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August 22, 2004

Ms. Jo Carole Ellis
Executive Director
Kentucky's Affordable Prepaid Tuition
100 Airport Road, P.O. Box 798
Frankfort, KY 40601

Dear Ms. Ellis:

We have completed our actuarial analysis of the Prepaid Tuition Trust Fund ("the Fund") for Kentucky's Affordable Prepaid Tuition ("KAPT" or "the Program") as of June 30, 2004. This report presents our findings with respect to the Fund's expected cash flows and adequacy of the Fund in light of assets in the Fund and in light of the KAPT Reserve ("Reserve") created under KRS 393.015.

The analysis of the funding of the Program was prepared for the KAPT Board for the purpose of assessing the actuarial soundness of the Fund as required by statute. The analyses have been prepared in accordance with generally accepted actuarial principles and practices commonly applicable to similar types of arrangements.

Currently the expected value of liabilities is $103,664,716 and the value of assets is $89,964,665 for a difference of $13,700,051 or –13.2% of liabilities. This deficit is offset by the Reserve of $28,339,000 for an overall surplus of $14,638,949 or 14.1% of liabilities. These results are based on assumptions approved by KAPT personnel after consultation with me.

We conclude that KAPT is actuarially sound based on the combined Reserve and Fund amounts.

We appreciate the opportunity to serve the Commonwealth of Kentucky. Any questions about the report should be directed to me at (770) 752-5656.

Very truly yours,

Robert B. Crompton, FSA, MAAA

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I. EXECUTIVE SUMMARY

The following are the key findings of our analysis.

Adequacy of the Program

We conclude that the KAPT Program is actuarially sound due to the Kentucky General Assembly's wisdom in backing the KAPT Fund with the KAPT Reserve. The Program's $14 million actuarial deficit is more than offset by the $28 million KAPT Reserve and the Unclaimed Property Fund of more than $80 million from which the Reserve is derived.

Note that the conclusion on soundness is dependent on the availability of the Reserve. If there are any future legislative changes that impair KAPT's access to the Reserve or to the Unclaimed Property Fund, then the soundness of the Program can only be preserved by reopening KAPT to new enrollments with contract prices set to produce surpluses through the use of actuarial premiums. We have projected that if KAPT reopens enrollment with contract prices that include a 7.5% premium surcharge, the Program can eliminate the actuarial deficit in less than 10 years. The table immediately below demonstrates the results of our projections on this deficit recovery through future enrollments.

Deficit Recovery Through Future Enrollments			
	Number of Contracts Sold Each Year		
Premium Level	1,000	2,000	3,000
5.0%	Never	15	8
7.5%	Never	8	5
10.0%	16	6	4

The table following summarizes results for June 30, 2004:

Value as of June 30, 2004	Assets and Liabilities
Total Assets	$89,964,665
Total KAPT Liabilities	$103,664,716
Actuarial Deficit	($13,700,051)
Deficit as a Percent of Liabilities	13.2%
KAPT Reserve	$28,339,000
Aggregate Surplus	14,638,949
Aggregate Surplus as a Percent of Liabilities	14.1%

Investment Strategy

The investment strategy of the Fund is designed to enable KAPT to meet the actuarially determined program liabilities. The market value composition of the Fund as of June 30, 2004, is 33% fixed income, 57% equities, and 10% cash and short-term investments. KAPT has selected outside investment managers to invest the Fund's assets.

The objective of the allocation of approximately 60% of the portfolio to equity investments is to provide higher portfolio returns than would be available from a portfolio consisting mainly of fixed income investments. We have not reviewed the strategy nor are we expressing an opinion on the strategy.

Key economic assumptions are listed below.

Key Assumptions	
Yield on Investments	
All Years	7.76%
Investment returns are before expenses.	
Tuition Inflation	
All Classes of Contracts	
2005/06 – 2010/11 (5 years)	7.50%
All years thereafter	7.00%
Expenses	
Initial Expenses	$742,000
The initial expense is projected to decrease over time as more contracts are sold.	

The tuition inflation assumptions are based on a combination of statistical models of tuition increases and on actuarial judgment. Our statistical models use information from the past 20 years.

Conclusion

From an actuarial perspective, it is essential for Kentucky policymakers to understand the key conclusion of this report. The KAPT program is financially and structurally sound in both the short and long terms because current law provides for a KAPT Reserve, comprised of unclaimed property funds, to offset any KAPT Program Fund actuarial deficits. If the General Assembly changes that law -- either to diminish or eliminate the KAPT Reserve -- then the only way to maintain the structural and financial soundness of the KAPT Fund is to allow for new enrollments into the program, charging actuarial premiums, in order to eliminate any Program Fund deficits. If both the KAPT Reserve is used for other purposes AND the KAPT program is shut down to future enrollment, then there is a strong probability that significant General Fund dollars will be needed to meet the state's contractual obligations to KAPT purchasers.

II. RELIANCES

In making the projections on which this report is based, we relied on the following information supplied to me as indicated below.

- Tuition amounts at Kentucky colleges and universities, public and private, supplied by the staff of KAPT
- Program expenses, supplied by the staff of KAPT
- Market value of assets of the Program's trust fund, supplied by the staff of KAPT
- Inventory of KAPT contracts by category, enrollment period, payment method and anticipated matriculation year, supplied by the Program's records administrator, Intuition Solutions, Inc.
- Assumptions regarding future investment returns on the Program's trust fund, supplied by the Program's investment advisor, Evaluation Associates
- Assumptions regarding the Program's anticipated asset allocation, supplied by the Program's investment advisor, Evaluation Associates
- Information on expenses of the Program, supplied by the staff of KAPT

III. DESCRIPTION OF THE PROGRAM

The Program was created in 2000 by the Kentucky Legislature "to provide access to participating institutions for the qualified beneficiaries and to provide students and their parents economic protection against rising tuition costs." The Legislature created the Prepaid Tuition Trust Fund in the custody of the state treasurer for administration by a board of directors. "The fund shall consist of payments received from prepaid tuition contracts. Income earned from the investments of the fund shall remain in the fund and be credited to it."

In addition, the Legislature created a KAPT Reserve (KRS 393.015) which provides that 75% of the state's unclaimed property fund shall be available to support the Trust Fund.

Administration of the Program is performed by the Kentucky Higher Education Assistance Authority, while currently governance resides with the Board.

Description of Contracts & Payment Options

There are three types of contracts.

- TheValue Plan, which provides in-state tuition at community colleges and technical colleges. Purchasers have the option of buying one year or two years of tuition under the Value Plan.
- The Standard Plan, which provides in-state tuition at any of Kentucky's eight public universities. The price for Standard Plan contracts is based on the most expensive public university. Purchasers have the option of buying from one year's tuition to five years' tuition in one-year increments.
- The Premium Plan, which is designed to cover the cost of average tuition at Kentucky's private colleges and universities. The cost of the Premium Plan contracts is based on the enrollment weighted-average tuition of Kentucky's private colleges and universities and increases at the same rate as tuition increases at the University of Kentucky. Similar to the Standard Plan, purchasers may purchase one year's tuition to five years' tuition in one-year increments.

Contracts are available to students who are at least two years away from initial college enrollment. Benefits can be used at any institution of higher education that is accredited by the U.S. Department of Education anywhere in the country. Benefits paid for out-of-state institutions or graduate schools will not exceed the benefits provided for Kentucky undergraduate benefits described above.

Each contract type has three main types of payment options:

- Lump Sum Payment
- Installment Payments, which come in several varieties:
    - Monthly payments over three years

    - Monthly payments over five years
    - Monthly payments over seven years
    - Monthly payments until the beneficiaries projected year of enrollment
- A combination of a Lump Sum down payment plus Installment Payments, where the installment payments are available in the following options:
    - Monthly payments over three years
    - Monthly payments over five years
    - Monthly payments over seven years

Residency Requirements

There are no residency requirements imposed on the purchasers of KAPT contracts. KAPT beneficiaries can be either:

- Kentucky residents at the time the application is signed or
- Intend to attend college in Kentucky.

Refunds

For cancellations other than death, disability, or receipt of a scholarship, the purchaser receives a refund of payments minus administrative charges and cancellation fees if the cancellation occurs before July 1 of the projected year of initial college enrollment. Cancellations for reasons other than death, disability, or receipt of a scholarship that occur on or after July 1 of the projected year of initial college enrollment will receive the tuition payout value of the contract minus administrative and cancellation fees.

If the beneficiary dies, becomes disabled, or receives a scholarship, the purchaser will receive a refund as described immediately above but with no deduction of any administrative or cancellation fees.

Change of Beneficiary

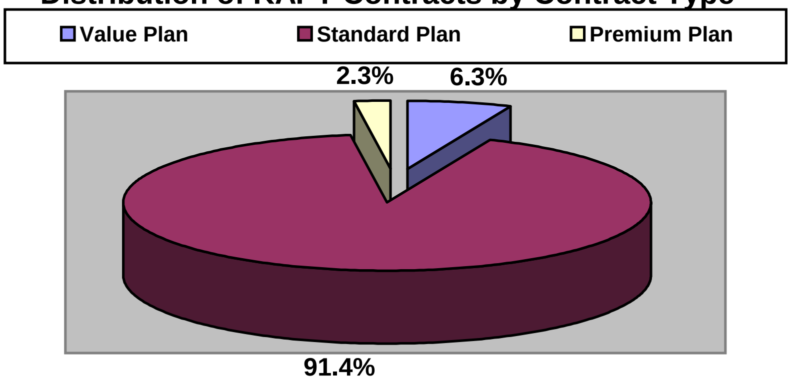
A contract owner may request a change of beneficiary to a substitute who is a family member of the immediately-preceding beneficiary. Changes in beneficiary for reasons other than death, disability, or receipt of a scholarship of the original beneficiary will be subject to administrative fees.

IV. SUMMARY OF CONTRACT DATA AND CURRENT ASSETS

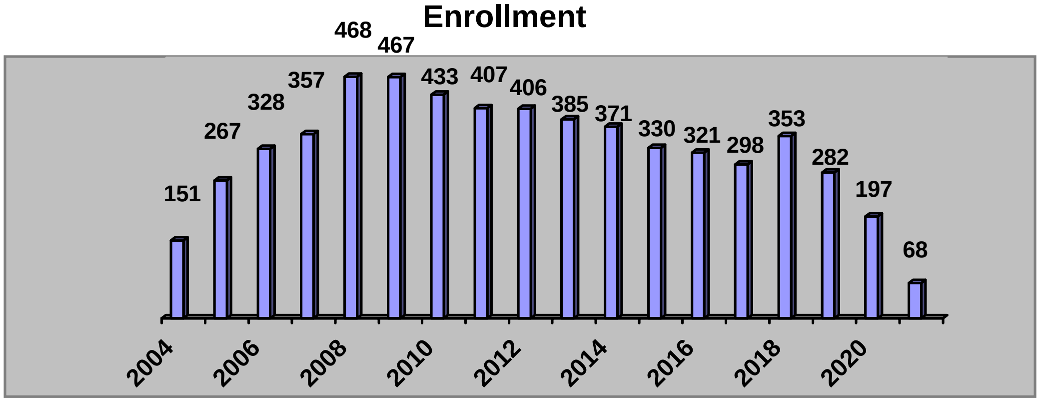
Contract Data

Data on the number of outstanding contracts and payments was provided by the Program's records administrator, Intuition Solutions, Inc. The graphs below summarize the data provided concerning these KAPT contracts.

Distribution of KAPT Contracts by Contract Type



Distribution of KAPT Contracts by Year of Initial College Enrollment



Current Assets

The assets currently held by the Fund are an important part of the determination of the actuarial adequacy of the Program. The investment strategy for those assets is also critical to the yield and to the vulnerability of the Program's actuarial adequacy to changes in the return earned on investments.

Fund Investments

The total market value of assets held as of June 30, 2004 is $63,708,180. The allocation of these assets is shown in the table below.

Market value of assets held as of June 30, 2004		
	Amount	% Of Total
Cash & Short Term	$ 6,407,999	10.1%
KAPT Lockbox Balance	219,847	0.3%
Bonds & Bond Funds	20,710,170	32.5%
Equities	36,134,185	56.7%
Accruals	235,979	0.4%
TOTAL	$63,708,180	100.0%

Investment Strategy

The investment strategy is designed to achieve an investment return in excess of tuition inflation, which will allow KAPT to provide the contractual benefits to KAPT beneficiaries at their anticipated initial year of college enrollment. The Fund's asset allocation has a target allocation by asset category as follows:

- Large Cap U.S. Stocks 45%
- Small/Mid Cap U.S. Stocks 10%
- Non-U.S. Stocks 5%
- Inflation Indexed Bonds 25%
- Corporate Bonds 15%

We note that the current asset allocation is within the ranges allowed by the Program's Investment Policy.

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V. ACTUARIAL METHODS AND ASSUMPTIONS

Methods

The actuarial method for the determination of the adequacy of the Fund consists of projecting future tuition rates, future expenses based on the average anticipated number of KAPT Contracts in place, and future utilization of KAPT Contracts. Future benefits and expenses are discounted using the assumed investment yield as the interest discount rate. The assumed discount rate is based on the current and anticipated mix of assets of the Fund.

For the projection of future benefits, the analysis proceeds as follows:

- Project future tuition rates for all years under consideration. Future tuition is based on the assumptions for tuition inflation. These assumptions vary by postsecondary school.

- Determine the nominal cost of future use of KAPT contracts based on the assumptions regarding utilization of contracts and the length of time the average beneficiary will take to complete his college education.

- Determine the nominal value of administrative expenses.

- Determine the present value of future contract usage and future expenses based on the investment yield assumptions.

- Perform projections for all of the Program's beneficiaries to determine if the Fund is adequate in the aggregate and make sufficient provision for overhead expenses.

__Assumptions__

Actuarial assumptions used to determine financial soundness of programs are of two general types: economic and demographic. Demographic assumptions determine the expected exposure to financial claims and generally answer the question "How and when will people use their contract?" Economic assumptions are concerned with the expected level of contract usage and answer the question "What is the expected value of contract usage?" The assumptions that we used were those that were approved by the KAPT Executive Director, after consultation with us.

Economic Assumptions

Economic assumptions are used to estimate the annual tuition rates at two and four year colleges, increases in Fund expenses, and Fund earnings on assets invested. Because inflation is a major component of the rate of increase in tuition rates and of investment returns, we considered these rates together. We believe that the difference in these rates is more important than the absolute level of the rates. The following paragraphs describe the economic assumptions used in this study.

Federal Income Tax

We assumed that Fund earnings are exempt from Federal Income Tax.

Annual Tuition Rates

Tuition increases vary by duration and are shown in the table below. Our assumptions were guided by our observations of historic tuition increases, trends in postsecondary enrollment in Kentucky, and the level of legislative appropriations for postsecondary schools in Kentucky.

Tuition Inflation	
All Classes of Contracts	
2005/06 – 2010/11	7.50%
All years thereafter	7.00%

Fund Earnings Rate

Our assumption for investment returns is based on information supplied to us by the Programs's investment advisor, Evaluation Associates. Evaluation Associates supplied us with expected asset class returns. The assumption below is gross before expenses and is based on the asset class returns combined with the Program's target allocation ratios.

Investment Returns	
Investment Return for all future years	7.76%

Annual Expenses

We are projecting future expenses to be as shown in the following table.

Expenses	
Investment Expenses	
First $25,000,000 of assets	0.49%
Next $25,000,000 of assets	0.28%
Assets in excess of $50,000,000	0.21%
Repayment of Initial Appropriation	
Entire balance to be repaid in 2004	$900,000
Administrative Expenses	
Initial Annual Amount	$742,700
This amount is assumed to decline as the Program grows.	

<u>Demographic Assumptions</u>

The demographic assumptions used in this report are based on our experience with similar types of liabilities. Our choice of assumptions is based on recent experience and our best estimates as to future events. These assumptions are as follows:

Contract Cancellations Due To Mortality and Disability

We assumed no contract terminations due to death or disability.

Other Contract Cancellations

We assumed that contracts would cancel according to the tables given below.

Contract Cancellation Table 1 of 2			
		36 Monthly	**60 Monthly**
Type of Payment=>	**Lump Sum**	**Payments**	**Payments**
Year of purchase	1.50%	3.00%	5.00%
Year of purchase+1	1.00%	2.00%	4.00%
Year of purchase+2	0.75%	1.00%	3.00%
Year of purchase+3	0.75%	1.00%	2.00%
Year of purchase+4	0.50%	0.75%	1.00%
Thereafter	0.50%	0.75%	0.75%

Contract Cancellation Table 2 of 2			
	84 Monthly	**Extended**	**Custom**
Type of Payment=>	**Payments**	**Payments**	**Payments**
Year of purchase	6.00%	8.00%	8.00%
Year of purchase+1	4.00%	7.00%	7.00%
Year of purchase+2	3.00%	5.00%	5.00%
Year of purchase+3	2.00%	4.00%	4.00%
Year of purchase+4	1.00%	3.00%	3.00%
Year of purchase+5	1.00%	2.00%	2.00%
Year of purchase+6	1.00%	1.00%	1.00%
Thereafter	0.75%	0.75%	0.75%

Matriculation Percent

All beneficiaries are assumed to matriculate at the matriculation date specified in the application, except for those who are projected to terminate, die, or become disabled.

Utilization of Benefits

We assume that beneficiaries will enroll in college at the date indicated as their anticipated matriculation date. We also assume that beneficiaries will use one year's worth of benefits over the course of only one academic year. That is, a 4-year contract will use all benefits over four academic years.

Within an academic year, contract usage is assumed to be 50% for the fall semester, 50% for the spring semester and none for the summer semester.

We believe these assumptions are slightly conservative since the alternate assumption is to assume that beneficiaries use their benefits more slowly. This slowdown in utilization would be beneficial to the Program since the anticipated Fund earnings rate will exceed the tuition increase rate after the first five years of the projection.

Dropout Rate

All beneficiaries are assumed to use 100% of their contractual benefits once they have enrolled in college.

Frequency of Beneficiary Replacement

Since all surviving beneficiaries are expected to matriculate and are expected to use their KAPT contracts until completion, the assumption is made that no replacement of beneficiaries will occur.

VI. ADEQUACY OF THE FUND AS OF JUNE 30, 2004

In determining the adequacy of the Fund, we estimated the future disbursements for higher education expenses of beneficiaries, expenses, and refunds for terminated contracts. We also projected the future assets based on current assets and expected earnings on assets. We believe these estimates are reasonable based on the information available and our past experience and judgment.

The estimates of the prospective assets and liabilities of the Fund are summarized in the table on the following page and demonstrate the financial position of the Fund. The value of all assets including future contract payments is $89,964,665 while the expected value of all liabilities is $103,664,716. The resulting actuarial deficit is $13,700,051.

However, the Program remains actuarially sound because the Program is backed by the KAPT Reserve of $28,339,000 for an overall surplus of $14,638,949. The KAPT Reserve was created by the Kentucky Legislature and provides that 75% of the state's unclaimed property fund shall be available to support the KAPT Fund.

The actuarial deficit will change from year to year due to positive and negative cash flows and due to the change in the present value of future contract usage and expense payments because of the passage of time. The actuarial deficit will also change due to the variance of experience from the assumptions. These variances include tuition increases, investment income, and expenses.

The deficit will also change due to the growth of the program and due to the updating of the assumptions to reflect the Program's emerging experience. The changes for the year ending June 30, 2003 are summarized in the table below.

Progression of Deficit	
Deficit at June 30, 2003	($ 10,700,000)
Projected Increase to June 30, 2004	(776,000)
Loss from Unfavorable Tuition Inflation	(7,415,450)
Gain due to Favorable Investment Experience	6,358,009
Changes due to Additional Contract Sales	- 0 -
Changes Due to Change In Assumptions	(1,166,610)
Deficit at June 30, 2004	($ 13,700,051)

In the following chart we show the value of expected future contract usage, expected future payments, current assets, and expected deficit as of the end of each future year for active contracts as of June 30, 2004.

PRESENT VALUE OF ASSETS AND LIABILITIES

Fiscal Year Ending	Assets Including Reserve Fund *	Present Value Of Future Revenues	Present Value of Future Liabilites And Expenses	Aggregate Surplus
2004	92,047,180	$ 26,256,485	$ 103,664,716	14,638,949
2005	104,638,262	21,026,572	107,619,169	18,045,665
2006	115,574,162	16,421,635	111,520,495	20,475,302
2007	124,555,288	12,447,307	114,180,717	22,821,879
2008	131,098,958	9,268,446	115,288,453	25,078,950
2009	134,665,328	6,749,612	114,175,369	27,239,570
2010	135,135,597	5,188,151	111,027,494	29,296,254
2011	133,538,008	4,220,528	106,517,598	31,240,937
2012	130,362,654	3,355,669	100,653,395	33,064,928
2013	126,146,826	2,595,111	93,983,077	34,758,860
2014	121,210,108	1,946,104	86,843,571	36,312,641
2015	115,467,077	1,409,260	79,160,941	37,715,395
2016	109,052,158	953,793	71,050,547	38,955,404
2017	101,791,507	573,892	62,345,362	40,020,037
2018	93,487,850	284,690	52,876,855	40,895,685
2019	83,790,777	116,277	42,339,370	41,567,684
2020	72,912,018	27,654	30,919,442	42,020,230
2021	61,888,224	-0-	19,651,931	42,236,293
2022	52,615,021	-0-	10,417,498	42,197,523
2023	46,317,724	-0-	4,433,580	41,884,144
2024	42,565,911	-0-	1,291,064	41,274,848
2025	40,503,879	-0-	157,210	40,346,669

* The reserve fund is assumed to increase by $3,500,000 per year.

VII. SENSITIVITY TESTING

We believe that when there is a significant amount of uncertainty about conditions prevailing in the future it is important to test for adequacy under other possible assumptions.

We investigated the effect of variances in both university inflation and investment yield assumptions from those anticipated by the adequacy test assumptions. For these projections, we assumed no future contributions. These scenarios are described below. These scenarios are based on level adjustments to the baseline adequacy assumptions discussed earlier in this report.

1) Tuition inflation lower than adequacy test assumptions by 0.25% every year.
2) Tuition inflation higher than adequacy test assumptions by 0.25% every year.
3) Investment yields higher than adequacy test assumptions by 0.25% every year.
4) Investment yields lower than adequacy test assumptions by 0.25% every year.
5) Tuition inflation higher and investment yields lower than adequacy test assumptions by 0.25% every year.

The deficit for each of these scenarios is shown below.

Sensitivity Testing Results		
Scenario	Deficit	Change From Reported
1	($11,806,669.00)	$ 1,893,382
2	($15,640,685.00)	(1,940,634)
3	($11,860,963.00)	1,839,088
4	($15,595,921.00)	(1,895,870)
5	($17,592,598.00)	(3,892,547)

VIII. MONTE CARLO MODELING

We have performed Monte Carlo modeling of the Program as of June 30, 2004 in order to provide you with information that quantifies the fluctuations associated with the Program. We have performed 1,000 projections of financial results using randomly derived scenarios of tuition inflation and investment returns. 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 Program.

These results are summarized in the table below. It is important to understand that these results are only illustrative of the range of results that are possible.

Percentage Of Best Estimate Reserve	Total Fund As Of June 30, 2004	Probability of Funds Exceding Obligations
87%	89.0	25% *
104%	108.0	50%
114%	118.3	65% **
125%	129.6	75%
150%	155.9	90%

* actual Fund position
** actual Fund position plus KAPT reserve account

The actual Fund balance at June 30, 2003 of $89,964,665 is 86.8% of the reported actuarial liability amount of $103.7 million. As indicated above, this Fund balance is estimated to have a 25% probability of being adequate to satisfy the Plan obligations. When the KAPT reserve account is reflected in the analysis, the combined Fund balance plus KAPT reserve account have a 65% probability of being adequate to satisfy all Plan obligations.

IX. CHANGES IN ACTUARIAL ASSUMPTIONS

We made several changes to the assumptions used in projecting the actuarial deficit. These assumptions changes are, in aggregate, conservative – that is, they cause the deficit to be larger than it would have been without these changes. These changes are discussed below.

Changes in Expenses

We changed the actuarial assumption for expenses from a per contract basis to an aggregate basis, consistent with how expenses are tracked at KAPT. In addition we explicitly recognized the Program's liability to repay the initial appropration amount.

Item	Current Assumption	Prior Assumption
Overhead	$742,700	None
Loan Repayment	$900,000	None
Per Contract Expense	None	$15.45/contract $10.30 per annual payout

Change in Investment Return

Previously the investment return was net of expenses. Because investment expenses vary with the Program's asset level, we changed this assumption so that the investment return was gross before investment expenses and added explicit investment expenses.

Item	Current Assumption	Prior Assumption
Investment Return	7.76%	7.25%
Investment Expenses	0.49% of 1st $25,000,000 0.28% of 2nd $25,000,000 0.21% of all excess funds	None

Change in Tuition Inflation

We revised the tuition inflation assumptions to better reflect our long-term view of what tuition increases will be.

Item	Current Assumption	Prior Assumption
Inflation Year 1 – 5	7.5%	7.5%
Inflation Years 6+	7.0%	6.5%

Inclusion of Contract Cancellation Rates

In prior years the determination of the actuarial surplus/deficit did not include the effects of contract cancellation. We have incorporated such assumption for 2004. These assumptions are given above the section ***Actuarial Methods & Assumptions***.

Dollar Effect of Change in Assumptions
If assumptions had been the same as last year, the Program's deficit would have been:

($12,533,441)

This change increased the deficit by $1,166,610.

X. EXPECTED USE OF FUNDS

The Fund, which is comprised of contributions, fees, all interest and earnings, and any other money appropriated or made available to KAPT, is expected to pay benefits and expenses in the following proportions:

- Tuition payments – 89.6%
- Expenses and repayment of the initial legislative appropriation – 6.2%
- Payments of refunds to contract owners – 4.2%

These results are shown graphically below.