



State of Alaska

Update on the State's Cash Reserve Funds and Discussion of State Cash Flows

February 2, 2021 Senate Finance presentation

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Agenda

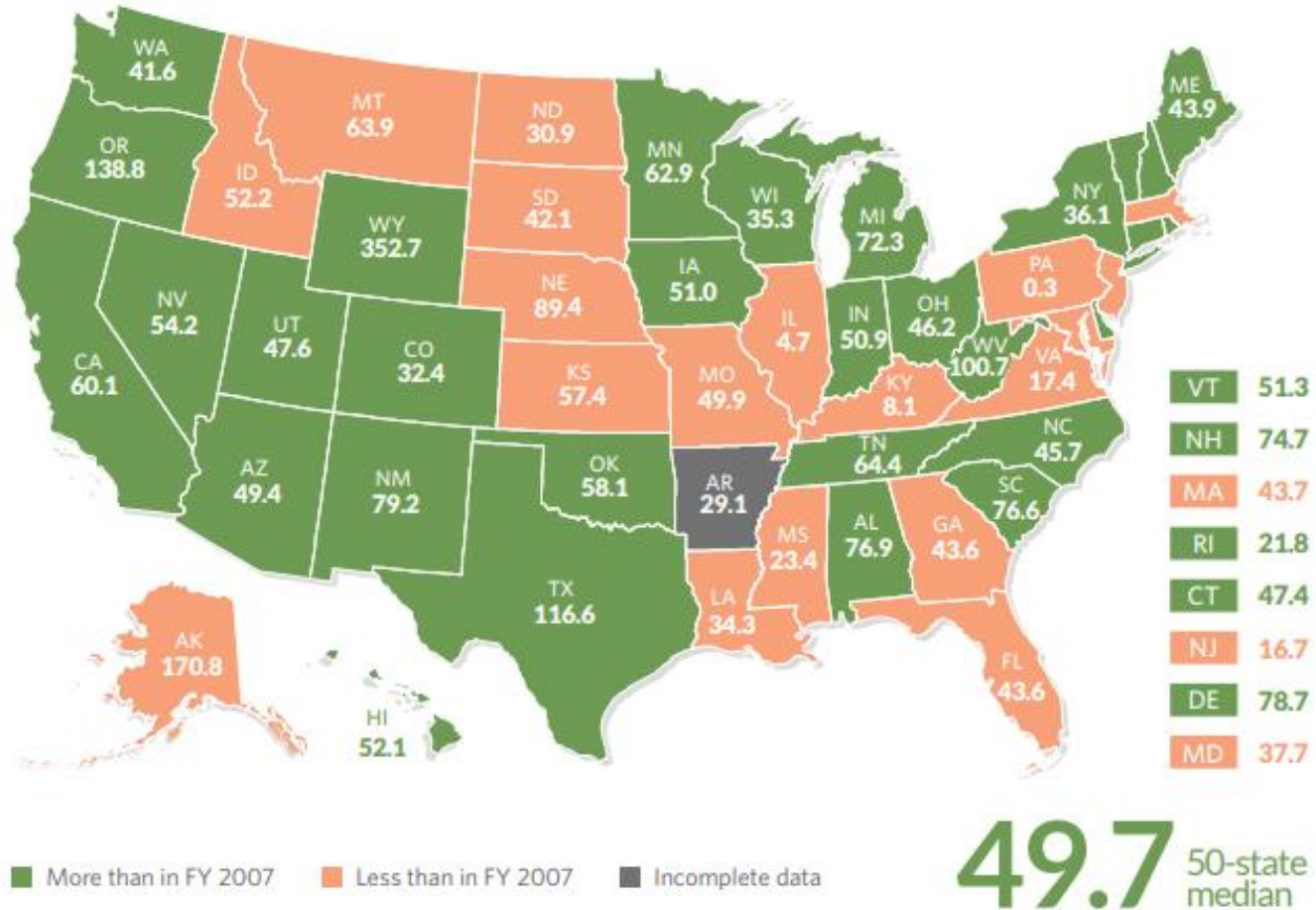
- 1. Update on Cash Reserve and Other Funds**
- 2. State Cash Flows**
- 3. Revenue Volatility Management**

Update on Cash Reserve and Other Funds

FY22 Days that Alaska could run on Total Balances (Cash Reserve and Other Funds)

	FY22 Estimated Beg Balance (billions)	FY22 \$4.3B Budget Coverage (ex PFD)
Alaska's Funds		
Traditional Cash Reserve Fund:		
➤ Constitutional Budget Reserve Fund (CBRF)	\$0.9	76 days
Other Large Funds that could be turned into when CBRF is exhausted:		
➤ Power Cost Equalization Fund	\$1.1	93 days
➤ Alaska Higher Education Investment Fund	\$0.4	34 days
Other Designated Funds (Subfunds of the General Fund) (e.g., AMHS Vessel Replacement, Major Maintenance Grant, Community Assistance, Alaska Capital Income, Highway Equipment Working Capital)	\$0.4	34 days
Total Funds Available before unstructured draw from ERA	\$2.8	238 days
Earnings Reserve Account	\$11.9	1,010 days
Dividend Payment	(\$2.0)	(170 days)
Total with ERA	\$12.7	1,078 days

Days Each State Could Run on Total Balances in FY 2019



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

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Cash Reserve Comparisons to Other States

Although uneven across states, since the Great Recession, states have increased cash reserve funds with a median balance of 7.9% in 2019 from 4.8% in 2008. Enacted FY21 percentages targeted an even higher median percentage of 8.4% prior to COVID-19.

Rainy Day Fund Balances as a Percentage of Expenditures, Fiscal 2019 to Fiscal 2021

Percentage	Number of States		
	Fiscal 2019 (Actual)	Fiscal 2020 (Preliminary Actual)	Fiscal 2021 (Enacted)
Less than 1%	3	4	4
> 1% but < 5%	11	11	9
> 5% but < 10%	17	17	16
10% or more	19	17	16
N/A	0	1	5

FY22 Alaska's Constitutional Budget Reserve Fund represents 22% of FY22 Expenditures

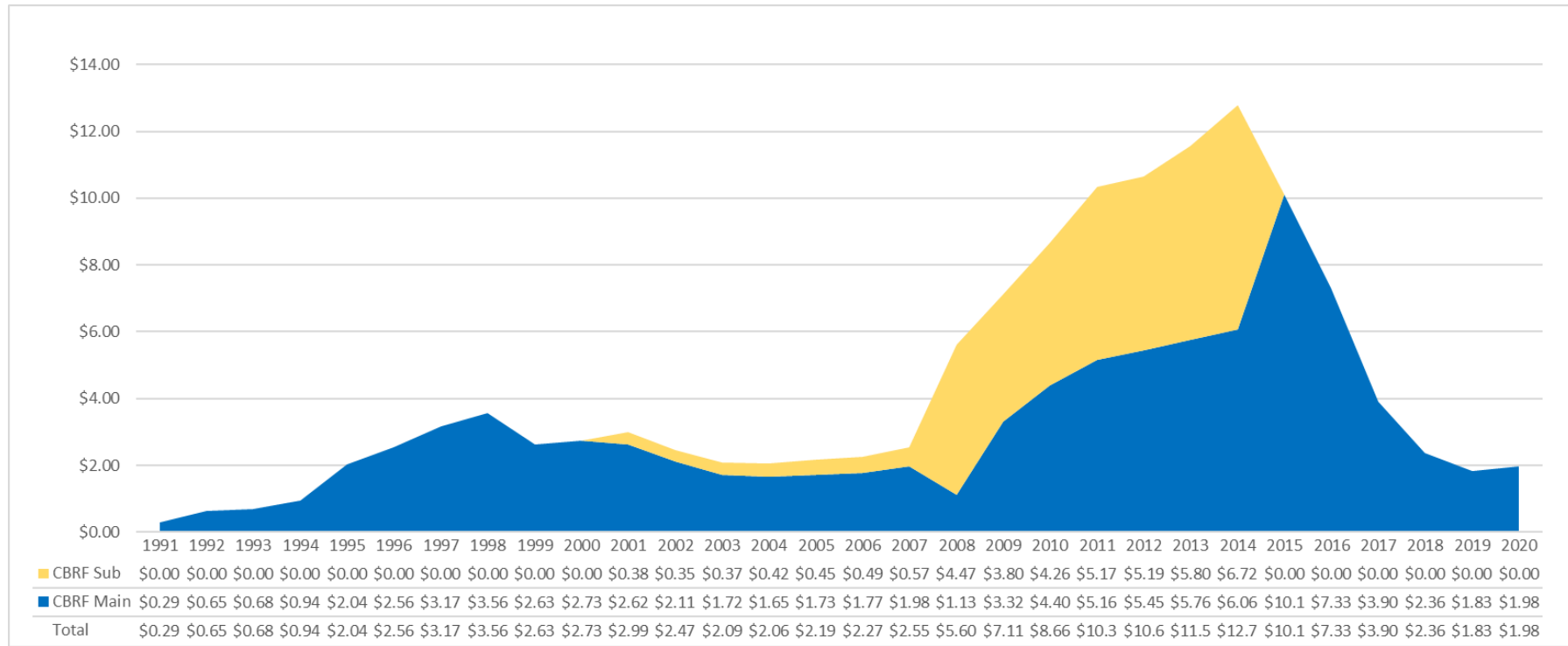
Cash Reserve Considerations

State	Days of General Fund Spending in Reserve	Balance Rule	Balance if Applied in Alaska
Wyoming	397.7	None	N/A
North Dakota	109.1	Capped at 9.5% of the general fund appropriations	\$503.10
New Mexico	90.1	Capped at 8% of general fund appropriations	\$423.68
Texas	70.4	10% of general fund revenues	\$442.80
West Virginia	59.7	Capped at 13% of general fund appropriations	\$688.50
Louisiana	15.1	Capped at 4% of total state revenue receipts	\$249.00

- Cash reserves range from 2% to 20% of General Fund Expenditures and should reflect the risk volatility of the revenue stream
- According to the PEW Trust, the optimal savings target of a state depends on three factors:
 - The defined purpose of funds (cash flow, revenue shortfall, combination)
 - The volatility of a state's tax revenue
 - The level of coverage—similar to an insurance policy—that the state seeks to provide for its budget (how likely is a 10% vs. a 50% revenue decline).
- All but eight states cap the balance of their fund. The cap is typically based on total general fund revenues (ranging from a cap of 2.5% to 15%) or total general fund appropriations (ranging from a cap of 2% to 20%).
- There is a trade-off that needs to be considered in determining the prudent balance of the fund.
- State Revenue since POMV implementation has been as high as \$5.3B (2019) and as low as \$4.2B (2020)

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

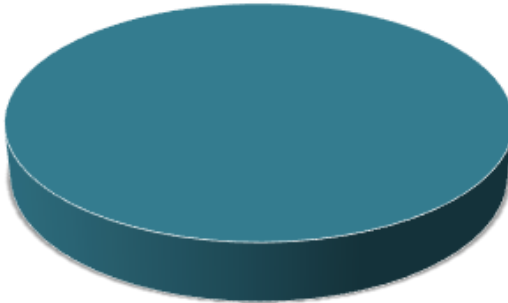
- In 1990, voters of Alaska adopted an amendment to the constitution creating the CBRF.
- CBRF is used to fund temporary cash flow expense/revenue mismatches.
- CBRF is used to appropriate/cover budget revenue shortfalls.
- Appropriations from the CBRF must be repaid.



Data is at fiscal year end of June 30.

Constitutional Budget Reserve Fund

Fiduciary oversight: Commissioner of Revenue

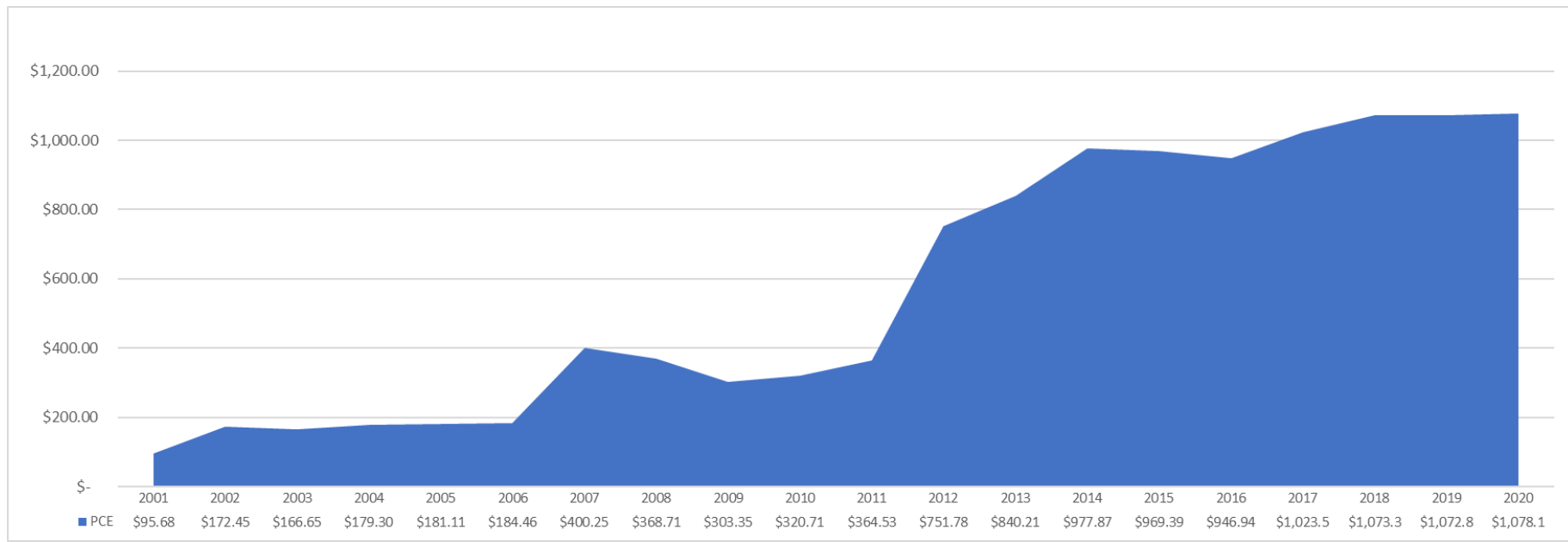
		Constitutional Budget Reserve	
Investment Objective		Moderate Risk, Intermediate investment horizon	
Target Asset Allocation		Cash Equivalents, 100% 	
Market Value (\$thousands)	12/31/2016	Actuals	
	12/31/2017	\$5,670,300	
	12/31/2018	\$3,087,000	
	12/31/2019	\$1,710,500	
	12/31/2020	\$2,162,400	
Returns 12/31/2020 (Rolling)		Actuals	Benchmark ¹
	3 Month	0.05%	0.03%
	6 Month	0.12%	0.07%
	1 Year	1.51%	1.26%
	3 Year	2.57%	2.43%
	5 Year	2.50%	2.26%
Callan Projected 10-Year Return: 2.25%			

¹Cash Equivalents: 3-month U.S. Treasury Bill

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates.

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

- 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.



Data is at fiscal year end of June 30.

Power Cost Equalization Fund

Fiduciary oversight: Commissioner of Revenue

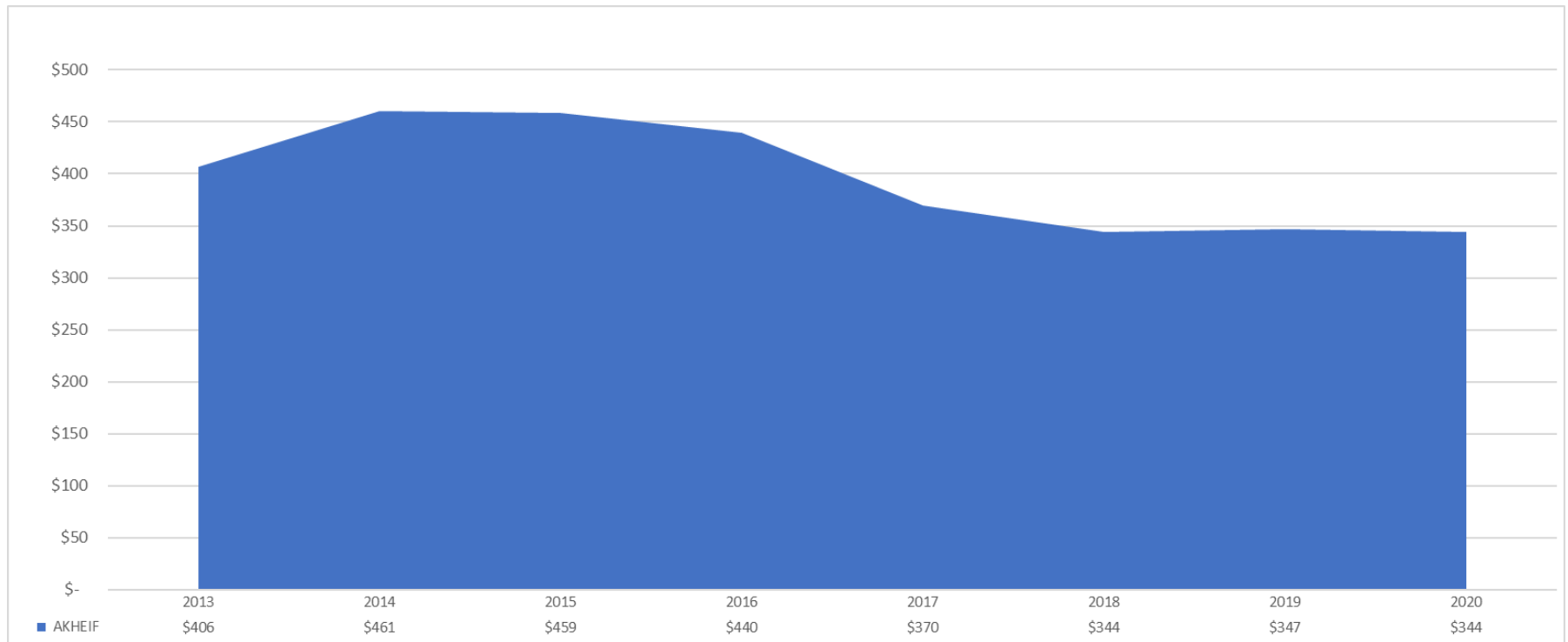
		Power Cost Equalization Fund	
Investment Objective		High Risk, Long Term investment horizon	
Target Asset Allocation		<p>Broad US Equity, 24%</p> <p>International Equity, 15%</p> <p>Cash Equivalents, 1%</p> <p>Core US Fixed Income, 60%</p>	
Market Value (\$thousands)	12/31/2016	Actuals	
	12/31/2017	\$947,300	
	12/31/2018	\$1,088,800	
	12/31/2019	\$959,800	
	12/31/2020	\$1,132,800	
	12/31/2020	\$1,142,300	
Returns 12/31/2020 (Rolling)	3 Month	Actuals	Benchmark ¹
	6 Month	6.44%	6.42%
	1 Year	10.24%	10.19%
	3 Year	7.76%	7.79%
	3 Year	7.36%	7.38%
	5 Year	8.87%	8.86%
Callan Projected 10-Year Return: 5.00%			

¹Core US Fixed Income: BB U.S. Aggregate Index; Broad US Equity: Russell 3000 Index; International Equity: MSCI ACWI ex-US Index

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates. Asset Allocation does not include private investments.

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

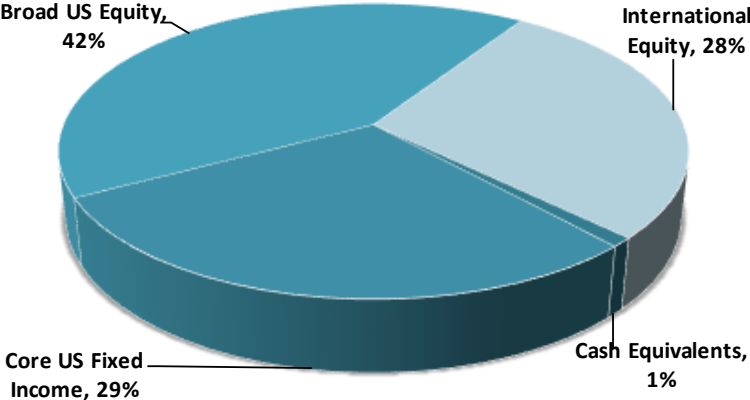
- On September 1, 2012, the AHEIF was capitalized with a \$400 million deposit from receipts of the Alaska Housing Capital Corporation for use in paying Alaska Performance Scholarship Awards and AlaskAdvantage Education Grants.



Data is at fiscal year end of June 30.

Alaska Higher Education Investment Fund

Fiduciary oversight: Commissioner of Revenue

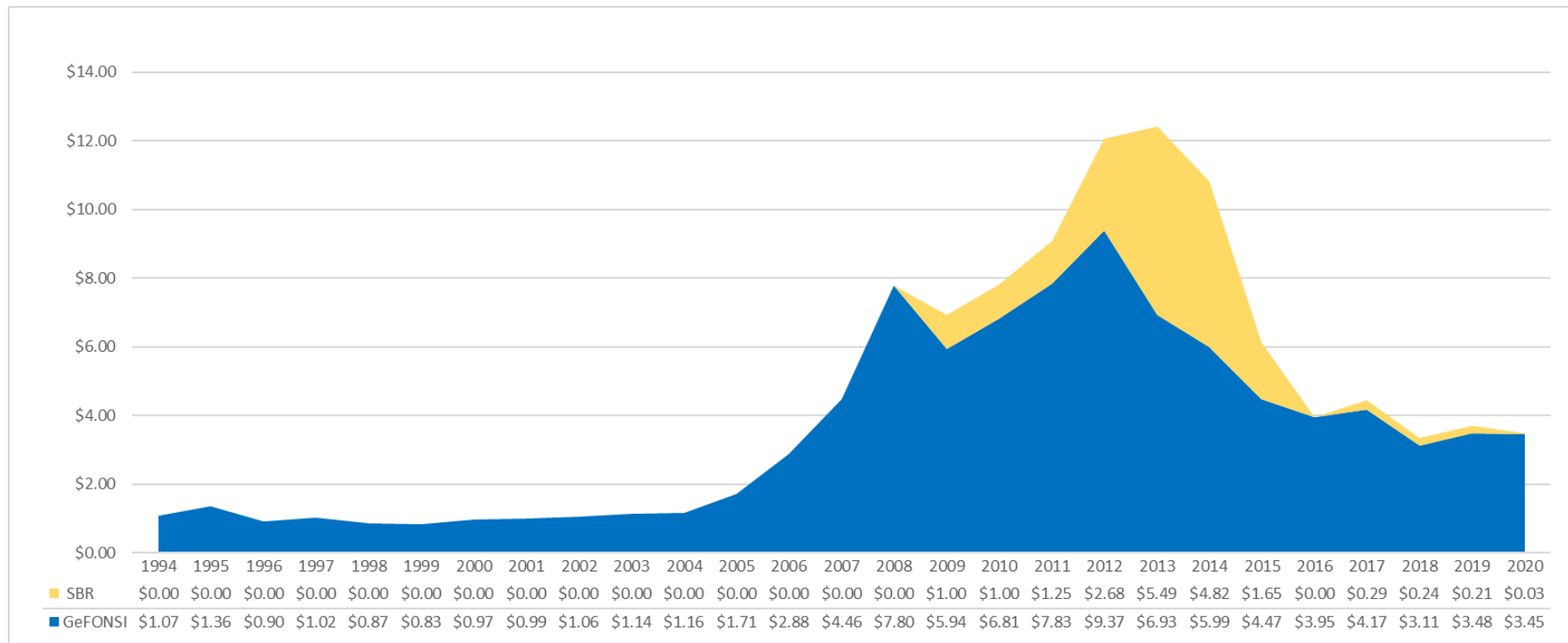
Insight: Commissioner of Revenue		AK Higher Education Investment Fund	
Investment Objective		High Risk, Long Term investment horizon	
Target Asset Allocation			
Market Value (\$thousands)	12/31/2016	Actuals	
	12/31/2017	\$351,500	
	12/31/2018	\$353,400	
	12/31/2019	\$313,400	
	12/31/2020	\$359,000	
Returns 12/31/2020 (Rolling)	3 Month	Actuals	Benchmark ¹
	6 Month	11.07%	11.07%
	1 Year	17.54%	17.53%
	3 Year	15.00%	14.98%
	5 Year	9.73%	9.71%
		10.29%	10.27%
Callan Projected 10-Year Return: 6.37%			

¹Core US Fixed Income: BB U.S. Aggregate Index; Broad US Equity: Russell 3000 Index; International Equity: MSCI ACWI ex-US Index

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General Fund and Other Non-Segregated Investments (GeFONSI) Historical Invested Assets (in billions)*

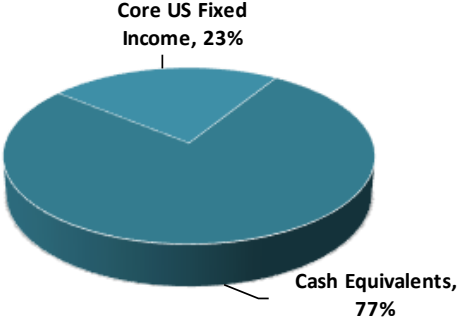
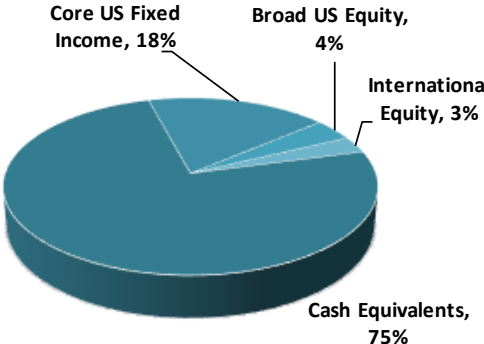
- GeFONSI includes the General Fund and Other Non segregated funds invested in a pooled environment (GF proper= \$400 million).
- GeFONSI II was created in 2018 to target a higher risk return profile for a subset of funds.



* 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

		GeFONSI I		GeFONSI II	
Investment Objective		Moderate Risk, Short to Intermediate investment horizon		Moderately High Risk, Intermediate investment horizon	
Target Asset Allocation					
Market Value (\$thousands)	12/31/2016	Actuals		Actuals*	
	12/31/2017	\$3,375,800		N/A	
	12/31/2018	\$3,340,000		N/A	
	12/31/2019	\$1,822,900		\$1,429,900	
	12/31/2020	\$1,389,000		\$1,223,600	
	Combined @ 12/31/2020	\$1,373,900		\$1,176,300	
		\$2,550,200			
Returns 12/31/2020 (Rolling)	3 Month	Actuals	Benchmark ¹	Actuals	Benchmark ¹
	6 Month	0.22%	0.18%	1.20%	1.23%
	1 Year	0.42%	0.35%	1.96%	1.94%
	3 Year	1.49%	1.36%	3.51%	3.40%
	3 Year	2.08%	1.93%	N/A	N/A
	5 Year	1.60%	1.39%	N/A	N/A
		Callan Projected 10-Year Return: 2.38%		Callan Projected 10-Year Return: 2.78%	

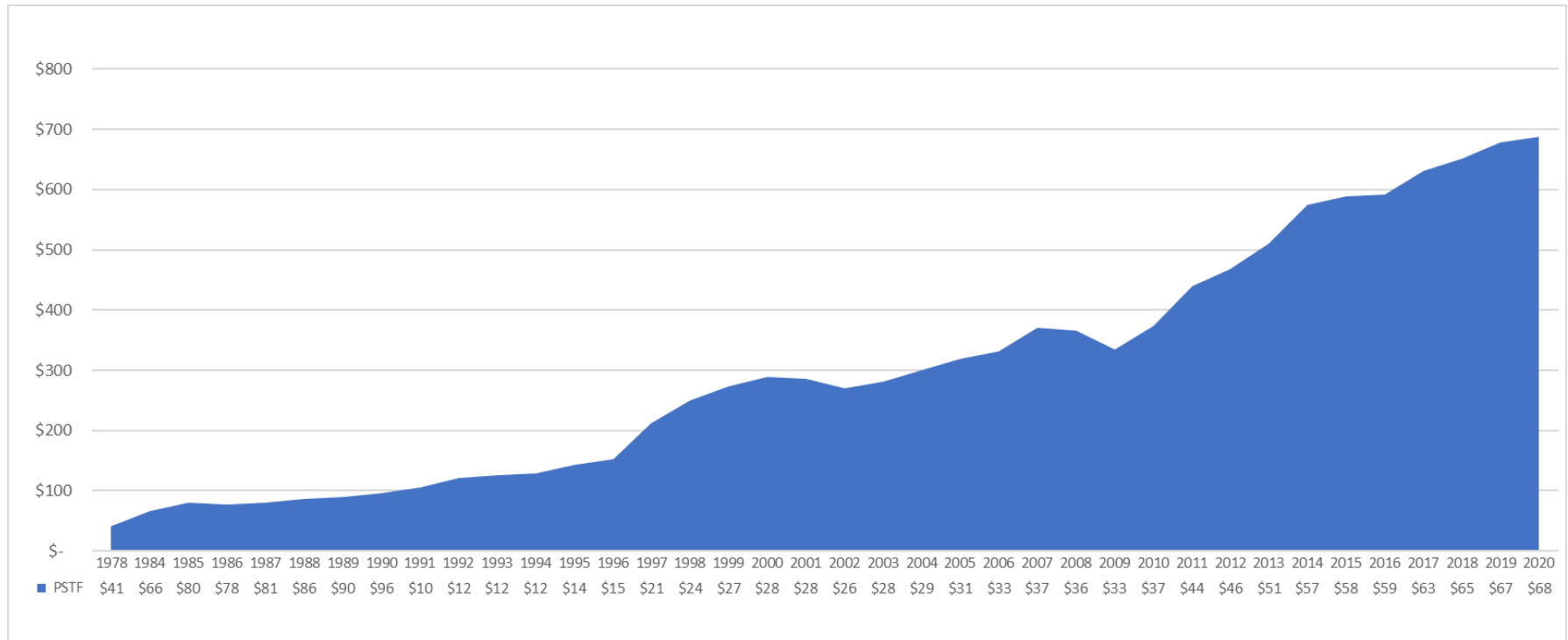
¹Cash Equivalents: 3-month U.S. Treasury Bill; Core US Fixed Income: BB U.S. Aggregate Index; Broad US Equities: Russell 3000 Index; International Equity: MSCI ACWI ex-US Index

*A portion of the GeFONSI was transferred to the GeFONSI II during Fiscal Year 2018 (January 2018)

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates.

Public School Trust Fund (PSTF) Historical Invested Assets (in millions)

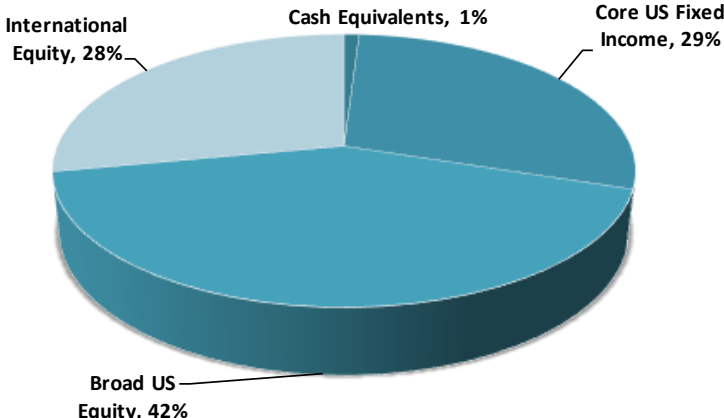
- The PSTF was established in 1978, replacing the territorial era public school land grant originally created by congress in 1915, by a transfer of the balance from the permanent school trust.
- Following passage of HB 213 in 2018, the fund is now managed as one fund, under a percentage of market value method (5% of the average market value for the 5 years preceding the last previous fiscal year).



Data is at fiscal year end of June 30.

Public School Trust Fund

Fiduciary oversight: Commissioner of Revenue

Investment Objective		Public School Trust Fund ¹	
		High Risk, Long Term investment horizon	
Target Asset Allocation		 <p>International Equity, 28%</p> <p>Cash Equivalents, 1%</p> <p>Core US Fixed Income, 29%</p> <p>Broad US Equity, 42%</p>	
Market Value (\$thousands)	12/31/2016	Actuals	
	12/31/2017	\$611,100	
	12/31/2018	\$671,900	
	12/31/2019	\$619,600	
	12/31/2020	\$727,100	
Returns 12/31/2020 (Rolling)		Actuals	Benchmark ²
	3 Month	11.06%	11.07%
	6 Month	17.54%	17.53%
	1 Year	15.00%	14.98%
	3 Year	9.69%	9.71%
	5 Year	9.75%	9.75%
Callan Projected 10-Year Return: 6.37%			

¹HB213, effective November 2018, revised the calculation for determining the amount appropriatable for future fiscal years' support of the state public school system.

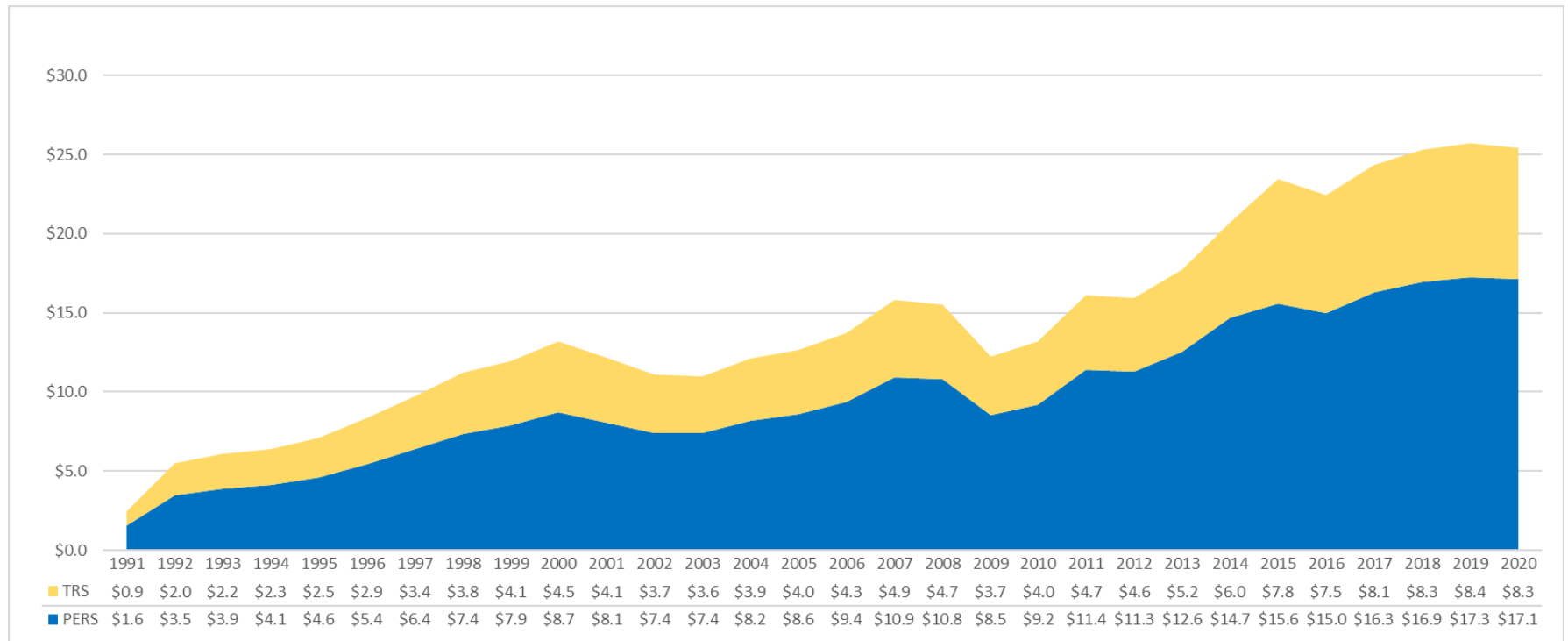
²Core US Fixed Income; BB U.S. Aggregate Index; Broad US Equity: Russell 3000 Index; International Equity: MSCI ACWI ex-US Index

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Public Employees Retirement System & Teachers Retirement System (PRS and TRS) – Pension and Health Defined Benefit Plans

Historical Invested Assets (in billions)

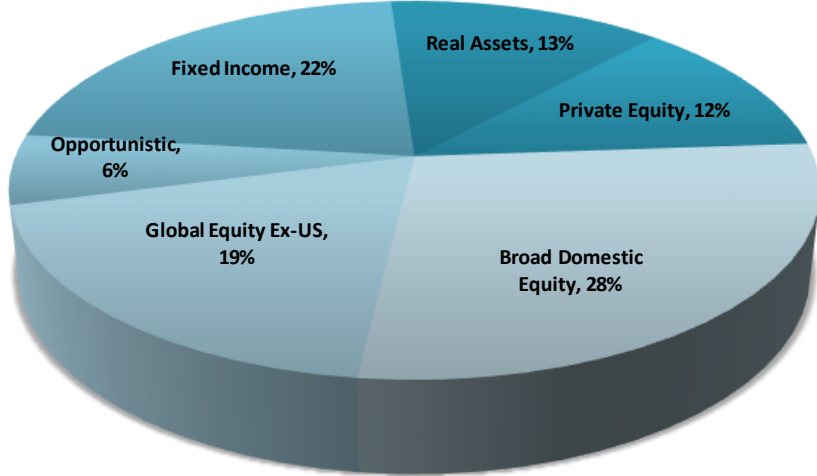
- The Alaska Retirement Management Board (ARMB) is a 9-person board that is the fiduciary of the state's pension and health systems.
- The defined benefit plans currently experiences net outflows from the funds.
- The 36-year return Average for PRS/TRS was 8.91%.



Data is at fiscal year end of June 30.

Public Employees Retirement System & Teachers Retirement System

Fiduciary oversight: Alaska Retirement Management Board

		PERS Retirement Defined Benefit Pension & Health	TRS Retirement Defined Benefit Pension & Health
Investment Objective		High Risk, Long Term investment horizon	High Risk, Long Term investment horizon
Target Asset Allocation			
Market Value (\$thousands)		Actuals	Actuals
	12/31/2016	\$15,449,400	\$7,701,400
	12/31/2017	\$17,097,800	\$8,477,000
	12/31/2018	\$16,076,200	\$7,917,500
	12/31/2019	\$17,974,600	\$8,786,500
	12/31/2020	\$19,573,300	\$9,478,500
Returns as of 09/30/220		Actuals ²	Benchmark ^{1,2}
	3 Month	4.05%	4.31%
	1 Year	7.12%	8.47%
	3 Year	6.82%	6.40%
	5 Year	8.55%	8.39%
Actuarially Assumed Rate of Investment Return: 7.38% (ARMB voted to approve a revision from 8% to 7.38% at the 1/11/2019 board meeting)			

1) 28.0% Russell 3000, 22.6% MSCI ACWI ex-US IMI Net, 23.3% BB US Aggregate, 1.1% 3-month T-bill, 4.9% NCREIF NFL-ODCE, 3.3% NCREIF Farmland, 1.3% NCREIF Timber, 2.3% CPI = 4%, 1.3% FTSE NAREIT All Equity, 4.0% S&P 500, 4.0% Russell 2000, and 4.0% MSCI EAFE Net

2) Rates listed net of fees

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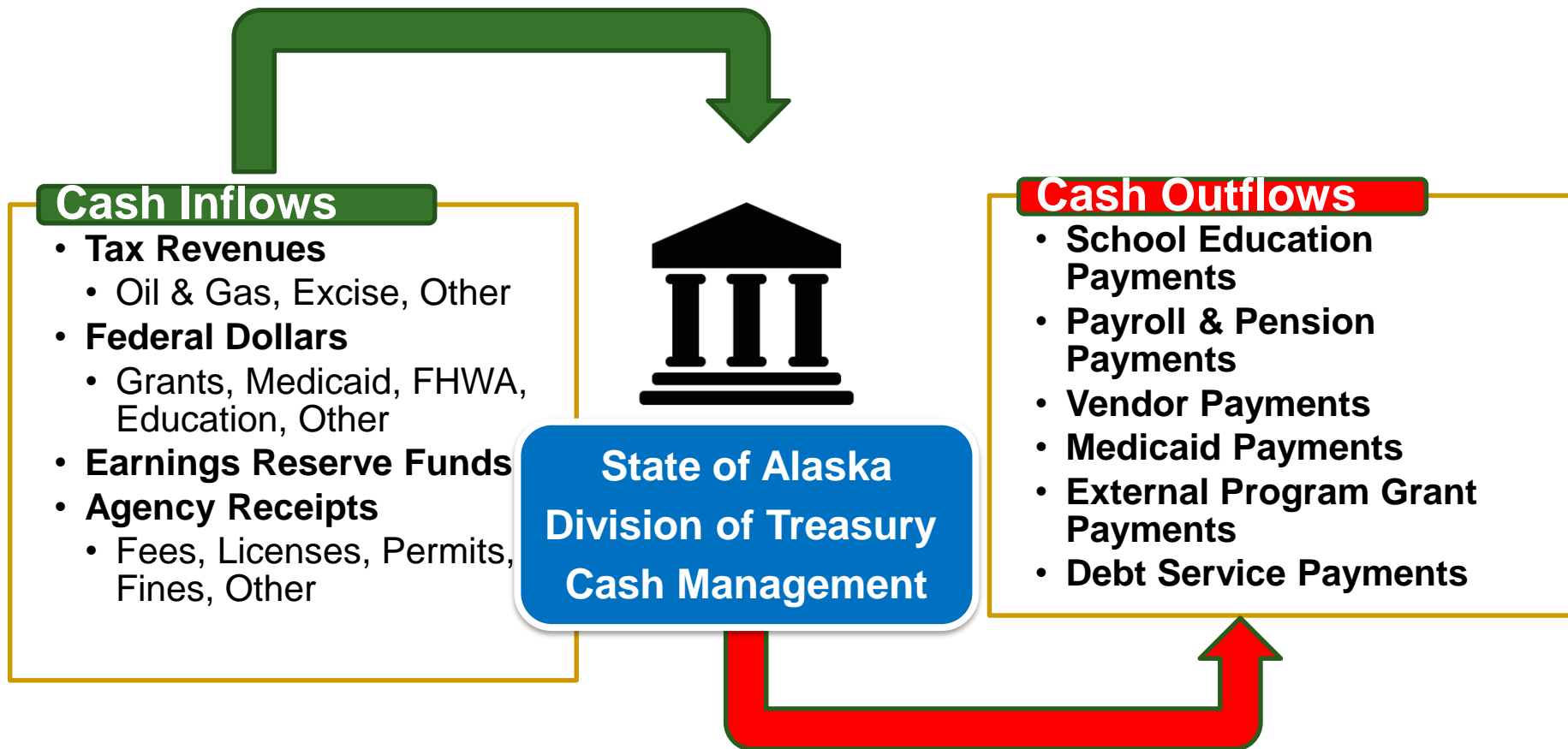
State Cash Flows

Cash vs. Accrual balances

- Cash balance is what you have in the bank at a given point in time.
- Accrual balance is what you have earned and what liabilities have been 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.

Treasury fund balances are cash balances, not what is available to spend.

SOA Treasury Cash Flow



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 cash flow timing mismatches:
 - Federal programs require expenditures before reimbursement.
 - i.e. Medicaid, Transportation, etc.
 - Beginning of year appropriation transfers do not match incoming revenue.
 - i.e. State pension payments, transfers to subfunds.
 - Seasonal Cash Flow needs.
 - i.e. Summer is the peak season for construction projects and seasonal workers.

Cash Deficiency Memorandum of Understanding

- Developed in 1994 between DOR, DOA, OMB & LAW.
- Updated as needed.
- Targets \$400m minimum cash threshold in the General Fund proper.
- Outlines procedures for addressing cash flow timing mismatches:
 - Develop monthly cash projections.
 - Monitor daily general fund cash balances.
 - Perform temporary interfund borrowing.
 - Transfer from SBR, CBR & ERA or sub funds.
 - In the event of revenue shortfall:
 - Seek legislative action through the Governor to access additional funds through appropriation from other Cash Reserve Funds discussed above.
 - Prioritize disbursements, restrict expenditures.

Cash Flow Deficiencies

- Use of budget reserve funds has been the solution of cash flow timing mismatches and revenue shortfalls.
- Appropriations From Reserve funds
 - The Legislature includes language annually in the operating budget appropriating budget reserve funds for revenue shortfalls.
 - Treasury has relied on this appropriation to authorize use of budget reserve funds to address timing cashflow mismatches as well.
 - The CBRF was fully repaid by FY10.
 - Borrowing from the CBRF recommenced in FY14.
 - Per FY19 CAFR \$12.6B is owed to CBRF.

Revenue Volatility Management

Revenue Volatility has transitioned and now comes from:

- Commodity Volatility
 - Petroleum revenues are 19% of FY22 projected unrestricted general fund revenues.
 - Uncertainty exists "in-year" for FY22.
 - Will always have in-year uncertainty because we base budget on in-year oil collections.
- Investment Return Volatility
 - Investment earnings are 72% of FY22 projected unrestricted general fund revenues.
 - Certainty exists today for FY22 (lagging POMV formula).
 - Uncertainty today for FY23 and beyond.

Volatility Management Techniques

- Access Cash Reserve and Other Funds (CBR and other fund balances).
- Modernize fiscal tools to include lines of credit in addition to revenue anticipation notes.
- Manage timing of Earnings Reserve Account transfers to the General Fund.
- Manage timing of expenditures.

Take Aways

- Declining cash reserves will continue to be a concern if budget deficits continue.
- Even if the budget is balanced, and all revenue is received, cash flow timing mismatches will occur.
- Cash flow forecasting is always wrong.
- Revenue shortfalls may occur if forecasted assumptions are wrong.
- Higher revenue volatility requires greater cash reserves until volatility decreases.
- Volatility management techniques are available.

THANK YOU

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