College Illinois!® Prepaid Tuition Program

2023 Experience Review
for the Nine-Year Period
July 1, 2014, to June 30, 2023

P: 312.456.9800 | www.grsconsulting.com

May 22, 2024

Mr. Eric Zarnikow
Executive Director
Illinois Student Assistance Commission
1755 Lake Cook Road
Deerfield, IL 60015-5209

Re: College Illinois!® Prepaid Tuition Program Experience Study for the Nine-Year Period Ending June 30, 2023

Dear Mr. Zarnikow:

In accordance with the request of the Illinois Student Assistance Commission ("ISAC"), Gabriel, Roeder, Smith & Company ("GRS") has performed a review of the actuarial assumptions used in the annual actuarial soundness valuation of the College Illinois!® Prepaid Tuition Program ("CIPTP").

The primary purpose of this study is to determine the continued appropriateness of the current actuarial assumptions by comparing actual experience to expected experience. Our study was based on census information (as provided by CIPTP Staff) and annual actuarial soundness valuations for the period from July 1, 2014, to June 30, 2023. Although the term "actuarial soundness" is not specifically defined, the purpose of an actuarial soundness valuation is to evaluate the financial status of the prepaid tuition program as of the valuation date.

Our study includes a review of the experience associated with the following actuarial assumptions:

- Inflation and the Investment Rate of Return;
- Tuition and Fee Increase Assumption;
- Asset Valuation Method;
- Rates of Cancellation Before and After Projected College Entrance Year;
- Rates of Cancellation After Matriculation;
- Rates of Matriculation At and Beyond Projected College Entrance Year;
- Utilization of Benefits – Applies Both to Contracts In and Not Yet In Payment Status;
- Mortality and Disability;
- Weighted Average Tuition and Bias Load;
- Administrative Expenses; and
- Truth in Tuition.

Section I contains a summary of the actuarial assumption review. The detailed results of our analysis are set forth in Section II of this report. Section III contains the cost impact to the CIPTP as a result of the recommended assumption modifications. Finally, Section IV contains a summary of all proposed assumptions.

The results of the experience study and recommended assumptions set forth in this report are based on the data and actuarial techniques and methods previously described, and upon the provisions of CIPTP as of the most recent valuation date of June 30, 2023. This assumption review is based on data provided by CIPTP for the annual actuarial valuations. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Based on these items, we certify these results to be true and correct.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

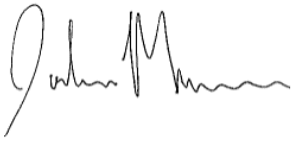
Alex Rivera, James R. Sparks, and Joshua Murner are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera, FSA, EA, MAAA, FCA
Senior Consultant

James R. Sparks, ASA, MAAA, FCA
Consultant



Joshua Murner, ASA, MAAA
Senior Analyst

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Background

For prepaid tuition plans, actuarial assumptions are selected that are intended to provide reasonable estimates of future expected experience, such as projected matriculation date, utilization of benefits, probability of cancellation, contract terminations, disability, and mortality. These assumptions, together with the beneficiary census data and the plan provisions, are used to determine the present value of future benefits. The actual cost of the plan over time will be the actual tuition and fee benefit payments and expenses required by the plan's provisions for the beneficiaries under the plan, less contract holder contributions and net investment earnings. To the extent actual experience deviates from the assumptions, experience gains and losses will occur. These gains (losses) then serve to reduce (increase) future actuarially determined deficits and increase (reduce) the funded ratio. The actuarial assumptions should be individually reasonable and consistent in the aggregate, and should be reviewed periodically to ensure that they remain appropriate.

Because no generally accepted standards of practice have evolved within the actuarial profession that specifically address prepaid tuition programs, we look to the Actuarial Standards of Practice ("ASOP") that are used for retirement systems for guidance. The specific ASOPs that provide guidance on measuring the costs of financing a retirement program include the following:

(1) ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions;*
(2) ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations;*
(3) ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations;*
(4) ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations; and*
(5) ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations.*
(6) ASOP No. 56, *Modeling*

The recommendations provided in this report are consistent with relevant guidance in the preceding actuarial standards of practice.

ASOP No. 27 provides guidance related to selecting and recommending economic assumptions, including the investment return, discount rate, inflation, and any other related economic assumptions.

In developing specific actuarial assumptions, ASOP No. 27 requires the actuary to follow a general process of:

(1) Identifying the components of the assumption;
(2) Evaluating relevant data;
(3) Considering specific and general factors related to the measurement; and
(4) Selecting a reasonable assumption.

In evaluating relevant data, the actuary should include appropriate recent and long-term historic data, but not give undue weight to recent experience.

Further, under ASOP No. 27, an assumption is considered reasonable if:

- It is appropriate for the purpose of the measurement;
- It reflects the actuary's professional judgment;
- It takes into account historical and current economic data that is relevant as of the measurement date;
- It reflects the actuary's estimate of future experience, the actuary's observation of the estimates inherent in market data, or a combination thereof; and
- It has no significant bias (i.e., it is not significantly optimistic or pessimistic), except when provisions for adverse deviation or plan provisions that are difficult to measure are included.

Also according to the ASOP No. 27, the actuary should recognize the uncertain nature of the items for which assumptions are selected and, as a result, may consider several different assumptions reasonable for a given measurement. The actuary should also recognize that different actuaries will apply different professional judgment and may choose different reasonable assumptions. As a result, a narrow range of reasonable assumptions may develop both for an individual actuary and across actuarial practice.

Assumptions Reviewed

The actuarial assumptions are usually divided into several categories:

- Economic assumptions, including the following:
    - Assumed rate of price inflation (as measured by the change in the Consumer Price Index for all urban consumers)
        - Underlies all other economic assumptions
    - Assumed long-term rate of return on investments
        - Rate at which projected benefits are reduced to present value
    - Assumed rate of tuition and fee increases
        - Rate at which projected benefits grow

The economic assumptions are generally chosen on the basis of the actuary's expectations as to the effect of future economic conditions on the operation of the plan, with input from Staff, the Board and other investment advisors.

- Demographic assumptions, including the following:
    - Rates of cancellation before and after projected college entrance year
    - Rates of cancellation after matriculation
    - Rates of matriculation at and beyond qualifying year
    - Utilization of benefits – applies both to contracts in and not yet in payment status
    - Contract terminations
    - Mortality and disability

- Other assumptions and methods, including the following:

    - Weighted Average Tuition (WAT) and bias loads
    - Administrative expenses
    - Truth in Tuition
    - Asset valuation method

Demographic and other assumptions are generally based on the plan's own experience, taking into account emerging trends.

The accuracy and extent of the data is an important consideration in assessing demographic and other experience. While the accuracy of the data for this study was deemed reliable, the data is only reviewed for year-to-year consistency and was not audited.

Key Findings and Recommendations

Gabriel, Roeder, Smith & Company ("GRS") has performed a review of the actuarial assumptions used in the annual actuarial soundness valuation of the College Illinois!® Prepaid Tuition Program ("CIPTP"). The primary purpose of the study is to determine the continued appropriateness of the current actuarial assumptions by comparing actual experience to expected experience. Our study was based on census information as provided by CIPTP Staff and annual actuarial soundness valuations for the period from July 1, 2014, to June 30, 2023.

Following is a summary of our key findings and recommendations:

- **Price inflation**: We recommend maintaining the price inflation assumption from 2.50 percent.
- **Investment return**: We recommend:
    - Maintaining the select and ultimate investment return assumption rate structure at 5.00 percent, net of investment expenses, in fiscal year 2024 grading down to 3.00 percent in 2031; and
    - Continuing to monitor the investment return assumption annually and update as necessary.
- **Tuition and fee increases**: We recommend:
    - Maintaining the current assumption of 4.25 percent for future assumed tuition and fee increases; and
    - Continuing to monitor the tuition and fee increase assumption annually and update as necessary.
- **Rates of cancellation before and after projected college entrance year:** We recommend updating the rates to reflect recent experience.

Experience Review Analysis

- **Rates of cancellation after matriculation:** We recommend adding an assumption that contract holders cancel their contract after they've already matriculated to reflect experience.
- **Probability of matriculation at or beyond projected college entrance year:** We recommend updating the rates to reflect recent experience.
- **Utilization of benefits that applies both to contracts in and not yet in payment status:** We recommend changes to the utilization or "usage rates" to reflect recent experience.
- **Mortality and Disability**: We recommend maintaining the current assumption of no provision for death and disability.
- **Weighted Average Tuition (WAT) Bias Load**: To reflect recent experience for contracts, we recommend:
    - Decreasing the Bias Load on the Community College WAT from 5.5 percent to 0.0 percent,
    - Decreasing the Bias Load on the University WAT from 2.5 percent to -3.0 percent,
    - Increasing the Bias Load on the University Plus WAT from 0.0 percent to 3.0 percent, and
    - Decreasing the Bias Load on the Legacy WAT from 4.0 percent to 0.0 percent.

  Significant changes in the recommended bias load assumptions were a result of additional methodology changes in the calculation of bias. These methodology changes are discussed later in the report.
- **Administrative Expenses**: We recommend maintaining the assumption that first year administrative expenses will decrease at the same rate as the actual decrease from the prior year and then decrease at the rate of the decrease in the present value of benefits, thereafter. For future actuarial valuations, we recommend collecting data on fixed and variable expenses and updating the Administrative Expenses assumption.
- **Truth in Tuition**: We recommend maintaining the current assumption pertaining to Truth in Tuition.
- **Asset Valuation Method**: We recommend no change to the current method of using the market value of assets plus the present value of expected future contributions from current members for the actuarial valuation assets.
- **Contract Transfer:** For future actuarial valuations, we recommend collecting data and reviewing experience for contract transfers to another eligible relative.

Experience Review Analysis

The impact of adopting the recommended assumptions would have had as of the June 30, 2023, Actuarial Soundness Valuation is summarized in the table below:

Valuation Date: June 30, 2023	Current	Proposed	Change
Membership Summary:			
Counts			
Not yet Matriculating	8,735	8,735	
Matriculating	9,991	9,991	
Total	18,726	18,726	
Average years until Enrollment if Not yet Matriculating	2.3	2.3	
Assets [1]			
· Actuarial Value of Assets (AVA)	$564,715,923	$564,750,156	$34,234
· Estimated Return on MVA	6.05%	6.05%	
Actuarial Liabilities (Present Value of Future Tuition Payments, Fees, and Administrative Expenses)	$559,928,714	$534,682,828	($25,245,886)
Deficit/(Surplus)	($4,787,209)	($30,067,328)	($25,280,120)
Funded Ratio	100.9%	105.6%	4.8%

[1] *Asset values include the expected present value of future contract payments from current contract holders.*

The decrease in the actuarial liabilities is mainly attributable to the updated benefit utilization rates, bias load, and the addition of cancellation after matriculation rates. This decrease in actuarial liabilities results in the funded ratio of the Program increasing by 4.7 percentage points from 100.9 percent to 105.6 percent.

The addition of the cancellation after matriculation assumption is the main driver for the increase in the projected benefit payments in year 2033 and thereafter (see the following page). Contract holders are assumed to receive benefits that are greater than or equal to the member's account balance, and any additional funds left after utilization of benefits are assumed to be refunded to the contract holder. For contracts purchased prior to the 2013/2014 enrollment period, account balances receive 2 percent annual interest.

Experience Review Analysis

Projection of Tuition Payments, Refund, Fees, and Administrative Expenses (Closed Group)			
Year	Current	Proposed	Change
2024	$108,185,673	$111,425,060	$3,239,387
2025	100,418,273	98,368,974	(2,049,298)
2026	92,752,380	84,239,212	(8,513,169)
2027	84,924,773	70,821,449	(14,103,324)
2028	68,634,839	58,202,186	(10,432,654)
2029	49,137,691	45,547,315	(3,590,375)
2030	39,873,936	34,702,809	(5,171,127)
2031	29,778,844	26,186,586	(3,592,258)
2032	23,457,024	19,985,345	(3,471,678)
2033	15,607,155	17,067,185	1,460,031
2034	14,234,586	14,952,616	718,030
2035	9,744,241	12,159,814	2,415,572
2036	7,363,354	10,395,002	3,031,648
2037	5,268,143	8,375,533	3,107,391
2038	3,753,256	7,266,741	3,513,485
2039	2,620,462	5,165,765	2,545,303
2040	1,665,641	3,612,311	1,946,670
2041	1,038,266	2,443,829	1,405,564
2042	699,107	1,672,006	972,898
2043	436,799	1,049,903	613,103
2044	259,300	565,726	306,426
2045	154,573	338,795	184,221
2046	103,544	190,275	86,731
2047	29,793	84,771	54,978
2048	16,702	42,341	25,638
2049	8,260	22,835	14,575
2050	3,838	11,610	7,771
2051	1,853	3,278	1,425
2052	834	1,593	758
2053	314	547	233
2054	63	189	125
2055	26	42	16
2056	7	0	(7)
2057	0	0	0
2058	0	0	0
2059	0	0	0
2060	0	0	0

SECTION II

EXPERIENCE ANALYSIS RESULTS

Economic Assumptions

Economic assumptions reflect the effects of economic forces on the projections of tuition and fees payable from the plan and in the discounting of those tuition and fees to present value.

These assumptions are based, at their core, on the assumed level of price inflation. Each economic assumption is then developed from expected spreads over price inflation. Since price inflation is relatively volatile and is subject to a number of influences not based on recent history, these assumptions are less reliably based on recent past experience than are the demographic assumptions.

The key economic assumptions are:

1. Assumed Rate of Inflation – The rate of price inflation (as measured by the Consumer Price Index for all Urban consumers) which underlies the remainder of the economic assumptions.
2. Assumed Rate of Investment Return – The rate at which projected future benefits under the system are reduced to present value.
3. Rate of Tuition and Fee Increases – This reflects inflationary forces on tuition and fees.

Inflation

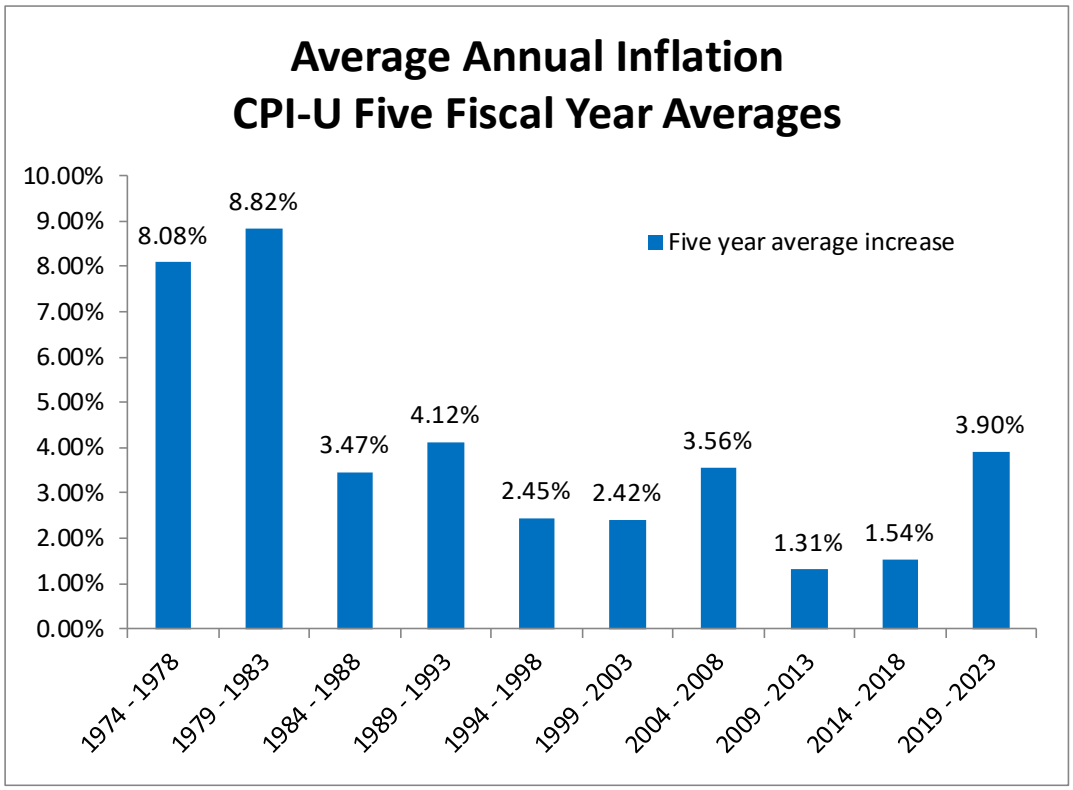
By "inflation," we mean price inflation, as measured by annual increases in the Consumer Price Index ("CPI"). This inflation assumption underlies all of the other economic assumptions we employ. It not only impacts investment return, but also tuition and fee increases.

Over the five-year period from June 2018 through June 2023, the CPI-U has increased at an average rate of 3.90 percent. However, the assumed inflation rate is only weakly tied to past results. The following table shows the annual rate of inflation for the last 5 years (June to June) and the average inflation over various longer periods, ending June 2023.

Fiscal Year	Annual Increase in CPI-U
2018-19	1.65%
2019-20	0.65%
2020-21	5.39%
2021-22	9.06%
2022-23	2.97%
3-Year Average	5.78%
5-Year Average	3.90%
10-Year Average	2.71%
20-Year Average	2.57%
30-Year Average	2.52%
40-Year Average	2.84%
50-Year Average	3.94%

Economic Assumptions

The graph below shows the average inflation (June to June) over 5-year periods over the last 50 years:



As the above chart illustrates, the high inflation of the 1970s and early 1980s is well in the past. The geometric average annual increase in price inflation was 2.52 percent per year over the last 30 years from June 1993 to June 2023, 2.57 percent over the last 20 years, and 2.71 percent over the last 10 years.

We surveyed the inflation assumption used by nationally recognized firms (investment consultants, asset managers, and insurance companies) across the country. In our sample of these firms, the inflation assumption ranged from 2.26 percent to 2.90 percent, with an average of 2.52 percent.

Another point of reference is the Social Security Administration's (SSA) 2023 Trustees Report, in which the Office of the Chief Actuary is projecting a long-term average ultimate annual inflation rate of 1.80 percent in the high cost projection scenario, 2.40 percent under the intermediate cost projection scenario and 3.00 percent in the low-cost projection scenario. The Social Security Trustees report uses the ultimate rates for their 75-year projections, much longer than the longest horizon we can discern from Treasuries and TIPS.

The table on the following page presents a summary of inflation rate forecasts from various professional experts.

Economic Assumptions

Forward-Looking Price Inflation Forecasts[a]	
Congressional Budget Office[b]	
5-Year Annual Average	2.83%
10-Year Annual Average	2.57%
Federal Reserve Bank of Philadelphia[c]	
5-Year Annual Average	2.60%
10-Year Annual Average	2.40%
Federal Reserve Bank of Cleveland[d]	
10-Year Expectation	2.28%
20-Year Expectation	2.33%
30-Year Expectation	2.39%
Federal Reserve Bank of St. Louis[e]	
10-Year Breakeven Inflation	2.18%
20-Year Breakeven Inflation	2.42%
30-Year Breakeven Inflation	2.19%
U.S. Department of the Treasury[f]	
10-Year Breakeven Inflation	2.09%
20-Year Breakeven Inflation	2.37%
30-Year Breakeven Inflation	2.19%
50-Year Breakeven Inflation	2.29%
100-Year Breakeven Inflation	2.36%
Social Security Trustees[g]	
Ultimate Intermediate Assumption	2.40%

[a] **End of the Fourth Quarter, 2023**. Version 2024-01-25 by Gabriel, Roeder, Smith & Company

[b] *The Budget and Economic Outlook: 2023 to 2033* , Release Date: February 2023, Consumer Price Index (CPI-U), Percentage Change from Year to Year, 5-Year Annual Average (2023 - 2027), 10-Year Annual Average (2023 - 2032).

[c] *Fourth Quarter 2023 Survey of Professional Forecasters* , Release Date: November 13, 2023, Headline CPI, Annualized Percentage Points, 5-Year Annual Average (2023 - 2027), 10-Year Annual Average (2023 - 2032).

[d] Inflation Expectations, Model output date: December 1, 2023.

[e] The breakeven inflation rate represents a measure of expected inflation derived from X-Year Treasury Constant Maturity Securities and X-Year Treasury Inflation-Indexed Constant Maturity Securities. Observation date: December, 2023.

[f] The Treasury Breakeven Inflation (TBI) Curve, Monthly Average Rates, December, 2023.

[g] *The 2023 Annual Report of The Board of Trustees of The Federal Old-Age And Survivors Insurance and Federal Disability Insurance Trust Funds* , March 31, 2023, p. 10, Key Assumptions and Summary Measures for the Last 65 Years of the Long-Range (75-year) Projection Period, Intermediate, Consumer Price Index (CPI-W).

Based on this information, we believe it would be reasonable to maintain the current inflation assumption of 2.50 percent. We believe a reasonable mid-term inflation assumption will likely fall in the range of 2.10 percent and 2.80 percent, although we recognize inflation may fall outside this range over the next few years.

Investment Return

ASOP 27

As previously stated, actuaries are required to comply with Actuarial Standard of Practice No. 27 (ASOP No. 27) in setting economic assumptions for retirement plans, including the assumed investment return rate. Although no specific actuarial standards are prescribed for prepaid tuition plans, we believe the provisions of ASOP No. 27 can serve as a general guideline.

In a prepaid tuition plan like CIPTP, it is ultimately the Board's responsibility to approve the actuarial assumptions used in the actuarial valuations. It is the actuary's duty to provide the Board with information needed to make those decisions and to make recommendations to the Board. Although the Board is the ultimate decision-making body, we are still bound by actuarial standards of practice when providing advice or recommendations to the Board.

The assumed rate of investment return is used as the discount rate to determine the present value of the Plan's obligations. It is important to note that an actuarial investment return assumption based on expected future experience is a single estimate for all years and therefore implicitly assumes that returns above and below expectations will "average out" over time. In other words, the expected risk premium is reflected in the assumed rate of investment return in advance of being earned, while the investment risk is not reflected until actual experience emerges with each actuarial valuation.

The review of the investment return assumption in this report considers forward-looking measures of likely investment return outcomes for the asset classes in the current Plan's investment policy. For purposes of this analysis, we have used the capital market assumptions from 12 nationally recognized firms (investment consultants, asset managers, and insurance companies) in our analysis of the System's investment return assumption.

Our analysis is performed using the GRS Capital Market Assumption Modeler (CMAM) tool. We update the CMAM tool each year. The capital market assumptions in the 2023 CMAM are from the following 12 firms (in alphabetical order): Aon Hewitt, Blackrock, BNY Mellon, Callan, Cambridge, JPMorgan, Meketa, Mercer, NEPC, RVK, Verus, and Wilshire. We believe that the benefit of using capital market expectations from multiple firms is that we can identify the uncertain nature of the items affecting the selection of the investment return assumption. While there may be differences in asset classes, investment horizons, inflation assumptions, treatment of investment expenses, excess manager performance (i.e., alpha), etc., we align the various capital market assumption sets from the 12 different firms in our model to best fit the Fund's investment policy (i.e., target asset allocation) as consistently as possible. The investment horizon for the capital market assumption sets used in this analysis is between 5 and 10 years.

To the best of our ability, we have adapted the Plan's current investment mix to fit with the various investment firms' assumptions, adjusting for these known differences in asset classes and methodology.

Economic Assumptions

To the best of our knowledge, all returns in the following charts are net of passive investment expenses and have no assumption for excess manager performance (alpha) in excess of active management fees. Importantly, the information in this report is not intended to be construed as investment advice.

Real Return

The allocation of assets within the universe of investment options will significantly impact the overall performance. Therefore, it is meaningful to identify the range of expected returns based on each Plan's targeted allocation of investments and an overall set of capital market assumptions.

Based on information provided by Staff, following is a table with the Plan's current target asset allocations:

Asset Category	Current Target
U.S. Equity	16%
Non U.S. Equity	16%
Fixed Income	26%
High Yield	3%
REIT	3%
Real Estate	7%
Infrastructure	5%
Private Equity	1%
Cash	23%
Total	**100%**

The arithmetic expected return developed from this asset allocation is shown in the following tables. The CMAM begins with the nominal expected return from each consultant (column 2), takes out each consultant's price inflation assumption (column 3) to arrive at the real return (column 4). We then incorporate the recommended price inflation assumption of 2.50 percent (column 5) to get the expected nominal return (column 6). Note that the arithmetic return is in general higher than the median return due to compounding effect of random returns. In general, the difference between the arithmetic and median return will be larger for larger standard deviation of returns. We have shown the standard deviation of returns as the investment risk in column 7.

ASOP No. 27 acknowledges that for any given economic assumption, there is a reasonable range of opinions on that assumption. This is evident from the summaries we show from our CMAM.

Economic Assumptions

Capital Market Assumption Set (CMA)	CMA Expected Nominal Return	CMA Inflation Assumption	Expected Real Return (2)–(3)	Actuary Inflation Assumption	Expected Nominal Return (4)+(5)	Standard Deviation of Expected Return (1-Year)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	5.44%	2.90%	2.54%	2.50%	5.04%	7.30%
2	5.51%	2.50%	3.01%	2.50%	5.51%	7.47%
3	6.17%	2.90%	3.27%	2.50%	5.77%	7.63%
4	5.84%	2.51%	3.32%	2.50%	5.82%	7.73%
5	6.17%	2.50%	3.67%	2.50%	6.17%	7.74%
6	6.12%	2.31%	3.81%	2.50%	6.31%	7.86%
7	6.45%	2.62%	3.83%	2.50%	6.33%	7.38%
8	6.32%	2.41%	3.91%	2.50%	6.41%	7.68%
9	6.30%	2.26%	4.03%	2.50%	6.53%	7.71%
10	6.74%	2.54%	4.20%	2.50%	6.70%	7.79%
11	6.54%	2.28%	4.27%	2.50%	6.77%	8.17%
Average	**6.14%**	**2.52%**	**3.62%**	**2.50%**	**6.12%**	**7.68%**

The average expected nominal return from column 6 is 6.12 percent. This is the average arithmetic rate of return.

Note that the arithmetic rate of return represents the average future expected return which is higher than the median future expected return. Setting the actuarial valuation assumption at the arithmetic expected return ignores the downward effect of volatility on the accumulation of assets. Consequently, the probability of actually achieving the actuarial assumption compounded over time is less than 50 percent if it is set at the arithmetic expectation.

The next step in our analysis is to compare the probabilities of achieving returns over a 10-year horizon. We compute the 40th, 50th, and 60th percentiles of returns as well as the probability of achieving the current fiscal year 2024 assumption of 5.00 percent based on a price inflation assumption of 2.50 percent over a 10-year horizon. Note that the investment horizon for the capital market assumption sets used in this analysis is between 5 and 10 years. For purposes of this analysis, no adjustment has been made to return expectations for longer time horizons. This implies that later years are expected to have the same distribution of returns as the first 10 years. A different assumption would result in a different distribution of returns.

Capital Market Assumption Set (CMA)	Distribution of 10-Year Average Geometric Net Nominal Return			Probability of exceeding 5.00%
	40th	50th	60th	
(1)	(2)	(3)	(4)	(5)
1	4.21%	4.79%	5.37%	46.32%
2	4.65%	5.24%	5.84%	54.13%
3	4.89%	5.50%	6.11%	58.21%
4	4.93%	5.54%	6.16%	58.85%
5	5.27%	5.89%	6.51%	64.27%
6	5.39%	6.02%	6.65%	66.05%
7	5.48%	6.07%	6.66%	67.82%
8	5.52%	6.13%	6.75%	68.13%
9	5.64%	6.26%	6.87%	69.87%
10	5.80%	6.42%	7.05%	72.01%
11	5.81%	6.46%	7.11%	71.58%
Average	**5.24%**	**5.85%**	**6.46%**	**63.39%**

The 50th percentile return is also related to the geometric average return. The geometric average of a sequence of returns over a number of years is the compound average of those returns over the number of years compounded. As the number of years in the geometric average increase and if the distributions of returns each year are independent and identically distributed, then the geometric average will converge to the median return. The median return is also a reasonable rate of return for purposes of the actuarial valuation. The average of 50th percentile returns (based on the recommended price inflation assumption of 2.50 percent) is 5.85 percent.

Column 5 of the table above shows the estimated probability of achieving the current assumed rate of return assumption of 5.00 percent over a 10-year period (based on the recommended price inflation assumption of 2.50 percent and the capital market assumptions from the investment consultants, most of which are based on investment horizons of between 5 and 10 years). The average probability of achieving the current assumption over 10 years based on these assumptions is about 63 percent.

Closed Plan De-Risking

The CIPTP assumption includes a select-and-ultimate structure to recognize that a closed plan with no new contracts will have increasing negative cash flow and is expected to require a change to the asset allocation over time. In an open plan, the asset pool will grow in real terms for decades. In a closed plan, the asset pool may grow for a period, but if all assumptions are met exactly, the fund balance will decline to $0 when the last dollar in benefits is paid. The growth and eventual stability of the asset pool in an open plan permits investment risk to be spread across an indefinite future, and therefore allows long term investment in a diversified portfolio. In a closed plan, all of the assets will ultimately be paid out, eventually constraining the asset allocation and driving it toward a fixed income allocation.

Economic Assumptions

Annual Rate of Return Memo

Each year, CIPTP provides a memo prescribing the investment return assumption and providing details and support for the assumption. We rely on CIPTP to set the investment return assumption each year.

The CIPTP has maintained 23 percent cash allocation during the fiscal year 2024 asset allocation review to recognize the need for liquidity being a closed plan. Prescribing an investment return assumption that grades down over the course of several years recognizes the future liquidity needs of CIPTP.

In the fiscal year 2023 memo, the CIPTP investment consultant, Callan, calculated a 5-year geometric return of 5.90 percent which was used to support an assumed fiscal year 2024 investment return assumption of 5.00 percent.

Additionally, the memo explains the 3-year and 5-year municipal bond yields are at 3.03 percent and 3.12 percent, respectively. The municipal bond yield rates were used to support the ultimate return assumption of 3.00 percent that is reached in 2031.

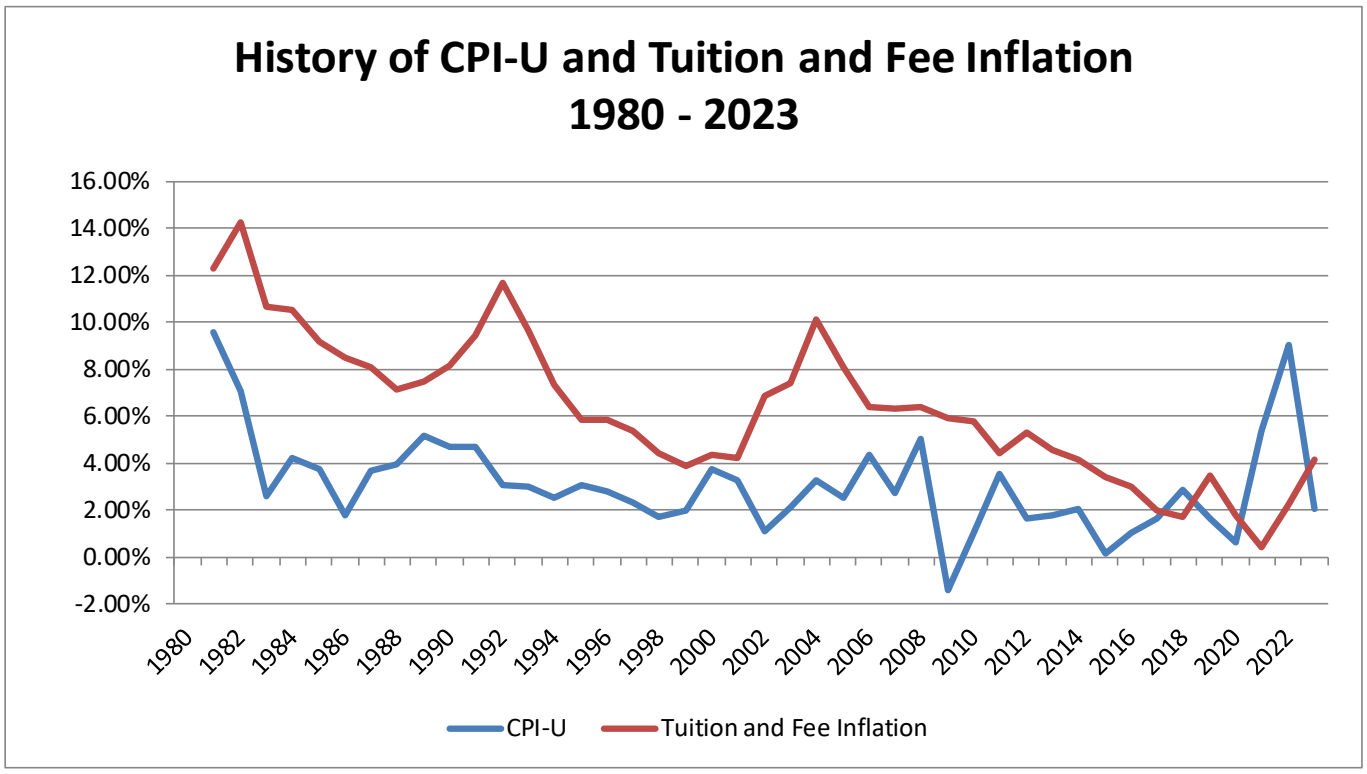
Recommendation

Based on our analysis of the expected investment return and the current target asset allocation, we concur with the investment return assumption prescribed by CIPTP in the fiscal year 2023 memo. We will continue to rely on the CIPTP to set the investment return assumption in future years.

Because contract prices cannot be changed after contracts are sold, we believe it is appropriate to use a more conservative approach in setting the investment return assumption for a prepaid tuition plan, as compared to a pension plan for which higher future contributions can be made for current plan members.

Tuition and Fee Increase Assumption

For the CIPTP actuarial valuation we utilize an actuarial assumption to predict the rate of tuition and fee growth, which is assumed to be higher than the rate of price inflation. The Bureau of Labor Statistics publishes a tuition and fee price index. Increases in tuition and fees have typically exceeded increases in the Consumer Price Index for All urban Consumers ("CPI-U"). The graph below shows the relationship between the CPI-U and Tuition and Fee Increases (June to June).



Since 1980, tuition and fee increases have exceeded CPI-U (June to June) in all years except for 2018, 2021, and 2022. The averages over that period are 6.28 percent for tuition and fees and 3.06 percent for CPI-U resulting in a 3.20 percent spread.

The current assumption is that tuition and fees will increase by 4.25 percent annually. This assumption is prescribed by CIPTP in an annual memo.

Based on the historical statistics on CPI and tuition and fee inflation, we believe that tuition and fees increases will likely exceed CPI increases on average by 1.00 to 3.00 percentage points. Based on our recommended inflation assumption of 2.50 percent, this would result in tuition and fee increases of 3.50 percent to 5.50 percent.

We concur with the tuition and fee inflation assumption prescribed by CIPTP for the June 30, 2023 actuarial soundness valuation. We will continue to rely on the CIPTP to set the tuition and fee inflation assumption in future years.

Economic Assumptions

Below is a summary of gains and losses over the past five years from the actuarial valuation as of June 30, 2023. There were gains from tuition/fee experience in each of the last five years and excluding gains as a result of state fund appropriations into ISAC, tuition/fee experience gains over the last five years make up almost all of the Program's gains for the period ($99.5 million out of $104.3 million).

	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022	June 30, 2023	Total 5-Year Change
Unfunded Liability at Prior Valuation Date	$ 307,711,673	$ 317,491,361	$ 340,312,560	$ 238,281,263	$ 28,006,113	
Projected Unfunded Liability at Valuation Date	$ 326,943,653	$ 336,540,843	$ 359,880,533	$ 250,791,030	$ 29,406,418	
(Gain)/Loss Due to:						
Investment Experience	$ 15,885,182	$ 29,831,698	$ (58,571,581)	$ 76,345,371	$ (6,059,305)	$ 57,431,365
Change in Assumptions	(4,317,928)	2,020,837	(5,170,637)	(11,965,512)	(11,458,863)	(30,892,103)
Tuition/Fee Inflation	(16,543,198)	(17,329,898)	(26,860,166)	(26,830,449)	(11,955,238)	(99,518,949)
Other Demographic Experience *	(4,476,348)	(10,750,920)	(996,886)	(10,334,327)	(4,720,221)	(31,278,702)
Total	$ (9,452,292)	$ 3,771,717	$ (91,599,270)	$ 27,215,083	$ (34,193,627)	$ (104,258,389)
Additional (Gain) from Other State Funds	-	-	(30,000,000)	(250,000,000)	-	(280,000,000)
Unfunded Liability/(Surplus) at Valuation Date	$ 317,491,361	$ 340,312,560	$ 238,281,263	$ 28,006,113	$ (4,787,209)	

** Other Demographic Experience includes deviations in actual contract beneficiary experience from our assumptions related to rates of enrollment and utilization of benefits and contract terminations and refunds. In 2023, also includes changes in expected future administrative expenses compared to projections from the previous actuarial valuation.*

Asset Valuation Method

We recommend no change to the current method of using the market value of assets plus the present value of expected future contributions from current members for the actuarial valuation assets. Using this value for the actuarial valuation assets is appropriate to measure against the liabilities to calculate the surplus or deficit of the Trust.

Demographic and Other Assumptions

The following pages present the analysis of the demographic and other assumptions. These assumptions include projected matriculation date, incidence, and bias of utilization of benefits and probability of cancellation, disability and mortality. These patterns generally take the form of tables of rates of incidence based on age and/or years from actual or expected matriculation date.

Absent any significant changes in benefit provisions, these assumptions generally exhibit reasonable consistency over periods of time. As a result, each demographic assumption is normally reviewed by relating actual experience to that assumed over the recent past.

These are statistical analyses. As a result, following are several considerations to keep in mind as we analyze these assumptions:

1. An actuarial assumption is designed to reflect average experience over periods of time (for example five to twenty years). As a result:

    a. A deviation between actual experience and that expected from our assumptions for one or two years does not necessarily mean that the assumption should be changed.
    b. A change in actuarial assumptions should result if the experience indicates a consistent pattern which is different from that assumed over a period of years.

2. The larger the amount of data available, the more reliable the statistics used in the analysis. As a result:

    a. Events that occur with great frequency (e.g., benefit utilization) are more credibly predictable than those occurring less frequently (e.g., beneficiary death).
    b. In all cases, data covering the entire study period produce more credible results than data for a single year.
    c. Year by year experience is helpful primarily in identifying trends and determining whether the four-year data is truly reflective of the entire period.

This analysis is based on the annual actuarial soundness valuation data for the nine-year period from July 1, 2014, to June 30, 2023. For the cancellation and matriculation rates, the data has been split into the periods July 1, 2014, to June 30, 2019, and July 1, 2019, to June 30, 2023, and reviewed separately based on the different periods. While results are shown in total for the periods studied, experience was reviewed on a year to year basis in case there were anomalies in the results that could influence the total period's experience (e.g., calendar year 2020). This individual year to year experience was considered during the process of developing the proposed new assumptions.

Rates of Cancellation before and after Projected College Entrance Year

We reviewed the cancellation experience for years before and after projected college entrance year for contracts that have not yet matriculated by comparing the unused contract units that were eligible to be cancelled and the actual contract units that were cancelled.

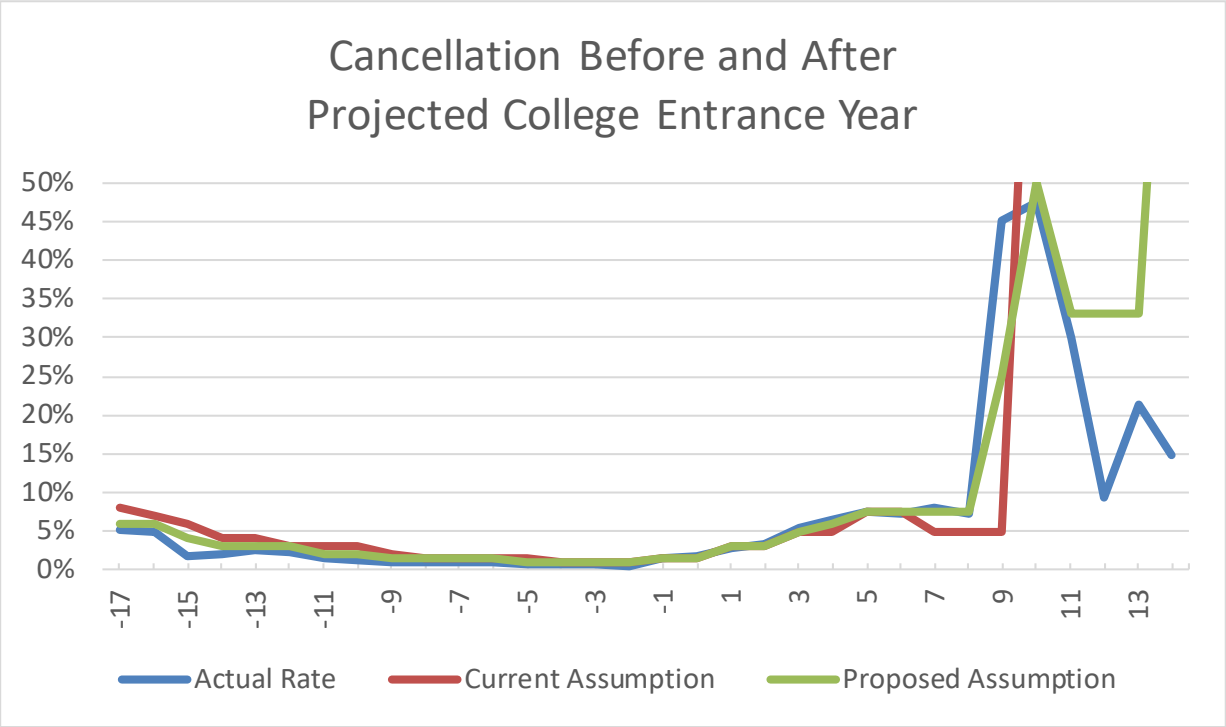
We propose extending the cancellation rates beyond 10 years from the projected college entrance year to reflect recent experience. The data suggests that certain members are reaching the end of the allowable college entrance year and are either deferring the refund year or transferring the remaining contract value to another eligible relative. We recommend monitoring the experience of contract transfers to evaluate the impact to the plan. Future contract transfers may extend the period of tuition payments.

The actual cancellation experience, current assumptions and proposed assumptions from the experience study period are shown in the table below:

	Actual Experience			Current Assumptions			Proposed Assumptions		
Years From Projected College Entrance Year	Exposures	Refund	Actual Rate	Current Rate	Refund	Actual/ Expected	Proposed Rate	Refund	Actual / Expected
-17	451	23	5.1%	8.0%	36	0.6	6.0%	27	0.9
-16	512	25	4.9%	7.0%	36	0.7	6.0%	31	0.8
-15	696	12	1.7%	6.0%	42	0.3	4.0%	28	0.4
-14	1,104	22	2.0%	4.0%	44	0.5	3.0%	33	0.7
-13	1,711	45	2.6%	4.0%	68	0.7	3.0%	51	0.9
-12	2,529	55	2.2%	3.0%	76	0.7	3.0%	76	0.7
-11	3,557	50	1.4%	3.0%	107	0.5	2.0%	71	0.7
-10	4,834	61	1.3%	3.0%	145	0.4	2.0%	97	0.6
-9	6,403	70	1.1%	2.0%	128	0.5	1.5%	96	0.7
-8	8,299	87	1.0%	1.5%	124	0.7	1.5%	124	0.7
-7	10,324	91	0.9%	1.5%	155	0.6	1.5%	155	0.6
-6	12,674	121	1.0%	1.5%	190	0.6	1.5%	190	0.6
-5	14,818	118	0.8%	1.5%	222	0.5	1.0%	148	0.8
-4	16,963	112	0.7%	1.0%	170	0.7	1.0%	170	0.7
-3	19,306	127	0.7%	1.0%	193	0.7	1.0%	193	0.7
-2	21,480	120	0.6%	1.0%	215	0.6	1.0%	215	0.6
-1	23,619	326	1.4%	1.5%	354	0.9	1.5%	354	0.9
0	25,521	438	1.7%	1.5%	383	1.1	1.5%	383	1.1
1	8,606	231	2.7%	3.0%	258	0.9	3.0%	258	0.9
2	5,058	167	3.3%	3.0%	152	1.1	3.0%	152	1.1
3	3,171	174	5.5%	5.0%	159	1.1	5.0%	159	1.1
4	2,069	131	6.3%	5.0%	103	1.3	6.0%	124	1.1
5	1,490	110	7.4%	7.5%	112	1.0	7.5%	112	1.0
6	1,127	81	7.2%	7.5%	85	1.0	7.5%	85	1.0
7	859	69	8.0%	5.0%	43	1.6	7.5%	64	1.1
8	652	47	7.2%	5.0%	33	1.4	7.5%	49	1.0
9	470	212	45.1%	5.0%	24	8.8	25.0%	118	1.8
10	169	80	47.3%	100.0%	169	0.5	50.0%	85	0.9
11	70	21	30.0%	100.0%	70	0.3	33.0%	23	0.9
12	43	4	9.3%	100.0%	43	0.1	33.0%	14	0.3
13	28	6	21.4%	100.0%	28	0.2	33.0%	9	0.7
14+	47	7	14.9%	100.0%	47	0.1	100.0%	47	0.1
Totals:	**198,660**	**3,243**	**1.6%**	**2.0%**	**4,014**	**0.8**	**1.9%**	**3,741**	**0.9**

Negative years represent the period prior to the projected college entrance year and positive years represent the period after the projected college entrance year.

Rates of Cancellation before and after Projected College Entrance Year

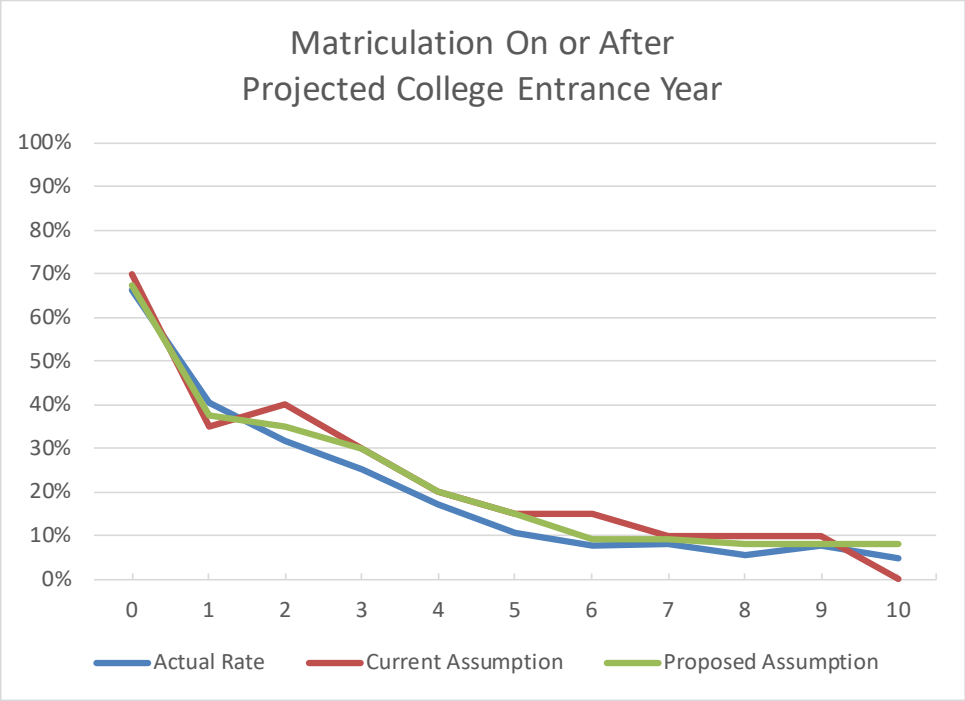


Rates of Matriculation at and beyond Projected College Entrance Year

We developed rates at which the beneficiary transitions into payment status by matriculating. We updated the rates to better reflect observed experience.

The actual matriculation experience, current assumptions, and proposed assumptions are illustrated in the following table.

	Actual Experience			Current Assumptions			Proposed Assumptions		
Years From Projected College Entrance Year	Exposures	Matriculation	Actual Rate	Current Rate	Matriculation	Actual / Expected	Proposed Rate	Matriculation	Actual / Expected
0	25,521	16,943	66.4%	70.0%	17,865	0.9	67.5%	17,227	1.0
1	8,606	3,481	40.4%	35.0%	3,012	1.2	37.5%	3,227	1.1
2	5,058	1,612	31.9%	40.0%	2,023	0.8	35.0%	1,770	0.9
3	3,171	793	25.0%	30.0%	951	0.8	30.0%	951	0.8
4	2,069	357	17.3%	20.0%	414	0.9	20.0%	414	0.9
5	1,490	158	10.6%	15.0%	224	0.7	15.0%	224	0.7
6	1,127	88	7.8%	15.0%	169	0.5	9.0%	101	0.9
7	859	69	8.0%	10.0%	86	0.8	9.0%	77	0.9
8	652	36	5.5%	10.0%	65	0.6	8.0%	52	0.7
9	470	36	7.7%	10.0%	47	0.8	8.0%	38	0.9
10+	357	15	4.2%	0.0%	0		0.0%	0	
Totals:	**49,380**	**23,588**	**47.8%**	**50.3%**	**24,856**	**0.9**	**48.8%**	**24,081**	**1.0**



Rates of Cancellation after Actual College Entrance Year

Cancellation after Matriculation

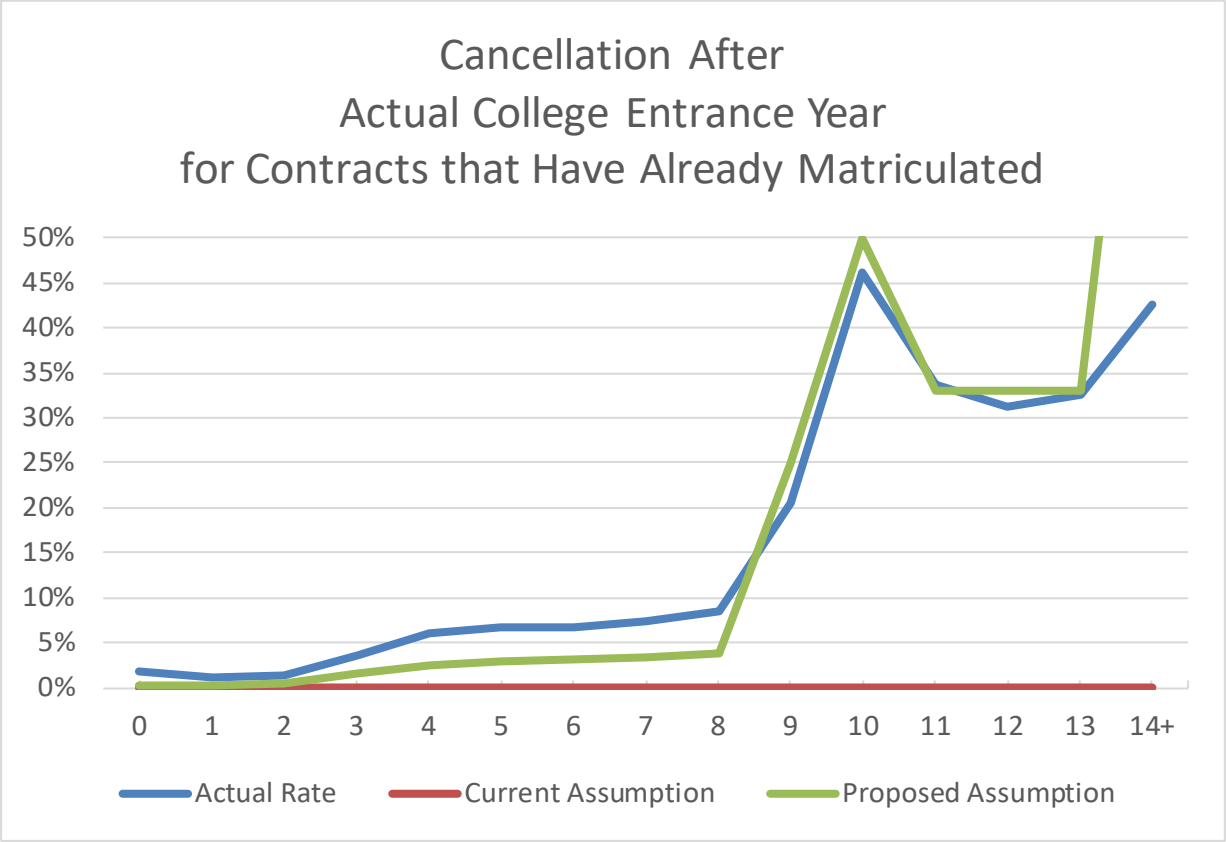
Under the prior assumptions, there was no assumption for contract holders canceling their contracts after they have started receiving benefits (i.e., already matriculated). We have reviewed the actual experience of members canceling their contracts after receiving benefits, and there is a material number of contracts where this occurs to justify an explicit assumption of cancellation after matriculation.

We propose extending the cancellation rates beyond 10 years from the projected college entrance year to reflect recent experience. The data suggests that certain members are reaching the end of the allowable payment period after the initial matriculation year and are either deferring the refund year or transferring the remaining contract value to another eligible relative. We recommend monitoring the experience of contract transfers to evaluate the impact to the plan. Future contract transfers may extend the period of tuition payments.

The actual cancellation experience, current assumptions, and proposed assumptions for members who have started receiving benefits from the experience study period (i.e., already matriculated) are shown in the table below:

	Actual Experience			Proposed Assumptions		
Years From Actual College Entrance Year	Exposures	Refund	Actual Rate	Proposed Rate	Refund	Actual / Expected
0	2,942	52	1.77%	0.25%	7	7.4
1	22,475	241	1.07%	0.25%	56	4.3
2	20,210	294	1.45%	0.50%	101	2.9
3	18,336	663	3.62%	1.50%	275	2.4
4	11,750	716	6.09%	2.50%	294	2.4
5	8,761	587	6.70%	3.00%	263	2.2
6	7,074	469	6.63%	3.25%	230	2.0
7	5,742	429	7.47%	3.50%	201	2.1
8	4,672	396	8.48%	3.75%	175	2.3
9	3,704	760	20.52%	25.00%	926	0.8
10	2,627	1,213	46.17%	50.00%	1,314	0.9
11	1,324	446	33.69%	33.00%	437	1.0
12	821	257	31.30%	33.00%	271	0.9
13	518	169	32.63%	33.00%	171	1.0
14+	604	257	42.55%	100.00%	604	0.4
Totals:	**111,560**	**6,949**	**6.23%**	**4.77%**	**5,325**	**1.3**

Rates of Cancellation after Actual College Entrance Year



Data Analysis – Utilization of Benefits

For the study of credit utilization of contracts, a different approach was taken for this study than past methodologies used. Previously, the utilization assumption was split between contracts who had utilized credits in the prior academic year and contracts who had not. For contracts who had utilized 10 or more credits within the past year, it was assumed they would utilize 22 credits per year until the contract was fully depleted. For contracts who had used fewer than 10 credits within the past year, an extended utilization schedule determined the benefit utilization in future years.

Reviewing the Program's credit utilization experience, it was determined a better approach for developing utilization assumptions to closer match Program experience going forward is to assume credit utilization strictly based upon years since a contract's actual matriculation year, regardless of their utilization in the prior years. Similar to the current assumptions, the proposed contract utilization assumptions vary by number of semesters purchased.

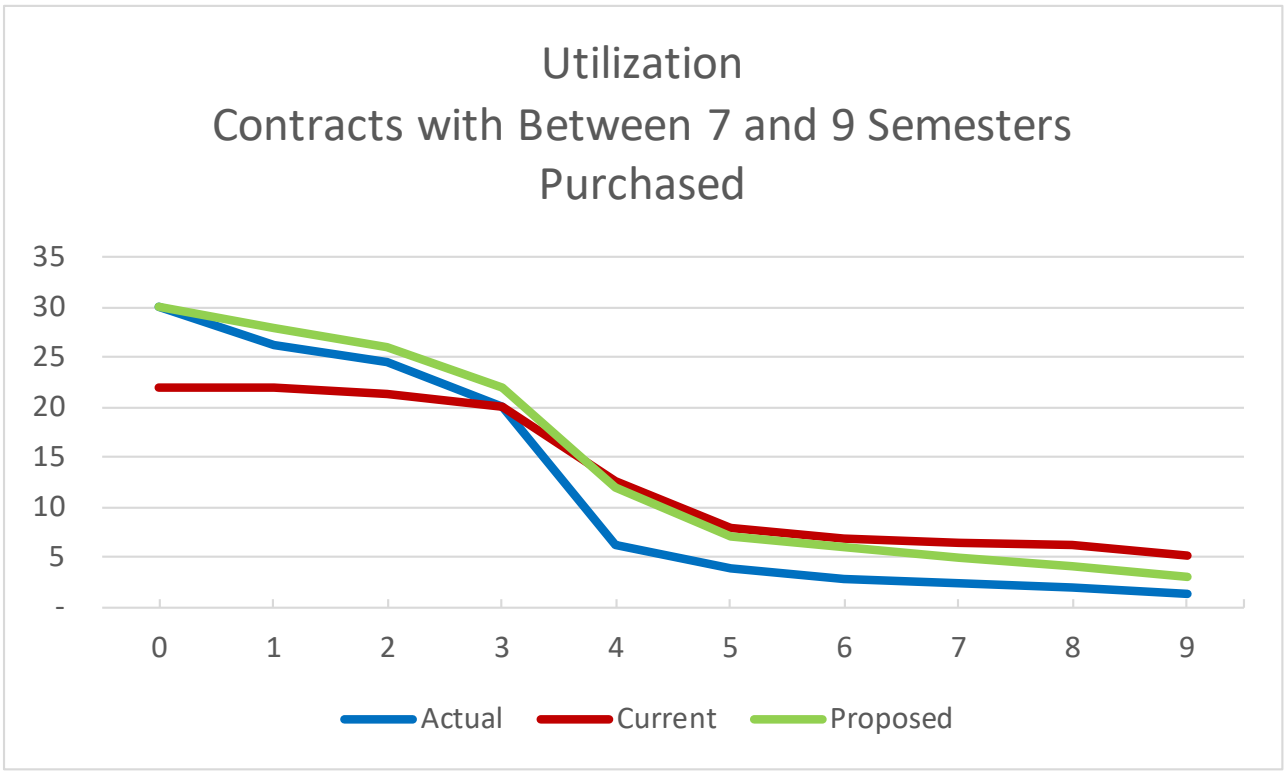
Generally speaking, the proposed assumptions result in higher credit utilization expectations during the first 3 to 4 years after a contract's matriculation and lower credit utilization expectations in years 5+ after actual matriculation.

We believe this pattern of higher utilization in the first few years after matriculation and lower utilization in later years are especially important to be reflected in the actuarial assumptions for this Program due to its closed nature. As the Program continues to mature, the remaining active contracts will become predominately contracts that have already matriculated and utilization assumptions for these contracts would be expected to decline.

The pattern of utilization does not extend beyond the number of available credits for a contract. Contracts that have not yet matriculated would start at the beginning of the schedule and then utilize the number of credits in the schedule until the contract has run out of credits. For example, a contract with 8 semesters purchased would use 30 credits, 28 credits, 26 credits, 22 credits, 12 credits, and finally the remaining 2 credits. The remainder of the utilization schedule is meant to capture the utilization of contracts that matriculated several years ago and have not yet utilized all of their benefits.

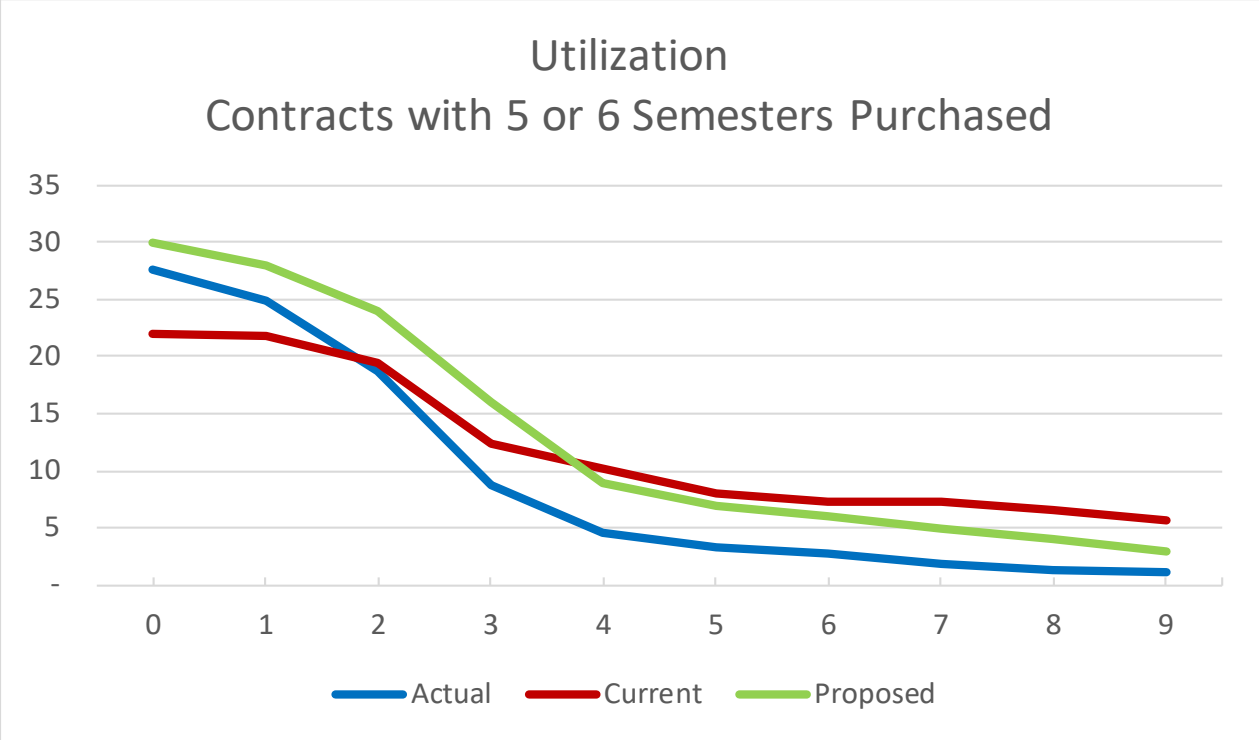
Utilization of Benefits

Contracts with Between 7 and 9 Semesters Purchased						
Year Since Matriculation	Count	Actual Credits	Expected Credits	Actual	Current	Proposed
0	14,163	424,712	311,248	29.99	21.98	30.00
1	15,076	396,737	329,892	26.32	21.88	28.00
2	15,590	383,067	331,989	24.57	21.29	26.00
3	15,464	310,220	309,002	20.06	19.98	22.00
4	9,737	61,352	122,293	6.30	12.56	12.00
5	7,104	26,894	56,580	3.79	7.96	7.00
6	5,746	15,866	39,076	2.76	6.80	6.00
7	4,618	11,253	29,953	2.44	6.49	5.00
8	3,699	7,591	22,626	2.05	6.12	4.00
9	7,321	8,977	38,193	1.23	5.22	3.00



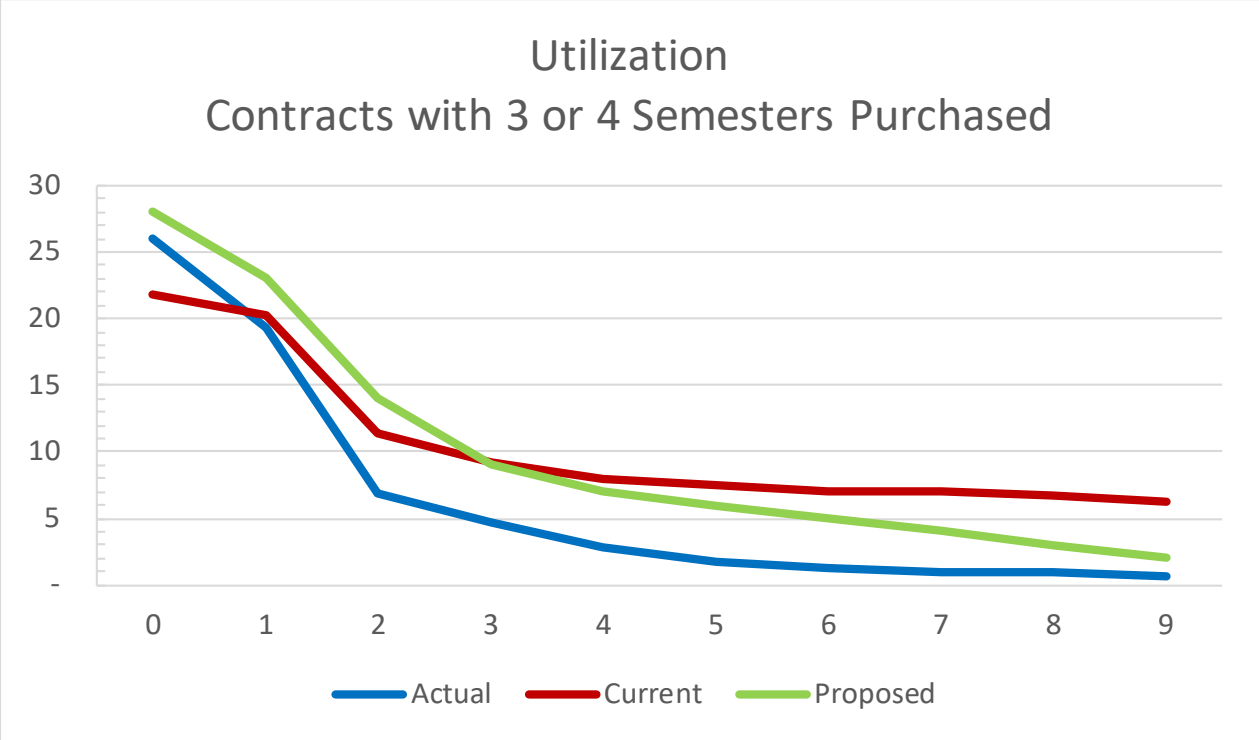
Utilization of Benefits

Contracts with 5 or 6 Semesters Purchased						
Year Since Matriculation	Count	Actual Credits	Expected Credits	Actual	Current	Proposed
0	1,317	36,386	28,848	27.63	21.90	30.00
1	1,394	34,700	30,379	24.89	21.79	28.00
2	1,387	25,894	26,866	18.67	19.37	24.00
3	781	6,832	9,671	8.75	12.38	16.00
4	426	1,957	4,320	4.59	10.14	9.00
5	349	1,148	2,783	3.29	7.97	7.00
6	276	778	2,023	2.82	7.33	6.00
7	242	463	1,760	1.91	7.27	5.00
8	205	281	1,347	1.37	6.57	4.00
9	562	663	3,195	1.18	5.68	3.00



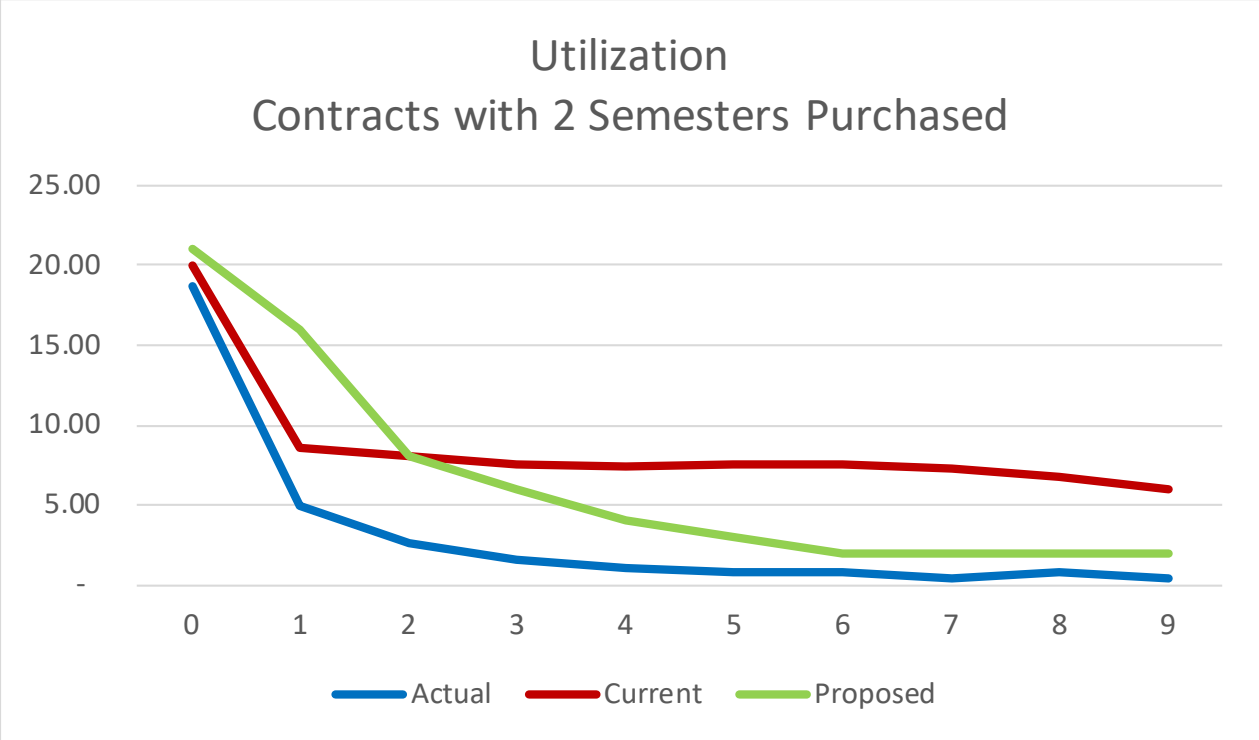
Utilization of Benefits

Contracts with 3 or 4 Semesters Purchased						
Year Since Matriculation	Count	Actual Credits	Expected Credits	Actual	Current	Proposed
0	4,518	117,456	98,485	26.00	21.80	28.00
1	4,602	89,085	93,087	19.36	20.23	23.00
2	2,544	17,448	28,958	6.86	11.38	14.00
3	1,560	7,340	14,379	4.71	9.22	9.00
4	1,157	3,202	9,299	2.77	8.04	7.00
5	959	1,636	7,198	1.71	7.51	6.00
6	764	959	5,383	1.26	7.05	5.00
7	653	637	4,542	0.98	6.96	4.00
8	568	576	3,782	1.01	6.66	3.00
9	1,315	783	8,150	0.60	6.20	2.00



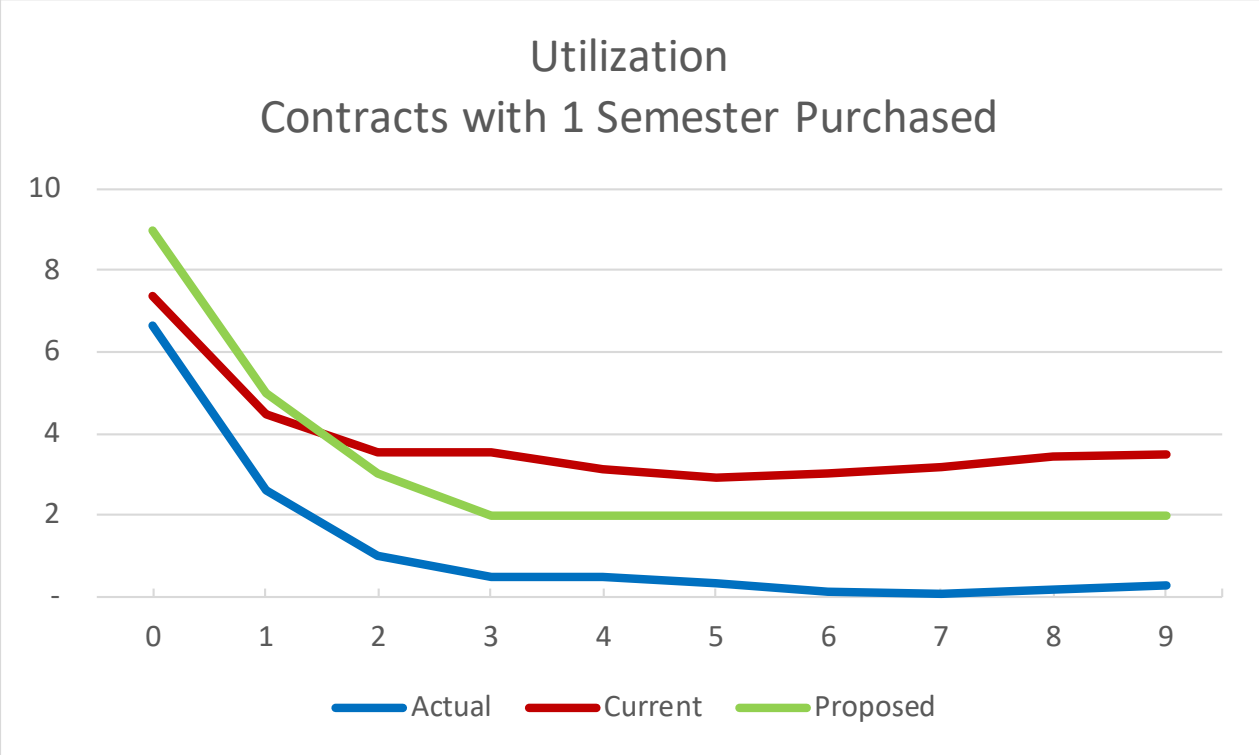
Utilization of Benefits

Contracts with 2 Semesters Purchased						
Year Since Matriculation	Count	Actual Credits	Expected Credits	Actual	Current	Proposed
0	1,451	27,187	28,948	18.74	19.95	21.00
1	1,161	5,743	9,898	4.95	8.53	16.00
2	528	1,392	4,234	2.64	8.02	8.00
3	409	670	3,080	1.64	7.53	6.00
4	322	352	2,387	1.09	7.41	4.00
5	255	194	1,918	0.76	7.52	3.00
6	214	175	1,604	0.82	7.50	2.00
7	172	66	1,254	0.38	7.29	2.00
8	156	129	1,052	0.83	6.74	2.00
9	351	136	2,110	0.39	6.01	2.00



Utilization of Benefits

Contracts with 1 Semester Purchased						
Year Since Matriculation	Count	Actual Credits	Expected Credits	Actual	Current	Proposed
0	405	2,696	2,988	6.66	7.38	9.00
1	225	586	1,001	2.60	4.45	5.00
2	134	136	472	1.02	3.52	3.00
3	104	48	370	0.46	3.56	2.00
4	88	41	277	0.47	3.15	2.00
5	74	25	214	0.34	2.90	2.00
6	63	6	190	0.09	3.02	2.00
7	52	3	166	0.06	3.18	2.00
8	42	7	143	0.18	3.41	2.00
9	70	19	243	0.27	3.47	2.00



Mortality and Disability

The incidence of death and disability among beneficiaries is very low. As a result, no assumption is currently made for death or disability.

Valuing the rate of incidence for mortality and disability is expected to be immaterial. As such, we continue to recommend that no assumption be made for death or disability.

Weighted Average Tuition Bias Load

Each year, GRS calculates the Weighted Average Tuition ("WAT") which is used in the actuarial soundness valuation to project contract benefits that are expected to be paid from the Trust. The WAT is an average of the tuition and fees for public universities and colleges in Illinois weighted by fulltime enrollment at each of the schools. We continue to find the WAT development to be reasonable.

Current valuation assumptions incorporate a bias load (i.e., an explicit percentage increase to the liabilities) to reflect Legacy, Choice 1, and Choice 2 contract beneficiaries are expected on average to attend more expensive schools than indicated by the headcount information that was used to determine the WATF.

Following are the current bias load assumptions:

Community College Contracts:
A load of 5.5 percent was added to the Community College contract WAT to recognize the bias toward enrollment at more expensive schools.

University Contracts:
A load of 2.5 percent was added to the University contract WAT to recognize this bias toward enrollment at more expensive schools.

University Plus Contracts:
No load was added to the University Plus contract WAT to recognize this bias toward enrollment at more expensive schools.

Legacy Contracts:
A load of 4.0 percent was added to the Legacy contract WAT to recognize this bias toward enrollment at more expensive schools.

In addition to the bias for contracts selecting more expensive schools, there are additional biases that should be considered. For example, some schools have fixed tuition pricing for full-time students. Since the WAT is developed based upon the full-time tuition rates of each school in the state, there is an additional risk of costs associated with contract holders utilizing credits as part-time students, which may cost more per credit hour on average than full-time students. Additionally, students who utilize additional credits at the full-time tuition rate could generate savings to the Program as the additional credit utilization does not cost the Program an additional tuition rate.

Weighted Average Tuition Bias Load

In order to quantify the level of bias a contract has, we analyzed the actual tuition and fee payments that were made by the Program versus what the expected tuition and fee payments would have been based upon the credits utilized and assumed WAT in the actuarial valuation. The table below shows the actual bias experience from 2018 to 2022, the current bias load assumptions and the proposed bias load assumptions. For Choice 3 (University Plus) contracts, the proposed bias load assumption is higher than the current assumption.

	Choice 1	Choice 2	Choice 3	
	Community College	University	University Plus	Legacy
Total Actual Tuition and Fee Payments made to contracts from Payment Years 2018 to 2022	$3,573,769	$30,255,290	$25,106,686	$487,077,240
Total Expected Tuition and Fee Payments made to contracts from Payment Years 2018 to 2022	$3,624,331	$32,328,117	$24,703,805	$491,787,169
Actual Bias Load (Applies to Tuition and Fees)	-1.4%	-6.4%	1.6%	-1.0%
Current Bias Load (Applies to Tuition and Fees)	5.5%	2.5%	0.0%	4.0%
Proposed Bias Load (Applies to Tuition and Fees)	0.0%	-3.0%	3.0%	0.0%

Weighted Average Tuition Bias Load

The following tables show the same bias experience further split by payment year (academic year). 2020 and 2021 experience generally showed more negative bias than experience in payment years 2018, 2019, and 2022. This temporary experience was attributed to the Covid-19 Pandemic and therefore the 2018, 2019, and 2022 experience was more heavily weighted in the determination of the proposed bias loads.

Community College Contracts					
Payment Year	Actual Payments	Expect Payments	Actual Bias Load	Current Bias Load	Proposed Bias Load
2018	$ 835,962	$ 843,714	-0.9%	5.5%	0.0%
2019	$ 781,970	$ 789,195	-0.9%	5.5%	0.0%
2020	$ 637,711	$ 645,305	-1.2%	5.5%	0.0%
2021	$ 672,049	$ 689,744	-2.6%	5.5%	0.0%
2022	$ 646,077	$ 656,373	-1.6%	5.5%	0.0%
Total	$ 3,573,769	$ 3,624,331	-1.4%	5.5%	0.0%

University Contracts					
Payment Year	Actual Payments	Expect Payments	Actual Bias Load	Current Bias Load	Proposed Bias Load
2018	$ 5,427,503	$ 5,722,041	-5.1%	2.5%	-3.0%
2019	$ 5,944,759	$ 6,183,915	-3.9%	2.5%	-3.0%
2020	$ 5,883,454	$ 6,409,892	-8.2%	2.5%	-3.0%
2021	$ 6,223,938	$ 6,775,977	-8.1%	2.5%	-3.0%
2022	$ 6,775,637	$ 7,236,292	-6.4%	2.5%	-3.0%
Total	$ 30,255,290	$ 32,328,117	-6.4%	2.5%	-3.0%

University Plus Contracts					
Payment Year	Actual Payments	Expect Payments	Actual Bias Load	Current Bias Load	Proposed Bias Load
2018	$ 4,487,426	$ 4,424,544	1.4%	0.0%	3.0%
2019	$ 4,856,843	$ 4,711,149	3.1%	0.0%	3.0%
2020	$ 4,827,011	$ 4,775,878	1.1%	0.0%	3.0%
2021	$ 5,364,539	$ 5,245,445	2.3%	0.0%	3.0%
2022	$ 5,570,867	$ 5,546,788	0.4%	0.0%	3.0%
Total	$ 25,106,686	$ 24,703,805	1.6%	0.0%	3.0%

Legacy Contracts					
Payment Year	Actual Payments	Expect Payments	Actual Bias Load	Current Bias Load	Proposed Bias Load
2018	$ 114,170,219	$ 114,641,452	-0.4%	4.0%	0.0%
2019	$ 107,125,372	$ 108,124,187	-0.9%	4.0%	0.0%
2020	$ 98,438,830	$ 100,546,680	-2.1%	4.0%	0.0%
2021	$ 89,427,060	$ 90,020,614	-0.7%	4.0%	0.0%
2022	$ 77,915,760	$ 78,454,237	-0.7%	4.0%	0.0%
Total	$ 487,077,240	$ 491,787,169	-1.0%	4.0%	0.0%

Administrative Expenses

Currently, administrative expenses for the next fiscal year are projected to equal actual current year expenses multiplied by the ratio of actual current year administrative expenses to actual prior year administrative expenses. After that, future year administrative expenses are projected to then decline at the same rate the present value of benefits declines.

The following table shows administrative expenses since 2018.

Year Ended June 30,	Total Administrative Expenses	Annual Increase
2018	$4,314,146	
2019	$3,836,125	-11.1%
2020	$3,447,093	-10.1%
2021	$3,997,358	16.0%
2022	$2,662,400	-33.4%
2023	$2,065,454	-22.4%

From 2018 to 2023, administrative expenses have decreased an average of 22 percent per year. We recommend maintaining the current administrative expense assumption.

However, for future actuarial valuations, we recommend collecting data on fixed costs and variable costs and updating the expense assumption.

Truth in Tuition

We have segregated the beneficiaries into two categories, those beneficiaries that fall under the Truth in Tuition law and those that do not. The Truth in Tuition law does not apply to community colleges. Under Illinois' Truth-in-Tuition law, enacted with the fall 2004 semester, the state's 12 public colleges and universities are required to charge incoming resident freshmen a fixed tuition rate for the first four years of college.

For contract beneficiaries with a University, University Plus, or Legacy contract, it was assumed that their tuition will not increase in their second, third, and fourth year of school. If they attend school beyond four years, it was assumed that their tuition would increase to the amount charged the year after the year they first enrolled. For contract beneficiaries with a Community College contract, it was assumed that tuition will increase for each year enrolled. The fee portion of the WATF is assumed to increase each year for all contract types.

We recommend maintaining these assumptions.

SECTION III

COST IMPACT OF RECOMMENDED CHANGES

Cost Impact of Recommended Changes

Valuation Date: June 30, 2023	Current	Proposed	Change
1 Number of Members			
a. Not yet Matriculating:	8,735	8,735	
b. Matriculating:	9,991	9,991	
c. Total	18,726	18,726	
Average Years until Enrollment if Not Yet	2.3	2.3	
2 Assets			
a. Market Value of Assets (in Trust)	$ 559,315,908	$ 559,315,908	$ -
b. PV Future Member Contributions	5,400,015	5,434,248	34,233
d. Total Actuarial Value of Assets (AVA) (2a + 2b)	$ 564,715,923	$ 564,750,156	$ 34,233
3 Actuarial Results			
Liabilities			
a. Not yet Matriculating - Tuition and Fees	$ 333,899,619	$ 344,091,635	$ 10,192,016
b. Matriculating - Tuition and Fees	219,323,803	183,582,395	(35,741,408)
c. Present Value of Future Administrative Expenses	6,705,292	7,008,798	303,506
d. Total	$ 559,928,714	$ 534,682,828	$ (25,245,886)
Unfunded Liability/(Surplus)	$ (4,787,209)	$ (30,067,328)	$ (25,280,119)
Funded Ratio	100.9%	105.6%	4.8%

Cost Impact of Recommended Changes

Closed Group Projections (No New Contracts)
Run-Off Scenario Current Assumptions
Projection Based on Data as of June 30, 2023
Assumed Net Investment Return and Discount Rates Graded Down from 5.00% to 3.00% in 0.286% Yearly Increments
Other Assumptions Based on Those Used in Actuarial Valuation as of June 30, 2023

			Assets							Liabilities				
Year Ending 6/30	Assumed Net Rate of Return	Annual New Contracts	Contract Contributions	Additional Required Solvency Contributions[1]	Tuition Payments, Refunds, and Fees	Administrative Expenses	Net Investment Return	Market Value of Assets (EOY)	Total Present Value of Future Contributions	Total Fund Assets (MVA + PVFC)	Total Present Value of Future Benefits	Present Value of Future Admin Expenses	Total Present Value of Future Benefits, Fees, and Expenses	Unfunded Liability	Funded Ratio
2023			3,117,318	0	115,938,252	2,065,454	35,173,611	559,315,908	5,400,015	564,715,923	553,223,422	6,705,292	559,928,714	-4,787,209	100.9%
2024	5.000%	0	1,763,916	0	106,583,322	1,602,351	23,891,817	476,785,968	3,862,539	480,648,507	471,669,188	5,398,636	477,067,824	-3,580,683	100.8%
2025	4.714%	0	1,264,021	0	99,052,134	1,366,138	20,009,860	397,641,576	2,751,158	400,392,734	392,544,973	4,255,174	396,800,147	-3,592,587	100.9%
2026	4.429%	0	840,130	0	91,615,417	1,136,964	15,596,688	321,326,014	2,014,463	323,340,477	316,307,040	3,281,750	319,588,790	-3,751,687	101.2%
2027	4.143%	0	721,941	0	84,008,624	916,149	11,585,576	248,708,758	1,361,176	250,069,934	243,680,045	2,482,775	246,162,820	-3,907,114	101.6%
2028	3.857%	0	557,793	0	67,929,047	705,793	8,292,559	188,924,271	845,229	189,769,500	183,852,421	1,859,264	185,711,685	-4,057,815	102.2%
2029	3.571%	0	376,147	0	48,605,182	532,508	5,884,192	146,046,919	492,611	146,539,530	140,953,061	1,383,732	142,336,793	-4,202,737	103.0%
2030	3.286%	0	281,825	0	39,465,681	408,255	4,153,500	110,608,308	222,379	110,830,687	105,475,570	1,014,290	106,489,860	-4,340,827	104.1%
2031	3.000%	0	157,603	0	29,473,345	305,498	2,877,214	83,864,281	69,101	83,933,382	78,727,658	734,671	79,462,329	-4,471,053	105.6%
2032	3.000%	0	70,130	0	23,228,998	228,026	2,167,717	62,645,104	0	62,645,104	57,514,630	525,290	58,039,920	-4,605,184	107.9%
2033	3.000%	0	0	0	15,440,570	166,585	1,646,976	48,684,925	0	48,684,925	43,569,602	371,984	43,941,586	-4,743,339	110.8%
2034	3.000%	0	0	0	14,108,391	126,195	1,248,607	35,698,946	0	35,698,946	30,558,236	255,070	30,813,306	-4,885,640	115.9%
2035	3.000%	0	0	0	9,655,733	88,509	925,885	26,880,590	0	26,880,590	21,675,485	172,895	21,848,380	-5,032,210	123.0%
2036	3.000%	0	0	0	7,300,574	62,781	696,784	20,214,020	0	20,214,020	14,916,476	114,367	15,030,843	-5,183,177	134.5%
2037	3.000%	0	0	0	5,224,939	43,204	527,982	15,473,859	0	15,473,859	10,061,237	73,951	10,135,188	-5,338,671	152.7%
2038	3.000%	0	0	0	3,724,115	29,141	408,333	12,128,936	0	12,128,936	6,583,510	46,594	6,630,104	-5,498,832	182.9%
2039	3.000%	0	0	0	2,601,393	19,068	324,852	9,833,326	0	9,833,326	4,140,890	28,640	4,169,530	-5,663,796	235.8%
2040	3.000%	0	0	0	1,653,648	11,994	270,200	8,437,885	0	8,437,885	2,586,847	17,326	2,604,173	-5,833,712	324.0%
2041	3.000%	0	0	0	1,030,773	7,493	237,678	7,637,297	0	7,637,297	1,618,332	10,242	1,628,574	-6,008,723	469.0%
2042	3.000%	0	0	0	694,420	4,687	218,710	7,156,900	0	7,156,900	962,123	5,792	967,915	-6,188,985	739.4%
2043	3.000%	0	0	0	434,012	2,787	208,203	6,928,304	0	6,928,304	550,512	3,138	553,650	-6,374,654	1000+%
2044	3.000%	0	0	0	257,706	1,594	203,988	6,872,992	0	6,872,992	305,485	1,614	307,099	-6,565,893	1000+%
2045	3.000%	0	0	0	153,689	885	203,888	6,922,307	0	6,922,307	158,672	764	159,436	-6,762,871	1000+%
2046	3.000%	0	0	0	103,085	460	206,128	7,024,891	0	7,024,891	58,813	321	59,134	-6,965,757	1000+%
2047	3.000%	0	0	0	29,623	170	210,303	7,205,401	0	7,205,401	30,513	158	30,671	-7,174,730	1000+%
2048	3.000%	0	0	0	16,614	88	215,913	7,404,612	0	7,404,612	14,567	73	14,640	-7,389,972	1000+%
2049	3.000%	0	0	0	8,218	42	222,015	7,618,367	0	7,618,367	6,664	32	6,696	-7,611,671	1000+%
2050	3.000%	0	0	0	3,819	19	228,494	7,843,023	0	7,843,023	2,988	13	3,001	-7,840,022	1000+%
2051	3.000%	0	0	0	1,844	9	235,263	8,076,433	0	8,076,433	1,206	5	1,211	-8,075,222	1000+%
2052	3.000%	0	0	0	831	3	242,281	8,317,880	0	8,317,880	399	2	401	-8,317,479	1000+%
2053	3.000%	0	0	0	313	1	249,532	8,567,098	0	8,567,098	93	0	93	-8,567,005	1000+%
2054	3.000%	0	0	0	63	0	257,012	8,824,047	0	8,824,047	32	0	32	-8,824,015	1000+%
2055	3.000%	0	0	0	26	0	264,721	9,088,742	0	9,088,742	7	0	7	-9,088,735	1000+%
2056	3.000%	0	0	0	7	0	272,662	9,361,397	0	9,361,397	0	0	0	-9,361,397	0.0%
2057	3.000%	0	0	0	0	0	280,842	9,642,239	0	9,642,239	0	0	0	-9,642,239	0.0%
2058	3.000%	0	0	0	0	0	289,267	9,931,506	0	9,931,506	0	0	0	-9,931,506	0.0%
2059	3.000%	0	0	0	0	0	297,945	10,229,451	0	10,229,451	0	0	0	-10,229,451	0.0%
2060	3.000%	0	0	0	0	0	306,884	10,536,335	0	10,536,335	0	0	0	-10,536,335	0.0%

Cost Impact of Recommended Changes

Closed Group Projections (No New Contracts)
Run-Off Scenario Proposed Assumptions
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Other Assumptions Based on Those Used in Actuarial Valuation as of June 30, 2023

			Assets								Liabilities				
Year Ending 6/30	Assumed Net Rate of Return	Annual New Contracts	Contract Contributions	Additional Required Solvency Contributions[1]	Tuition Payments, Refunds, and Fees	Administrative Expenses	Net Investment Return	Market Value of Assets (EOY)	Total Present Value of Future Contributions	Total Fund Assets (MVA + PVFC)	Present Value Future Benefits Current Members	Present Value of Future Admin Expenses	Total Present Value of Future Benefits, Fees, and Expenses	Unfunded Liability	Funded Ratio
2023			3,117,318	0	115,938,252	2,065,454	35,173,611	559,315,908	5,434,248	564,750,156	527,674,030	7,008,798	534,682,828	-30,067,328	105.6%
2024	5.000%	0	1,767,002	0	109,822,709	1,602,351	23,843,661	473,501,511	3,895,322	477,396,833	441,522,942	5,717,316	447,240,258	-30,156,575	106.7%
2025	4.714%	0	1,269,001	0	97,028,232	1,340,742	19,931,173	396,332,711	2,780,390	399,113,101	363,048,607	4,614,865	367,663,472	-31,449,629	108.6%
2026	4.429%	0	845,698	0	83,136,767	1,102,445	15,725,310	328,664,507	2,039,300	330,703,807	294,168,763	3,692,647	297,861,410	-32,842,397	111.0%
2027	4.143%	0	727,943	0	69,928,167	893,282	12,178,898	270,749,899	1,380,917	272,130,816	234,993,775	2,934,030	237,927,805	-34,203,011	114.4%
2028	3.857%	0	563,645	0	57,488,596	713,589	9,342,127	222,453,485	859,768	223,313,253	185,471,005	2,319,979	187,790,984	-35,522,269	118.9%
2029	3.571%	0	381,164	0	44,984,108	563,207	7,145,304	184,432,638	502,564	184,935,202	146,314,620	1,829,659	148,144,279	-36,790,923	124.8%
2030	3.286%	0	286,545	0	34,258,506	444,303	5,499,089	155,515,463	227,862	155,743,325	116,305,326	1,438,233	117,743,559	-37,999,766	132.3%
2031	3.000%	0	161,412	0	25,833,410	353,176	4,277,971	133,768,260	70,883	133,839,143	93,576,438	1,122,945	94,699,383	-39,139,760	141.3%
2032	3.000%	0	71,938	0	19,701,188	284,157	3,716,554	117,571,407	0	117,571,407	76,389,208	868,245	77,257,453	-40,313,954	152.2%
2033	3.000%	0	0	0	16,835,220	231,966	3,273,026	103,777,248	0	103,777,248	61,595,003	658,873	62,253,876	-41,523,372	166.7%
2034	3.000%	0	0	0	14,765,575	187,041	2,890,686	91,715,318	0	91,715,318	48,457,431	488,813	48,946,244	-42,769,074	187.4%
2035	3.000%	0	0	0	12,012,667	147,147	2,570,410	82,125,914	0	82,125,914	37,719,629	354,139	38,073,768	-44,052,146	215.7%
2036	3.000%	0	0	0	10,280,462	114,541	2,309,005	74,039,917	0	74,039,917	28,417,689	248,517	28,666,206	-45,373,711	258.3%
2037	3.000%	0	0	0	8,289,239	86,294	2,096,493	67,760,877	0	67,760,877	20,857,561	168,394	21,025,955	-46,734,922	322.3%
2038	3.000%	0	0	0	7,203,404	63,337	1,924,631	62,418,767	0	62,418,767	14,172,631	109,166	14,281,797	-48,136,970	437.1%
2039	3.000%	0	0	0	5,122,728	43,037	1,795,649	59,048,651	0	59,048,651	9,398,808	68,763	9,467,571	-49,581,080	623.7%
2040	3.000%	0	0	0	3,583,770	28,541	1,717,675	57,154,015	0	57,154,015	6,043,643	41,860	6,085,503	-51,068,512	939.2%
2041	3.000%	0	0	0	2,425,477	18,352	1,678,234	56,388,420	0	56,388,420	3,763,362	24,491	3,787,853	-52,600,567	1000+%
2042	3.000%	0	0	0	1,660,578	11,428	1,666,758	56,383,172	0	56,383,172	2,190,961	13,627	2,204,588	-54,178,584	1000+%
2043	3.000%	0	0	0	1,043,249	6,653	1,675,863	57,009,132	0	57,009,132	1,197,907	7,284	1,205,191	-55,803,941	1000+%
2044	3.000%	0	0	0	562,088	3,638	1,701,851	58,145,257	0	58,145,257	663,387	3,811	667,198	-57,478,059	1000+%
2045	3.000%	0	0	0	336,780	2,014	1,739,313	59,545,775	0	59,545,775	341,494	1,880	343,374	-59,202,401	1000+%
2046	3.000%	0	0	0	189,238	1,037	1,783,540	61,139,040	0	61,139,040	159,683	884	160,567	-60,978,473	1000+%
2047	3.000%	0	0	0	84,286	485	1,832,909	62,887,178	0	62,887,178	78,933	419	79,352	-62,807,826	1000+%
2048	3.000%	0	0	0	42,101	240	1,885,985	64,730,822	0	64,730,822	38,573	188	38,761	-64,692,061	1000+%
2049	3.000%	0	0	0	22,718	117	1,941,585	66,649,572	0	66,649,572	16,674	75	16,749	-66,632,823	1000+%
2050	3.000%	0	0	0	11,559	51	1,999,314	68,637,276	0	68,637,276	5,443	26	5,469	-68,631,807	1000+%
2051	3.000%	0	0	0	3,261	17	2,059,069	70,693,067	0	70,693,067	2,297	10	2,307	-70,690,760	1000+%
2052	3.000%	0	0	0	1,586	7	2,120,768	72,812,242	0	72,812,242	756	3	759	-72,811,483	1000+%
2053	3.000%	0	0	0	545	2	2,184,359	74,996,054	0	74,996,054	225	1	226	-74,995,828	1000+%
2054	3.000%	0	0	0	188	1	2,249,879	77,245,744	0	77,245,744	41	0	41	-77,245,703	1000+%
2055	3.000%	0	0	0	42	0	2,317,372	79,563,074	0	79,563,074	0	0	0	-79,563,074	0.0%
2056	3.000%	0	0	0	0	0	2,386,892	81,949,966	0	81,949,966	0	0	0	-81,949,966	0.0%
2057	3.000%	0	0	0	0	0	2,458,499	84,408,465	0	84,408,465	0	0	0	-84,408,465	0.0%
2058	3.000%	0	0	0	0	0	2,532,254	86,940,719	0	86,940,719	0	0	0	-86,940,719	0.0%
2059	3.000%	0	0	0	0	0	2,608,222	89,548,941	0	89,548,941	0	0	0	-89,548,941	0.0%
2060	3.000%	0	0	0	0	0	2,686,468	92,235,409	0	92,235,409	0	0	0	-92,235,409	0.0%

SECTION IV

SUMMARY OF RECOMMENDED ASSUMPTIONS

Summary of Recommended Assumptions

The actuarial assumptions used in the actuarial soundness valuation are shown in this section.

Valuation Methods

Actuarial Value of Assets – The Actuarial Value of Assets is equal to the Market Value of Assets.

Valuation Assumptions

The rationale for the assumptions may be found in the experience study report covering the period July 1, 2014 through June 30, 2023. The assumptions were adopted for first use in the actuarial soundness valuation as of June 30, 2024.

Measurement Date June 30, 2023

Net Investment Return Rate

The following select and ultimate rate structure, net of investment expenses and compounded annually, is assumed. Includes inflation assumption of 2.50 percent. (First effective with the actuarial soundness valuation as of June 30, 2023, and prescribed to us by ISAC.)

Net Investment Return Rate

Fiscal Year Ending 6/30	Net Investment Return Rate
2024	5.000%
2025	4.714%
2026	4.429%
2027	4.143%
2028	3.857%
2029	3.571%
2030	3.286%
2031+	3.000%

Considering the current asset allocation, current and future liquidity requirements, and the fact that program enrollment is on hold, we believe the net investment rate of return assumption of 5.00 percent in fiscal year 2024 grading down to 3.00 percent in 2031, on a select and ultimate basis, is reasonable for the purposes of measuring the Program's future obligations. Additionally, we believe the assumed rate of tuition increases of 4.25 percent per year is reasonable for the purpose of measuring the Program's future obligations.

Summary of Recommended Assumptions

Weighted Average Tuition and Fees (WATF) by Contract Type Based on the Freshman Tuition Rates Adjusted for Differential Tuition (Blended)

	Contract Type			
	Choice 1	Choice 2	Choice 3	
	Community College	University	University Plus	Legacy†
2023-2024 Weighted Tuition	$4,410	$11,514	$14,829	$12,349
2023-2024 Weighted Fees	545	4,159	4,860	4,336
2023-2024 Total WATF	4,955	15,673	19,689	16,685

†Legacy contracts refer to contracts sold prior to October 2008. These contracts can be used for full tuition and fees at any public University in the State of Illinois, including UIUC.

For continuing students at public universities and students attending community colleges, fees are combined with tuition in our projections and follow their respective tuition inflation assumptions.

Freshman Weighted Average Tuition and Fees (WATF) Increase from Prior Year

	Contract Type			
	Choice 1	Choice 2	Choice 3	
	Community College	University	University Plus	Legacy
2023-2024 Total WATF	$4,955	$15,673	$19,689	$16,685
2022-2023 Total WATF	4,894	15,373	19,283	16,474
WATF Increase	1.25%	1.95%	2.11%	1.28%

Bias Load

"Legacy," Choice 1 and Choice 2 contract beneficiaries are assumed on average to attend more expensive schools than indicated by the headcount information that was used to determine the WATF. The following bias loads were used to recognize this bias toward enrollment at more expensive schools. No bias load was applied to the "University Plus" beneficiaries due to the separation of UIUC.

	Contract Type			
	Choice 1	Choice 2	Choice 3	
	Community College	University	University Plus	Legacy
Bias Load	0.00%	-3.00%	3.00%	0.00%

Tuition and Fee Increase Assumption

Tuition and Fee Increase Assumption - June 30, 2023, Actuarial Valuation				
Effective Date	Community College	University	University Plus	Legacy
6/30/2023 and Beyond	4.25%	4.25%	4.25%	4.25%

(First effective with the actuarial soundness valuation as of June 30, 2022, and prescribed to us by ISAC.)

These assumptions were chosen by ISAC and consider historical Illinois public tuition and fee inflation, typically over a 20-year horizon, as well as current economic and political conditions.

Truth in Tuition

Under Illinois' Truth-in-Tuition law, the State's 12 public colleges and universities are required to charge incoming resident freshmen a fixed tuition rate for the first four years of college. The Truth in Tuition law does not apply to community colleges.

For contract beneficiaries with a Choice 2, Choice 3 or Legacy contract, it was assumed that their tuition will not increase in their second, third and fourth year of school. If they attend school beyond four years, it was assumed that their tuition would increase to the amount charged the year after the year they first enrolled. For contract beneficiaries with a Choice 1 contract, it was assumed that tuition will increase for each year enrolled. The fee portion of the WATF is assumed to increase each year for all contract types.

The following table shows the WAT (excluding fees) for the past four years that would be used for contract beneficiaries under the Truth-in-Tuition law. (Choice 1 is shown for informational purposes only.)

	Contract Type			
	Choice 1	Choice 2	Choice 3	
	Community College	University	University Plus	Legacy
2023-2024 Weighted Tuition	$4,410	$11,514	$14,829	$12,349
2022-2023 Weighted Tuition	4,360	11,300	14,619	12,235
2021-2022 Weighted Tuition	4,281	11,123	14,074	11,914
2020-2021 Weighted Tuition	4,075	11,151	14,106	11,950
2019-2020 Weighted Tuition	4,012	11,025	13,885	11,805

Rates of Cancellation

These rates are used to measure the probability of eligible contract beneficiaries cancelling their contracts before and after projected college entrance date. The rates apply to contract beneficiaries who have not yet matriculated. Once the contract beneficiaries are assumed to have matriculated and started using benefits, the cancellation rates do not apply.

Years from Projected College Entrance Year	Cancellation Rate
-17	6.0%
-16	6.0%
-15	4.0%
-14	3.0%
-13	3.0%
-12	3.0%
-11	2.0%
-10	2.0%
-9	1.5%
-8	1.5%
-7	1.5%
-6	1.5%
-5	1.0%
-4	1.0%
-3	1.0%
-2	1.0%

Years from Projected College Entrance Year	Cancellation Rate
-1	1.5%
0	1.5%
1	3.0%
2	3.0%
3	5.0%
4	6.0%
5	7.5%
6	7.5%
7	7.5%
8	7.5%
9	25.0%
10	50.0%
11	33.0%
12	33.0%
13	33.0%
14+	100.0%

In the event of a cancellation, it was assumed that a refund will be paid equal to the amount of all contract payments made accumulated with applicable interest, less benefits paid. (Two percent annual interest is applicable to contracts purchased prior to the 2013/2014 enrollment period. No interest is applicable to contracts purchased during or after the 2013/2014 enrollment period.)

Summary of Recommended Assumptions

Rates of Cancellation After Matriculation

These rates are used to measure the probability of eligible contract beneficiaries cancelling their contracts after contract beneficiaries are assumed to have matriculated and started using benefits.

Years from Projected College Entrance Year	Matriculation Rate
0	0.25%
1	0.25%
2	0.50%
3	1.50%
4	2.50%
5	3.00%
6	3.25%
7	3.50%
8	3.75%
9	25.00%
10	50.00%
11	33.00%
12	33.00%
13	33.00%
14+	100.00%

In the event of a cancellation, it was assumed that a refund will be paid equal to the amount of all contract payments made accumulated with applicable interest, less benefits paid. (Two percent annual interest is applicable to contracts purchased prior to the 2013/2014 enrollment period. No interest is applicable to contracts purchased during or after the 2013/2014 enrollment period.)

Rates of Matriculation

These rates are used to measure the probability of eligible contract beneficiaries matriculating at and beyond their projected college entrance date. The rates apply to contract beneficiaries who have not yet matriculated.

Years from Projected College Entrance Year	Matriculation Rate
0	67.5%
1	37.5%
2	35.0%
3	30.0%
4	20.0%
5	15.0%
6	9.0%
7	9.0%
8	8.0%
9	8.0%
10	0.0%

Summary of Recommended Assumptions

Utilization of Benefits

The following number of credits were assumed to be utilized for contract beneficiaries. Contract beneficiaries are assumed to use the benefits as described by the CIPTP Master Agreement.

	Number of Semesters Purchased								
Years Since Matriculation	1	2	3	4	5	6	7	8	9
1	9.00	21.00	28.00	28.00	30.00	30.00	30.00	30.00	30.00
2	5.00	16.00	23.00	23.00	28.00	28.00	28.00	28.00	28.00
3	3.00	8.00	14.00	14.00	24.00	24.00	26.00	26.00	26.00
4	2.00	6.00	9.00	9.00	16.00	16.00	22.00	22.00	22.00
5	2.00	4.00	7.00	7.00	9.00	9.00	12.00	12.00	12.00
6	2.00	3.00	6.00	6.00	7.00	7.00	7.00	7.00	7.00
7	2.00	2.00	5.00	5.00	6.00	6.00	6.00	6.00	6.00
8	2.00	2.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00
9	2.00	2.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00
10+	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00

Administrative Expenses

Administrative expenses of the Program are assumed to be paid through a combination of investment earnings and fees assessed on purchasers. Marketing expenses were excluded from the liabilities (present value of future administrative expenses) for current contract beneficiaries as it is assumed those costs should only be applicable to future contracts. Administrative expenses for FY 2024 are projected to equal actual 2023 expenses multiplied by the ratio of actual 2023 administrative expenses to actual 2022 administrative expenses. Future year (for FY 2025 and later) administrative expenses are projected to then decline at the same rate the present value of benefits declines. The present value of future administrative expenses for FY 2023 is equal to approximately 1.2 percent of the total liabilities.

Mortality and Disability

No assumption is made for death or disability. Valuing the rate of incidence is expected to be immaterial.

Contract Transfers

No explicit assumption is made for contract transfers. However, the set of assumptions is slightly conservative and losses due to contract transfers are expected to reduce the implied margin of conservatism. We recommend monitoring contract transfer experience to evaluate if an explicit assumption is needed.

Data Adjustments

The following contract beneficiary records were excluded from the actuarial valuation:

- Records with a payment status indicating they were cancelled;
- Records with a contract usage status of depleted; and
- Records with less than one contract unit remaining (the number of contract units purchased minus the number of contract units used is less than one).

Summary of Recommended Assumptions

The projected college entrance year was adjusted for contract beneficiaries who are not scheduled to have completed payments for the contract by the college entrance year provided in the data.

The account balance that is eligible to be refunded is calculated by GRS based on the contract payment information provided, increased with applicable interest, less any tuition and fee benefits paid to date. Two percent annual interest is applicable to contracts purchased prior to the 2013/2014 enrollment period. No interest is applicable to contracts purchased during or after the 2013/2014 enrollment period.