applications for derivatives are: efficient substitutes for physical securities, managing risk by hedging existing exposures, to implement arbitrage or other approved active management strategies.

Each asset class is assigned a benchmark that represents the opportunity set and risk and return characteristics associated with the asset class. For some private or more complex asset classes the benchmark serves as a proxy for the expected level and pattern of returns rather than an approximation of the actual investment holdings.

Investment Restrictions
The Regents established that the purchase of securities issued by tobacco companies and companies with business operations in Sudan are prohibited in separately managed accounts. The OCIO will determine what constitutes a tobacco or Sudan Company based on standard industry classification of the major index providers and must communicate this list to investment managers annually and whenever changes occur.

5. STRATEGIC ALLOCATION

The purpose of the Strategic Asset Allocation (SAA) is to establish a diversified long term portfolio that is best able to achieve UCRP's long-term purpose and objectives. The SAA will reflect investment beliefs and organizational capability of the OCIO. The actual portfolio exposures will deviate from the Strategic Asset Allocation as a result of price drifts, opportunity set, and value adding activities of the OCIO. This is underpinned by the recognition that investment opportunities come and go, values rise and fall and, that implementation must be dynamic in order to benefit from this fluctuation. This belief is critical to add value to UCRP. We follow a risk allocation process to ensure that the attractiveness of all opportunities is assessed on a consistent basis and that will meet the objectives set.

The investment strategy of UCRP will be based on a financial plan that will consider:

- The financial condition of the Plan, i.e., the relationship between the current and projected assets of the Plan and the projected benefit payments, and the current Funding Policy.
- Future growth of active and retired participants; expected service costs and benefit payments; and inflation and the rate of salary increases. (Together these are the principal factors determining liability growth.)
- The expected long-term capital market outlook, including expected volatility of and correlation among various asset classes.

Below are the strategic asset allocation long-term weights and allowable ranges:

Table 1

	Target Allocation	**Allowable Ranges**	
		Minimum	**Maximum**
Global Equity	53.0	43.0	63.0
Core Fixed Income	13.0	10.0	16.0
High Yield Fixed Income	2.5	0.0	5.0
Emerging Markets Fixed Income	1.5	0.0	3.0
Private Credit	3.5	0.0	7.0
Private Equity	12.0	7.0	17.0
Absolute Return	3.5	0.0	5.5
Real Assets	4.0	0.0	8.0
Real Estate	7.0	2.0	12.0
Cash	0.0	0.0	5.0
TOTAL	100%		
Combined Private Investments[1]	30.0	15.0	40.0
Combined Public Fixed Income[2]	17.0	10.0	25.0

1. Private Investments includes Private Equity, Private Credit, Real Estate, Real Assets and Absolute Return.
2. Public Fixed Income includes Core, High Yield and Emerging Markets Fixed Income

6. RISK MANAGEMENT

There are three principal factors that affect a pension fund's financial status: 1) contributions, 2) benefit payments, and 3) investment performance. Only the last factor is dependent upon the investment policy and guidelines contained herein. However, the Committee's level of risk tolerance will take all three factors into account. At certain levels of funded status, it could be impossible for the investments to achieve the necessary performance to meet the promised liabilities. The result is that either benefits have to be reduced, contributions increased, or risk tolerance changed.

Funded status risk, or the risk of a significant decline in funded position, is the ultimate aggregate risk for

UCRP. Of the three determinants of this aggregate risk (contributions, benefits and investments) investment policy and investment risk are governed by this policy. The primary investment risk for UCRP is that investment returns fall below the assumed rate of return of the UCRP over the medium to long term. The principal risk factors that determine UCRP's investment risk, and the parties responsible for managing them are as follows:

- **Capital market risk** is the risk that the investment return associated with the asset allocation policy is not sufficient to provide the required returns to meet the UCRP's investment objectives. Responsibility for determining the overall level of capital market risk lies with the Board and OCIO.

- **Total active risk** refers to the difference between the return of the UCRP policy benchmark and the actual return and captures the impact of implementation of the SAA policy. It incorporates the aggregate of investment style risk, active management risk, and tactical/strategic risks and is thus the responsibility of the OCIO.

The OCIO is responsible for managing both active risk and total risk (the combination of capital market and active risk), and shall implement procedures and safeguards so that the combined risk exposures of all portfolios taken together are kept within risk bands. Further, within limits of prudent diversification and risk budgets, total and active risk exposures are fungible. That is, the OCIO may allocate risk exposures within and between asset types in order to optimize return.

Although the management of investment portfolios may be outsourced, investment oversight and risk management are primary fiduciary duties of the Board that are delegated to and performed by the OCIO.

7. BENCHMARKS

UCRP's performance will be evaluated against appropriate benchmarks including a strategic asset allocation benchmark ("Total UCRP Portfolio Benchmark") and specific benchmarks for each asset class and investment manager. The Total UCRP Portfolio Benchmark is a weighted average consisting of the asset class benchmarks listed below weighted by the SAA target weights. The benchmarks for each asset class are shown in Table 2:

Table 2

Asset Class	Benchmark
Global Equity	MSCI All Country World Index (ACWI) Investable Market Index (IMI) Tobacco and Fossil Fuel Free - Net Dividends
Core Fixed Income	Bloomberg Barclays 1-5 Year US Government/Credit Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index Fossil Free
Emerging Market Fixed Income	JP Morgan Emerging Markets Bond Index Global Diversified Fossil Free

Private Equity	Russell 3000 + 3*%
Real Estate	NCREIF Fund Index – Open End Diversified Core Equity (ODCE) non lagged
Real Assets	Actual Real Assets Portfolio Return
Private Credit	Actual Private Credit Portfolio Return
Absolute Return	HFRI Fund of Funds Composite
Cash	Bank of America 3-Month US Treasury Bill Index

* The Private Equity benchmark is in transition from Russell 3000 + 2.5% for FY 2021 to Russell 3000 + 3.0% thereafter.

The **Total UCRP Portfolio Benchmark** is a weighted average consisting of each of the monthly returns of the benchmarks noted above weighted by the Policy Allocation percentages. The policy benchmarks may differ from the target allocations in Table 1 until implementation reaches the long-term strategic asset allocation.

8. REBALANCING

There will be periodic deviations in actual asset weights from the strategic target weights. Causes for periodic deviations are market movements, cash flows, tactical tilts, and asset selection. Significant movements from the asset class policy weights will alter the intended expected return and risk of UCRP. Accordingly, UCRP may be rebalanced when necessary to ensure adherence to this Policy.

The OCIO will monitor the actual asset allocation. The Board directs the OCIO to take all actions necessary, within the requirement to act prudently, to manage the asset allocation in a manner that ensures that UCRP achieves its long-term risk and return objectives.

The OCIO shall assess and manage the trade-off between the cost of rebalancing and the active risk associated with the deviation from policy asset weights. The OCIO may delay a rebalancing program when the it believes the delay is in the best interest of UCRP.

9. MONITORING AND REPORTING

The OCIO is responsible for monitoring the portfolio and investment managers on an ongoing basis. The OCIO should monitor and report to the Committee on Investments, Finance and Capital Strategies Committee and Board of Regents on the following items:

1. Asset and Risk Measures and Exposures
2. Investment Performance and Attribution (against benchmarks identified in this Policy)
3. Material Changes to Organization and Investment Strategy
4. Potential Material Issues and Risks
5. Compliance of UCRP with this Policy

While short-term results will be monitored, it is understood that UCRP's objectives are long-term in nature and progress towards these objectives will be evaluated from a long-term perspective.

On at least an annual basis the CIO will report on the implementation of the UC's Sustainability Framework which will include a discussion on the portfolio's environmental, social, and governance risks considered during the year.

10. **POLICY MAINTANENCE**

The Policy should be reviewed at least annually and updated as necessary. The Committee on Investments may recommend action which will be placed on the Consent Agenda for approval by the Board.

11. **NO RIGHT OF ACTION**

This Policy is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the University of California or its Board of Regents, individual Regents, officers, employees, or agents.

12. **DISCLOSURES**

The Chief Investment Officer ("OCIO") provides investment-related information on UCRP to The Regents' Committee on Investments in a manner consistent with the requirements outlined in this policy. Current and historical materials are publicly available on The Regents' website within the section on Meeting Agendas and Schedule. The Chief Investment Officer's Annual Report for the most recent fiscal year is also available on the Chief Investment Officer's website. Other disclosures that will be posted on the Chief Investment Officer's website are:

1. A report on private equity internal rates of return is publicly available on the Chief Investment Officer's website on a lagged quarterly basis.
2. As soon as practicable after each fiscal year, a complete listing of all assets held by the UCRP at calendar year end will be posted on the Chief Investment Officer's website. Each listing will include the asset's market value at the end of the year. The assets will be grouped in the standard categories used by the custodian bank to group the assets in the asset reports provided to the Chief Investment Officer

Changes to procedures and related documents do not require Regents approval, and inclusion or amendment of references to these documents can be implemented administratively by the Office of the Secretary and Chief of Staff upon request by the unit responsible for the linked documents.

~~UNIVERSITY OF CALIFORNIA~~
~~RETIREMENT PLAN~~

~~INVESTMENT POLICY STATEMENT~~

~~Approved March 15, 2018~~

~~Replaces version approved March 14, 2013 and amended May 12, 2016~~

~~**UNIVERSITY OF CALIFORNIA RETIREMENT PLAN**~~
~~**INVESTMENT POLICY STATEMENT**~~

~~**POLICY SUMMARY/BACKGROUND**~~

~~The purpose of this Investment Policy Statement (“Policy” or “IPS”) is to define the objectives and policies established for the management of the investments of the University of California Retirement Plan (“UCRP”). The management of UCRP is subject to state and federal regulations and laws, and all other University investment policies, which may not be listed in this document. The investment policy statement consists of the following sections:~~

- ~~Investment Objectives~~
- ~~Monitoring and Reporting~~
- ~~Conflicts of Interest~~
- ~~Disclosures~~
- ~~Policy Maintenance~~

~~This policy reflects the Governance Framework outlined in Bylaws 22 and 23 of the University and the Finance and Capital Strategies Committee Charter.~~

~~The Board defines the goals and objectives of UCRP and is responsible for establishing and approving changes to this IPS. The Finance and Capital Strategies Committee and Investments Subcommittee are responsible for establishing the Asset and Risk Allocation Policy (with approval by the Board on a consent agenda), which defines the strategic asset allocation, risk tolerance, asset types and benchmarks of the portfolio.~~

~~The Chief Investment Officer (or “Office of the Chief Investment Officer”) is responsible for implementing the approved investment policies and developing investment processes and procedures for asset allocation, risk management, investment manager selection and termination, monitoring and evaluation, and the identification of management strategies that will improve the investment efficiency of UCRP assets.~~

~~**POLICY TEXT**~~

~~**INVESTMENT OBJECTIVES**~~

~~**1. Overall Objective**~~

~~The objective of UCRP is to provide retirement benefits, as described in the Plan document, to its participants and their beneficiaries. The overall investment goal of UCRP is to maximize the probability of meeting the Plan’s liabilities subject to the Regents’ funding policy.~~

~~**2. Return Objective**~~

~~UCRP seeks to maximize its return on investment, consistent with levels of investment risk that are prudent and reasonable given long-term capital market expectations and the overall objectives of UCRP. The performance of UCRP will be measured relative to its objectives (e.g. actuarial rate, funded status, inflation) and policy benchmarks found in the Asset and Risk Allocation Policy. Accordingly, the investment objectives and strategies emphasize a long-term outlook, and interim performance fluctuations will be viewed with the corresponding perspective. The Board acknowledges that over short time periods (i.e. one quarter, one year, and even three to five year time periods), returns will vary from performance objectives and the investment policy thus serves as a buffer against ill-considered action.~~

~~**3. Risk Objective**~~

~~While the Board recognizes the importance of the preservation of capital, it also recognizes that to achieve UCRP's overall objectives requires prudent risk-taking, and that risk is the prerequisite for generating investment returns. Therefore investment risk cannot be eliminated but should be managed. Risk exposures should be identified, measured, monitored and tied to responsible parties; and risk should be taken consistent with UCRP's objectives and the expectations for return from the risk exposures.~~

~~UCRP seeks a level of risk that is prudent and reasonable to maximize the probability of achieving its overall objective consistent with capital market conditions. The expected level of UCRP funded status volatility (i.e. surplus risk, or volatility of the change in UCRP assets relative to the change in UCRP liabilities) should be monitored and the Board seeks to minimize the probability of loss of funded status over a full market cycle.~~

~~**4. Sustainability Objective**~~

~~The Office of the Chief Investment Officer (OCIO) shall incorporate environmental sustainability, social responsibility, and governance (ESG) into the investment evaluation process as part of its overall risk assessment in its investments decision making. ESG factors are considered with the same weight as other material risk factors influencing investment decision making.~~

~~The OCIO uses a proprietary sustainability framework to provide core universal principles that inform the decisions and assist in the process of investment evaluation. The OCIO manages the UCRP consistent with these sustainability principles. The Framework can be found on the OCIO's website in the sustainability section.~~

~~**MONITORING AND REPORTING**~~

~~The OCIO is responsible for monitoring the portfolio and investment managers on an ongoing basis. The OCIO should monitor and report to the Investments Subcommittee, Finance and Capital Strategies Committee, and Board of Regents on the following items.~~

1. ~~Asset and Risk Allocation~~

2. ~~Investment Performance and Attribution (against benchmarks identified in the **UCRP Asset and Risk Allocation Policy**)~~

3. ~~Material Changes to Organization and Investment Strategy~~

4. ~~Potential Material Issues and Risks~~

~~While short-term results will be monitored, it is understood that UCRP's objectives are long-term in nature and progress towards these objectives will be evaluated from a long-term perspective.~~

~~**DISCLOSURES**~~

~~The Chief Investment Officer provides investment-related information on the UCRP to the Regents' Investments Subcommittee in a manner consistent with the requirements outlined in this policy. Current and historical materials are publicly available on the Regents' website within the section on Meeting Agendas and Schedule. The Chief Investment Officer's Annual Report for the most recent fiscal year is also available on the Chief Investment Officer's website. Other disclosures that will be posted on the Chief Investment Officer's website are:~~

1. ~~A report on private equity internal rates of return is publicly available on the Chief Investment Officer's website on a lagged quarterly basis.~~

2. ~~The fees and expenses paid directly to the alternative investment vehicle, the fund manager, or related parties.~~

    a. ~~The name, address, and vintage year of each alternative investment vehicle, the dollar amount of the total commitment, and the following information related to fees and expenses paid directly to the alternative investment vehicle, the fund manager or related parties (as defined in AB2833);~~

    b. ~~Fees and expenses paid directly to the alternative investment vehicle, the fund manager or related parties;~~

    c. ~~Pro rata share of fees and expenses not included above that are paid by the alternative investment vehicle to the fund manager or related parties;~~

    d. ~~UCRP's pro rata share of carried interest distributed to the fund manager or related parties; and~~

    e. ~~UCRP's pro rata share of aggregate fees and expenses paid by portfolio companies to the fund manager or related parties.~~

3. ~~As soon as practicable after each fiscal year, a complete listing of all assets held by the UCRP at calendar year end will be posted on the Chief Investment Officer's website. Each listing will include the asset's market value at the end of the year. The assets will be grouped in the standard categories used by the custodian bank to group the assets in the asset reports provided to the Chief Investment Officer.~~

4. ~~Each External Manager[1] proposing an investment to be made by or on behalf of the University of California Retirement System must comply with one of the following two requirements:~~

   a. ~~If the External Manager will not use any Placement Agents[2] in connection with the proposed investment, the External Manager must provide the Chief Investment Officer with a written statement to that effect.~~

   b. ~~If the External Manager will use a Placement Agent in connection with the proposed investment, the External Manager must disclose the following information in writing to the Chief Investment Officer:~~

      i. ~~A description of the relationship between the External Manager and any Placement Agents for the investment for which funds are being raised.~~

      ii. ~~Whether the Placement Agent's mandate includes the Regents of University of California as trustee/custodian.~~

      iii. ~~A description of the services performed by the Placement Agent.~~

      iv. ~~A description of any and all payments of any kind provided or agreed to be provided to a Placement Agent by the External Manager with regard to investments by the Regents as a plan trustee or custodian of retirement or savings plan assets.~~

      v. ~~Upon request, the resume for each officer, partner or principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses, and investment and work experience.~~

      vi. ~~A statement as to whether the Placement Agent, or any of its affiliates, is registered with the Securities Exchange Commission.~~

      vii. ~~A statement as to whether the Placement Agent, or any of its affiliates, is registered as a lobbyist under California law.~~

   c. ~~The Chief Investment Officer will only enter into agreements to invest in or through External Managers that agree to comply with the provisions of this policy with regard to Placement Agents. The Chief Investment Officer will rely on the written~~

~~[1] "External Manager" means a (i) person who is seeking to be, or is, retained by the Regents to manage a portfolio of securities or other assets for compensation or (ii) a person managing an investment fund who offers or sells, or has offered or sold, an ownership interest in the investment fund.~~

~~[2] "Placement Agent" means a person directly or indirectly hired, engaged or retained by, or serving for the benefit of or on behalf of, an External Manager or an investment fund managed by an External Manager, who acts, or has acted, for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale to the Regents of either the investment management services of the External Manager or an ownership interest in an investment fund managed by the External Manager. Any exceptions to this definition of "Placement Agent" available under Sections 7513.8 or Section 82047.3 of the California Government Code will apply under this Policy.~~

~~statements made by the External Manager.~~

~~RESTRICTIONS~~

~~The Regents have restricted that purchase of securities issued by tobacco companies and companies with business operations in Sudan are prohibited in separately managed accounts. The Chief Investment Officer will determine what constitutes a tobacco or Sudan company based on standard industry classification of the major index providers and must communicate this list to investment managers annually and whenever changes occur.~~

~~COMPLIANCE/DELEGATION~~

~~The UCRP Investment Policy Statement should be reviewed at least annually and updated as necessary. Revisions may be recommended by the Office of the Chief Investment Officer, Investments Subcommittee, Finance and Capital Strategies Committee, and approved by the Board of Regents.~~

~~NO RIGHT OF ACTION~~

~~This policy is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the University of California or its Board of Regents, individual Regents, officers, employees, or agents.~~

~~PROCEDURES AND RELATED DOCUMENTS~~

~~UCRP Asset and Risk Allocation Policy~~

~~Investment Implementation Manual~~

~~Changes to procedures and related documents do not require Regents approval, and inclusion or amendment of references to these documents can be implemented administratively by the Office of the Secretary and Chief of Staff upon request by the unit responsible for the linked documents.~~

~~UNIVERSITY OF CALIFORNIA~~
~~RETIREMENT PLAN~~

~~ASSET AND RISK~~
~~ALLOCATION POLICY~~

~~Approved March 15, 2018~~

~~UNIVERSITY OF CALIFORNIA RETIREMENT PLAN~~
~~ASSET AND RISK ALLOCATION POLICY~~

~~POLICY SUMMARY/BACKGROUND~~

~~The purpose of this Asset and Risk Allocation Policy ("Policy") is to define the asset types, strategic asset allocation, risk management, benchmarks, and rebalancing for the University of California Retirement Plan ("UCRP"). The Investments Subcommittee has consent responsibilities over this policy.~~

~~POLICY TEXT~~

~~ASSET CLASS TYPES~~

~~Below is a list of asset class types in which the UCRP may invest so long as they do not conflict with the constraints and restrictions described in the UCRP Investment Policy Statement. The criteria used to determine which asset classes may be included are:~~

- ~~Positive contribution to the investment objective of UCRP~~
- ~~Widely recognized and accepted among institutional investors~~
- ~~Low cross correlations with some or all of the other accepted asset classes~~

~~Based on the criteria above, the types of assets for building the portfolio allocation are:~~

1. **~~Public Equity~~**

   ~~Includes publicly traded common and preferred stock of issuers domiciled in US, Non-US, and Emerging (and Frontier) Markets. The objective of the public equity portfolio is to generate investment returns with adequate liquidity through a globally diversified portfolio of common and preferred stocks.~~

2. **~~Fixed Income~~**

   ~~Fixed Income includes a variety of income related asset types. The portfolio will invest in interest bearing and income based instruments such as corporate and government bonds, high yield debt, emerging markets debt, inflation linked securities, cash and cash equivalents. The portfolio can hold a mix of traditional (benchmark relative) strategies and unconstrained (benchmark agnostic) strategies. The objective of the income portfolio is to provide necessary liquidity for payment obligations and portfolio rebalancing needs, while investing in higher yielding and less liquid income opportunities with excess liquidity.~~

3. **~~Private Equity~~**

   ~~Private equity includes, but is not limited to, venture capital and buyout funds, direct investments, and co-investments in private companies. This includes investments in privately held companies and private investments in public entities which are illiquid. The objective of the portfolio is to earn higher returns than the public equity markets over the long term and take advantage of the illiquidity premium.~~

4. **~~Private Real Estate~~**

   ~~Private real estate includes, but is not limited to, core, value-add, opportunistic strategies that are characterized by development, repositioning and leverage. Investments are typically comprised of commercial properties in various operating segments (e.g. office, retail, hotel, industrial, student housing and multi-family). The objective of the real estate portfolio is to contribute to the diversification of the portfolio, generate returns through income and/or capital appreciation, and protect long-term purchasing power.~~

5. **~~Real Assets~~**

   ~~Real assets includes, but is not limited to, natural resources, timberland, energy, royalties, infrastructure, and commodities related equity and debt related investments. The objective of the real assets portfolio is to contribute to the diversification of the portfolio, generate returns through income and/or capital appreciation, and provide protection against unanticipated inflation.~~

6. **~~Absolute Return / Strategic Opportunities~~**

   ~~Absolute return investments are expected to generate long-term real returns by exploiting market inefficiencies. The portfolio invests in a collection of strategies that includes, but is not limited to, strategy types such as Relative Value, Event Driven, and Strategic Opportunities. The objective of the portfolio is to provide diversification and generate capital appreciation.~~

7. **~~Derivatives~~**

   ~~A derivative is a contract or security whose value is derived from another security or risk factor. There are three fundamental classes of derivatives futures, options and swaps each with many variations; in addition, some securities are combinations of derivatives or contain embedded derivatives. Use of derivatives to create economic leverage is prohibited, except for specific strategies only. Permitted applications for derivatives are: efficient substitutes for physical securities, managing risk by hedging existing exposures, to implement arbitrage or other approved active management strategies.~~

~~Each asset class is assigned a benchmark that represents the opportunity set and risk and return characteristics associated with the asset class. For some private or more complex asset classes the benchmark serves as a proxy for the expected level and pattern of returns rather than an approximation of the actual investment holdings.~~

~~RISK MANAGEMENT~~

~~There are three principal factors that affect a pension fund's financial status: 1) contributions, 2) benefit payments, and 3) investment performance. Only the last factor is dependent upon the investment policy and guidelines contained herein. However, the Subcommittee's level of risk tolerance will take into account all three factors. At certain levels of funded status, it could be impossible for the investments to achieve the necessary performance to meet the promised liabilities. The result is that either benefits have to be reduced, contributions increased, or risk tolerance changed.~~

~~There are different types of risk important at each level of investment management for UCRP and tied to various responsible parties thus different risk metrics are appropriate at each level.~~

~~There are different types of risk tied to various responsible parties at each level of UCRP investment management. Thus, different risk metrics are appropriate at each level.~~

~~The **principal risks** that impact the UCRP, and the parties responsible for managing them are as follows:~~

- ~~Capital market risk is the risk that the investment return associated with the Subcommittee's asset allocation policy is not sufficient to provide the required returns to meet the UCRP's investment objectives. Responsibility for determining the overall level of capital market risk lies with the Board and Subcommittee.~~
- ~~Investment style risk is associated with an active management investment program. It is the performance differential between an asset category's market target and the aggregate of the managers' benchmarks within the asset category weighted according to a policy allocation specified by the Chief Investment Officer. This risk is an implementation risk and is the responsibility of the Chief Investment Officer.~~
- ~~Manager value-added risk is also associated with an active management investment program. It is the performance differential between the aggregate of the managers' actual (active) portfolios and the aggregate of the managers' benchmarks. This risk is an implementation risk and is the responsibility of the Chief Investment Officer (and indirectly the investment managers retained by the Chief Investment Officer).~~
- ~~Tactical/strategic risk is the performance differential between (1) policy allocations for UCRP's asset categories and its investment managers and (2) the actual allocations. This risk is the responsibility of the Chief Investment Officer.~~
- ~~Total active risk refers to the volatility of the difference between the return of the UCRP policy benchmark and the actual return. It incorporates the aggregate of the risks above, and is thus the responsibility of the Chief Investment Officer.~~
- ~~Surplus risk refers to the volatility of the change in the dollar value of UCRP assets versus the change in the dollar value of the liabilities. The latter represents the ultimate investment objective of the Plan. Because the asset allocation articulates the Regents' risk tolerance, and because the Regents determine the Plan's benefits and liabilities, this risk is the joint responsibility of the Board and the Subcommittee.~~

~~Although the management of investment portfolios may be outsourced, investment oversight and risk management are primary fiduciary duties of the Board that are delegated to and performed by the Chief Investment Officer. The Chief Investment Officer shall report on risk exposures and the values of the several risk measures to the Board.~~

~~**UCRP Product level (Board, Investments Subcommittee, and Office of the Chief Investment Officer)**~~

- ~~Surplus Risk (insufficient assets to meet liabilities)~~
  - ~~Measures the risk of inappropriate investment policy and strategy~~
- ~~Total Investment Risk (volatility of total return)~~
  - ~~Measures the risk of asset allocation policy~~

~~**Implementation level (Office of the Chief Investment Officer)**~~

- ~~Active Risk or "Tracking Error" (volatility of deviation from style or benchmark)~~
  - ~~Measures the risk of unintended exposures or ineffective implementation~~

~~**Risk Measures:** UCRP will use various risk analysis tools (e.g. factor analysis, simulation modeling) to measure the portfolio risks noted below. These metrics are intended to be used as one of many inputs in the asset and risk allocation process and are not intended to be used as benchmarks to measure actual results.~~

- ~~**Funded Ratio:** Funded Ratio, defined as the ratio of plan assets to liabilities. Plan assets shall be measured at current market value as well as using actuarially smoothing. Liabilities shall be measured as the actuarial accrued liability (AAL). Liabilities, and hence this metric, are formally re-estimated only annually, but should be reviewed quarterly (change in liabilities estimated using liability duration and change in bond yields, as well as accruals for service cost and benefits paid).~~
  - ~~The funded ratio projected over a ten year forecast period, using an actuarial model of assets and liabilities~~
  - ~~The expected shortfall, defined as the expected loss experienced in worst case market scenarios~~

~~The Office of the Chief Investment Officer (OCIO) is responsible for managing both total and active risk and shall implement procedures and safeguards so that the combined risk exposures of all portfolios taken together are kept within risk bands. Further, within limits of prudent diversification and risk budgets, total and active risk exposures are fungible. That is, the OCIO may allocate risk exposures within and between asset types in order to optimize return.~~

~~**STRATEGIC ALLOCATION**~~

~~The purpose of the Strategic Asset Allocation is to reflect UCRP's long term purpose and objectives, as well as the investment beliefs and organizational capability of the OCIO. The actual portfolio exposures will deviate from the Strategic Asset Allocation as a result of price drifts, opportunity set, and value adding activities of the OCIO. This is underpinned by the recognition that investment opportunities come and go, values rise and fall and, that implementation must be dynamic in order to benefit from this fluctuation. This belief is critical to add value to UCRP. We follow a risk allocation process to ensure that the attractiveness of all opportunities is assessed on a consistent basis and that will meet the objectives set.~~

~~The investment strategy of UCRP will be based on a financial plan that will consider:~~

- ~~The financial condition of the Plan, i.e., the relationship between the current and projected assets of the Plan and the projected benefit payments, and the current Funding Policy.~~
- ~~Future growth of active and retired participants; expected service costs and benefit payments; and inflation and the rate of salary increases. (Together these are the principal factors determining liability growth.)~~
- ~~The expected long-term capital market outlook, including expected volatility of and correlation among various asset classes.~~

~~Below are the strategic asset allocation long-term weights and allowable ranges:~~

–	~~Target Allocation~~	–	~~Allowable Ranges~~	
			~~Minimum~~	~~Maximum~~
~~Global Equity~~	~~50.0~~	–	~~40.0~~	~~60.0~~
~~US Fixed Income~~	~~13.0~~	–	~~10.0~~	~~16.0~~
~~High Yield Fixed Income~~	~~2.5~~	–	~~0.0~~	~~5.0~~
~~Emerging Mkt Fixed Income~~	~~2.5~~	–	~~0.0~~	~~5.0~~
~~TIPS~~	~~2.0~~	–	~~0.0~~	~~4.0~~
~~Private Equity~~	~~10.0~~	–	~~5.0~~	~~15.0~~
~~Absolute Return~~	~~10.0~~	–	~~0.0~~	~~20.0~~
~~Real Assets~~	~~3.0~~	–	~~0.0~~	~~6.0~~
~~Real Estate~~	~~7.0~~	–	~~2.0~~	~~12.0~~
~~Liquidity~~	~~0.0~~	–	~~0.0~~	~~10.0~~
~~TOTAL~~	~~100%~~	–	–	–
–	–	–	–	–
~~Combined Public Equity~~	~~50.0~~	–	~~40.0~~	~~60.0~~
~~Combined Fixed Income~~	~~20.0~~	–	~~10.0~~	~~30.0~~
~~Combined Other Investments*~~	~~30.0~~	–	~~20.0~~	~~40.0~~

~~*Other Investments category including, but not limited to: Real Estate, Private Equity, Real Assets, and Absolute Return~~

~~BENCHMARKS~~

~~The following criteria have been adopted for the selection of benchmark indices. It is understood that not all benchmarks will meet the entire list of criteria, but ideally, benchmarks that meet most of the criteria will be selected. There may be instances where tradeoffs are made between benchmarks that meet some of the criteria but not others.~~

1. ~~**Unambiguous**: the names and weights of securities comprising the benchmark are clearly delineated.~~

2. **Investable**: is possible to replicate the benchmark performance by investing in the benchmark holdings.
3. **Measurable**: possible to readily calculate the benchmark's return on a reasonably frequent basis.
4. **Appropriate**: the benchmark is consistent with investment preferences or biases.
5. **Specified in Advance**: the benchmark is constructed prior to the start of an evaluation period.
6. **Reflects Current Investment Opinion**: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction.

Benchmarks are a tool against which to measure the effectiveness of investment strategy either at a total fund level, at an investment class or strategy level, or at the mandate level. Based on the benchmark selection criteria, the following strategic policy benchmarks have been chosen:

Table 2

Asset Class	**Benchmark**
Global Equity	MSCI All Country World Index (ACWI) Investable Market Index (IMI) Tobacco Free - Net Dividends
Core Fixed Income	Barclays US Aggregate Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Emerging Market Fixed Income	JP Morgan Emerging Markets Bond Index Global Diversified
Treasury Inflation Protected Securities (TIPS)	Barclays US TIPS Index
Private Equity	Russell 3000 + 3% [1]
Absolute Return / Strategic Opportunities	HFRI Fund of Funds Composite
Real Assets	Actual Real Assets Portfolio Return
Real Estate	NCREIF Funds Index – Open End Diversified Core Equity (ODCE), lagged 3 months

The **Total UCRP Portfolio Benchmark** is a weighted average consisting of each of the monthly returns of the benchmarks noted above weighted by the Policy Allocation percentages. The policy benchmarks may differ from the target allocations in Table 1 until implementation reaches the long-term strategic asset allocation.

REBALANCING

There will be periodic deviations in actual asset weights from the strategic target weights. Causes for periodic deviations are market movements, cash flows, tactical tilts, and asset selection. Significant movements from the asset class policy weights will alter the intended expected return and risk of UCRP. Accordingly, UCRP may be rebalanced when necessary to ensure adherence to this policy and the Investment Policy.

[1] As the OCIO transitions the benchmark into the portfolio, it will use 150 basis points illiquidity premium for the first year starting in July 2017.

~~The OCIO will monitor the actual asset allocation. The Board directs the OCIO to take all actions necessary, within the requirement to act prudently, to manage the asset allocation in a manner that ensures that UCRP achieves its long-term risk and return objectives.~~

~~The OCIO shall assess and manage the trade-off between the cost of rebalancing and the active risk associated with the deviation from policy asset weights. The Chief Investment Officer may delay a rebalancing program when the Chief Investment Officer believes the delay is in the best interest of UCRP.~~

~~COMPLIANCE/DELEGATION~~

~~The UCRP Asset and Risk Allocation Policy Statement should be reviewed at least annually and updated as necessary. The Investments Subcommittee may recommend action which will be placed on the Consent Agenda for approval by the Board.~~

~~NO RIGHT OF ACTION~~

~~This policy is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the University of California or its Board of Regents, individual Regents, officers, employees, or agents.~~

~~PROCEDURES AND RELATED DOCUMENTS~~

~~Investment Implementation Manual~~

~~Changes to procedures and related documents do not require Regents approval, and inclusion or amendment of references to these documents can be implemented administratively by the Office of the Secretary and Chief of Staff upon request by the unit responsible for the linked documents.~~