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Fiscal Modeling: Senate Finance Committee Scenarios

Senate Finance Committee
April 20, 2022
Legislative Finance Division

Outline

- Review of LFD Modeling Baseline Assumptions
- Comparison of Senate Finance Committee Assumptions to LFD Baseline
- Fiscal Models Using Committee 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.
 - This includes a statutory PFD beginning FY23.

Review of Modeling Baseline (cont.)

Revenue Assumptions

- LFD's baseline revenue assumptions are the Department of Revenue's Spring Revenue Forecast.
 - This assumes \$101 oil in FY23, following futures market thereafter.
 - DNR oil production forecast projects that Alaska North Slope production will increase from 502.3 thousand barrels per day in FY23 to 576.6 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.)

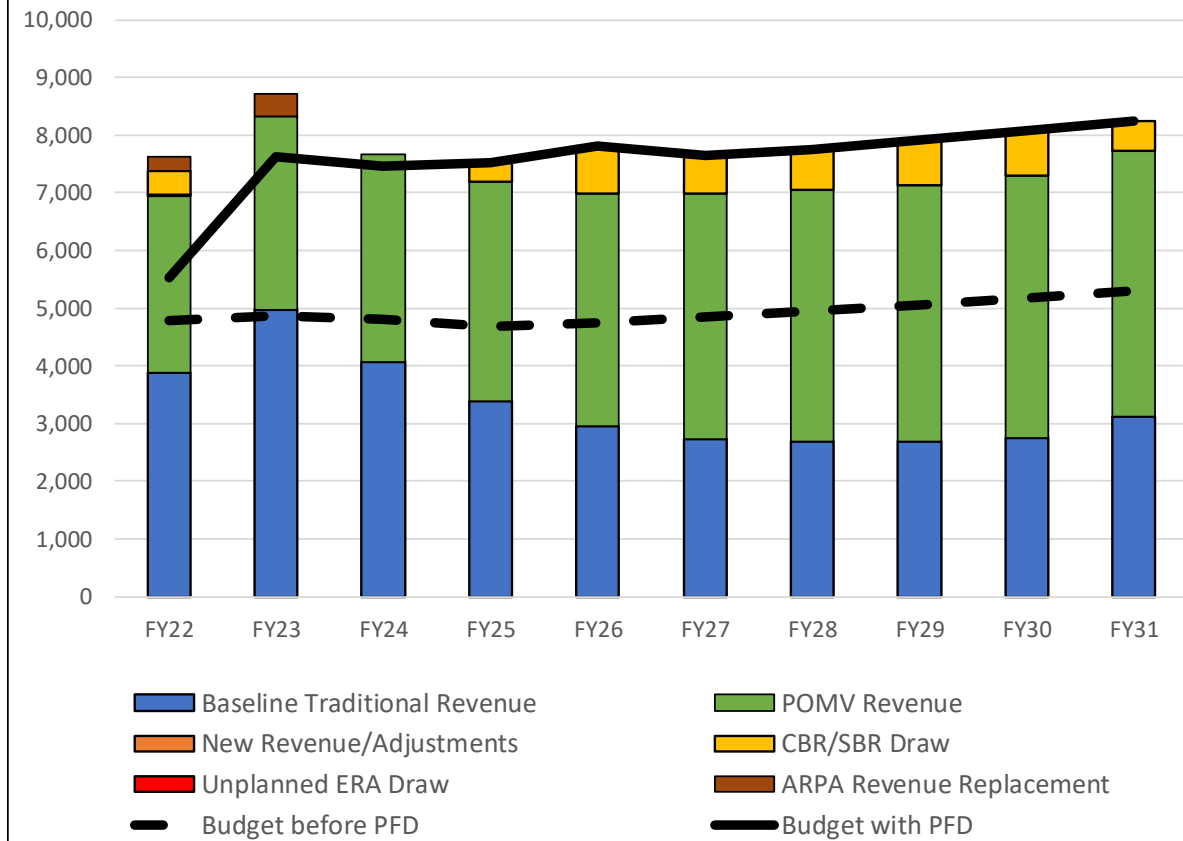
Spending Assumptions

- For **agency operations**, these scenarios assume the Governor's FY23 amended budget grows with inflation (2.25%).
- 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 (2.25%)
- For **supplementals** we assume \$50.0 million per year. This is based on the average amount of supplemental appropriations minus lapsing funds each year.
- For the **PFD**, we assume a statutory dividend is paid annually beginning FY23.

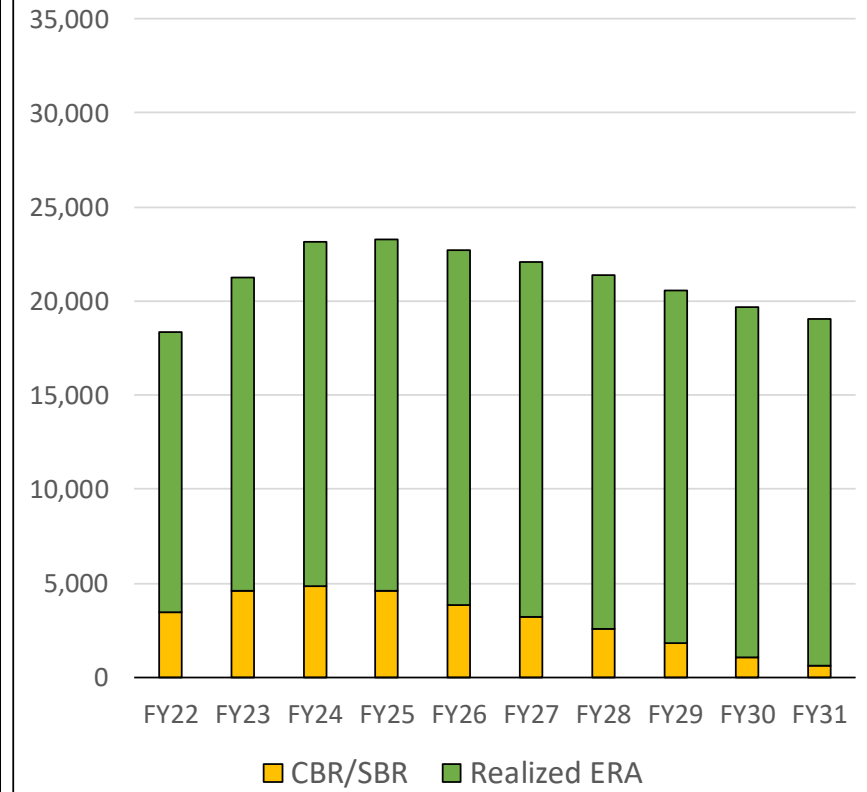
LFD Modeling Baseline

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	1,431	705	215	(327)	(829)	(656)	(702)	(783)	(795)	(520)

UGF Budget/Revenue (\$millions)



Budget Reserves
FY-Ending Balance (\$millions)



No ERA Overdraws

Senate Finance Committee Scenarios

Committee Chair asked for modeling with the following assumptions that differ from LFD's baseline:

- Capital budget baseline of \$400 million (instead of \$195.4 million)
- All oil revenues resulting from ANS prices beyond \$100/barrel deposited into Permanent Fund
- Agency operations assume FY23 SCS2 budget growing at 2.25%.
- Assume expiring federal funds are replaced with UGF and PERS healthcare is funded after FY23
- Varying PFD scenarios: statutory PFD, 50% of POMV, and SB 199 with trigger passing and failing.
- Deficits are first filled with K-12 Forward Funding. CBR/SBR deficit draws only occur after the entirety of Forward Funding is used to fill deficits.

SCS2 Budget

The SCS2 budget has significant changes from the Governor's amended budget, including:

- \$60m FY22 supplemental appropriation to oil and gas tax credit fund.
- \$1,215m for Forward-Funding K-12 in FY23. Modeling assumes this funding is reduced to fill deficits.
- Added \$27m UGF to offset state agencies' increased fuel costs.
- Added \$300m FY22 supplemental ARPA revenue replacement. Remaining \$186m used in FY23.

SCS2 Fiscal Summary

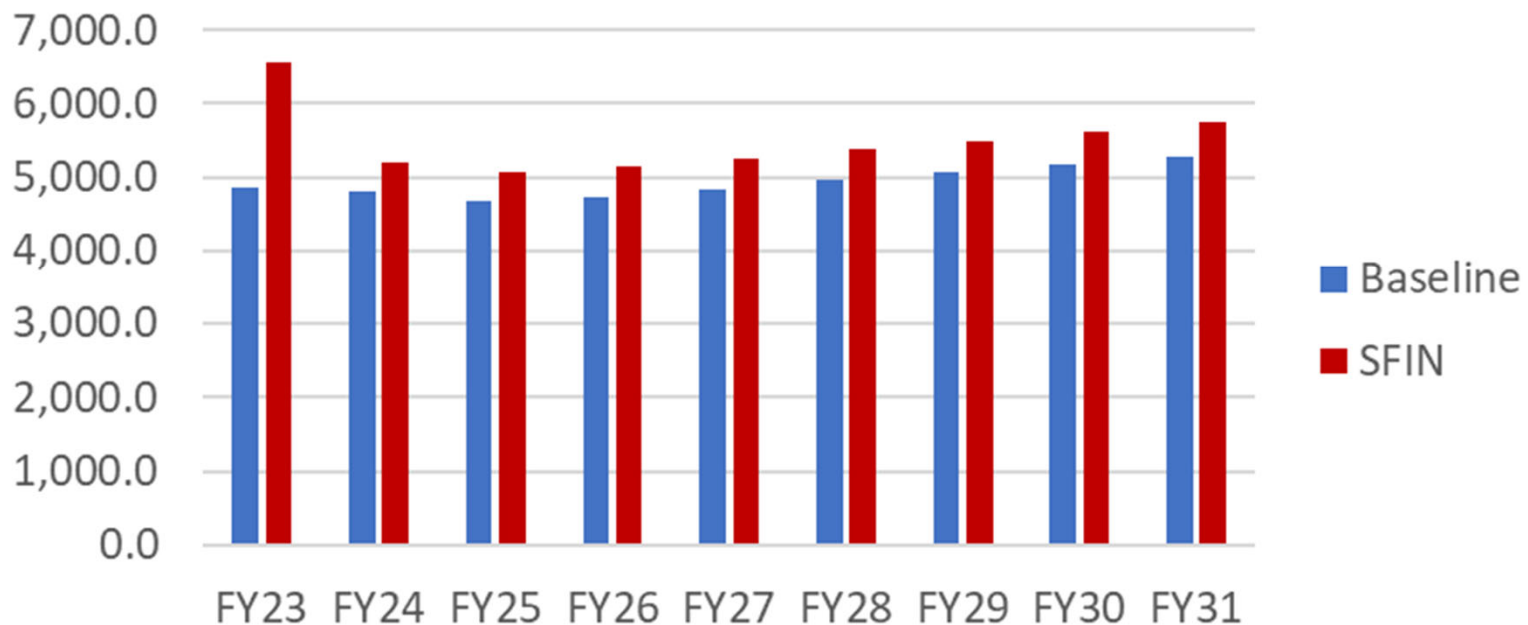
	(\$ Millions) (Non-duplicated Funds)	FY22 Budget	FY23 SCS2/ SFINCS1	Change in UGF	
		UGF	UGF		
1	Revenue	6,964.7	8,331.0	1,366.3	20%
2	Fall 2021 Revenue Forecast	2,662.7	2,577.2	(85.5)	-3%
3	Spring 2022 Forecast Increase	1,220.7	2,393.2	1,172.5	96%
4	POMV Draw	3,069.3	3,360.6	291.3	9%
5	Misc/Adjust/Non-UGF Revenue	12.0	-	(12.0)	
6	Appropriations	6,027.1	8,287.8	2,260.7	38%
7	Operating Budget	4,840.3	6,106.5	1,266.2	26.2%
8	Agency Operations (SCS2)	3,919.5	4,128.4	208.8	5.3%
9	Statewide Items (SCS2)	414.0	763.1	349.0	84.3%
10	Forward-Fund K12 (SCS2)	-	1,215.1	1,215.1	
11	Operating Supplementals (SCS2)	506.8	-	(506.8)	
12	Capital Budget	248.7	400.0	151.3	60.8%
13	Current Year Appropriations	242.9	400.0	157.1	64.7%
14	Capital Supplementals (SCS2Op/SCS1Cap)	5.8		(5.8)	
15	Permanent Fund	938.0	1,781.3	843.3	89.9%
16	Permanent Fund Dividends	739.0	1,680.3	941.3	127.4%
17	Inflation Proofing/Other Deposits*	-	-		
18	Royalty Deposit to Corpus (SCS2)	199.0	101.0		
19	Pre-Transfer Surplus/(Deficit)	937.6	43.2		
20	Statutory Budget Reserve	(410.7)	-		
21	American Rescue Plan Act (ARPA)	(550.0)	(186.6)		
22	Other Fund Transfers (SCS2)	14.6	0.3		
23	Supplemental Statutory Budget Reserve Deposit	660.0			
24	Post-Transfer Surplus/(Deficit)	1,223.7	229.5		

Reserve Balances (EOY)		
	FY22	FY23
SBR	1,953.8	1,953.8
CBR	1,278.0	1,534.2
ERA*	14,901.4	15,613.8

Comparison of Senate Finance Scenario to LFD Baseline

Comparison of LFD Baseline to Senate Finance Assumptions (\$millions)									
	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Baseline	4,862.1	4,812.2	4,681.2	4,735.4	4,840.3	4,952.0	5,058.8	5,171.9	5,289.7
SFIN	6,556.5	5,204.8	5,082.5	5,145.8	5,259.9	5,381.1	5,497.5	5,620.5	5,748.4
Difference	1,694.4	392.5	401.4	410.4	419.6	429.1	438.7	448.6	458.7

LFD Baseline to SFIN Assumptions (\$millions)



Oil Prices, FY22 to Date

ANS West Coast Price

Dates futures markets pulled for DOR Spring Forecast



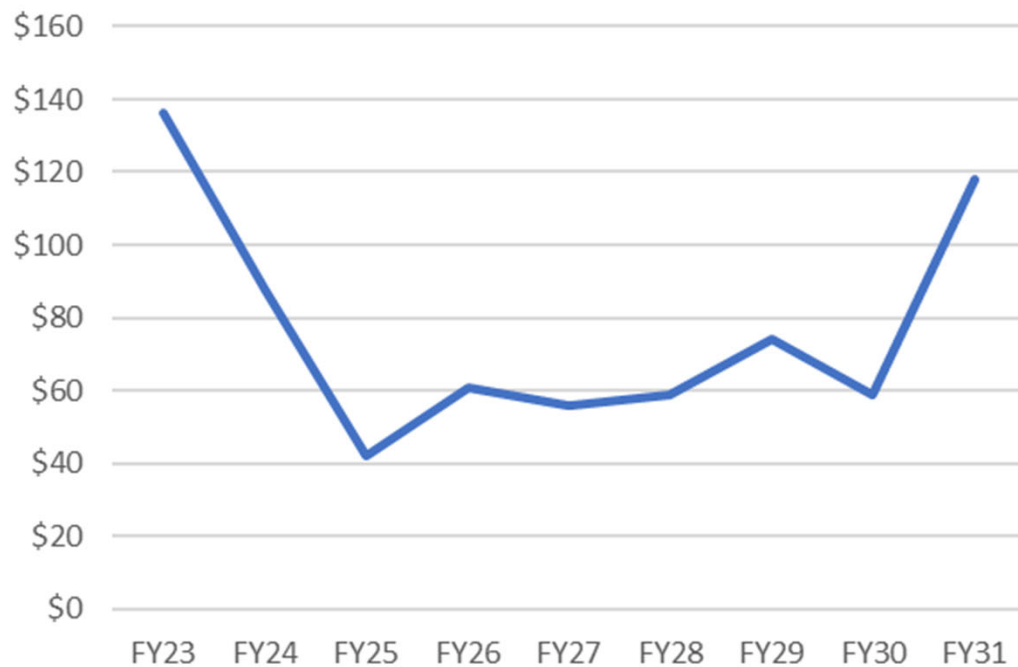
Stress Tests

- Two types of stress tests performed:
 - Budget stress test: grow agency operations and capital budget by 5% per year instead of 2.25%
 - 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

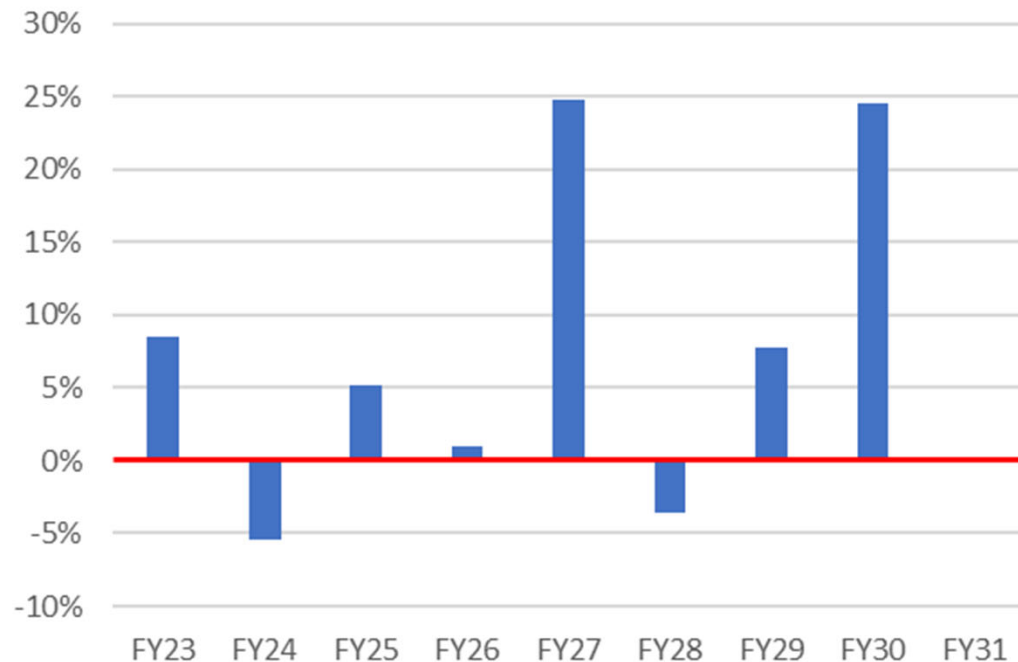
Stress Test: 25th Percentile Example

- Example of a single case, for which 25% of total cases see greater overall deficits.
- Example case has average oil price of \$77 and average Permanent Fund return of 7.0%.

Average Oil Price (\$/barrel)



Permanent Fund Total Return

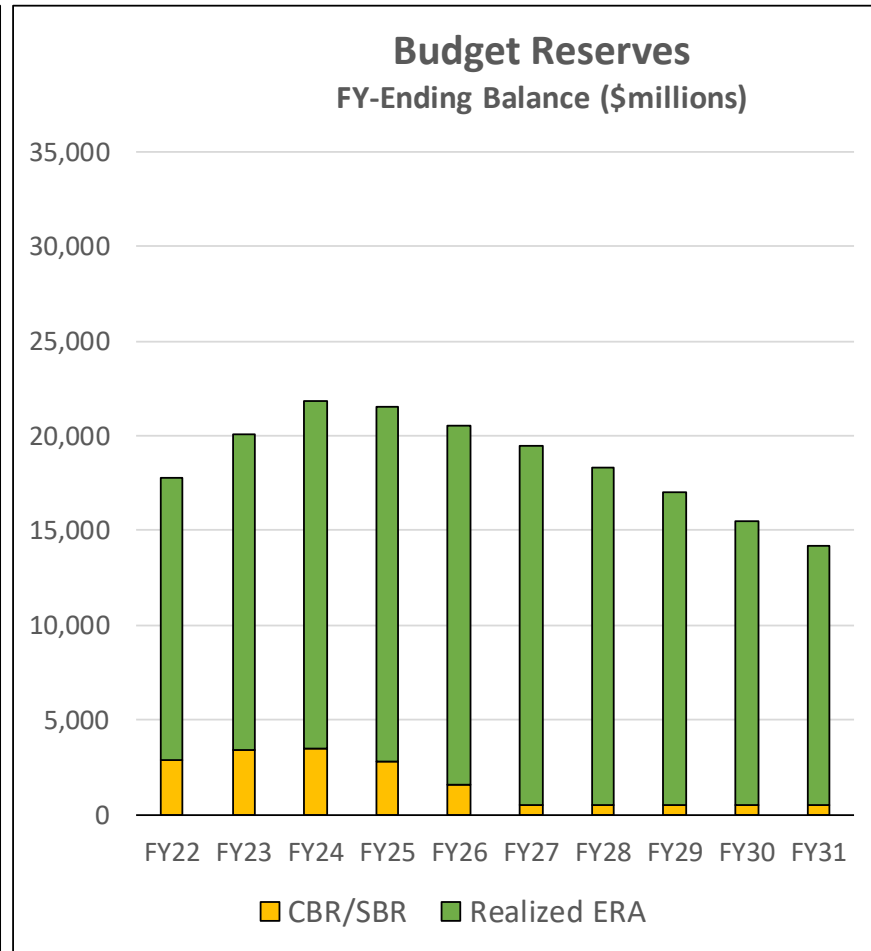
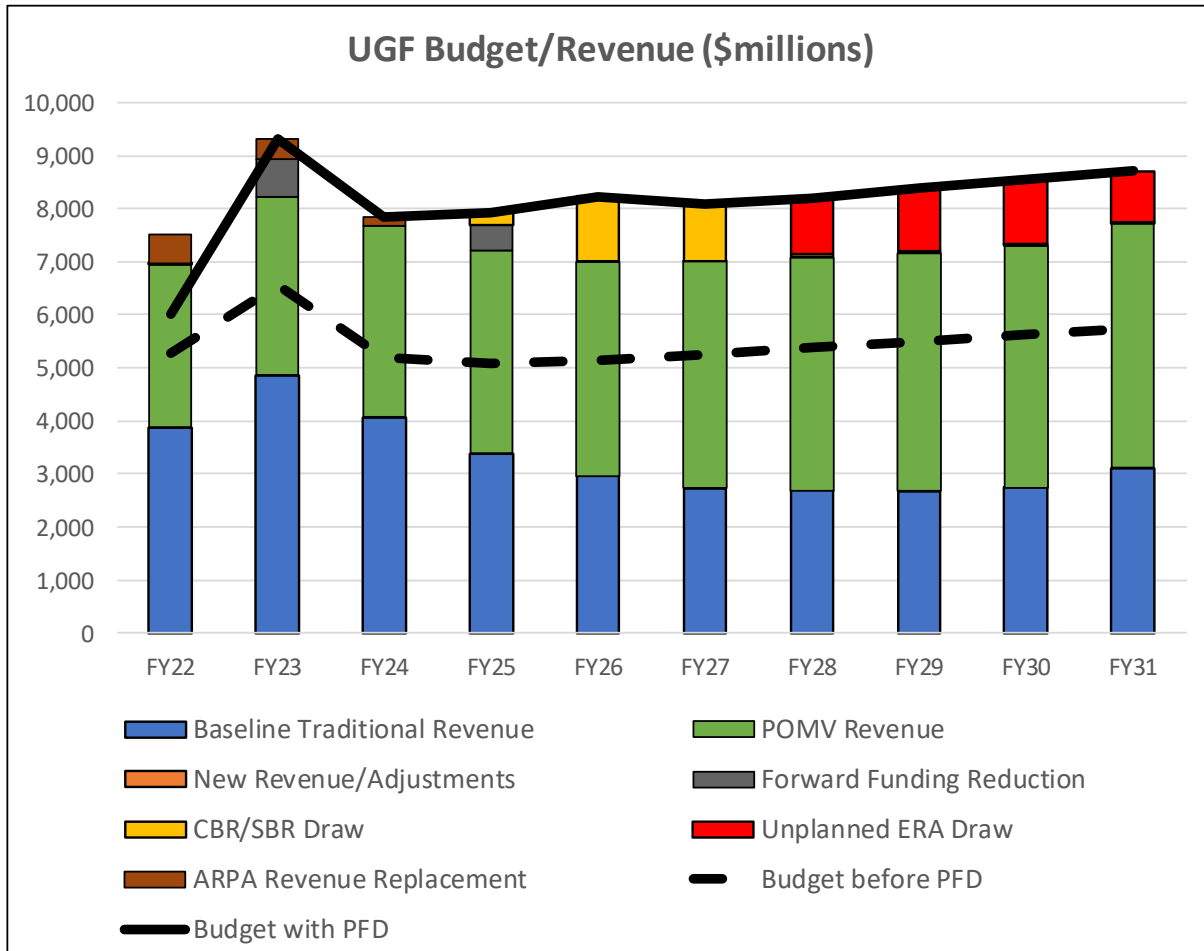


Statutory PFD

SFIN Baseline (2.25% Growth)

APFC Returns: 6.2% FY23+
 Oil Price: DOR Spring FC
 Agency Ops: 2.25% Ann. Growth
 Capital: \$400m FY23, 2.25% Growth

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	(1,097)	(177)	(727)	(1,236)	(1,070)	(1,122)	(1,213)	(1,237)	(979)



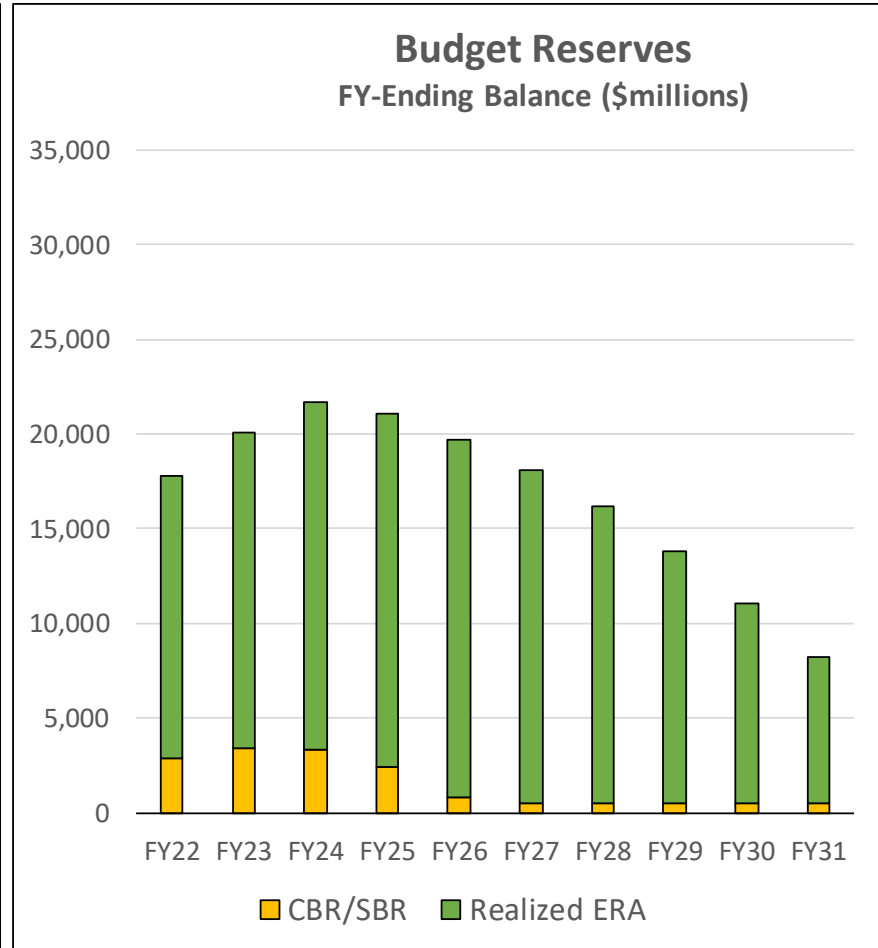
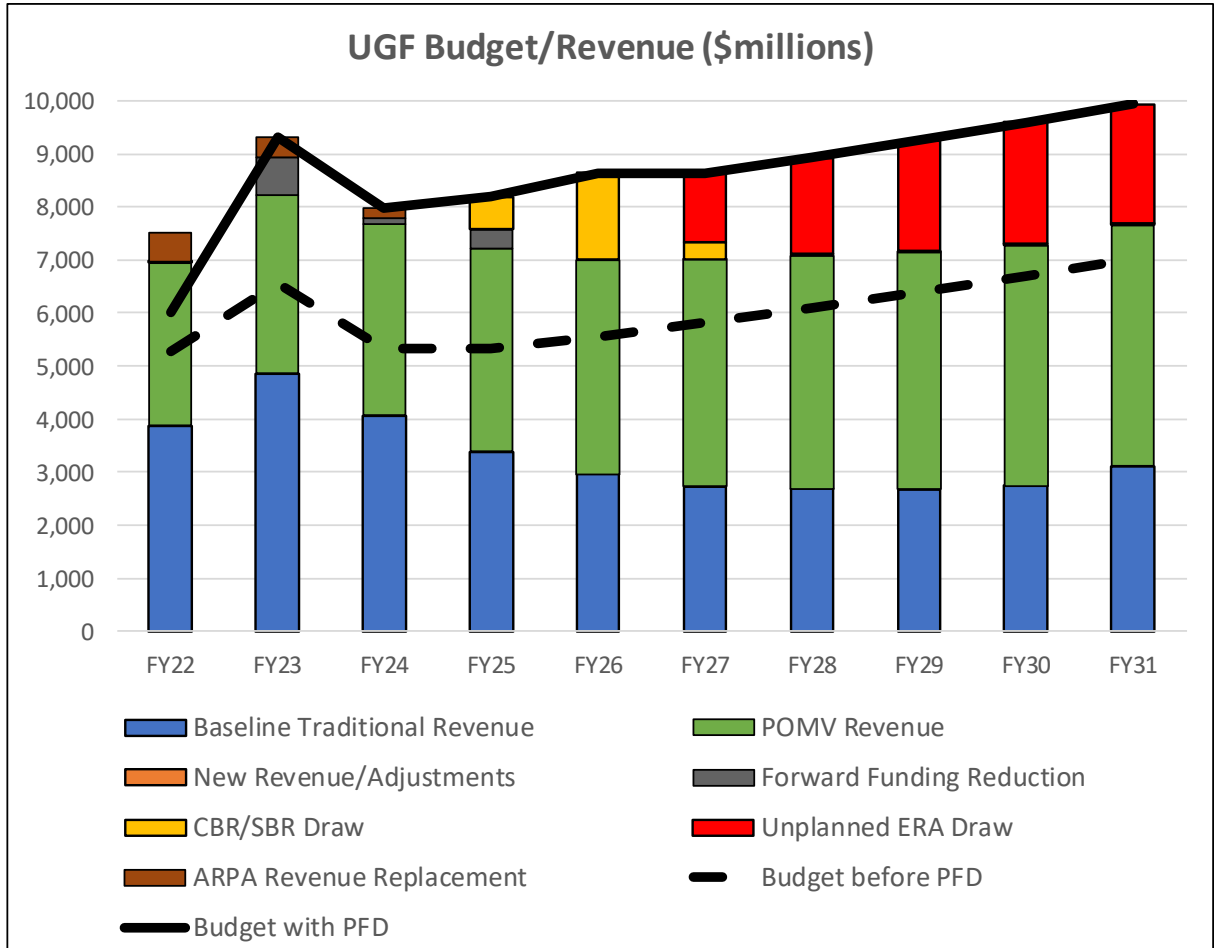
	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	6.20%	6.32%	6.33%	6.03%
PFD Draw (\$millions)	739	2,765	2,641	2,847	3,087	2,827	2,822	2,878	2,922	2,956
PFD/Person	\$1,114	\$4,219	\$3,966	\$4,262	\$4,600	\$4,179	\$4,155	\$4,218	\$4,263	\$4,293

Statutory PFD

Budget Stress Test (5% Growth)

APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 5% Ann. Growth
Capital: \$400m FY23, 5% Growth

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	(1,097)	(301)	(985)	(1,637)	(1,625)	(1,840)	(2,110)	(2,328)	(2,280)



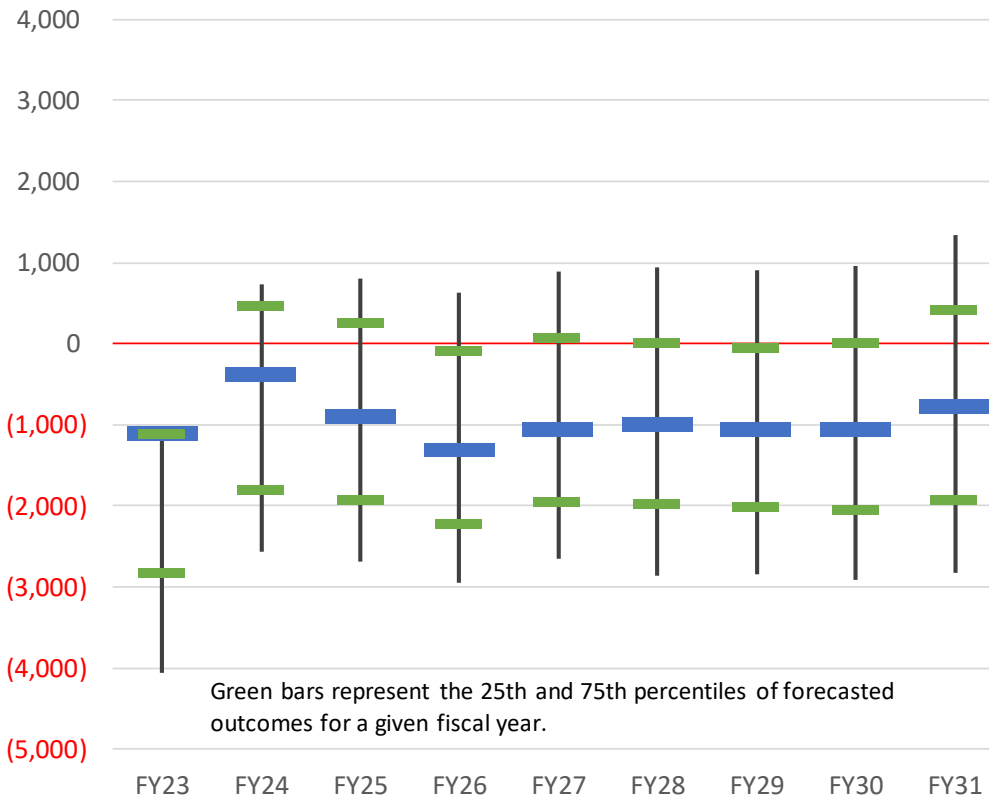
	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	6.53%	7.07%	7.33%	7.55%	7.48%
PFD Draw (\$millions)	739	2,765	2,641	2,847	3,087	2,827	2,822	2,869	2,899	2,911
PFD/Person	\$1,114	\$4,219	\$3,966	\$4,262	\$4,600	\$4,179	\$4,155	\$4,205	\$4,228	\$4,226

Statutory PFD Revenue Stress Test

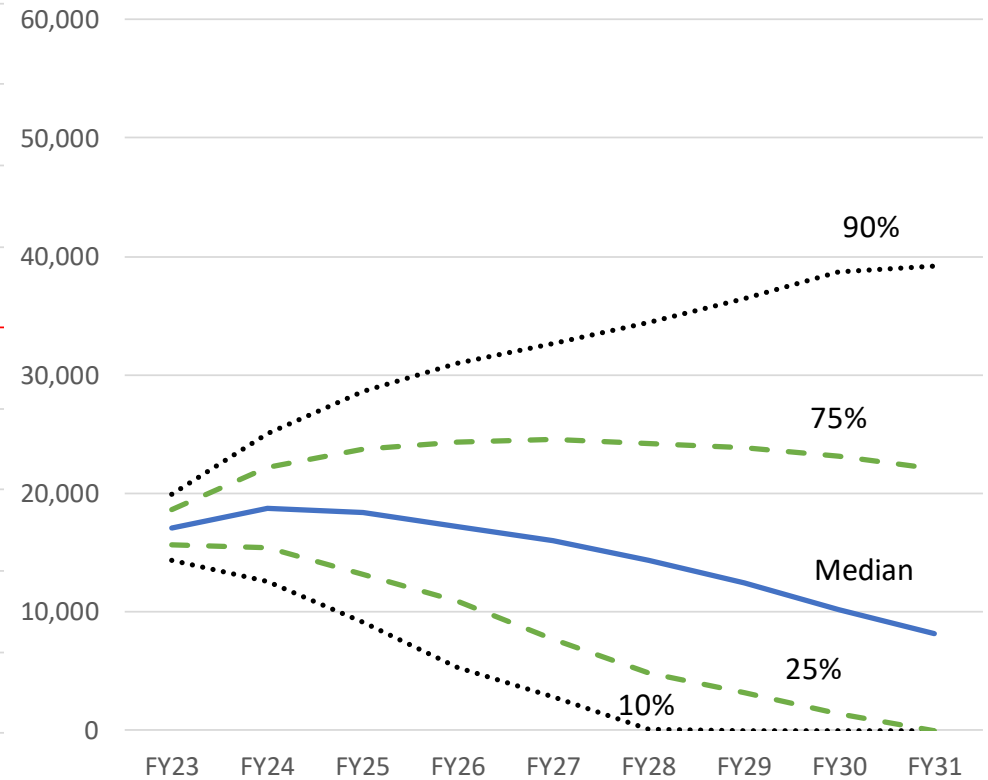
Median APFC Returns: 6.2% FY23+
 Median Oil Price: DOR Spring FC
 Agency Ops: 2.25% Ann. Growth
 Capital: \$400m FY23, 2.5% Growth

Median Surplus/(Deficit)	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	(1,097)	(368)	(894)	(1,309)	(1,040)	(1,001)	(1,053)	(1,052)	(774)

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



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



CBR/SBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR/SBR below \$4 billion	100%	100%	96%	96%	96%	95%	94%	93%	90%
CBR/SBR at/below \$500 million	21%	28%	44%	57%	60%	61%	64%	62%	56%

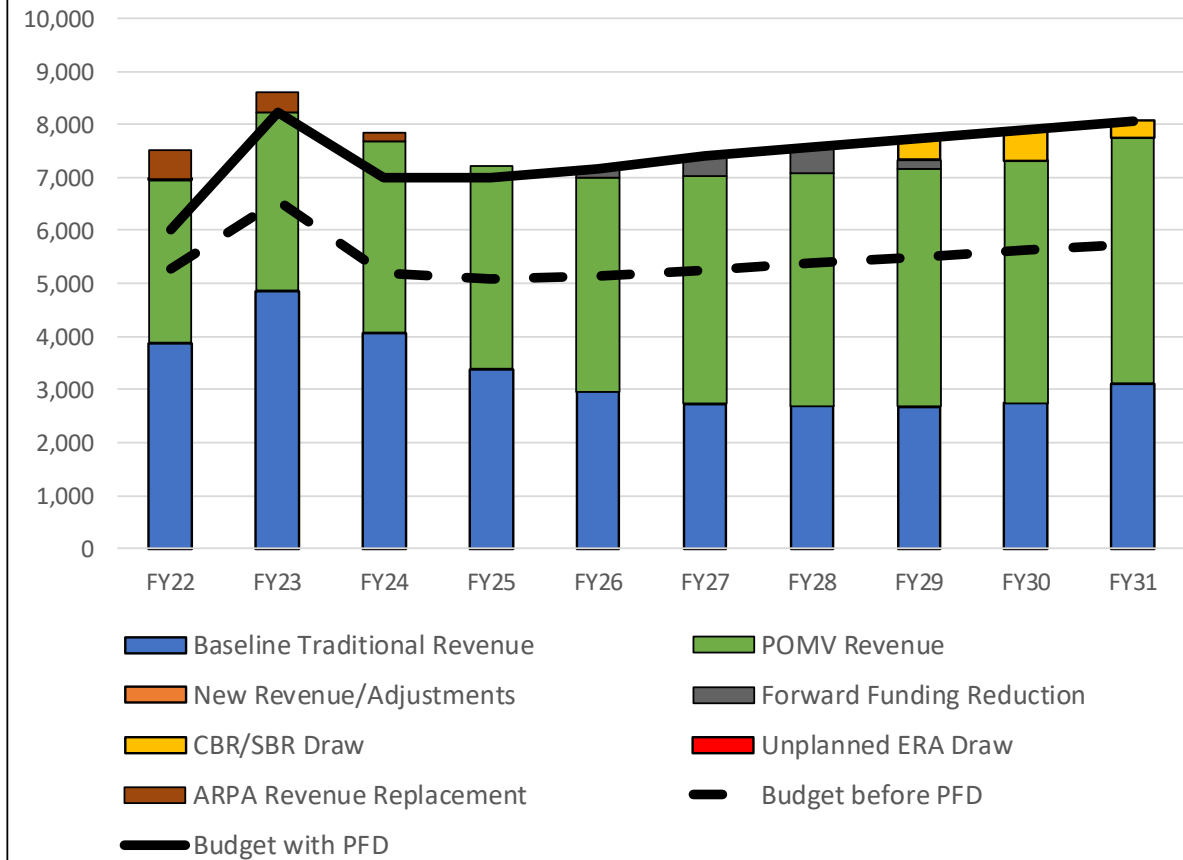
50% of POMV to PFD

SFIN Baseline (2.25% Growth)

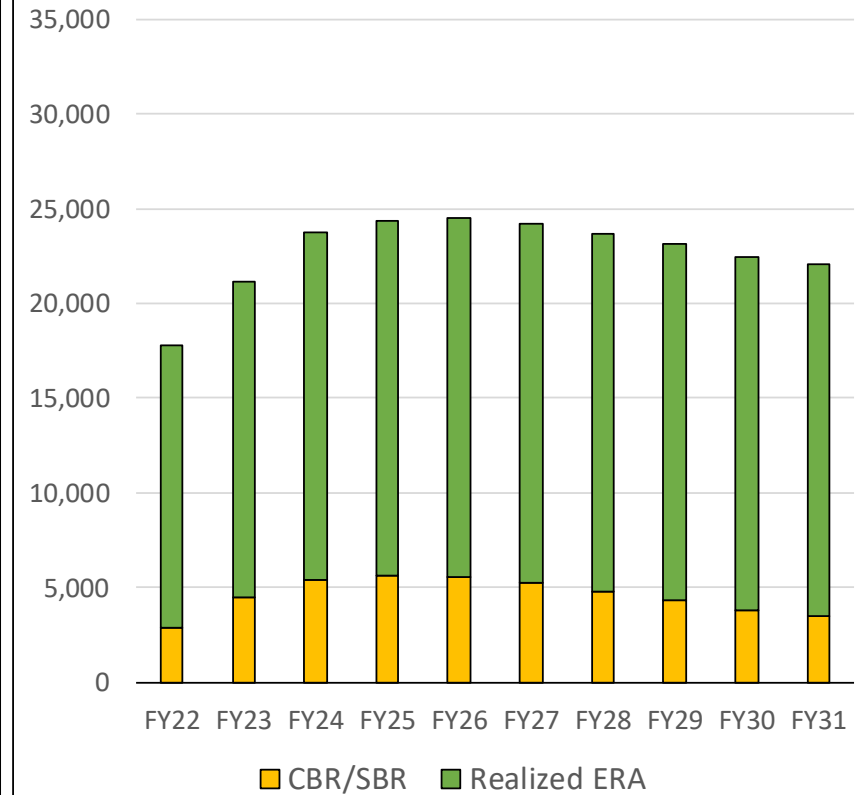
APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 2.25% Ann. Growth
Capital: \$400m FY23, 2.25% Growth

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	(12)	662	211	(169)	(387)	(494)	(575)	(587)	(313)

UGF Budget/Revenue (\$millions)



**Budget Reserves
FY-Ending Balance (\$millions)**



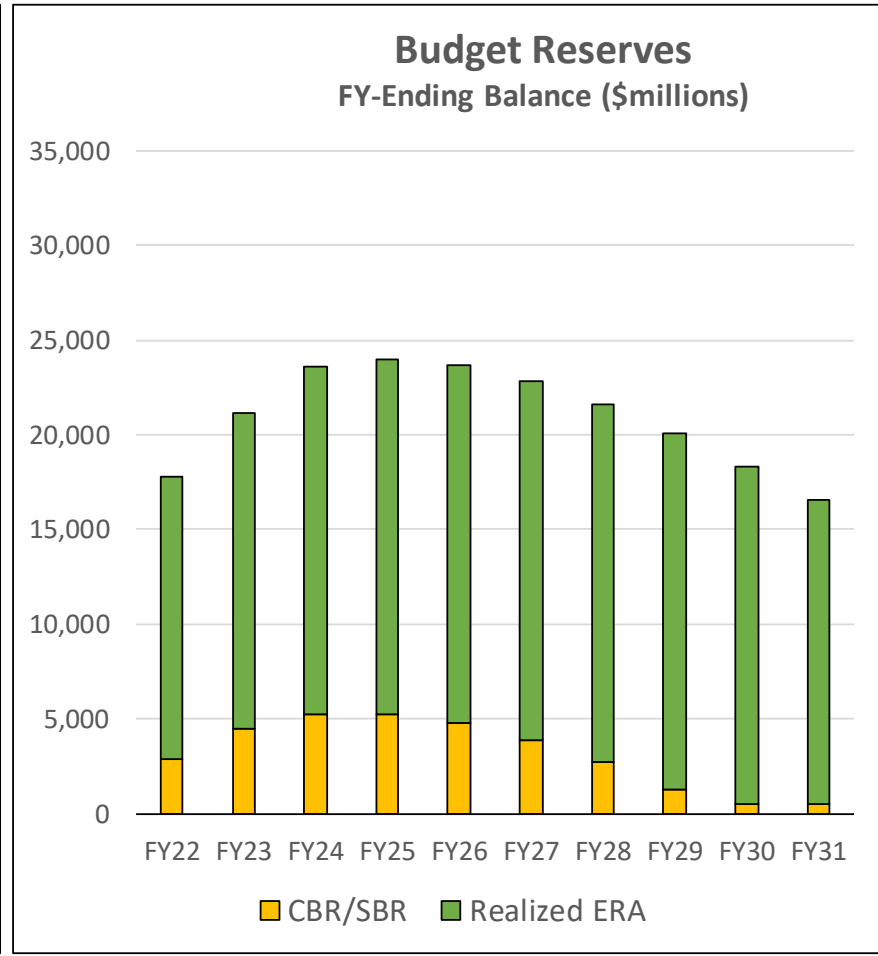
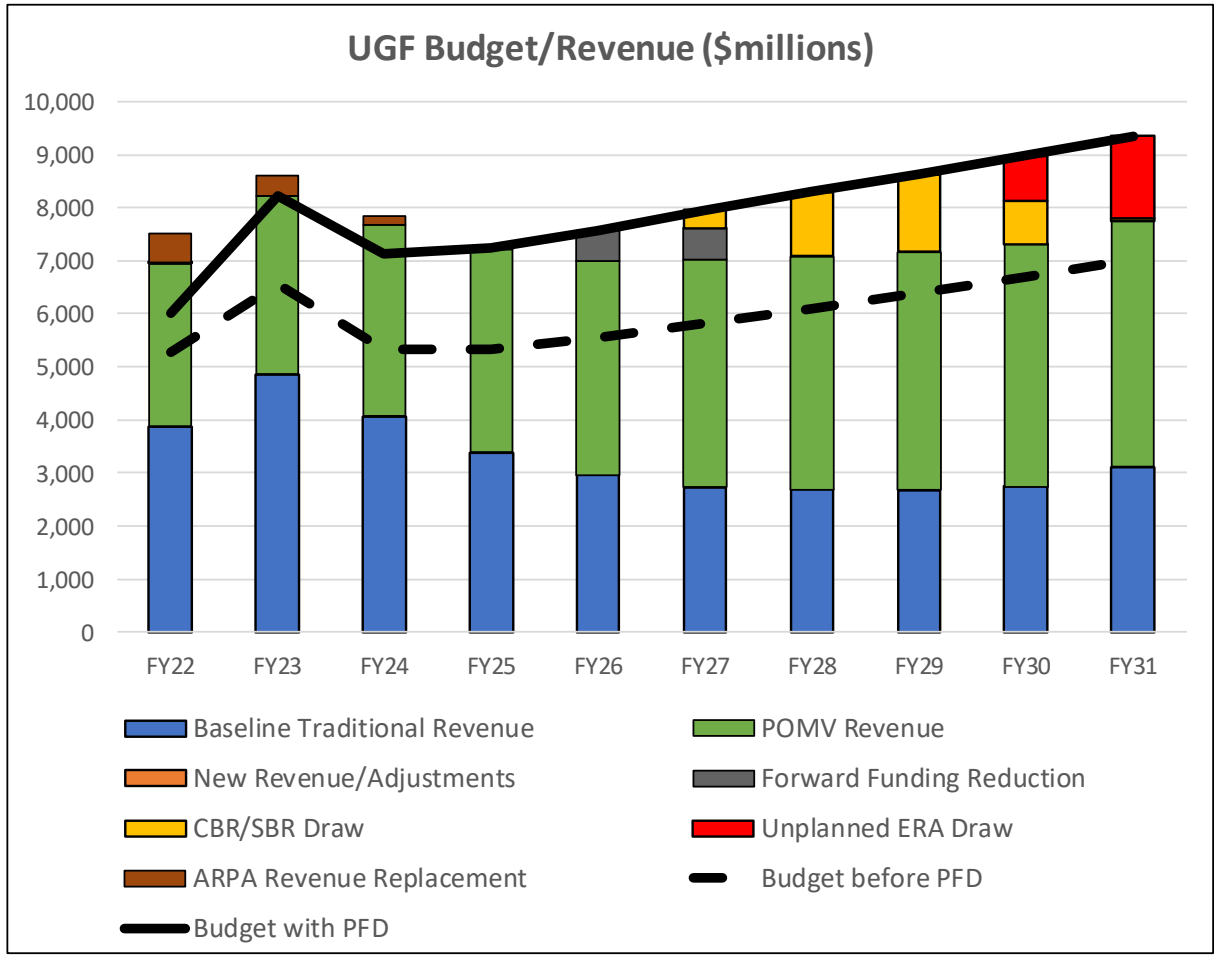
	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PFD Draw (\$millions)	739	1,680	1,802	1,909	2,020	2,144	2,194	2,241	2,283	2,324
PFD/Person	\$1,114	\$2,542	\$2,696	\$2,843	\$2,993	\$3,164	\$3,221	\$3,273	\$3,321	\$3,365

50% of POMV to PFD

Budget Stress Test (5% Growth)

APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 5% Ann. Growth
Capital: \$400m FY23, 5% Growth

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	(12)	537	(47)	(570)	(941)	(1,213)	(1,468)	(1,667)	(1,593)



	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.93%	6.68%
PFD Draw (\$millions)	739	1,680	1,802	1,909	2,020	2,144	2,194	2,241	2,283	2,324
PFD/Person	\$1,114	\$2,542	\$2,696	\$2,843	\$2,993	\$3,164	\$3,221	\$3,273	\$3,321	\$3,365

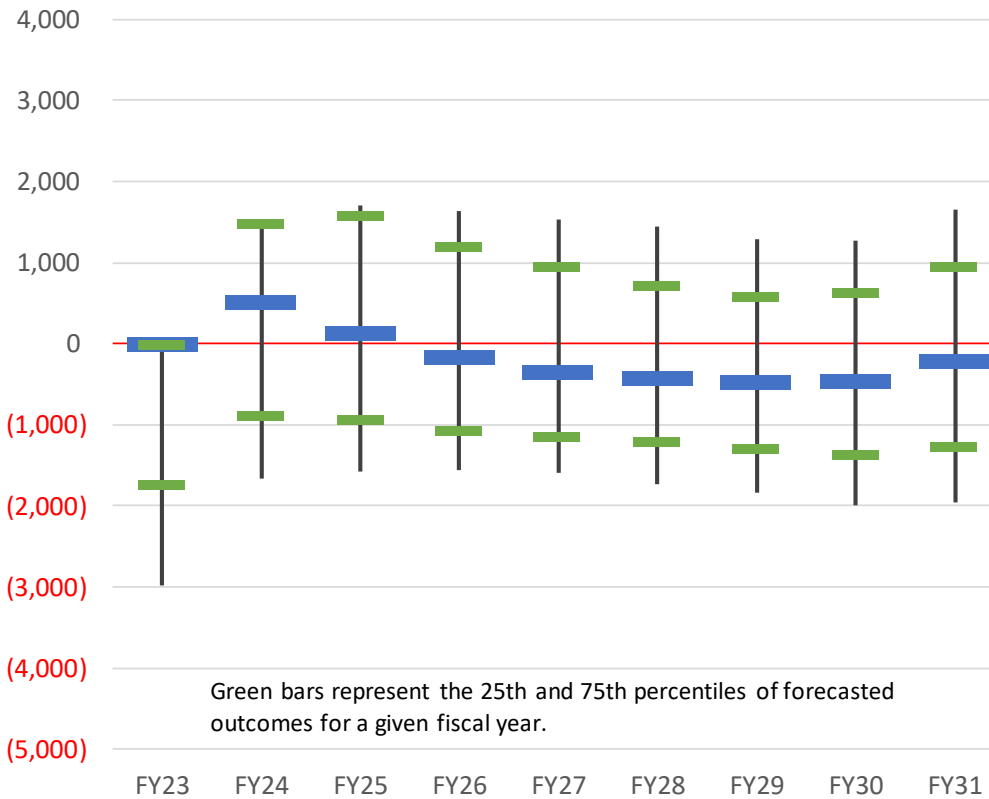
50% of POMV to PFD

Revenue Stress Test

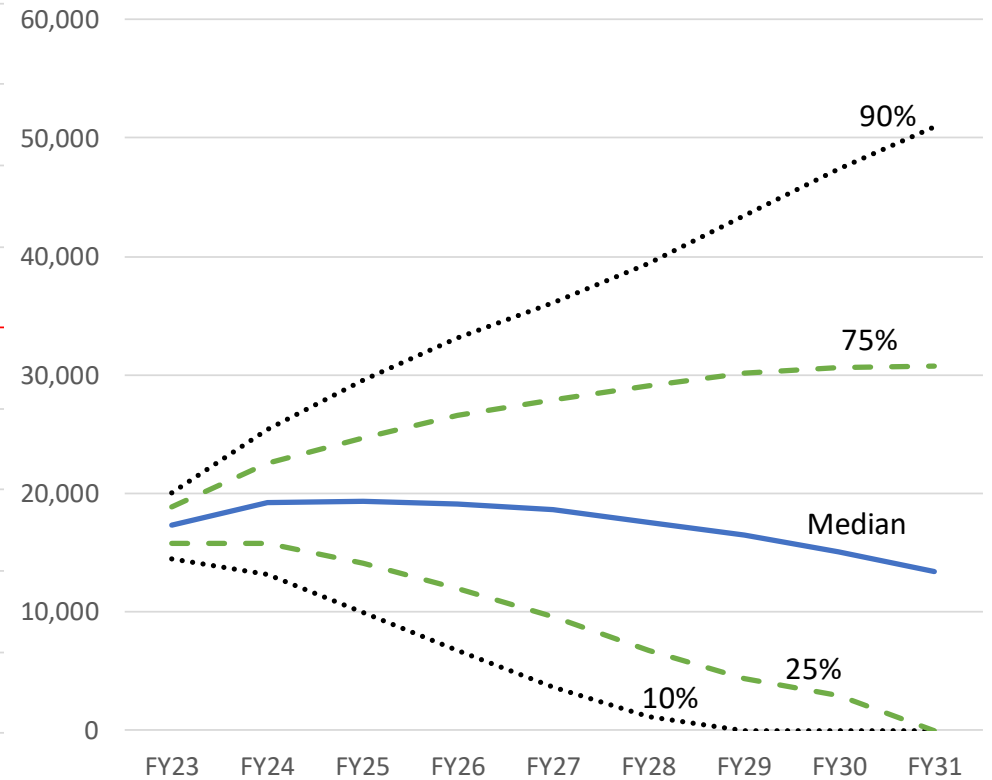
Median APFC Returns: 6.2% FY23+
 Median Oil Price: DOR Spring FC
 Agency Ops: 2.25% Ann. Growth
 Capital: \$400m FY23, 2.5% Growth

Median Surplus/(Deficit)	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	(12)	514	130	(154)	(345)	(427)	(468)	(461)	(217)

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



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



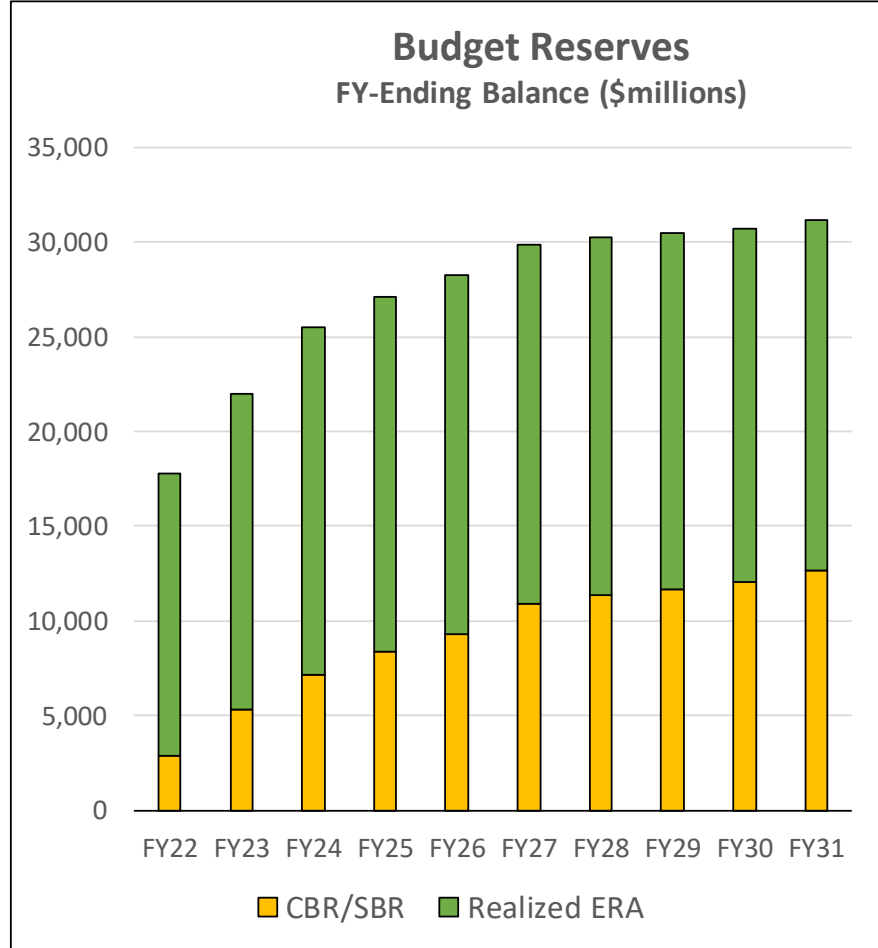
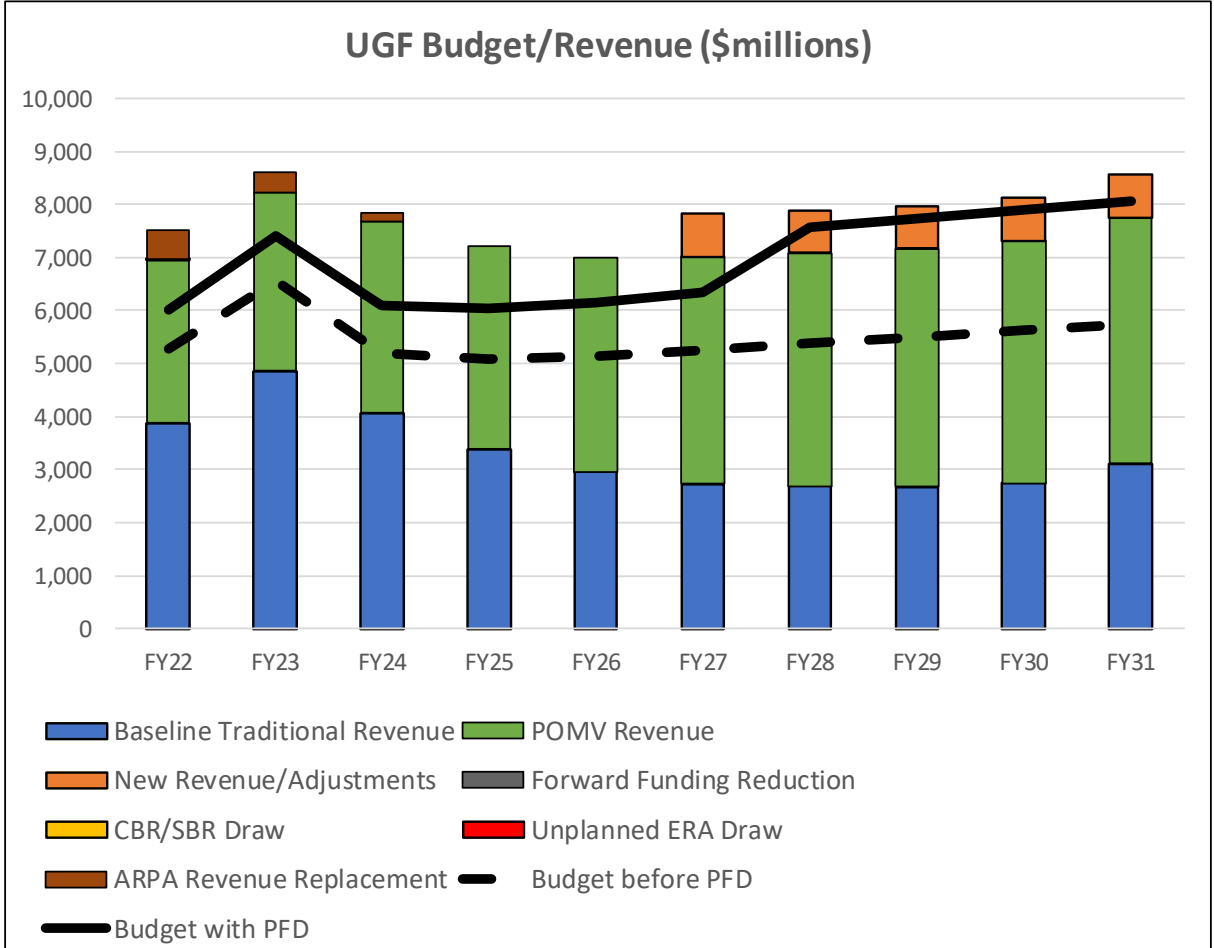
CBR/SBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR/SBR below \$4 billion	100%	62%	57%	55%	57%	59%	61%	62%	61%
CBR/SBR at/below \$500 million	9%	9%	9%	12%	14%	17%	22%	27%	27%

SB 199, Trigger Succeeds

SFIN Baseline (2.25% Growth)

APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 2.25% Ann. Growth
Capital: \$400m FY23, 2.25% Growth
PFD: 25% POMV FY23-27, 50% FY28+
\$800m/yr New Revenue FY27+

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	828	1,563	1,166	841	1,485	306	225	213	487



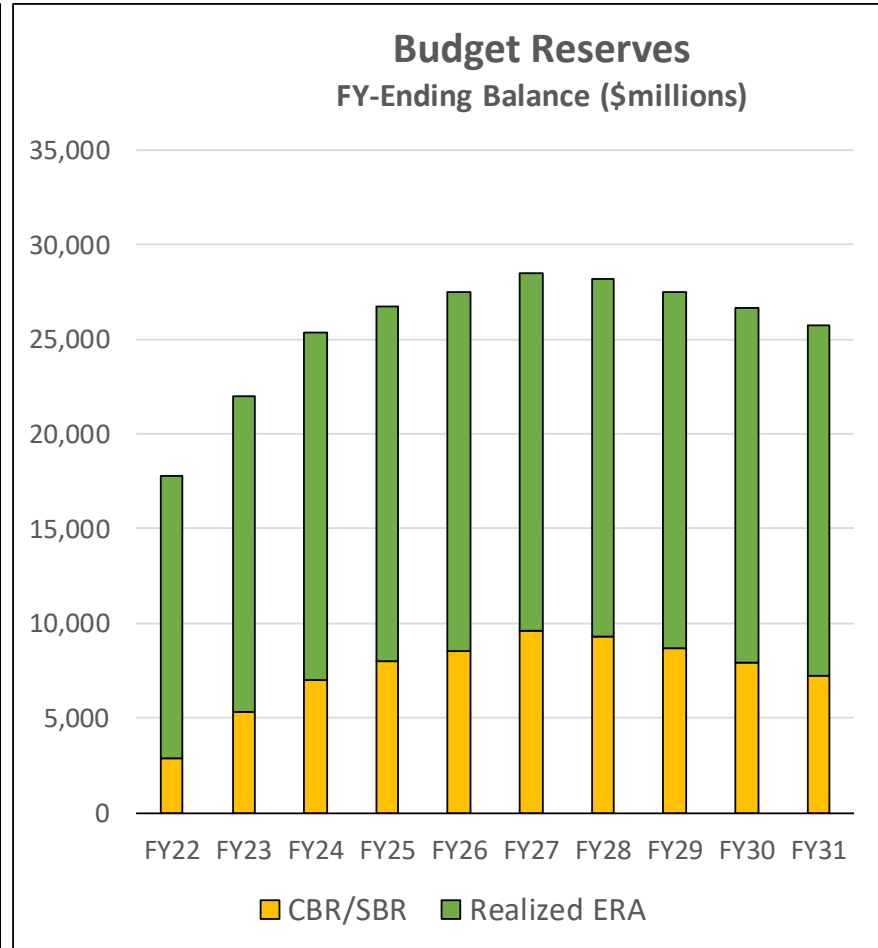
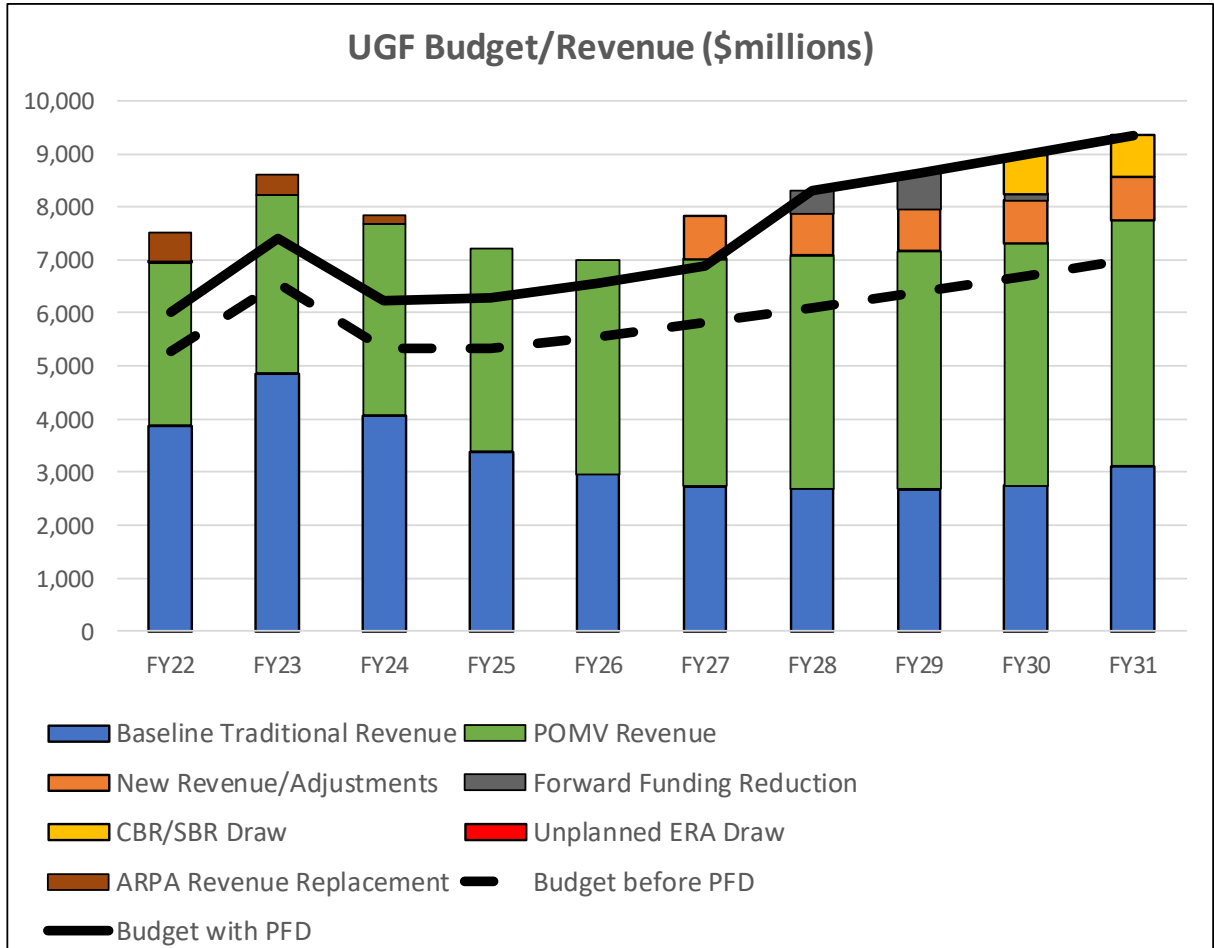
	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PFD Draw (\$millions)	739	840	901	955	1,010	1,072	2,194	2,241	2,283	2,324
PFD/Person	\$1,114	\$1,243	\$1,327	\$1,400	\$1,474	\$1,559	\$3,240	\$3,273	\$3,321	\$3,365

SB 199, Trigger Succeeds

Budget Stress Test (5% Growth)

APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 5% Ann. Growth
Capital: \$400m FY23, 5% Growth
PFD: 25% POMV FY23-27, 50% FY28+
\$800m/yr New Revenue FY27+

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	828	1,438	908	440	931	(413)	(668)	(867)	(793)



	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PFD Draw (\$millions)	739	840	901	955	1,010	1,072	2,194	2,241	2,283	2,324
PFD/Person	\$1,114	\$1,243	\$1,327	\$1,400	\$1,474	\$1,559	\$3,240	\$3,273	\$3,321	\$3,365

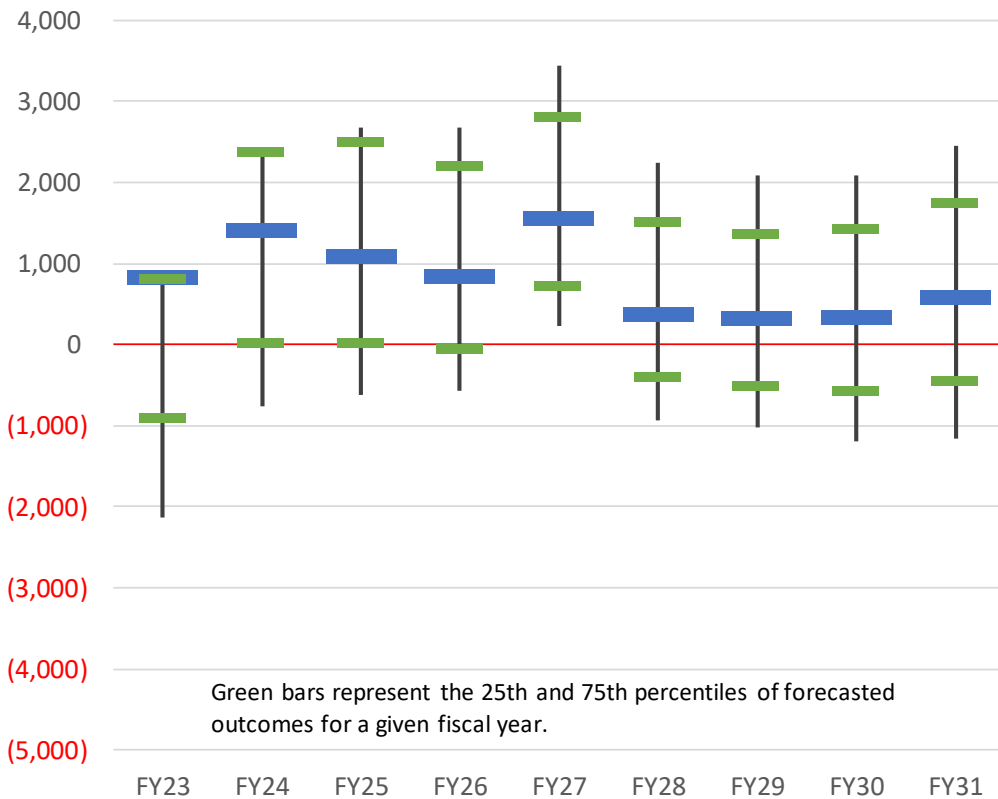
SB 199, Trigger Succeeds

Revenue Stress Test

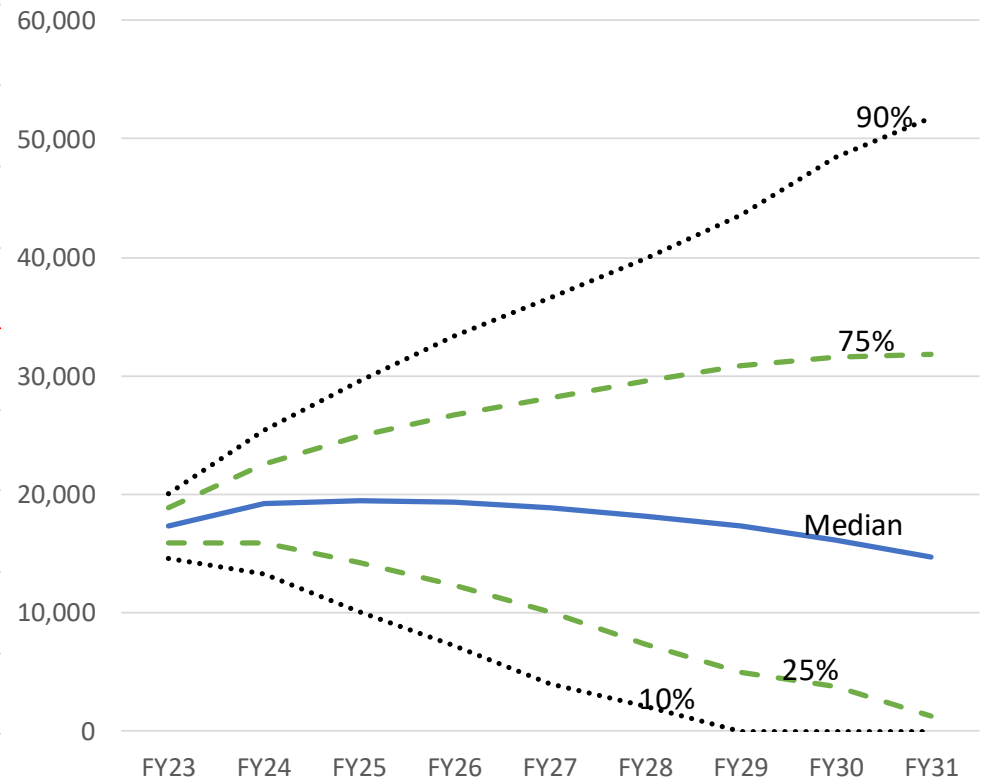
Median APFC Returns: 6.2% FY23+
Median Oil Price: DOR Spring FC
Agency Ops: 2.25% Ann. Growth
Capital: \$400m FY23, 2.25% Growth
PFD: 25% POMV FY23-27, 50% FY28+
\$800m/yr New Revenue FY27+

Median Surplus/(Deficit)	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	828	1,415	1,089	851	1,551	373	332	344	594

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



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



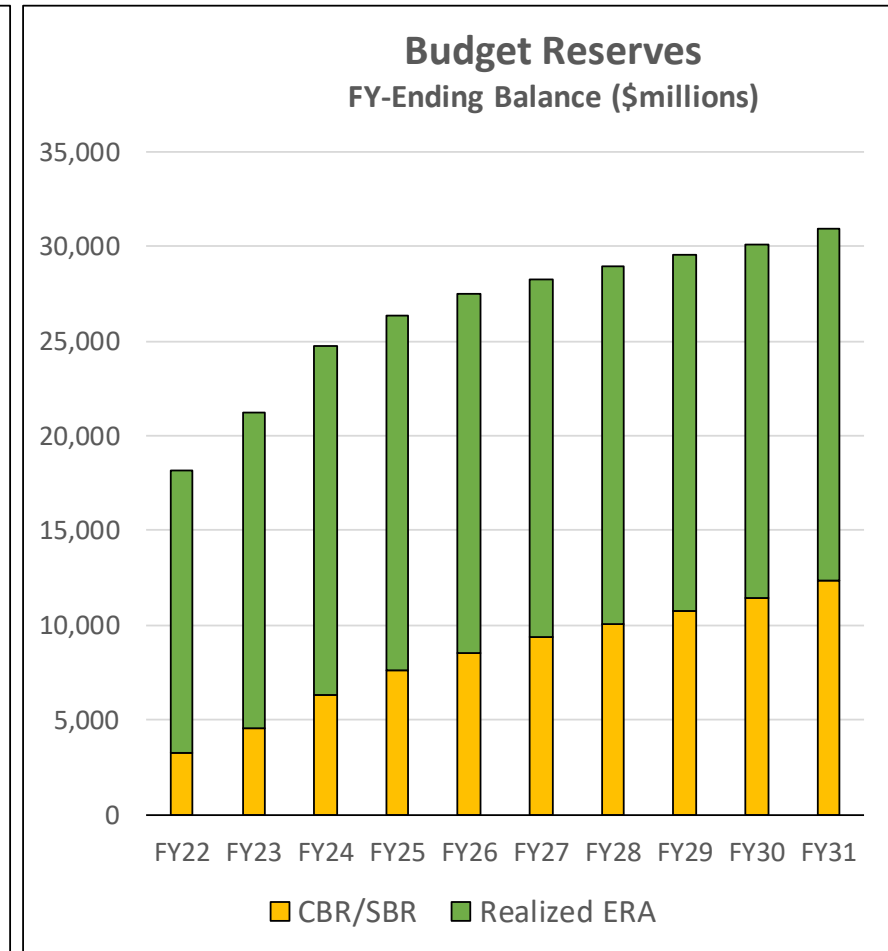
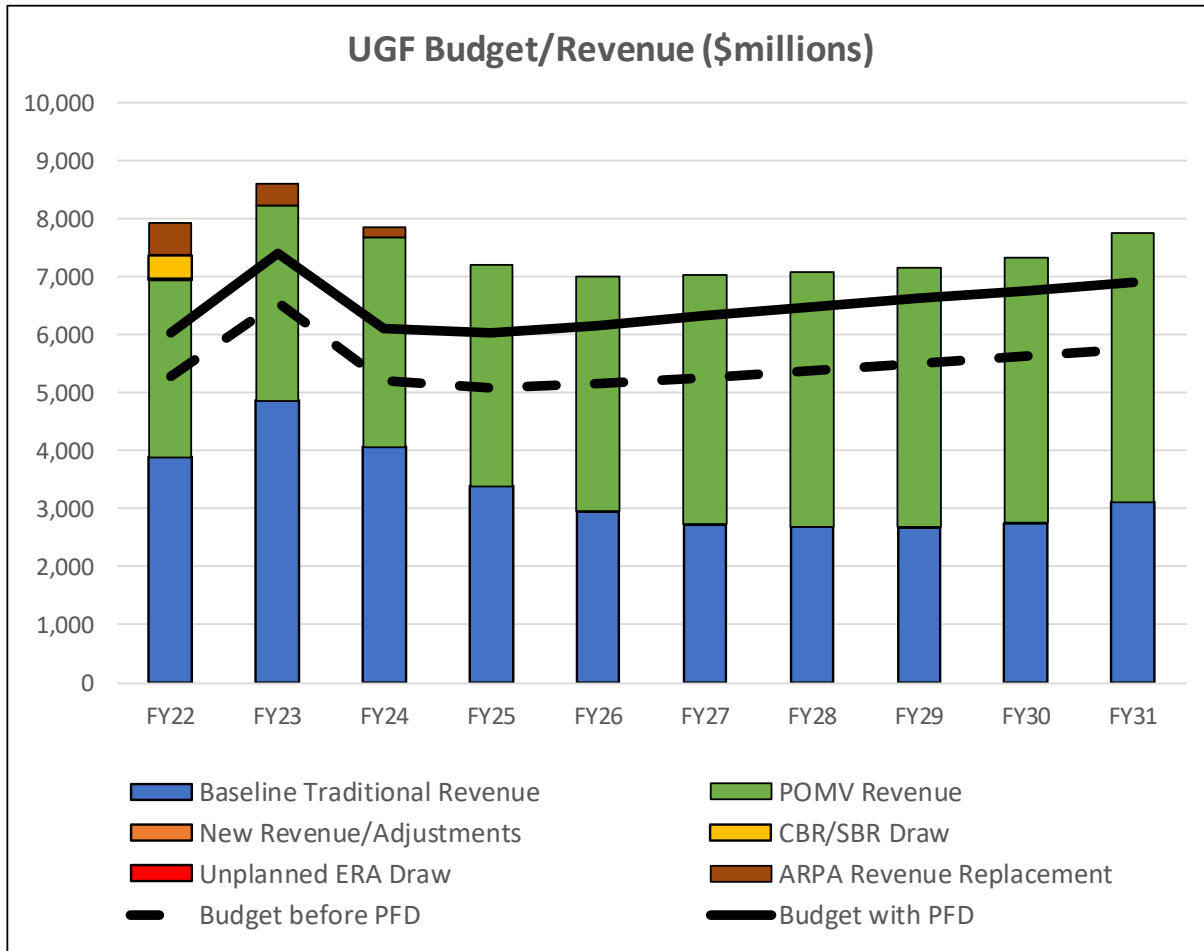
CBR/SBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR/SBR below \$4 billion	42%	28%	18%	12%	5%	5%	5%	7%	7%
CBR/SBR at/below \$500 million	1%	2%	1%	0%	0%	0%	1%	1%	1%

SB 199, Trigger Fails

SFIN Baseline (2.25% Growth)

APFC Returns: 6.2% FY23+
Oil Price: DOR Spring FC
Agency Ops: 2.25% Ann. Growth
Capital: \$400m FY23, 2.25% Growth
PFD: 25% POMV for all years

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	828	1,563	1,166	841	685	603	545	555	848



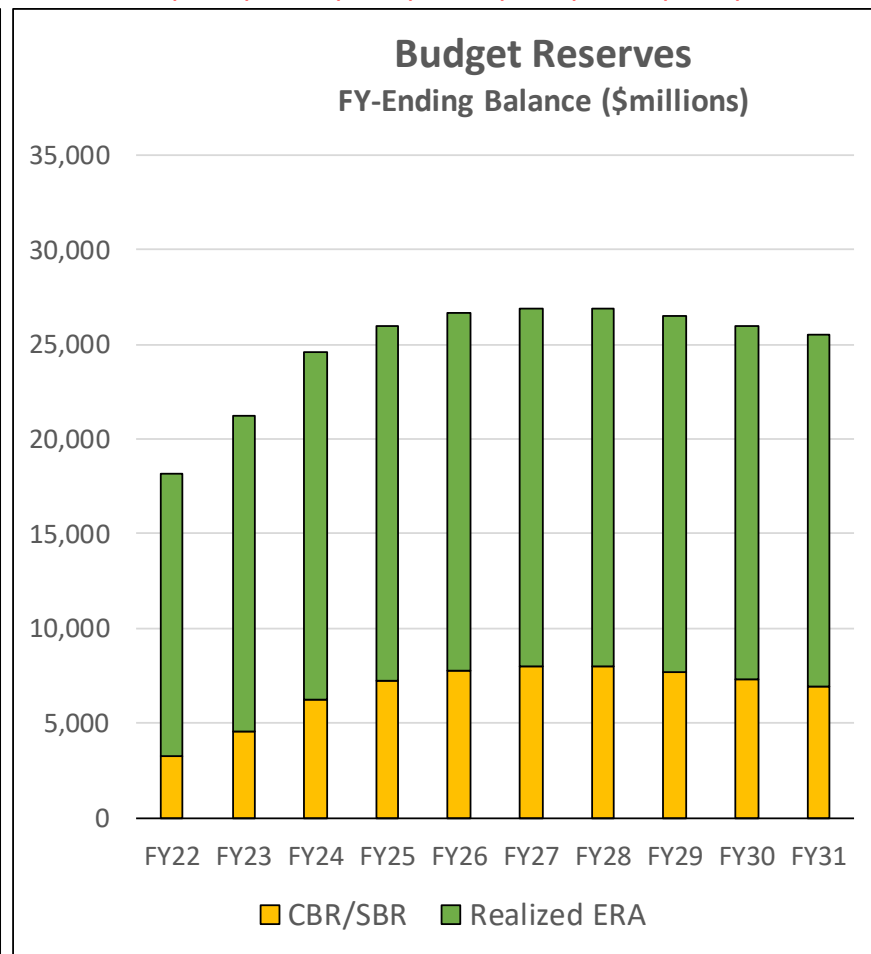
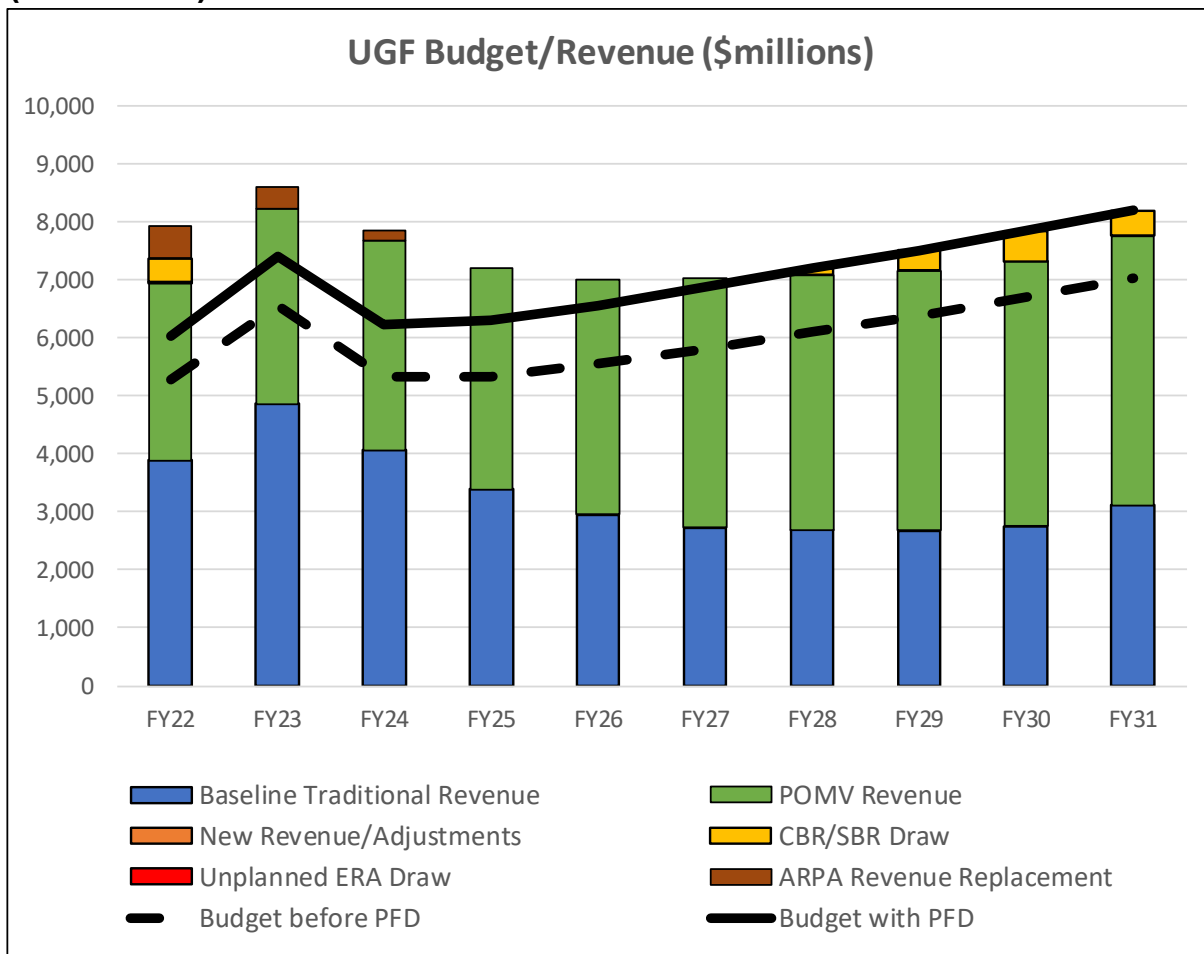
	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PFD Draw (\$millions)	739	840	901	955	1,010	1,072	1,097	1,120	1,142	1,162
PFD/Person	\$1,114	\$1,243	\$1,327	\$1,400	\$1,474	\$1,559	\$1,587	\$1,613	\$1,636	\$1,658

SB 199, Trigger Fails

Budget Stress Test (5% Growth)

APFC Returns: 6.2% FY23+
 Oil Price: DOR Spring FC
 Agency Ops: 5% Ann. Growth
 Capital: \$400m FY23, 5% Growth
 PFD: 25% POMV for all years

Surplus/(Deficit) (\$millions)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	942	828	1,438	908	440	131	(115)	(348)	(526)	(431)



	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Effective POMV Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PFD Draw (\$millions)	739	840	901	955	1,010	1,072	1,097	1,120	1,142	1,162
PFD/Person	\$1,114	\$1,243	\$1,327	\$1,400	\$1,474	\$1,559	\$1,587	\$1,613	\$1,636	\$1,658

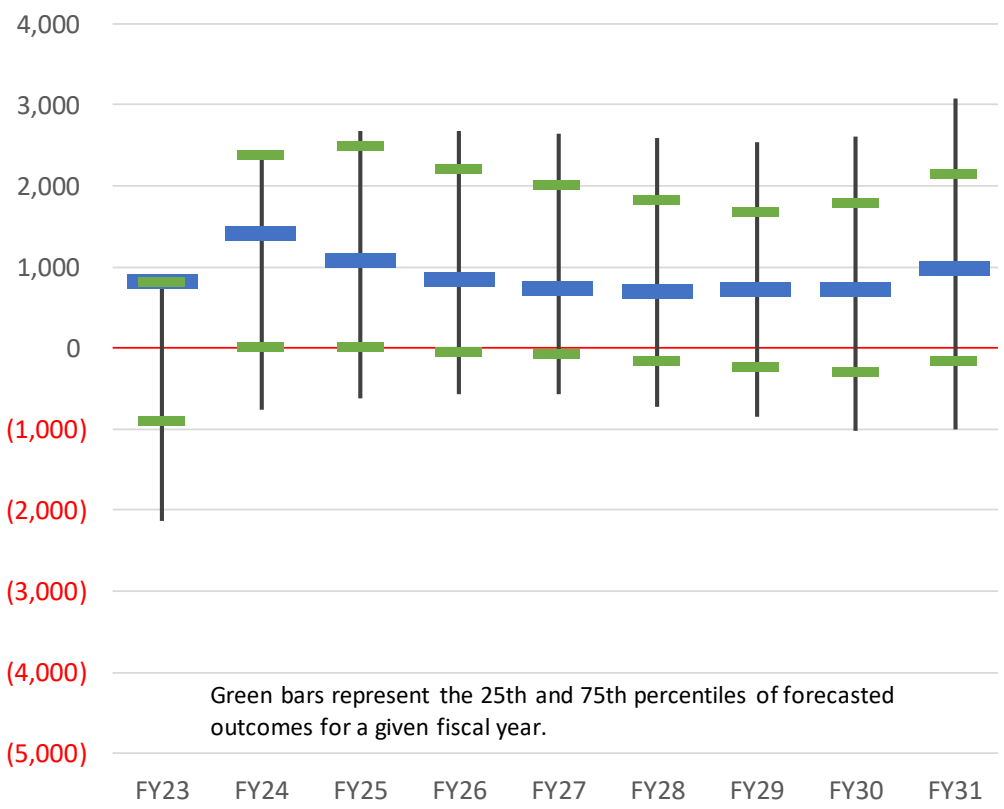
SB 199, Trigger Fails

Revenue Stress Test

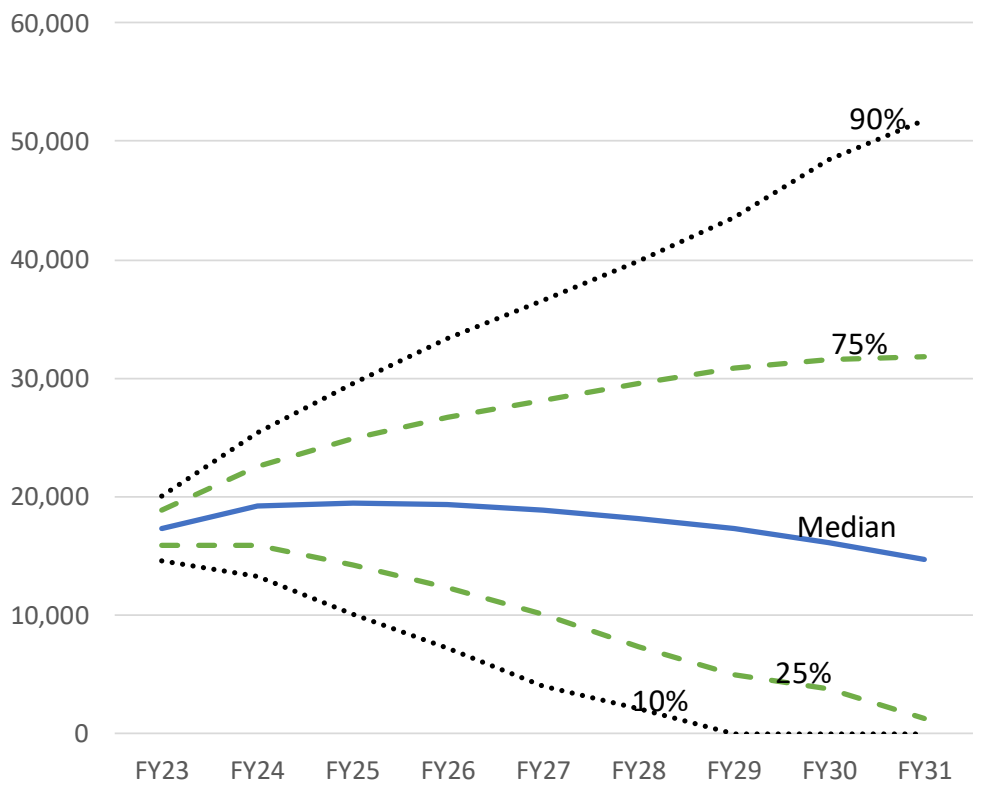
Median APFC Returns: 6.2% FY23+
Median Oil Price: DOR Spring FC
Agency Ops: 2.25% Ann. Growth
Capital: \$400m FY23, 2.5% Growth
PFD: 25% POMV for all years

Median Surplus/(Deficit)	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
	828	1,415	1,089	851	751	702	719	732	994

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



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



CBR/SBR Balance Probabilities	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
CBR/SBR below \$4 billion	42%	28%	18%	12%	9%	7%	6%	7%	8%
CBR/SBR at/below \$500 million	1%	2%	1%	0%	0%	1%	1%	1%	2%

Questions?

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