



## Actuarial Analysis Of Differential Tuition



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### Highlights

- GET program currently on feasible path to full funding
  - Based on results from earlier presentation
  - Analysis did not include effects of differential tuition
- Differential tuition increases program's risks
  - Based on results of 20 percent to 50 percent differential tuition increases
  - Can increase chance of state contributions from 1 percent to over 40 percent
- Currently, differential tuition a legal/policy issue rather than actuarial
- OSA can help determine effects of differential tuition on GET
  - If non-actuarial issues are defined
  - Can assess risk increase and unit price impacts to GET



## Differential Tuition Increases Risks To GET

- GET currently on expected path to full funding in 2029
  - Current enrollment period data is positive indicator for plan
  - Program remains under stress
- Differential tuition would add stress to full funding plan
  - Unit payout value increases → cash flow strain
  - Unit price increase → decreases unit sales → cash flow strain
  - Assets decrease faster than anticipated → less investment returns
  - Overall, leads to increased chance of state contributions

## 2012 Session Analysis on Differential Tuition

- Estimated effect of two differential tuition scenarios
  - Based on 20 percent and 50 percent tuition increases - possibilities made public by UW
  - Included in GET unit payout value
  - Occur immediately
- Based on June 30, 2011, results
  - Different starting point for analysis, but same overall effect
- Full analysis in handout - letter dated February 6, 2012



## Snapshot Funded Status Decreases

Impact on GET Program Status*			
	Without Differential Tuition	With Differential Tuition 20% Increase	With Differential Tuition 50% Increase
<i>(Dollars in Millions)</i>			
Present Value of all GET Contracts	\$2,646	\$3,169	\$3,955
Market Value of Assets	\$2,125	\$2,125	\$2,125
Unfunded Liability	\$521	\$1,044	\$1,830
Funded Status	80%	67%	54%

\* Projected values at June 30, 2011.

## Ongoing Risk Measures Worsen

	Without Differential Tuition	With 20% Differential Tuition	With 50% Differential Tuition
Chance of State Contributions	1.1%	Over 20%	Over 40%
Chance of Funded Status Below 50%	22.5%	47%	100%
Average Expected Annual Unit Sales (Next 20 Years)	988,000	493,000	234,000



## OSA Can Help Estimate Differential Tuition Impacts

- We can help estimate the impacts on GET if non-actuarial issues are defined
  - Timing of differential tuition (policy)
  - Amount of differential tuition (policy)
  - Whether differential tuition is included in GET payout value (policy/legal)
- Additional issues for consideration
  - Long-term effect on general tuition growth
  - GET Committee's approach to pricing units after differential tuition implemented
- Policymakers can assess increased risks to GET



## Summary

- GET program currently expected to recover to full funding
- Differential tuition will increase risks to GET
- OSA can quantify the risks and help policymakers assess the risks
  - Several non-actuarial issues need to be defined



## Questions

- Q & A



## Differential Tuition Scenarios – Possible Unit Price Increase

- Assumes GET Committee adds increased obligation to one-time 30-year amortization of unfunded obligation

Category	Impact on GET Unit Price		
	Without Differential Tuition	With Differential Tuition 20% Increase	With Differential Tuition 50% Increase
<b>Unit Price</b>			
Expected Cost	\$121.60	\$145.92	\$182.40
Expenses	4.61	9.25	19.48
Reserve	18.93	23.27	30.28
Amortization	18.70	79.42	289.51
<b>Total Unit Price</b>	<b>\$163.00</b>	<b>\$257.00</b>	<b>\$521.00</b>

Note: Total unit price rounded down.



## Differential Tuition Scenarios – Risk Analysis

- Some numbers estimated since purchaser and GET Committee behavior were not fully re-evaluated
  - Results would be worse to the extent that unit sales are overestimated in this analysis

Key Risk Metrics			
Risk Category	Without Differential Tuition	With Differential Tuition 20% Increase	With Differential Tuition 50% Increase
Chance of State Contribution over 50 years	1.1%	Over 20%	Over 40%
Worst Case 50-Year State Contributions <i>(Dollars in Millions)</i>	\$2,270	Over \$4,000	Over \$5,000
Chance of Funded Status Under 50% over 50 years	22.5%	47%	100%
Chance of Purchaser Experiencing Negative Return	1.4%	22%	77%
Chance of Average Annual Sales Below 750,000 Units	15.3%	Over 50%	Over 75%
Average Expected Annual Units Sold <i>(Next 20 Years)</i>	988,244	492,987	234,041