

#### State of Alaska Update on the State's Rainy Day Funds and Discussion of State Cash Flows

January 30, 2020 House Finance presentation

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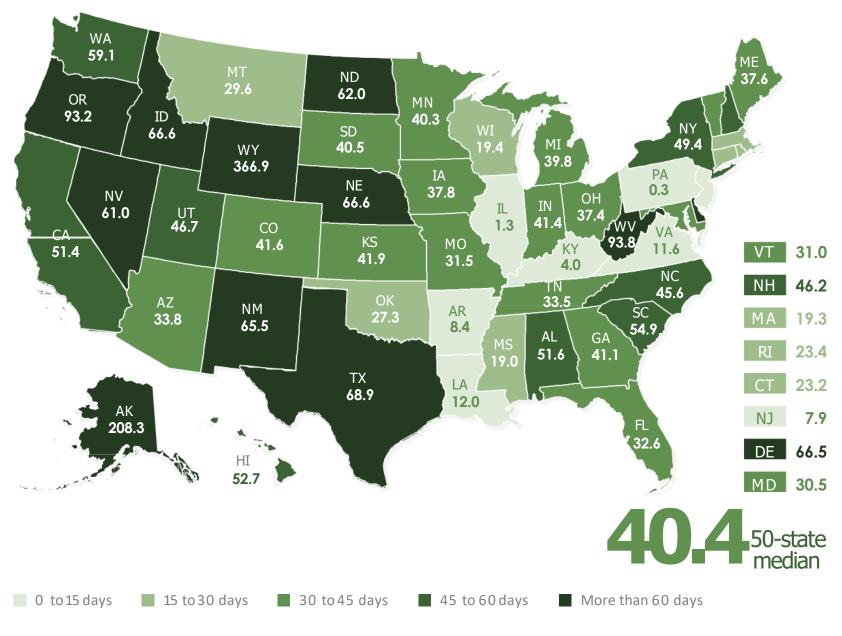
### Update on Rainy Day and Other Funds

#### FY21 Days that Alaska could run on Total Balances (Rainy Day and Other Funds)

	FY21	FY21
	Estimated	\$4.5B
	Beg Balance	Budget
	(billions)	Coverage
Alaska's Funds		(ex PFD)
Traditional Rainy Day Fund:		
Constitutional Budget Reserve Fund (CBRF)	\$1.9	154 days
Other Large Funds that could be turned to when CBRF is exhausted:		
Power Cost Equalization Fund		
Alaska Higher Education Investment Fund	\$1.1	89 days
	\$0.4	32 days
Other Designated Funds (Subfunds of the General Fund)	\$0.4	32 days
(e.g. AMHS Vessel Replacement, Major Maintenance Grant, Community Assistance, Alaska Capital Income, Highway Equipment Working Capital)	Minimum	
Total Funds Available before unstructured draw from ERA	\$3.8	307 days
Earnings Reserve Account (uncommitted at 12/31/19)*	\$10.2	827 days
Total with ERA	\$14.0	1,134 days

\*Source: apfc.org

#### Days Each State Could Run on Total Balances in FY 2018

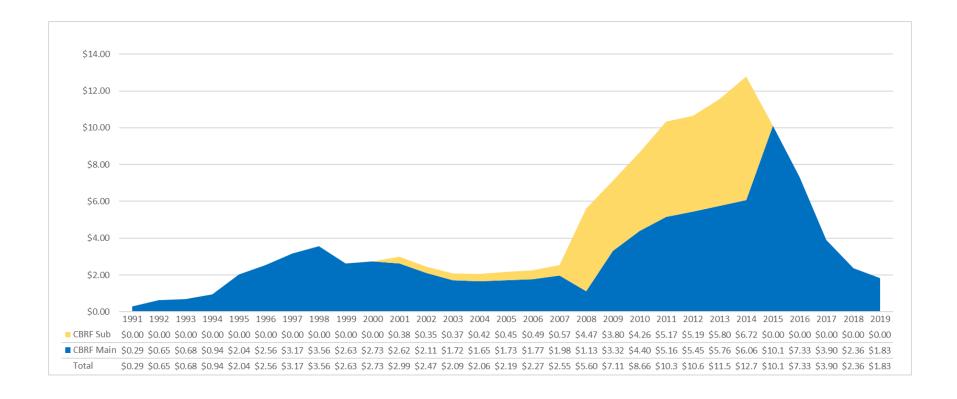


Source: Pew analysis of data from the National Association of State Budget Officers

#### Constitutional Budget Reserve Fund

- In 1990, voters of Alaska adopted an amendment to the constitution creating the CBRF. The fund was established as a savings fund to enhance budget stability. Consists of deposits resulting from resolutions of disputes about the amount of mineral lease bonuses, royalties or taxes.
- Legislature may appropriate from the CBRF to fund operations under certain conditions:
  - Simple majority vote if available funds from other sources are less than amount appropriated to fund state government for the previous fiscal year.
  - Otherwise 3/4s vote.
- Borrowings are allowed to fund temporary cash deficiencies and budget shortfalls as appropriated by the legislature.
- ➤ Borrowings must be repaid to the CBRF when there is a surplus in the general fund at the end of the year.
- As of FY10, the CBRF was repaid and no borrowing occurred FY 11-FY14.
- A Sub-fund of the CBRF was established in 2000. In 2008, \$4.1 B was deposited (1.5 CBRF Main + \$2.6B from GF). Sub Fund was liquidated in 2015 as required by statute as funds were deemed to be needed with 5 years.

#### Constitutional Budget Reserve Fund Historical Invested Assets (in billions)



#### Constitutional Budget Reserve Fund Fiduciary oversight: Commissioner of Revenue

		Constitutional Budget Reserve		
Investment Objective		Moderate Risk,		
Investment Objective		Intermediate investment horizon		
Target Asse	et Allocation	Cash Equivalents, 75%	Broad Domestic Equities, 2%  Global Ex-US Equities, 2%  Broad Fixed Income, 21%	
		Ac	ctuals	
Market Value	12/31/2016	\$5,6	70,300	
	12/31/2017	\$5,6° \$3,0°	70,300 87,000	
Market Value (\$thousands)	12/31/2017 12/31/2018	\$5,6° \$3,0° \$1,7°	70,300 87,000 10,500	
	12/31/2017	\$5,6° \$3,0° \$1,7°	70,300 87,000 10,500 62,400	
	12/31/2017 12/31/2018	\$5,6° \$3,0° \$1,7°	70,300 87,000 10,500	
	12/31/2017 12/31/2018	\$5,6° \$3,0° \$1,7 \$2,1°	70,300 87,000 10,500 62,400	
(\$thousands)  Returns	12/31/2017 12/31/2018 12/31/2019	\$5,6° \$3,0° \$1,7° \$2,1° Actuals	70,300 87,000 10,500 62,400 Benchmark <sup>1</sup>	
(\$thousands)	12/31/2017 12/31/2018 12/31/2019 3 Month	\$5,6° \$3,0° \$1,7° \$2,1° Actuals 0.78%	70,300 87,000 10,500 62,400 Benchmark <sup>1</sup> 0.74%	
(\$thousands)  Returns	12/31/2017 12/31/2018 12/31/2019 3 Month 6 Month	\$5,6° \$3,0° \$1,7° \$2,1° Actuals 0.78% 1.72%	70,300 87,000 10,500 62,400 Benchmark <sup>1</sup> 0.74% 1.67%	

<sup>&</sup>lt;sup>1</sup>Cash Equivalents: 3-month U.S. Treasury Bill; Broad Fixed Income: Barclays U.S. Aggregate Index; Broad Domestic Equities: Russell 3000 Stock Index; Global ex-US Equities: MSCI ACWI ex-US Index

#### Power Cost Equalization

- The purpose of the PCE Endowment fund is to provide for a long-term stable financing source that provides affordable levels of electric utility costs in otherwise high-cost service areas of the state.
- > 5% of the monthly average market value of the fund for the previous 3 fiscal years may be appropriated. If prior years earnings exceed this amount, 70% (not to exceed \$55M) of the difference can be spent on related identified programs. Commerce is the agency that oversees the spending of the fund. SB196, effective 6/30/2016, changed the spending target from 7% to 5%.

#### Fund History:

- 2000-Power Cost Equalization Endowment Fund established from Constitutional Budget Reserve Appropriation of \$100 million
- ➤ 2002-PCE receives \$89.6 million from proceeds of the sale of the four dam pool hydroelectric project.
- ➤ 2007-Additional appropriation of \$182.7 million
- ➤ 2012-Additional appropriation of \$400 million

#### Power Cost Equalization Historical Invested Assets (in millions)



#### Power Cost Equalization Fund Fiduciary oversight: Commissioner of Revenue

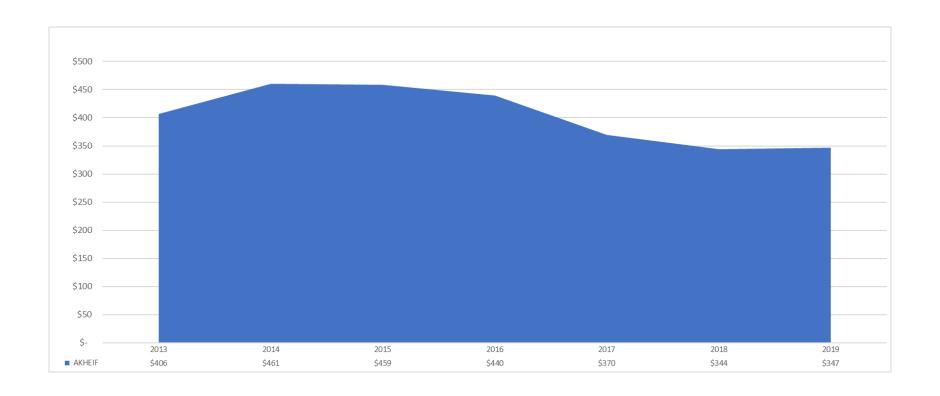
		Power Cost Equalization Fund		
Investment Objective		High Risk, Long Term investment horizon		
Target Asset Allocation			Broad Domestic Equities, 41%	
		A	ctuals	
Market Value	12/31/2016	\$94	17,300	
(\$thousands)	12/31/2017	\$1,0	88,800	
(4 )	12/31/2018		59,800	
	12/31/2019	\$1,132,800		
		Actuals	Benchmark <sup>1</sup>	
Returns 12/31/19 (Rolling)	3 Month	6.09%	6.15%	
	6 Month	7.05%	7.05%	
	1 Year Actuals	21.67%	21.71%	
	3 Year Actuals	10.03%	10.11%	
5 Year Actuals		7.48%	7.30%	
C-II D	Year Return: 6.58%			

<sup>&</sup>lt;sup>1</sup>Broad Fixed Income: Barclays U.S. Aggregate Index; Broad Domestic Equities: Russell 3000 Stock Index; Global ex-US Equities: MSCI ACWI ex-US

#### Alaska Higher Education Investment Fund

- On September 1, 2012, the Alaska Higher Education Investment Fund was capitalized with a \$400 million deposit from receipts of the Alaska Housing Capital Corporation.
- On January 28, 2013 the Alaska Higher Education Investment Fund was moved out of the General Fund into a segregated fund, and an asset allocation was approved to generate earnings sufficient to meet the seven percent annual appropriation amount as required by AS 37.14.750.(c).
- Two-thirds of each year's appropriation is allocated for Alaska Performance Scholarship Awards and one-third of the appropriation be allocated for AlaskAdvantage Education Grants.
- In FY2019, \$11.75 million was allocated for Alaska Performance Scholarship Awards, and \$5.875 million was allocated for AlaskAdvantage Education Grants.
- In FY2020, \$11.75 million was allocated for Alaska Performance Scholarship Awards, and \$5.842 million was allocated for AlaskAdvantage Education Grants.

#### Alaska Higher Education Investment Fund Historical Invested Assets (in millions)



#### Alaska Higher Education Investment Fund Fiduciary oversight: Commissioner of Revenue

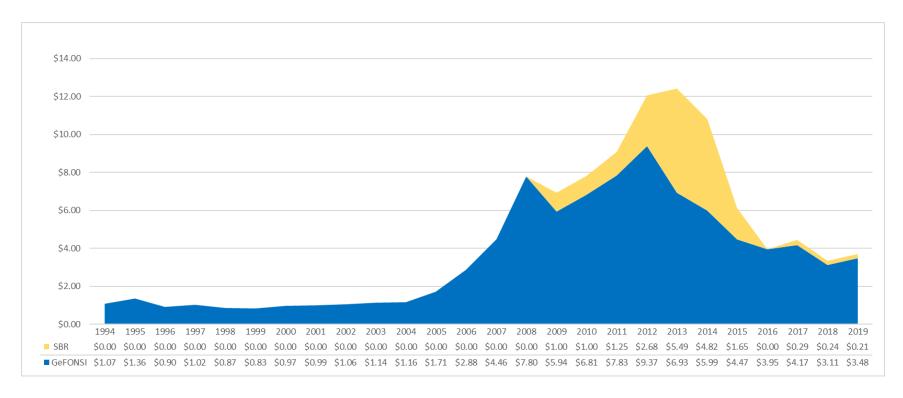
		AK Higher Education Investment Fund		
Investment Objective		High Risk,		
Investment Objective		Long Term investment horizon		
		Global Ex-US Equities, 27%		
Target Asset Allocation		Broad Domestic Equities, 41%		
			tuals	
Market Value	12/31/2016	\$351	1,500	
Market Value (\$thousands)	12/31/2017	\$351 \$353	1,500 3,400	
	12/31/2017 12/31/2018	\$351 \$353 \$313	1,500 3,400 3,400	
	12/31/2017	\$351 \$353 \$313 \$359	1,500 3,400 3,400 9,000	
	12/31/2017 12/31/2018 12/31/2019	\$351 \$353 \$313 \$359 Actuals	1,500 3,400 3,400 9,000 Benchmark <sup>1</sup>	
(\$thousands)	12/31/2017 12/31/2018 12/31/2019 3 Month	\$351 \$353 \$313 \$359 Actuals 6.09%	1,500 3,400 3,400 9,000 Benchmark <sup>1</sup> 6.15%	
(\$thousands)  Returns 12/31/2019	12/31/2017 12/31/2018 12/31/2019 3 Month 6 Month	\$351 \$353 \$313 \$359 Actuals 6.09% 7.05%	1,500 3,400 3,400 9,000 Benchmark <sup>1</sup> 6.15% 7.05%	
	12/31/2017 12/31/2018 12/31/2019 3 Month 6 Month 1 Year	\$351 \$353 \$313 \$359 Actuals 6.09% 7.05% 21.71%	1,500 3,400 3,400 9,000 Benchmark <sup>1</sup> 6.15% 7.05% 21.71%	
(\$thousands)  Returns 12/31/2019	12/31/2017 12/31/2018 12/31/2019 3 Month 6 Month	\$351 \$353 \$313 \$359 Actuals 6.09% 7.05%	1,500 3,400 3,400 9,000 Benchmark <sup>1</sup> 6.15% 7.05%	

<sup>&</sup>lt;sup>1</sup>Broad Fixed Income: Barclays U.S. Aggregate Index; Broad Domestic Equities: Russell 3000 Stock Index; Global ex-US Equities: MSCI ACWI ex-US

#### GeFONSI I and II

- ➤ GeFONSI includes the General Fund and Other Non segregated funds invested in a pooled environment (GF proper= \$400 million).
- Department of Administration separately accounts for each fund within State Accounting system.
- Department of Revenue is responsible for investing the GeFONSI and calculating and allocating daily investment earnings to each fund.
- ➤ 185 funds, assigned as Types 1, 2, or 3. Type 1 funds receive their earnings, the others do not.
- ➤ GeFONSI II was created in 2018 to target a higher risk return profile and includes funds that are type 2 or 3.

#### General Fund and other non-segregated investments Historical Invested Assets (in billions)\*



<sup>\*</sup> The Statutory Budget Reserve Fund (AS 37.05.540) was part of the GeFONSI before and after being managed as a separate fund from July, 2013-October, 2015.

#### General Fund and other non-segregated investments (GeFONSI I & II) Fiduciary oversight: Commissioner of Revenue

		GeFONSII		GeFONSI II		
Investment Objective		Moderate Risk,		Moderately High Risk,		
Investment Objective		Short to Intermediate investment horizon		Intermediate investment horizon		
Target A	Asset Allocation	Cash Equiva 83%	1-3 Year Gov't Bonds, 17%	1-3 Year Gov't Bonds, 31%	Broad Domestic Equities, 4% Global Ex-US Equities, 3%  Broad Fixed Income, 9%	
		A	ctuals		Actuals*	
	12/31/2016	\$3,375,800		N/A		
Market Value	12/31/2017	\$3,340,000 \$1,822,900		N/A \$1,429,900		
(\$thousands)	12/31/2018					
	12/31/2019			\$1,223,600		
	Combined @ 12/31/2019		\$2,61	2,600		
		Actuals	Benchmark <sup>1</sup>	Actuals	Benchmark <sup>1</sup>	
Returns 12/31/19 (Rolling)	3 Month	0.49%	0.47%	1.07%	1.04%	
	6 Month	1.07%	0.98%	1.77%	1.63%	
	1 Year Actuals	2.90%	2.68%	6.38%	6.25%	
	3 Year Actuals	1.90%	1.72%	N/A	N/A	
	5 Year Actuals	1.38%	1.16%	N/A	N/A	
		Callan Projected 10-Year Return: 2.65%		Callan Projec	ted 10-Year Return: 3.30%	

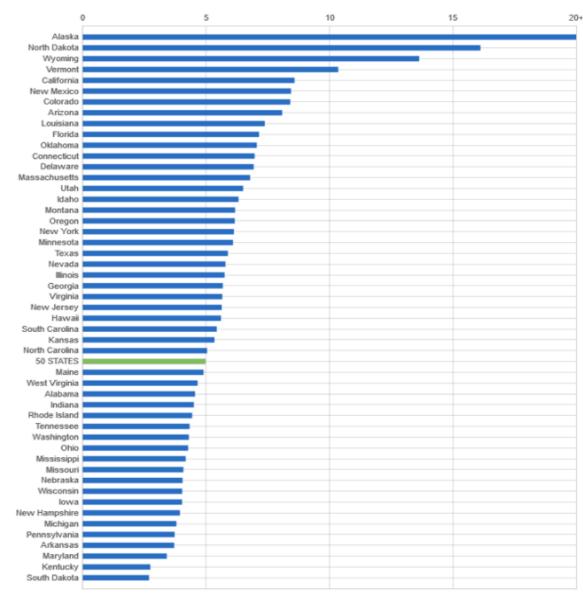
<sup>&</sup>lt;sup>1</sup>Cash Equivalents: 3-month U.S. Treasury Bill; 1-3 Year Government Bonds: Barclays 1-3 Year Gov't Bond Index; Broad Fixed Income: Barclays U.S. Aggregate Index; Broad Domestic Equities: Russell 3000 Stock Index; Global ex-US Equities: MSCI ACWI ex-US Index

<sup>\*</sup>A portion of the GeFONSI was transferred to the GeFONSI II during Fiscal Year 2018 (January 2018)

### Revenue Volatility Management

#### Alaska has the highest Tax Revenue Volatility





#### Revenue Volatility Now Comes From:

#### Commodity Volatility

- Petroleum revenues are 28% of FY21 projected unrestricted general fund revenues
- Uncertainty exists "in-year" for FY21
- Will always have in-year uncertainty because we base budget on in-year oil collections

#### Investment Return Volatility

- Investment earnings are 62% of FY21 projected unrestricted general fund revenues
- Certainty exists today for FY21 (lagging POMV formula)
- Uncertainty today for FY22 and beyond

#### Volatility Management Techniques

- Rainy Day and Other Funds (CBR and other fund balances)
- Oil Price Hedging
- Lagging PF Distribution Formula
- Distribution Formula Alternatives (Harvard/Yale/Tobin)

### Discussion of State Cash Flows

#### **SOA** Treasury Cash Flow

#### Cash Inflows

- Tax Revenues
  - Oil & Gas, Excise, Other
- Federal Dollars
  - Grants, Medicaid, FHWA, Education, Other
- Earnings Reserve Funds
- Agency Receipts
  - Fees, Licenses, Permits, Fines, Other



State of Alaska
Division of Treasury
Cash Management

#### Cash Outflows

- School Education Payments
- Payroll & Pension Payments
- Vendor Payments
- Medicaid Payments
- External Program Grant Payments
- Debt Service Payments

#### **Cash Management Objectives**

- ➤ Maintain adequate liquidity (\$400 million)
- Optimize cash resources.
- Safeguard State assets.
- Record financial activity affecting cash.

#### Cash vs. Accrual balances

- Cash balance is what you have in the bank at a given point in time.
- Accrual balance takes into account what you have earned and when a liability is incurred at a particular point in time. It is what you should have at a particular point in time after all expected receipts and expenditures come in and out.
- ➤ Simple example: Your bank balance shows you have \$1,000 in cash at July 31. However, you know that you wrote checks for utilities on July 25 for \$400 that are for July utilities that have not yet cleared. You may have also earned a pay check of \$1,200 for work performed in July. Your accrual balance at July 31 would be \$1,800.

#### **Cash Flow Deficiencies**

- ➤ Prior to 1985, most unrestricted revenues flowed into and stayed in the General Fund for expenditure.
- Over time, the legislature has established many subfunds to segregate cash for budgeting purposes, resulting in less cash available to pay day-to-day operating costs.
- Expenditures can occur prior to receipt of revenue, resulting in a cash flow deficit:
  - > Federal programs require expenditures before reimbursement.
    - i.e. Medicaid, Transportation, etc...
  - Beginning of year appropriation transfers do not match incoming revenue.

#### **Cash Flow Deficiencies**

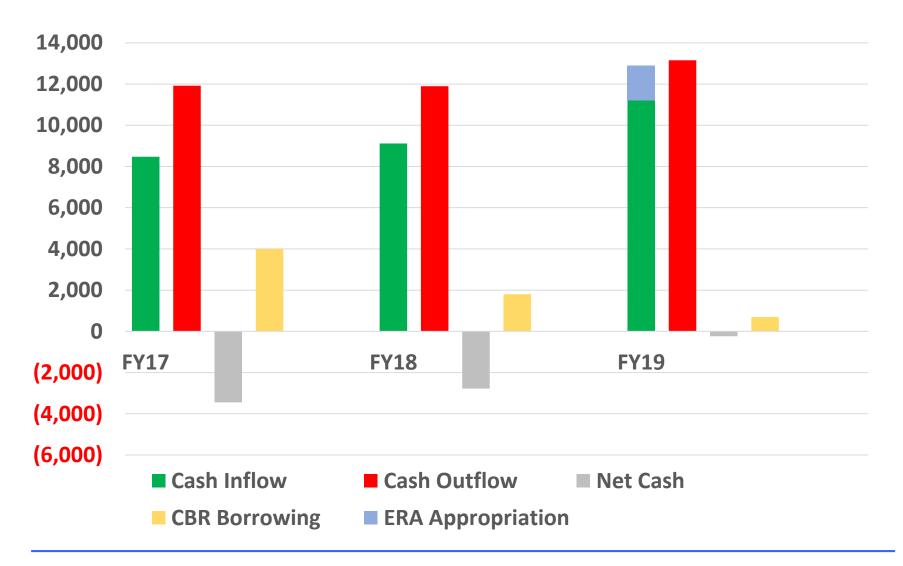
- Borrowing from budget reserve funds has been the solution of both cash shortages (cash flow deficits) and revenue shortfalls (budget deficits).
- During FY93-FY05, the legislature included language in the appropriation act permitting borrowings from budget reserve funds.
- The CBRF was fully repaid by FY10.
- Borrowing from the CBRF recommenced in FY14
- Per FY18 CAFR \$9.9B is owed to CBR

#### Cash Deficiency Memorandum of Understanding

- Original MOU signed 1994 by DOR, DOA, OMB & LAW.
- Updated December 1, 2017.
- Targets \$400m dollar minimum threshold.
- Outlines procedures for addressing cash deficiencies:
  - Develop monthly cash projections.
  - Monitor daily general fund cash balances.
  - Transfer from SBR, CBR & ERA as appropriated.
  - Perform <u>temporary</u> interfund borrowing.
  - Borrow from general fund sub funds, if temporary
  - If all appropriations/borrowing are exhausted:
    - Seek legislative action through the Governor to access additional funds through appropriation from other Rainy Day Funds discussed above.
    - Prioritize disbursements, restrict expenditures.

## CASH FLOWS IN THE GEFONSI OPERATING ACCOUNT

#### Historic Actual Cash Inflows and Outflows FY 2017 – 2019\* (in millions)



<sup>\*</sup>Includes all cash inflows and outflows from the State's operating account. Cash inflows and outflows will be greater than revenues and expenses because they include transfers between funds.

#### **Seasonal Cash Flow Fluctuations**

- June Annual oil & gas property tax revenue.
- July Debt service payments.
- Re-appropriation (July & August):
  - Finishing prior FY expenditures + current FY expenditures.
  - Allocating funds in or out of GF per new legislation.
- Summer Peak season for construction projects and seasonal workers.

## CASH IN THE GENERAL FUND PROPER

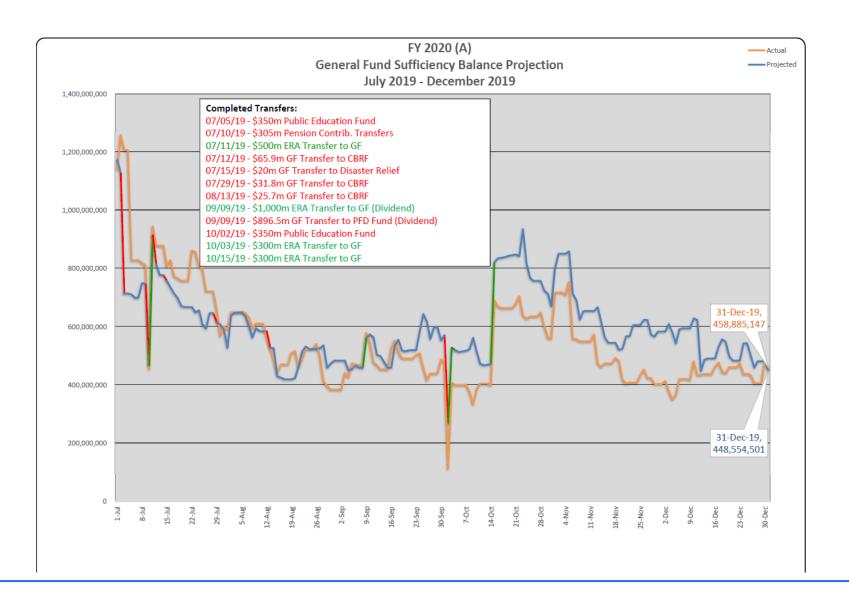
#### Daily General Fund Sufficiency Balance Calculation



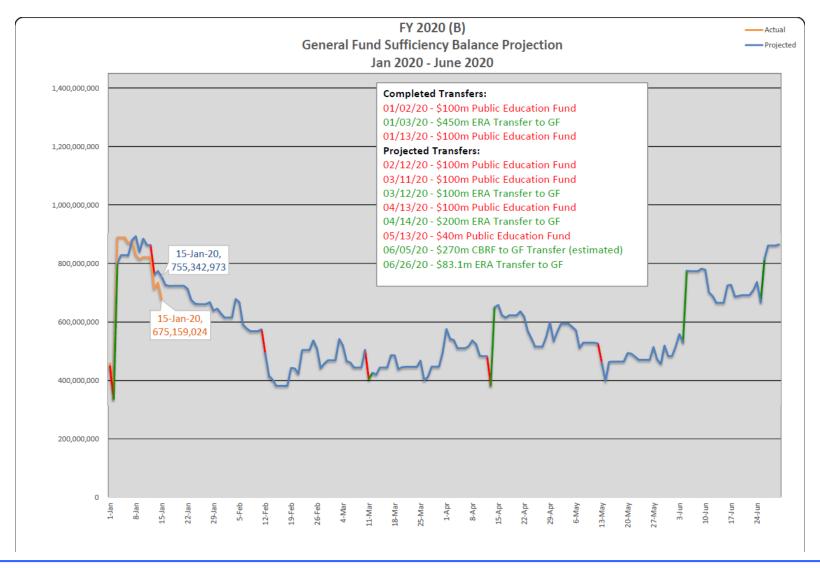
\*Receipts not yet cleared by agencies, may not be GF money

## FY2020 GENERAL FUND FORECAST

#### General Fund Sufficiency July 1, 2019 – December 31, 2019



#### General Fund Sufficiency January 1, 2020 – June 30, 2020



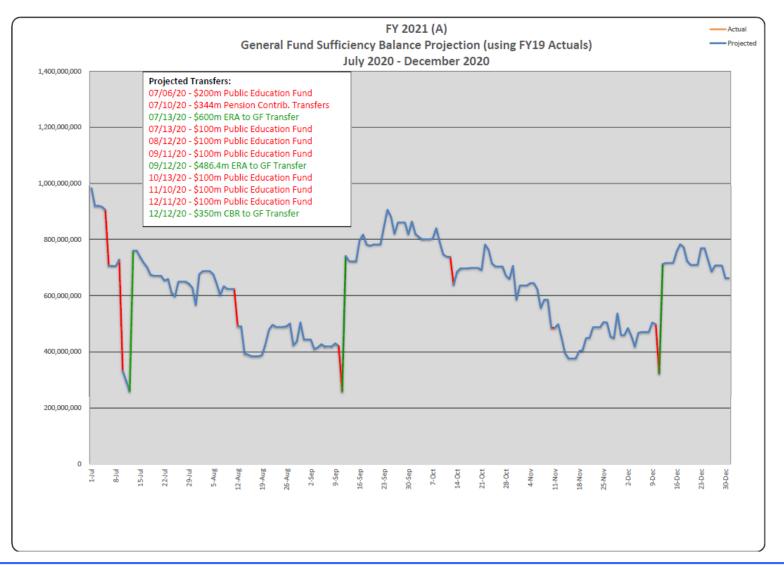
Assumes cash flows are consistent with FY19 actuals, updated for FY20 education and other fund transfers, and projected oil prices

Disclaimer: Actual cash flows will differ from projections based on the price of oil and timing and amount of expenditures

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# FY2021 GENERAL FUND FORECAST (using FY19 actuals)

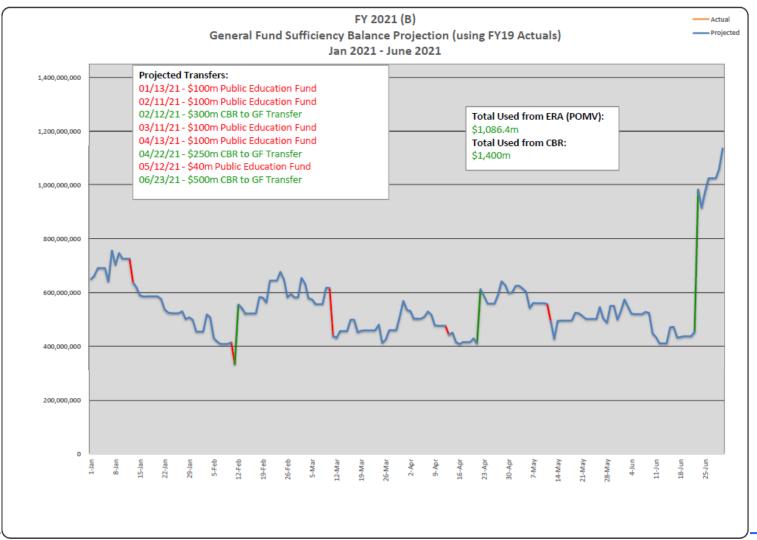
#### General Fund Sufficiency July 1, 2020 – December 31, 2020



Assumes cash flows are consistent with FY19 actuals, updated for FY20 education and other fund transfers, and projected oil prices

Disclaimer: Actual cash flows will differ from projections based on the price of oil and timing and amount of expenditures

#### General Fund Sufficiency January 1, 2021 – June 30, 2021



Assumes cash flows are consistent with FY19 actuals, updated for FY20 education and other fund transfers, and projected oil prices

Disclaimer: Actual cash flows will differ from projections based on the price of oil and timing and amount of expenditures

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#### Take Aways

- > Cash flow forecasting is always wrong.
- Even if the State budget is balanced, borrowing for <u>cash flow</u> deficits will occur.
- > Budget deficit borrowing may occur if forecasted assumptions are wrong.
- How much is borrowed depends on the actual amounts and timing of revenues and expenses.
- Higher Revenue Volatility requires greater Rainy Day fund reserves.
- Volatility management techniques are available.

#### THANK YOU

#### Please find our contact information below:

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