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Fiscal Modeling: Senate Finance Committee Scenarios

Senate Finance Committee
February 10, 2022
Legislative Finance Division

Outline

- Review of LFD Modeling Baseline Assumptions
- Comparison of Senate Finance Committee assumptions to LFD Baseline
- Fiscal Models Using Senate Finance Assumptions

Review of LFD Modeling Baseline

- Legislative Finance's fiscal model is designed to show policy makers the longer-term impact of fiscal policy decisions.
- The baseline assumptions are essentially that current budget levels are maintained, adjusted for inflation. Policy changes are then applied against that baseline.
- Our default is to assume that statutory formulas will be followed.

Review of Modeling Baseline (cont.)

Revenue Assumptions

- LFD's baseline revenue assumptions are the Department of Revenue's Fall Revenue Forecast.
 - This assumes \$71 oil in FY23, following futures market thereafter.
 - DNR oil production forecast projects that Alaska North Slope production will increase from 500.2 thousand barrels per day in FY23 to 586.2 thousand barrels per day in FY31.
- For the Permanent Fund, we use Callan's return assumption of 5.86% total return in FY22 and 6.20% thereafter.

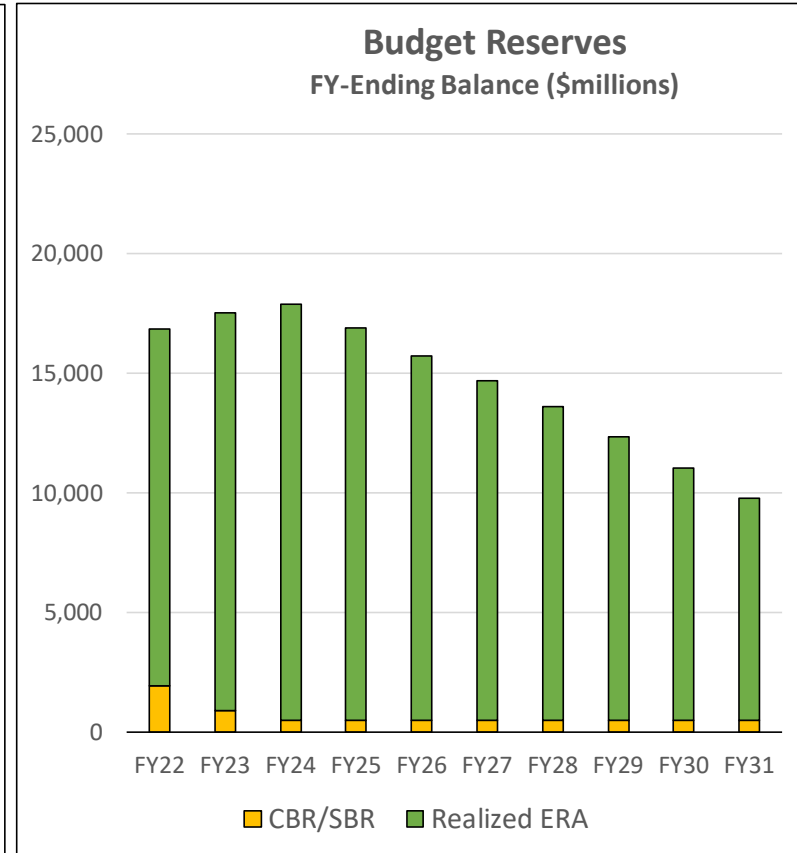
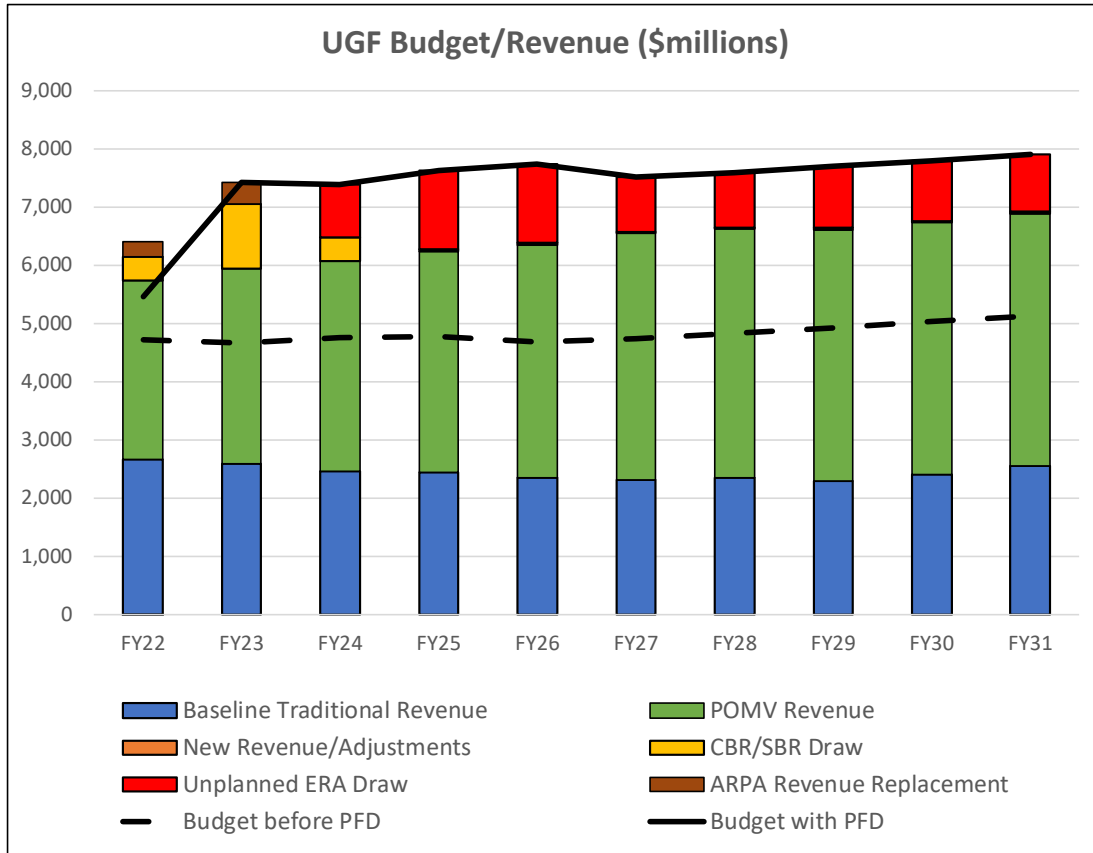
Review of Modeling Baseline (cont.)

Spending Assumptions

- For **agency operations**, these scenarios assume the Governor's FY23 budget grows with inflation (2.0%).
- For **statewide items**, the baseline assumes that all items are funded to their statutory levels beyond FY23.
 - This includes School Debt Reimbursement, the REAA Fund, Community Assistance, oil and gas tax credits.
- For the **capital budget**, we assume the Governor's FY23 capital budget grows with inflation (2.0%)
- For **supplementals** we assume \$50.0 million per year. This is based on the average amount of supplemental appropriations minus lapsing funds each year.

LFD Modeling Baseline

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	(1,482)	(1,320)	(1,375)	(1,387)	(978)	(961)	(1,080)	(1,061)	(1,009)



Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.00%	6.26%	6.77%	6.70%	6.13%	6.09%	6.22%	6.20%	6.13%

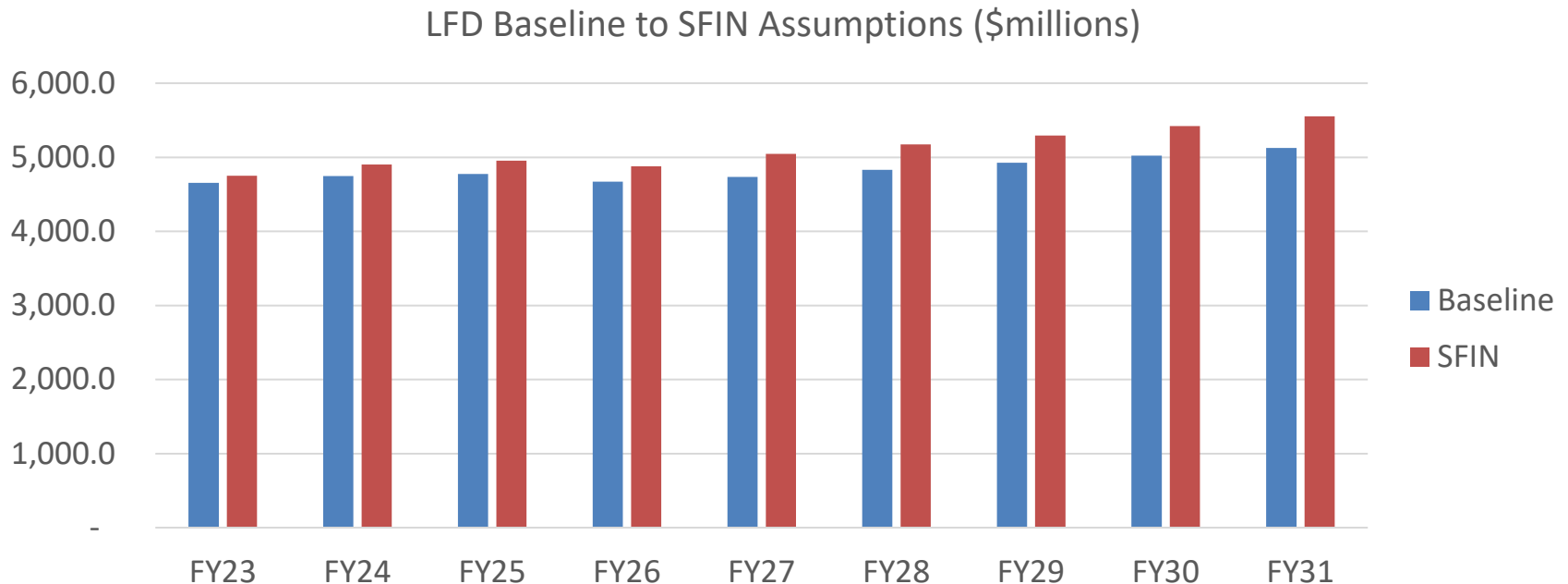
Senate Finance Committee Scenarios

Senate Finance Co-Chairs asked for modeling with the following assumptions that differ from LFD's baseline:

- Capital budget baseline of \$250 million (instead of \$154.7 million)
- Agency operations growing at 2.5% (instead of 2.0%)
- Assume expiring federal funds are replaced with UGF and PERS healthcare is funded after FY23
- Varying PFD scenarios: statutory PFD, 50/50 of POMV, 75/25 of POMV

Comparison of Senate Finance Committee Scenario to LFD Baseline

Comparison of LFD Baseline to SFIN assumptions (\$ millions)									
	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Baseline	4,655.9	4,747.5	4,774.5	4,672.3	4,735.3	4,833.6	4,926.5	5,025.1	5,127.8
SFIN	4,751.5	4,905.1	4,955.9	4,878.5	5,049.3	5,174.5	5,295.5	5,423.3	5,556.4
Difference	95.3	157.5	181.3	206.1	314.0	340.9	369.0	398.2	428.6



Stress Tests

- Two types of stress tests performed:
 - Budget stress test: grow agency operations and capital budget by 3.5% per year instead of 2.5%
 - Revenue stress test: use probabilistic modeling to simulate a range of possible oil prices and investment returns
- For each PFD scenario, we will show the non-stressed model output and the two stress tests

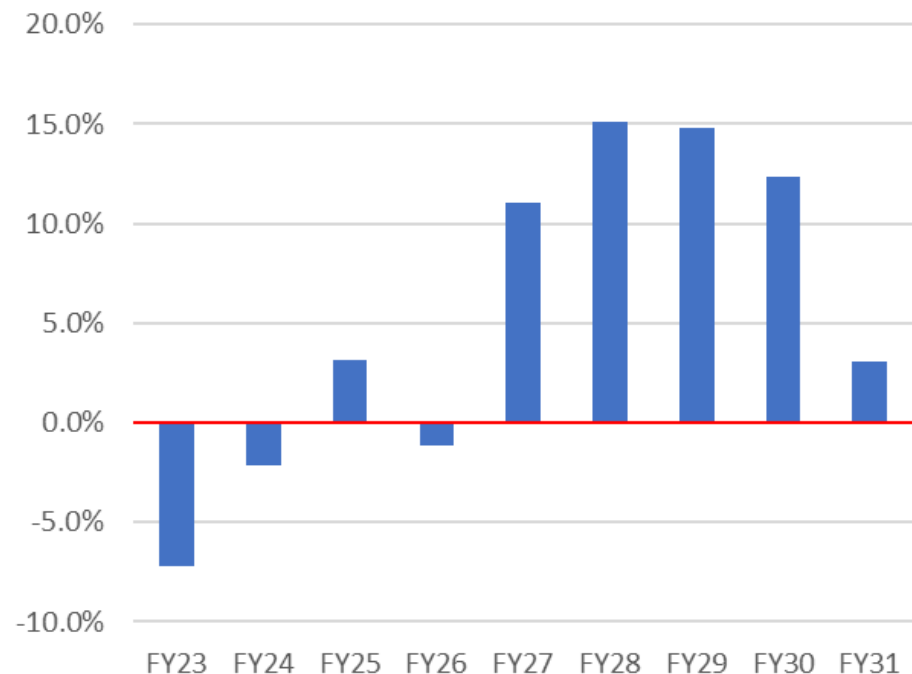
Stress Test: 25th Percentile Example

- Example of a single case, for which 25% of total cases see greater overall deficits.
- Example case has average oil price of \$58 and average Permanent Fund return of 5.4%.

Average Oil Price (\$/barrel)



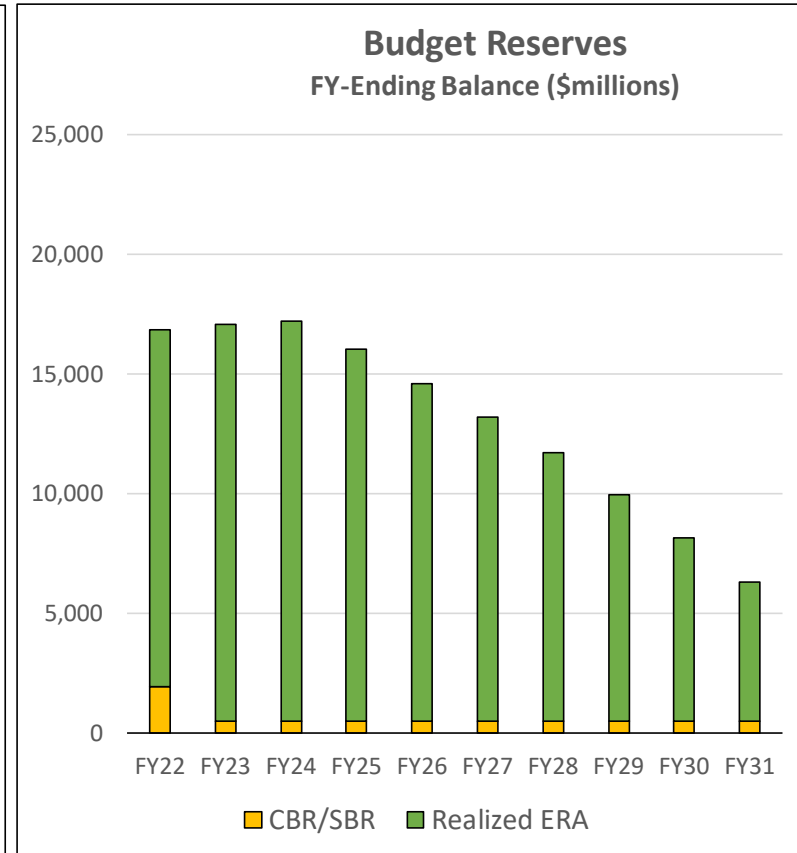
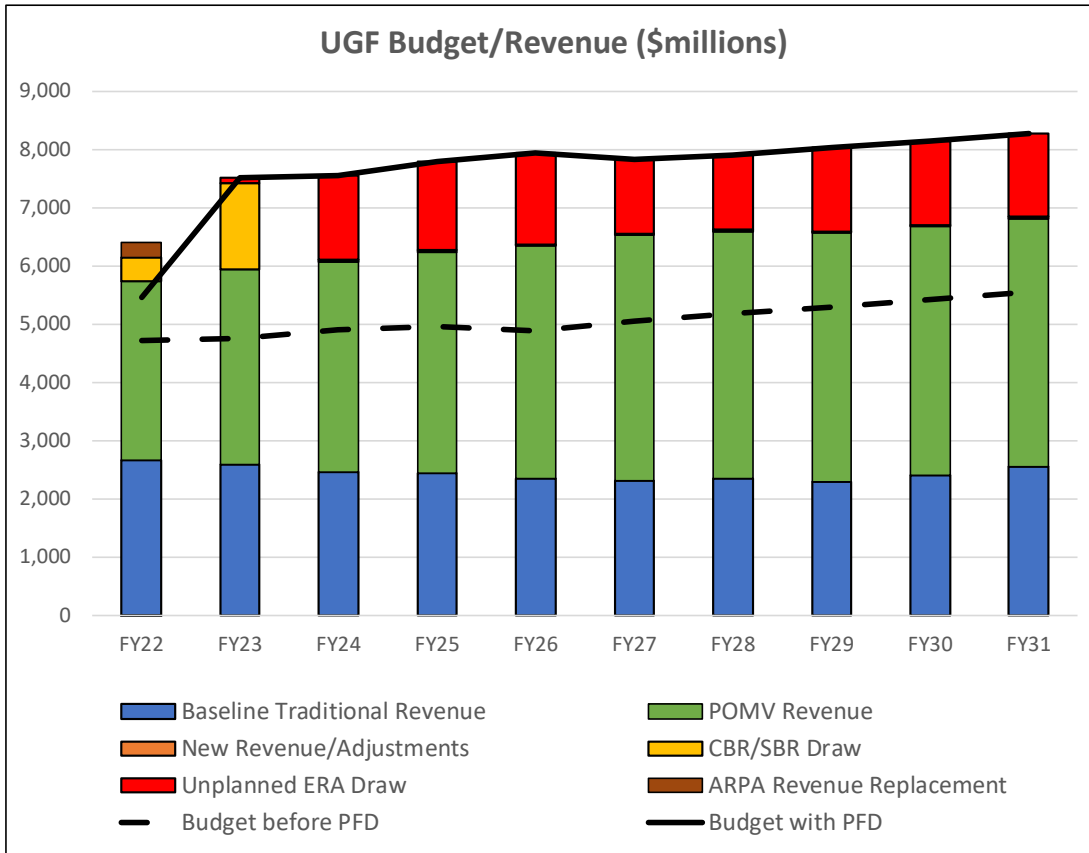
Permanent Fund Total Return



Scenario 1: Statutory PFD

Normal Model Output

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	(1,578)	(1,477)	(1,556)	(1,595)	(1,297)	(1,310)	(1,462)	(1,479)	(1,462)

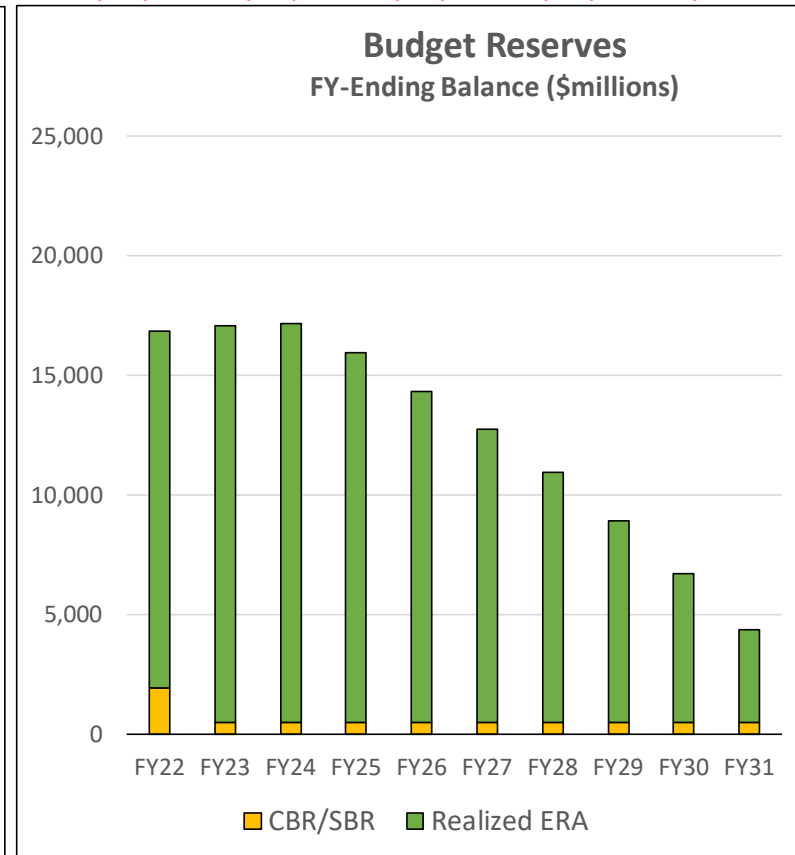
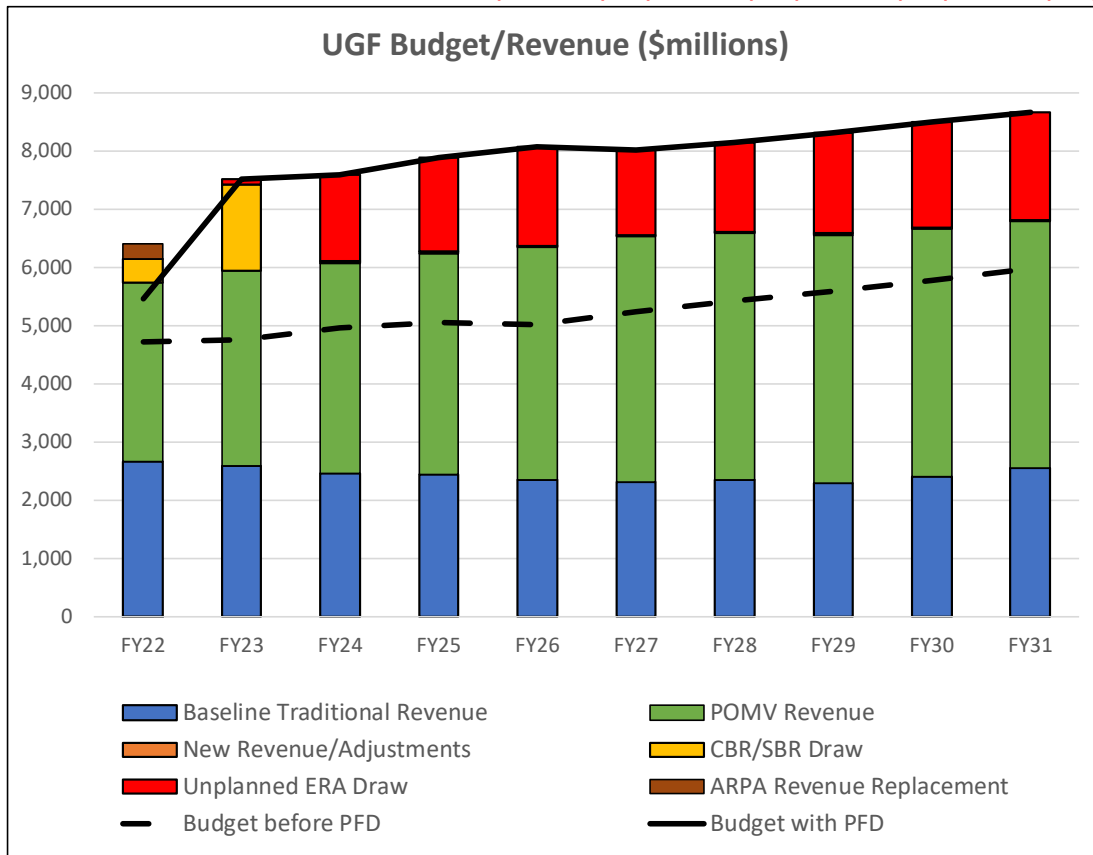


Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.14%	7.01%	7.01%	6.96%	6.51%	6.51%	6.68%	6.70%	6.69%

Scenario 1: Statutory PFD

Budget Stress Test

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	(1,578)	(1,519)	(1,643)	(1,729)	(1,480)	(1,547)	(1,756)	(1,834)	(1,882)



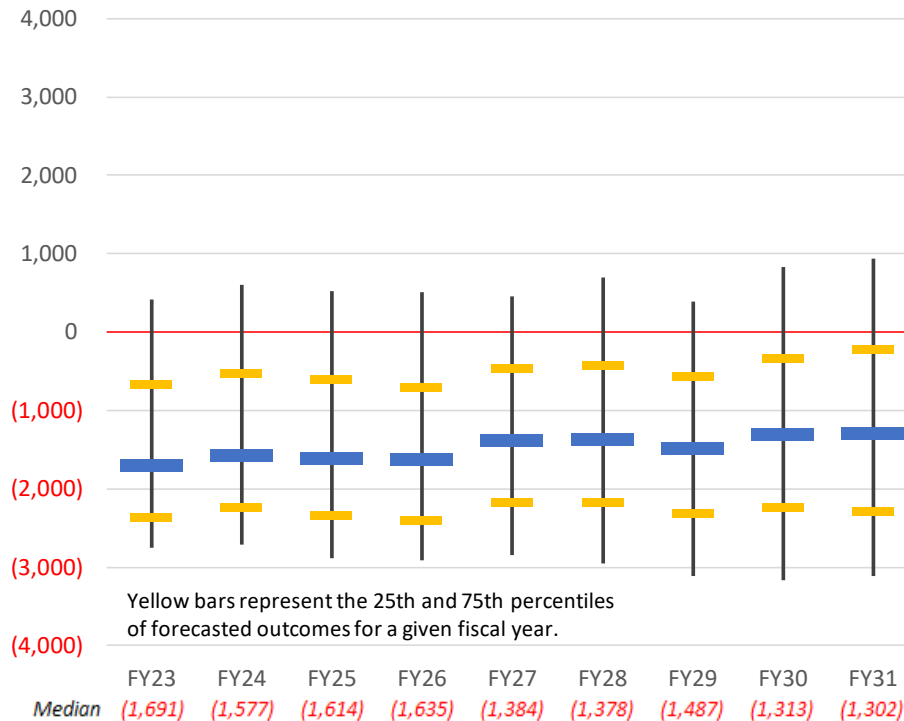
Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.14%	7.06%	7.12%	7.13%	6.73%	6.79%	7.03%	7.13%	7.19%

Scenario 1: Statutory PFD

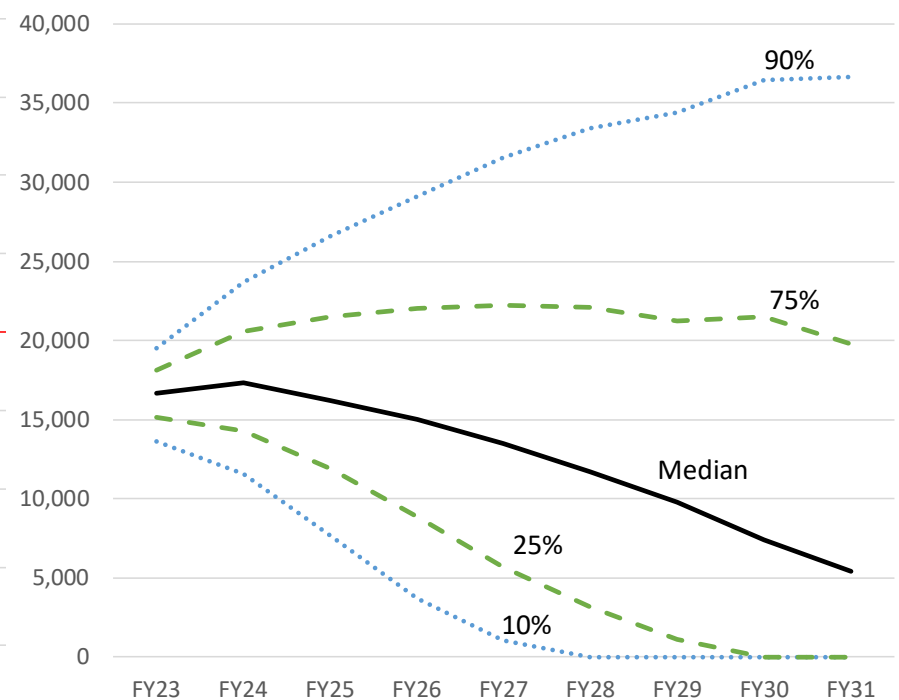
Revenue Stress Test

Median	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Surplus/(Deficit)	(1,691)	(1,577)	(1,614)	(1,635)	(1,384)	(1,378)	(1,487)	(1,313)	(1,302)

Surplus/(Deficit) by Fiscal Year (\$millions)



Range of FY-End Realized ERA Balances (\$millions)

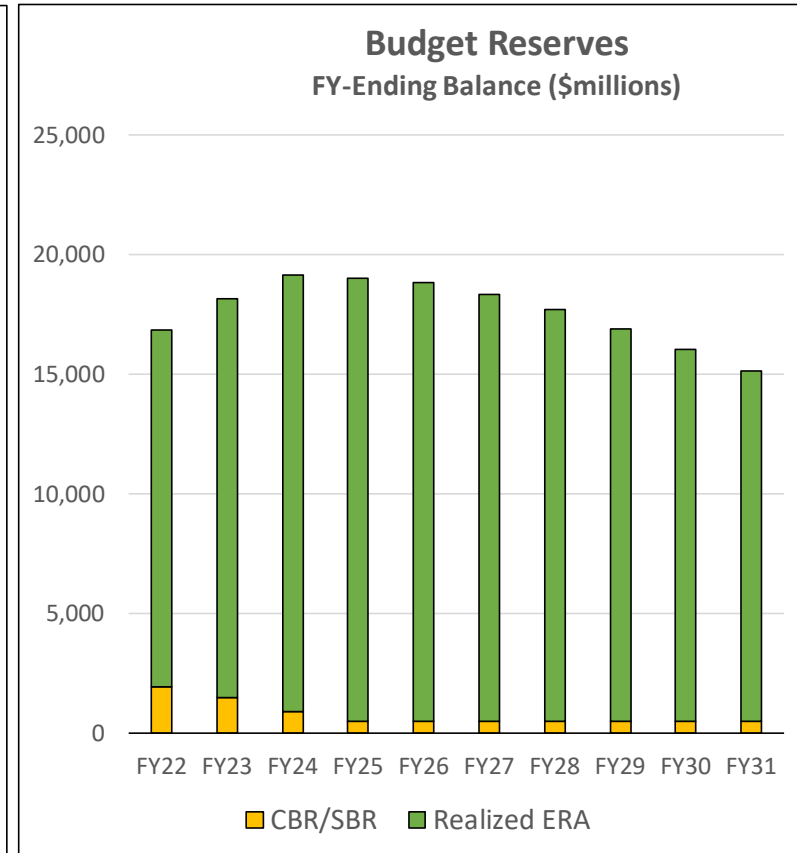
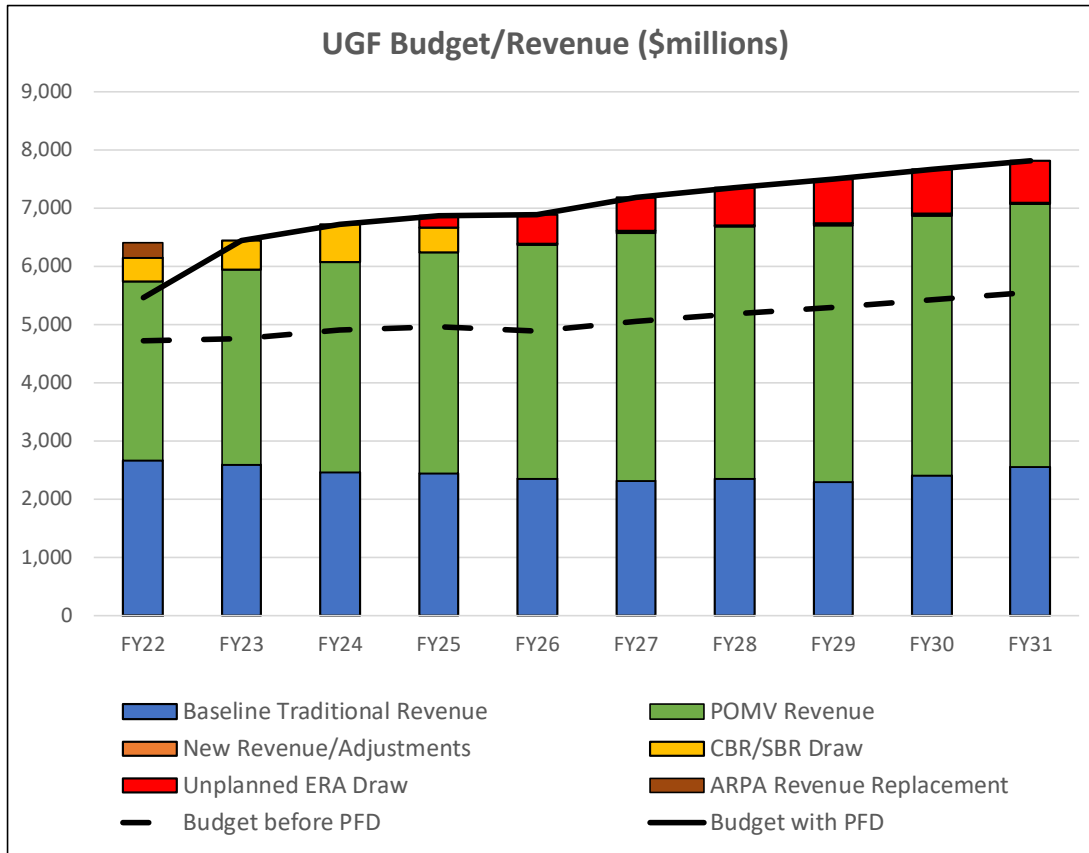


CBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR below \$2.5 billion	95%	95%	95%	94%	94%	92%	91%	90%	87%
CBR at/below \$500 million	69%	76%	78%	79%	77%	74%	76%	73%	71%

Scenario 2: 50/50 PFD

Normal Model Output

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	(494)	(641)	(622)	(529)	(608)	(666)	(795)	(788)	(751)

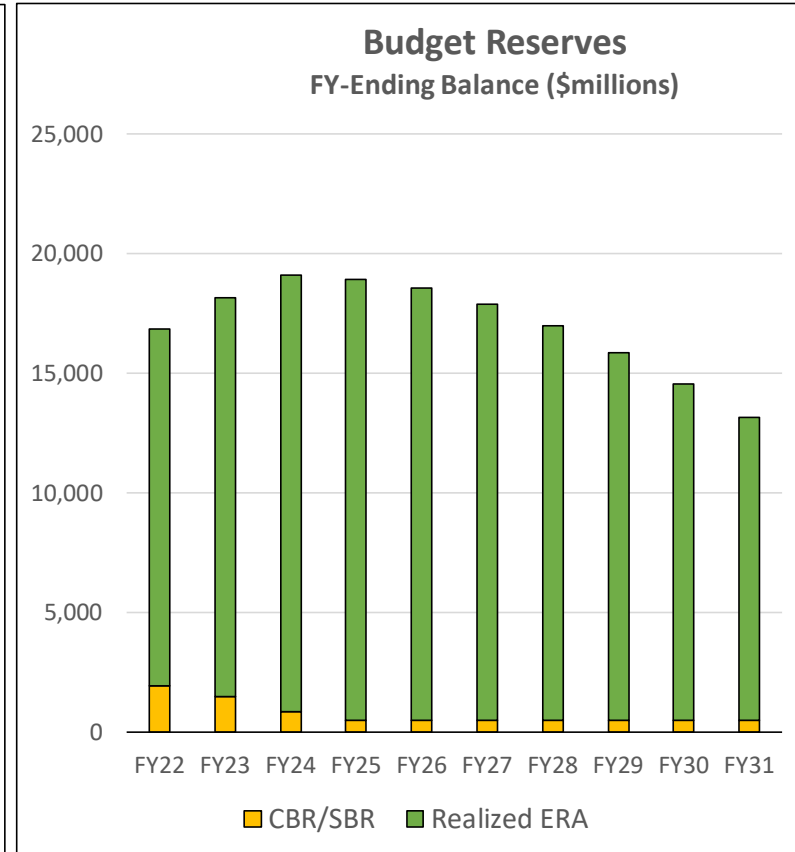
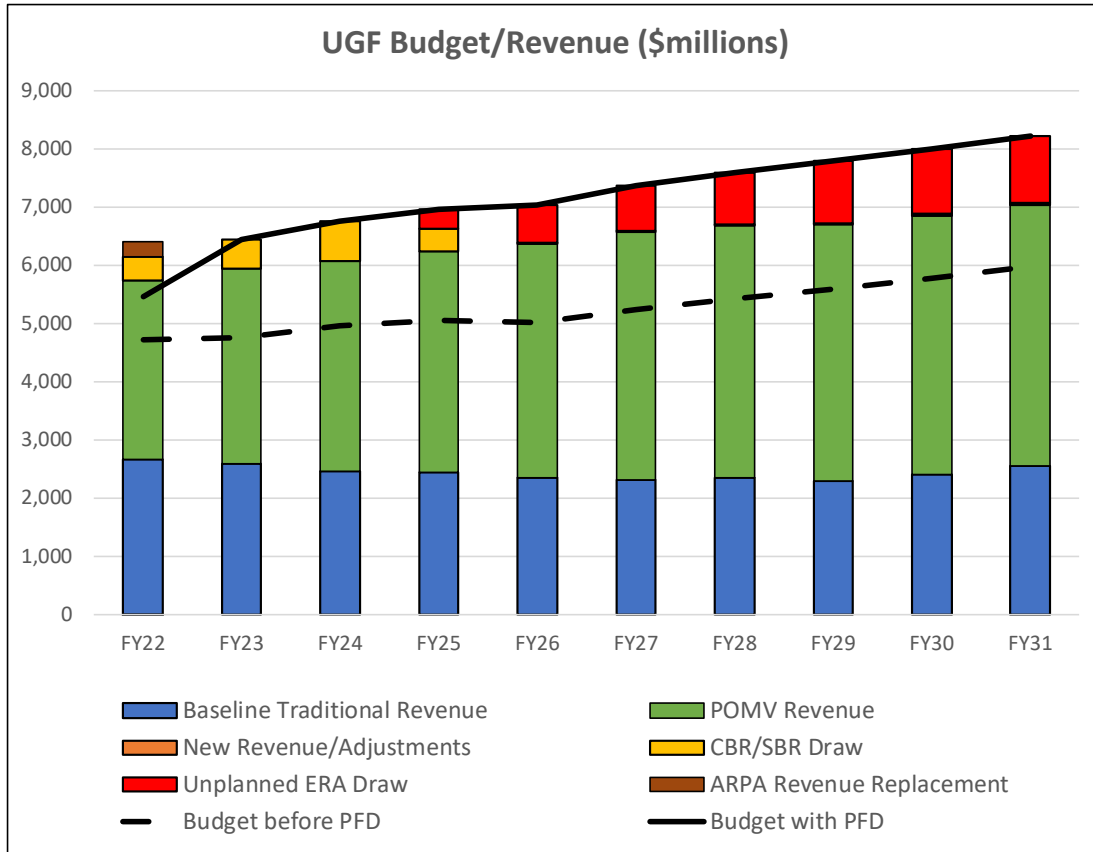


Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.00%	5.00%	5.27%	5.62%	5.68%	5.74%	5.87%	5.85%	5.81%

Scenario 2: 50/50 PFD

Budget Stress Test

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	(494)	(682)	(708)	(662)	(791)	(903)	(1,091)	(1,146)	(1,176)



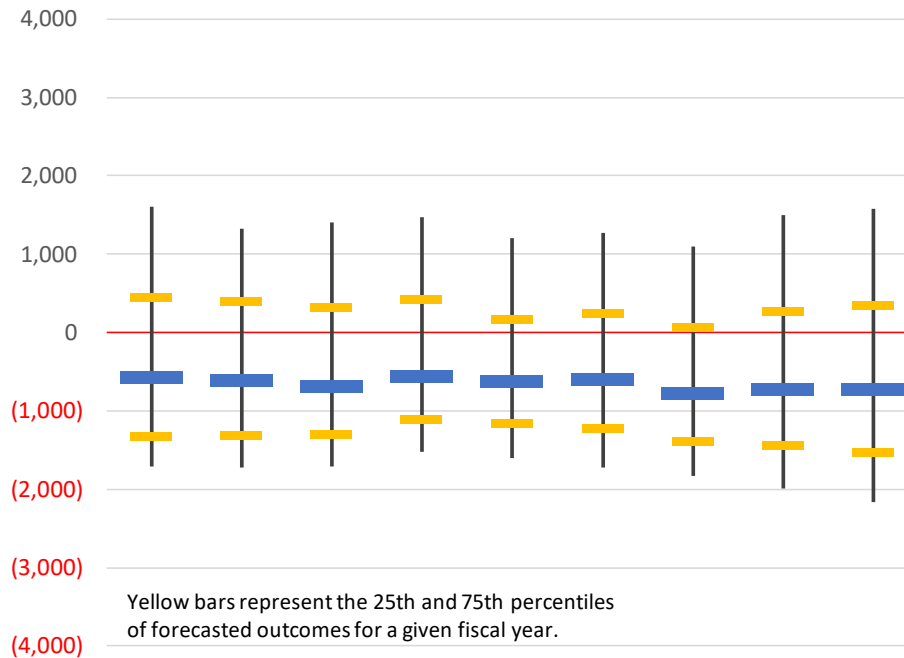
Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.00%	5.00%	5.43%	5.79%	5.90%	6.01%	6.21%	6.26%	6.28%

Scenario 2: 50/50 PFD

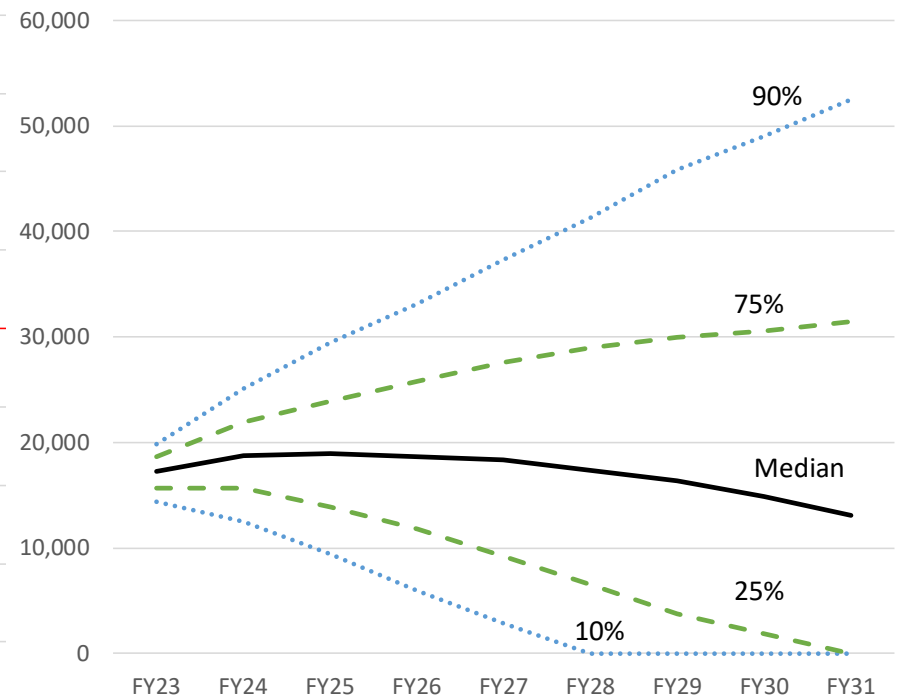
Revenue Stress Test

Median	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Surplus/(Deficit)	(575)	(612)	(694)	(556)	(623)	(596)	(774)	(717)	(720)

Surplus/(Deficit) by Fiscal Year (\$millions)



Range of FY-End Realized ERA Balances (\$millions)

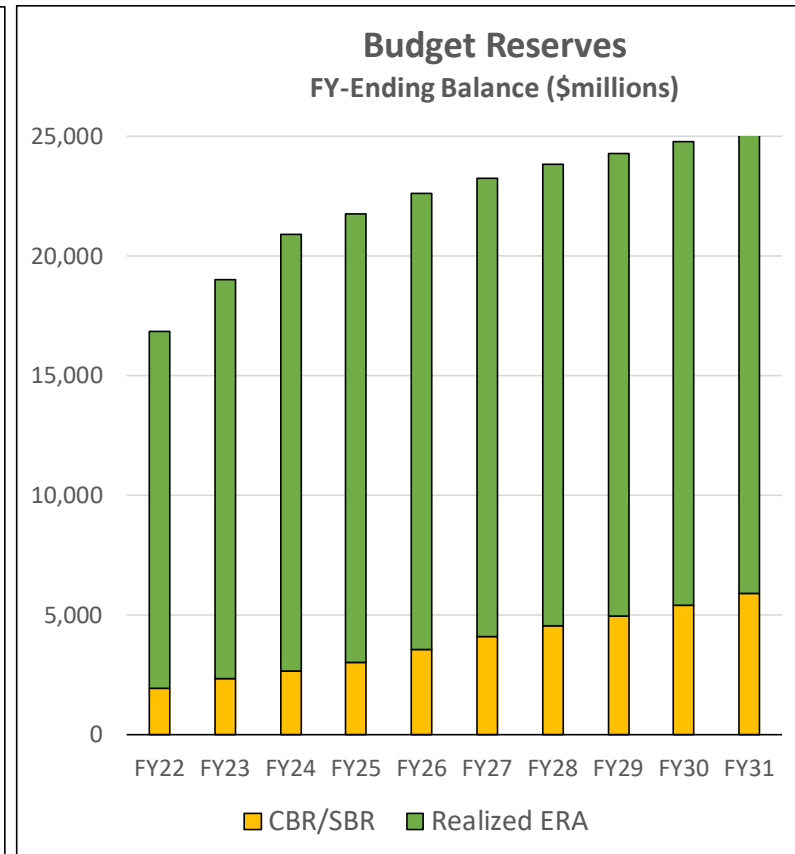
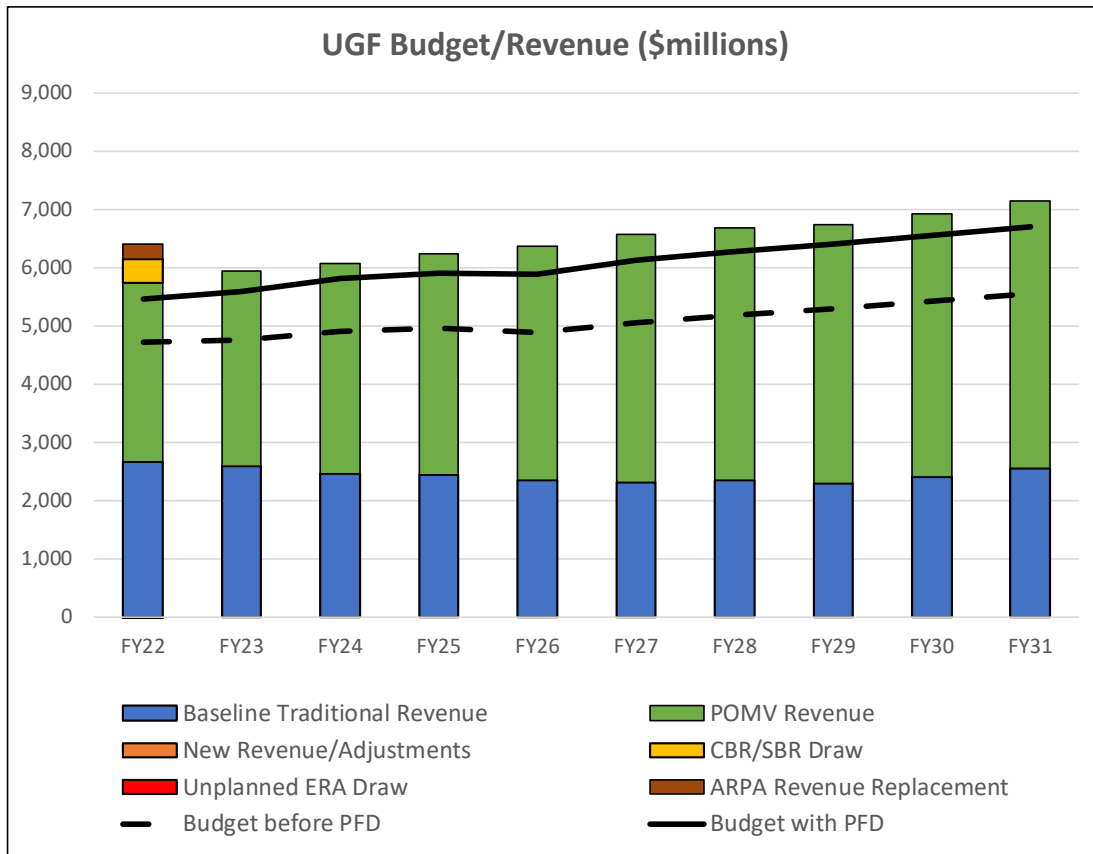


CBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR below \$2.5 billion	83%	82%	80%	76%	75%	74%	75%	73%	72%
CBR at/below \$500 million	38%	45%	47%	44%	45%	45%	50%	50%	49%

Scenario 3: 75/25 PFD

Normal Model Output

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	346	259	330	476	458	425	323	360	431

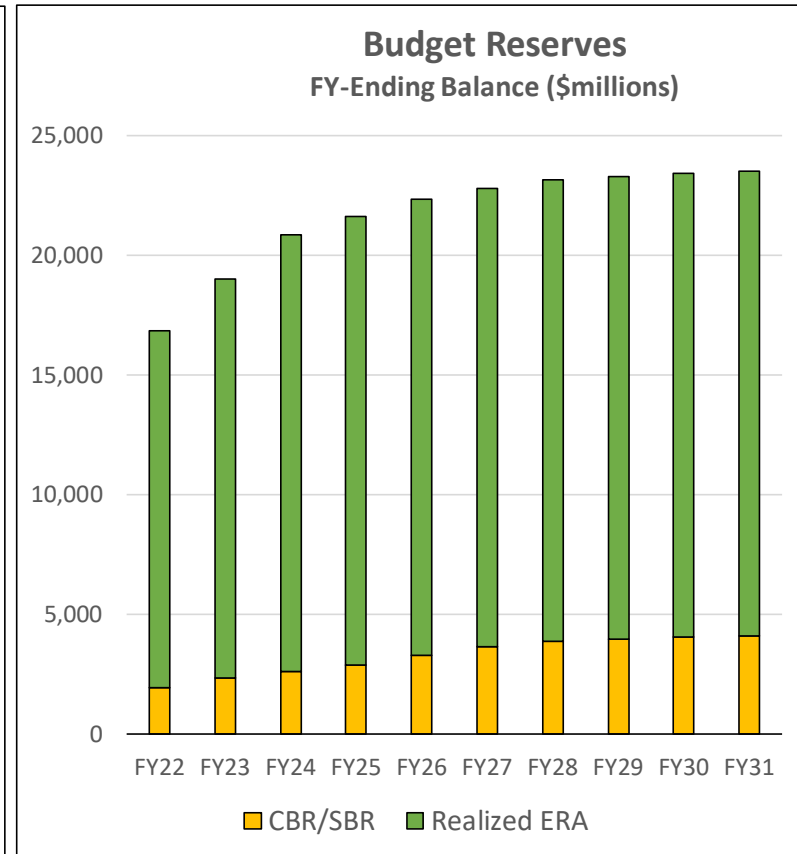
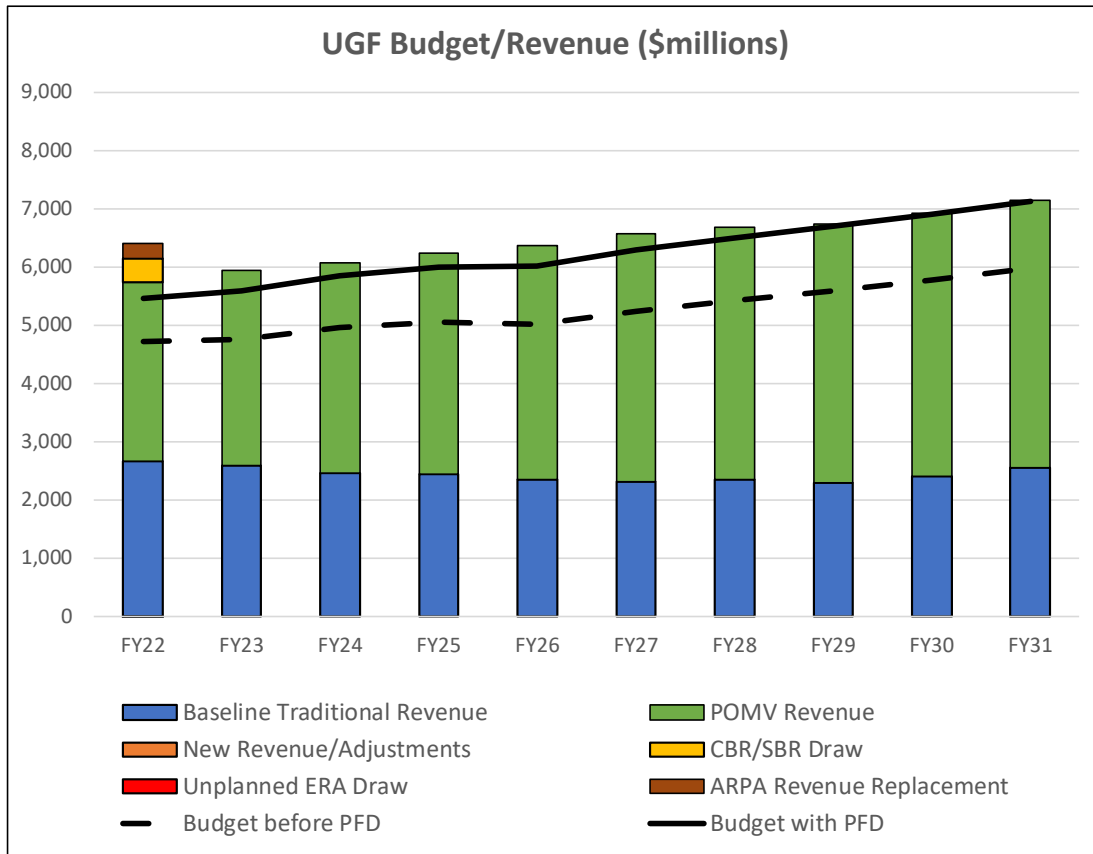


Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Scenario 3: 75/25 PFD

Budget Stress Test

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	279	346	218	243	343	275	190	32	11	19



Effective POMV Draw Rate	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

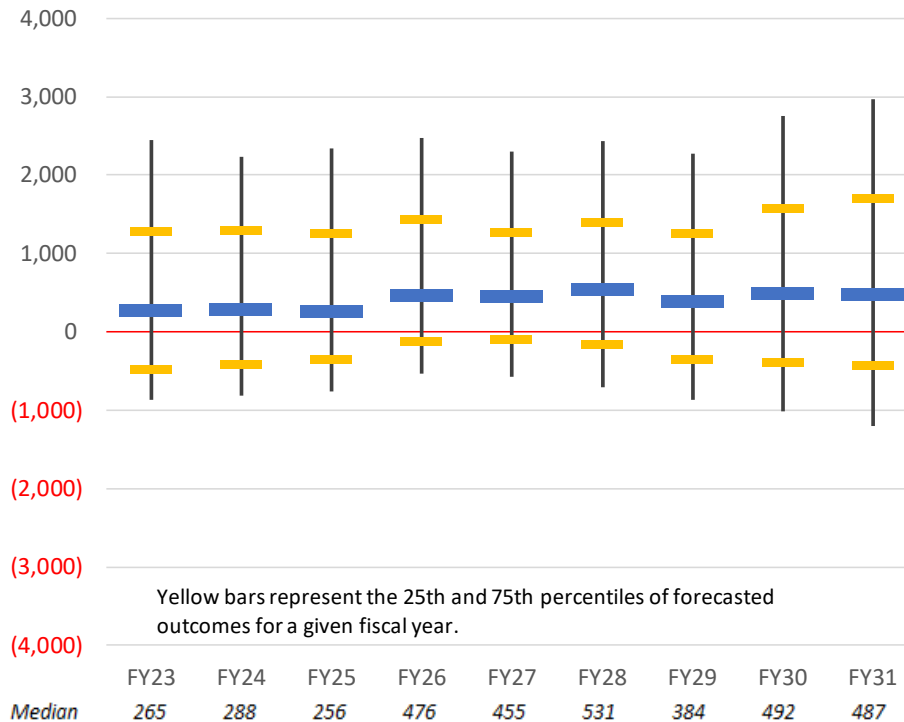
Scenario 3: 75/25 PFD

Revenue Stress Test

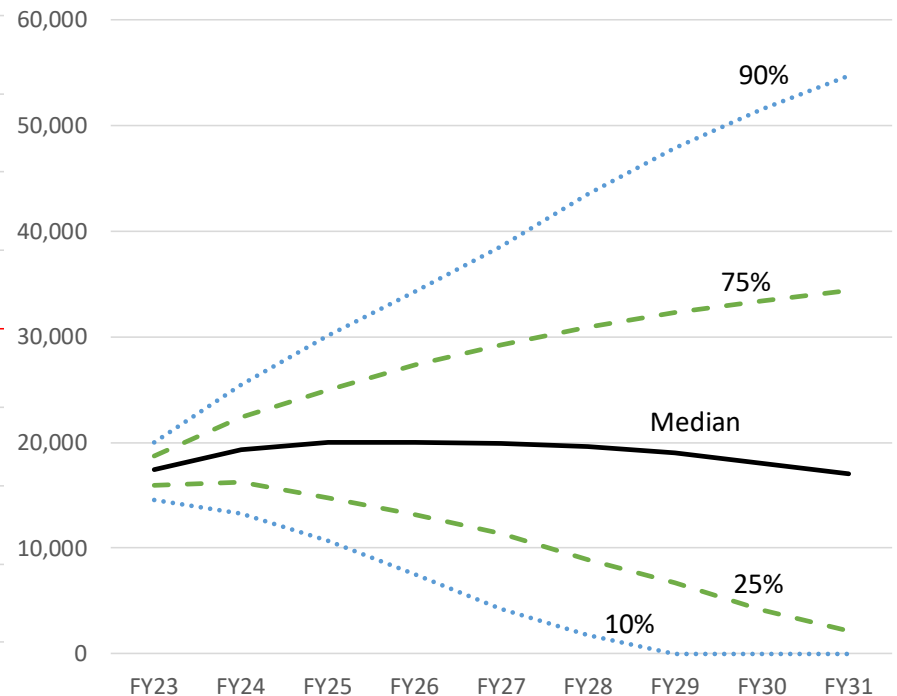
**Median
Surplus/(Deficit)**

FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
265	288	256	476	455	531	384	492	487

Surplus/(Deficit) by Fiscal Year (\$millions)



Range of FY-End Realized ERA Balances (\$millions)



CBR Balance Probabilities

	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR below \$2.5 billion	69%	53%	41%	30%	23%	19%	17%	18%	19%
CBR at/below \$500 million	7%	11%	9%	5%	4%	5%	6%	7%	9%

Questions?

Contact Information

Alexei Painter
Legislative Fiscal Analyst
(907) 465-5413
Alexei.Painter@akleg.gov

Conor Bell
Fiscal Analyst
(907) 465-3002
Conor.Bell@akleg.gov

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