South Carolina Tuition Prepayment Program

2019 Actuarial Valuation Report

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Executive Summary

A. Summary of Key Valuation Results

	Actuarial Valuation as of:	
	June 30, 2018*	June 30, 2019
Program Assets		
Invested Assets at Fair Market Value	$52,551,420	$40,761,708
Present Value of Projected Future Premium Contributions	915,457	612,032
Total Assets	$53,466,877	$41,373,740
Program Obligations		
Present Value of Projected Future Benefits and Expenses	$89,491,492	$78,271,541
Accrued Program Management Fees	39,914	10,182
Total Liability for Obligations	$89,531,406	$78,281,723
Actuarial Reserve		
Actuarial Reserve/(Deficit)	($36,064,529)	($36,907,983)
Funded Ratio	59.7%	52.9%
Key Assumptions		
Single Effective Discount Rate for Determining the Present Value of Program Obligations**	2.90%	2.37%
Assumed Tuition Inflation Growth Rate	5.50%	5.50%

* Results from the June 30, 2018 Valuation are from the previous actuary's report with slight adjustments to match the final financial statements.

** In the June 30, 2018 Valuation, program expenses were accounted for as a 30 basis points reduction in the discount rate assumption (2.90% net rate). In the June 30, 2019 Valuation, program expenses are accounted for explicitly with no reduction to the discount rate (2.37% gross rate).

B. Actuarial Discussion and Analysis

An actuarial valuation of the South Carolina Tuition Prepayment Program (the "Program") is conducted annually to analyze the ability of projected Program resources to fully meet projected Program contract obligations and Program expenses. The actuarial reserve is the amount, stated in present value terms, by which the expected value of Program assets (resources) exceeds the expected value of Program liabilities, including expenses (obligations). The calculation is done as of a single point in time, using a single set of actuarial assumptions and methods.

While the actuarial valuation uses a single set of actuarial assumptions, actual future Program experience will differ from the assumptions used in the valuation's calculations. With exceptions as noted in this report, the valuation was conducted using the same actuarial assumptions and methods used in the valuation conducted as of June 30, 2018.

As of June 30, 2019 the Program has assets of $41,373,740 and obligations of $78,281,723. The difference in values creates an actuarial deficit of $36,907,983. The ratio of assets to obligations, known as the funded ratio, is 52.9%. Based on the assumptions used for the valuation, the Program is expected to have insufficient assets to fund payments for fall semester 2022 (note that fall semester payments can begin as early as the month of June). Please see Exhibit 5 for a projection of the Program's expected cash flows. Possible options for dealing with the deficit include both ongoing plan and shutdown scenarios:

Ongoing Plan Options

Lump Sum Appropriation
The current deficit increases at an annualized rate of 2.37%, thus appropriations to cover the deficit are expected to increase over time as follows:

Date	Required Appropriation
June 30, 2019	$36.9 million
June 30, 2020	$37.8 million
June 30, 2021	$38.7 million
June 30, 2022	$39.6 million
Fall Semester 2022*	$39.7 million

*At the time the Program is expected to have depleted the assets.

Annual Appropriations
In lieu of a lump sum appropriation, the State may opt for annual appropriations equal to the "pay as you go" costs of Program benefits and expenses. These appropriations would start with the fall semester 2022 payments, when the Program is expected to deplete the assets. These costs are expected to be approximately: $9.7 million in the year ending June 30, 2023; $10.8 million in the year ending June 30, 2024; and then decreasing amounts until 2041 when all of the Program benefits and expense are expected to have been paid. The total amount of required appropriations on this basis is expected to be $41.8 million. Please see Exhibit 5 for a projection of these annual amounts.

Shutdown Options

If the Program is shut down and refunds are paid (based on a return of premiums at 4% interest to all contracts with unused semesters still in force), the expected amount of the total refund payments and the appropriation required to cover the projected shortfall for different shutdown dates are:

Shutdown Date	Amount of Refunds	Required Appropriation
June 30, 2019	$61.6 million	$20.9 million
June 30, 2020	$53.7 million	$25.6 million
June 30, 2021	$45.3 million	$30.0 million
June 30, 2022	$36.8 million	$34.1 million
Fall of 2022*	$35.0 million	$35.0 million

*At the time the Program is expected to have depleted the assets.

C. Program Experience

"Experience" encompasses the performance of the Program during the year, including investment performance, along with the effects of changes in the discount rate yield curve, tuition, expenses, and the Program's contract data.

The Program experience during the year is quantified through changes in the actuarial reserve / (deficit). The year-to-year changes in the reserve are detailed in Exhibit 4 of the report. The actuarial deficit increased by $0.8 million during the year. As noted in Exhibit 4, four of the factors that had significant impacts to the reserve level over the past year were:

- $3.4 million decrease to the deficit due to lower than assumed tuition increases for fall 2019
- $2.5 million increase to the deficit due to a change to the assumption for future Program expenses
- $2.0 million increase to the deficit due to a decrease in discount rates from a year ago
- $1.1 million decrease to the deficit due to higher actual investment returns than assumed a year ago

D. Changes in Actuarial Assumptions and Methods

The actuarial assumptions and methods used in this valuation are the same as those used in the valuation conducted as of June 30, 2018 except as summarized below, with more details in Appendix A:

- Discount rate yield curve updated to reflect changes in capital market conditions between valuation dates.
- Assumption for Program management expenses changed.
- Assumption for pre-matriculation voluntary cancellations changed.

Please see Appendix C for a more detailed summary of this valuation's actuarial assumptions and methods.

E. Changes in Program Provisions

There have been no changes in Program provisions that affect actuarial calculations since the prior valuation. Please see Appendix D for a summary of principal Program provisions.

Exhibits

Exhibit 1

Market Value of Assets

The fair market value of assets as of June 30, 2018 and June 30, 2019 is shown below, and was provided by Columbia Threadneedle Investments.

	June 30, 2018	June 30, 2019
1. Immunized fixed income including accrued income	$52,291,053	$40,397,525
2. Cash and cash equivalents	$260,367	$364,183
3. Total market value of investments	$52,551,420	$40,761,708

Exhibit 2

Change in Market Value of Assets

The change in the market value of assets from June 30, 2018 to June 30, 2019 is shown below, and was provided by Columbia Threadneedle Investments. The estimated net rate of return earned on the investments for the year ending June 30, 2019 was 5.81%.

1.	Market value of assets as of June 30, 2018	$52,551,420
2.	Contract premium payments	354,017
3.	Tuition and refund benefits paid	(14,486,527)
4.	Program management expenses	(137,333)
5.	Investment performance	
	a. Interest income	1,203,688
	b. Realized gains / (losses)	(291,418)
	c. Unrealized gains / (losses)	1,597,593
	d. Total net investment performance	2,509,863
6.	Net increase / (decrease) in market value of assets [(2) + (3) + (4) + (5d)]	(11,759,980)
7.	Change in accrued management expenses	(29,732)
8.	Market value of assets as of June 30, 2019 [(1) + (6) + (7)]	$40,761,708

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Exhibit 3

Actuarial Reserve as of June 30, 2019

The actuarial reserve is the amount, stated in present value terms, by which the expected value of Program assets (resources) exceeds the expected value of Program liabilities, including expenses (obligations). The calculation is done as of a single point in time, using a single set of actuarial assumptions and methods.

1.	Assets at fair market value as of June 30, 2019	$40,761,708
2.	Present value of expected future premium contributions	612,032
3.	Total projected program assets [(1) + (2)]	$41,373,740
4.	Present value of projected future benefits and expenses	$78,271,541
5.	Accrued program management fees	10,182
6.	Total projected program obligations [(4) + (5)]	$78,281,723
7.	Actuarial reserve/(deficit) as of June 30, 2019 [(3) - (6)]	($36,907,983)
8.	Actuarial reserve/(deficit) as a percentage of total projected program obligations [(7) ÷ (6)]	(47.1%)
9.	Funded ratio: Assets / Obligations [(3) / (6)]	52.9%

Exhibit 4

Change in Actuarial Reserve from June 30, 2018 to June 30, 2019

A number of factors contributed to the year-to-year change in the actuarial reserve, as quantified below.

	$Millions
1. Actuarial reserve/(deficit) as of June 30, 2018	($36.1)
Increase/(decrease) in reserve from June 30, 2018 to June 30, 2019 due to:	
2. Interest on the deficit at 2.90%	(1.0)
3. Decrease in the discount rate	(2.0)
4. Higher return on investments than assumed	1.1
5. Lower actual 2019-2020 tuition than assumed	3.4
6. Change to assumption for program expenses	(2.5)
7. Change to assumption for voluntary cancellations	0.3
8. Other	(0.1)
9. Total increase/(decrease) in actuarial adequacy reserve during the year	(0.8)
10. Actuarial reserve/(deficit) as of June 30, 2019	($36.9)

Exhibit 5

Projected Cash Flows under the Valuation Assumptions ($Millions)

The projection assumes that Program assets earn a return of 2.37% every year. The amounts shown in the annual shortfall column are the projected "pay as you go" costs for the Program once the investments are depleted.

Year Ending June 30:	Beginning Market Value of Investments (Cumulative Shortfall)	Expected Contract Premiums	Expected Tuition Payments	Expected Refund Payments	Expected Program Expenses	Expected Investment Earnings	Annual (Shortfall)	Ending Market Value of Investments (Cumulative Shortfall)
2020	$40.76	$0.24	($12.70)	($0.62)	($0.34)	$0.76	$0.00	$28.10
2021	28.10	0.20	(12.25)	(0.81)	(0.34)	0.47	0.00	15.37
2022	15.37	0.11	(11.97)	(0.59)	(0.34)	0.18	0.00	2.77
2023	2.77	0.05	(11.36)	(0.83)	(0.34)	0.01	(9.69)	(9.69)
2024	(9.69)	0.01	(9.85)	(0.62)	(0.34)	0.00	(10.80)	(20.50)
2025	(20.50)	0.00	(6.19)	(0.76)	(0.34)	0.00	(7.29)	(27.78)
2026	(27.78)	0.00	(4.24)	(0.97)	(0.34)	0.00	(5.55)	(33.33)
2027	(33.33)	0.00	(2.29)	(1.03)	(0.34)	0.00	(3.66)	(36.98)
2028	(36.98)	0.00	(0.88)	(1.01)	(0.34)	0.00	(2.23)	(39.21)
2029	(39.21)	0.00	(0.13)	(1.29)	(0.34)	0.00	(1.77)	(40.98)
2030	(40.98)	0.00	(0.13)	(0.00)	(0.34)	0.00	(0.47)	(41.45)
2031	(41.45)	0.00	(0.10)	(0.00)	0.00	0.00	(0.10)	(41.55)
2032	(41.55)	0.00	(0.04)	(0.00)	0.00	0.00	(0.04)	(41.58)
2033	(41.58)	0.00	(0.03)	(0.00)	0.00	0.00	(0.03)	(41.62)
2034	(41.62)	0.00	(0.02)	(0.00)	0.00	0.00	(0.02)	(41.63)
2035	(41.63)	0.00	(0.02)	(0.00)	0.00	0.00	(0.02)	(41.65)
2036	(41.65)	0.00	(0.02)	(0.00)	0.00	0.00	(0.02)	(41.67)
2037	(41.67)	0.00	(0.04)	0.00	0.00	0.00	(0.04)	(41.71)
2038	(41.71)	0.00	(0.02)	0.00	0.00	0.00	(0.02)	(41.73)
2039	(41.73)	0.00	(0.02)	0.00	0.00	0.00	(0.02)	(41.75)
2040	(41.75)	0.00	(0.02)	0.00	0.00	0.00	(0.02)	(41.77)
2041	(41.77)	0.00	(0.02)	0.00	0.00	0.00	(0.02)	(41.79)

Certification

Caveats and Limitations of Use

The actuarial valuation of the South Carolina Tuition Prepayment Program as of June 30, 2019 has been completed in accordance with our understanding of Program provisions using assumptions and methods as described in this report. It also has been completed in accordance with our understanding of any applicable guidance or interpretations provided by the State Treasurer's office, InTuition Solutions, Inc., and Columbia Threadneedle Investments. The valuation results contained in this report are based on the actuarial assumptions and methods (Appendix C), principal Program provisions (Appendix D), and contract data (Appendix B) summarized in the appendices.

Purpose of the Valuation

The actuarial reserve portion of the actuarial valuation assesses, as of a single point in time, the estimated sufficiency of Program resources (assets currently held and estimated future premium contributions for contracts currently in force) to satisfy Program obligations (estimated future Program benefit payments and management expenses).

Assumptions and Methods

All liabilities shown in this report have been determined on the basis of actuarial assumptions and methods set forth in Appendix A. Except where noted, the assumptions are those developed and used by the prior actuary. The assumptions and methods used in this valuation are unchanged from those used in the prior valuation as of June 30, 2018, except as noted in this report.

Limited Use

We believe the assumptions and methods used in this report for purposes of calculating the actuarial reserve are reasonable for the purposes of the measurements. The results of this report are dependent upon future experience conforming to the assumptions disclosed in this report. Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: Program experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in Program provisions and/or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. Determinations for purposes other than meeting those requirements referenced above may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Reliance

In preparing our report we relied, without audit, on information (some oral and some written) supplied by InTuition Solutions, Inc., the Office of the State Treasurer, and Columbia Threadneedle Investments. This information includes, but is not limited to, statutory provisions, contract data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

This actuarial valuation was prepared and completed by us and those under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our professional opinion, the techniques and assumptions used are reasonable. To the best of our knowledge, there is no benefit provision or related expense to be provided by the Program and/or paid from the Program's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation, and there were no known events that were not taken into account in the valuation.

Milliman's work product was prepared exclusively for the internal business use of the Program, for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning the Program's operations, and uses Program data which Milliman has not audited. To the extent that Milliman's work is not subject to disclosure under applicable public record laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

(a) The Program may provide a copy of Milliman's work, in its entirety, to the Program's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Program.

(b) The Program may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the Program sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Certification

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with Actuarial Standards of Practice, the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

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Appendices

Appendix A – 2019-2020 Weighted Average Tuition

An enrollment weighted average of tuition and mandatory fees is used as the basis for projecting the actuarial cost of future tuition benefits under the Program and as the basis for certain Program payouts to independent and out-of-state institutions. The tuition and mandatory fee amounts were provided by InTuition Solutions, Inc. and reviewed by the Office of the State Treasurer. The enrollment counts were provided by the Office of the State Treasurer based on data from the South Carolina Commission on Higher Education.

Institutions	2019-20 Tuition and Fees	Enrollment Fall 2016	Enrollment Fall 2017	Enrollment Fall 2018	Three-year Average Enrollment	Percent of Total Enrollment	Weighted Average Tuition
The Citadel	$14,128	3,049	3,139	3,238	3,142	3.45%	$487
Clemson University	15,120	18,053	19,503	19,743	19,100	20.97%	3,171
Coastal Carolina University	11,640	9,435	9,721	9,566	9,574	10.51%	1,223
College of Charleston	12,978	9,913	9,420	9,457	9,597	10.54%	1,368
Francis Marion University	11,160	3,257	3,085	2,642	2,995	3.29%	367
Francis Marion Nursing	17,012	213	236	203	217	0.24%	41
Lander University	11,700	2,865	2,727	2,847	2,813	3.09%	362
S.C. State University	11,060	2,901	2,369	2,314	2,528	2.77%	307
U.S.C. - Aiken	10,398	3,036	2,925	2,897	2,953	3.24%	337
U.S.C. - Beafort	11,080	1,814	1,922	1,945	1,894	2.08%	230
U.S.C. - Columbia	12,848	25,110	26,146	26,577	25,944	28.48%	3,659
U.S.C. - Upstate	11,838	5,456	5,010	5,200	5,222	5.73%	678
Winthrop University	15,806	5,221	4,737	4,599	4,852	5.33%	842
Med. Univ. of S.C. - Nursing	25,233	166	294	309	256	0.28%	71
		90,489	91,234	91,537	91,087	100.00%	$\boxed{\$13,143}$

History of Weighted Average Tuition

Academic Year	Weighted Average Tuition (WAT)	Percentage Increase from Previous Year	Academic Year	Weighted Average Tuition (WAT)	Percentage Increase from Previous Year
2002-2003	$5,057		2011-2012	10,412	2.0%
2003-2004	5,891	16.5%	2012-2013	10,716	2.9%
2004-2005	6,679	13.4%	2013-2014	11,082	3.4%
2005-2006	7,458	11.7%	2014-2015	11,470	3.5%
2006-2007	7,954	6.7%	2015-2016	11,845	3.3%
2007-2008	8,418	5.8%	2016-2017	12,269	3.6%
2008-2009	9,029	7.3%	2017-2018	12,731	3.8%
2009-2010	9,519	5.4%	2018-2019	13,077	2.7%
2010-2011	10,204	7.2%	2019-2020	13,143	0.5%

Annualized Increase in Weighted Average Tuition:

Over last 5 years	2.8%
Over last 10 years	3.3%
Over last 15 years	4.6%
Over last 17 years	5.8%

Appendix B - Contract Data

Contracts in Force as of June 30, 2019

The table below shows the number of contracts with at least one semester of tuition still in force as of June 30, 2019 by the year of enrollment in the Program and by the projected matriculation year. There are 2,053 contracts with at least one semester still in force. There are an additional 654 contracts with a fraction of one semester of tuition still in force. A total of 2,707 contracts have tuition benefits still in force and were included in the actuarial valuation.

Projected Matriculation	Year of Enrollment in Program								
Year	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2006	Total
2006	-	-	-	-	1	-	-	-	1
2007	-	2	-	2	3	1	-	-	8
2008	9	10	6	2	9	3	-	-	39
2009	8	6	4	2	6	4	4	1	35
2010	13	18	14	6	6	5	3	2	67
2011	13	8	7	2	10	3	3	4	50
2012	7	8	9	7	5	8	4	2	50
2013	12	11	7	13	13	7	2	1	66
2014	18	20	16	9	9	3	6	1	82
2015	24	23	22	15	18	9	16	2	129
2016	50	53	26	41	57	34	26	12	299
2017	13	42	47	29	55	19	29	7	241
2018	2	37	64	48	63	28	27	11	280
2019	1	3	37	36	46	32	32	10	197
2020	2	-	2	25	53	30	35	11	158
2021	1	-	1	-	65	40	38	19	164
2022	-	3	2	-	1	53	33	13	105
2023	-	-	1	-	-	-	37	29	67
2024	2	-	2	-	-	-	-	-	4
2025	1	-	-	1	1	-	-	-	3
2026	1	-	-	1	-	-	1	-	3
2027	-	-	-	-	-	-	-	-	-
2028	-	-	-	1	-	-	-	-	1
2029	-	-	-	-	1	-	-	-	1
2030	-	-	1	-	-	-	-	-	1
2031	-	-	-	-	-	-	-	-	-
2032	-	1	-	-	-	-	-	-	1
2033	-	-	-	-	-	-	-	-	-
2034	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-
2036	1	-	-	-	-	-	-	-	1
Total	178	245	268	240	422	279	296	125	2,053

Semesters in Force as of June 30, 2019

The table below shows the number of semesters of tuition still in force by the year of enrollment in the Program and by the projected matriculation year for the 2,053 contracts with at least one semester of tuition still in force. The 654 contracts with a fraction of one semester of tuition still in force have a total of 70 semesters.

Projected Matriculation Year	Year of Enrollment in Program								
	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2006	Total
2006	-	-	-	-	3	-	-	-	3
2007	-	14	-	6	13	1	-	-	34
2008	32	28	27	8	31	12	-	-	138
2009	34	16	17	4	14	9	15	2	111
2010	43	55	63	17	19	12	10	12	231
2011	55	26	43	2	24	4	10	13	177
2012	39	31	36	29	13	34	17	10	209
2013	53	57	32	71	42	31	9	7	302
2014	76	73	66	51	52	11	30	8	367
2015	104	96	81	56	61	35	55	9	497
2016	156	182	82	115	184	121	104	36	980
2017	59	204	248	152	274	85	123	29	1,174
2018	11	217	411	316	406	172	166	60	1,759
2019	8	24	292	276	356	244	244	76	1,520
2020	16	-	16	196	408	220	268	72	1,196
2021	8	-	8	-	492	308	292	132	1,240
2022	-	24	16	-	8	424	248	100	820
2023	-	-	8	-	-	-	280	184	472
2024	16	-	8	-	-	-	-	-	24
2025	8	-	-	8	8	-	-	-	24
2026	8	-	-	8	-	-	8	-	24
2027	-	-	-	-	-	-	-	-	-
2028	-	-	-	8	-	-	-	-	8
2029	-	-	-	-	4	-	-	-	4
2030	-	-	4	-	-	-	-	-	4
2031	-	-	-	-	-	-	-	-	-
2032	-	8	-	-	-	-	-	-	8
2033	-	-	-	-	-	-	-	-	-
2034	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-
2036	8	-	-	-	-	-	-	-	8
Total	734	1,055	1,458	1,323	2,412	1,723	1,879	750	11,334

Appendix C – Actuarial Assumptions and Methods

Economic Assumptions: Discount Rate

The discount rate used to calculate the present values of benefits under the program is determined by discounting the projected benefit payments using the FTSE Pension Discount Curve for June 30, 2019. This curve consists of a set of yields on hypothetical AA-rated zero coupon bonds with maturities ranging from 6 months up to 30 years. The single equivalent discount rate that produces the same total present value of benefits as the curve is the discount rate for the actuarial valuation.

The rate for this year's valuation is 2.37%. This rate has not been reduced to reflect investment management fees. The rate used for last year's valuation was 2.90%. This rate reflected investment management fees of 30 basis points.

Economic Assumptions: Tuition Growth Rate

Tuition is assumed to increase at 5.50% per year. This is the same assumption as used for last year's actuarial valuation. This assumption was developed by the prior actuary. It is currently under review by the Program and will be reviewed by Milliman as part of an experience study before next year's valuation.

Economic Assumptions: Bias Load

It is assumed that the average payout per semester for tuition benefits will be 103% of weighted average tuition. This is the same assumption as used for last year's actuarial valuation. This assumption was developed by the prior actuary and will be reviewed by Milliman as part of an experience study before next year's valuation.

Economic Assumptions: Program Expenses

It is assumed that total Program expenses, including investment management fees, will be $340,000 per year for each of the next 11 years. This assumption was set by the Office of the State Treasurer.

Demographic Assumptions: Pre-Matriculation Voluntary Termination of Contract

It is assumed that contract holders will voluntarily terminate their contracts at the following rates. Note that all current in force contracts are past the 8th year since purchase.

	Lump Sum	48-Month	Extended
Year of purchase	2.0%	5.0%	8.0%
1st year after purchase	2.0%	4.0%	7.0%
2nd year after purchase	2.0%	3.0%	6.0%
3rd year after purchase	1.5%	2.0%	5.0%
4th year after purchase	1.5%	1.0%	4.0%
5th year after purchase	1.5%	1.0%	3.0%
6th year after purchase	1.5%	1.0%	2.0%
7th year after purchase	1.0%	1.0%	2.0%
8th year after purchase	1.0%	1.0%	2.0%
Thereafter	2.5%	2.5%	2.5%

The termination assumptions for the period from the year of purchase through the 8th year after purchase were developed by the prior actuary. The termination assumption for the period thereafter was mandated by the Program's external auditor. These assumptions will be reviewed by Milliman as part of an experience study before next year's valuation.

Demographic Assumptions: Utilization of Benefits

Four year contracts are assumed to redeem their tuition benefits ratably over five years. Two year contracts are assumed to redeem their semesters ratably over two years. Contracts that are more than two years beyond their projected matriculation year and have not redeemed benefits for at least two years are assumed to forgo their tuition benefits and receive a refund of premiums with 2.0% interest on unused semesters in the year the beneficiary reaches age 30.

These utilization assumptions were developed by the prior actuary and will be reviewed by Milliman as part of an experience study before next year's valuation.

Appendix D – Principal Plan Provisions

The Program opened in 1998 and sold two and four-year prepaid tuition contracts. The contracts provide for the payment of tuition and mandatory fees at public higher education institutions in South Carolina. The Program halted sales in 2006 and closed it to new enrollment in 2008.