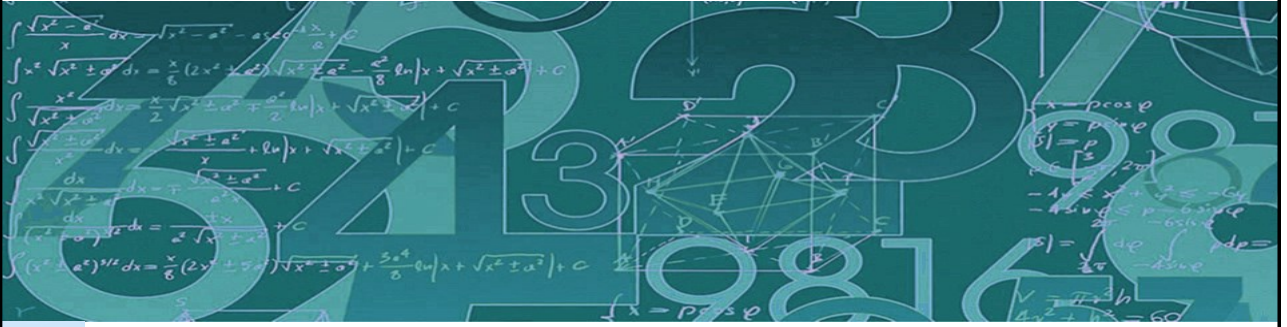


2024 GET Unit Price Setting

Presentation to: WA529 Committee

Sarah Baker, Senior Actuarial Analyst, ASA, MAAA

Luke Masselink, Senior Actuary, ASA, EA, MAAA



Today's Presentation

Purpose

- Updated actuarial analysis to assist the Committee in adopting a unit price for the upcoming enrollment period (2024-25)

Current Program Status

- Key changes from 2023 results
- Estimated funded status and reserves as of June 30, 2024

Price-Setting Information

- Key considerations for 2024 analysis
- 2024-25 enrollment best estimate unit price and range

Risk Analysis

- Key pricing metrics under various stress tests

Updated Program Measurements

- OSA provides annual projected program measurements to help inform unit price setting
 - Program funded status
 - Level of program reserves
- Based on a projection of prior actuarial valuation results
 - Additional year of contract changes using grouped data
 - May include changes to assumptions
 - Uses actual market value of assets as of measurement date
- Projection produces very similar result to an actuarial valuation that uses individual records
- Previously referred to approach as “roll-forward”

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Key Changes from 2023 Results

- 2023-24 unit sales and distributions
 - Approximately 428,000 new unit sales

Participant Data Summary		
	2023	2024
Active Contracts	67,647	66,918
Number of Units Outstanding	10,082,367	9,675,561

- Higher than assumed FY 2024 investment returns

FY 2024 Investment Returns	
Assumed Return	5.00%
Actual Return	11.15%

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Key Program Assumptions

- No change to rate of return or tuition growth assumption

Key Assumptions	
Investment Return	
All Years	5.00%
Tuition Growth by School Year	
2024-25	3.00%
2025-27	3.25%
2027-28+	4.15%

- Investment return assumption based on target asset allocation
 - 60% fixed income/40% global equity
- Short-term tuition growth based on 4-year budget cycle

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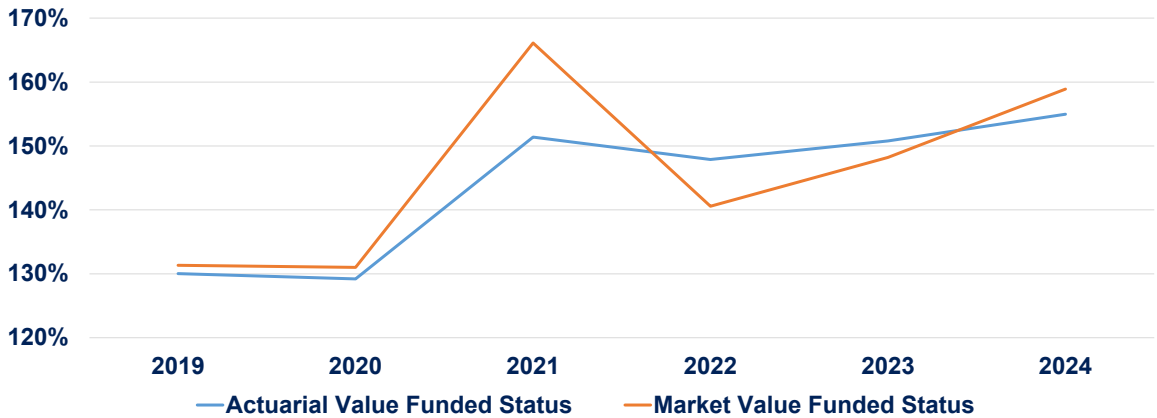
Current Program Status

Funded Status Summary		
<i>(Dollars in Millions)</i>	2023 GAVR	2024 Projection
Present Value of Future Obligations	\$1,142	\$1,141
(A) Market Value of Assets at June 30	\$1,617	\$1,754
(B) Present Value of Receivables	\$76	\$59
Present Value of Fund (A) + (B)	\$1,693	\$1,813
Reserve/(Deficit)	\$551	\$672
Funded Status	148%	159%

- Increase in program funded status largely due to 2024 investment return

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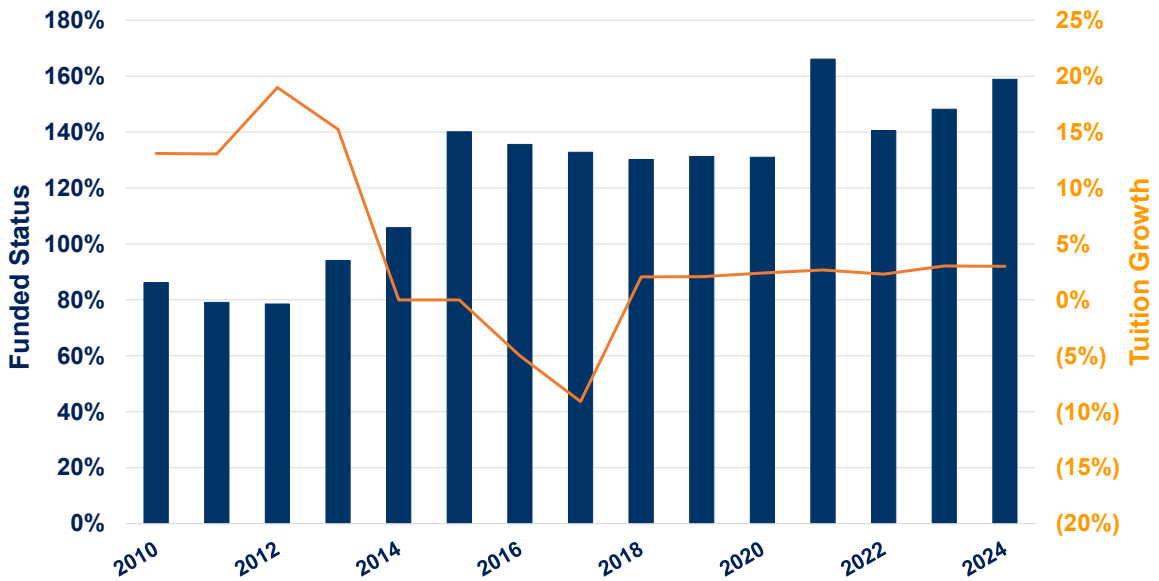
Funded Status by Asset Value



- June 30, 2024, Market Value Funded Status = 159%
- June 30, 2024, Actuarial Value Funded Status = 155%
- Actuarial value of assets based on an 8-year asset smoothing method

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Funded Status and Tuition Growth History



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Price-Setting Considerations

- The responsibility to adopt a unit price rests solely with the Committee, subject to the requirements of the price cap
- In adopting a unit price, the Committee considers many policy issues; including, but not limited to, the management of program risks
- To assist the Committee in adopting an appropriate unit price, we calculate a best estimate and a best estimate range for the unit price that allows the Committee members to balance policy issues
- We consider any price within the best estimate range to be reasonable from an actuarial perspective

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Components of Unit Price

Expected Cost

- Covers the present value of the expected cost of future tuition and applicable state-mandated fees

Expenses

- Contributes to the payment of administrative expenses

Reserve

- Covers unexpected future costs from new unit sales, such as higher than expected tuition growth or lower than expected investment returns
- 15% reserve level included in best estimate unit price

Amortization

- An optional component that covers unexpected past costs from significant program or policy changes, as well as adverse demographic and economic experience
- Not included in current unit pricing

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Price-Setting Adoption – Key Considerations

- Current tuition policy began with the 2015-16 academic year
- Unit sales slightly increased from last year, remain under 500,000
- Best estimate calculation continues to include a 15% reserve
- 2024-25 price cap = \$136.00

Historical Unit Sales Information		
Enrollment Year	Adopted Unit Price	Units Sold
2019-20	\$121.00*	505,222
2020-21	133.00*	550,062
2021-22	114.01	735,322
2022-23	116.63	408,958
2023-24	\$120.16	428,112

*Price displayed is before the retroactive price adjustment to \$114.01.

**Custom monthly contract sales suspended.

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Unit Price Information

- 2024-25 payout value: \$123.76
- 2024-25 price cap: \$136.00
- Last year the Committee adopted a unit price equal to the payout value of \$120.16
 - This has been the Committee's practice since the 2021-22 enrollment period

GET Unit Price Information		
Unit Price	2024-25 Enrollment	
	Best Estimate	Best Estimate Range
Expected Cost	\$105.39	
Expenses	3.34	
Reserve	16.31	
Amortization	N/A	
Total Unit Price	\$125	\$110 - \$142
Premium	1%	(11%) - 15%

Note: Totals are truncated and may not agree. Premium represents the increase of the Total Unit Price over today's unit payout value expressed as percentage.

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Risk Analysis for Unit Pricing

- Financial program risks can change over time, and some may not materialize
 - June 30, 2024, funded status of units under contract = 159%
- Should the current program reserve impact unit pricing?
 - If so, committee could consider a smaller reserve component than 15%
 - If not, maintaining 15% reserve component may remain reasonable given future unit sales may encounter adverse experience
- What would it take to significantly reduce the program reserve?
- We have prepared risk analysis to help the Committee better understand potential impacts from program risks

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Summary of Risk Analysis for Unit Pricing

Risk Analysis

- We performed risk analysis to test the 15% reserve and the impact to the June 30, 2024, funded status (program reserve)
- We recommend the Committee continue to consider and evaluate the reserve policies

Risk Scenarios

- We project the assets and liabilities of a single example unit sale under various scenarios
 1. Best estimate assumptions
 2. Extension of current law tuition policy
 3. Investment returns 1% lower and tuition growth 1% higher than assumed
 4. Stress test investment return
- We estimate the impact to the June 30, 2024, program funded status under each scenario
- Please see the Appendix for details on the assumptions and methods used in this risk analysis

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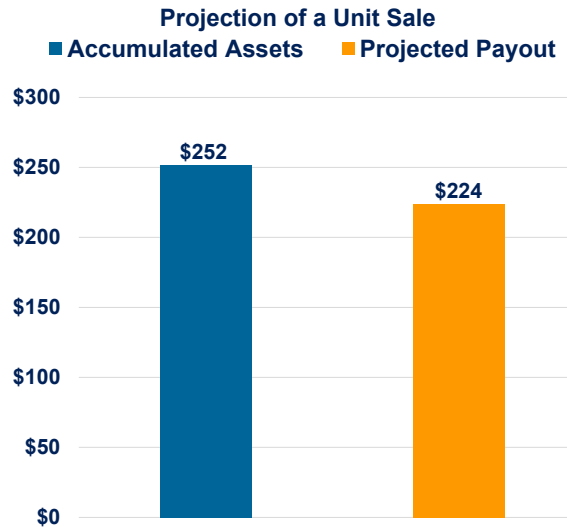
Best Estimate Results

- Approximate results if future experience matches expectations
- Includes 15% reserve component

Tuition Growth Assumption by School Year	
2025-27	3.25%
2027-28+	4.15%

Investment Return Assumption	
	5.00%

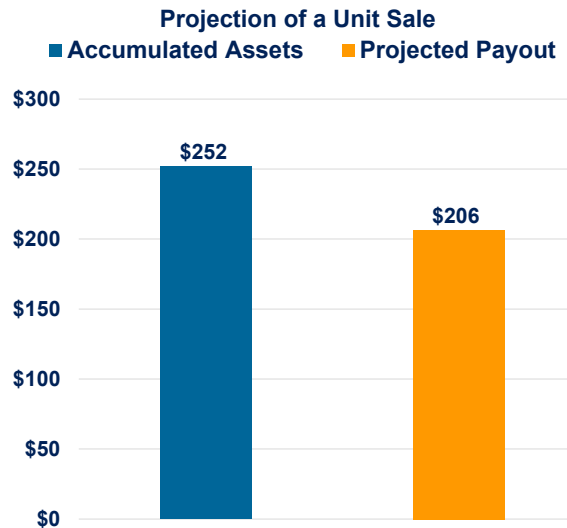
Funded Status Estimate June 30, 2024	
	159%



Risk Scenario – Current Law Tuition Growth

Tuition Growth Assumption by School Year		
	Best Estimate	Risk Scenario
2025-27	3.25%	3.25%
2027-28	4.15%	3.25%
2028-30	4.15%	3.50%
2030-35	4.15%	3.75%
2035-38	4.15%	3.50%
2038-39	4.15%	3.25%
2039+	4.15%	2.80%

Funded Status Estimate June 30, 2024		
	Best Estimate	Risk Scenario
	159%	163%

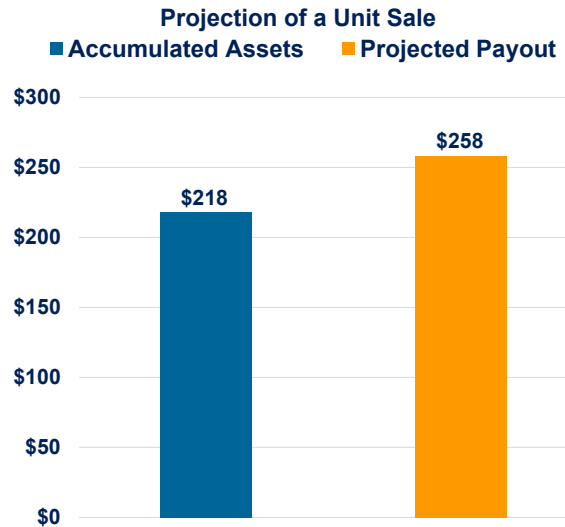


Risk Scenario – Investment Returns 1% Lower than Expected and Tuition Growth 1% Higher than Expected

Tuition Growth Assumption by School Year		
	Best Estimate	Risk Scenario
2025-27	3.25%	4.25%
2027-28+	4.15%	5.15%

Investment Return Assumption	
Best Estimate	Risk Scenario
5.00%	4.00%

Funded Status Estimate June 30, 2024	
Best Estimate	Risk Scenario
159%	142%



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Risk Scenario – Stress Test Investment Return

- 15% reserve on unit sales offsets impact from adverse experience
- Projected Unit Sale Ratio = Accumulated Assets / Projected Payout

1-Year Investment Return	Projected Unit Sale Ratio	June 30, 2024, Funded Status
5% (Best Estimate)	113%	159%
0%	107%	152%
(5%)	102%	144%
(20%)	86%	122%

- After the 1-year investment return shown in the table, future returns are assumed to be 5.00% annually

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Summary of Results

Current Program Status

- Funded status of 159% and reserves of \$672 million on June 30, 2024
 - Funded status of 148% and reserves of \$551 million on June 30, 2023
- Increase primarily driven by higher than assumed investment return during FY 2024
- Based on a projection from June 30, 2023

Price-Setting Information

- Best estimate unit price of \$125 with a range of \$110 to \$142 for next enrollment period
- Current law caps the unit price at \$136
- Payout value of \$123.76 for current academic school year
- Unit price of \$120.16 adopted for last enrollment period

Risk Analysis

- Current 15% reserve policy for new unit sales mitigates impacts from adverse experience
- A lower reserve policy could be reasonable if you consider current funded status and tuition policy

Questions?



Questions? Please Contact: The Office of the State Actuary
leg.wa.gov/OSA; state.actuary@leg.wa.gov
360-786-6140, PO Box 40914, Olympia, WA 98504
Luke Masselink and Sarah Baker

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Thank You



Office of the State Actuary
"Supporting financial security for generations."

September 11, 2024

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Appendix

- Historical Unit Price and Premiums
- Program Status on June 30, 2024 – Additional Detail
- Tuition Growth and Return Assumptions for Best Estimate Range
- Price Cap Calculation
- Current Program Status Disclosures
- Data, Assumptions and Methods
- Actuarial Certification

Office of the State Actuary

September 11, 2024 21

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Historical Unit Price and Premiums

Historical Unit Information				
Enrollment Year	Adopted Unit Price	Payout Value	Premium	Units Sold
1998-99	\$35	\$33.96	3%	1,374,095
1999-00	38	35.21	8%	615,327
2000-01	41	36.41	13%	523,702
2001-02	42	38.98	8%	2,463,500
2002-03	52	45.20	15%	2,099,531
2003-04	57	48.36	18%	1,896,635
2004-05	61	51.54	18%	2,108,360
2005-06	66	55.06	20%	2,146,191
2006-07	70	58.88	19%	2,339,431
2007-08	74	62.90	18%	2,102,305
2008-09	76	67.20	13%	3,177,699
2009-10	101	76.00	33%	2,624,367
2010-11	117	85.92	36%	2,697,696
2011-12	163	102.23	59%	1,503,962
2012-13	172	117.82	46%	1,038,773
2013-14	172	117.82	46%	741,701
2014-15	172	117.82	46%	618,367
2015-16	-	111.93	N/A	-
2016-17	-	101.76	N/A	-
2017-18	113	103.86	9%	770,665
2018-19	113	106.01	7%	639,646
2019-20	121	108.44	12%	505,222
2020-21	133	111.03	20%	550,062
2021-22	114.01	114.01	0%	735,322
2022-23	116.63	116.63	0%	408,958
2023-24	\$120.16	\$120.16	0%	428,112

Note: Price and premium displayed are before any refunded amortization component or retroactive price adjustments.

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Program Status on June 30, 2024 – Additional Detail

	Funded Status Summary		
	2023 GAVR	Financial Reporting Projection 2024 Data Update	2024 MVA (Final Results)
<i>(Dollars in Millions)</i>			
Present Value of Future Obligations	\$1,142	\$1,141	\$1,141
(A) Market Value of Assets (MVA) on June 30	\$1,617	\$1,656	\$1,754
(B) Present Value of Receivables	\$76	\$59	\$59
Present Value of Fund (A) + (B)	\$1,693	\$1,715	\$1,813
Funded Status	148%	150%	159%
Reserve/(Deficit)	\$551	\$574	\$672

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Tuition Growth and Return Assumptions for Best Estimate Range

Tuition Growth Assumptions		
	2025-27	2027+
Low Price Range	3.25%	3.65%
Best Estimate	3.25%	4.15%
High Price Range	3.25%	4.65%

Investment Return Assumptions	
	All Years
Low Price Range	5.50%
Best Estimate	5.00%
High Price Range	4.50%

- To develop the best estimate range, we varied both the assumed rate of investment return and tuition growth rates

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Price Cap Calculation

- Price cap conditions met
 - Funded status as of June 30, 2024, is above 120%
 - Tuition policy remains unchanged

GET Unit Price Information	
Price Cap Calculation	
2024-25 Payout Value	\$123.76
+10 Percent	12.38
2024-25 Price Cap	136.00

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Current Program Status Disclosures

- Current program status in this presentation starts with a projection of the results of the [June 30, 2023, GET Actuarial Valuation Report \(GAVR\)](#)
- To estimate the June 30, 2024, program measures, we enhance that projection to reflect additional unit sales and redemptions as well as updated assets as of the new measurement date
 - See our letter from August 19, 2024, for supporting information on the data, assumptions, and methods used for the current program status

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Data, Assumptions and Methods

- Price setting and Risk analysis
 - To determine the expense component of the unit price, we relied on projected program expenses and fee revenue provided by program staff as documented in the 2023 GAVR
 - We reviewed this data and found it reasonable for this analysis
 - Program staff provided the current payout value and we relied on that information to prepare the price setting and risk analysis
 - No other data was required to perform the price setting
- Current program status and funded status measurements
 - We used the same data as disclosed in our letter from August 19, 2024

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Data, Assumptions and Methods (Continued)

- Price-setting analysis
 - To develop the best estimate unit price and range, we relied on the key assumptions disclosed in this presentation
 - We used the new unit sales profile and redemption rate assumption disclosed in the [2021 GET Experience Study](#) to determine the expected duration between unit purchase and ultimate redemption of the unit
 - All other assumptions are consistent with those disclosed in the 2023 GAVR
- We excluded the potential impacts of differential tuition policy from our analysis
- Risk analysis
 - For each risk scenario, we varied our assumptions, as disclosed in this presentation, from the best estimate assumptions to produce different accumulated assets and projected payout values from our best estimate
 - To determine funded status measurements, we used the same assumptions as disclosed in our letter from August 19, 2024, unless otherwise noted in this presentation

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Data, Assumptions and Methods (Continued)

- Price-setting analysis
 - To determine the best estimate unit price and range, we estimate the future payout value of a single unit based on assumptions for future tuition growth and holding periods for the unit (the duration between purchase and ultimate redemption)
 - Assumed holding periods are based on the assumed new unit sales profile
 - We calculate the present value of this future unit using the expected rate of investment return
 - We then add an additional component to the unit price for contributions to the administrative expenses of the program using the following procedure
 - Start with the present value of program expenses for currently unredeemed units on June 30, 2023, as disclosed in the 2023 GAVR
 - Divide that amount by the number of unredeemed units on June 30, 2023
 - Increase that amount with inflation to reflect the growth to the next enrollment period
 - Finally, we include a reserve component in the unit price to account for adverse deviation from our assumptions (unexpected costs)

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Data, Assumptions and Methods (Continued)

■ Risk analysis

- For each scenario, we compare the projected unit payout value to the expected growth in assets attributable to the purchase of a single unit (accumulated assets)
 - We selected a 15-year period to approximate the average holding period of new contracts
 - We calculate a hypothetical unit price as the present value of the 15-year projected unit payout value under our best estimate tuition growth rates with a 15 percent reserve
 - We excluded the expense component from this analysis
- To determine funded status measurements, we used the same methods as disclosed in our letter from August 19, 2024

Actuarial Certification

- Actuarial standards of practice that specifically apply to the measurement or evaluation of prepaid tuition programs have not been defined within the actuarial profession
 - We used the standards of practice for pension systems where possible
- The data, assumptions, and methods used in this analysis are reasonable and appropriate for the primary purpose stated on slide 1 and are in conformity with generally accepted actuarial principles and standards of practice as of the date of this presentation
 - The use of another set of assumptions and methods could also be reasonable and could produce materially different results
- This analysis may not be appropriate for other purposes and should be replaced with updated analysis for adopting a unit price in subsequent enrollment periods
- Since this analysis is based on assumptions about uncertain future events, actual results will differ to the extent that future experience differs from these assumptions
- No members of the WA529 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
- Luke Masselink, ASA, EA, MAAA, served as the certifying actuary for this work and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein