2016 ACTUARIAL VALUATION REPORT

GUARANTEED EDUCATION TUITION PROGRAM

NOVEMBER 2016

Office of the State Actuary

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**Letter of Introduction
Guaranteed Education Tuition
Actuarial Valuation Report
As of June 30, 2016**

November 2016

This report documents the results of an actuarial valuation of the Guaranteed Education Tuition (GET) program. The primary purposes of this valuation are to:

❖ Calculate the funded status of the contracts sold as of the valuation date and explain how the funded status should be used.

❖ Show how the funded status changes when we change our assumptions.

This report also provides information regarding the assumptions and methods used in the valuation of the GET program and explains the change in the surplus/(deficit) from the last valuation.

This report is organized in the following sections:

❖ Executive Summary.
❖ Background.
❖ Plan Description.
❖ Best Estimate Results.
❖ Sensitivity of Best Estimate Results.
❖ Actuarial Certification Letter.
❖ Appendices.

The Executive Summary provides the key results for current contracts. The Background and Plan Description sections explain how this valuation complements annual GET communications, how the Office of the State Actuary supports GET, and provide a general understanding of the GET program. The next two sections provide detailed actuarial asset, liability, and cash flow information over the next 25 years. The appendices describe the key assumptions and methods, assets, participant data, and additional information used to prepare this valuation.

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2016 GET Actuarial Valuation Report

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We encourage you to submit any questions you might have concerning this report to our regular address or our e-mail address at state.actuary@leg.wa.gov. We also invite you to visit GET's website for further information regarding Washington's GET program.

Sincerely,

Matthew M. Smith, FCA, EA, MAAA
State Actuary

Graham Dyer
Actuarial Analyst

Intended Use

The purpose of this report is to:

❖ Provide an annual update of the financial status of the Guaranteed Education Tuition (GET) program.

❖ Provide a snapshot view of the present value of current contracts' obligations and assets as of the valuation date.

❖ Provide a best-estimate projection of the program assuming no future unit sales other than those purchased through existing monthly payment contracts.

❖ Show how these results could vary if key assumptions are altered.

All of this information should be used together to understand the current status of the GET program.

This report is one of several key documents related to GET throughout a fiscal year. This report is not intended to replace program information supplied by GET or other analysis supplied by the Office of the State Actuary (OSA), including analysis provided for the Comprehensive Annual Financial Report. Please replace this report when a more recent report becomes available.

Comments on 2016 Results

Many factors can influence how actuarial valuation results change from one measurement date to the next. Those factors include changes in the covered population; changes in program provisions, assumptions, and methods; and experience that varies from our expectations.

Significant factors for this year's valuation include the following:

❖ Below expected investment returns for the plan year ending June 30, 2016 (lowered funded status);

❖ Refund of amortization payments for unredeemed units purchased since the beginning of the 2011-12 enrollment period (lowered funded status); and

❖ Customer-requested refunds under special and temporary refund rules (lowered funded status).

    o Customer-requested refunds lower both the program's assets and obligations. Under these temporary refund rules, the reduction in assets will exceed the reduction in obligations because the rules allow for larger than anticipated refunds.

The following table contains the actual refund values for the year ending June 30, 2016.

Actual Refunds	
	Year Ending June 30, 2016
(Dollars in Millions)	
Amortization Refunds	$59
Special Refunds	$312

Note: Values provided by GET staff.

The GET Committee, at their September 2016 meeting, authorized an extension of the special refund rules until the later of September 1, 2017, or 60 days after a Washington State-sponsored 529 college saving plan opens. Refunds processed within this prospective window could materially change the results of future actuarial valuations. The analysis in this report includes refunds through June 30, 2016. We will include refunds after June 30, 2016, in future actuarial valuation reports.

If the program is permanently closed or terminated, the Washington State Investment Board (WSIB) may change the program's asset allocation. That in turn may lead to a lower assumed rate of investment return. A lower assumed rate of return would increase the present value of program obligations and lower the program's funded status. The sensitivity analysis section demonstrates how the closed and terminated program measurements change when we assume lower rates of return.

The results of the valuation **exclude the impacts of differential tuition**. If differential tuition were implemented and included in the GET unit payout value, the results of this valuation could materially change.

FUNDED STATUS OF CURRENT CONTRACTS

The following table summarizes the key measures of the program's funded status as of the current and prior valuation dates. The present value of future obligations represents the expected value, as of the valuation date, of all future payments from the program for current contracts only. The future payments represent both unit payout values and expenses. The future payments are discounted to the present value as of the valuation date using the valuation discount rate. The present value of the fund represents both assets currently on hand and the present value of monthly contract receivables discounted to the valuation date using the discount rate. Please see the **Best Estimate Results** section of this report for funded status gain/loss and fund value reconciliation tables.

The funded status helps readers evaluate the health of the GET program at a single point in time. A history of funded status measured consistently over a defined period helps readers evaluate a plan's long-term ability to accurately assess and react to experience. A plan more/less than 100 percent funded is not automatically considered over-funded/at-risk.

The reserve/(deficit) indicates the excess/shortfall of the fund assets on hand to cover the program's obligations at the valuation date. The reserve level can be interpreted similarly to the funded status.

A self-sustaining program that collects all cash inflows up front, like GET, may want to aim for a long-term reserve of approximately 15 percent (or 115 percent funded status) in order to protect against unexpected adverse outcomes over the life of the program.

Please note the program's funded status is highly sensitive to changes in tuition policy and associated changes in assumed tuition growth. The program's funded status is also sensitive to changes to the long-term assumed rate of investment return. Small increases/decreases in the assumed rate of return can produce large increases/decreases in the funded status, while small increases/decreases in the assumed tuition growth can produce large decreases/increases in the funded status.

As a result of this sensitivity, readers should exercise caution when interpreting and reaching conclusions based on a single, point-in-time, measurement.

Please see the **Sensitivity of Best Estimate Results** section and the Appendix for how these results could change under different assumptions.

Funded Status Summary		
(Dollars in Millions)	**2016**	**2015**
Present Value of Future Obligations	$1,726	$2,042
Present Value of Fund	$2,341	$2,862
Funded Status	135.6%	140.1%
Reserve/(Deficit)	$615	$820

PROJECTION OF CURRENT CONTRACTS

The funded status of the current contracts only tells part of the full story of the GET program. Consideration of the full history of the funded status along with a projection of future funded status provides the reader with a more complete picture of the program's health.

At the August 2015 GET Committee meeting, the GET Committee decided to suspend new unit sales for up to two years. The program remains suspended and, under current law, will reopen by, July 1, 2017. The next table shows a projection of future funded status assuming no future unit sales, aside from unit purchases already under contract. Along with the funded status, the table shows the expected assets, net cash flows, and present value of obligations (so the reader can assess the size of the program). Future actuarial valuation reports will include projections that assume future unit sales after the program reopens and after the GET Committee establishes new price-setting guidelines for future unit sales.

We advise readers to exercise caution when using, distributing, or relying on the projection. As with any projection, this projection will only occur if all assumptions are realized. Furthermore, this projection represents current contracts only (no future unit sales) and assumes no future changes to current program provisions.

A large expected reserve develops under this projection because we assume the current reserve of $615 million will continue to grow with the long-term expected return of 6 percent each year. However, as noted earlier, if the program is permanently closed or terminated, WSIB may change the program's asset allocation. That in turn may lead to a lower assumed rate of investment return. A lower assumed rate of return would increase the present value of program obligations and lower the program's reserve and funded status.

As noted earlier, the impact of future customer-requested refunds under the special and temporary refund rules may materially change the projection of the program's assets and obligations. The projections in this actuarial valuation reflect customer-requested refunds through June 30, 2016, only. Please contact GET Staff for further details on how these refunds are administered.

	Projection of Current Contracts Only (If all Assumptions are Realized)			
(Dollars in Millions); BOY = Beginning of Year				
Fiscal Year	Funded Status	BOY Fund Value	BOY Obligation Value	Net Cash Flow
2016	136%	$2,341	$1,726	($12)
2017	139%	2,303	1,659	(17)
2018	143%	2,264	1,586	(25)
2019	147%	2,219	1,506	(35)
2020	153%	2,165	1,416	(54)
2021	160%	2,093	1,306	(32)
2022	168%	2,047	1,219	(41)
2023	178%	1,993	1,122	(49)
2024	190%	1,934	1,018	(55)
2025	206%	1,870	906	(61)
2026	229%	1,802	788	(63)
2027	260%	1,733	666	(61)
2028	306%	1,668	545	(57)
2029	378%	1,608	426	(44)
2030	492%	1,561	317	(29)
2031	691%	1,532	222	(7)
2032	*	1,524	145	15
2033	*	1,539	87	38
2034	*	1,577	48	56
2035	*	1,633	22	72
2036	*	1,705	8	84
2037	*	$1,790	$2	$94

Funded Status exceeds 1,000% due to very small obligation value.

Please see the **Sensitivity of Best Estimate Results** section for how these results could change under different assumptions and how the results change if the program were terminated.

KEY ASSUMPTIONS

The results of this valuation are based on a number of assumptions including future economic conditions and purchaser behavior. Assumptions concerning purchaser behavior only apply when the program sells future units. We summarize the key assumptions in the next table. Please see the **Assumptions, Methods, and Data** section in the Appendix for a detailed listing of the assumptions used in this valuation.

Key Assumptions		
Annual Investment Return		6.0%
Annual Tuition Growth		
	2016-17	(10.5%)
	2017-18	6.5%
	2018-19	6.5%
	2019-20	6.0%
	2020-21	5.0%
	2021-22	5.0%
	2022-23	5.0%
	2023-24	5.0%
	2024-25	5.0%
	2025-26	5.0%
	2026-27	5.0%
	2027-28+	5.0%

Consistent with Chapter 36, Laws of 2015, 3rd Special Legislative Session, we assumed negative tuition growth rates for the next two academic school years and applied a minimum future payout value of $117.82 per unit for all unredeemed units at June 30, 2015.

CONTRACT DATA

The table below summarizes the current contract and unit data used in this valuation for the plan year ending June 30, 2016, as well as for the prior year. Please see the **Best Estimate Results** section for a table reconciling outstanding GET units from last year to this year. Please also see the **Contract Data** section in the Appendix for detailed information about when units were bought and are expected to be used.

Contract Summary		
	2016	**2015**
Number of Current Contracts	109,561	130,260
Number of Units Outstanding	17,617,656	21,662,612

The Washington State Legislature created the Guaranteed Education Tuition (GET) program in 1997. The program sold units annually from its inception through July 1, 2015, when the GET Committee suspended new unit sales. Under current law, the program will reopen (and sell new units) by July 1, 2017.

RCW 28B.95 outlines the purpose of the GET program along with general guidelines regarding how it is administered. The statute establishes the five-member Committee on Advanced Tuition Payment and College Savings (GET Committee). The GET Committee meets regularly to discuss the goals and status of the program, make administrative decisions, and set the unit price for the following enrollment period.

GET staff supports the functions of the program and the GET Committee by administering the program and staffing GET Committee meetings. GET staff also prepares studies and reports directed to the GET Committee by the Legislature. Communications from GET staff can be found on the GET website.

Statute also defines the eight-member Legislative Advisory Committee (LAC). The LAC provides advice to the GET Committee and Office of the State Actuary (OSA) regarding the administration of the program.

OSA assists the GET Committee and the Legislature by providing actuarial services and consulting. OSA's three primary services for GET include:

❖ Prepare an annual actuarial valuation of GET (this document) for the GET Committee.

❖ Prepare unit price-setting analysis for the GET Committee (when necessary).

❖ Consult, price, and communicate the effects of potential changes to the GET program for the GET Committee or the Legislature.

This valuation should not be used in isolation to understand the ongoing health of the GET program. Rather, this document should be used together with the annual report from GET staff, OSA's price-setting analysis (when performed), and any other studies or reports created by GET staff, OSA, or LAC.

A combination of RCW 28B.95 (determined by the Legislature) and the Guaranteed Education Tuition Program (GET) contract (determined by the GET Committee) make up the terms of the GET program. Statute provides general guidelines and certain rules for the GET Committee, whereas the GET contract states all specific details for the purchaser.

The main plan provisions are outlined below so the reader can get a sense for what cash flows occur, what parties are involved, and what drives the results of the actuarial valuation. For a complete description of the plan provisions we direct you to GET's website, which includes both summarized plan provisions and the full GET contract.

Future unit sales are suspended until the program reopens. The graphic below illustrates the standard yearly process when new unit sales are allowed.

Unit Price is Set
- GET Committee sets the price annually for the current enrollment period.
- Based on adopted price-setting guidelines.

Units are Purchased
- Maximum of 500 units.
- Can be purchased either through a lump sum payment or a monthly contract (with finance charges).

Money is Invested
- Investment returns on the proceeds from unit sales are expected to pay a portion of the future unit value and lowers the price of the unit today.
- Invested by the Washington State Investment Board.

Units are Redeemed
- Unit Value (specific dollar amount) equals 1 percent of annual resident undergraduate tuition and state mandated fees at most expensive public Washington university at time of unit use.
- Subject to minimum unit value of $117.82 established by GET Committee.
- Maximum of 125 units per year.
- Used at any eligible in-state or out-of-state higher education institution based on Unit Value, or
- Refunded based on Unit Value or transferred to another eligible beneficiary.

This section provides details of our best-estimate of the present value of obligations, assets, cash flow, and funded status information for the Guaranteed Education Tuition Program (GET). The first subsection shows the assets currently set aside for the contracts sold as of the valuation date, along with a history of the funded status. Also provided is a "gain/loss" table that illustrates how the funded status changed since last year, and a short series of tables that reconcile fund values and outstanding contracts from last year to this year. The last subsection illustrates how the program is expected to fare beyond the valuation date, assuming no future unit sales other than those purchased through existing monthly payment contracts.

Please see the **Executive Summary** section for a description of this information and how it can be interpreted.

STATUS OF CURRENT CONTRACTS

The next two tables display the program's current funded status, along with a funded status history.

Funded Status	
Obligations	
(Dollars in Millions)	
a) Present Value of Unit Redemptions	$1,708
b) Present Value of Administrative Expenses	$18
c) Present Value of Obligations (a+b)	$1,726
Fund Value	
(Dollars in Millions)	
d) Assets	$2,167
e) Present Value of Monthly Contract Receivables	$174
f) Present Value of Fund (d+e)	$2,341
Calculation of Funded Status	
(Dollars in Millions)	
g) Present Value of Fund (f)	$2,341
h) Present Value of Obligations (c)	$1,726
i) Ratio of Fund Value to Obligations (g/h)	135.6%
j) Reserve / (Deficit) (g-h)	$615

~ **Best-Estimate Results** ~

Funded Status History	
Fiscal Year	Funded Status
2016	135.6%
2015	140.1%
2014	105.8%
2013	94.1%
2012	78.5%
2011	79.1%
2010	86.2%
2009	84.2%
2008	109.5%
2007	117.4%
2006	108.8%
2005	108.1%
2004	104.5%
2003	98.4%
2002	89.6%
2001	104.9%
2000	113.4%
1999	110.1%

Gain/(Loss) Analysis Change in Funded Status by Source	
2015 Funded Status	140.1%
Changes in 2016 Funded Status	
Expected Change in Funded Status	4.1%
Program Obligations	
Tuition Payments	21.0%
Expenses	0.5%
New Units Purchased	(0.0%)
Other	(0.6%)
Total Program Obligations Gains/Losses	21.0%
Program Assets	
Contributions	2.9%
Distributions	(17.1%)
Contract Receivables	(5.7%)
Investment Earnings	(9.3%)
Other	0.7%
Total Program Assets Gains/Losses	(28.5%)
Additional Changes	
Corrections	0.0%
Method Change	0.5%
Total Additional Change Gains/Losses	0.5%
Other Gains/Losses	(1.6%)
Total Change	(4.5%)
2016 Funded Status	135.6%

Note: Totals may not agree due to rounding.

Reconciliations

The following table demonstrates actuarial gains and losses, expressed as funded status changes. We use gain/loss analysis to compare actual changes to assumed changes in the assets and obligations. We also use this analysis to determine:

- ❖ The accuracy of our valuation model and annual processing.
- ❖ Why funded status changed.
- ❖ The reasonableness of the actuarial assumptions.

Actuarial gains will increase funded status; actuarial losses will decrease funded status. Under a reasonable set of actuarial assumptions, actuarial gains and losses will offset over long-term experience periods.

The next three tables show reconciliations from last year to this year, for Market Value of Assets, Present Value (PV) of Monthly Contracts, and Outstanding Units.

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Change in Market Value of Assets	
(Dollars in Millions)	
2015 Market Value of Assets	**$2,664**
Changes in Net Asset Value	
Interest and Other Investment Income	36
Capital Gains and Losses	113
Unrealized Gains and Losses	(154)
Expenses	(2)
Contributions	49
Distributions	(541)
Total Changes in Net Asset Value	**(497)**
2016 Market Value of Assets	**$2,167**

Change in PV of Monthly Contract Receivables	
(Dollars in Millions)	
PV Monthly Contracts at June 30, 2015	**$256**
Changes in PV Monthly Contracts	
Experience Study Assumption Changes	0
Advanced Payments	0
Actual Custom Monthly Payments Received in 2016	(50)
Interest Adjustment	14
Account Downgrades	(8)
Account Conversions*	(39)
PV of Monthly Contracts for New Units in 2016	0
Other**	(0)
Total Changes in PV Monthly Contracts	**(83)**
PV Monthly Contracts at June 30, 2016	**$174**

Conversion of Custom Monthly accounts to Lump-Sum accounts. Includes vouluntary refunds. Excludes refunded amortization payments already reflected in the 2015 GAVR.

**Includes unexplained changes.*

Change in Number of Outstanding Units	
Number of Outstanding Units at June 30, 2015	21,662,612
New Units Purchased	0
Units Redeemed	(1,349,523)
Units Refunded	(2,616,774)
Units Defaulted	(27,062)
Units Downgraded*	(18,900)
Units Converted	(31,378)
Other	(1,319)
Number of Outstanding Units at June 30, 2016	17,617,656

Customer-requested account changes.

Closed Program Cash Flows

The following table shows how the program is expected to fare beyond the valuation date, assuming no future unit sales other than those purchased through existing monthly payment contracts. A closed program refers to the full benefits of the program being paid out to contracts sold before the valuation date, but no units being sold beyond the valuation date.

						Projection of Current Contracts Only (If all Assumptions are Realized)				
(Dollars in Millions); BOY = Beginning of Year						Cash Inflows			Cash Outflows	
Fiscal Year	Funded Status	Unit Value[1]	Number of Units Used	BOY Fund Value[2]	BOY Obligation Value	Net Cash Flow	Monthly Contracts	Investment Return	State Contributions	Unit Use	Expense
2016	136%	$118	1,396,711	$2,341	$1,726	($12)	$34	$126	$0	($165)	($8)
2017	139%	118	1,401,495	2,303	1,659	(17)	31	125	0	(165)	(8)
2018	143%	118	1,426,753	2,264	1,586	(25)	28	124	0	(168)	(8)
2019	147%	118	1,473,799	2,219	1,506	(35)	24	122	0	(174)	(8)
2020	153%	120	1,550,423	2,165	1,416	(54)	21	119	0	(187)	(8)
2021	160%	126	1,255,242	2,093	1,306	(32)	18	117	0	(159)	(8)
2022	168%	133	1,229,865	2,047	1,219	(41)	15	115	0	(163)	(8)
2023	178%	139	1,183,488	1,993	1,122	(49)	13	112	0	(165)	(9)
2024	190%	146	1,135,257	1,934	1,018	(55)	10	109	0	(166)	(9)
2025	206%	154	1,083,378	1,870	906	(61)	8	106	0	(166)	(9)
2026	229%	161	1,006,030	1,802	788	(63)	6	102	0	(162)	(9)
2027	260%	169	917,183	1,733	666	(61)	5	99	0	(155)	(9)
2028	306%	178	821,800	1,668	545	(57)	3	95	0	(146)	(9)
2029	378%	187	692,786	1,608	426	(44)	2	92	0	(129)	(9)
2030	492%	196	562,093	1,561	317	(29)	1	90	0	(110)	(10)
2031	691%	206	422,030	1,532	222	(7)	1	89	0	(87)	(10)
2032	*	216	296,867	1,524	145	15	0	89	0	(64)	(10)
2033	*	227	186,581	1,539	87	38	0	91	0	(42)	(10)
2034	*	238	113,744	1,577	48	56	0	94	0	(27)	(10)
2035	*	250	59,587	1,633	22	72	0	97	0	(15)	(11)
2036	*	263	24,466	1,705	8	84	0	102	0	(6)	(11)
2037	*	276	6,476	1,790	2	94	0	107	0	(2)	(11)
2038	*	290	168	1,884	0	101	0	113	0	(0)	(12)
2039	*	304	12	1,985	0	107	0	119	0	(0)	(12)
2040	*	319	5	2,091	0	113	0	125	0	(0)	(12)
2041	*	$335	0	$2,204	$0	$119	$0	$132	$0	$0	($13)

[1] *Shown in dollars (not in millions).*

[2] *Fund Value includes present value of monthly contract receivables. Fund Value is used for Funded Status measurement since liabilities include monthly contract units.*

*Funded Status exceeds 1,000% due to very small obligation value.

The best-estimate results are sensitive to the key assumptions used in the valuation. In this section, we calculated the results after varying the rate of investment return (as well as the discount rate) and tuition growth to illustrate the sensitivity of the results to these assumptions. The table in the first subsection shows these results assuming no further unit sales.

In the second subsection, we show the termination liability under RCW 28B.95.090 and the corresponding expected cash flows if the Guaranteed Education Tuition Program (GET) were to be terminated as of the valuation date. Program termination means anyone beyond four years of their first expected unit use year would be immediately paid out the current unit value. All participants within four years of unit use would continue to be able to use the program as is for up to ten years.

Sensitivity to Economic Assumptions

Sensitivity of Results to Key Assumptions							
Closed Program*							
(Dollars in Millions)	+1% Tuition	Best Estimate	-1% Tuition	-2% Discount Rate	-1% Discount Rate	Best Estimate	+1% Discount Rate
Present Value of Fund	$2,341	$2,341	$2,341	$2,355	$2,348	$2,341	$2,335
Present Value of Obligations	$1,827	$1,726	$1,635	$1,969	$1,841	$1,726	$1,622
Reserve / (Deficit)	$514	$615	$706	$385	$506	$615	$713
Funded Status (as of June 30)							
2016	128%	136%	143%	120%	128%	136%	144%
2017	130%	139%	147%	121%	130%	139%	148%
2018	133%	143%	153%	123%	132%	143%	154%
2019	137%	147%	159%	125%	136%	147%	160%
2020	137%	153%	170%	127%	140%	153%	167%
2021	140%	160%	183%	130%	145%	160%	177%
2022	143%	168%	197%	134%	150%	168%	188%
2023	147%	178%	214%	138%	157%	178%	201%
2024	153%	190%	235%	143%	165%	190%	218%
2025	160%	206%	264%	150%	176%	206%	240%
2026	170%	229%	303%	159%	191%	229%	271%
2027	184%	260%	358%	172%	213%	260%	315%
2028	204%	306%	440%	190%	244%	306%	379%
2029	236%	378%	567%	219%	292%	378%	479%
2030	287%	492%	774%	264%	368%	492%	640%
2031	375%	691%	**	341%	500%	691%	920%
2032	533%	**	**	480%	738%	**	**
2033	843%	**	**	752%	**	**	**
2034	**	**	**	**	**	**	**
2035	**	**	**	**	**	**	**

Based on current contracts only, no future unit sales.

**Funded Status exceeds 1,000% due to very small obligation value.*

TERMINATED PROGRAM CASH FLOWS

If program termination were to occur, the present value of obligations as of the valuation date would be $1.775 billion and the fund value would be $2.186 billion, which would result in a reserve of $411 million and a funded status of 123 percent. This represents the funded status if the program were terminated at the valuation date and before the immediate payout occurs. The increase in liability (compared to Closed Program projection) is due to paying out a portion of the units sooner than expected, resulting in lost assumed investment earnings. The decrease in fund value (compared to Closed Program projection) is due to a portion of the outstanding monthly contracts being cancelled, resulting in lower than expected contract receivables. The following table shows these results.

							Cash Inflows			Cash Outflows	
Projection of Program Termination (If All Assumptions are Realized)											
(Dollars in Millions); BOY = Beginning of Year											
Fiscal Year	**Funded Status**	**Unit Value[1]**	**Number of Units Used**	**BOY Fund Value[2]**	**BOY Obligation Value**	**Net Cash Flow**	**Monthly Contracts**	**Investment Return**	**State Contributions**	**Unit Use**	**Expense**
2016	123%	$118	8,416,653	$2,186	$1,775	($884)	$9	$100	$0	($992)	($1)
2017	150%	118	1,401,495	1,289	860	(88)	6	72	0	(165)	(1)
2018	161%	118	1,426,753	1,189	741	(99)	4	66	0	(168)	(1)
2019	177%	118	1,473,799	1,081	611	(114)	2	59	0	(174)	(1)
2020	205%	120	1,550,423	959	468	(136)	0	52	0	(187)	(1)
2021	270%	126	1,002,205	817	303	(82)	0	45	0	(127)	(1)
2022	385%	133	745,114	729	189	(59)	0	41	0	(99)	(0)
2023	675%	139	485,839	663	98	(30)	0	38	0	(68)	(0)
2024	*	146	236,082	626	34	2	0	36	0	(35)	(0)
2025	*	$154	0	$620	$0	$37	$0	$37	$0	$0	$0

[1] *Shown in dollars (not in millions).*

[2] *Fund Value includes present value of monthly contract receivables. Fund Value is used for Funded Status measurement since liabilities include monthly contract units.*

*Funded Status exceeds 1,000% due to very small obligation value.

We also show how our best-estimate results under program termination change when assuming lower discount rates. If the program is terminated, the Washington State Investment Board (WSIB) may change the program's asset allocation. That in turn may lead to a lower assumed rate of investment return.

Sensitivity of Results to Key Assumptions			
	Terminated Program*		
(Dollars in Millions)	Best Estimate	-1% Discount Rate	-2% Discount Rate
Present Value of Fund	$2,186	$2,186	$2,187
Present Value of Obligations	$1,775	$1,811	$1,848
Reserve / (Deficit)	$411	$376	$338
Funded Status (as of June 30)			
2016	123%	121%	118%
2017	150%	144%	138%
2018	161%	153%	146%
2019	177%	167%	157%
2020	205%	191%	177%
2021	270%	245%	222%
2022	385%	341%	300%
2023	675%	582%	497%
2024	**	**	**
2025	**	**	**

*Program is terminated; all contracts with expected use year beyond 4 years immediately refunded.

**Funded Status exceeds 1,000% due to very small obligation value.

Actuarial Certification Letter

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Actuarial Certification Letter
Guaranteed Education Tuition
Actuarial Valuation Report
As of June 30, 2016

November 2016

This report documents the results of an actuarial valuation for the Washington Guaranteed Education Tuition (GET) Program defined under Chapter 28B.95 of the Revised Code of Washington. The primary purpose of this report is to update the annual financial status of the program through the calculation of the funded status for current contracts, in combination with the projection of the expected funded status in future years. This report also provides information on the sensitivity of the valuation results to key assumptions and developments in the program since the last valuation. This report should not be used for other purposes. Please replace this report with a more recent report when available.

The results summarized in this report involve calculations that require assumptions about future economic and demographic events. We developed the assumptions used in this valuation during the *2015 GET Experience Study*. Copies of the *2015 GET Experience Study* are available upon request.

Standards of practice that specifically apply to prepaid tuition programs have not been defined within the actuarial profession. We used the standards of practice for pension systems where possible to guide the actuarial valuation of GET. In our opinion, the assumptions, methods, and calculations used in the valuation are reasonable and appropriate for the primary purpose as stated above, and are in conformity with generally accepted actuarial principles and standards of practice as of the date of this publication. The use of another set of assumptions and methods, however, could also be reasonable and could produce materially different results. Actual results may vary from our expectations.

In 2015, the GET Committee authorized current contact holders the choice to remain in the program or refund their unredeemed units during a specified window, subject to a minimum payout value of $117.82 per unit. The window for optional refunds was extended by the committee at their September 2016 meeting until September 1, 2017, or sixty days after the opening of the State's 529 savings program, whichever is later. We will include the impact of refunds paid after July 1, 2016, the measurement date for this actuarial valuation, in future actuarial valuation reports after the refunds are known.

The results of the valuation **exclude the impacts of differential tuition**. If differential tuition were implemented and included in the GET unit payout value, the results of this valuation could materially change. This analysis will need to be updated

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in the future if changes are made to the GET program or the Legislature enacts major reform to current tuition policy.

The GET Program staff provided the participant and historical data to us. We checked the data for reasonableness as appropriate based on the purpose of this valuation. The Washington State Investment Board provided financial and asset information. We relied on all the information provided as complete and accurate. In our opinion, this information is adequate and substantially complete for the purposes of this valuation.

No members of the GET Committee or their respective staff attempted to bias our work product. We are not aware of any matters that impacted the independence and objectivity of our work.

We intend this valuation to be used by the GET Committee during the 2017 Fiscal Year only. We advise readers of this valuation to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. Please read the analysis shown in this valuation as a whole. Distribution of, or reliance on, only parts of this valuation could result in its misuse and may mislead others.

Consistent with the actuarial Code of Professional Conduct, I, Matthew Smith, must disclose any potential conflict of interest. I have purchased units in GET; however, this does not impair my ability to act fairly. I have performed all analysis without bias or influence. The GET Committee contracted with OSA to perform this valuation, and I supervised the actuarial analysis performed.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. While this report is intended to be complete, we are available to offer extra advice and explanations as needed.

Sincerely,

Matthew M. Smith, FCA, EA, MAAA
State Actuary

Lisa Won, ASA, FCA, MAAA
Deputy State Actuary

APPENDIX A ★ ASSUMPTIONS, METHODS, AND DATA

The assumptions used in this report can be divided into three broad categories: economic, demographic, and behavioral. We discuss the assumptions used in this valuation throughout the next three subsections. However, for more detailed and supporting information on these assumptions, please see the *2015 GET Experience Study letter*. This letter is available upon request.

ECONOMIC ASSUMPTIONS

The two key economic assumptions are expected investment returns and expected tuition growth. The next table shows what we have assumed for this valuation.

Key Economic Assumptions	
Investment Returns	6.0% per year
Tuition Growth *(Excludes Differential Tuition)*	
2016-17	(10.5%)
2017-18	6.5%
2018-19	6.5%
2019-20	6.0%
2020-21	5.0%
2021-22	5.0%
2022-23	5.0%
2023-24	5.0%
2024-25	5.0%
2025-26	5.0%
2026-27	5.0%
2027-28+	5.0%

Expected investment returns are based on the Washington State Investment Board's (WSIB) Capital Market Assumptions (CMA) and current asset allocation over a fifteen-year period. We relied on the CMAs provided by WSIB as accurate and have reviewed them for reasonability. We've implicitly assumed the current 60 percent global equity / 40 percent fixed income portfolio will remain unchanged

throughout the projection period. The expected investment returns are used as the discount rate for expected program payments, expenses, and receivables as well as the investment returns in our closed group projections.

The tables below display the development of the tuition growth assumptions we used to prepare the valuation results. We updated our tuition growth model after the recent experience study. We use the tuition growth model, information from the most recently enacted state budget, and our professional judgment to set tuition growth rates. The tuition growth model has three main structural components.

1. **Long-Term Inflationary Growth** — Represents the increase in total dollars spent on instruction. Over the last twenty years, this has increased by about 4.5 percent per year. We assume it will grow by 5.0 percent in the future. In Step 1 of our model, we estimate the total dollars required for the Cost of Instruction (COI) for undergraduate programs at the University of Washington. Consistent with the results of our recent experience study, we then grow that amount by an assumed long-term inflationary growth factor of 5 percent per year.

2. **State Funding** — Represents the increase or decrease in the percent of total dollars assumed to come from the state versus tuition. Historically, it has decreased from approximately 80 percent (in 1990) to 35 percent (in 2016). This has put upward pressure on tuition since tuition increased to replace lost state funding. We assume state funding will continue to decline to about 28 percent after the next biennium and level out. As a result, we project tuition will increase above long-term inflationary levels over the period where state funding is assumed to decrease. In Step 2, we assume every lost dollar of state support is replaced by an increased dollar from tuition. The resulting growth in tuition dollars derives the tuition growth rate after state funding.

3. **Scaling Factor** — Represents an adjustment to the increase or decrease in assumed tuition in response to a corresponding

Tuition Growth Assumption Structure						
(Dollars in Thousands)		Step 1 – Inflation	Step 2 — State Funding			
School Year	Total Dollars	Inflationary Growth	Assumed State %	State Dollars	Tuition Dollars	Tuition Growth After State Funding
2015-16	922,805	7.9%	31.7%	292,311	630,494	3.6%
2016-17	941,894	2.1%	35.2%	331,631	610,263	(3.2%)
2017-18	988,989	5.0%	33.0%	326,203	662,786	8.6%
2018-19	1,038,438	5.0%	30.8%	319,403	719,035	8.5%
2019-20	1,090,360	5.0%	28.5%	311,108	779,252	8.4%
2020-21	1,144,878	5.0%	28.5%	326,663	818,215	5.0%
2021-22	1,202,122	5.0%	28.5%	342,997	859,125	5.0%
2022-23	1,262,228	5.0%	28.5%	360,146	902,082	5.0%
2023-24	1,325,339	5.0%	28.5%	378,154	947,186	5.0%
2024-25+	1,391,606	5.0%	28.5%	397,061	994,545	5.0%

Historical data provided by the University of Washington.
Note: State and tuition dollars in a given year are used to develop tuition increase assumptions for the following year.

decrease or increase in state funding. For every dollar decrease (increase) in state funding, we scale the assumed tuition increases (decreases) by a fraction of that dollar, because past experience indicates that not every dollar of state funding is replaced by an increased dollar of tuition growth. Our scaling factor assumption is 75 percent. In Step 3 of the model, we adjust the tuition growth rates after state funding by our scaling factor assumption, but not below our long-term assumption of 5 percent. Lastly, we set the first two years of tuition growth rates consistent with the recently enacted state budget for higher education and smooth the growth rates for years thereafter.

Tuition Growth Assumption Structure				
Step 3 — Set Tuition Growth Assumption				
School Year	Tuition Growth After State Funding	Apply 75% Scaling Factor*	Tuition Growth in 2015-17**	Tuition Growth Assumption
2015-16	3.6%	5.0%	(5.0%)	(5.0%)
2016-17	(3.2%)	5.0%	(10.5%)	(10.5%)
2017-18	8.6%	6.5%		6.5%
2018-19	8.5%	6.4%		6.5%
2019-20	8.4%	6.3%		6.0%
2020-21	5.0%	5.0%		5.0%
2021-22	5.0%	5.0%		5.0%
2022-23	5.0%	5.0%		5.0%
2023-24	5.0%	5.0%		5.0%
2024-25+	5.0%	5.0%		5.0%

Set value equal to the greater of (a) 75% of tuition growth after state funding or (b) long-term growth assumption of 5%.

**Chapter 36, 2015 Laws 3rd Special Legislative Session.*

Chapter 36, Laws of 2015, 3rd Special Legislative Session, also established a policy to limit resident, undergraduate tuition growth rates to no more than the annual growth rate in the median state wage. If future Legislatures continue this policy, we would expect future tuition growth rates closer to 3-4 percent. However, because the current Legislature cannot obligate a future Legislature, the sustainability of the current higher education budget is not certain, and because past history consistently demonstrates that higher education tuition policy changes remain for short-term periods only, we have assumed tuition growth rates after the next two years that we believe are more reflective of long-term practices and consistent with our expectations for the future.

The program's funded status is highly sensitive to short-term changes in tuition growth. For example, under an alternate tuition scenario (as shown in the following table), we assume the recently enacted tuition policy changes holds indefinitely. Under that scenario, the funded status, measured at June 30, 2016, would rise from 136 percent to 153 percent and the reserve would increase from $615 million to $807 million.

Tuition Growth Assumption - Alternate Growth Scenario	
School Year	Annual Tuition Growth
2016-17	(10.5%)
2017-18	2.60%
2018-19	2.70%
2019-20	2.80%
2020-21	2.90%
2021-22	3.00%
2022-23	3.15%
2023-24	3.30%
2024-25	3.45%
2025-26	3.60%
2026-27+	3.75%

The tuition growth assumption does not consider differential tuition. The impact from differential tuition could vary based on how it interacts with the current contracts. If the payout value is tied to the highest rate of differential tuition, the tuition growth assumption would likely increase. However, if the payout value were tied to the lowest rate of differential tuition, the tuition growth assumption could actually decrease, as base tuition may not need to increase as fast with higher differential tuition making up the difference.

We assumed expenses would grow at a rate of 3.50 percent per year. Consistent with the recent experience study and input from GET staff, we removed the distribution expense and monthly payment plan expense used in prior actuarial valuations.

For the current actuarial valuation, we assume maintenance expenses of $20.06 per contract per year plus assumed growth for each year beyond the valuation date. We continue to rely on the assumptions and methods from the prior actuary for determining maintenance expenses. We plan to update these assumptions and methods after we receive further input from the GET Committee. Please see the *2015 GET Experience Study letter* for additional background.

Demographic Assumptions

As discussed in the body of this report, new unit sales are suspended until the program reopens in 2017. In past valuations, we assumed new entrants (or future purchasers) would enroll in the program during subsequent years. Under the current enrollment suspension, we assume no new entrants. We include in this report the updated assumptions on future purchasers from the experience study for context and future reference only.

We based the new entrant cohort on an average of the previous three years' new sales data provided by GET staff, in this case 2012 through 2014. We assumed each future cohort would have this same makeup.

The following table shows the percent of the population in each of the 38 combinations. It also shows the number of units each combination purchases and the length of the monthly payment plan for those who select that payment option. For example, 1.9 percent of the people are assumed to purchase 80 lump sum units that are kept for six years before being used.

To illustrate how we use the table, for every one hundred purchasers, approximately:

❖ Sixty-nine select the lump-sum payment option and each buys, on average, 74 units.

❖ Thirty-one select the monthly payment plan option and each buys, on average, 115 units, and pay for these units over an average of 142 months.

Behavioral Assumptions

We've made the following assumptions for GET contract holders. As a result of the last experience study, we removed the **Rate of Monthly Payment Default** and **Rate of Refund** from our model. We found those assumptions unnecessary for the purposes of this measurement. However, those assumptions could be necessary for another measurement. Please see the *2015 GET Experience Study letter* for further details.

❖ Rate of Redemption — The following shows what percent of a contract holder's total units we expect will be used upon reaching college (or their "use year").

Redemption	
	Rate
All Years	20%

In past valuations, we projected future unit sales to model new unit purchases. For this valuation, we assumed no future purchasers will enter the program due to the suspension of future unit sales. The following projected unit sales description should be used for informational purposes only.

During the experience study we updated our Projected Unit Sales model. This model projects unit sales based on an assumed number of units sold corresponding to an average premium, where premium is defined to be the unit price above the payout value of the unit. We adjusted expected future units based on the expected future premium. An increase/decrease in premium would result in a decrease/increase in expected unit sales. For more details, please see the experience study.

In past valuations, we assumed the GET Committee would continue to follow their past price-setting guidelines throughout the projection period. Please see **Appendix D** for details on the price-setting guidelines in effect prior to the suspension of new unit sales.

Future Purchaser Cohort Assumption					
Length in Program (Years)	% Lump Sum	Lump Sum Units Purchased	% Monthly Payment Plan	Monthly Payment Plan Units Purchased	Length of Monthly Payment Plan (Months)
2	0.2%	94	0.0%	0	0
3	1.6%	78	0.2%	76	25
4	1.0%	77	0.4%	79	37
5	1.5%	82	0.7%	78	48
6	1.9%	80	0.9%	101	59
7	2.2%	89	1.2%	93	69
8	2.7%	99	1.3%	106	80
9	2.9%	93	1.4%	113	92
10	3.1%	84	1.5%	110	102
11	3.0%	97	1.7%	108	114
12	3.3%	87	1.8%	119	125
13	3.6%	89	1.7%	120	132
14	5.0%	79	2.5%	114	144
15	4.8%	62	2.2%	111	156
16	5.5%	63	2.6%	115	163
17	6.5%	56	2.7%	121	175
18	12.0%	59	4.2%	123	190
19	8.3%	76	3.9%	133	199
20	0.0%	7	0.0%	133	112
Total	**69.1%**	**74**	**31.8%**	**115**	**142**

We assumed the GET Committee would price future units in line with the expected investment returns and tuition growth discussed in the Economic Assumptions subsection.

We assumed that neither the Legislature nor the GET Committee will make changes to the program over the projection period.

We further assumed no significant changes will be made to tuition policy over the projection period.

Miscellaneous

For purposes of the valuation, we assume mid-valuation year timing on payments in and out of the fund.

Methods

We valued the current contract and asset values in GET by estimating the future tuition payments (cash outflow), administrative expenses (cash outflow), and monthly contract payments (cash inflow). The estimation of future cash flows required assumptions about:

❖ When the contract holder will redeem their units.

❖ Whether they will stop making payments on their monthly payment plan.

❖ What tuition will be in future years.

❖ What administrative expenses will be over time.

We discounted these cash flows to today's value in order to calculate the plan's funded status at the valuation date. Discounting the cash flows to today's value requires an assumption regarding how fast invested money will grow over time. The idea is that $1 today is worth more next year ($1.06 in this case) due to investment earnings. Discounting moves the opposite way and states that $1.06 a year from now will be worth $1 today. Discounting all of the cash flows to one common year allows for an apples-to-apples comparison of all cash flows.

Due to the suspension of future unit purchases, we did not perform open group analysis with this valuation report. In prior valuations, we estimated the impact of future contract holders; the following paragraphs detail our approach for valuing the open group.

We typically do not have data on who will purchase GET units in the future. Thus, our first step in projecting future unit purchases, is to estimate the makeup of these future purchasers. We refer to the entire group of purchasers within a year as a "cohort". We condense a cohort into 38 summarized mixtures representing different types of people, or purchasers. We model the contract length of these future purchasers such that they remain in the program between 2 and 20 years before unit use (redemption) begins. Additionally, we model that purchasers choose either a lump sum payment option or a monthly payment plan option. The 38 combinations are made up of the 19 different contract lengths multiplied by the two different payment options. The percent of the population expected to be in each of the combinations is shown in the assumption section.

Next, we value the 38 future purchasers in each cohort. We value each cohort in the same way we value the current contract holders in the actuarial valuation. We estimate future tuition payments (cash outflow), administrative expenses (cash outflow), and monthly contract payments (cash inflow). The estimation of future cash flows required assumptions about when contract holders will redeem their units, whether they will stop making payments on their monthly payment plans, how tuition will change in future years, and what administrative expenses will be over time.

We then discount these cash flows to the cohort's entry year. The model repeats this process for each year in our 25-year projection, since we expected a new cohort to enter each year.

The projection of the GET program measures the same key elements in each future year that we measure under the closed group.

For example, we start with the program's current status — present value of obligations, assets, funded status, and unit price/value. Throughout the next year, investment returns occur at our assumed rate, tuition grows at our assumed rate, people redeem tuition units at our assumed rate, and people buy new units at our assumed rate (discussed above in the

assumption subsection). This particular projection moves the program forward assuming experience matches our assumptions exactly. We call this a deterministic projection because all assumptions are realized in the projection (with no variance from the assumption) and the current program rules determine the expected future outcome.

At the end of the first year, a valuation is performed and new obligations, assets, and funded status are calculated. Based on the funded status from the valuation and according to the GET Committee's current price-setting guidelines, we make an assumption as to how they will set a new price for the following year.

Once the new price is set, we project 25 years into the future and recalculate the price each year based on the projected obligations and assets. By the end of the projection, we have developed our "expected" path that the GET program will follow. Of course, in reality, the future will be different than we assume. We believe there is a 50 percent chance the future will be better for the program, and a 50 percent chance the future will be worse for the program.

Data

We used the contract data file provided by GET staff. We relied on this data as accurate and complete; we value each entry in the file. We did not perform an audit of this data, but believe it is reasonable for the purposes of our work. We used data entries such as:

❖ Program Year — The contract holder's entry year into the program.

❖ Use Year — When the contract holder expects to start using units for tuition.

❖ Payment Amount — The monthly amount the contract holder owes on their payment plan.

❖ Payments Due — The number of monthly payments left on their monthly payment plan.

❖ Units Outstanding — The number of units the contract holder currently owns (including units still being paid for in the monthly payment plan).
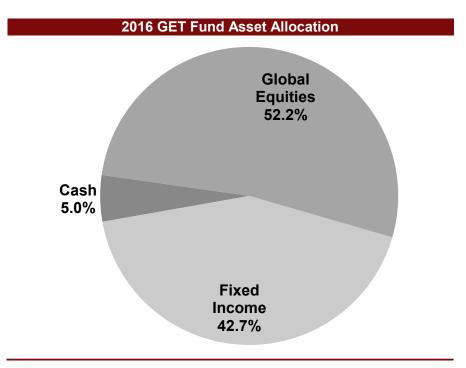
In past valuations, we employed a data-grouping process to reduce the amount of time it takes to run a valuation. This process groups similar individuals based upon the Payment Year, Use Year, and 12-month breakdowns for Payments Due. With this valuation, we no longer group data for the projections in this report.

To set our tuition growth assumption we studied the historical tuition data in the following table. We also examined average tuition growth over different periods (see the bottom of the table).

Year	Tuition Growth	Year	Tuition Growth
1982-83	11.0%	2000-01	3.4%
1983-84	11.2%	2001-02	7.1%
1984-85	0.0%	2002-03	16.0%
1985-86	22.7%	2003-04	7.0%
1986-87	0.0%	2004-05	6.6%
1987-88	7.9%	2005-06	6.8%
1988-89	3.8%	2006-07	6.9%
1989-90	1.7%	2007-08	6.8%
1990-91	6.9%	2008-09	6.8%
1991-92	11.5%	2009-10	13.1%
1992-93	3.4%	2010-11	13.1%
1993-94	12.4%	2011-12	19.0%
1994-95	14.8%	2012-13	15.2%
1995-96	3.9%	2013-14	0.0%
1996-97	4.0%	2014-15	0.0%
1997-98	3.9%	2015-16	(5.0%)
1998-99	4.0%	2016-17	(10.5%)
1999-00	3.7%		
5-Year Average			(0.4%)
10-Year Average			5.5%
20-Year Average			6.0%
35-Year Average			6.6%
35-Year Standard Deviation			6.7%

APPENDIX B ★ ASSETS

The chart below shows how GET assets are currently invested. Below the chart are descriptions of those investment types, or asset classes.

2016 GET Fund Asset Allocation

The current WSIB Capital Market Assumptions are shown in the following table. The average 6.84 percent portfolio return is a one-year arithmetic return. When compounded over a 15-year period, the arithmetic return decreases to a 6.36 percent geometric return.

In response to the program's special and temporary refund rules, the WSIB temporarily increased the cash allocation to 5 percent. We reviewed the impact of this temporary asset allocation change on the long-term assumed rate of return and concluded the current assumption remains reasonable as long as the temporary asset allocation change does not extend beyond the period of the temporary refund rules.

2016 Capital Market Assumptions			
Asset	Return	Standard Deviation	Weight
Fixed Income	3.90%	5.25%	40%
Global Equities	8.80%	18.85%	60%
Portfolio	6.84%	11.90%	100%
Correlation	Fixed Income	Global Equities	
Fixed Income	1.00		
Global Equities	0.20	1.00	

Cash: Highly liquid, very safe investments that can be easily converted into cash, such as Treasury Bills and money-market funds.

Fixed Income: Securities representing debt obligations and usually having fixed payments and maturities. Different types of fixed income securities include government and corporate bonds, mortgage-backed securities, asset-backed securities, convertible issues, and may also include money-market instruments.

Global Equities: Shares of U.S. and non-U.S. corporations that trade on public exchanges or "over-the-counter." The ownership of a corporation is represented by shares that are claimed on the corporation's earnings and assets.

The target asset allocation is currently 60 percent global equity and 40 percent fixed income.

The following table shows the GET Fund Value. The value of the fund includes the market value of assets held by the WSIB along with the present value of the monthly contract receivables. We assume mid-valuation year timing on payments in and out of the fund for purposes of the valuation.

Fund Value	
Market Value of Assets	
(Dollars in Millions)	
Cash	$109
Global Equities	$1,132
Fixed Income	$926
Total Market Value of Assets	**$2,167**
Present Value of Monthly Contracts	$174
Total Fund Value	**$2,341**

APPENDIX C ★ CONTRACT DATA

The following tables summarize units and contracts by the contract enrollment year and initial contract use year.

Number of Units Sold by Unit Price		
Enrollment Year	Unit Price	Units Sold
1998-99	$35	1,374,095
1999-00	38	615,327
2000-01	41	523,702
2001-02	42	2,463,500
2002-03	52	2,099,531
2003-04	57	1,896,635
2004-05	61	2,108,360
2005-06	66	2,146,191
2006-07	70	2,339,431
2007-08	74	2,102,305
2008-09	76	3,177,699
2009-10	101	2,624,367
2010-11	117	2,697,696
2011-12	163	1,503,962*
2012-13	172	1,038,773
2013-14	172	741,701
2014-15	$172	618,367
2015-16**	-	0

*Restated number of units sold.

**Unit sales suspended.

Number of Units Outstanding by Use Year		
Fiscal Year	Expected Unit Value	Units Starting to be Used
2016*	$118	4,720,256
2017	118	1,221,672
2018	118	1,231,377
2019	118	1,189,922
2020	120	1,132,362
2021	126	1,201,593
2022	133	1,103,275
2023	139	1,011,676
2024	146	962,965
2025	154	881,505
2026	161	833,580
2027	169	681,385
2028	178	555,359
2029	187	348,323
2030	196	258,510
2031	206	167,284
2032	216	85,768
2033	227	30,045
2034	238	742
2035+	$250	57

*Includes contracts that already started using units.

Outstanding Units
Enrollment Year

Use Year	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16**
2016*	375,949	125,459	133,045	517,982	578,603	397,309	497,128	443,071	426,580	320,084	425,264	256,208	168,817	22,174	11,655	3,708	17,221	0
2017	20,938	33,184	29,892	107,810	117,674	103,336	112,698	117,337	132,149	91,994	141,450	93,872	82,685	19,747	9,767	3,001	2,544	1,597
2018	2,667	10,571	31,354	105,940	116,853	88,398	155,436	124,796	128,787	91,068	145,290	95,405	89,440	25,609	12,427	5,215	1,239	880
2019	1,108	400	15,413	144,884	112,799	75,856	95,839	143,884	128,682	91,996	116,611	104,273	93,591	34,485	15,705	7,842	6,408	143
2020	9,701	200	617	46,554	151,025	90,377	112,036	104,108	141,174	90,997	121,420	97,116	91,403	36,583	22,649	8,710	7,195	499
2021	0	1,329	20	2,833	94,400	155,267	127,947	127,851	121,608	126,957	130,142	115,278	111,685	34,712	26,988	14,379	10,129	68
2022	0	0	3,432	625	1,732	59,349	163,046	148,630	135,624	101,256	173,997	117,146	101,061	44,458	25,621	16,252	10,456	591
2023	0	0	0	6,261	883	254	89,667	180,095	156,883	106,458	122,552	145,324	107,506	39,490	26,883	16,614	12,560	245
2024	0	0	0	0	4,291	500	2,353	123,686	210,915	136,201	151,823	97,930	138,189	41,986	25,005	19,403	10,684	0
2025	0	0	0	0	0	276	1,289	827	153,547	189,986	152,907	137,019	121,846	54,051	32,419	22,069	15,037	233
2026	0	0	0	0	0	0	949	651	939	161,840	267,737	140,570	132,230	52,766	44,972	21,295	9,631	0
2027	0	0	0	0	0	0	0	876	1,335	3,136	133,571	258,969	153,781	54,785	31,824	27,663	15,218	227
2028	0	0	0	0	0	0	0	0	610	453	1,740	158,228	239,403	70,824	44,577	19,714	19,810	0
2029	0	0	0	0	0	0	0	0	0	1,961	1,046	4,738	141,302	113,462	42,296	25,005	17,970	543
2030	0	0	0	0	0	0	0	0	0	0	776	2,950	4,701	116,049	83,849	30,025	20,148	11
2031	0	0	0	0	0	0	0	0	0	0	0	1,950	2,897	3,322	76,814	57,134	24,916	250
2032	0	0	0	0	0	0	0	0	0	0	0	0	570	874	1,302	42,089	40,599	335
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	508	28,804	421
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	738	4	0	0
2035+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	56	0

Includes contracts that already started using units.

**Units in the 2015-16 Enrollment Year result from contract changes, not new unit sales.*

Outstanding Contracts
Enrollment Year

Use Year	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16**
2016*	2,490	843	899	3,414	3,917	2,548	3,288	2,944	2,897	2,227	2,940	1,813	1,258	286	175	59	26	0
2017	72	122	124	419	493	423	512	528	644	513	725	496	510	199	119	44	51	46
2018	9	42	134	407	507	343	665	576	613	523	748	531	530	229	129	67	29	12
2019	5	1	61	553	478	331	443	687	601	502	611	562	576	278	182	91	63	2
2020	70	1	4	181	649	374	526	502	760	523	635	474	550	286	214	97	81	1
2021	0	15	1	10	373	595	588	627	626	750	684	647	654	320	261	149	115	1
2022	0	0	18	5	4	269	721	760	710	590	915	628	605	341	257	146	141	5
2023	0	0	0	43	3	1	384	819	853	664	711	787	646	332	236	159	162	3
2024	0	0	0	0	22	1	9	558	1,026	860	862	595	943	356	269	179	144	0
2025	0	0	0	0	0	3	7	4	735	1,065	928	776	785	518	303	226	203	4
2026	0	0	0	0	0	0	6	2	4	835	1,521	862	876	485	443	214	171	0
2027	0	0	0	0	0	0	0	4	6	11	691	1,551	996	517	376	300	204	1
2028	0	0	0	0	0	0	0	0	3	2	10	889	1,583	647	492	301	318	0
2029	0	0	0	0	0	0	0	0	0	9	5	18	867	1,012	515	357	305	3
2030	0	0	0	0	0	0	0	0	0	0	6	14	54	876	857	456	347	2
2031	0	0	0	0	0	0	0	0	0	0	0	8	11	16	718	778	475	1
2032	0	0	0	0	0	0	0	0	0	0	0	0	8	4	9	472	747	2
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	437	4
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0
2035+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0

Includes contracts that already started using units.

**Contracts in the 2015-16 Enrollment Year result from contract changes, not new unit sales.*

Appendix D ★ Price-Setting Guidelines

We used the following guidelines, for the applicable enrollment period, for price-setting analysis before the suspension of future unit sales. These guidelines should be used for informational and historical purposes only. Due to the suspension of future unit sales, we did not complete the price-setting exercise for the 2015-17 enrollment periods and no price is currently set for future GET units. The GET Committee, at their August 2015 meeting, authorized a refund of all past and future amortization payments made for unredeemed units. Future price-setting guidelines may not include an amortization fee.

In 2011, the GET Committee adopted new price-setting guidelines (how we price future units) to address the new tuition-setting policy established by the Legislature at that time and to return the program to a fully funded status. The price-setting guidelines adopted in 2011 include the following four parts:

❖ Expected Cost — Covers the expected cost of future tuition and certain administrative expenses.

❖ Expenses — Covers the GET program's annual operating expenses.

❖ Reserve — Covers unexpected future costs such as above-expected tuition growth or below-expected investment returns. The current price-setting guidelines call for a 15 percent reserve. This component can be increased or decreased to alter the probability that a unit will ever create an unfunded liability in the future.

❖ Amortization — An optional component that covers unexpected past costs from significant program or policy changes. In 2011, the committee established a one-time 30-year amortization of the unfunded liability measured at June 30, 2011.

GET Unit Price Information	
Category	**2014-15 Enrollment**
Unit Price	
Expected Cost	$124.74
Expenses	5.93
Reserve	20.51
Amortization	20.82
Total Unit Price	**$172.00**

Note: Totals may not agree due to rounding.

2016
ACTUARIAL VALUATION REPORT

GUARANTEED EDUCATION TUITION PROGRAM

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"Supporting financial security for generations."

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