AGENDA ITEM 1A

COLLEGE ILLINOIS!® PREPAID TUITION PROGRAM INVESTMENT POLICY ASSET ALLOCATION AND ASSET LIABILITY STUDY

Submitted for: Action

Summary: As stated in our Statement of Investment Policy, we review the asset allocation targets annually and conduct, along with our investment consultant, a formal asset

liability modeling study at least every three years.

For FY25 an in-depth investment evaluation and analysis was performed by investment staff and Callan, given that we believe we are a critical juncture in the life of the program. We think this is a unique opportunity to largely secure the College Illinois! program future rate of investment return, while reducing most of the current investment portfolio risk, as financial markets typically exhibit considerable volatility over time. Key inputs to determine the optimal investment approach are *our return needs*, *our risk tolerance*, *and our liquidity budget*.

Along with this memorandum we are providing separately Callan's Asset Allocation and Liability Study presentation, which provides the framework for this review and its recommendation.

Of note, based on the actuarial soundness report as of June 30, 2023, the College Illinois program expects significant cash outflows (page 3 of Callan's presentation) over the next three years (\$99 million for FY25, \$92 million for FY26 and \$84 million for FY27). The total expected cash outflows over the next three years amounts to approximately 56% of the trust fund current market value. The expected yearly cash outflow for FY25 amounts to approximately 20% of the investment portfolio. The materiality of the cash outflows over the coming years is significant, therefore having a liquid portfolio which avoids drawdown risk is highly desirable.

Historically, we have been lowering the risk of the portfolio over the last few years. In June 2021, we updated the asset allocation to have one set of asset class policy targets versus having interim and long-term targets. Using a risk-return framework, we marginally shifted our policy targets to maximize our returns with a prudent risk posture. In the next page you can see our current asset class policy targets as well as their respective rebalancing ranges, which were approved at the June 22, 2023 Commission meeting.

CURRENT ASSET ALLOCATION POLICY TARGETS

| Asset Class | Current Asset Class Policy Targets | Rebalancing Ranges | | |
|---|--|-----------------------|--|--|
| US Equity | 16% | 12-19% | | |
| Non-US Equity | 16% | 12-19% | | |
| Private Equity | 1% | | | |
| EQUITY | 33% | | | |
| Fixed Income HighYield FIXED INCOME | 26% 3% 29% | 22-29% 1-7% | | |
| REIT | 3% | 1-7% | | |
| Real Estate | 7% | | | |
| Infrastructure | 5% | | | |
| REAL ASSETS | 15% | | | |
| ABSOLUTE RETURN | 0% | | | |
| CASH | 23% | | | |
| Totals | 100% | | | |

Next, we evaluated options within a risk-return framework. Our goal is to maximize the expected rate of return of the College Illinois trust fund, to help ensure we meet our expected future liabilities per our actuarial assumptions, while being cognizant of the risk posture needed to achieve those returns. Additionally, our goal is to also protect fund assets from drawdown risk as much as possible given the runoff scenario of the fund and the limited window of time. Therefore, the desired return profile is to meet the actuarial rate of return while minimizing the risk needed to achieve the rate of return.

With the few updates in assumptions, the updated asset liability study considers the new cash inflow, cash outflows, Callan's 2024 capital markets assumptions (page 4 of Callan's presentation) and the range of potential asset allocation mixes (page 6 of Callan's presentation). Further, we assume that the program will remain closed to new enrollments. Using such assumptions, the current asset allocation has an expected rate of return of 6.8% with a standard deviation of 7.9%. Please note, by increasing equity allocation from our current target of 32% to 50%, we only gain a marginal increase in the projected rate of return (from 6.8% to 7.3%), while increasing the risk profile from 7.9% to 10.8%. Both investment staff and Callan believe that the potential additional expected rate of return (+0.50%) that we could earn is not worth the extra risk at this point in the life of the fund. When comparing the lowest risk mix (0% Equity) to the highest risk mix (50% Equity) shown in page of the 6 of the Callan presentation, there are a couple of key items to keep in mind:

- As you can see in page 7 of the Callan's presentation, the chance of having negative returns in FY25 increases considerably from 7% to 26% as the percentage of equity increases.
- As you can see in page 8 of the Callan presentation, the probability of having a deficit of \$25 million or more at the end of FY25 also increases considerably from 3% to 22% as the percentage of equity increases.

While considering the lower risk mixes in page 6 of the Callan presentation, we were pleased to see that all the conservative mixes are projected to exceed the FY25 actuarial assumption of 4.714% without having any equity exposure, as the fixed income asset class expected rates of return have increased due to the Federal Reserve interest rate hikes over the past two years.

Given the attractive projected rate of return of 5.5% (relative to the assumed rate of return of 4.71%) for the lowest risk mix, we decided to explore if we could find an alternative to reduce the portfolio projected risk (3.7% standard deviation) even further, to avoid drawdown risk while maintaining a similar rate of return. After much thoughts and consideration, we considered substituting the fixed income allocation which is typically used to derisk portfolios, with risk free treasury securities given the high interest rates we are able to lock in as of now. Furthermore, the lowest risk mix (0% Equity and 82% cash) has very desirable downside protection characteristics (only 1% chance of negative returns in FY25 and 1% chance of a deficit of 25 million or more at the end of FY25) as can be seen in pages 12 and 13 of the Callan's presentation. Because of this favorable interest rate environment, we took this idea a step further and considered doing a treasury laddered portfolio, which from our perspective is a good solution to meet the projected liabilities for the College Illinois! program with the lowest level of risk possible.

The College Illinois! fund assumed net investment return and discount rates are reduced by 0.286% in yearly increments from 4.714% (for FY25) to the ultimate rate of 3.00% (for FY31 and thereafter), as can be seen below.

| Year Ending 6/30 | Assumed Net Rate of Return |
|------------------------|-------------------------------------|
| | |
| 2023 | |
| 2024 | 5.000% |
| 2025 | 4.714% |
| 2026 | 4.429% |
| 2027 | 4.143% |
| 2028 | 3.857% |
| 2029 | 3.571% |
| 2030 | 3.286% |
| 2031 | 3.000% |

Given the assumed discount rates shown above, we believe that building a U.S. Treasury laddered portfolio based on the current Treasury Par Yield Curve Rates shown below, should easily meet the programs projected obligations and modestly improve the funded ratio overtime as long as tuition inflation remains within our projections. The current treasury yield rates for all periods under consideration are well in excess of the actuarial assumed rate of return for all future years, therefore we feel very strongly about this proposal.

| Date | 1 Mo | 2 Mo | 3 Mo | 4 Mo | 6 Mo | 1 Yr | 2 Yr | 3 Yr | 5 Yr | 7 Yr | 10 Yr | 20 Yr | 30 Yr |
|-----------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 4/19/2024 | 5.49 | 5.51 | 5.45 | 5.44 | 5.39 | 5.17 | 4.97 | 4.81 | 4.66 | 4.65 | 4.62 | 4.83 | 4.72 |

We want to highlight that the Treasury laddered portfolio we are considering implementing could potentially at times show a temporary reduced or negative rate of return in a rising interest rate environment. But we are not too concerned about this potential headwind as we plan to hold those securities until maturity, by which time we would earn the yields that we had locked in at the time of the purchases. If we end up pursuing this proposal it will be similar to an LDI (Liability-driven investing) strategy, which disadvantage is that it offers lower returns compared to riskier investments such as equities if you have a long investment horizon.

Please note, at this point in time approximately 18% of the trust fund portfolio is tied up in illiquid investments and we plan to continue working with the managers to maximize the value of these assets. Investment staff wanted to understand the potential impact of having zero returns from the illiquid investments over the next 7 years, and we estimated that it would potentially increase the deficit of the fund by approximately \$7 million. Because this part of the portfolio could be exposed to drawdown risk or some losses in the future, we want to make sure that the Investment Committee and Commission are aware of such risks, as that could significantly impact our funded ratio in the future.

Additionally, once the illiquid investments are monetized in the near future, we might have to deploy such proceeds to fixed income (or other asset classes) if the treasury yields are much lower at that point in time. Therefore, we should consider having very wide rebalancing ranges for the fixed income asset class in particular, to be able to manage successfully that potential scenario. Please note, if treasury yields remain at attractive levels (like today) by the time we received the illiquid investments proceeds, then we will likely recommend investing such money into treasury securities too, as we are recommending today.

To simplify the analysis and evaluation of the various options or asset mixes, we recommend taking a step back to reflect on: what we would like to achieve?

The key is to generate a rate of return that exceeds our actuarial rate of return assumptions with the lowest risk profile possible. Therefore, investment staff along with the Callan team narrowed down our options to three asset mixes based on the fund expected returns, risk profile and liquidity needs, which can be seen in page 15 of Callan's presentation and in the table below. Importantly, in all of the final asset mixes selected, the asset allocation would be highly conservative relative to our current asset allocation given the information noted above.

| Asset Class | Mix 1 | Mix 2 | Mix 3 | |
|----------------------|-------|-------|-------|--|
| Domestic Equity | 0% | 0% | 2% | |
| International Equity | 0% | 0% | 0% | |
| Fixed Income | 0% | 2% | 2% | |
| High Yield | 3% | 3% | 3% | |
| REIT | 0% | 0% | 0% | |
| Absolute Return | 0% | 0% | 0% | |
| Real Estate | 10% | 10% | 10% | |
| Infrastructure | 5% | 5% | 5% | |
| Private Equity | 0% | 0% | 0% | |
| Cash | 82% | 80% | 78% | |

| Expected Return (1-year) | 5.24% | 5.25% | 5.33% |
|--------------------------|-------|-------|-------|
| RisK | 2.25% | 2.27% | 2.47% |

- Asset Mix 1 chooses the most conservative path where we reduce risk as much as possible excluding our illiquid exposure and invest most of the money in treasury securities risk free, while still exceeding the assumed rate of return.
- Asset Mix 2 chooses another rather conservative option (very similar to Mix 1) that keeps a modest allocation to fixed income (2%) to be able to address the illiquid monetization proceeds in the future if needed, while also exceeding the assumed rate of return. The risk/return profiles of Mix 1 and 2 are almost identical as can be seen above.
- Asset Mix 3 is also rather similar to Mix 1 and 2, but it adds a 2% allocation to US Equities in case we ever need to redeploy in this asset class in the future. We believe this is an unlikely event, but we are trying to contemplate all possible scenarios and potential risks as part of this analysis and review process.

There are pros and cons to each of the three mixes shown above and therefore we wanted to get the perspective from the Investment and Commissioners on these options.

We reviewed in general terms the derisking proposal at the joint meeting of Investment Advisory Panel, Investment Committee and Commission on Thursday, April 18, 2024. We had a very healthy debate about this proposal and its potential positive ramification for the College Illinois! program and the State of Illinois. Generally, the consensus from Investment Advisory Panel, Investment Committee and Commission appeared to be supportive for the derisking plan. At that meeting, all participants agreed that the Investment Committee and Commission would meet again on Monday, April 22, 2024 to review in detail the proposal, which we are doing today.

Investment staff has reviewed in detail the proposal individually with a majority of the Investment Advisory Panel and Investment Committee members, who have expressed support for this proposal. Additionally, investment staff has also

reviewed in detail the proposal individually with some of the Commissioners, who have also expressed support for this proposal. Investment staff also reviewed in detail the proposal with the Executive Director and Chair of the Commission, who have expressed support for this proposal.

After choosing a desirable asset mix that reflects the Commission's risk tolerance and other considerations, the policy benchmark for the investment portfolio would need to be updated to reflect the new policy targets for the asset classes and its respective indices shown below.

| Asset Class | Index |
|----------------|--------------------------|
| US Equity | Wilshire 5000 |
| Non-US Equity | MSCI ACWI ex USA |
| Private Equity | Wilshire 5000 |
| Fixed Income | Bloomberg U.S. Aggregate |
| High Yield | BofA MLHY Master II |
| REIT | MSCI US REIT |
| Real Estate | NREIF ODCE |
| Infrastructure | 90-day T Bills + 4% |
| Cash | 90-day T-Bills |

<u>Action requested</u>: For the Investment Committee to recommend and the Commission to approve the asset mix that reflects the Investment Committee and Commission's risk tolerance.