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ACTUARIAL VALUATION  
OF THE  
NEVADA PREPAID TUITION PROGRAM

JUNE 30, 2002

By:

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ASSEMBLY WAYS AND MEANS

DATE: 3-24-03 ROOM: 3137 EXHIBIT E

SUBMITTED BY: Treasurer's Office

E-10618



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February 26, 2003

**Nevada Prepaid Tuition Program**  
555 E. Washington Ave.  
Suite 4600  
Las Vegas, NV 89101

**Ladies & Gentlemen:**

**This report presents the results of our actuarial valuation of the Nevada Prepaid Tuition Program as of June 30, 2002.**

**Purpose**

**The main purposes of this report are:**

- to calculate the actuarial present value of the prepaid tuition contracts purchased through June 30, 2002 and compare the value of those obligations with the assets in the Fund as of that date;
- to review the experience and changes in the actuarial assumptions and methods 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 provided by SCT and preliminary financial statements provided by the Nevada Prepaid Tuition Program. We have relied on this data in preparing this report.**

**Certification**

**Based on the following, the Nevada Prepaid Tuition 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. This determination has been based on reasonable actuarial assumptions that represent the Program's best estimate of anticipated experience under the Prepaid Tuition 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.**

E-20618

### Background

Chapter 353B of the Nevada Revised Statutes created the Nevada Prepaid Tuition Program to help families save for the cost of higher education. The Act created the Nevada Higher Education Tuition Trust Fund Board of Trustees (the "Board"). Section 353B.090 stated "The board shall develop a program for the prepayment of tuition at a guaranteed rate which is established based on the annual actuarial study required pursuant to NRS 353B.190 for undergraduate studies at a university or community college that is a member of the system."

This Act also created the Nevada Higher Education Tuition Trust Fund (the "Fund"), which consists of payments received pursuant to a prepaid tuition contract, a bequest, endowment or grant from the Federal Government or any other public or private source of money. All income derived from investments in the Fund and gains from a sale or exchange shall be credited to the Fund. Money in the Fund that is not expended during any biennium does not revert to the state general fund at any time.

The Nevada Prepaid Tuition Program offers four plan types; a University Plan providing 120 credit hours (8 semesters) of tuition at a state university, a University Plan providing 60 credit hours (4 semesters) of tuition at a state university, a Community College Plan providing 60 credit hours (4 semesters) of tuition at a state community college, and a Community College Plus University Plan providing 60 credit hours (4 semesters) of tuition at a state community college and 60 upper division level credit hours (4 semesters) of tuition at a state university.

Purchasers are allowed to pay for their contracts by choosing one of three payment options: 1) a single lump sum payment, 2) equal monthly payments until the beneficiary reaches college age, or 3) a five year plan of 60 equal monthly payments.

The purpose of this actuarial valuation is to estimate the obligations of the Prepaid Tuition Program for all future payments associated with Prepaid Contracts purchased as of the valuation date. The value of those obligations is then compared with the Fund Balance to determine the current financial position of the Prepaid Tuition Program.

### Statutory Requirements

Section 353B.160(10) states that "if the annual actuarial study performed pursuant to NRS 353B.190 reveals that there is insufficient money to ensure the actuarial soundness of the trust fund, the board shall modify the terms of subsequent prepaid tuition contracts."

"Actuarially sound" 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 Programs. For purposes of this report, we have assumed that the phrase "actuarially sound" when applied to the Fund, 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

For retirement programs, the traditional conservative approach to setting actuarial assumptions has been modified over the last 25 years due to the "best estimate" requirements of the Employee Retirement Income Security Act ("ERISA"). This "best estimate" requirement was re-enforced by Financial Accounting Standards Board Statements No. 35, 87 and 106 regarding the calculation of liabilities for private sector, GAAP reporting purposes. Moreover, it has been adopted by the Actuarial Standards Board in Actuarial Standard of Practice No. 27 regarding "Selection of Economic Assumptions for Measuring Pension Obligations."

It is not clear to us from the statute which standard of "actuarial soundness" was contemplated by the legislature. For purposes of this report, we have adopted the "best estimate" approach.

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. This methodology is described in the section below, Variability of Results and Valuation Basis.

#### Investment Policy

The Investment Policy for the Prepaid Tuition Program is determined by the Board and implemented by the State Treasurer. The Investment Policy is important because it sets forth acceptable investment allocations among asset classes. The asset allocation affects the magnitude and variability of investment returns realized and therefore the financial structure of the plan.

For the Valuation, we have assumed that Program investments will be allocated as follows:

|              |     |
|--------------|-----|
| Equities     | 50% |
| Fixed Income | 50% |

**Actuarial Assumptions**

The actuarial assumptions used to prepare this report are summarized in Appendix C. The two most significant of those assumptions are the rate of investment returns and tuition growth in the future. The Nevada Prepaid Tuition Program selected both of these assumptions. They are:

- the investment return assumption of 7.50% per year (this is the same as the investment return assumption used to prepare the prior year's report); and,
- the tuition growth 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 2003 through 2007 | 7.50%*                | 5.00%                   | 5.00%*                    | 5.00%                   |
| Fall 2008 and later    | 5.75%                 | 5.00%                   | 5.00%                     | 5.00%                   |

\* Tuition at Universities is scheduled to increase by 7.59% and 7.06% in the fall of 2003 and 2004, respectively. Similarly, Community College tuition is scheduled to increase at 6.18% and 3.70% in the fall of 2003 and 2004, respectively.

**Summary of Results**

The actuarial value of the obligations of the Prepaid Tuition Program as of June 30, 2002 is summarized below and compared with the balance in the Fund.

|  | <u>Present Value of Obligations for Future Payments</u> | <u>Value of Total Fund Assets</u> | <u>Stabilization Reserve / (Deficit)</u> |
|--|---|-----------------------------------|--|
| <b><u>Prepaid Tuition Program:</u></b> |   |                                   |  |
| Tuition Obligations                    | \$67,469,000  | n/a                               | n/a                                      |
| Administrative Expenses                | <u>622,000</u>  | <u>n/a</u>                        | <u>n/a</u>                               |
| Subtotal                               | \$68,091,000  | \$65,431,302                      | (\$2,659,698)                            |
| State Loan                             | <u>1,947,000</u>  | <u>n/a</u>                        | <u>(1,947,000)</u>                       |
| Grand Total                            | \$70,038,000  | \$65,431,302                      | (\$4,606,698)                            |

To date, there has been an appropriation of \$3,501,853 from the State that has been spent by the Program. The Program will repay the State over ten years beginning in the 2004 fiscal year. The present value of all of the repayments has been reflected above. See Appendix E for the repayment schedule.

The present value of future obligations for Administrative Expenses reflects the expected costs of maintaining existing contract 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.

As indicated above, the Fund has assets that fall short of the best estimate of the obligations by roughly \$4.6 million or 6.6% of obligations. Unfavorable future experience would adversely affect this position. It would be desirable to accumulate an actuarial reserve over time, expressed as a percentage of obligations.

#### Actuarial Gain/Loss Analysis

During the 2002 fiscal year, the Stabilization Reserve decreased from a surplus of \$5,116,690 to a deficit of \$4,606,698, which is 6.6% of obligations. The decrease is mostly attributable to changes in the tuition growth assumption and unfavorable investment results. Each of the factors affecting the reserve is discussed below.

The Reserve was expected to grow during the year by \$373,518 due to investment returns.

During the 2002 fiscal year, there were 1,136 enrollments. Each contract sold contributes to the Stabilization Reserve. We estimate that \$1.0 million of Reserve was generated by the new contracts.

The return on Fund investments was approximately -3.0% on a dollar-weighted basis. In the previous valuation, a 7.5% return was assumed. Thus, actual investment returns were 10.5% less than expected. This produced a net actuarial loss of \$3,257,840.

Tuition rates for the 2002-2003 school year increased by 3.3% for Universities and 1.4% for Community Colleges, below the 5% rate assumed in the previous valuation. This resulted in a gain of \$1,095,000.

Refunds were paid to 276 contract holders during the prior year. This resulted in a loss of approximately \$100,000.

Fewer contracts were sold than expected during the year. This resulted in a loss of \$492,278 to the Stabilization Reserve.

The tuition growth assumption for universities was changed from a constant 5.0% in all future years to 7.59% for 2003, 7.06% for 2004, 7.50% for 2005 through 2007 and 5.75% thereafter. The tuition growth assumption for community colleges was changed from a constant 5.0% in all future years to 6.18% for 2003, 3.70% for 2004 and 5.0% thereafter. These changes decreased the reserve by \$8.6 million

In summary, the Stabilization Reserve changes due to experience and assumption changes can be summarized as follows:

|   |                |
|---|----------------|
| Stabilization Reserve / (Deficit) as of June 30, 2001 | \$5,116,690    |
| Interest on Reserve                                   | 373,518        |
| Addition to stabilization reserves from new contracts | 964,637        |
| Investment loss                                       | (3,257,840)    |
| Tuition gain  | 1,095,000      |
| Refunds paid during year                              | (100,000)      |
| Fewer contracts sold than expected                    | (492,278)      |
| Change in tuition growth assumption                   | (8,560,000)    |
| Other   | <u>253,575</u> |
| Stabilization Reserve / (Deficit) as of June 30, 2002 | \$(4,606,698)  |

Variability of Results and Valuation Basis

The present values of the obligations shown above were based on assumptions that represent an estimate of anticipated experience under the Prepaid Tuition Program 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, inflation, etc. 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 and investment returns. Each of these scenarios is based on statistical factors such as standard deviation and correlation that were established by reviewing historical results and then adjusting where appropriate to reflect current conditions.



For each scenario, we determined whether the Fund would run out of money before all tuition and expense obligations were paid. By tabulating the results under all of these projections we estimated the probability of having the assets of the Prepaid Tuition Program exceed its obligations. Note that for this analysis, a scenario where the Fund comes up as little as one dollar short is considered a scenario where Fund assets do not exceed obligations. Also note that we have assumed there are no additional contracts sold and no changes are made to the asset mix throughout the projection period. We have also assumed that all future installment payments will be made.

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. They do not necessarily represent the "true" probability of future events, which, of course, are unknown. The assumptions are presented in detail in Appendix C.

*(Amounts in Millions)*

| <u>Percentage of "Best Estimate" Reserve</u> | <u>Total Fund Value at June 30, 2002</u> | <u>Probability of Funds Exceeding Obligation</u> |
|--|--|--|
| 90%  | \$63.0                                   | 33%  |
| 93%  | 65.4                                     | 39% *  |
| 100%   | 70.0                                     | 50%  |
| 110%   | 77.0                                     | 65%  |
| 120%   | 84.0                                     | 77%  |
| 130%   | 91.0                                     | 86%  |
| 140%   | 98.0                                     | 90%  |
| 150%   | 105.0                                    | 93%  |

**\* Actual Fund Position**

The "Best Estimate" Reserve of \$70.0 million represents the level of assets necessary as of June 30, 2002 to achieve a 50% probability of sufficiency. This includes the present value of Installment Contract Receivables. The actual Fund balance at June 30, 2002 of \$65.4 million is thus 93% of the actuarially determined "Best Estimate" Reserve. As indicated in the above table, this Fund balance is estimated to have a 39% probability of being adequate to satisfy all Program obligations.

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We believe the 39% figure should be viewed as a risk index. To date the Program has a goal to gradually build a Stabilization Reserve to help absorb the risk of adverse deviations in investment and tuition growth experience. As the Reserve grows relative to the Program obligations, we would expect to see this risk index measure improve. We included in the table the probability of sufficiency associated with other funding levels to illustrate the sensitivity of this measure to the level of funding.

#### Data Reliance

In performing this analysis, we relied on data and other information provided by the Nevada Prepaid Tuition Program. 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.

#### Cash Flow Projection


Appendix E shows a cash flow projection based on the actuarial assumptions. The starting Market Value of Investments as of July 1, 2002 is \$35.6 million. At the end of the 2023 Fiscal Year all tuition obligations associated with units already purchased are expected to have been paid, resulting in a final cumulative shortfall of \$10.8 million. Since the actuarial assumptions are intended to represent "best estimates" of future expenses, there is a 50% probability that results will be less favorable than indicated and a 50% probability that results will be more favorable.

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February 26, 2003  
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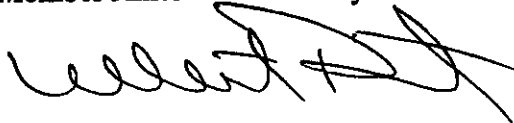
We look forward to reviewing the results of our analyses with you and the Board at your earliest convenience.

Respectfully submitted,

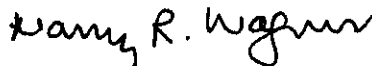
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Attachments

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Nevada Prepaid Tuition Program

I. Statement of Assets as of June 30, 2002

| <u>Investments</u>                                | <u>Market Value</u> |
|---|---------------------|
| 1) Equity   | \$ 14,322,938       |
| 2) Fixed Income                                   | <u>21,245,033</u>   |
| Total Market Value of Investments                 | \$ 35,567,971       |
| Present Value of Installment Contract Receivables | <u>29,863,331</u>   |
| Value of Total Fund Assets                        | \$ 65,431,302       |

II. Reconciliation of Investments

|                                 |                |
|---------------------------------|----------------|
| 1) Investments at June 30, 2001 | \$ 25,702,145  |
| 2) Contract Purchase Payments   | 11,488,454     |
| 3) Investment Earnings          | (884,872)      |
| 4) Tuition Payments and Refunds | 582,649        |
| 5) Administrative Expense       | <u>155,107</u> |
| 6) Investments at June 30, 2002 | \$ 35,567,971  |
| Dollar-weighted rate of return  | (3.0%)         |

Appendix A

Nevada Prepaid Tuition Program

Participant Data as of June 30, 2002

Number of Contracts by Plan Type

| <u>Matriculation<br/>Year</u> | <u>University<br/>Plan (4 yrs)</u> | <u>Community<br/>College Plus<br/>University Plan</u> | <u>Community<br/>College Plan</u> | <u>University<br/>Plan (2 yrs)</u> | <u>Total</u> |
|-------------------------------|------------------------------------|---|-----------------------------------|------------------------------------|--------------|
| 2002                          | 80                                 | 15  | 7                                 | 0                                  | 102          |
| 2003                          | 182                                | 32  | 24                                | 0                                  | 238          |
| 2004                          | 289                                | 49  | 23                                | 16                                 | 377          |
| 2005                          | 363                                | 45  | 39                                | 10                                 | 457          |
| 2006                          | 377                                | 61  | 32                                | 15                                 | 485          |
| 2007                          | 423                                | 70  | 21                                | 11                                 | 525          |
| 2008                          | 433                                | 75  | 35                                | 23                                 | 566          |
| 2009                          | 468                                | 68  | 25                                | 21                                 | 582          |
| 2010                          | 497                                | 62  | 25                                | 17                                 | 601          |
| 2011                          | 483                                | 61  | 22                                | 11                                 | 577          |
| 2012                          | 484                                | 65  | 26                                | 12                                 | 587          |
| 2013                          | 503                                | 51  | 19                                | 16                                 | 589          |
| 2014                          | 435                                | 54  | 19                                | 15                                 | 523          |
| 2015                          | 434                                | 44  | 22                                | 7                                  | 507          |
| 2016                          | 495                                | 45  | 17                                | 11                                 | 568          |
| 2017                          | 440                                | 40  | 20                                | 10                                 | 510          |
| 2018                          | 419                                | 41  | 11                                | 13                                 | 484          |
| 2019                          | <u>200</u>                         | <u>7</u>  | <u>3</u>                          | <u>4</u>                           | <u>214</u>   |
| <b>Total</b>                  | <b>7,005</b>                       | <b>885</b>  | <b>390</b>                        | <b>212</b>                         | <b>8,492</b> |

Appendix B

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**Nevada Prepaid Tuition Program**

**Summary of Actuarial Assumptions**

**Economic Assumptions for Simulation Model:**

|                                   | <u>Inflation</u> | <u>Equity</u> | <u>Fixed<br/>Income</u> | <u>University<br/>Tuition</u> | <u>Community<br/>College<br/>Tuition</u> |
|-----------------------------------|------------------|---------------|-------------------------|-------------------------------|--|
| Expected Arithmetic Annual Return | 2.50%            | 9.54%         | 5.54%                   | 7.57%/5.86%                   | 5.05%                                    |
| Standard Deviation                | 3.16             | 17.92         | 7.62                    | 5.10                          | 5.62                                     |
| Correlation with:                 |                  |               |                         |                               |  |
| Inflation                         | 1.00             | -0.23         | -0.33                   | 0.09                          | -0.02                                    |
| Equity                            |                  | 1.00          | 0.50                    | 0.15                          | 0.51                                     |
| Fixed Income                      |                  |               | 1.00                    | 0.19                          | 0.34                                     |
| University Tuition                |                  |               |                         | 1.00                          | 0.74                                     |
| Community College Tuition         |                  |               |                         |                               | 1.00                                     |

**Equivalent Deterministic Economic Assumptions:**

The assumptions shown below, used deterministically, would produce the same "best estimate" obligation developed by the Simulation Model assumptions shown above and used in the valuation.

|   |                  |
|---|------------------|
| Consumer Price Index (CPI) Inflation Rate | 2.50%, per annum |
| Investment Returns                        | 7.35%, per annum |
| University Tuition Growth: Next 5 years   | 7.50%, per annum |
| University Tuition Growth: Thereafter     | 5.75%, per annum |
| Community College Tuition Growth          | 5.00%, per annum |

**Expenses:**

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

Annual Maintenance Expense per Contract = \$5.25  
Annual Distribution Cost per Contract in Payment Status = \$8.74

A monthly processing fee of \$1.50 has been netted out in calculating the present value of Installment Contract receivables.

Expenses are assumed to increase at a rate equal to CPI + .5%.

**Appendix C**

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Nevada Prepaid Tuition Program

Recent History of Per Credit Hour Tuition in Nevada

| <u>Academic Year</u> | <u>Average<br/>Community<br/>College<br/>Tuition</u> | <u>Percent<br/>Increase</u> | <u>University<br/>Tuition</u> | <u>Percent<br/>Increase</u> |
|----------------------|--|-----------------------------|-------------------------------|-----------------------------|
| 1982-1983            | \$17.00  |                             | \$31.00                       |                             |
| 1983-1984            | 20.92  | 23.0%                       | 36.00                         | 16.1%                       |
| 1984-1985            | 20.88  | -0.2                        | 36.00                         | 0.0                         |
| 1985-1986            | 20.88  | 0.0                         | 36.00                         | 0.0                         |
| 1986-1987            | 20.89  | 0.0                         | 36.00                         | 0.0                         |
| 1987-1988            | 21.36  | 2.3                         | 36.00                         | 0.0                         |
| 1988-1989            | 21.35  | -0.1                        | 40.00                         | 11.1                        |
| 1989-1990            | 21.34  | 0.0                         | 40.00                         | 0.0                         |
| 1990-1991            | 24.00  | 12.4                        | 46.00                         | 15.0                        |
| 1991-1992            | 26.00  | 8.3                         | 49.00                         | 6.5                         |
| 1992-1993            | 28.00  | 7.7                         | 55.50                         | 13.3                        |
| 1993-1994            | 29.50  | 5.4                         | 55.50                         | 0.0                         |
| 1994-1995            | 30.50  | 3.4                         | 58.00                         | 4.5                         |
| 1995-1996            | 33.50  | 9.8                         | 61.00                         | 5.2                         |
| 1996-1997            | 36.50  | 9.0                         | 64.00                         | 4.9                         |
| 1997-1998            | 38.00  | 4.1                         | 66.50                         | 3.9                         |
| 1998-1999            | 39.50  | 3.9                         | 69.00                         | 3.8                         |
| 1999-2000            | 41.00  | 3.8                         | 71.50                         | 3.6                         |
| 2000-2001            | 42.50  | 3.7                         | 74.00                         | 3.5                         |
| 2001-2002            | 44.00  | 3.5                         | 76.50                         | 3.4                         |
| 2002-2003            | 44.50  | 1.1                         | 79.00                         | 3.3                         |

Compound Increase in Tuition

|                     |      |      |
|---------------------|------|------|
| Over last 5 years:  | 3.2% | 3.5% |
| Over last 10 years: | 4.7  | 3.6  |
| Over last 20 years: | 3.8  | 4.0  |

Appendix D

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## Nevada Prepaid Tuition Program

### Cash Flow Projection

(\$Millions)

| <u>Fiscal Year</u> | <u>Beginning Balance</u> | <u>Monthly Payments</u> | <u>Tuition Benefits</u> | <u>Expenses</u> | <u>Loan Repayment</u> | <u>Investment Income</u> | <u>Ending Balance</u> |
|--------------------|--------------------------|-------------------------|-------------------------|-----------------|-----------------------|--------------------------|-----------------------|
| 2003               | \$35.6                   | \$8.0                   | \$0.2                   | \$0.045         | \$0.000               | \$2.9                    | \$46.3                |
| 2004               | 46.3                     | 7.1                     | 0.8                     | 0.049           | 0.025                 | 3.7                      | 56.2                  |
| 2005               | 56.2                     | 5.6                     | 1.8                     | 0.054           | 0.025                 | 4.4                      | 64.4                  |
| 2006               | 64.4                     | 4.1                     | 3.1                     | 0.059           | 0.100                 | 4.8                      | 70.1                  |
| 2007               | 70.1                     | 2.7                     | 4.4                     | 0.064           | 0.150                 | 5.0                      | 73.3                  |
| 2008               | 73.3                     | 2.0                     | 5.6                     | 0.067           | 0.200                 | 5.2                      | 74.8                  |
| 2009               | 74.8                     | 1.8                     | 6.6                     | 0.068           | 0.250                 | 5.2                      | 75.2                  |
| 2010               | 75.2                     | 1.5                     | 7.5                     | 0.069           | 0.500                 | 5.2                      | 74.3                  |
| 2011               | 74.3                     | 1.3                     | 8.4                     | 0.069           | 0.750                 | 5.1                      | 72.2                  |
| 2012               | 72.2                     | 1.1                     | 9.1                     | 0.068           | 0.800                 | 4.8                      | 68.9                  |
| 2013               | 68.9                     | 0.9                     | 9.7                     | 0.066           | 0.702                 | 4.4                      | 64.4                  |
| 2014               | 64.4                     | 0.7                     | 10.4                    | 0.064           | 0.000                 | 4.1                      | 58.7                  |
| 2015               | 58.7                     | 0.6                     | 10.7                    | 0.061           | 0.000                 | 3.6                      | 52.1                  |
| 2016               | 52.1                     | 0.5                     | 10.9                    | 0.057           | 0.000                 | 3.0                      | 44.6                  |
| 2017               | 44.6                     | 0.3                     | 11.5                    | 0.054           | 0.000                 | 2.5                      | 35.8                  |
| 2018               | 35.8                     | 0.2                     | 11.7                    | 0.050           | 0.000                 | 1.8                      | 26.0                  |
| 2019               | 26.0                     | 0.1                     | 12.2                    | 0.047           | 0.000                 | 0.9                      | 14.8                  |
| 2020               | 14.8                     | 0.0                     | 11.2                    | 0.040           | 0.000                 | 0.2                      | 3.8                   |
| 2021               | 3.8                      | 0.0                     | 8.1                     | 0.027           | 0.000                 | 0.0                      | (4.3)                 |
| 2022               | (4.3)                    | 0.0                     | 4.9                     | 0.016           | 0.000                 | 0.0                      | (9.2)                 |
| 2023               | (9.2)                    | 0.0                     | 1.6                     | 0.005           | 0.000                 | 0.0                      | (10.8)                |

Appendix E

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STATE OF NEVADA  
OFFICE OF THE STATE TREASURER  
MEMORANDUM

DATE: March 18, 2003

TO: Brian M. Burke, Senior Program Analyst  
Fiscal Analysis Division

THROUGH: Brian K. Krolicki, State Treasurer *BK*

FROM: Janice Wright, Deputy Treasurer. *JW*

SUBJECT: Treasurer's Office B/A 1092

RECEIVED  
FISCAL ANALYSIS DIVISION  
MAR 18 PM 3:27

Thank you for your phone call on March 17, 2003 requesting clarification on the revenue amounts for B/A 1092-College Savings Plan, which does not receive or expend any General Fund revenue. You are correct that the dollar amount of the projections provided to you as Attachment 4 in our response dated February 28, 2003 does match the total amount of revenue shown in Governor's Recommend budgets for FY 04 and 05. Our cash projections do not include the \$3,000 shown as Balance Forward each year, or the \$4,264 and \$4,277 budgeted for FY 04 and 05 respectively, for Treasurer's Interest.

First, we asked for an advance from one of our partners, Strong Capital Management for FY 03 to cover expenses until we realized revenue. Because we did not expect to receive the advance in time to cover payroll the first week in July, 2002, we balanced forward \$3,000. The Budget Office reflected the Balance Forward of \$3,000 in each year of the FY 04 and 05 biennium budget. However, we do not expect a balance forward for FY 04 and 05.

Second, our Governor Recommended budget included Treasurer's Interest at \$4,264 and \$4,277 for FY 04 and 05 respectively and we did not include these projections in our original Attachment 4 dated February 28, 2003. Our original interest projections assumed we would receive approximately 90% of our revenue at the beginning of each fiscal year. We have adjusted our projections as we now know we will not realize the full amount of principal at the beginning of the year. We estimate our earnings will be about half the original amount or \$2,072 for both FY 04 and 05. We are in a difficult market condition and interest earnings have continued to be less than projected and do not appear

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**STATE TREASURER PROGRAMS**  
America's College Savings Plan  
Millennium Scholarship Program  
Unclaimed Property

**LAS VEGAS OFFICE**  
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to be increasing. Therefore, if you wish to make a change to our Governor's Recommended budget, you may reduce our Treasurer's Interest to \$2,072 each year of the biennium. And, any increased revenue that may materialize in this budget account as noted in our earlier cash projections could be placed in a transfer Category 10 to provide revenue to B/A 1081-Prepaid Tuition Program pursuant to NRS 353B.350 or in a Reserve account.

Finally, you asked if we had prepared a spreadsheet which was the basis of our projections for Attachment 4, sent to you with our response dated February 28, 2003. We did not prepare a spreadsheet as the basis of those assumptions. We provided you with our best estimate of the number of accounts, the revenues, and the schedule of fees paid on accounts generated for the College Savings Program. This Program is still in its infancy and is going through many material changes, so all we have is our best estimates.

We will receive annual fees in September each year of \$10 per account paid on a flat-fee basis, based solely on the number of accounts with our partners Strong, Skandia and USAA. Upromise will **not** pay a similar annual account fee.

Strong and Upromise will pay asset fees for the direct-sold product of 6.67 basis points, paid on the value of assets in the account. Skandia and Upromise will also pay asset fees for the advisor-sold product of 10 basis points, paid on the value of assets in the account. USAA will **not** pay any asset based fees.

The number of accounts changes each day, as does the asset value of the accounts. Typically, the assets are small in the beginning and continue to grow as the child nears college age. Many accounts are opened with the automatic investment plan, where purchasers may contribute small amounts using payroll deduction plans. All accounts using the automatic investment plan or payroll deductions are exempt from paying the \$10 per account fee. Also, any account more than \$25,000 is exempt from the \$10 per account fee. Advisor sold product sales will probably increase faster than the direct sold product sales due to brokers selling this product.

We anticipate our contracts with Strong and Upromise will be long-term, however their sub-agreements with various partners may change from time to time. As these relationships change, so will their fee agreements with Strong and Upromise. Also the introduction of President Bush's plan for Lifetime Savings Accounts (LSAs) and Retirement Savings Accounts (RSAs) may cause 529s to become less competitive as an investment vehicle.

While it is difficult to make projections for such a new program, we believe it is responsible to be conservative in our estimates, until our history teaches us how this program will grow. We hope our program grows at a healthy rate, but we do not have a solid historical basis to project that rate. FY 05 revenues may not be much greater than FY 04. The flattening out of the revenues is due to the difficult market conditions and our expectation that the bulk of the new accounts will be sold by Upromise, which is not

required to pay us \$10 per account. Upromise will pay us asset based fees, but the new accounts will be relatively small in the beginning and will only grow in time.

We would be happy to respond to any questions you may have on this matter.