Comparing Alaska Fiscal Proposals

Gunnar Knapp
Professor Emeritus of Economics
UAA Institute of Social and Economic Research (ISER)

Prepared for
Alaska Legislature House Finance Committee

January 25, 2017

About me . . .

- Former ISER Director and Professor of Economics
- Studied Alaska fiscal issues
- Retired end of June 2016
- Now a “Professor Emeritus”
- All of my work on fiscal issues is voluntary
  - Not being paid by anyone
  - My attempt at public service
  - All opinions are my own

What I'll talk about

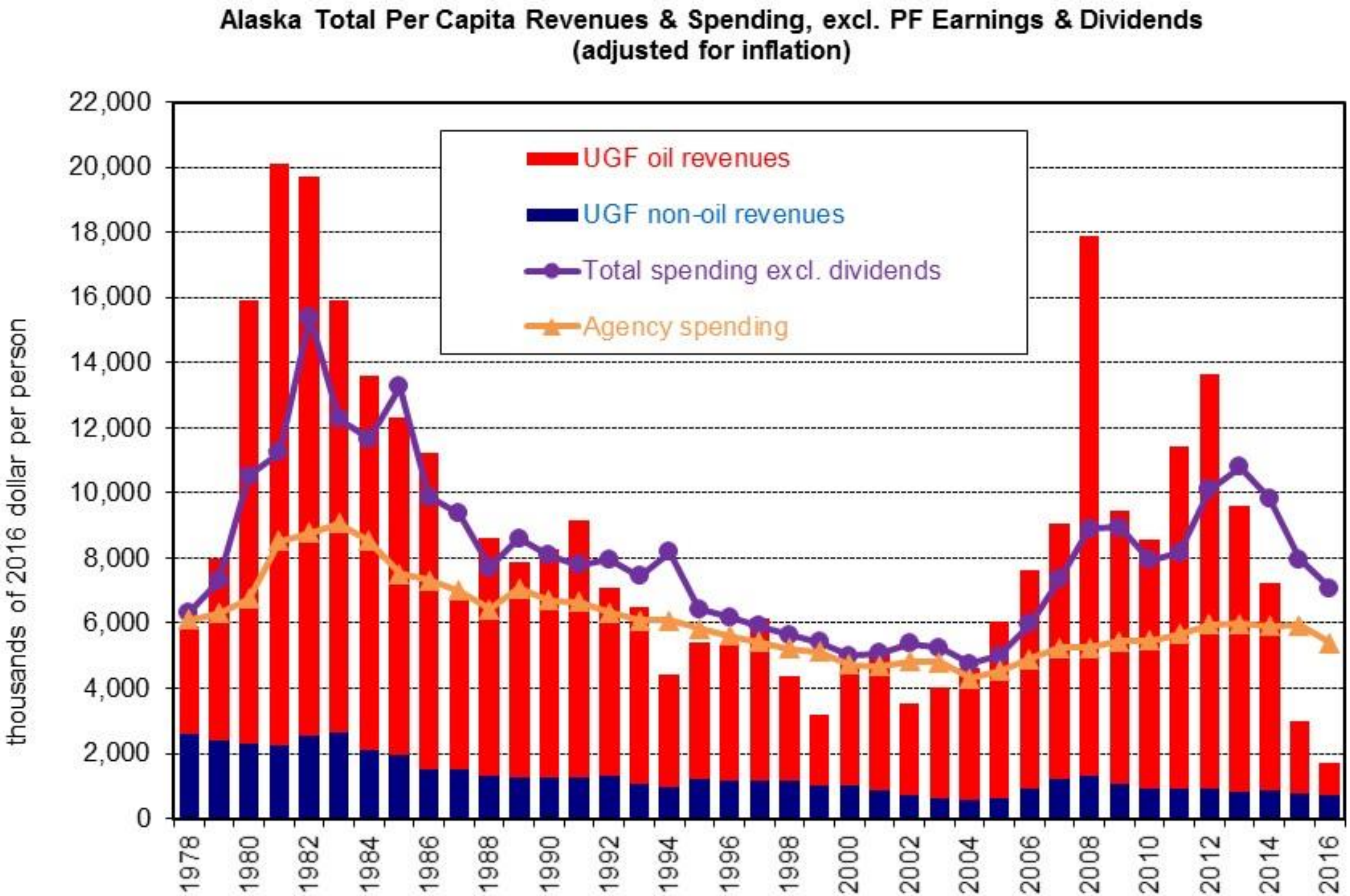
- Alaska faces a major fiscal challenge
- Fiscal proposals are emerging for what we should do
- How do these proposals compare over time?

I am <u>not advocating</u> for or against any proposal.

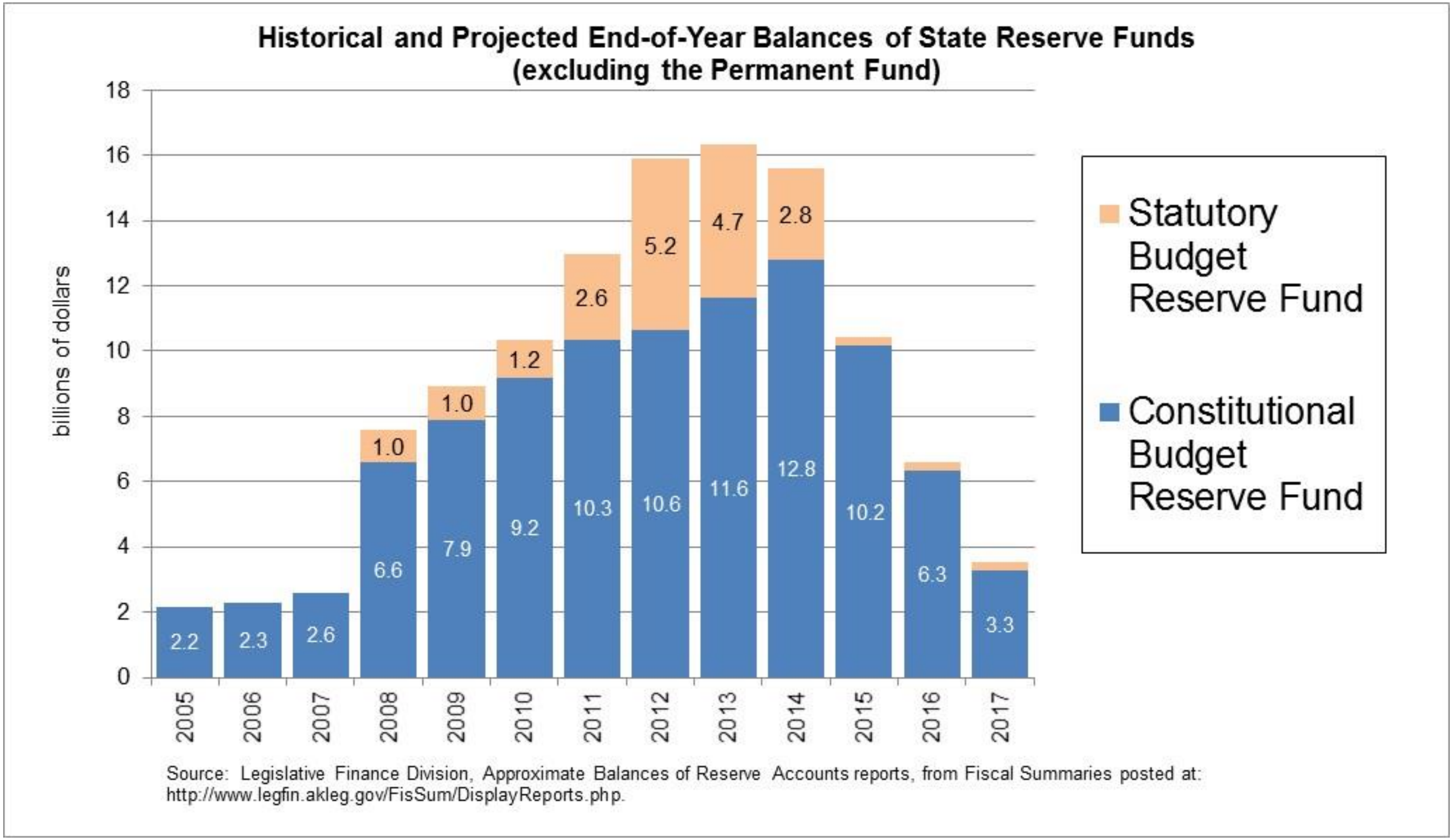
I only want to:

- help people understand the proposals
- show a way of thinking about them

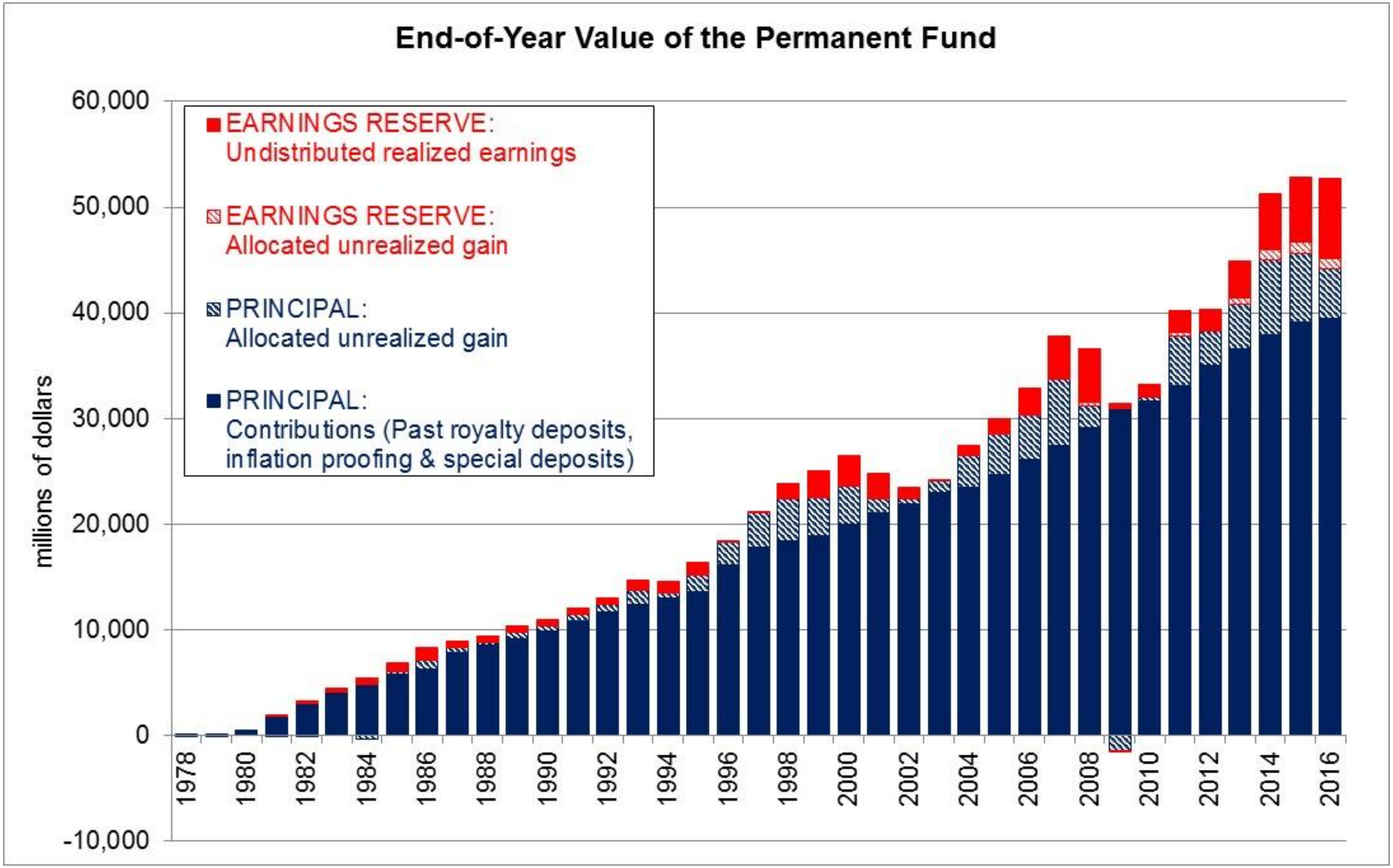
A long-term look at Alaska's revenues and spending . . .

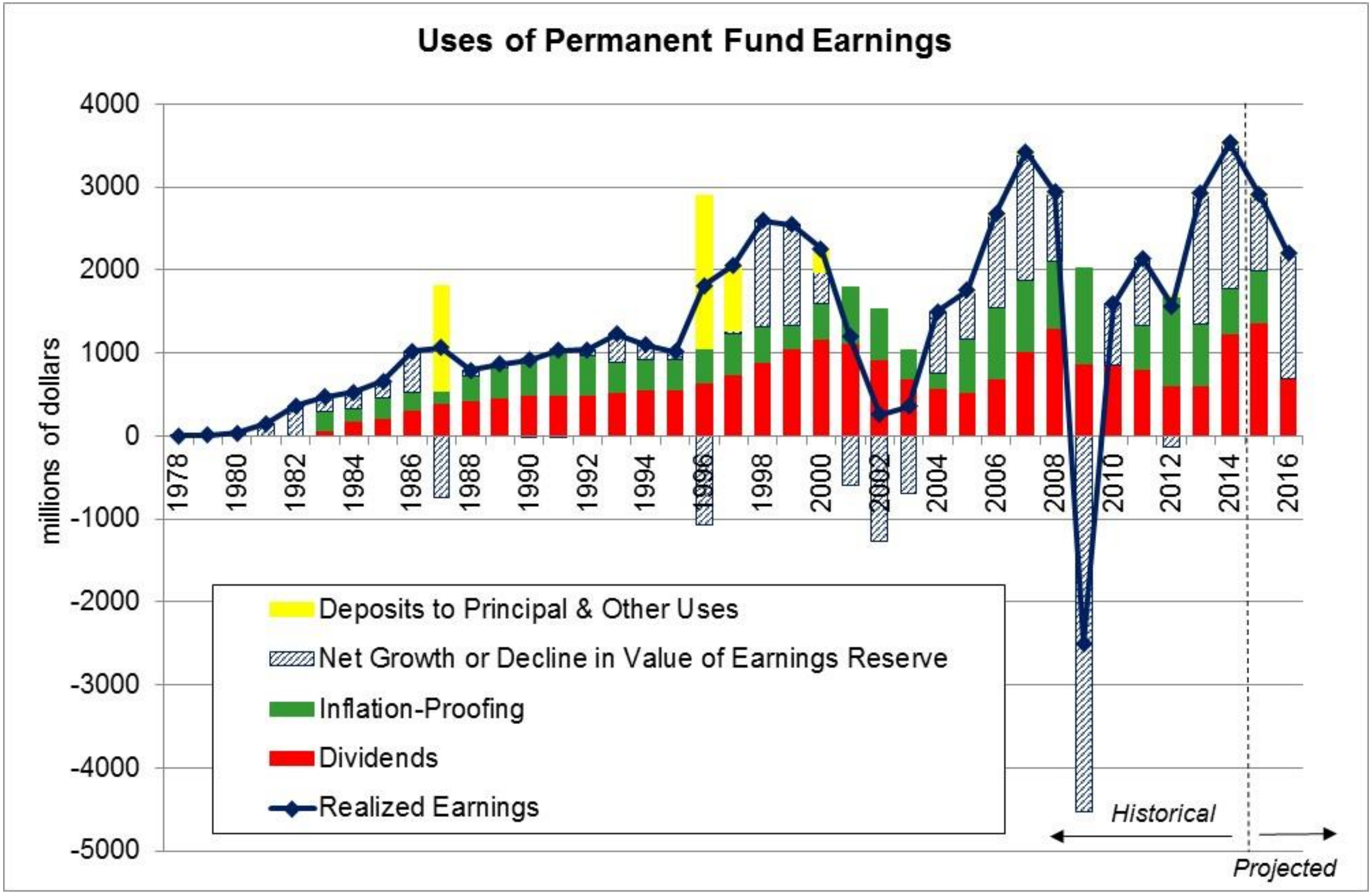


Trends in our savings . . .



Trends in the Permanent Fund . . .





Uses of Permanent Fund Earnings
millions of dollars
4000
3000
2000
1000
0
-1000
-2000
-3000
-4000
-5000
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Deposits to Principal & Other Uses
Net Growth or Decline in Value of Earnings Reserve
Inflation-Proofing
Dividends
Realized Earnings
Historical
Projected

Key issues in the fiscal debate:

Should we begin using some of the Permanent Fund earnings to help pay for state government?

If so, how?

- Annual “general fund draw”?
- Reduce dividends so the “general fund draw” can be bigger?

I made an "Alaska fiscal model" to compare fiscal proposals.

- Nothing magic about it
- Just a big Excel spreadsheet
- A relatively simple model
- Provides a starting point for discussion
- Not a substitute for detailed models of:
  - Legislative Finance Division
  - Department of Revenue
  - OMB
  - Alaska Permanent Fund Corporation
  - Proposers of specific legislation

Assumptions are critical to any fiscal projections

- Future oil revenues
  - Future oil prices
  - Future oil production

- Future investment income
  - Permanent Fund total and statutory rates of return

If we use really optimistic assumptions,
we don't have a problem.

If we use really pessimistic assumptions,
we have a huge problem.

Most fiscal projections you see are based on

The Department of Revenue's most recent oil revenue assumptions

From Alaska Department of Revenue *Fall 2016 Revenue Sources Book*

Chapter 2
5

Total Unrestricted General Fund Revenue
A 10-year forecast

	History	Forecast									
Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Petroleum	1,109.5	966.9	1,099.8	1,344.2	1,360.6	1,378.3	1,430.6	1,438.2	1,453.7	1,532.9	1,562.0
Non-Petroleum	407.8	461.2	491.9	487.0	495.5	505.5	512.7	522.7	533.6	545.0	557.3
Investment	22.5	18.6	32.4	41.5	50.7	59.8	69.0	78.1	87.2	96.4	105.5
Total Unrestricted Revenue	**1,539.8**	**1,446.7**	**1,624.1**	**1,872.7**	**1,906.7**	**1,943.7**	**2,012.4**	**2,039.0**	**2,074.5**	**2,174.3**	**2,224.8**

Millions of Dollars

Rising from $1.5 billion in FY16 to $2.6 billion in FY26

The Permanent Fund Corporation's average rate-of-return assumptions

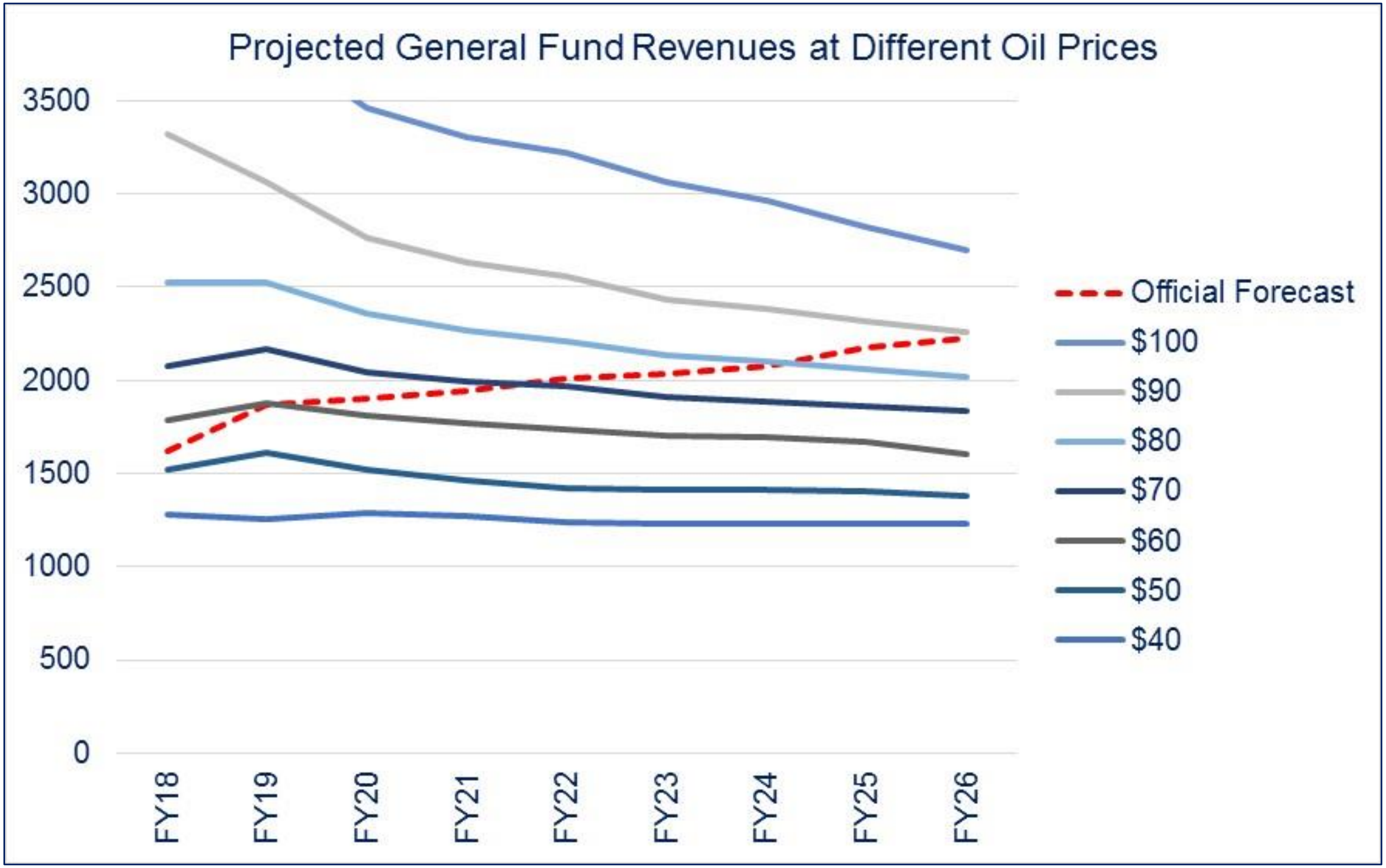
From Alaska Permanent Fund Corporation Financial History & Projections as of November 30, 2016

Assumptions:		Total Return	- Inflation	= Total Real Return	Statutory Return	
Lo	FY 2017	-6.84%	2.25%	-9.09%	Lo	3.51%
Mid	FY 2017 (6)	**6.70%**	**2.25%**	**4.45%**	Mid	**5.43%**
Hi	FY 2017	22.26%	2.25%	20.01%	Hi	8.15%
	FY 2018-2026 (7)	6.95%	2.25%	4.70%		6.24%

6.95% total rate of return & 6.24% statutory rate of return

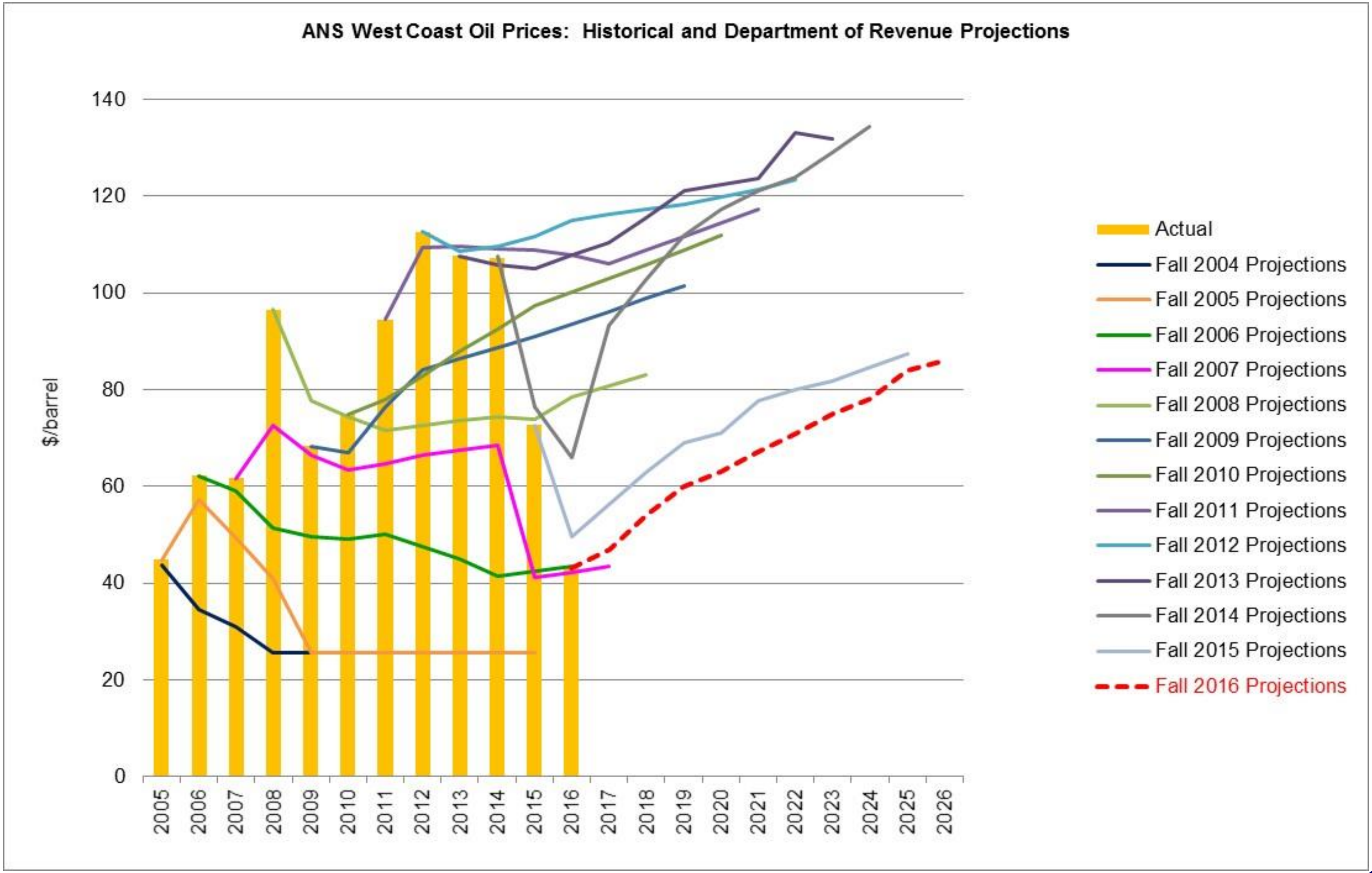
But these revenues and returns won't actually happen!

If oil prices are different than what the Department of Revenue projected, our revenues will be different.

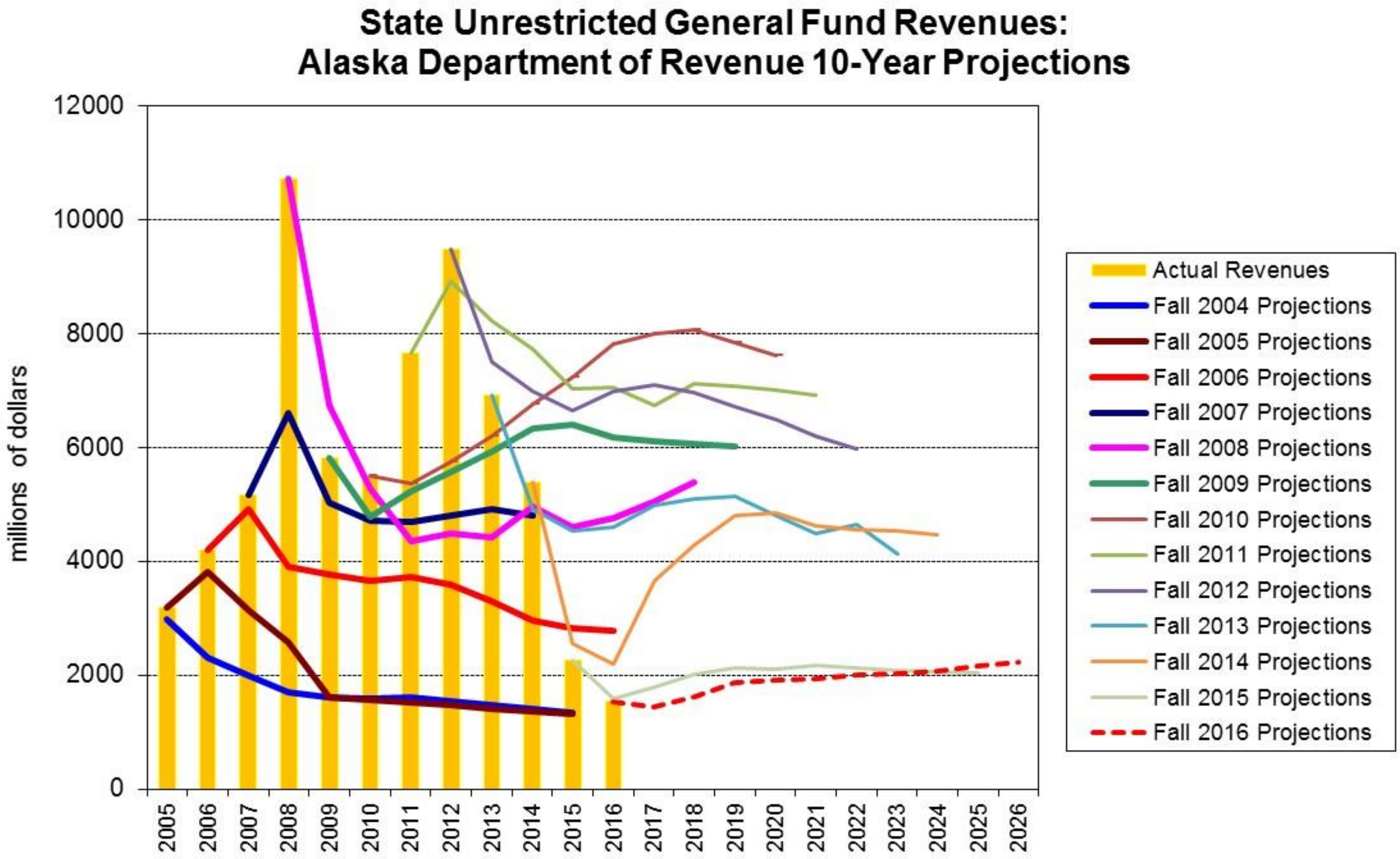


Source: Alaska Department of Revenue Fall 2016 revenue projections

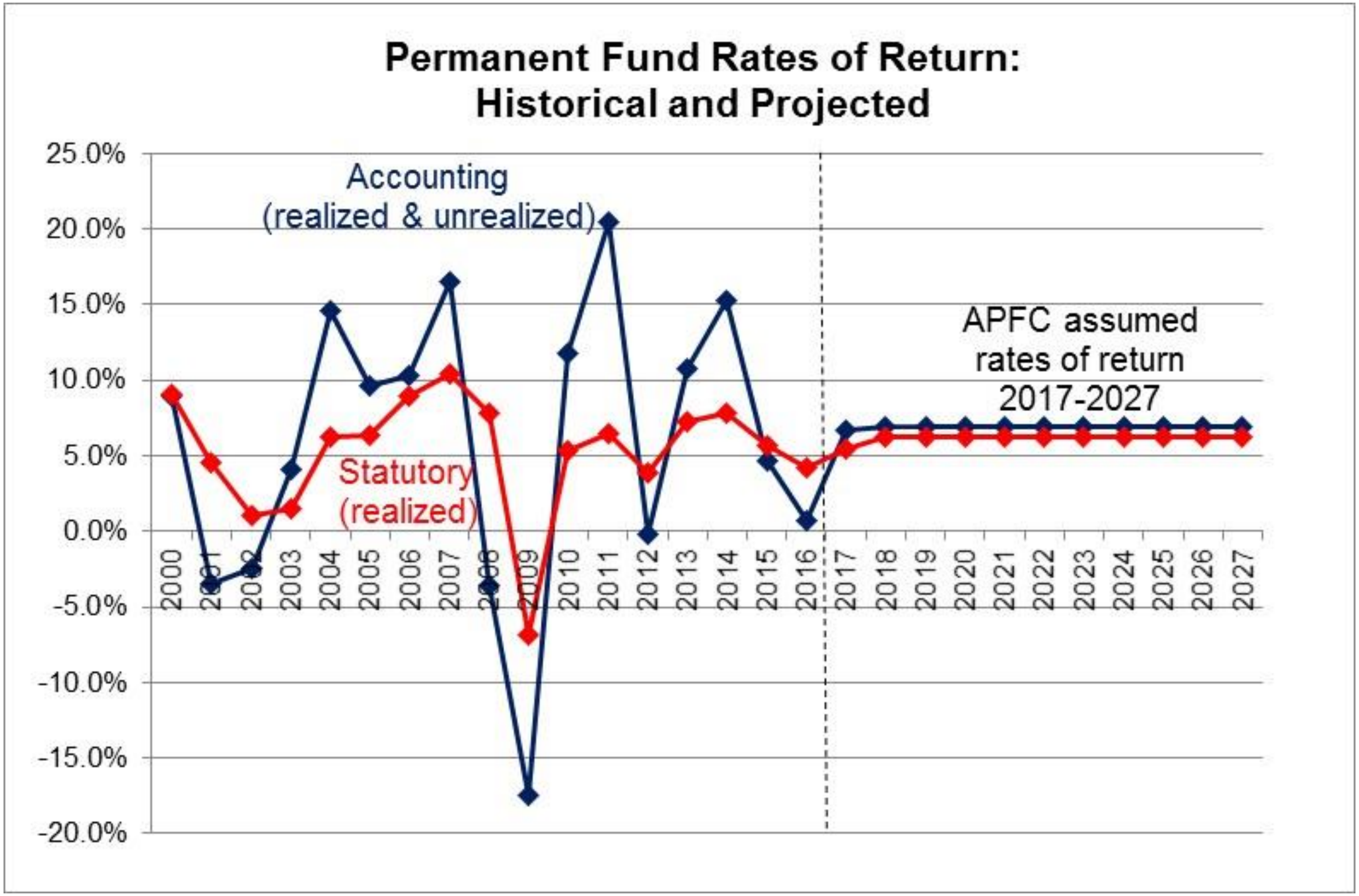
Oil prices have always been different from what the Department of Revenue projected



Historically, our actual revenues have differed drastically from what the Department of Revenue projected a few years earlier.



Historically, Permanent Fund rates of return have always fluctuated widely.



Source: Alaska Permanent Fund Financial History and Projections as of November 30, 2016.
http://www.apfc.org/home/Content/publications/reportArchive.cfm

If we can’t accurately predict our oil revenues or investment returns, what <u>should</u> we assume about them when we make fiscal projections???

Not just one set of assumptions!

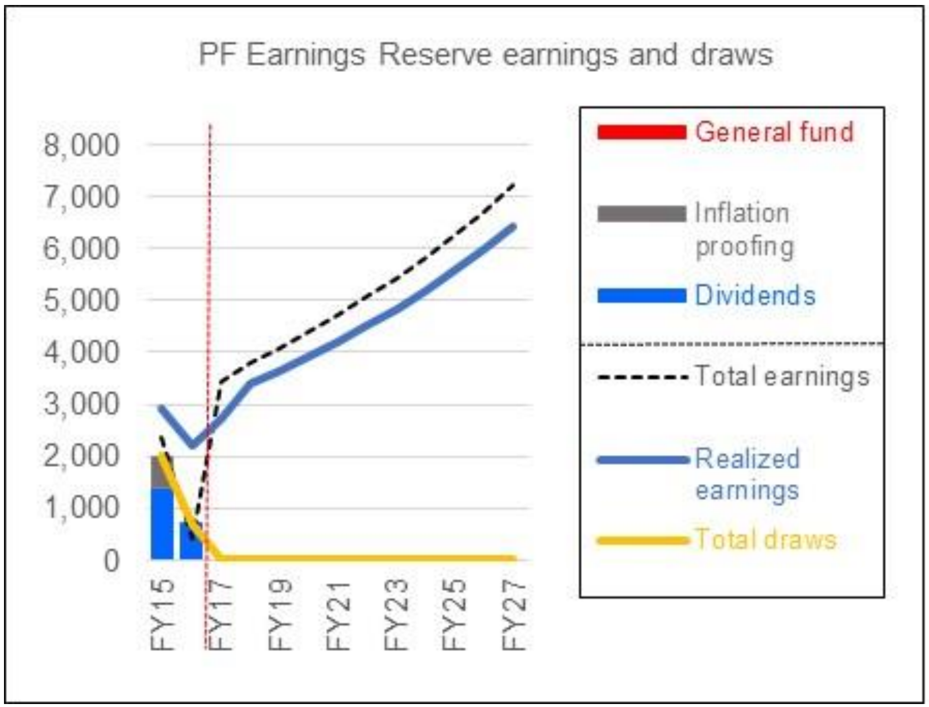
We should look at the implications of a range of plausible assumptions.

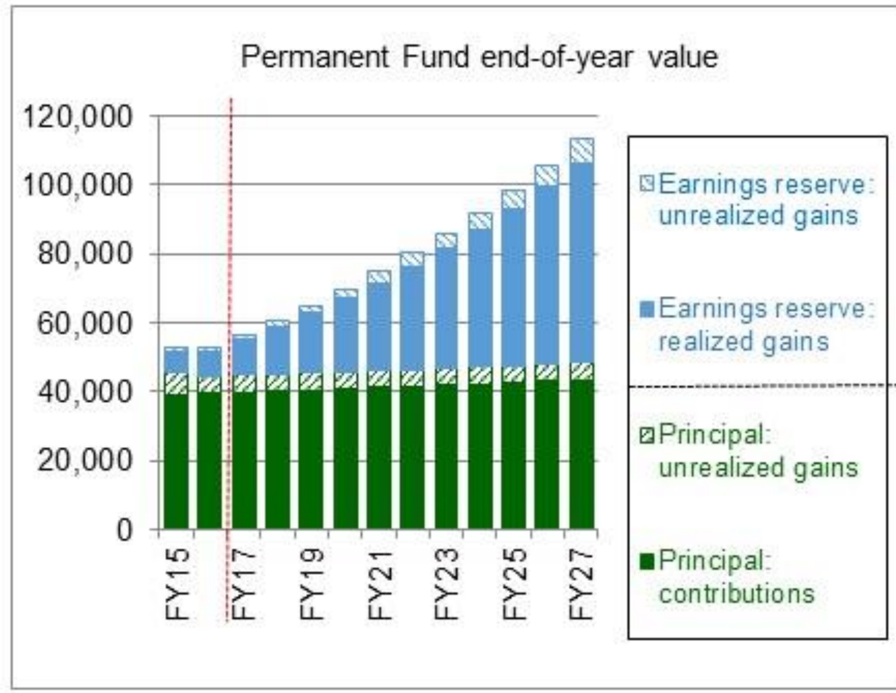
I'll show the implications of two sets of assumptions for future Permanent Fund rates of return

Name	Assumptions
APFC	Alaska Permanent Fund Corporation assumptions Constant 6.95% total rate of return Constant 6.24% statutory rate of return
2006-16	Actual Permanent Fund rates of return for the years 2006-2016 Highly variable!

If we don't inflation proof or draw any PF earnings. . .

The PF total value would grow to $113 billion by FY27
The PF earnings reserve would grow to $65 billion by FY27
Annual realized earnings would grow to $6.4 billion in FY27



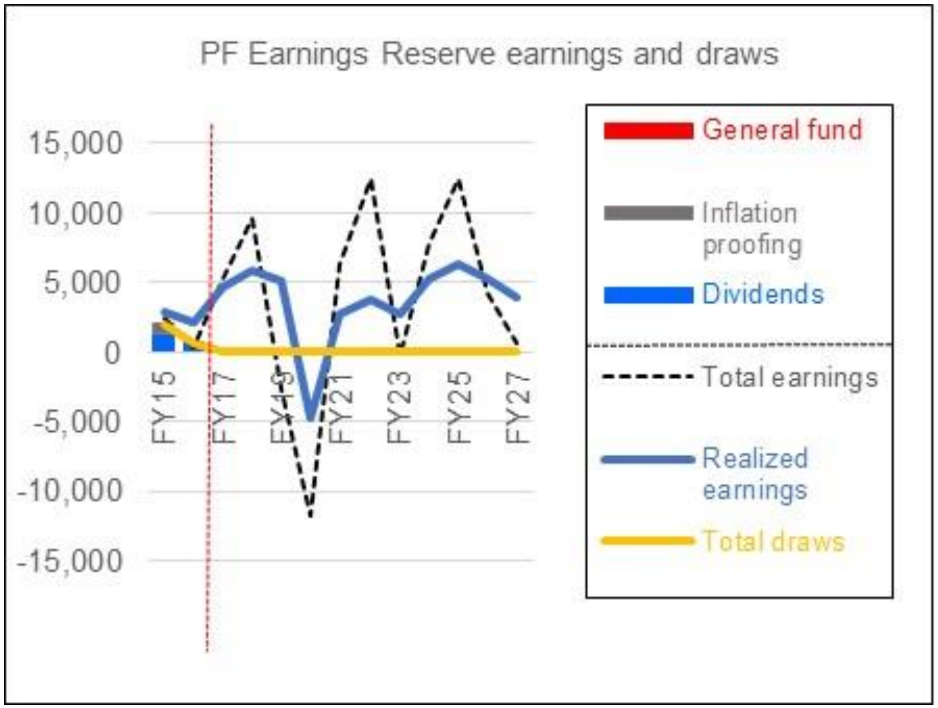


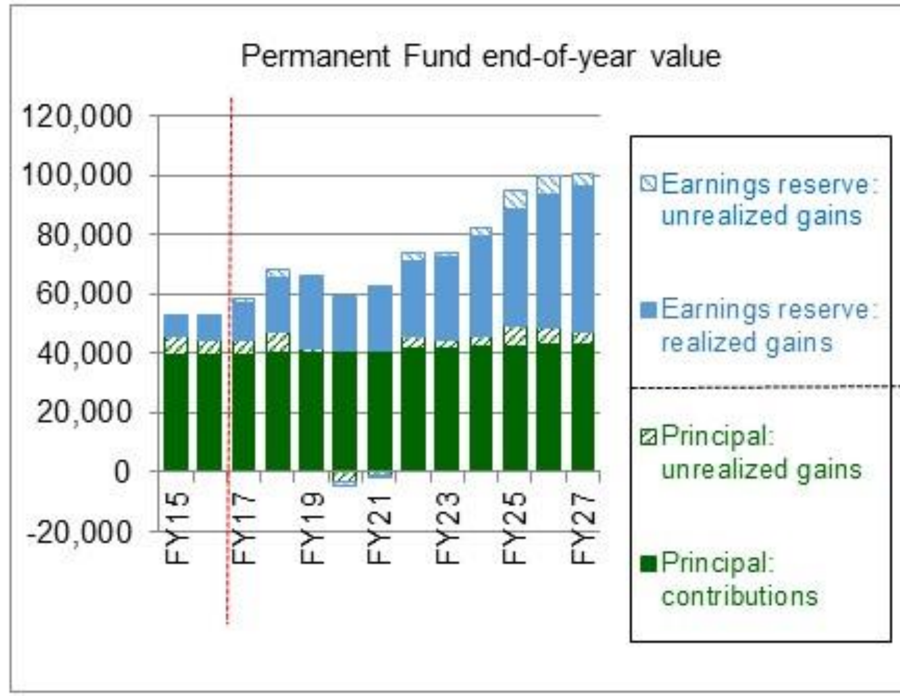
Rate of return assumptions	Inflation proofing	Dividend draw	General fund draw
APFC	none	none	none

Effect of the same rates of return as for FY06-FY17 . . .

The PF total value would grow to $100 B by FY27 ($13B less)

Earnings and growth would be much more variable!





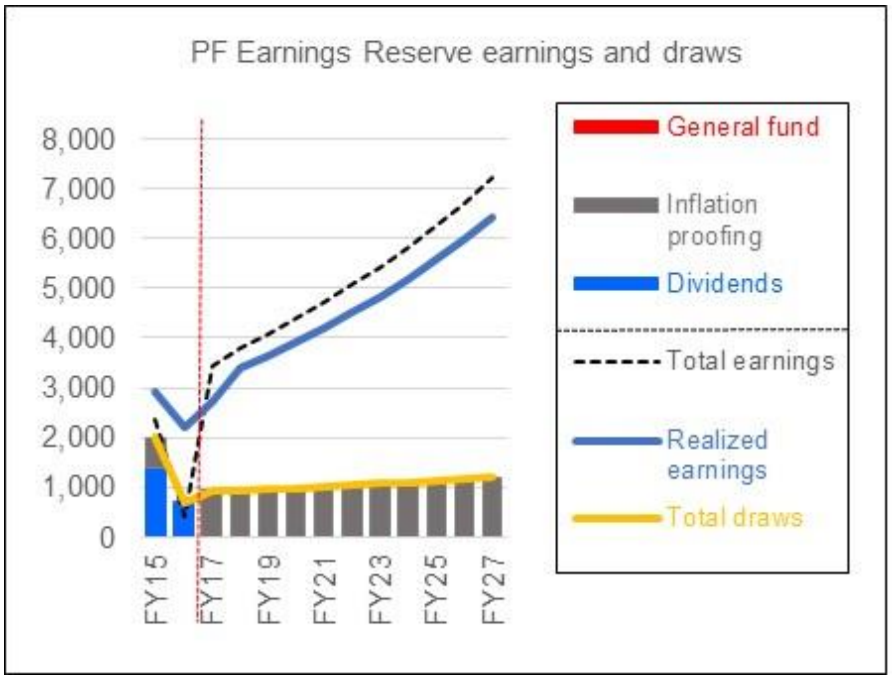
Rate of return assumptions	Inflation proofing	Dividend draw	General fund draw
FY06-FY16	none	none	none

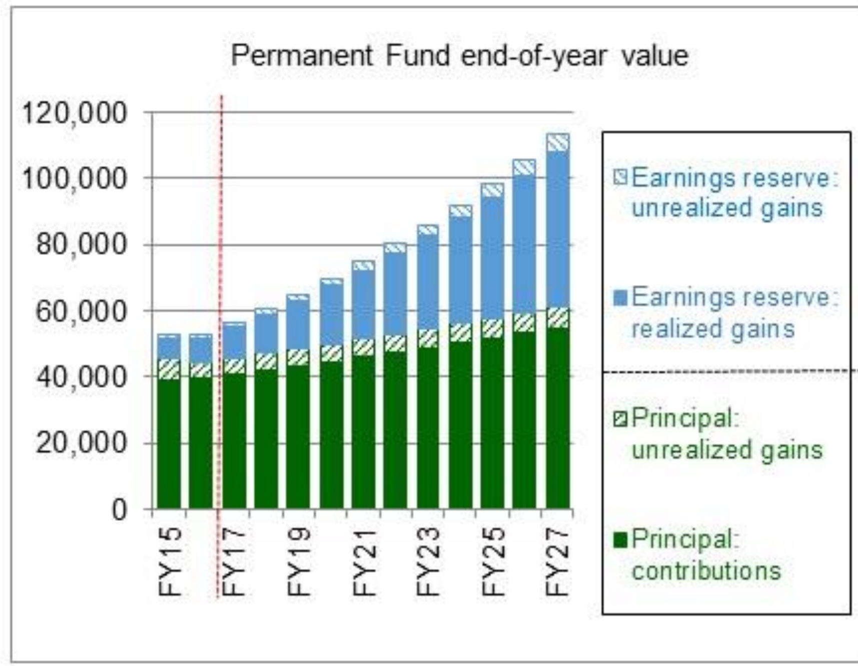
If we fully inflation-proof but don't draw any PF earnings

The fund would grow in the same way

The fund's earnings would grow in the same way

More of the fund would be in the principal and less in the earnings reserve

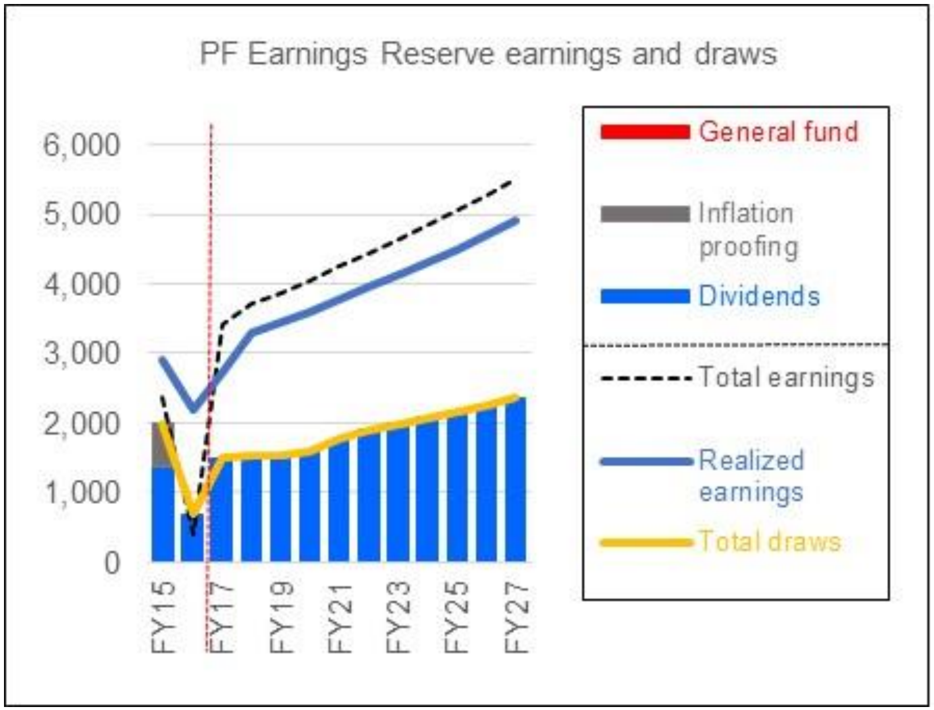


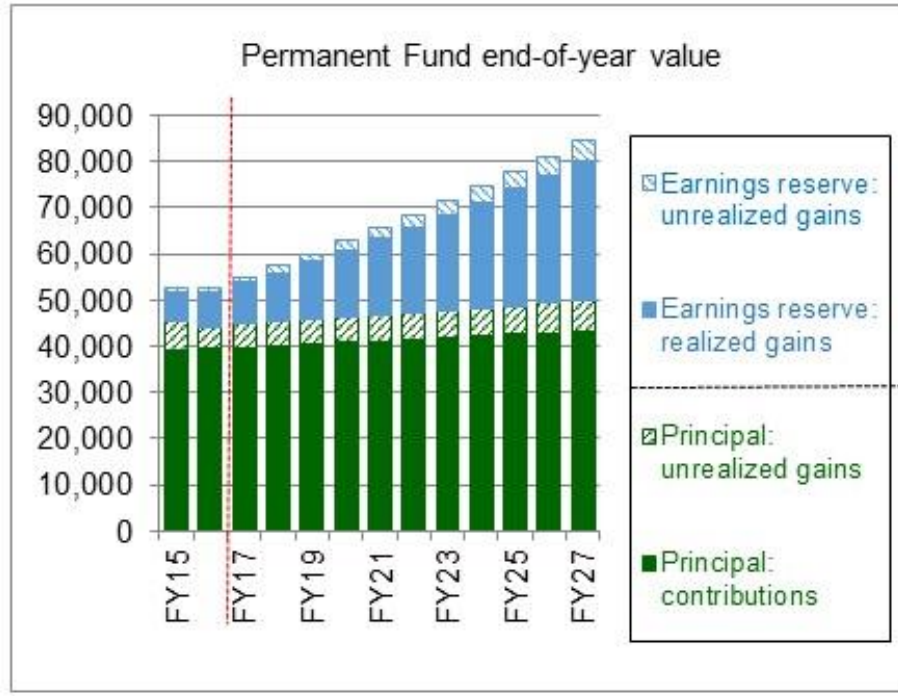


Rate of return assumptions	Inflation proofing	Dividend draw	General fund draw
APFC	full	none	none

If we don't inflation-proof and draw only dividends based on the current formula

The PF total value would grow to $84 B by FY27
The PF earnings reserve would grow to $35 B by FY27
Annual realized earnings would grow to $4.9 B in FY27
Annual dividend payouts would rise from $1.5B in FY17 to $2.4B in FY27
Dividend checks would rise from about $2260 in FY17 to $3560 in FY27





Rate of return assumptions	Inflation proofing	Dividend draw	General fund draw
APFC	none	Current formula	none

I’ll show projections for
3 hypothetical proposals and 3 actual proposals

- 500-500-500
- Cut and tax only
- Do nothing

- Dunleavy
- HB365
- Governor

The “Dunleavy,” ”HB 365” and “Governor” projections are based on my own (possibly incorrect!) understanding of the proposals, and are <u>not necessarily correct representations of what the sponsors have proposed or intend</u>.

“500-500-500” proposal

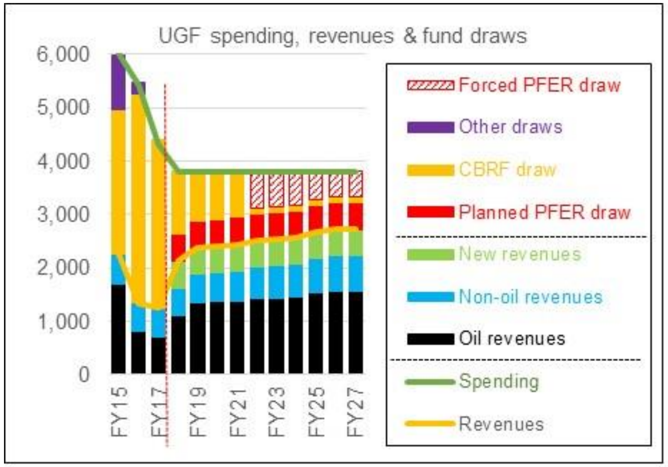
UGF Spending	New Revenues	PF general fund draw	Dividends	Other
$500 million spending cut	$500 million in new taxes	$500 million annual general fund draw	Current formula	

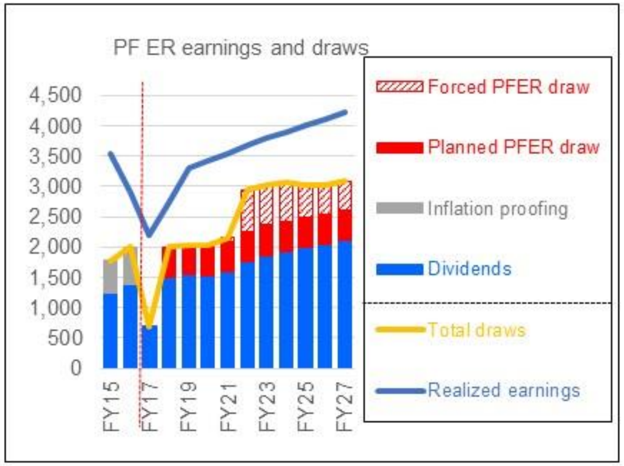
My purpose in showing this “proposal” is to illustrate how the projections work and explain the graphs.

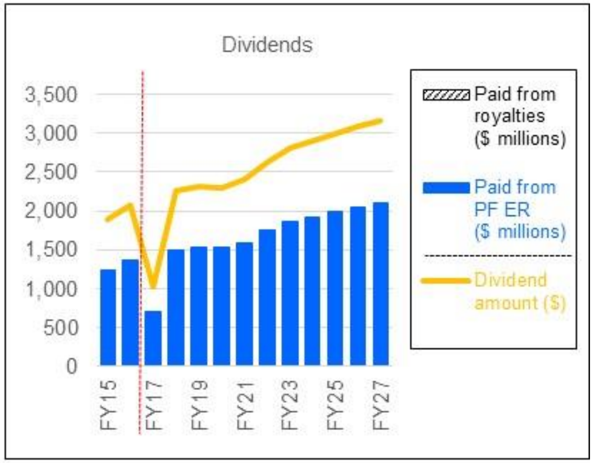
“500-500-500” Projections

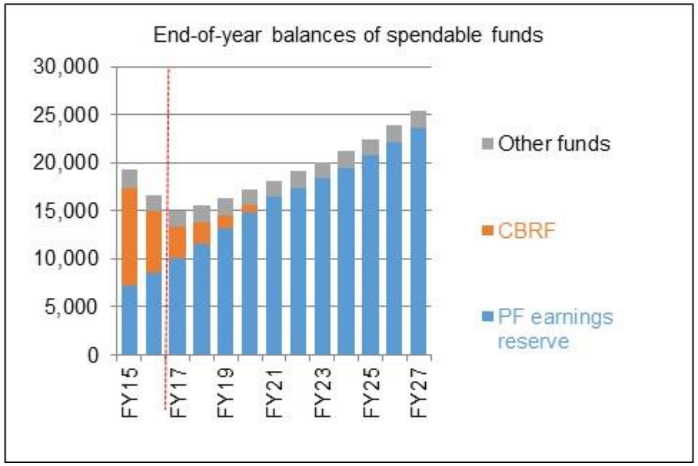
PF rate-of-return assumptions:

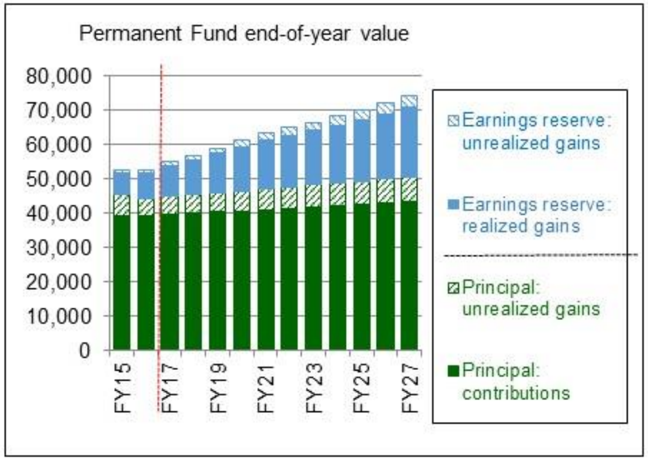
APFC







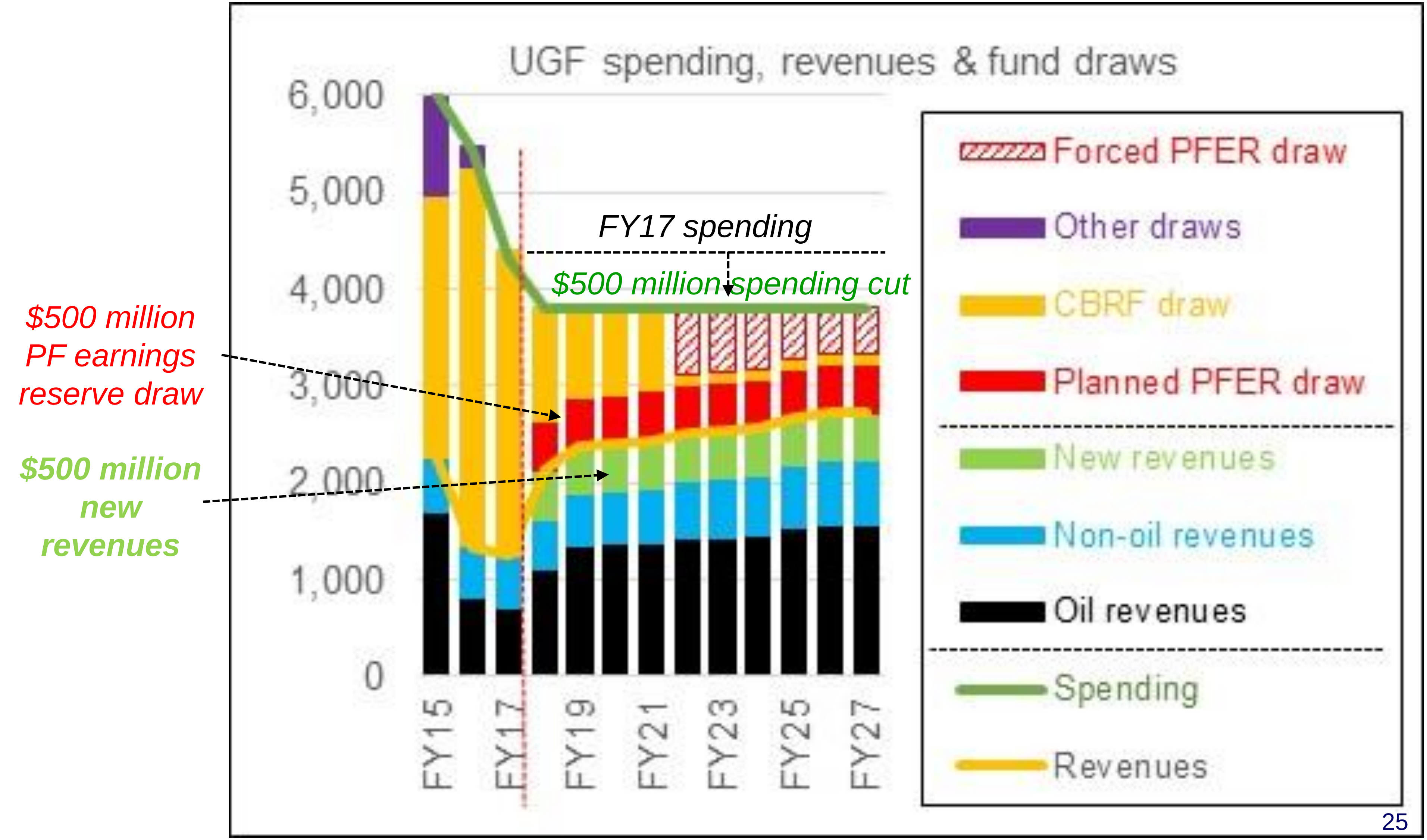




PF rate-of-return assumptions:

APFC

"500-500-500" Projections

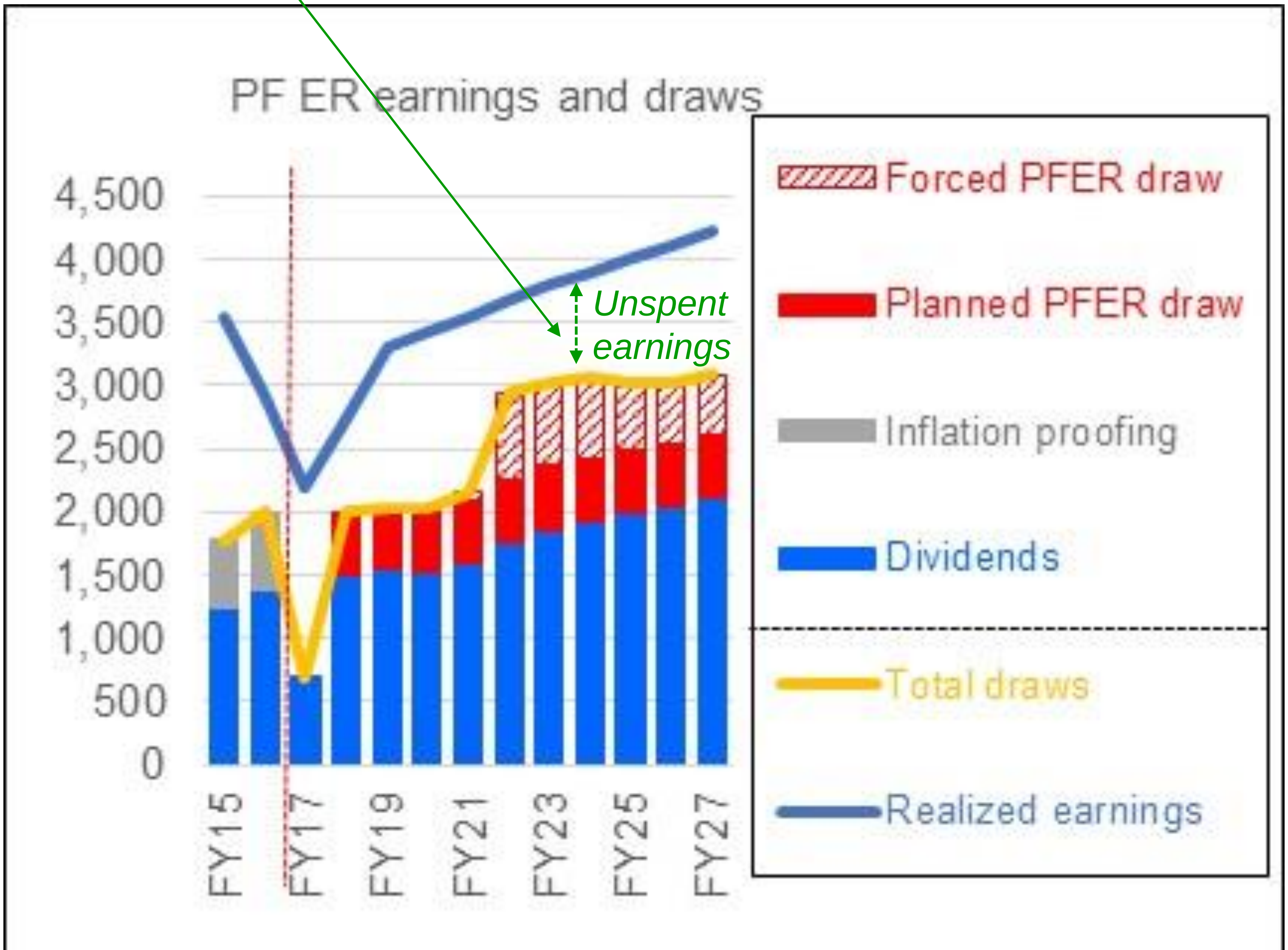


Because we are not spending all of the realized earnings, the PF earnings reserve will grow over time

"500-500-500" Projections

PF rate-of-return assumptions:

APFC



PF rate-of-return assumptions:

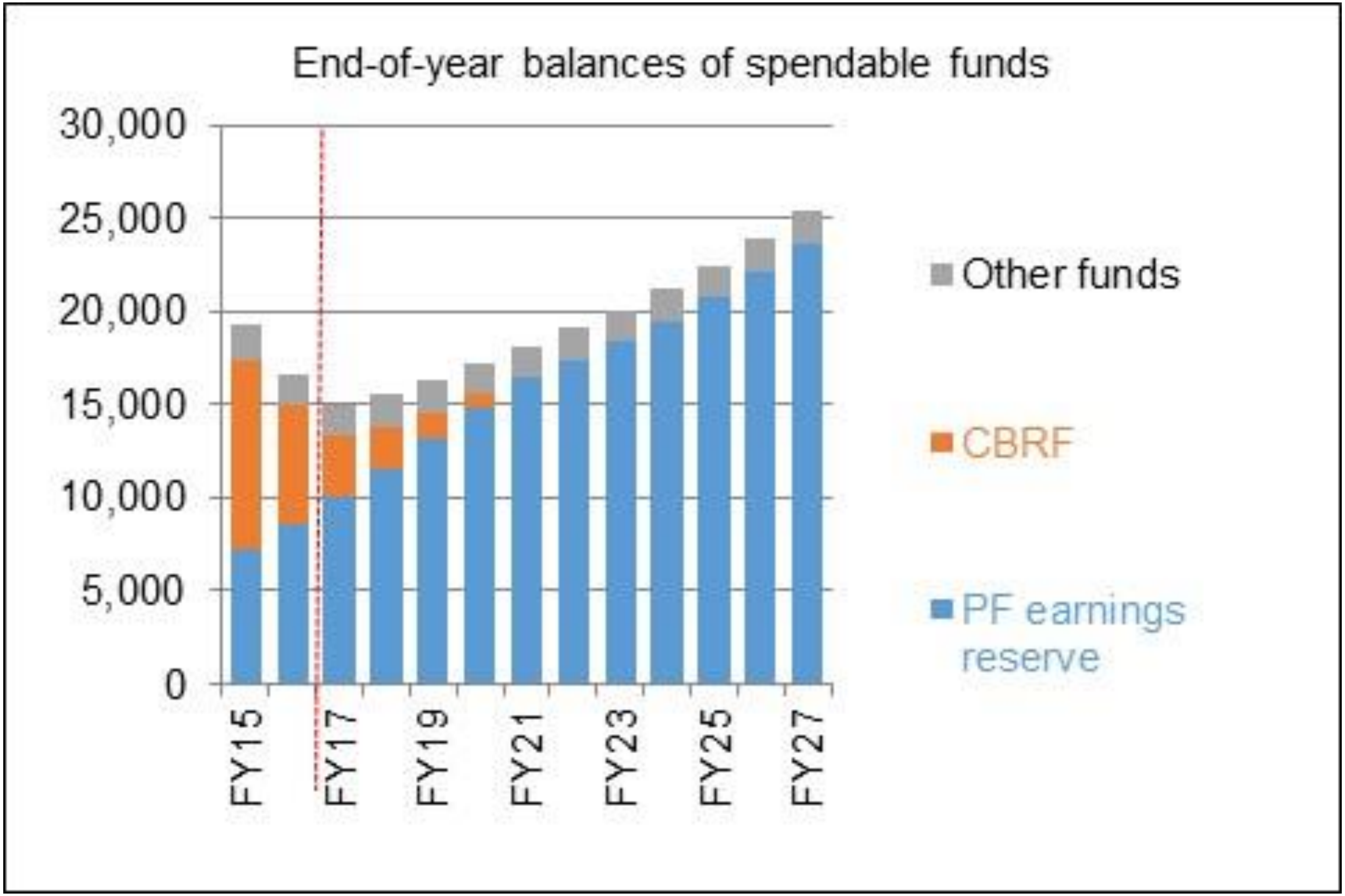
APFC

"500-500-500" Projections

PF
rate-of-return
assumptions:

APFC

“500-500-500” Projections

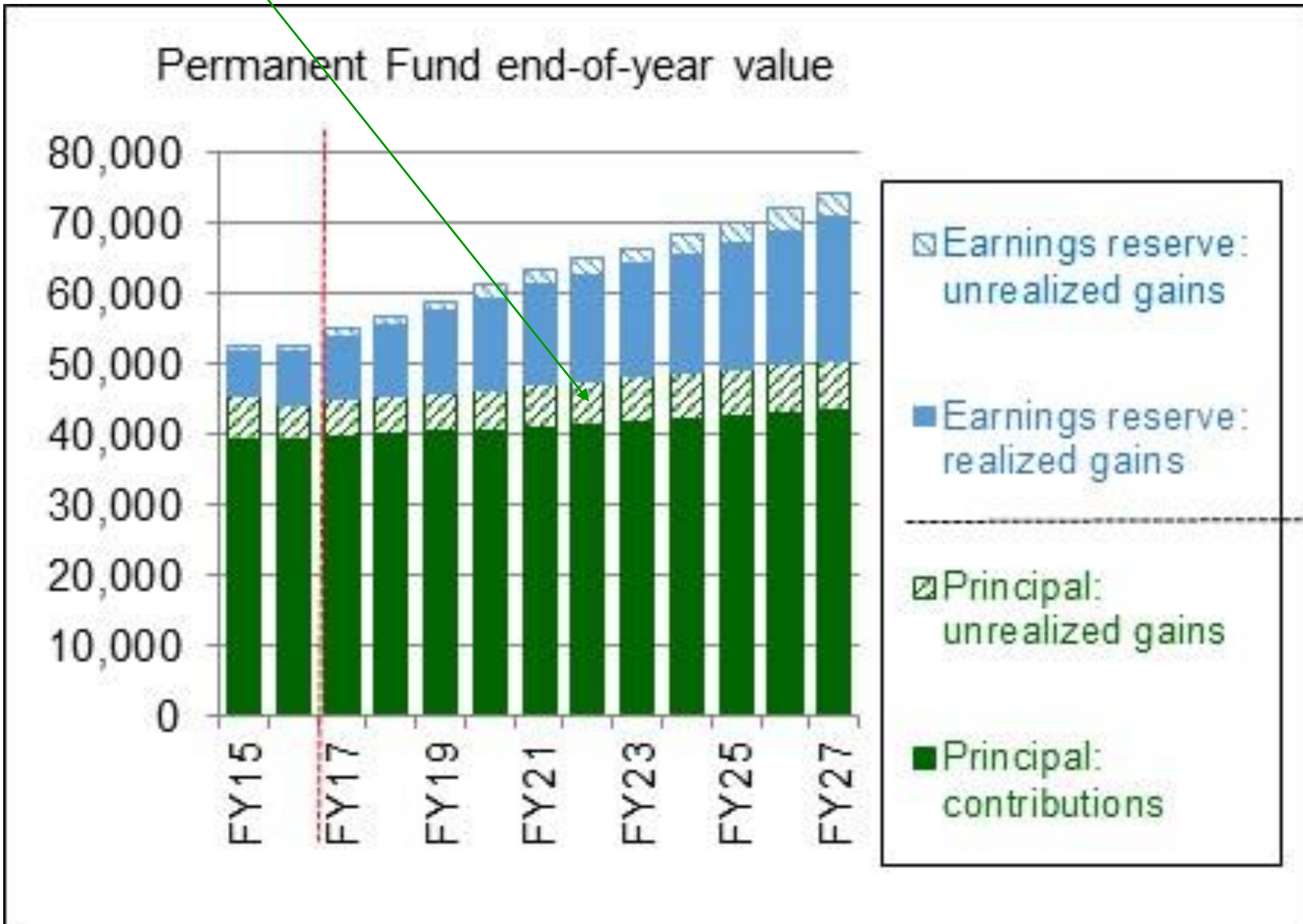


The unrealized earnings grow over time because the total rate of return is greater than the statutory rate of return

"500-500-500" Projections

PF rate-of-return assumptions:

APFC



“Cut and tax only” proposal

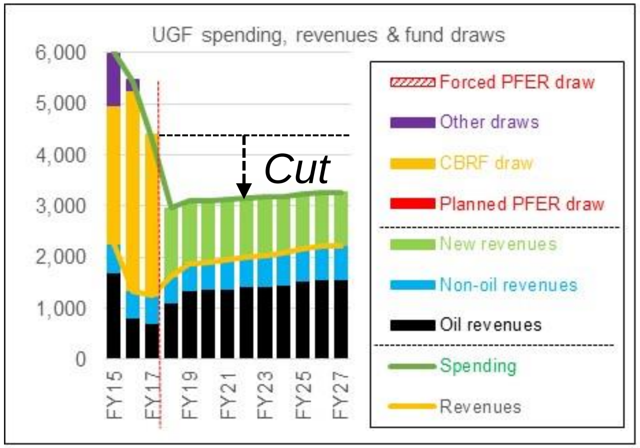
UGF Spending	New Revenues	PF general fund draw	Dividends	Other
Cut by half the deficit	Add by half the deficit	None	Current formula	

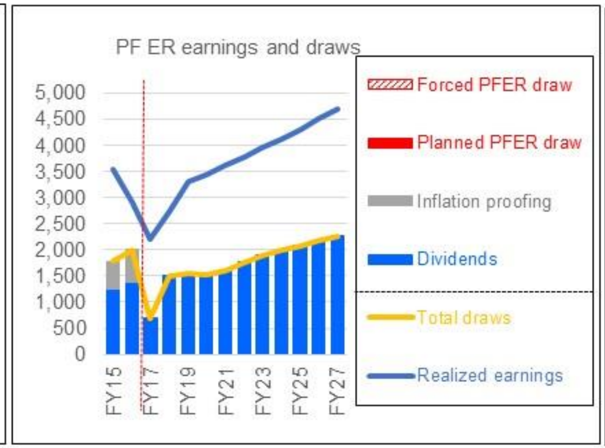
My purpose in showing this “proposal” is to illustrate how much we would need to cut spending or raise taxes to fully end the deficit if we don’t use Permanent Fund earnings.

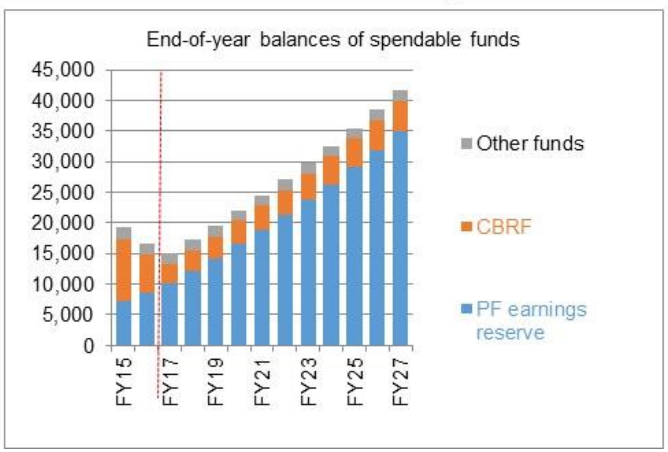
“Cut and Tax Only” Projections

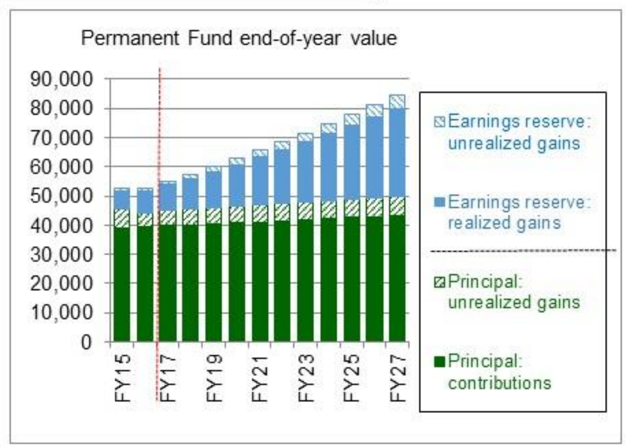
PF
rate-of-return
assumptions:

APFC









“Do nothing” proposal

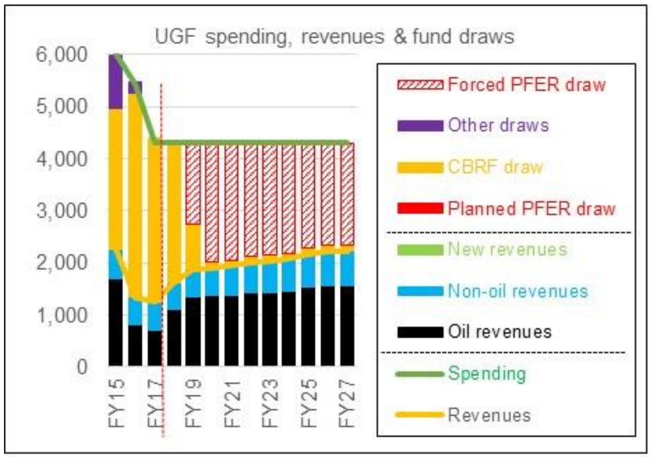
UGF Spending	New Revenues	PF general fund draw	Dividends	Other
Keep at FY17 level	No new revenues	Forced draw to cover deficits after CBRF depletion	Keep current formula	

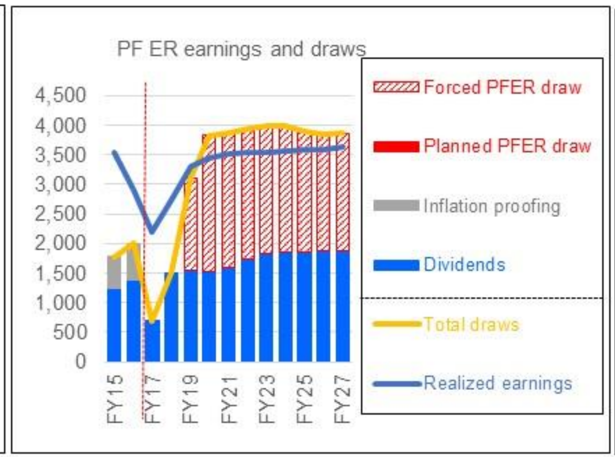
My purpose in showing this “proposal” is to illustrate how much we would be forced to draw from Permanent Fund earnings if we made no changes to spending or revenues.

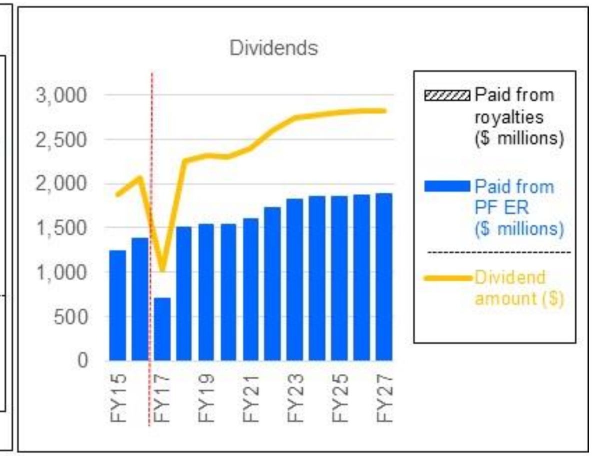
“Do Nothing” Projections

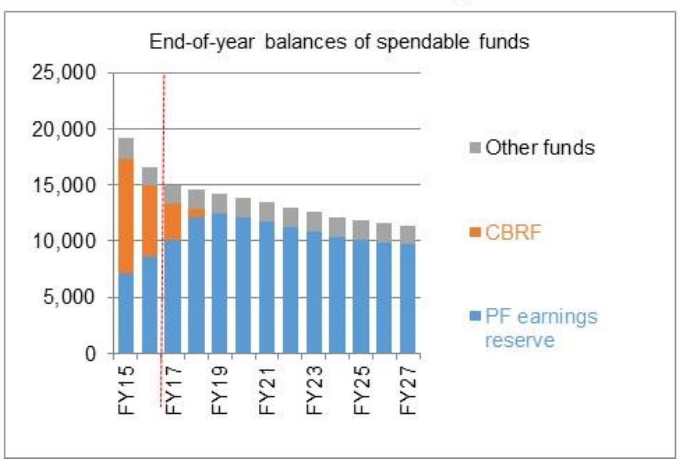
PF rate-of-return assumptions:

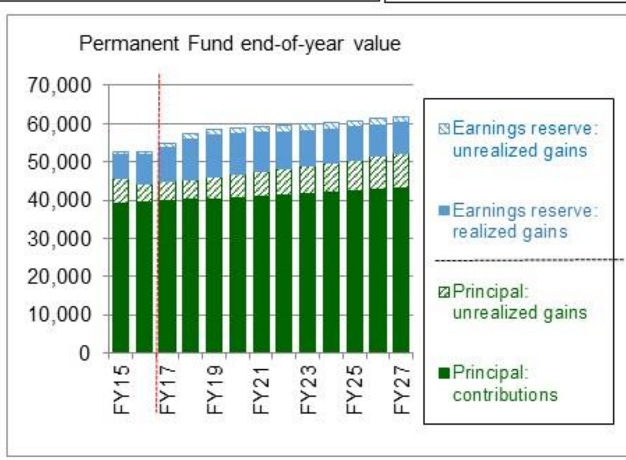
APFC







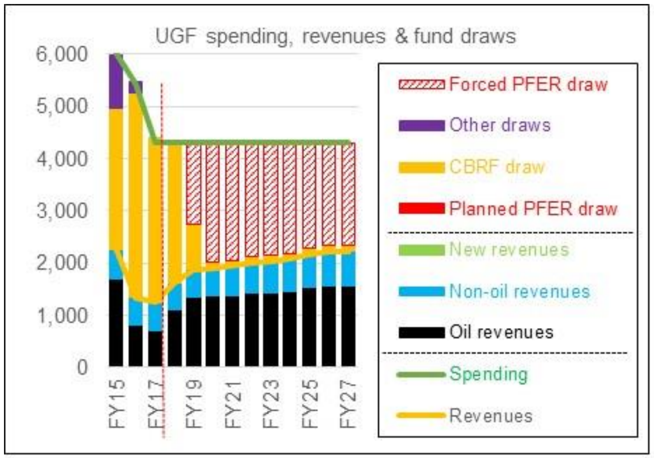


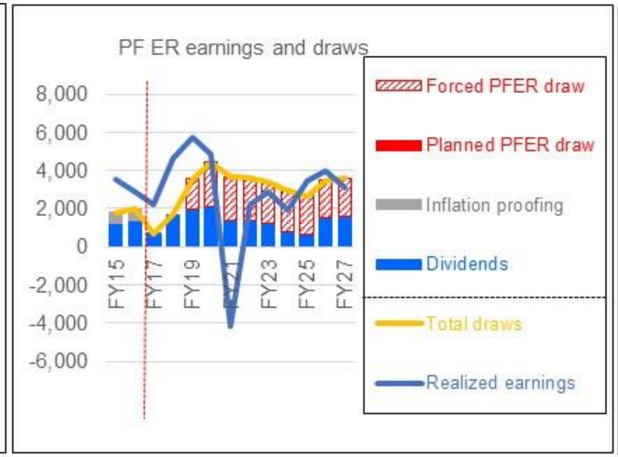


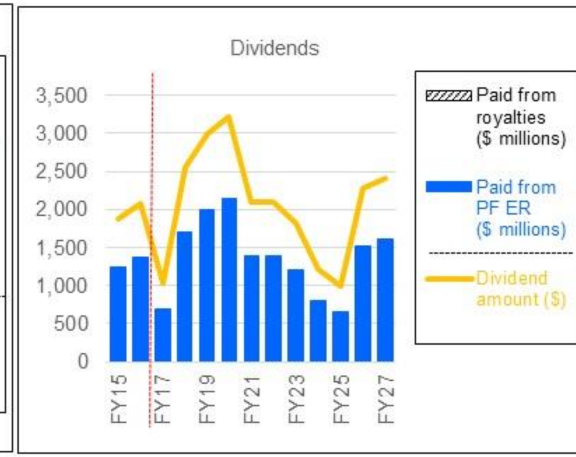
“Do Nothing” Projections

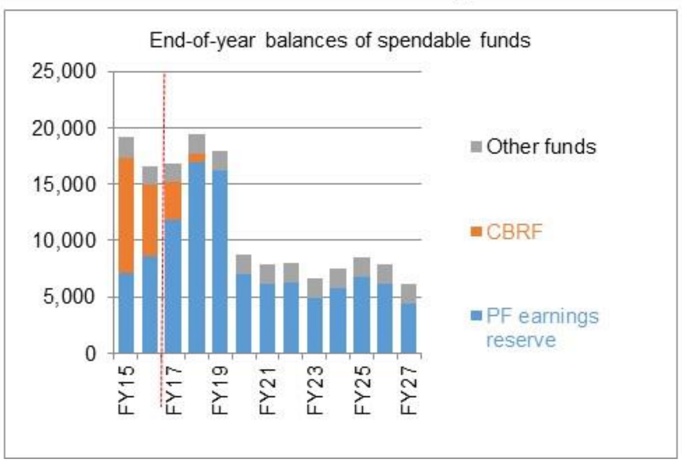
PF rate-of-return assumptions:

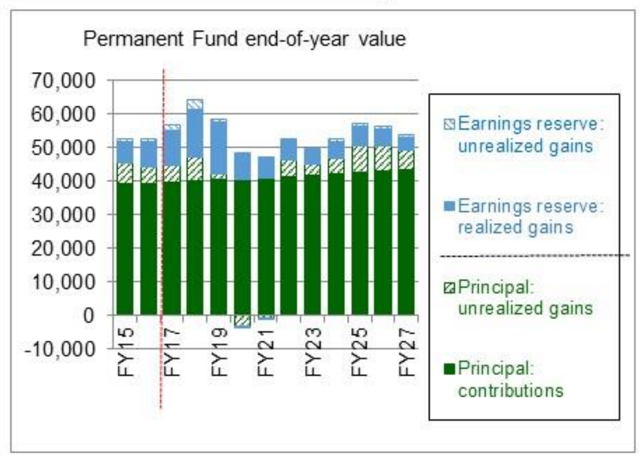
FY06 -FY16











"Dunleavy" proposal
(recently proposed by Senator Dunleavy)

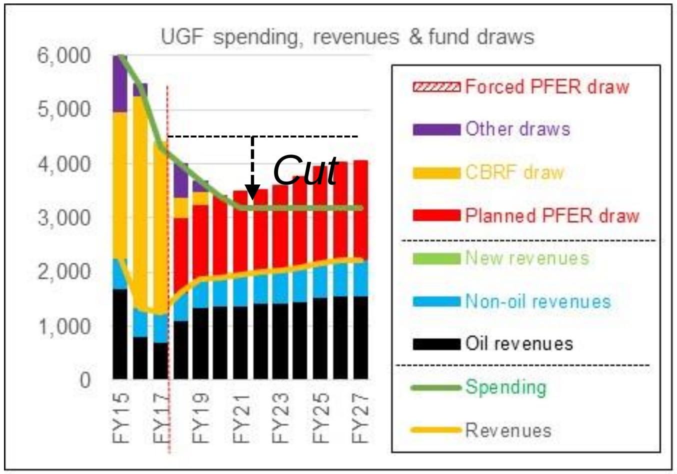
UGF Spending	New Revenues	PF general fund draw	Dividends	Other
Modeled as $800 million cut over 3 years	None	Same as dividend formula	Keep current dividend formula; increase this year's dividend by the amount the Governor vetoed last year	Draw $809 million from other funds over 2 years

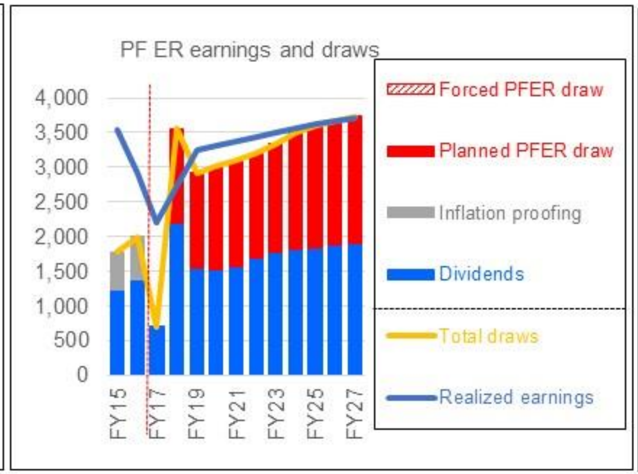
My projections are based on my own (possibly incorrect!) understanding of this proposal, and are *<u>not necessarily correct representations of what Senator Dunleavy has proposed or intends</u>.*

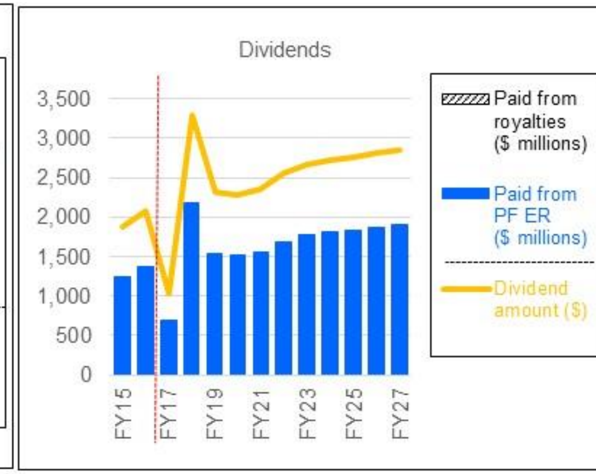
“Dunleavy Proposal” Projections

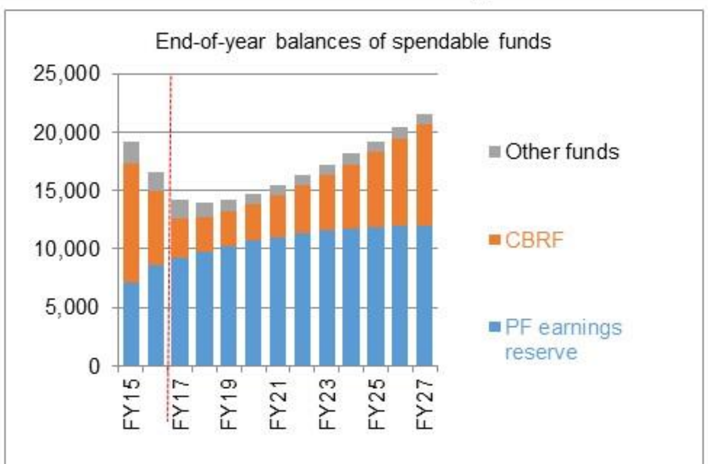
PF rate-of-return assumptions:

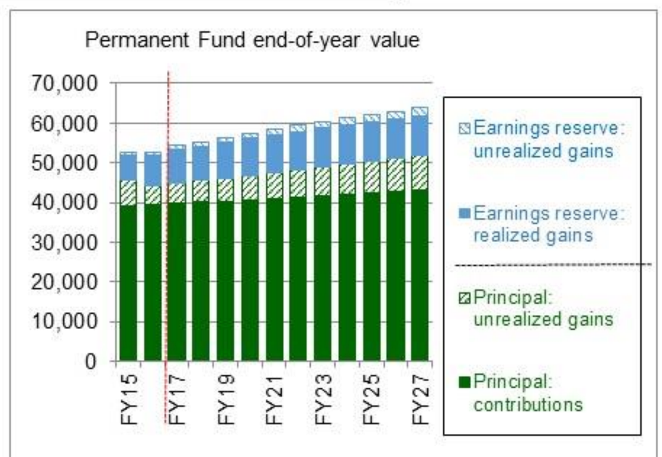
APFC







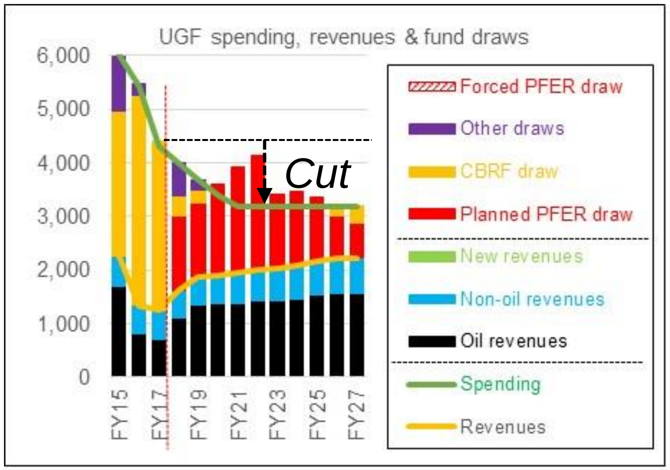


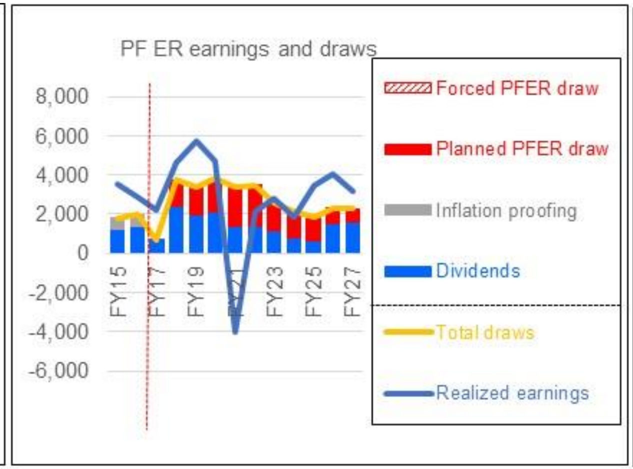


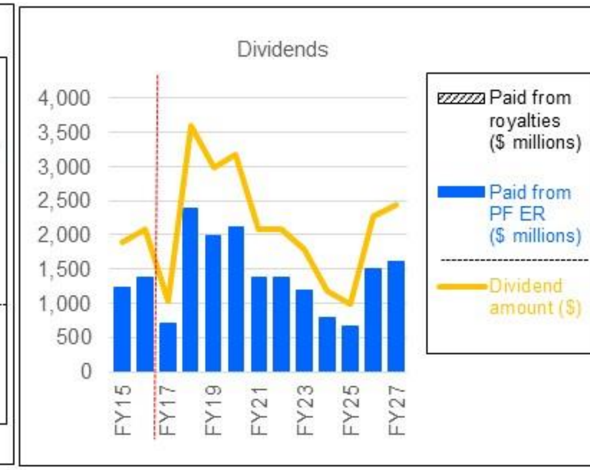
“Dunleavy Proposal” Projections

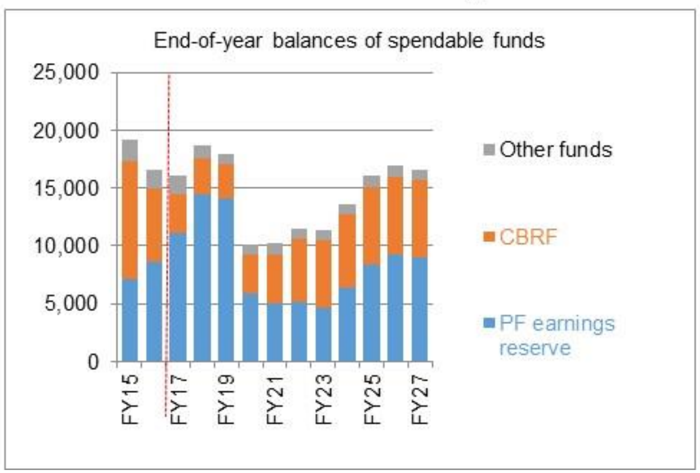
PF rate-of-return assumptions:

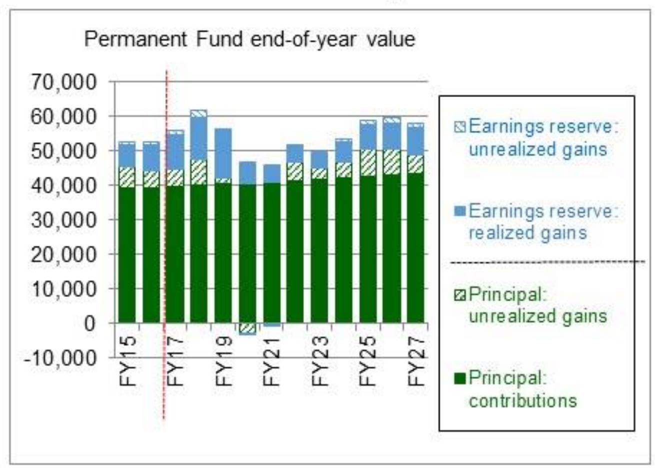
FY06 -FY16











“HB365” proposal
(based on bill proposed last year by Rep. Seaton)

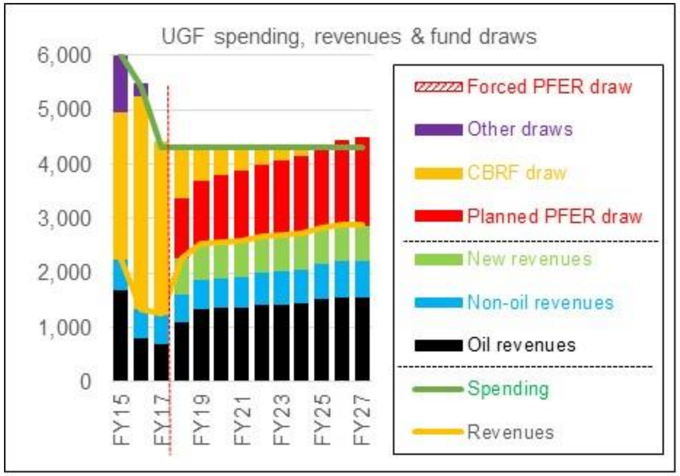
UGF Spending	New Revenues	PF general fund draw	Dividends	Other
Modeled at FY17 spending level	$655 annual income from an income tax	2.3% POMV	Half of the payout under the current formula	

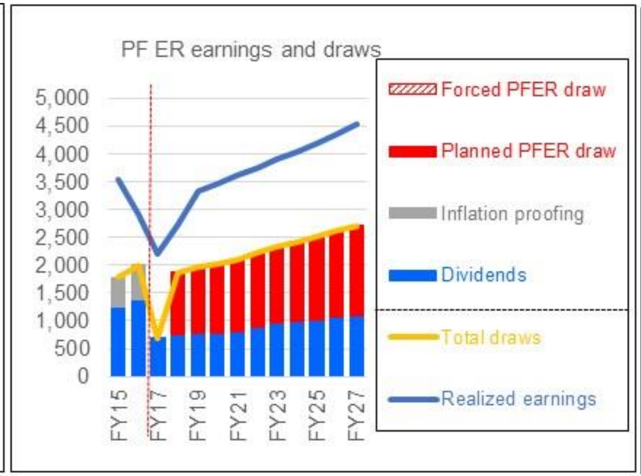
My projections are based on my own (possibly incorrect!) understanding of this proposal, and are *<u>not necessarily correct representations of what Rep. Seaton has proposed or intends</u>.*

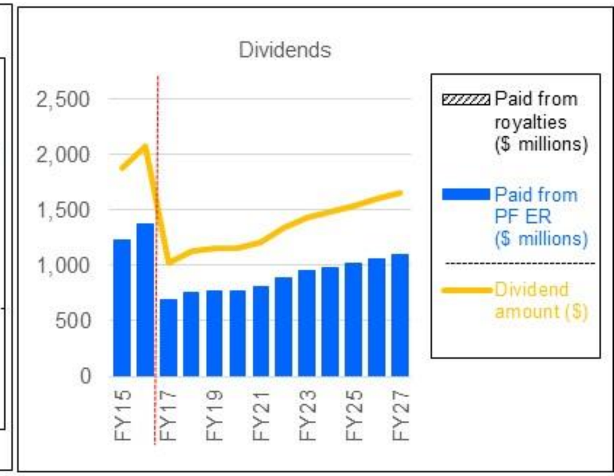
“HB 365” Projections

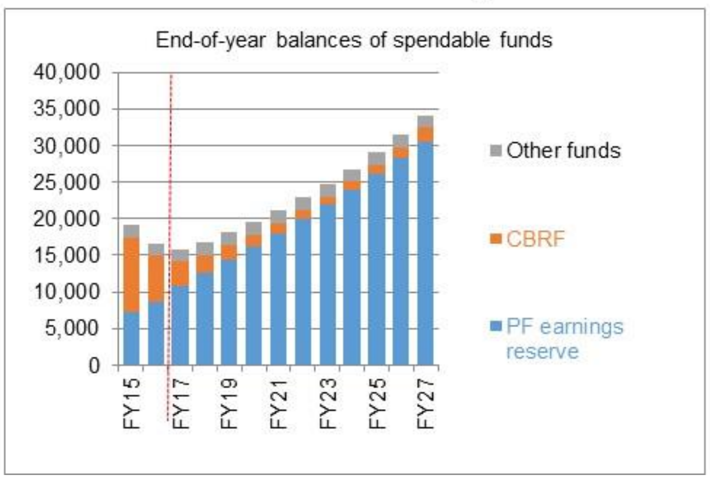
PF rate-of-return assumptions:

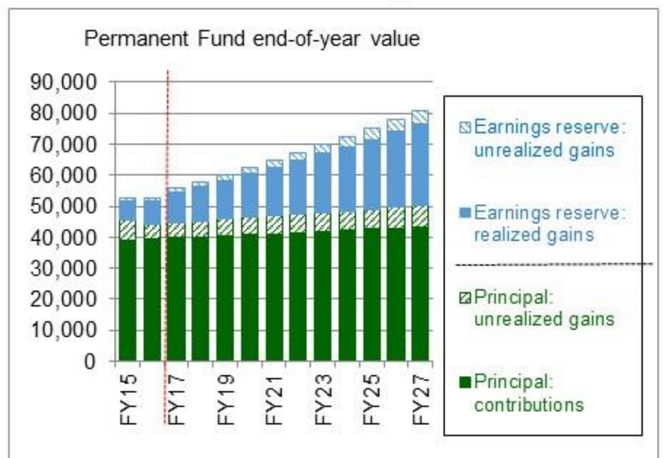
APFC







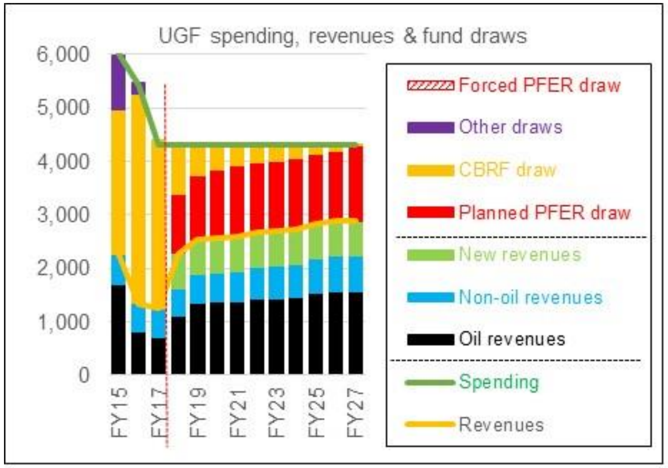


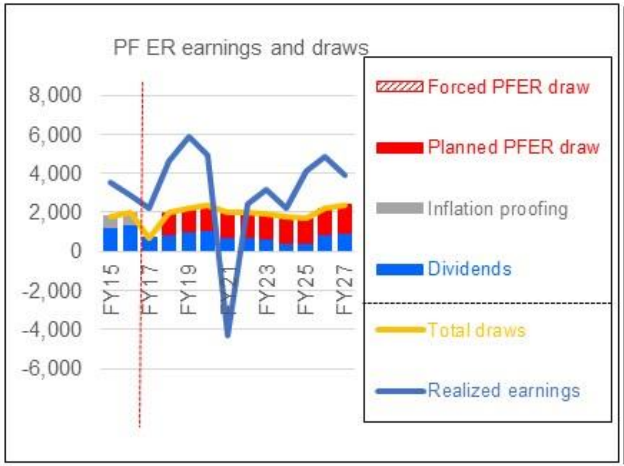


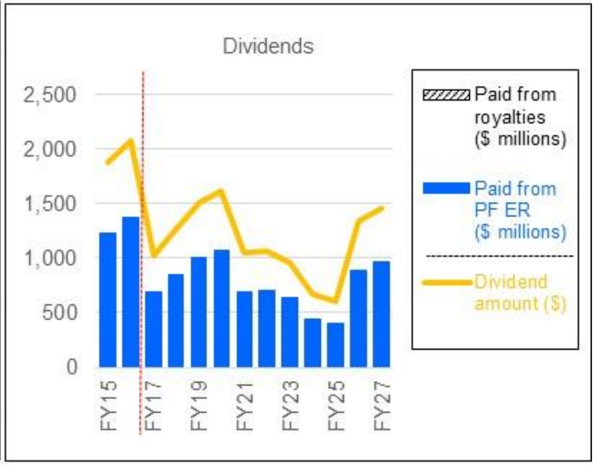
“HB 365” Projections

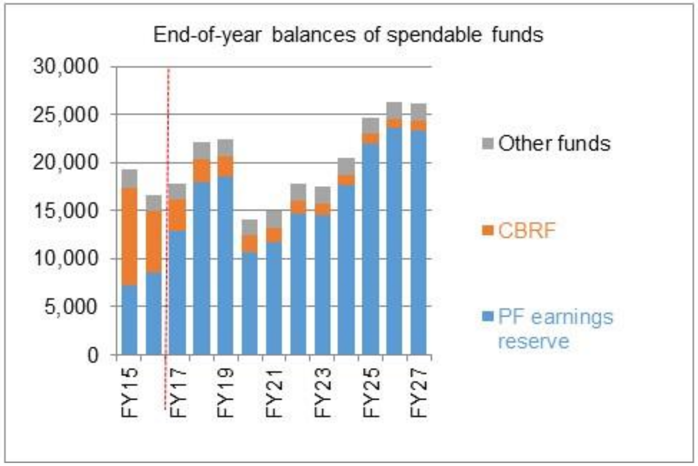
PF rate-of-return assumptions:

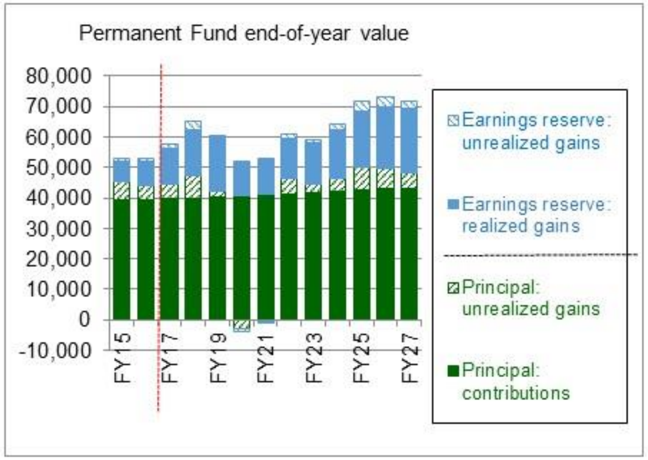
FY05 -FY17











“Governor” proposal
(based on December 2016 proposal by Governor Walker, similar to legislation passed by the Senate last year)

UGF Spending	New Revenues	PF general fund draw	Dividends	Other
Modeled at $4.3 billion	Increase in motor fuel tax raises about $80 million in new revenue	5.25% POMV draw (of which 20% goes to dividends)	20% of POMV general fund draw + 20% of unrestricted royalties	Reduce PF royalty allocation to 25%

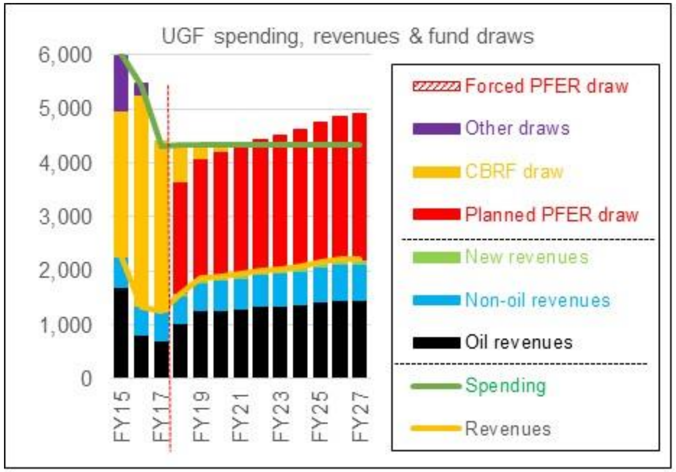
The proposal includes other important features including a reduction in the general fund draw if royalties and taxes > $1.2 billion and $1000 dividend check for next two years.

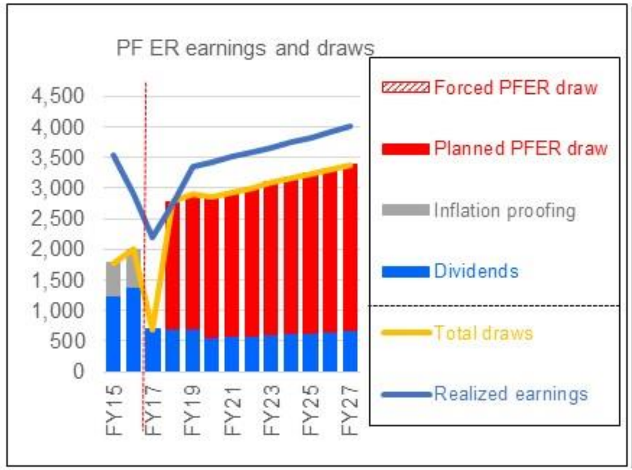
My projections are based on my own (possibly incorrect!) understanding of this proposal, and are <u>not necessarily correct representations of what the Governor has proposed or intends</u>.

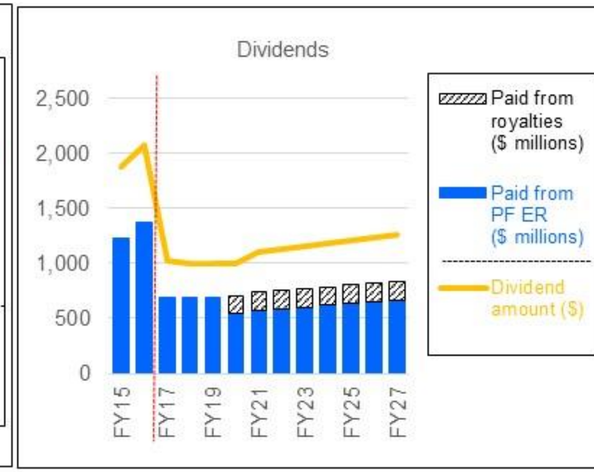
"Governor" Projections

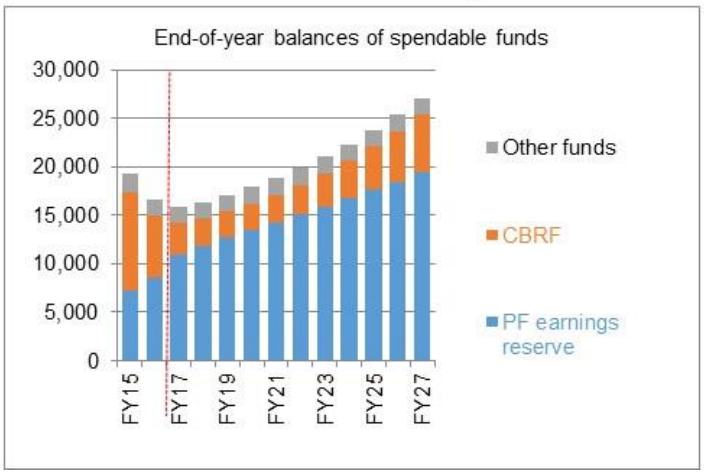
PF rate-of-return assumptions:

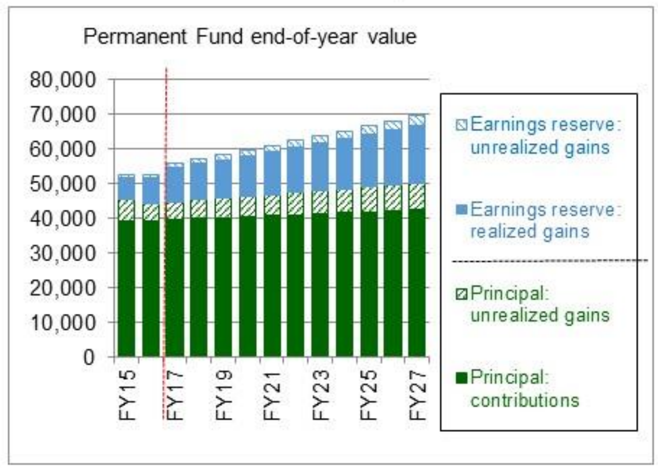
APFC







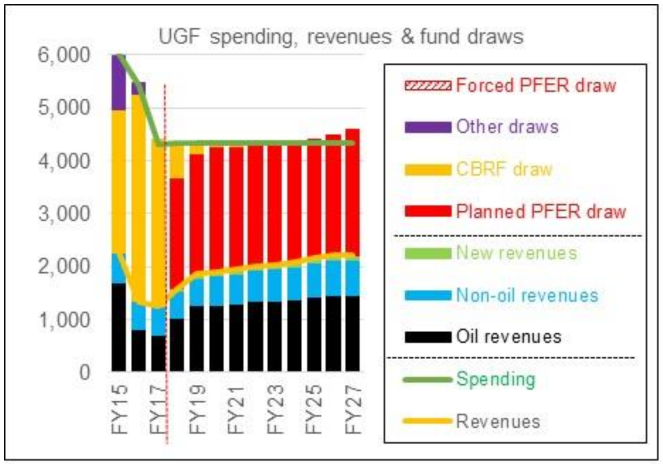


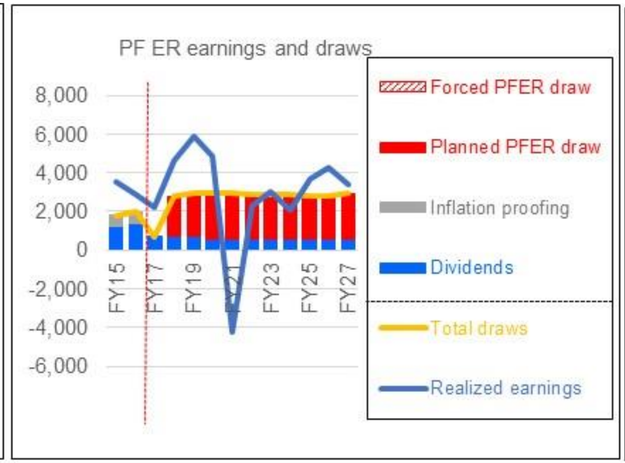


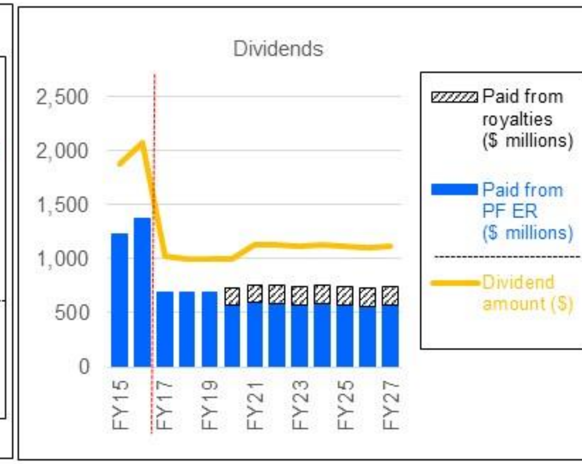
"Governor" Projections

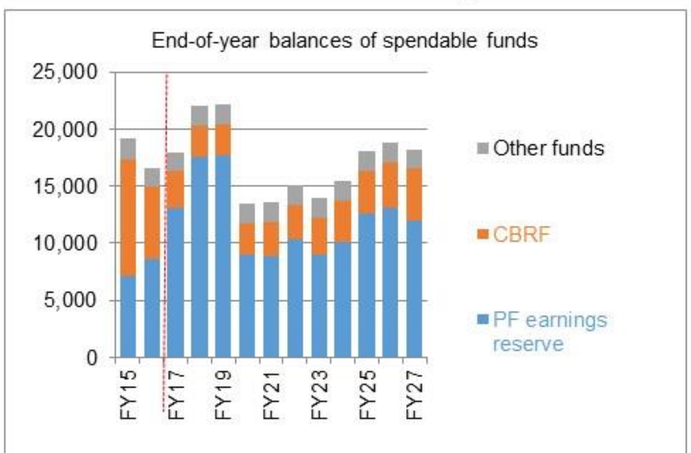
PF rate-of-return assumptions:

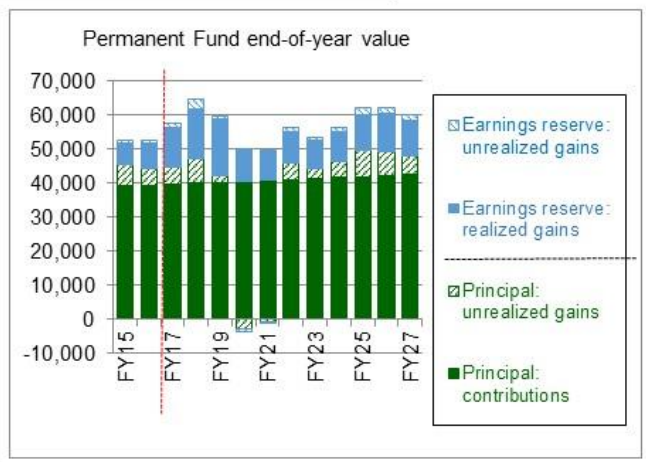
FY06 -FY16











What is a “sustainable” level of state spending?

- There is no simple “correct” answer
- It depends on:
  - Very uncertain future oil revenues and investment returns
  - What time period we are planning for
  - How much we want to preserve or grow our assets
  - How much we want to pay in dividends
  - How much we’re willing to raise in new revenues

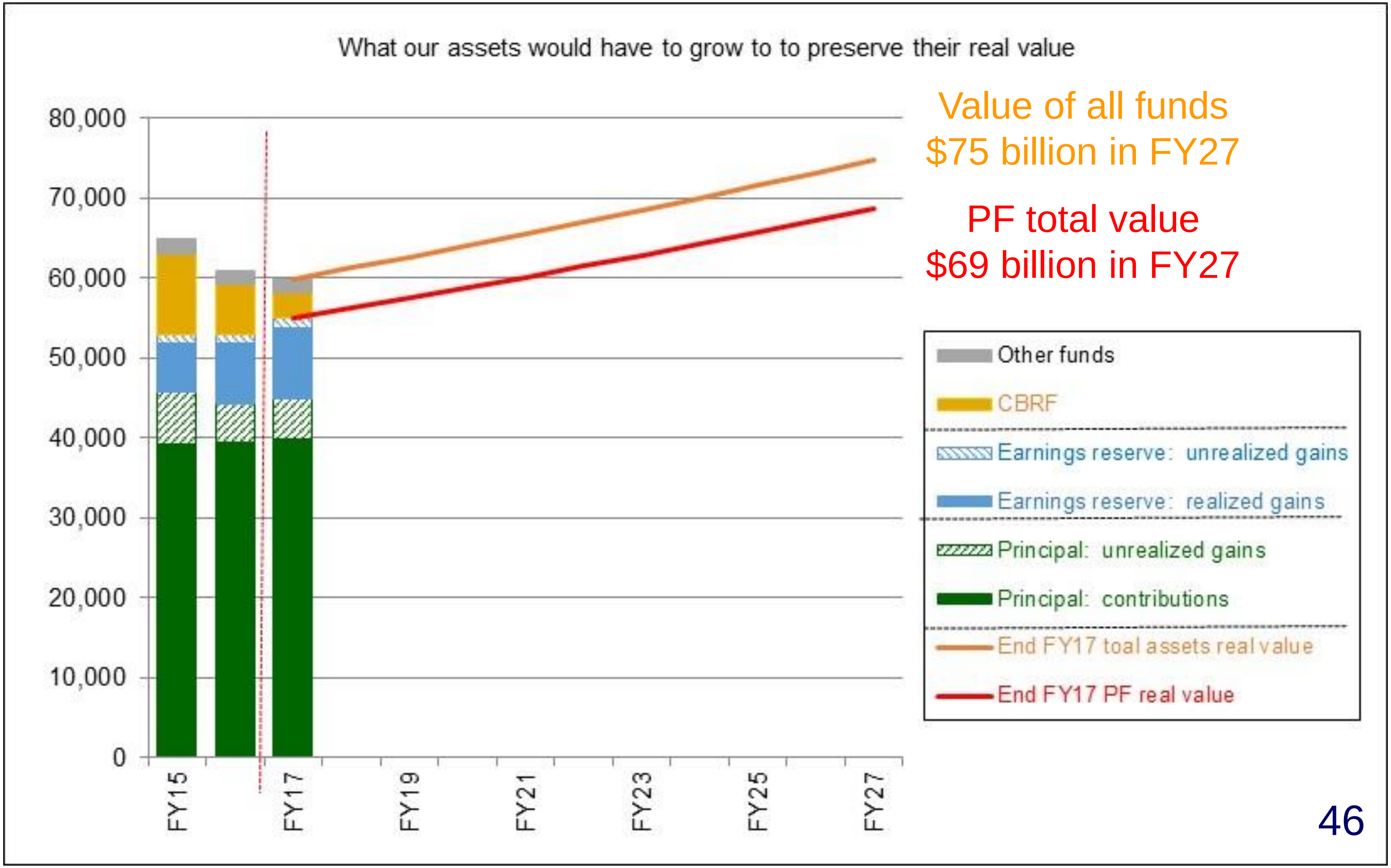
A condition for “sustainable spending”:

a spending level which preserves the real value of our assets over time

=

a spending level which grows the value of our assets over time
at the rate of inflation

Conditions for whether proposals maintain the real (inflation-adjusted) value of our assets



Sustainable on paper isn't necessarily the same as sustainable in practice

- Suppose you plan to "add to savings when revenues are high and draw from savings when revenues are low."
- Your plan won't be sustainable unless you have the discipline to:
  - Not over-project future average revenues
  - Save when revenues are high (rather than spending more)
- Finding that discipline is part of our fiscal challenge

Rather than discussing fiscal proposals separately, we should be comparing them.

- The real question for any proposal is whether there are other, better alternatives
- The real question for any critic of a proposal is "what is a better alternative?"
- It is easier to compare proposals if we:
  - Use the same assumptions
  - Use the same terminology
  - Use the same graphs

Fiscal projections can’t tell us which proposals are “best for Alaska”

- They can tell us if proposals are feasible and sustainable

- They <u>can’t</u> tell us about other very important issues:
  - Short-run economic effects
  - Long-run economic effects
  - Effects on government services
  - Relative effects on different income groups
  - Relative effects on different regions