

# Realities of Alaska's Fiscal and Economic Challenges and Options

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## About me . . .



- Former ISER Director and Professor of Economics
- Studied Alaska fiscal issues
- Retired June 2016, now a “Professor Emeritus”
- All of my work on fiscal issues is voluntary
- Not advocating for any fiscal choices
- Trying to help Alaskans understand:
  - Facts of Alaska’s fiscal situation
  - Choices we face

# Outline

- A brief introduction to Alaska's fiscal challenge
- A brief look back at Alaska's fiscal history
- Framing Alaska's fiscal options
- A few final comments

# A brief introduction to Alaska's fiscal challenge

Part of the difficulty in discussing Alaska's fiscal challenge is the complexity of different kinds of revenues and spending.

We have tended to frame the issues in terms of **unrestricted general fund** revenues and spending.

But the issues also relate to other kinds of revenues and spending.

**Projected Alaska State Revenues by Source and Restriction, FY17**

Source	Unrestricted General Fund Revenue	Restricted Revenue			Total
		Designated General Fund Revenue	Other Restricted Revenue	Federal Revenue	
Oil Revenue	1,159		686	4	1,849
Non-Oil Revenue	468	410	257		1,136
Investment Revenue	20	42	3,511		3,573
<i>PF realized earnings</i>			2,758		
Federal Receipts				3,611	3,611
Total	1,646	452	4,454	3,615	10,168

Source: Alaska Department of Revenue, Spring 2017 Revenue Forecast, Tables 2-2 & 2.3.

*University tuition  
Marine highway  
tickets*

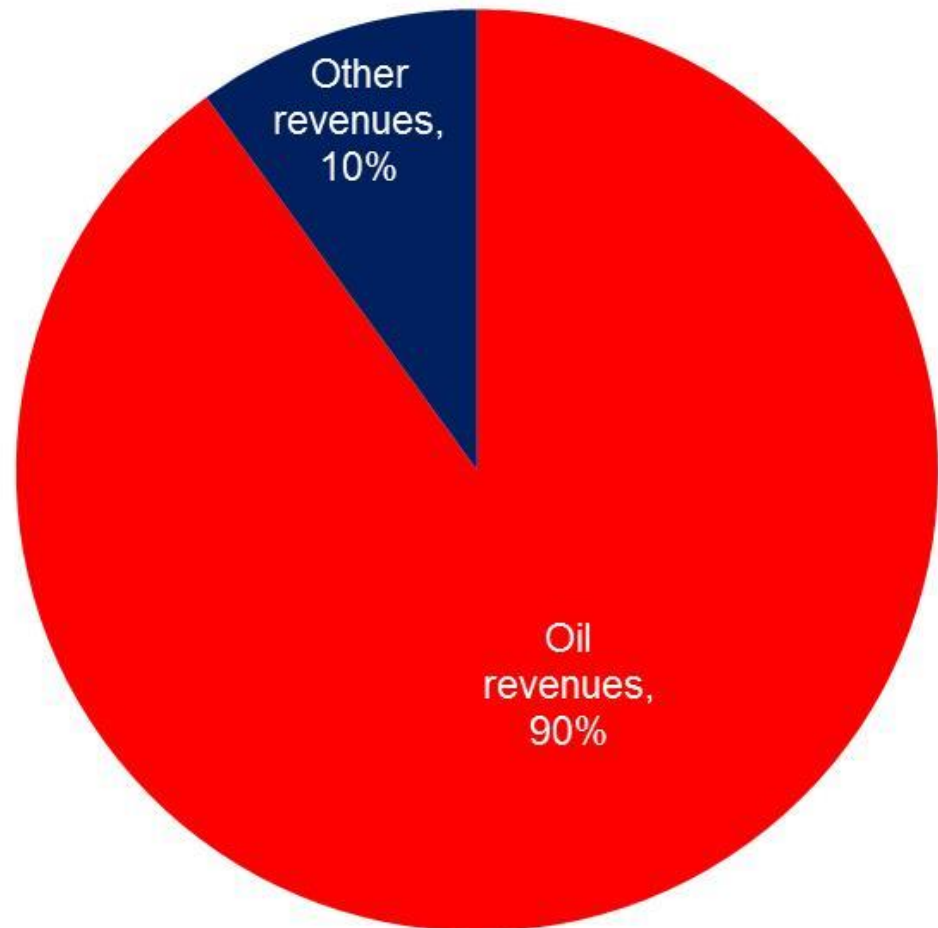
*Permanent  
Fund  
realized  
earnings*

*Oil royalty  
deposits to  
Permanent  
Fund  
principal*

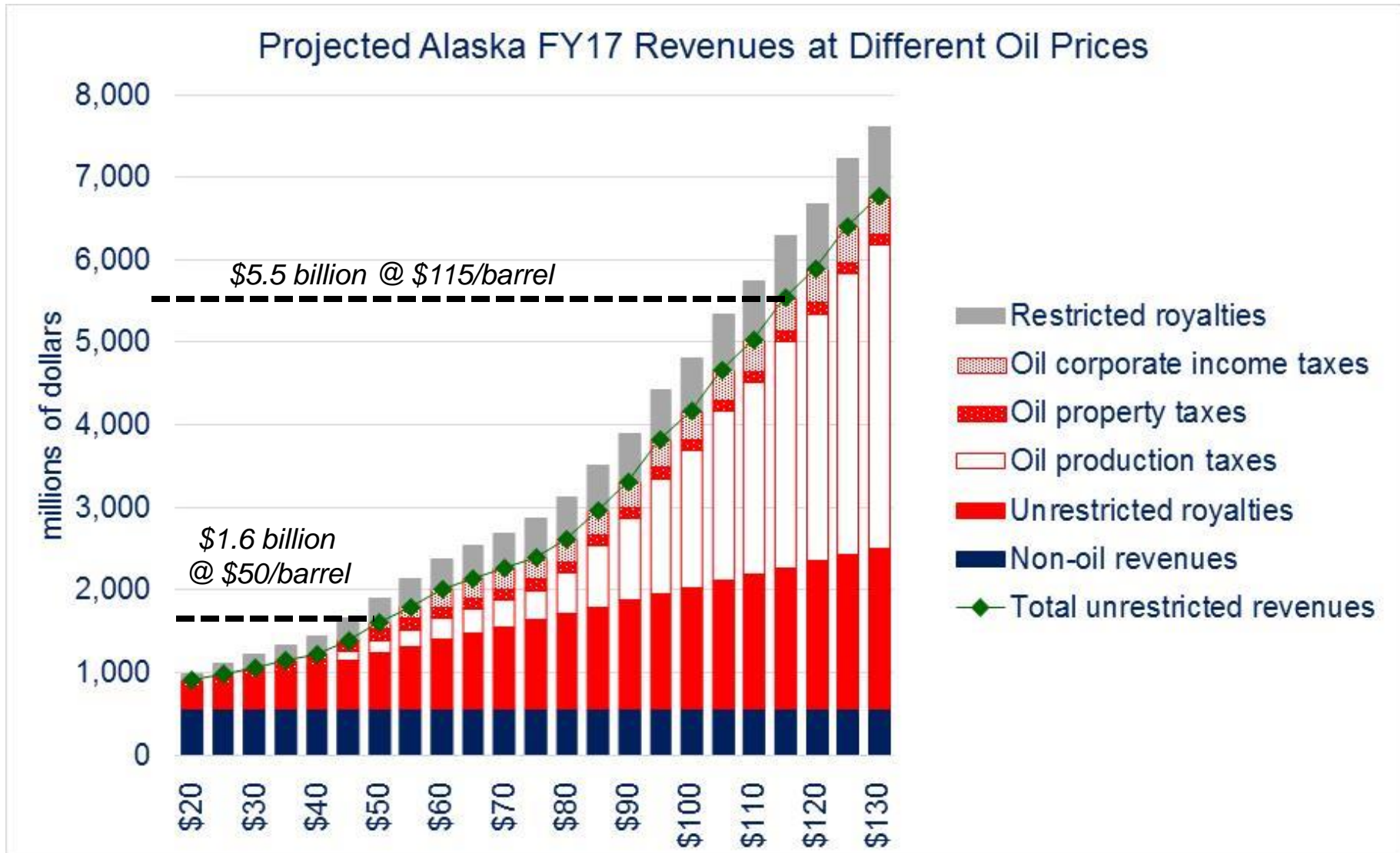
*Federal  
funding for  
transportation  
health care,  
education, etc.*

# Alaska has been extremely dependent on oil for unrestricted general fund revenues.

From 2005 to 2014,  
oil revenues  
averaged 90% of  
Alaska's  
"unrestricted general  
fund revenues"



Our state revenues are extremely sensitive to oil prices  
—particularly production taxes, which are based on profits.



Oil prices fell drastically in FY15 & FY16 and have risen only slightly in FY17.

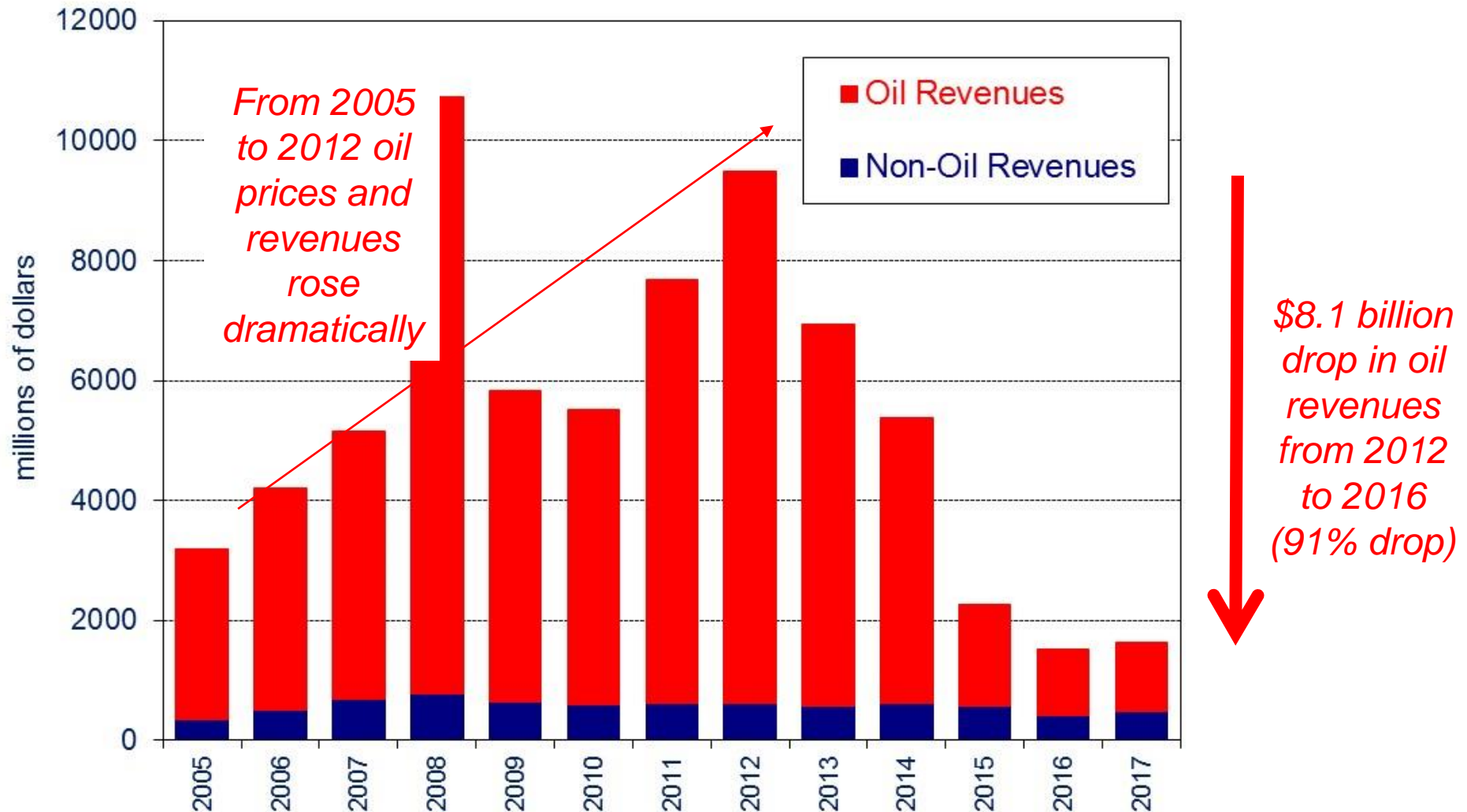
## Daily ANS West Coast Oil Price



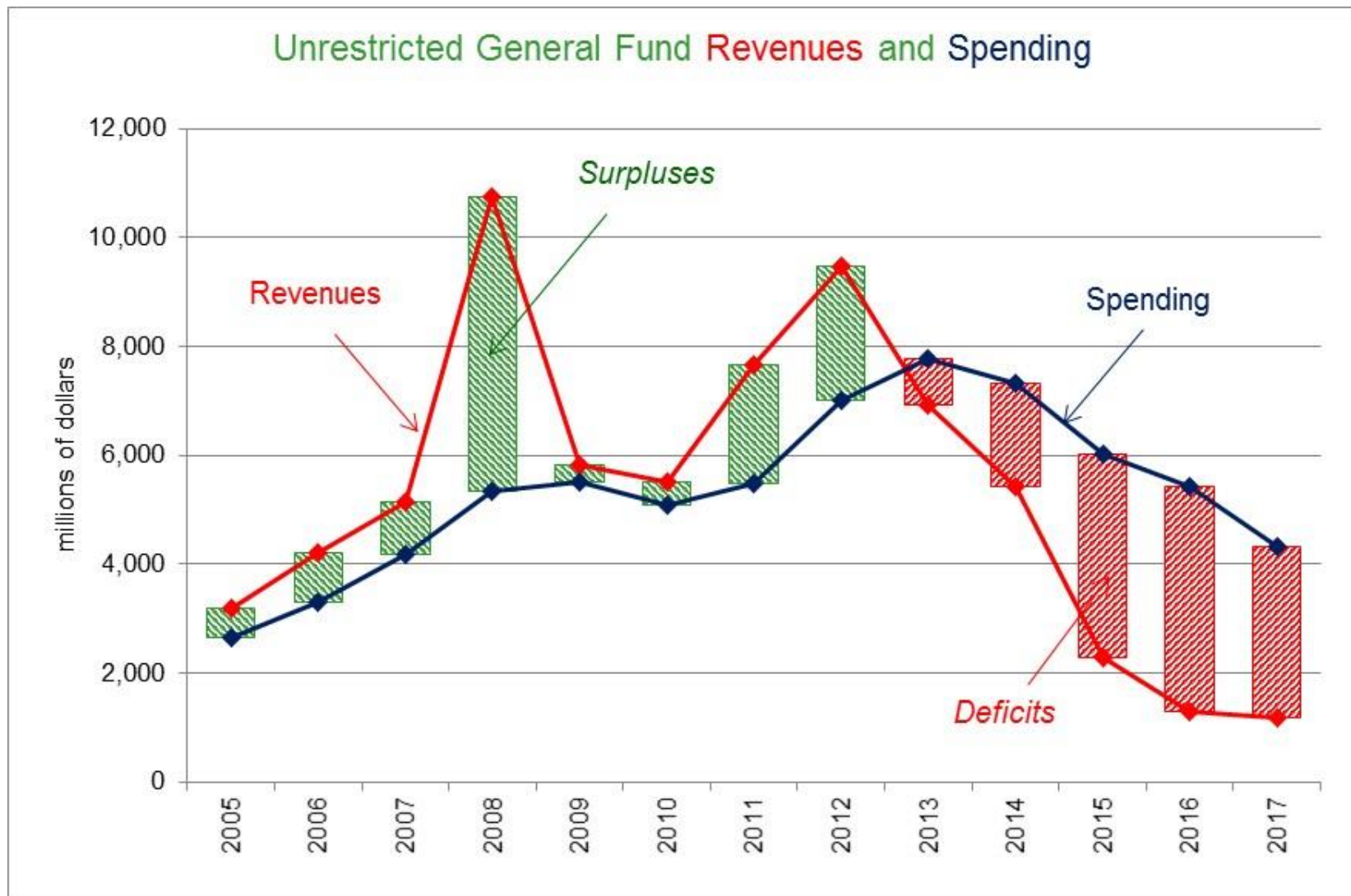


Mostly (but not only) because of the fall in prices, our oil revenues have fallen drastically since 2012.

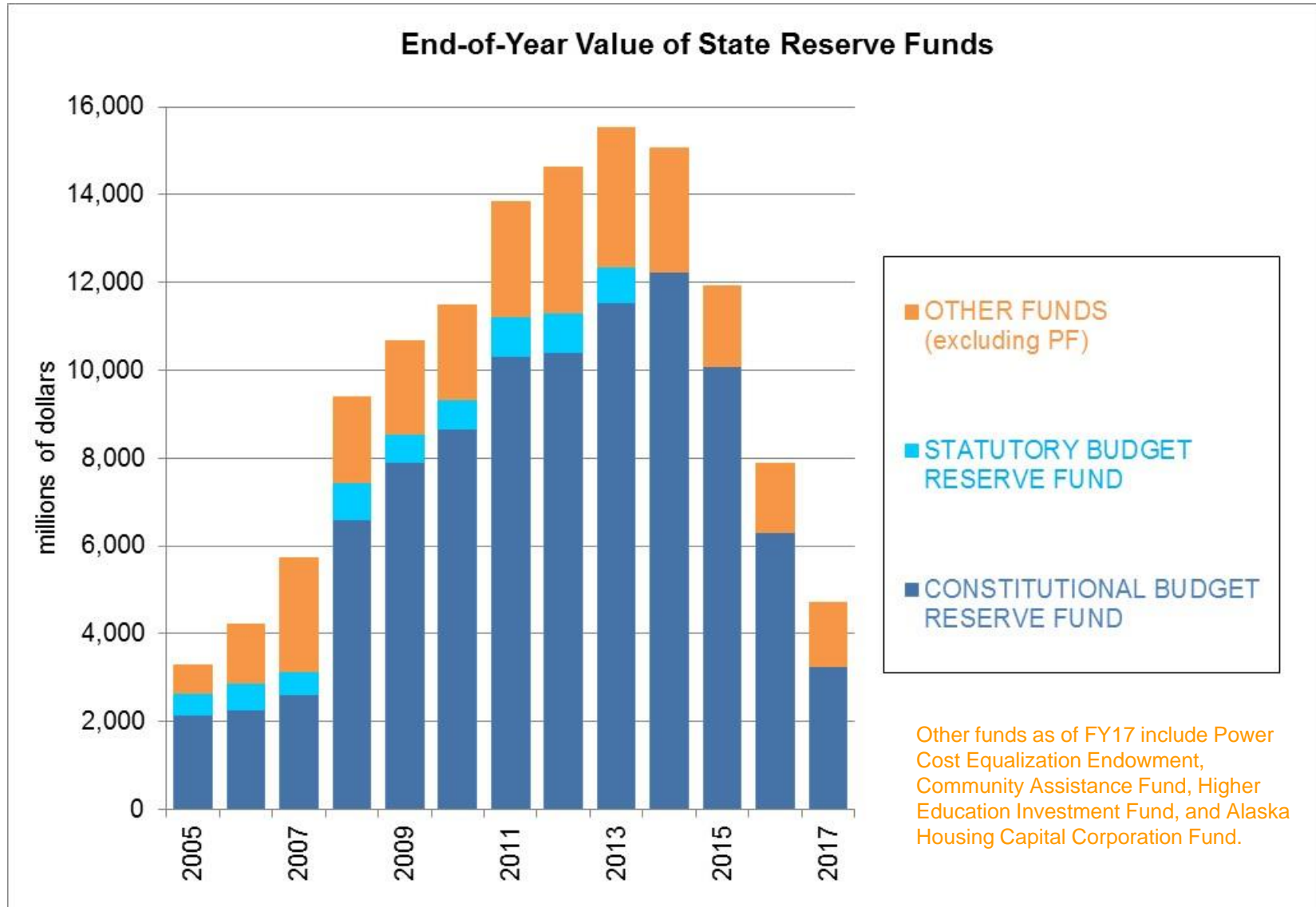
### Alaska Unrestricted General Fund Revenues



From 2005 to 2012, even though spending was rising, we ran big General Fund surpluses. Since 2013 we have been running big General Fund deficits.

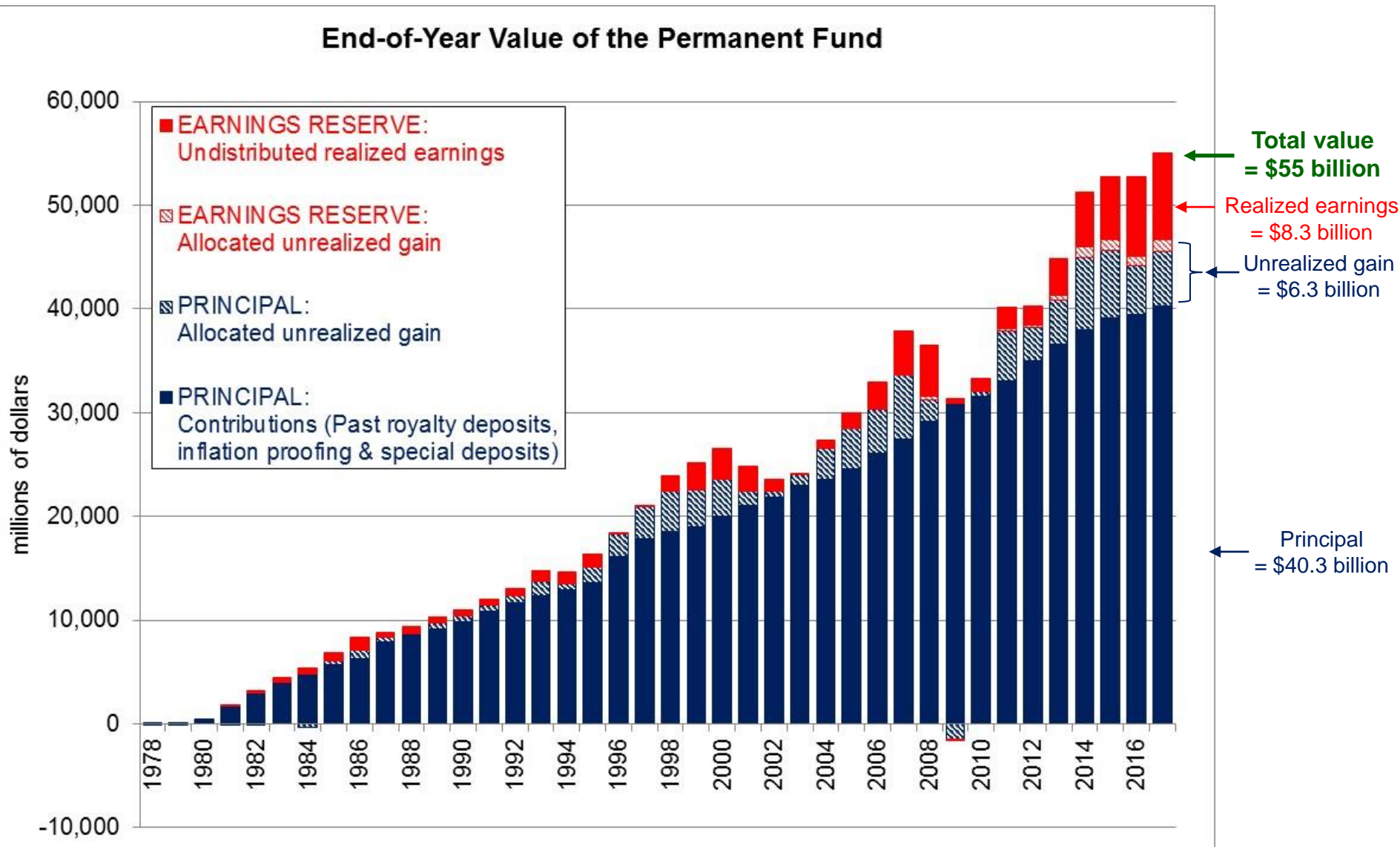


We used the surpluses prior to 2012 to build up our savings reserves funds.  
Since 2013 we have been rapidly drawing down these funds.  
Continued deficits of this year's level could drain our reserves very soon.

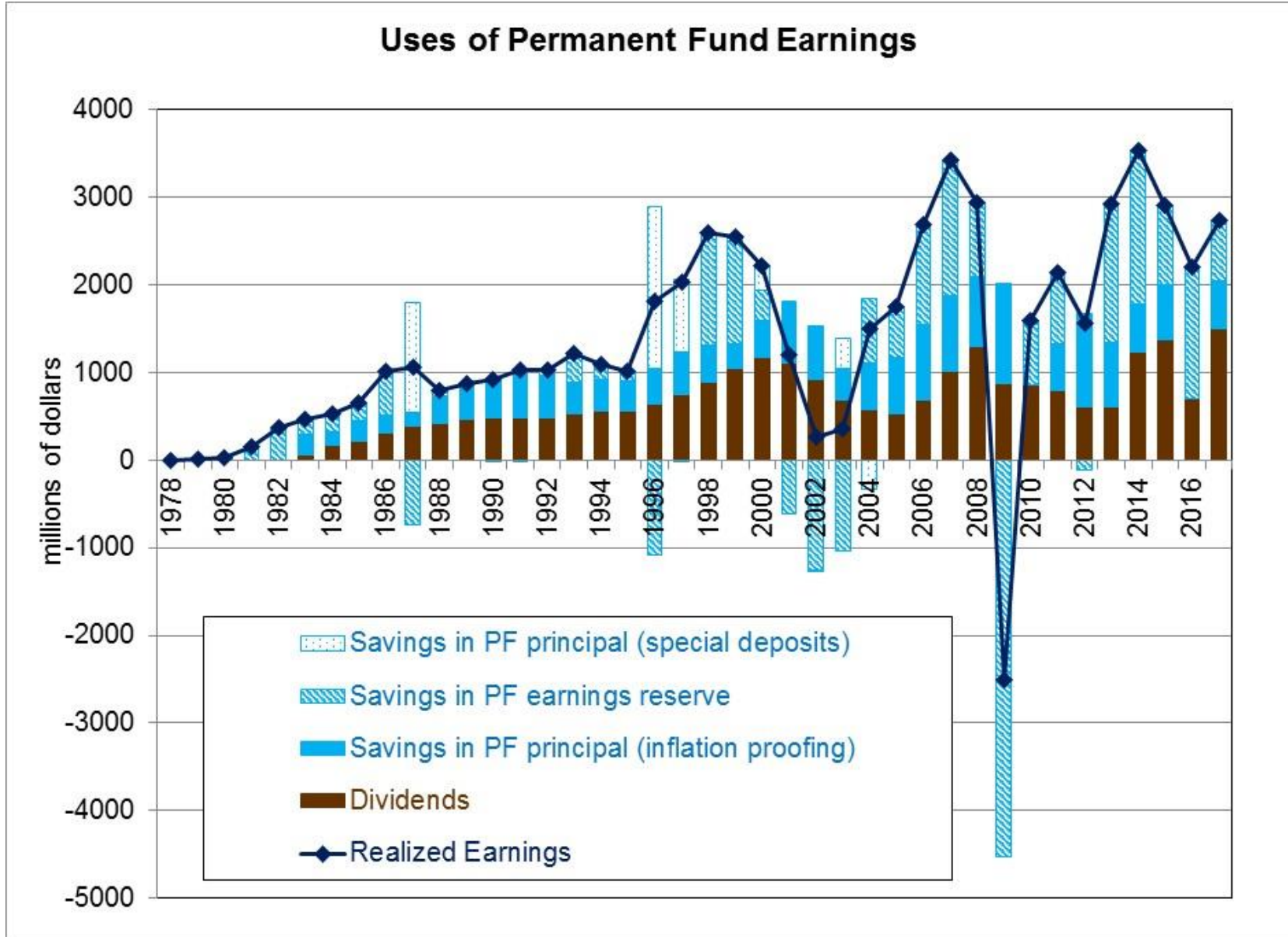


Note: 2017 data are Legislative Finance Division projections.

We have also saved a lot of money in our Permanent Fund, which is projected to total \$55 billion at the end of FY17. The principal may not be spent but **the realized earnings may be spent.**



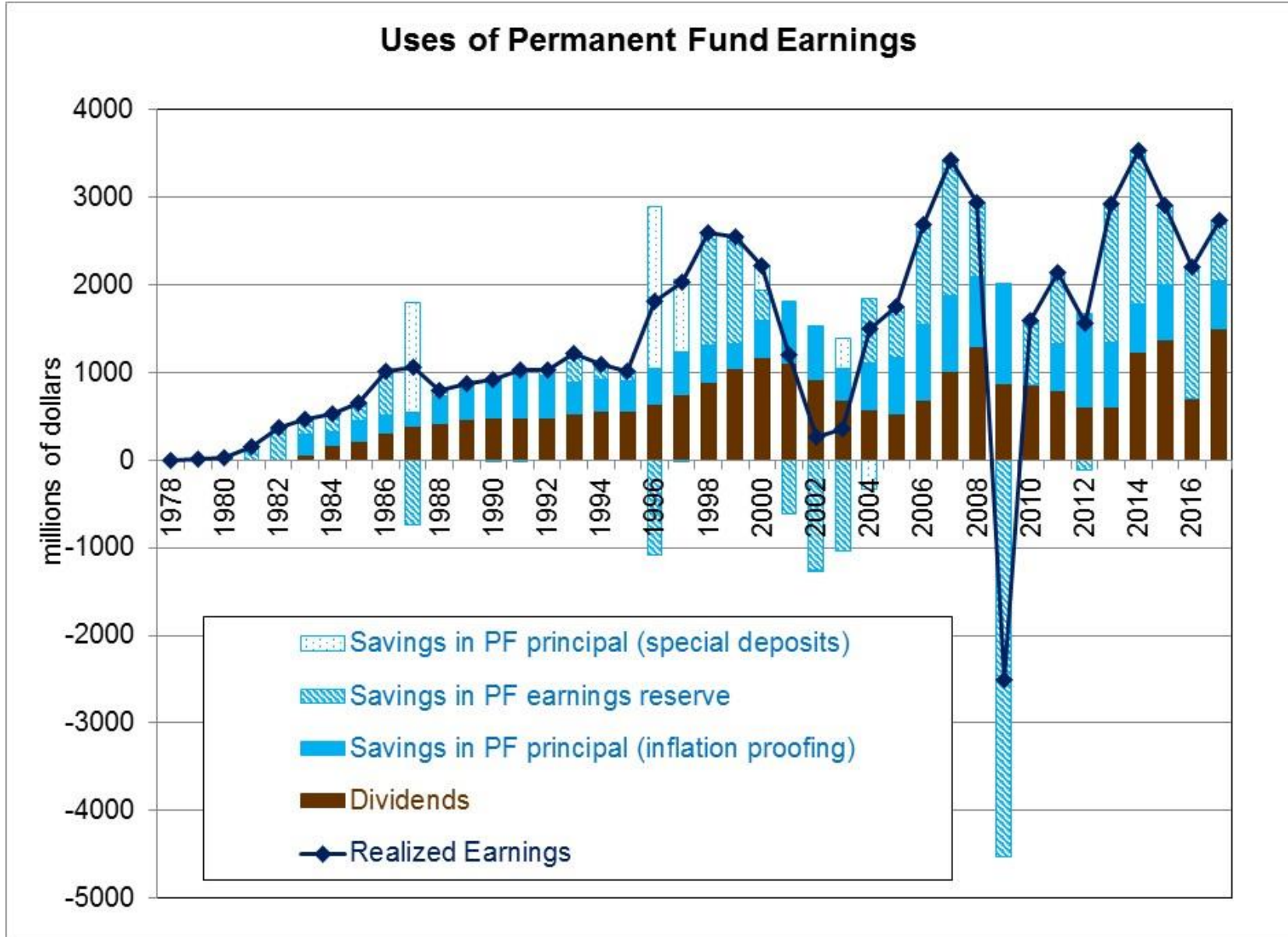
We have used approximately half of the earnings for dividends and have saved the other half.



Note: 2017 data are projections as of February 28, 2017.



Key fiscal choices are whether and how to begin using how much of Permanent Fund earnings to help pay for state government.



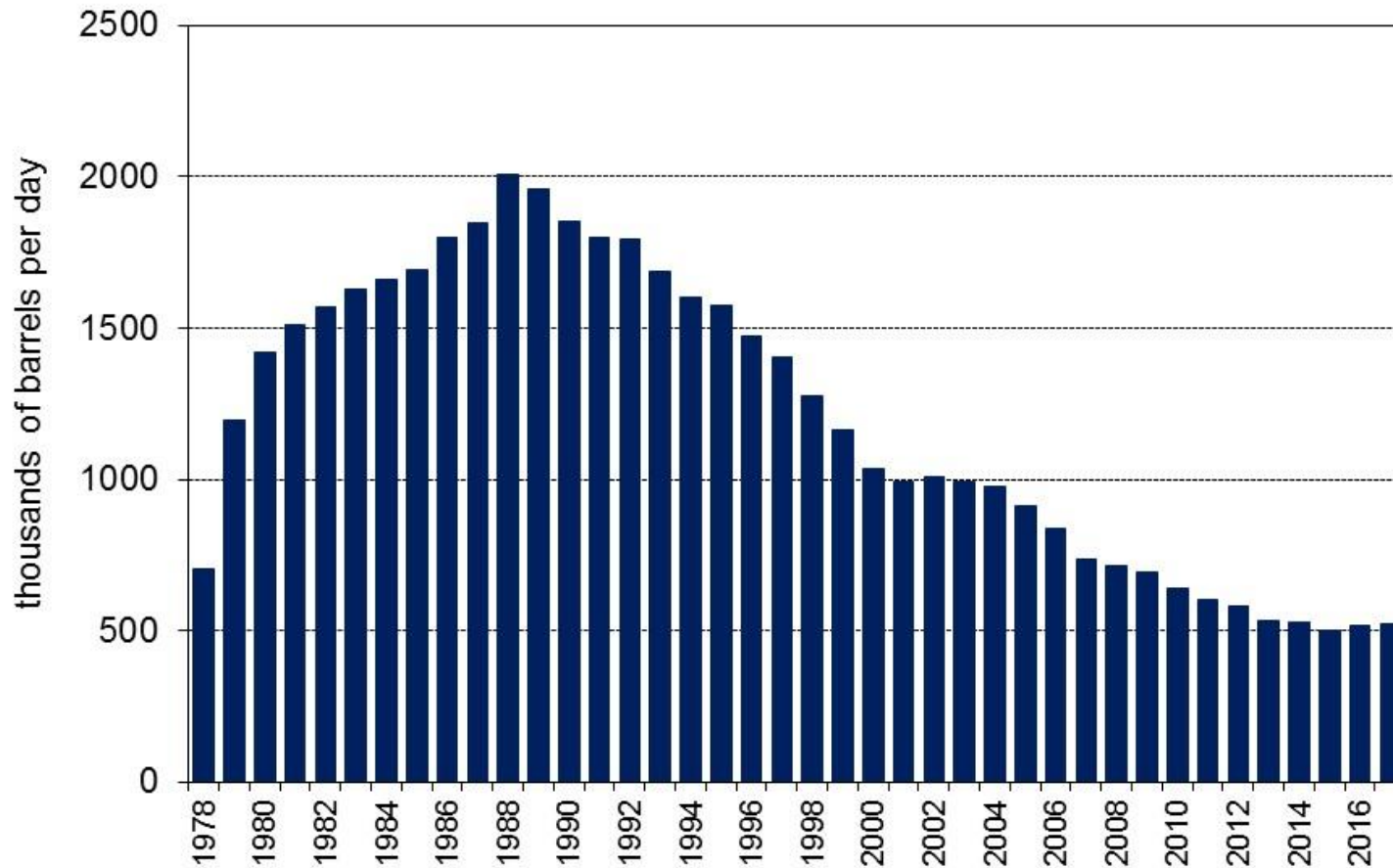
Note: 2017 data are projections as of February 28, 2017.

# A brief look back at Alaska's fiscal history

Oil has driven Alaska's economy and state finances  
for as long as most Alaskans remember.

A fundamental long-term challenge is that oil production has been declining.

**Alaska North Slope Oil Production**

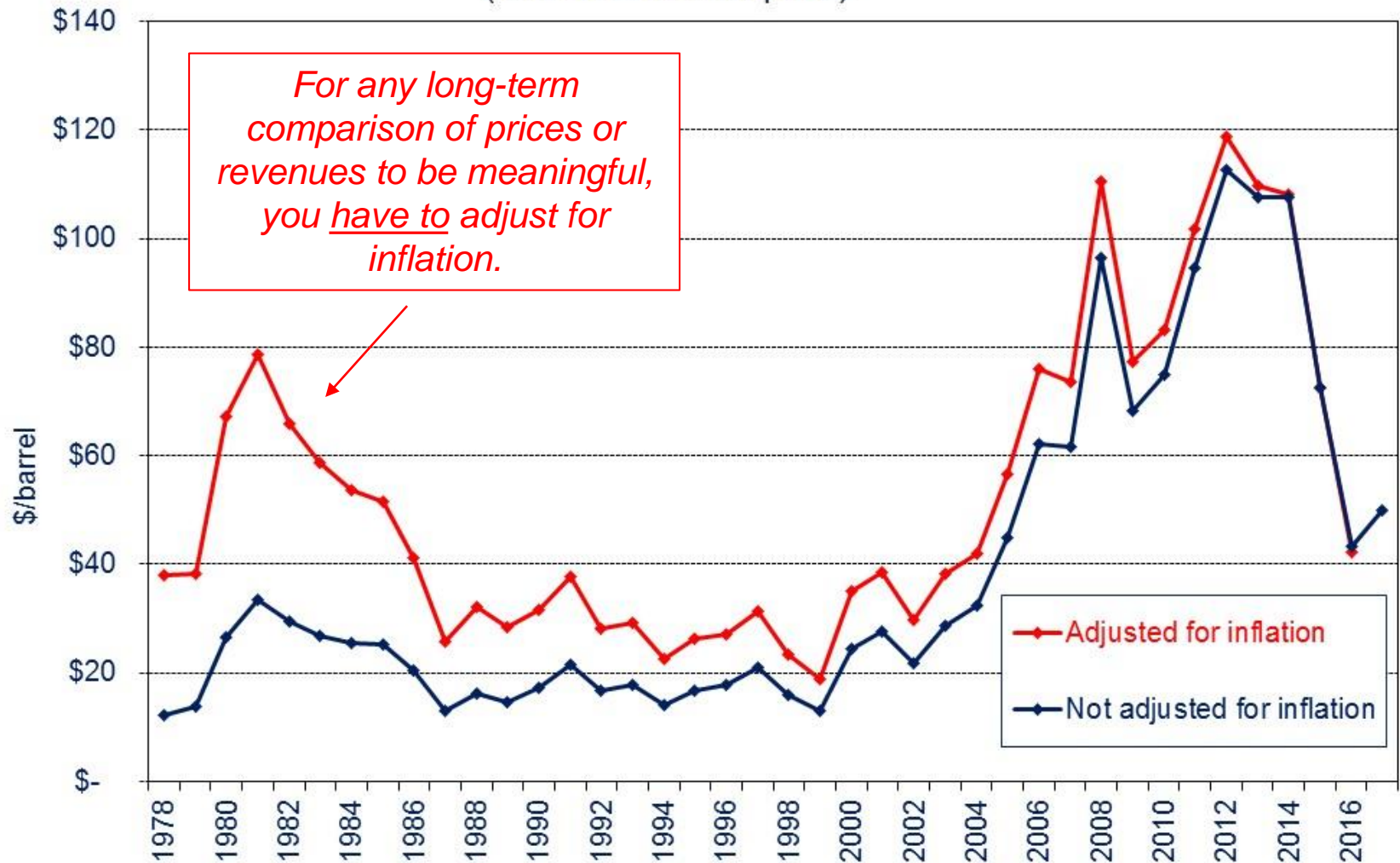


Note: 2017 data are DOR Spring 2017 projections.

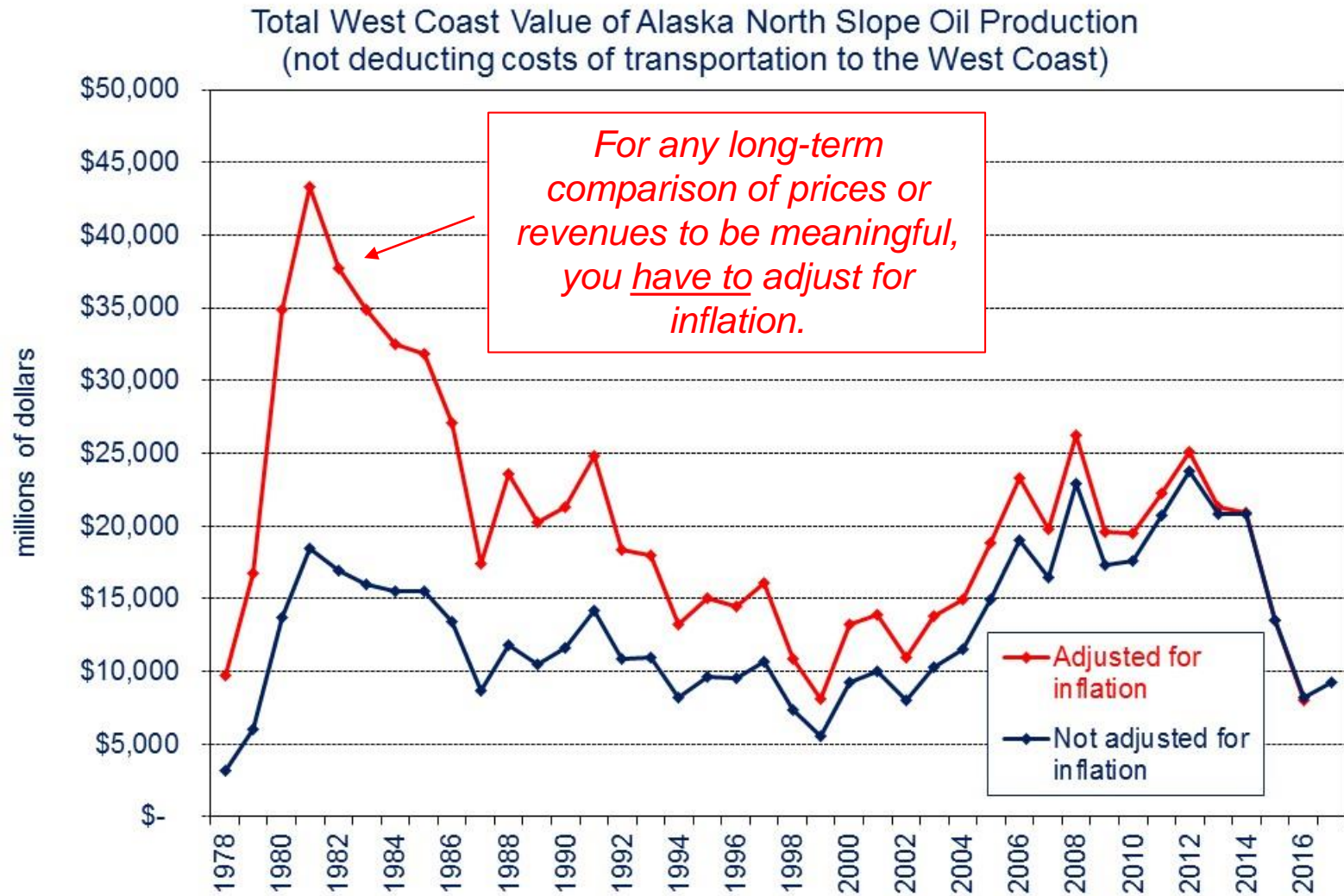


# Oil prices have fluctuated drastically since North Slope oil production began.

Average Price of Alaska North Slope Oil  
(ANS West Coast price)

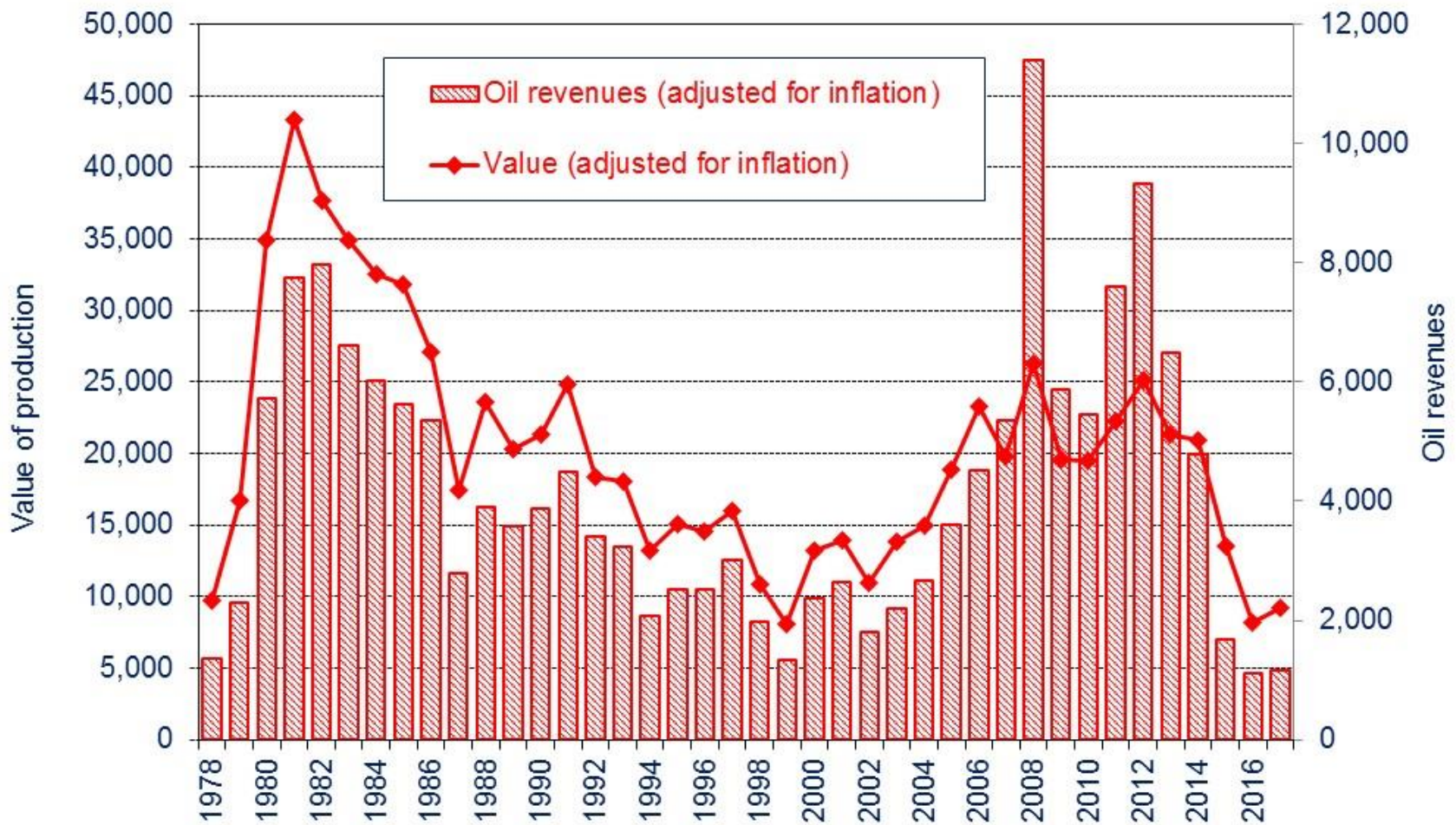


The combined effect of fluctuations in oil production and prices has been drastic fluctuations in the value of Alaska oil production.



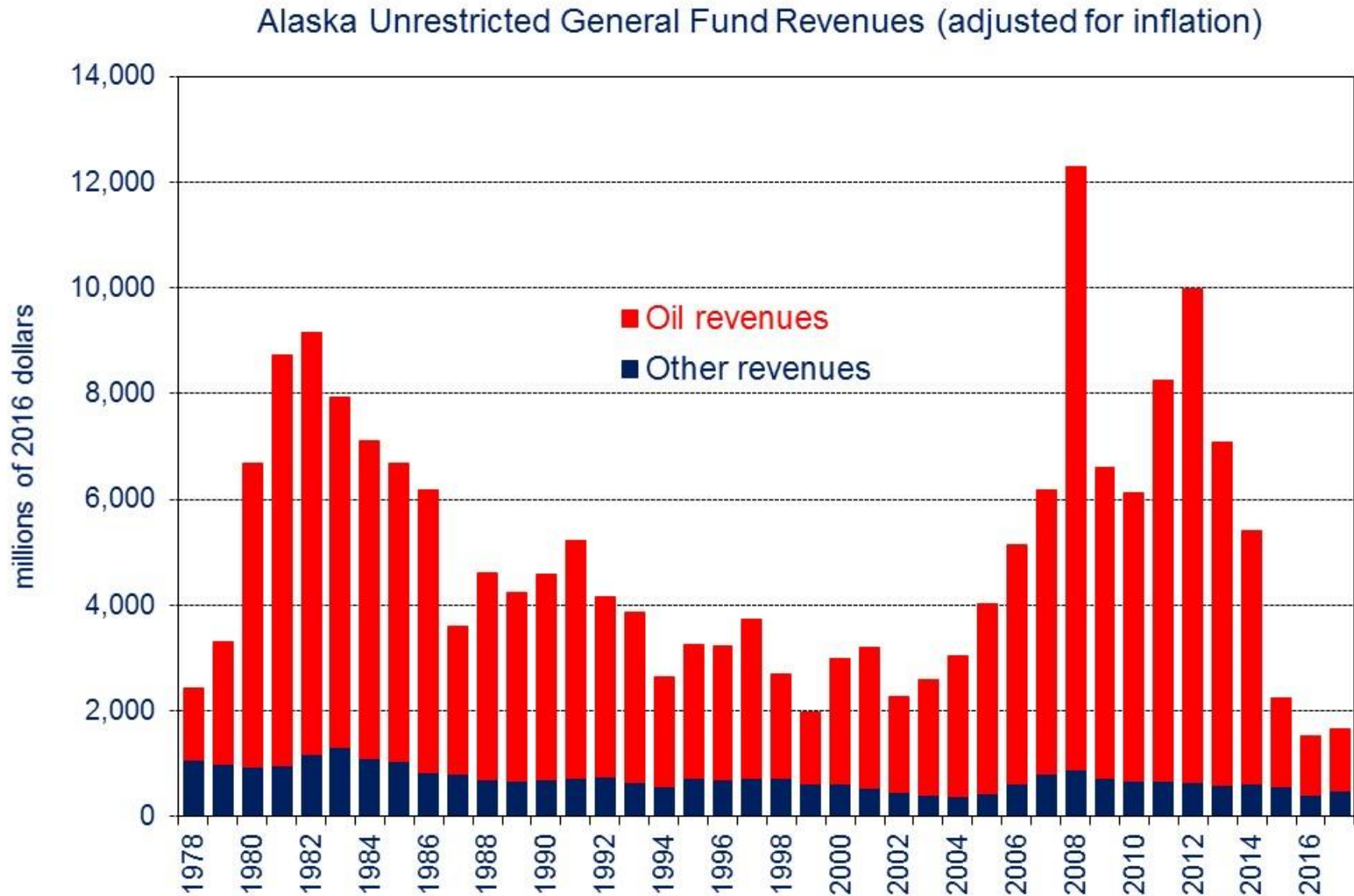
Drastic fluctuations in the value of Alaska oil production were reflected in drastic fluctuations in Alaska oil revenues.

Value of Alaska North Slope Oil Production and Alaska UGF Oil Revenues)  
(millions of 2016 dollars)

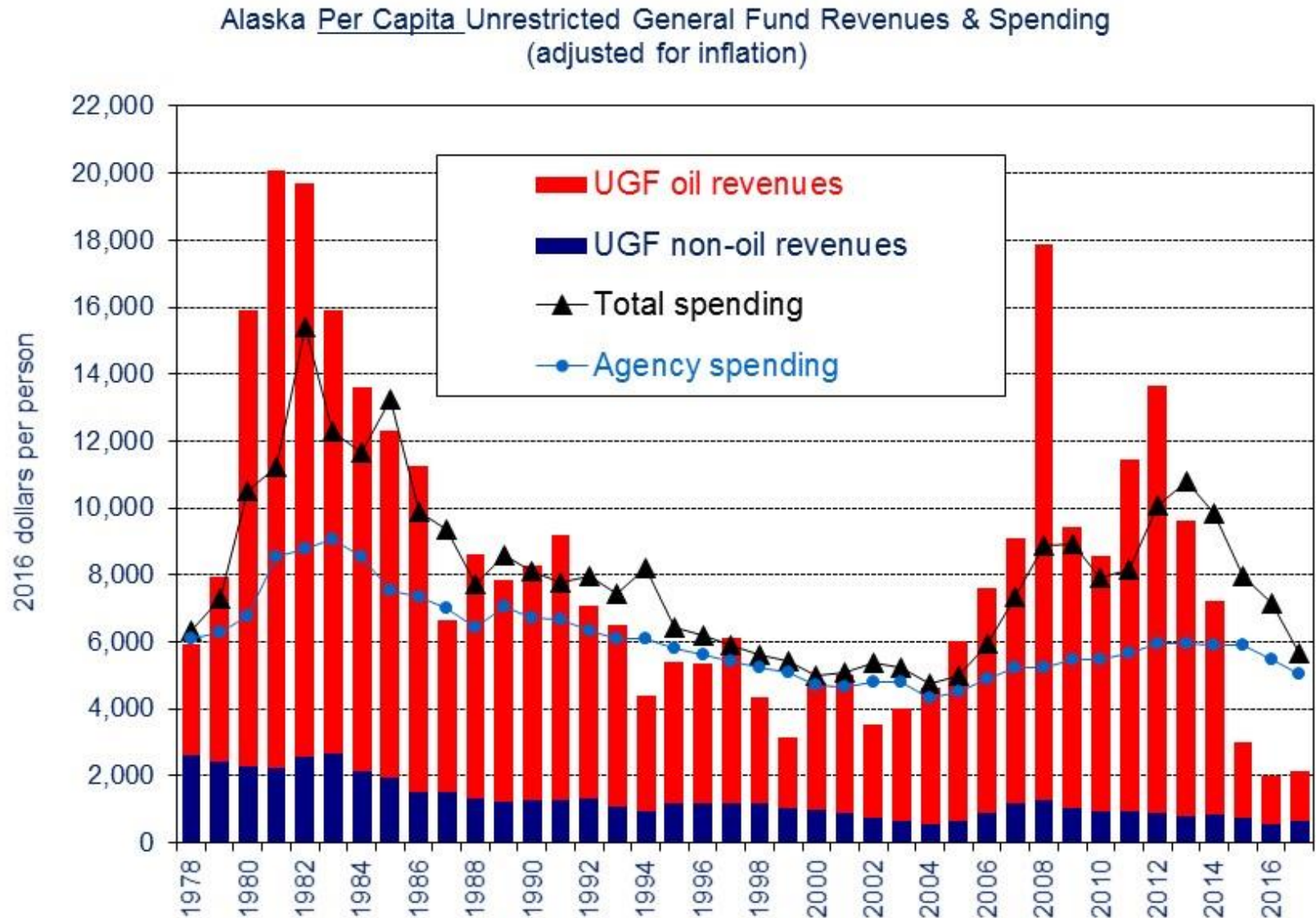




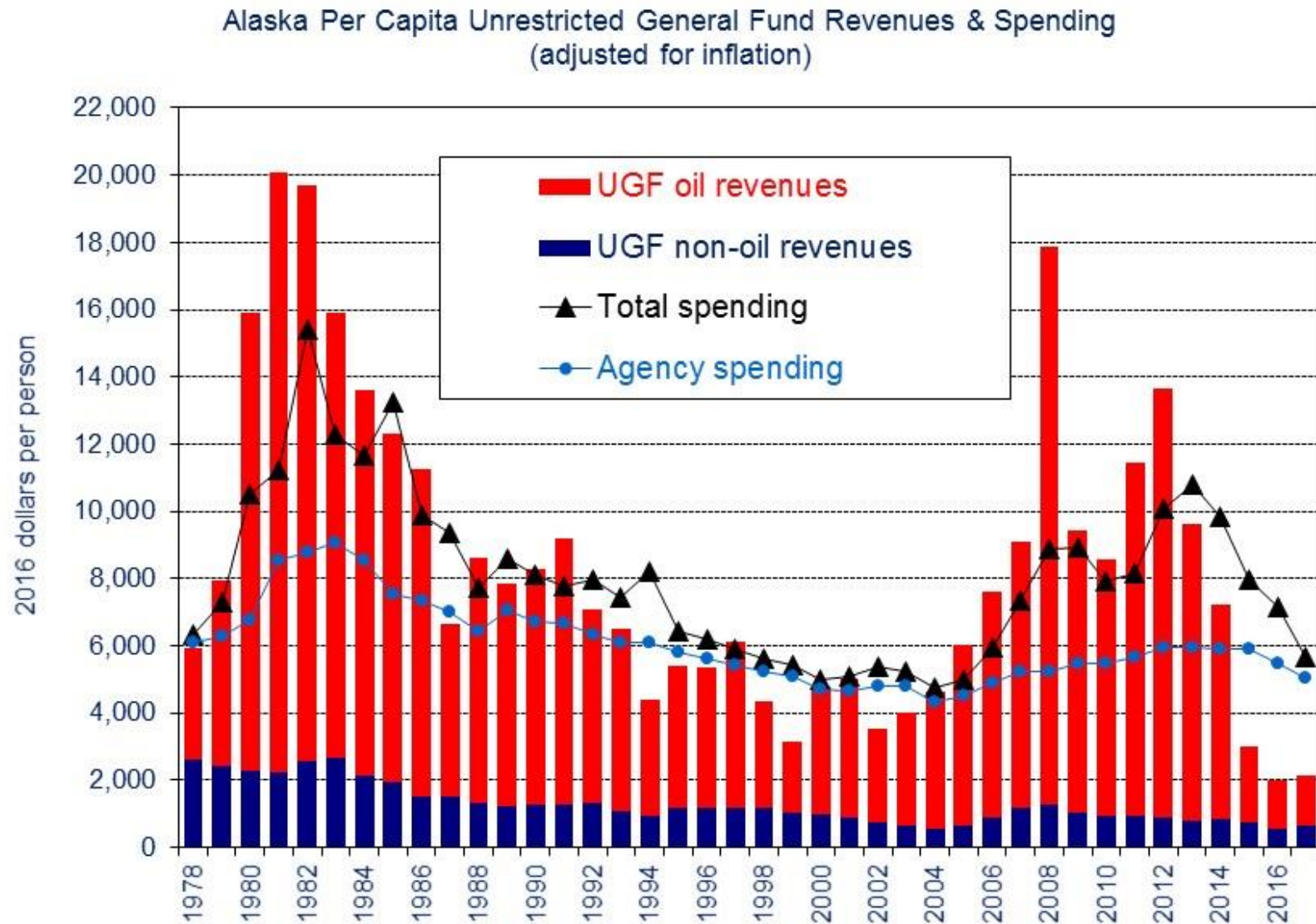
Despite drastic fluctuations in oil revenues, for more than three decades we were able to fund state government almost entirely with oil revenues. Oil accounted for 86% of total UGF revenues between 1980 and 2014.



When we had more oil money, we spent more (and saved some)  
When we had less oil money, we spent less (and spent our savings)



Our fundamental fiscal challenge is that  
it is no longer possible to fund state government almost entirely with oil revenues.  
Oil revenues have fallen too much. We don't have enough savings.



# Framing Alaska's fiscal options

Most of the discussion of the fiscal challenge  
has treated UGF and Permanent Fund  
revenues, spending and savings separately.

This reflects the reality of how these funds are managed  
and their historically different purposes.

But in framing our long-term fiscal options,  
it is useful to think in terms of our  
combined UGF and Permanent Fund  
revenues, spending and savings.



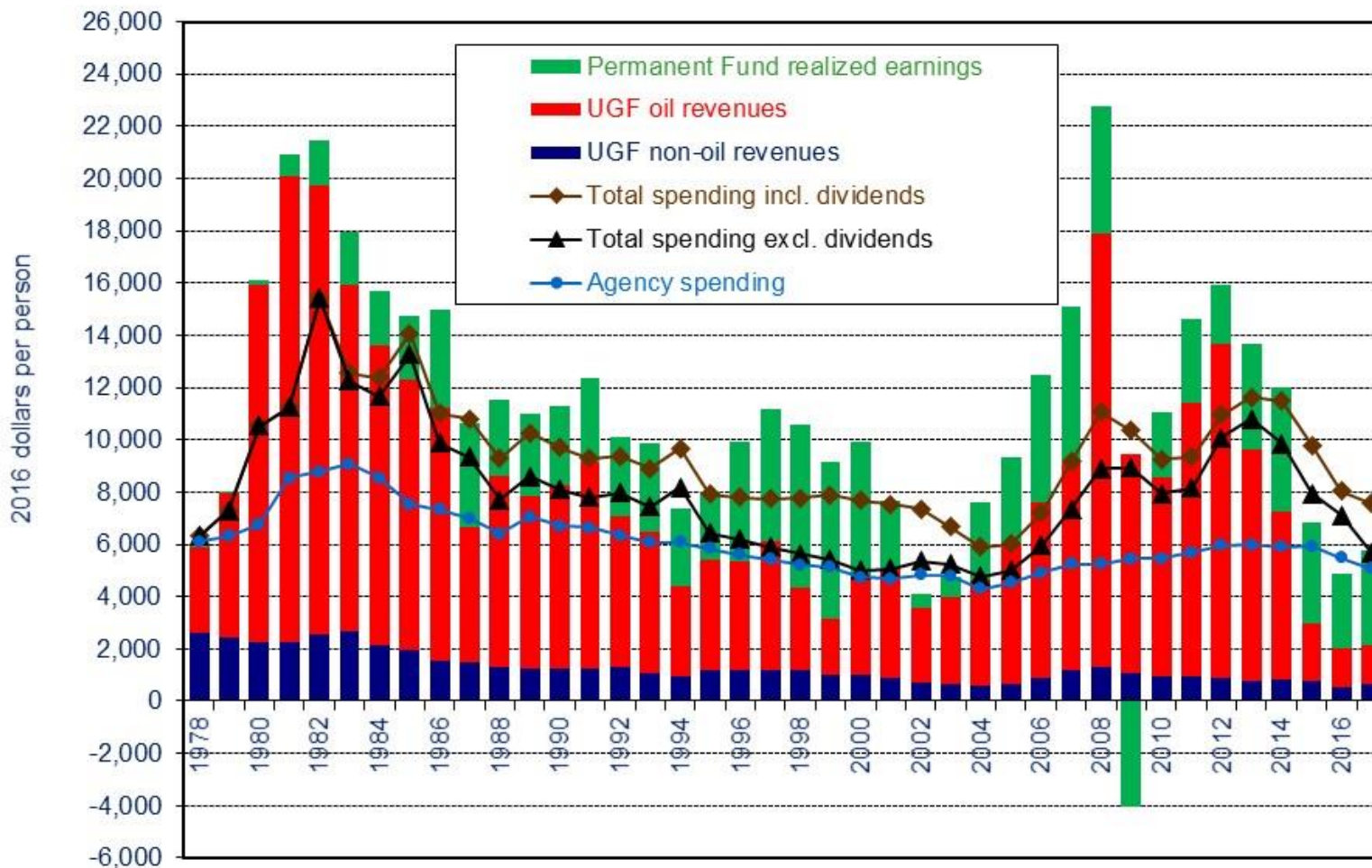
Our long-term fiscal challenge is that  
our total spending for government and dividends  
exceeds our total UGF and Permanent Fund revenues,  
and we have been drawing down our total savings.

Using PF earnings to help pay for government  
doesn't address our long-term fiscal challenge.

Only changes to our revenues or our spending  
for government and/or dividends  
address our long-term fiscal challenge.

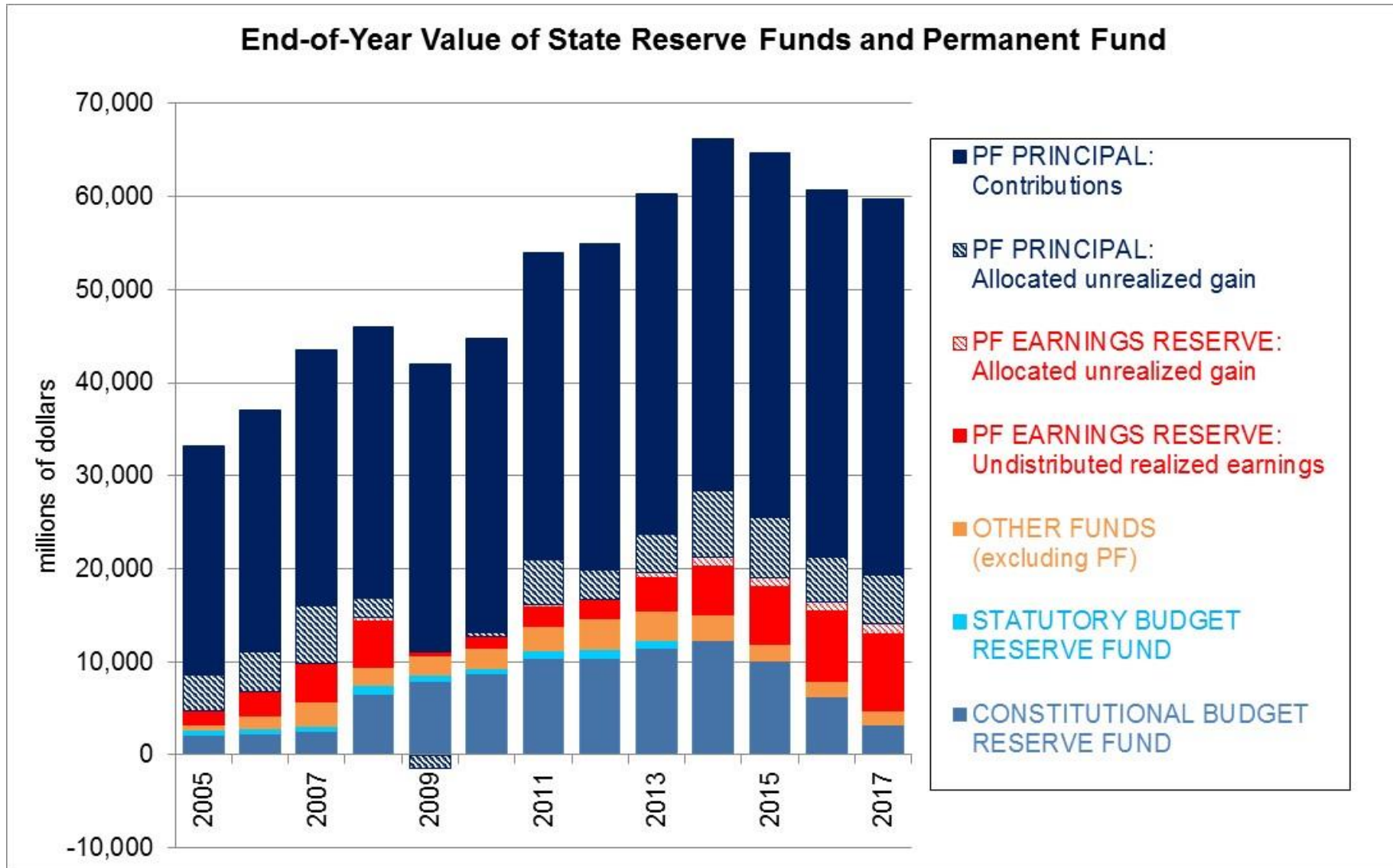
Since 2015, our total spending for government and dividends has exceed our total UGF and Permanent Fund revenues.

Alaska Per Capita Revenues & Spending including PF Earnings & Dividends  
(adjusted for inflation)



Our FY17 total spending is \$1.8 billion more than our total revenues

Since 2014 we have been drawing down the total value of our funds.



Mathematically, over any given period:

Our total revenues from all sources  
Existing & New

*minus*

Our total spending of all kinds  
Government & Dividends

*equals*

Our total savings\* in all funds  
CBRF, Permanent Fund & Other

*\*By “savings” I mean the net amount that we add to our funds.  
In any given period, “savings” can be positive, zero or negative.*

Over any given period, given projected existing revenues,  
we face a direct tradeoff between

New revenues  
Government spending  
Dividend spending  
Total savings in all funds

I developed a simple model to illustrate this tradeoff  
over the 9-year period FY18-FY26.

The model illustrates a way of framing our fiscal choices  
in terms of four broad questions:

1. What assumptions about future revenues from existing sources should we base our fiscal planning on?
2. Given these assumptions, what are sustainable existing revenues?  
*(defined as the total level of spending existing revenues could support which would keep the inflation-adjusted total value of all funds unchanged)*
3. Given sustainable existing revenues, what are the feasible combinations of
  - New revenues
  - Government spending
  - Dividend spending
  - Total savings in all funds
4. Which of these feasible combinations do we wish to choose?

Question 1:  
What assumptions about future revenues  
from existing sources should we  
base our fiscal planning on?

## Our existing revenue sources:

- Future oil revenues *which depend on*
  - Future oil prices
  - Future oil production
- Future investment revenues *which depend on*
  - Permanent Fund rates of return
  - How much we save

It's not obvious what assumptions about future revenues we should base our fiscal planning on.

The issue is not only what revenues are most likely.  
It is also what assumptions are most prudent to base our planning on.



Most of the fiscal debate we hear is based on

The Department of Revenue's most recent oil revenue assumptions

Chapter 2  
**5**

## Total Unrestricted General Fund Revenue

A 10-year forecast

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

Fiscal Year	Millions of Dollars										
	History	Forecast									
	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
<b>Total Unrestricted Revenue</b>	<b>1,539.8</b>	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	<b>2,224.8</b>

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

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

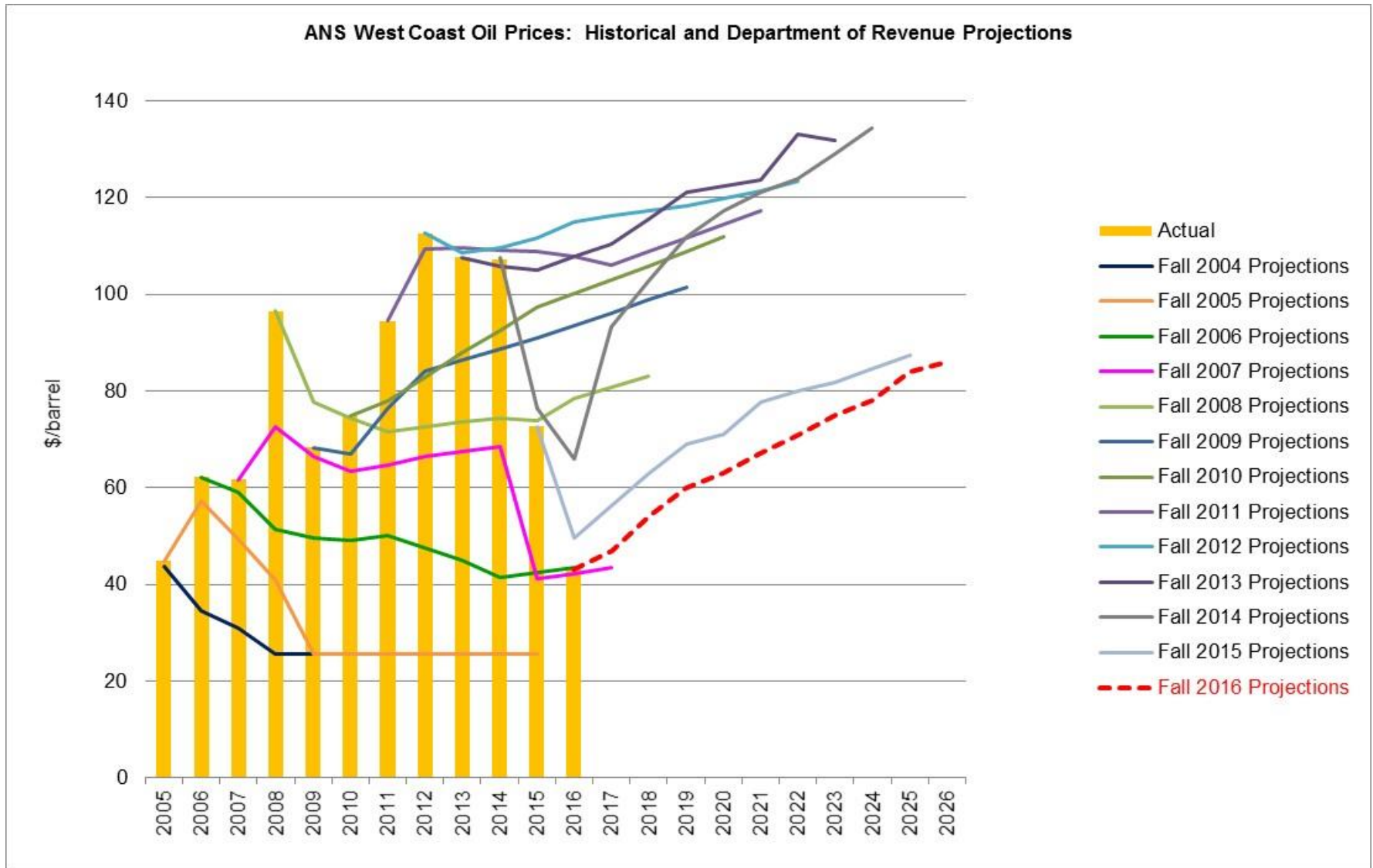
From Alaska Permanent Fund Corporation Financial History & Projections as of November 30, 2016

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

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

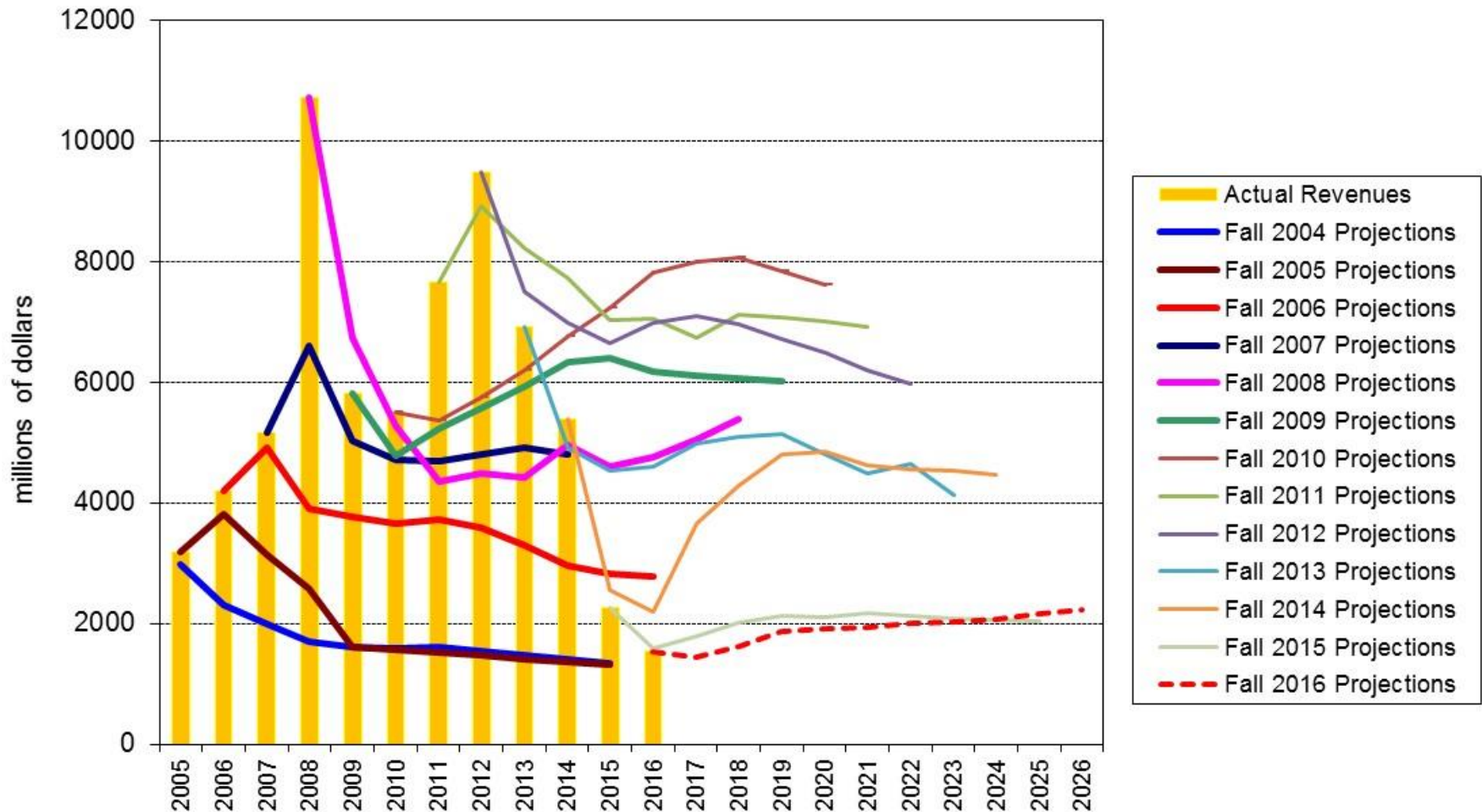
But these assumed revenues and returns won't actually happen!

Actual oil prices have almost always differed drastically from what the Department of Revenue projected a few years earlier.



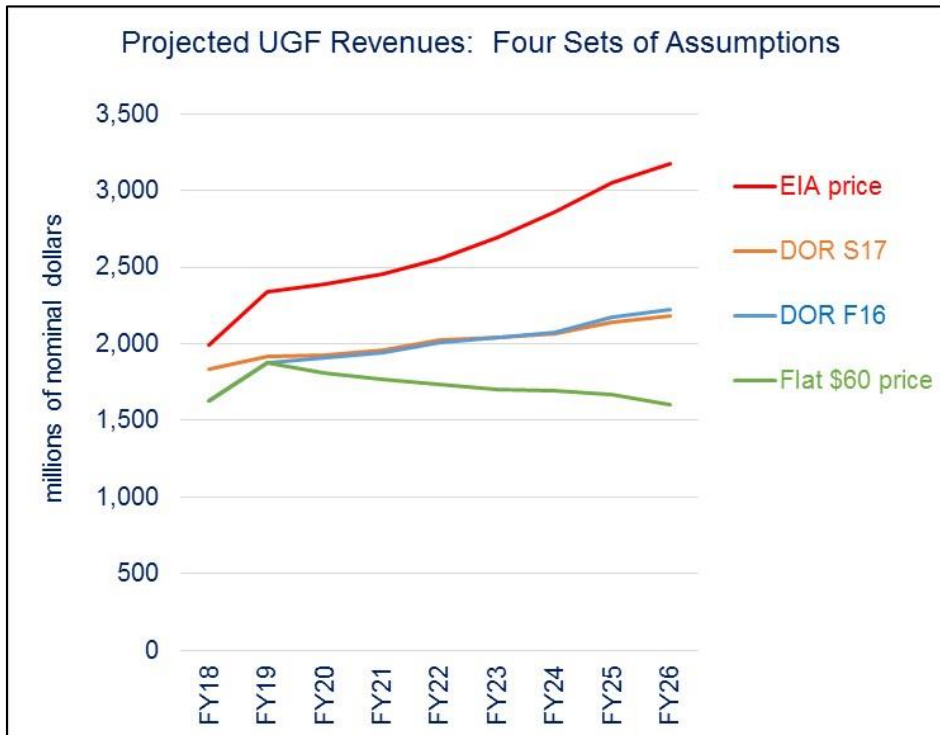
Actual oil revenues have almost always differed drastically from what the Department of Revenue projected a few years earlier.

### State Unrestricted General Fund Revenues: Alaska Department of Revenue 10-Year Projections



## I'll illustrate the implications of four sets of assumptions about future oil revenues

Name	Assumptions
EIA price	Oil prices rise as projected by Energy Information Administration
DOR S17	Alaska Department of Revenue Spring 2016 projections (just released)
DOR F16	Alaska Department of Revenue Fall 2016 projections
Flat \$60 price	Oil price stays constant at \$60/barrel after FY18

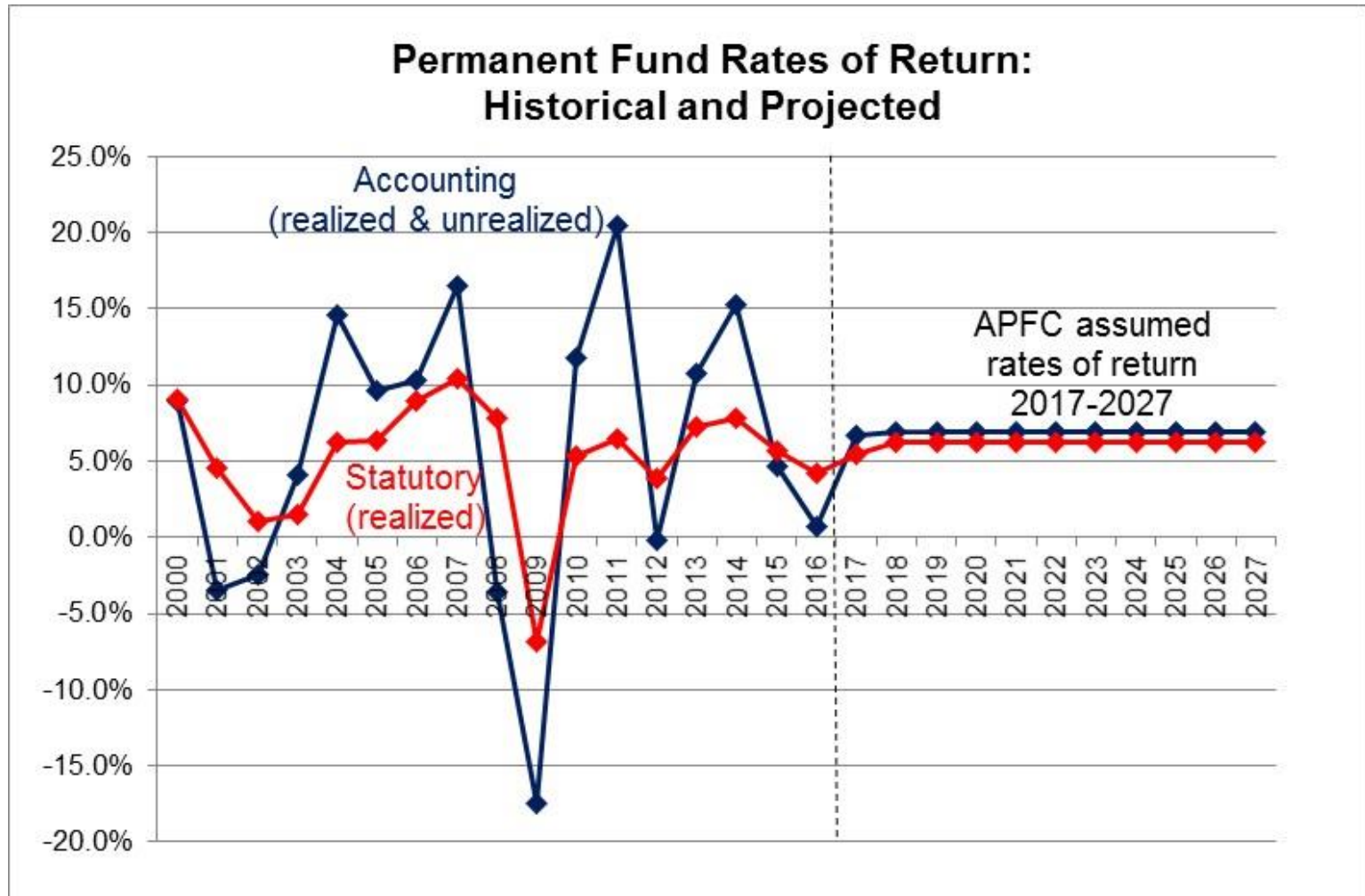


*Any of these assumptions could happen.*

*No one knows for sure what will happen.*

*Which should we base our planning on?*

Historically, Permanent Fund rates of return have always fluctuated widely.  
They have never been constant.



I'll illustrate the implications of three sets of assumptions about future Permanent Fund rates of return and inflation

Name	Assumptions for FY18-26
APFC	Alaska Permanent Fund Corporation assumptions Constant 6.95% total rate of return Constant 6.24% statutory rate of return Constant 2.25% rate of inflation
APFC-1%	1% lower rates of return than APFC assumptions
APFC+1%	1% higher rates of return than APFC assumptions



Since it's so difficult to predict our oil revenues or investment returns, what should 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.

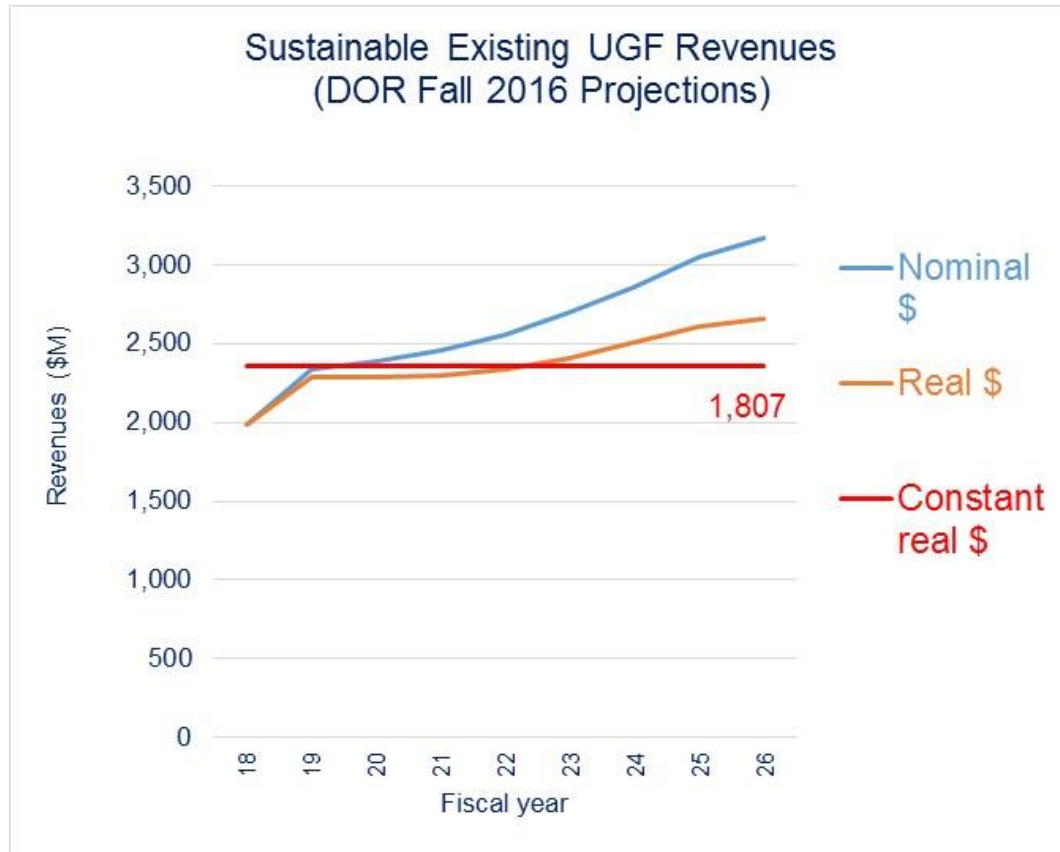
*We ought to have much more analysis and discussion of the outlook for our future revenues and what assumptions we should base our fiscal planning on.*

## Question 2:

Given our assumptions about revenues from existing sources, what are sustainable existing revenues?

(defined as the total level of spending existing revenues could support which would keep the inflation-adjusted total value of all funds unchanged)

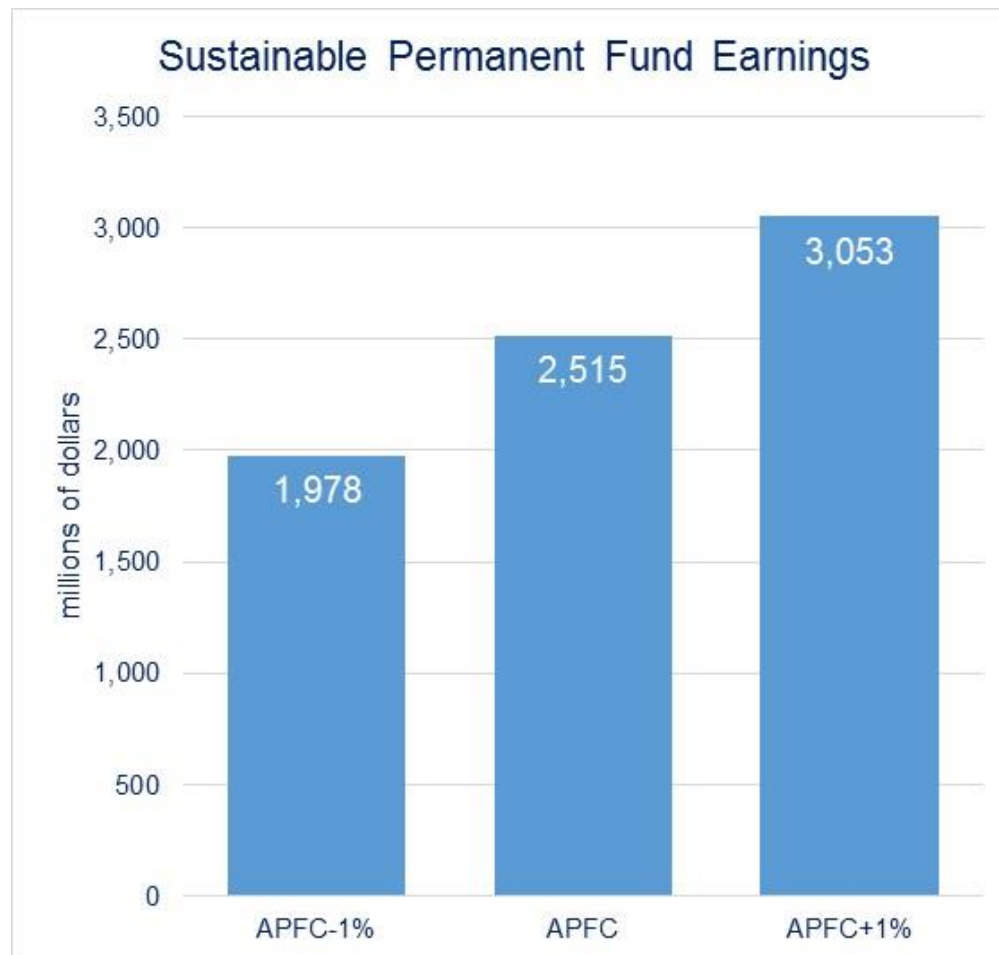
# Calculating Sustainable Existing UGF Revenues



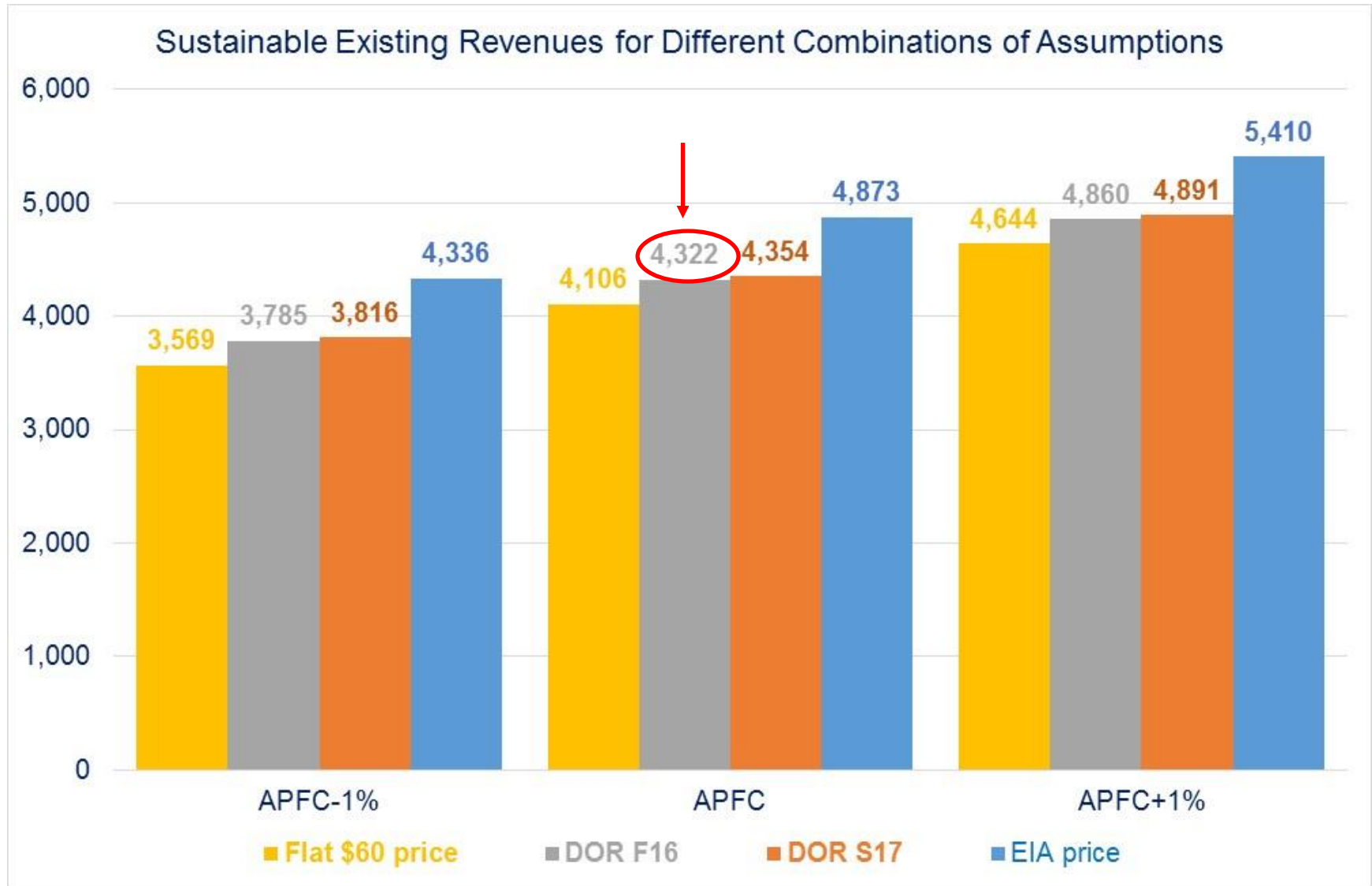
# Calculating Sustainable Permanent Fund Earnings

*Defined as the total annual real draw which would result in growth of the inflation-adjusted total value by the real value of royalty deposits*

*= end-FY25 value of \$66.3 million (nominal) or \$55.6 million (real)*



Sustainable existing revenues vary significantly depending on what you assume about future oil revenues and PF rates of return!



Question 3:  
Given sustainable existing revenues,  
what are the feasible combinations of . . .

New revenues  
Government spending  
Dividend spending  
Total savings in all funds



*If we assume DOR F16 oil revenue and APFC rates of return:*

- “Sustainable existing revenues” are \$4322 million
- We could sustain total annual spending of \$4322 million and maintain the real value of our funds.

Selected Fiscal Choices Which Would Maintain the Real Value of our Funds		
Government spending	Dividend spending*	New Revenues
4302	0	0
3712	610	0
3102	1220	0
4302	610	610
4302	1220	1220
4912	610	610

*\*A \$1000 dividend costs about \$610 million; A \$2000 dividend costs about \$1220 million*

*Any combination of government and dividend spending which exceeds \$4322 without corresponding new revenues would deplete the real value of our funds.*

Question 4:  
Which of the feasible combinations  
do we wish to choose of . . .

New revenues  
Government spending  
Dividend spending  
Total savings in all funds

Which of the feasible combinations  
do we wish to choose of . . .

New revenues

Government spending

Dividend spending

Total savings in all funds

These are *political choices*. We should debate them!

But they should be grounded  
in the reality of the real tradeoffs we face.  
We shouldn't be debating fiscal reality.

Fiscal reality is—in part—that  
our options have changed drastically from what they have  
been for almost as long as most Alaskans can remember.

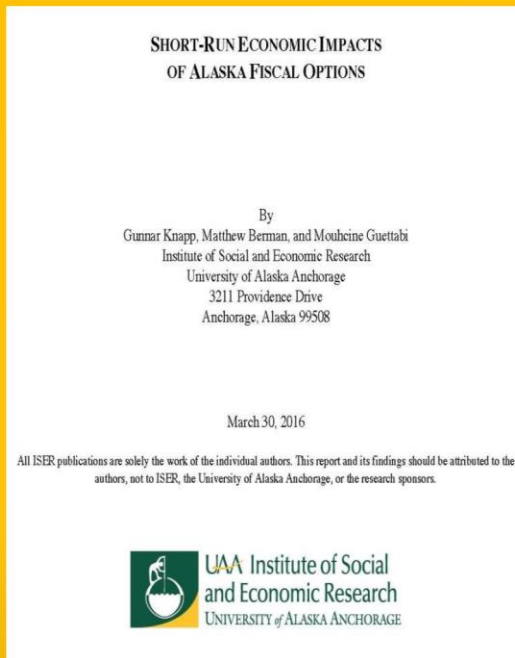
# A few final comments

We should be thinking and talking about *many* considerations in making our fiscal choices

- How fair are they in how they affect different Alaskans today?
- How will they affect future Alaskans?
- What are their short-term economic impacts?
- What are their long-term economic impacts?
- How might they influence how Alaskans engage with government?

Referring to an ISER study, Brad Keithley has argued that we should focus on relative short-term economic impacts of fiscal options.

## *Cutting the PFD hurts the overall Alaska economy*



- Not all fiscal options have the same impact on the overall economy – some are worse than others
- Cutting the PFD has the **largest adverse impact** on the overall economy:
  - **By income** of all the state's fiscal options, and
  - **By any measure** of all the state's revenue options.

*Short-Run Economic Impacts of Alaska Fiscal Options, at III-9, A-15 (March 2016)*

**Feb. 16, 2017**

**Alaskans for Sustainable Budgets**

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This is an overly simplistic characterization of our study results and the lessons which can be drawn from them.



As I wrote in the study and testified to the Senate Finance Committee. . .

We only studied short-run direct economic impacts of fiscal options. There are many other important potential impacts which we *didn't* study.

- A few examples of impacts we *didn't* study:
  - Economic impacts of reductions in government services
  - Impacts on investment
  - Impacts on infrastructure development & resource industries
  - Impacts on labor markets & population
- Our fiscal choices will significantly affect Alaska's future
- We should think about not only their short-term economic impacts but also their longer-term economic and social impacts.

## A few other comments. .

- Drawing down our savings has been our default fiscal choice
  - Lowest current economic impact
  - Least noticed
  - Least political pain
  - *But may cause the biggest long-term harm to Alaska!*
  - Spending your kids' inheritance is easiest for you but hurts them the most.
- Cuts aren't real unless they are specified.
  - Plans based on cuts which can't be achieved are actually plans to continue running deficits and drawing from our savings
- Paying taxes wouldn't kill us
  - Economies function in the other 49 states
  - People pay attention to spending when they pay taxes
  - Not paying taxes causes the Alaska Disconnect

## What addressing Alaska's fiscal challenge demands of us

- Of all Alaskans
  - Become informed about our fiscal reality
  - Recognize that there are no easy solutions
  - Recognize that no-one gets everything they want in a democracy
- Of advocates
  - It's not enough to say what you oppose
  - You need to say what you propose
  - Reality-based proposals
- Of our elected leaders:
  - Educating Alaskans
  - Hard work
  - Cooperation
  - Hard choices