

ACTUARIAL VALUATION
OF THE
VIRGINIA PREPAID
EDUCATION PROGRAM
AS OF JUNE 30, 2008

By:

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Board of the Virginia College Savings Plan
Commonwealth of Virginia
Virginia College Savings Plan
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Ladies & Gentlemen:

This report presents the results of the actuarial valuation of the Virginia Prepaid Education Program (VPEP) as of June 30, 2008.

Purpose

The main purposes of this report are:

- to calculate the actuarial present value of the obligations under the prepaid tuition contracts purchased through June 30, 2008 and compare the value of those obligations with the assets in VPEP as of that date;
- to review the experience and changes in the actuarial assumptions during the last year and indicate their effects on the results; and
- to set forth the basis for the actuarial assumptions and methods utilized in those calculations.

The results contained in this report are based on contract data and preliminary financial statements provided by the Virginia College Savings Plan. We have relied on this data in preparing this report.

Background

In 1994, the Virginia General Assembly established the Virginia Higher Education Tuition Trust Fund (subsequently renamed the Virginia College Savings Plan) to enhance the accessibility and affordability of higher education for all citizens of the Commonwealth. VPEP funds consist of payments received pursuant to prepaid tuition contracts, bequests, endowments or grants from the United States government, its agencies and

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instrumentalities, and any other available sources of funds, public or private. Any moneys remaining in VPEP at the end of a biennium shall remain in VPEP. Interest and income earned from the investment of such funds shall remain in VPEP.

In 1998, the Virginia General Assembly passed legislation that requires the Governor to include in each year's state budget an amount to cover VPEP's obligations in the event "the Plan is unable to meet its current obligations." The Governor has included the provision in subsequent budget submissions, and the General Assembly has included the provision in subsequent Appropriation Acts, including Chapter 879 of the 2008 Acts of Assembly (2008 Appropriation Act).

Program Design

The Virginia Prepaid Education Program is one of four Section 529 options offered by the Virginia College Savings Plan. Under VPEP, participants purchase tuition contracts that provide coverage of tuition and mandatory fees at a public university and/or community college in Virginia. At redemption, the contract pays the current tuition and mandatory fees at the Virginia public university or community college that the beneficiary attends. The benefits vary if the beneficiary does not attend a Virginia public university or community college. With the establishment of the Virginia Education Savings Trust, contract holders have the option of rolling over the value of their prepaid contract into a savings account. The value of the prepaid contract for such rollovers is the accumulated contributions at the reasonable rate of interest set by the Board. This option to roll over the contract has effectively added a minimum benefit to the Program.

Statutory Requirements

The Code of Virginia, Title 23, Chapter 4.9 provides limited guidance for establishing the actuarial basis to evaluate the Virginia Prepaid Education Program. The Code requires an annual audit of the Program and states in part that if the annual accounting and audit "reveal that there are insufficient funds to ensure the actuarial soundness of VPEP, the Board shall be authorized to adjust the terms of subsequent prepaid tuition contracts or arrange refunds for current purchasers to ensure actuarial soundness."

"Actuarial soundness" is not a precise concept and there is no generally accepted understanding of the meaning of this phrase within the actuarial profession, especially with respect to prepaid tuition plans. For purposes of this report, we have assumed that the phrase "actuarially sound," when applied to the Virginia Prepaid Education Program, means that the Fund has sufficient assets (including the value of future installment payments due under current contracts) to cover the actuarially estimated value of the tuition obligations under those contracts (including any administrative costs associated with those contracts).

We have also interpreted these Sections to require that the actuarial liabilities be evaluated using sound actuarial principles that are generally consistent with the practices and principles widely used for retirement programs. Reference to other programs is necessary because of the innovative nature of a prepaid tuition program. No generally accepted standard of practice has evolved within the actuarial profession specifically addressing prepaid tuition programs. We chose the standards applicable to retirement programs because these programs generally provide for payments at some future date where that payment has a high probability of payment at, or close to, some specific age.

Valuation Basis

The assumptions selected for this report are intended to be "best estimates".

The method for determining the "best estimate" liability for the Program reflects the possible variability of inflation, tuition, and investment returns and the correlation between each of these variables. The methodology is described in the section below, Variability of Results and Valuation Basis.

VPEP Investment Policy

On March 23, 2005, the Board of the Virginia College Savings Plan amended its investment policy for the Virginia Prepaid Education Program to set forth the acceptable investment allocations.

The investment policy is important because it sets forth acceptable investment allocations among asset classes. The asset allocation affects the magnitude and variability of expected investment returns and therefore the financial structure of the plan. For the valuation, we have assumed that Program investments will be allocated as shown below, based on the investment policy target allocations:

Asset Class

U.S. Equities	45%
Foreign Equities	10%
REITs	5%
Fixed-Income	40%

Actuarial Assumptions

The actuarial assumptions used to prepare this report are summarized in Appendix C. The two most significant of those assumptions are the rates of investment return and tuition growth in the future. The Virginia College Savings Plan selected both of these assumptions.

They are:

- the investment return assumption of 7.00% per year, net of investment related expenses (this is the same as the assumption used to prepare the prior year's report); and,
- the annual tuition growth rate assumptions summarized in the table below.

	<u>Universities</u>		<u>Community Colleges</u>	
	<u>New assumption</u>	<u>Prior assumption</u>	<u>New assumption</u>	<u>Prior assumption</u>
Fall 2009	8.5%	8.0%	7.5%	7.0%
Fall 2010	8.5%	7.0%	7.5%	7.0%
Fall 2011 and thereafter	7.5%	7.0%	7.5%	7.0%

Summary of Results

The actuarial value of the obligations of the Virginia Prepaid Education Program as of June 30, 2008 is summarized below and compared with the total assets of the Program.

	<u>Present Value of Obligations For Future Payments</u>	<u>Value of Total Program Assets</u>	<u>Actuarial Reserve/ (Deficit)</u>
<i>(Amounts in Millions)</i>			
Virginia Prepaid Education Program:			
Tuition Obligations	\$1,864.0	n/a	n/a
Administrative Expenses	<u>27.4</u>	<u>n/a</u>	<u>n/a</u>
Grand Total	\$1,891.4	\$1,839.6	\$(51.8)

As indicated above, the Virginia Prepaid Education Program has assets that fall short of the "best estimate" of the obligations by roughly \$51.8 million or 2.7%. Unfavorable future experience would adversely affect this position. It would be desirable to accumulate additional actuarial reserve over time that would positively affect this position.

The present value of future obligations for Administrative Expenses reflects the expected costs of maintaining each contract in place (as of June 30, 2008) until all tuition benefits have been paid and the expenses associated with making those payments. It does not include the future expenses of the Program associated with general overhead and marketing attributable to future contracts. The \$27.4 million administrative expense obligation is equivalent to about \$381 per contract.

Actuarial Gain/Loss Analysis

During the 2008 fiscal year, the plan shifted from a surplus of \$122.2 million to a deficit of \$51.8 million or 2.7% of obligations. This decrease is mostly attributable to investment losses and the change in the tuition growth assumption, offset somewhat by revenue from new sales. Each of the factors affecting the change in the actuarial reserve/(deficit) is discussed below.

The actuarial surplus was expected to grow during the year by about \$8.6 million due to the passage of time. (The obligations are calculated as present values which grow with interest with the passage of time.)

The rate of return on Program investments (net of investment management fees) for the fiscal year was -4.3% on both a time-weighted basis and dollar-weighted basis. For the previous valuation, a 7.0% return was assumed. This produced a net actuarial loss of approximately \$178.2 million.

Average tuition rates for the 2008-2009 school year increased by 8.6% for universities and 7.5% for community colleges, compared to the 8.0% and 7.0% rates assumed in the prior valuation. This resulted in an actuarial loss of \$4.8 million.

The Program sold 3,978 new contracts during the year. Each contract was priced so as to contribute to the actuarial reserve. We estimate that the reserve was increased by about \$10.0 million from these new contracts.

The Prepaid Program received \$27.3 million in administrative fee revenue from all the VCSP programs, including CollegeAmerica. Total agency operating expenses were \$9.5 million, of which \$4.1 million was expected to be provided by the VPEP expense reserve. The balance of the fee revenue, \$21.9 million, is an increase to the reserve.

The tuition growth assumption for universities was increased from 8.0% in fall 2009 and 7.0% thereafter to 8.5% for fall 2009 and fall 2010 and 7.5% thereafter. The tuition growth assumption for community colleges was increased from 7.0% in all years to 7.5% in all years. In addition, the assumption for the reasonable rate of return was decreased from a mean of 4.5% to mean of 4.2% per year. This resulted in a combined decrease in the reserve of approximately \$44.6 million.

Other experience gains added about \$13.1 million to the reserve. These could be from rollovers, the drop in the reasonable rate during the year, and more beneficiaries attending colleges with lower tuition levels than assumed in last year's valuation.

In summary, the effect of experience and assumption changes on the actuarial reserve/ (deficit) can be summarized as follows:

(Amounts in Millions)

Actuarial Reserve / (Deficit) as of June 30, 2007	\$ 122.2
Interest on the reserve at 7.00%	8.6
Investment gain (loss)	(178.2)
Tuition gain (loss)	(4.8)
Sales of new contracts	10.0
Administrative Fee Revenue from VCSP	21.9
Change in Assumptions	(44.6)
Other	13.1
Actuarial Reserve / (Deficit) as of June 30, 2008	\$ (51.8)

Variability of Results and Valuation Basis

The present values of the obligations shown above were based on assumptions which represent an estimate of anticipated experience under the Fund that are reasonably related to past educational cost and investment data. Differences between those projections and actual amounts will depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

A prime source of variation will be normal fluctuations that occur in the rate of increase in tuition, investment returns, and expense inflation. One way of estimating the range of possible outcomes is to stochastically model the financial operation of the Program using "Monte Carlo" techniques. This approach involves preparing 1,000 projections of financial results under randomly derived scenarios of tuition growth, investment returns, and expense inflation. Each of these scenarios is based on statistical factors such as standard deviation and correlation that were established by reviewing historical results adjusted where appropriate to reflect current conditions. By tabulating the results under all of these projections we estimated the probability that current assets, along with all anticipated contract payments plus investment returns, will be sufficient to cover the obligations of the Virginia Prepaid Education Program.

We have summarized in the table below the results of this process. It is important to understand that these results are only illustrative of the range of results that are possible and are dependent on the assumptions utilized. The assumptions are presented in Appendix C.

(Amounts in Millions)

<u>Percentage of "Best Estimate" Reserve</u>	<u>Total VPEP Fund Value at June 30, 2008</u>	<u>Probability of VPEP Funds Exceeding Obligation</u>
90%	\$1,702.3	30%
97%	1,839.6	45%*
100%	1,891.4	50%
110%	2,080.6	68%
120%	2,269.7	79%
130%	2,458.9	88%
140%	2,648.0	93%
150%	2,837.1	96%

*actual Fund position.

The present value of obligations for future payments shown previously is the amount of assets necessary to have a 50% probability of meeting all program obligations, including administrative costs, associated with current contracts. The actual VPEP fund balance at June 30, 2008 of \$1,839.6 million is 97% of the actuarially determined "Best Estimate" Reserve amount of \$1,891.4 million. As indicated in the above table, this VPEP fund balance is estimated to have a 45% probability of being adequate to satisfy all Program obligations using current assumptions.

Data Reliance

In performing this analysis, we relied on data and other information provided by the Virginia College Savings Plan. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

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Cash Flow Projection

The table in Appendix E shows a cash flow projection based on a set of deterministic assumptions that produce the same Present Value of Obligations for Future Payments as the “best estimate” actuarial assumptions used in the Monte Carlo simulations. The deterministic cash flow projection assumes that University tuition increases 8.5% for two years and 7.5% thereafter, Community College tuition increases 7.5% each year, and Plan assets earn 6.74% each year. The starting Market Value of Invested Assets as of July 1, 2008 is \$1,551.6 million. At the end of the 2033 Fiscal Year all tuition obligations associated with contracts already purchased are expected to have been paid resulting in a final cumulative deficit of \$181.2 million. Since the actuarial assumptions are intended to represent “best estimates” of future expenses, there is a 50% chance that actual results will be better than this projection and a 50% chance that actual results will be worse.

Certification

Based on the foregoing assumptions, the Virginia Prepaid Education Program does not have sufficient assets, including the value of future installment payments, to cover the actuarially estimated value of the tuition obligations under all contracts outstanding as of the valuation date (including any administrative costs associated with those contracts).

This determination has been based on reasonable actuarial assumptions that represent the Virginia College Savings Plan’s best estimate of anticipated experience under the Program taking into account past experience and future expectations. Since the results of the valuation are dependent on the actuarial assumptions used, actual results can be expected to deviate from the figures indicated in this report to the extent that future experience differs from those assumptions.

This report was prepared exclusively for the Virginia College Savings Plan for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning the Virginia College Savings Plan’s operations, and uses the Virginia College Savings Plan’s data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We look forward to reviewing the results of our analyses with you at your earliest convenience.

Respectfully submitted,

MILLIMAN, INC.



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Member American Academy of Actuaries



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Virginia Prepaid Education Program

I. Statement of Assets as of June 30, 2008

<u>Investments</u>	<u>Market Value</u>
1) Equities	\$ 766,632,694
2) Fixed Income including Accrued Interest	564,040,563
3) REIT Index Fund and Real Estate	64,370,881
4) Cash & Cash Equivalents	152,538,129
5) Other Investments	16,960,444
6) Other Receivables	4,327,589
7) Accounts Receivable	6,439,375
8) Property, Plant & Equipment	193,097
9) Payables	(2,065,503)
10) Accrued Liabilities	(382,522)
11) Other Liabilities	<u>(21,462,807)</u>
Total Market Value of Investments	\$ 1,551,591,940
Present Value of Installment Contract Receivables	<u>288,024,065</u>
Value of Total Fund Assets	\$ 1,839,616,005

II. Reconciliation of Investments

1) Investments at June 30, 2007	\$1,558,190,196
2) Adjustment to Match Financial Statements	1,691,605
3) Contract Purchase Payments	124,302,309
4) Application Fees	114,030
5) Administrative Fee Revenue	27,273,579
6) Interest and Dividends	60,156,086
7) Realized and Unrealized Gains/(Losses)	(124,564,763)
8) Tuition Payments, Refunds and Rollovers	(81,005,809)
9) Administrative Expenses	(9,510,440)
10) Investment Management Fees	(5,044,745)
11) Transfers to the Commonwealth	<u>(10,108)</u>
12) Investments at June 30, 2008	\$ 1,551,591,940
Time-weighted rate of return	-4.3%
Dollar-weighted rate of return	-4.3%

Appendix A

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Virginia Prepaid Education Program

Participant Data as of June 30, 2008 – Number of Contracts*

Matriculation Year	Plan Type																				Total by Payout Year	Percent of Total			
	Total Years of Community College Purchased										Total Years of University Purchased														
	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	0	0			0	0	0
2000-2001	1	0	0	1	0	0	8	0	2	0	0	0	0	0	0	0	0	3	5	2	51	2	75	0.1%	
2001-2002	1	0	1	0	0	0	33	0	7	0	1	0	2	0	0	0	0	7	11	2	125	3	193	0.3%	
2002-2003	3	1	0	1	0	0	29	4	6	0	0	0	0	0	0	1	0	26	22	6	194	16	309	0.4%	
2003-2004	3	1	0	3	1	0	27	0	16	3	0	0	3	0	0	0	0	1	24	40	5	341	23	491	0.7%
2004-2005	4	1	1	2	0	0	51	6	29	1	1	0	7	0	0	1	0	1	64	72	16	613	51	921	1.3%
2005-2006	8	1	0	10	0	0	89	3	66	1	2	0	7	1	0	0	0	2	129	170	48	2057	82	2676	3.7%
2006-2007	8	10	2	3	1	0	116	7	88	2	1	1	15	0	0	0	0	1	184	248	95	2471	94	3347	4.7%
2007-2008	14	9	2	5	0	0	168	12	110	2	0	0	19	2	0	0	0	0	291	499	99	2883	112	4227	5.9%
2008-2009	22	11	6	8	0	0	157	14	124	3	0	0	16	3	0	0	0	3	442	532	129	2980	133	4583	6.4%
2009-2010	16	20	2	7	1	0	198	8	148	3	0	1	16	3	0	0	0	1	426	530	132	3225	132	4869	6.8%
2010-2011	54	14	7	9	1	0	193	14	157	2	0	1	17	2	1	0	0	3	513	628	125	3168	144	5053	7.0%
2011-2012	47	18	6	6	0	0	194	11	172	1	2	0	24	3	1	0	0	3	496	568	130	3198	140	5020	7.0%
2012-2013	50	18	9	12	2	0	187	9	147	2	0	1	38	1	1	0	0	1	540	579	128	3071	153	4949	6.9%
2013-2014	44	13	9	18	2	0	165	4	162	2	1	1	19	1	0	1	0	2	437	565	127	2921	128	4622	6.4%
2014-2015	52	12	7	17	1	1	155	10	154	3	0	0	32	0	1	0	0	1	498	506	131	2788	149	4518	6.3%
2015-2016	35	12	4	7	0	0	142	13	127	0	0	0	17	2	0	1	0	3	392	503	101	2646	119	4124	5.7%
2016-2017	38	9	4	8	0	1	126	11	133	1	3	0	15	1	0	0	0	2	347	410	116	2419	123	3767	5.2%
2017-2018	27	12	2	2	0	0	107	5	137	4	1	0	17	1	0	0	0	2	323	363	97	2141	134	3375	4.7%
2018-2019	24	8	4	5	0	0	77	3	133	2	0	1	13	2	0	1	0	1	278	333	77	2022	143	3127	4.4%
2019-2020	21	15	1	6	2	1	65	3	121	2	1	0	17	1	0	0	0	2	246	307	78	1776	127	2792	3.9%
2020-2021	22	2	2	2	1	0	59	4	90	2	0	0	11	2	0	0	0	0	189	221	45	1469	103	2224	3.1%
2021-2022	23	8	1	6	2	0	59	4	80	1	0	1	13	2	0	1	0	5	189	251	74	1355	98	2173	3.0%
2022-2023	24	4	2	5	1	0	46	4	54	4	0	0	4	1	0	0	0	0	169	211	41	841	37	1448	2.0%
2023-2024	21	2	1	2	2	0	39	4	58	2	1	0	5	0	0	0	0	2	132	130	41	814	40	1296	1.8%
2024-2025	16	0	1	2	0	1	27	2	35	0	0	0	4	1	0	0	0	1	91	129	27	516	41	894	1.2%
2025-2026	11	1	2	1	0	0	20	2	27	1	0	0	1	0	0	0	0	0	60	70	12	342	20	570	0.8%
2026-2027	3	0	0	1	0	0	11	0	3	0	0	0	3	0	0	0	0	0	22	23	2	98	4	170	0.2%
Total	592	202	76	149	17	4	2548	157	2386	44	14	7	335	29	4	5	1	37	6518	7926	1886	46525	2351	71813	
Percent of Total	0.8%	0.3%	0.1%	0.2%	0.0%	0.0%	3.5%	0.2%	3.3%	0.1%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	9.1%	11.0%	2.6%	64.8%	3.3%		

* Table only includes contracts with at least one year of tuition remaining.

Virginia Prepaid Education Program

Participant Data as of June 30, 2008 – Remaining Years of Tuition

<u>Expected Payout Year</u>	<u>University Years</u>	<u>Community College Years</u>
2008-2009	12,475	797
2009-2010	14,471	835
2010-2011	15,766	765
2011-2012	16,449	811
2012-2013	15,770	830
2013-2014	15,591	821
2014-2015	15,249	811
2015-2016	14,538	729
2016-2017	13,783	680
2017-2018	12,797	636
2018-2019	11,878	577
2019-2020	10,851	519
2020-2021	9,723	435
2021-2022	8,757	388
2022-2023	7,401	327
2023-2024	6,153	277
2024-2025	4,930	219
2025-2026	3,670	160
2026-2027	2,610	103
2027-2028	1,577	47
2028-2029	838	25
2029-2030	322	14
2030-2031	103	7
2031-2032	33	3
2032-2033	6	1
Total	215,741	10,817

Virginia Prepaid Education Program

Summary of Actuarial Assumptions

Investment / Economic Assumptions for Simulation Model:

The standard deviation and correlation assumptions are based on actual historical returns and tuition growth. Expected return assumptions are based on Milliman's investment assumptions, but are adjusted so that the expected annualized return on the portfolio is 7.0%, which is the assumption set by the Board.

	<u>Inflation</u>	<u>Reason-able Rate</u>	<u>L Cap Equity</u>	<u>Sm/Mid Cap Equity</u>	<u>Non-US Equity</u>	<u>REITs</u>	<u>Fixed Income</u>	<u>Univ Tuition</u>	<u>CC Tuition</u>
Expected Arithmetic Mean	2.50%	4.20%	9.00%	9.50%	9.00%	8.25%	5.30%	7.60%	7.60%
Standard Deviation	1.80%	1.40%	17.20%	20.55%	21.10%	15.85%	7.30%	4.95%	5.80%
Correlation:									
Inflation	1.00	0.62	-0.19	-0.05	-0.18	-0.10	-0.27	0.23	0.20
Reasonable Rate		1.00	0.13	0.10	-0.05	0.02	0.12	0.05	-0.23
L Cap Equity			1.00	0.84	0.56	0.52	0.45	0.00	-0.14
Sm/Mid Cap Equity				1.00	0.46	0.73	0.44	0.00	-0.02
Non-US Equity					1.00	0.36	0.14	0.19	-0.13
REITs						1.00	0.41	0.11	0.04
Fixed Income							1.00	0.22	0.26
Univ Tuition								1.00	0.80
CC Tuition									1.00

Based on the economic assumptions above, the expected long-term annualized compound rate of return on investments is 7.00%. The expected long-term annualized compound rate of tuition growth is 8.5% for the next two years and 7.5% thereafter for university tuition, and 7.5% for community college tuition. The expected annual means shown above for University tuition are increased by 1.0% in the first two years to match this assumption.

Matriculation and Bias:

It is assumed that 80% of beneficiaries will attend a public university in Virginia, 10% will attend a private university in Virginia and 10% will attend a university in another state. Weighted average tuition for four-year public universities in Virginia was adjusted with a 10.0% load to add a bias for matriculation at more expensive schools. The highest tuition for a public university in Virginia was assumed to be 50% higher than weighted average tuition. Out-of-state students are assumed to receive a benefit equal to the payments made on the contract plus interest at the composite reasonable rate of return.

Virginia Prepaid Education Program

Summary of Actuarial Assumptions
(continued)

Utilization: It is assumed that participants will begin utilizing their contract at the following rates, and then redeem one year of tuition per year until the contract is depleted:

Years since Matriculation <u>Year</u>	Number of Years of Tuition Purchased							
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
0	35%	60%	60%	85%	85%	100%	100%	100%
1	20%	10%	20%	7%	8%			
2	15%	15%	10%	5%	7%			
3	10%	5%	5%	3%				
4	10%	5%	5%					
5	5%	5%						
6	5%							

Expenses: The expenses included in the present value of future obligations are those relating to:

Annual Maintenance Expense per Contract = \$49.19

Annual Distribution Cost per Contract in Payment Status = \$12.30

These expenses are assumed to increase annually at the rate of inflation plus 0.5%.

Virginia Prepaid Education Program

History of Enrollment-Weighted Average Tuition and Mandatory Fees at Four Year Universities and Community Colleges in Virginia

<u>Academic Year</u>	<u>University Tuition and Fees</u>	<u>% Increase</u>	<u>Community College Tuition and Fees</u>	<u>% Increase</u>
1982-1983	\$1,362			
1983-1984	1,537	12.8%		
1984-1985	1,733	12.8%		
1985-1986	1,885	8.8%		
1986-1987	2,080	10.3%		
1987-1988	2,240	7.7%		
1988-1989	2,377	6.1%	\$778	
1989-1990	2,544	7.0%	798	2.5%
1990-1991	2,702	6.2%	894	12.0%
1991-1992	2,985	10.5%	1,050	17.4%
1992-1993	3,357	12.5%	1,230	17.1%
1993-1994	3,659	9.0%	1,320	7.3%
1994-1995	3,789	3.6%	1,359	3.0%
1995-1996	3,949	4.2%	1,445	6.3%
1996-1997	4,002	1.3%	1,445	0.0%
1997-1998	4,095	2.3%	1,445	0.0%
1998-1999	4,217	3.0%	1,445	0.0%
1999-2000	3,721	(11.8%)	1,159	(19.8%)
2000-2001	3,793	1.9%	1,159	0.0%
2001-2002	3,843	1.3%	1,159	0.0%
2002-2003	4,122	7.3%	1,671	44.3%
2003-2004	5,033	22.1%	1,882	12.6%
2004-2005	5,559	10.5%	2,006	6.5%
2005-2006	5,990	7.8%	2,135	6.4%
2006-2007	6,529	9.0%	2,269	6.3%
2007-2008	6,966	6.7%	2,404	5.9%
2008-2009	7,562	8.6%	2,584	7.5%

Compounded Increase in Tuition

Over last 5 years:	8.5%	6.5%
Over last 10 years:	6.0%	6.0%
Over last 15 years:	5.0%	4.6%
Over last 20 years:	6.0%	6.2%
Over last 25 years:	6.6%	n/a

Appendix D

Virginia Prepaid Education Program

Cash Flow Projection

<u>Fiscal Year</u>	<u>Beginning Balance</u>	<u>Monthly Payments</u>	<u>Tuition Benefits</u>	<u>Expenses</u>	<u>Investment Income</u>	<u>Ending Balance</u>
2009	\$1,551.6	\$65.4	\$112.2	\$3.7	\$101.0	\$1,602.1
2010	1,602.1	59.3	131.5	3.8	103.3	1,629.4
2011	1,629.4	49.3	149.7	3.7	103.8	1,629.1
2012	1,629.1	40.1	165.7	3.6	102.9	1,602.8
2013	1,602.8	32.0	174.1	3.2	100.3	1,557.8
2014	1,557.8	24.9	186.8	3.1	96.4	1,489.2
2015	1,489.2	21.5	197.2	2.9	91.3	1,401.9
2016	1,401.9	18.4	201.5	2.6	84.9	1,301.1
2017	1,301.1	15.7	204.8	2.4	78.0	1,187.6
2018	1,187.6	13.2	204.0	2.2	70.3	1,064.9
2019	1,064.9	10.8	202.9	1.9	61.9	932.8
2020	932.8	8.6	198.8	1.7	53.2	794.1
2021	794.1	6.8	191.2	1.5	44.1	652.3
2022	652.3	4.9	185.3	1.2	34.8	505.5
2023	505.5	3.4	169.3	1.0	25.6	364.2
2024	364.2	2.0	152.4	0.8	16.9	229.9
2025	229.9	1.0	132.1	0.6	8.8	107.0
2026	107.0	0.2	106.5	0.4	1.9	2.2
2027	2.2	0.0	81.4	0.3	0.0	(79.5)
2028	(79.5)	0.0	52.7	0.2	0.0	(132.4)
2029	(132.4)	0.0	30.1	0.1	0.0	(162.6)
2030	(162.6)	0.0	12.5	0.0	0.0	(175.1)
2031	(175.1)	0.0	4.3	0.0	0.0	(179.4)
2032	(179.4)	0.0	1.5	0.0	0.0	(180.9)
2033	(180.9)	0.0	0.3	0.0	0.0	(181.2)

Appendix E

This work product was prepared solely for the Virginia College Savings Plan for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Virginia Prepaid Education Program

Prepaid Tuition Benefits

For beneficiaries attending a Virginia public college, university, or community college, VPEP will pay the full amount of in-state undergraduate tuition and all mandatory fees on a semester-by-semester basis for the type of school and number of years purchased. VPEP payments to in-state public schools will not exceed the actual cost of the in-state undergraduate tuition and mandatory fees. The contract-holder has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to the Virginia Education Savings Trust (VEST), and request a distribution from VEST to pay for qualified higher education expenses.

For beneficiaries attending a Virginia independent (private) college or university, VPEP will pay to the Virginia private school, including certain private career schools, the lesser of 1) the payments made on the contract plus the actual rate of return earned on the VPEP Trust or 2) the highest in-state undergraduate tuition and mandatory fees at a Virginia public school in the same academic year the benefits are used. All payments will be made directly to the school on a semester-by-semester basis following the school's add-drop period. The student or his or her family is responsible for any additional expenses not covered by VPEP. The contract-holder has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to the Virginia Education Savings Trust, and request a distribution from VEST to pay for qualified higher education expenses.

For beneficiaries attending an out-of-state public or private college or university, VPEP will pay the lesser of 1) the payment made on the contract plus interest at the composite reasonable rate of return or 2) the average in-state undergraduate tuition and mandatory fees at Virginia public schools for the same academic year the benefits are used. All payments will be made directly to the school on a semester-by-semester basis. The student or his or her family is responsible for any additional expenses not covered by VPEP. The contract-holder has the option to transfer the total amount of all payments, accumulated at the reasonable rate of return, to the Virginia Education Savings Trust , and request a distribution from VEST to pay for qualified higher education expenses.

The reasonable rate of return tracks the quarterly performance of the Institutional Money Funds Index as reported in the Money Fund Monitor by iMoneyNet.

Appendix F