

“It was the best of
times...

February 5, 2016

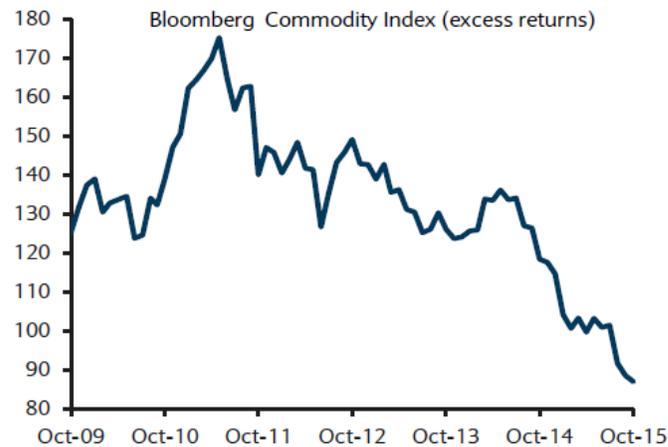
Or the corollary to “Please God give us another boom and I promise not to...

-Mark Gordon, Treasurer

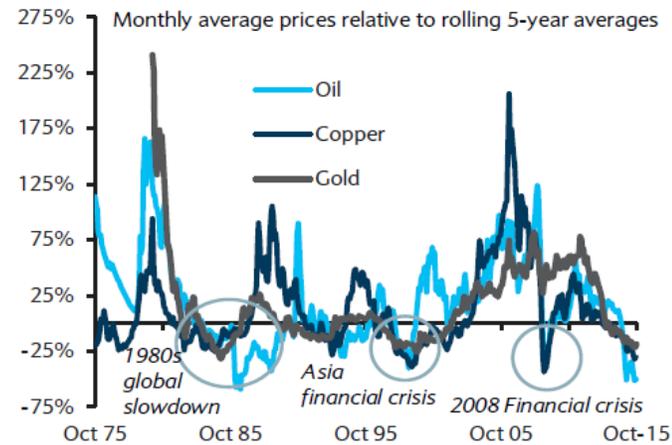
Not a picture of the Tetons...

Source:
Barclays
Research

Downtrend in commodities has accelerated...



...and is now comparable with previous economic crises



History suggests the bottoming process in commodities still has some way to run

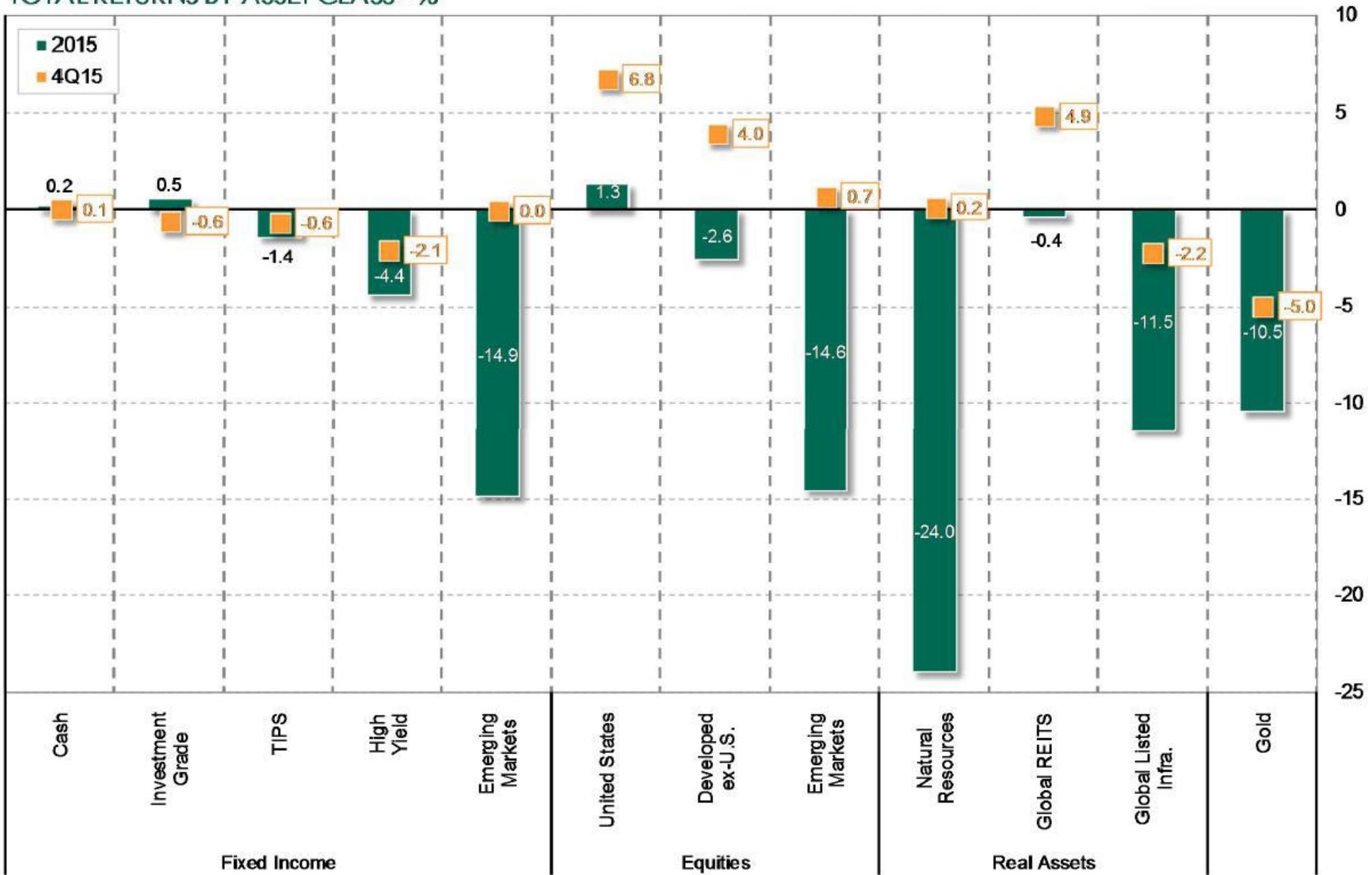
Comparison of current commodity price levels with previous crisis lows

	Low point (relative to 5-year rolling avg. price)				
	Oct-15	Avg. Low in previous crises	2008 financial crisis	1997 Asian financial crisis	1980s economic slowdown
Copper	-30%	-36%	-44%	-39%	-26%
Oil	-50%	-45%	-35%	-40%	-59%
Gold	-19%	-27%	-35%	-25%	-32%
BBC index	-33%	-32%	-35%	-27%	n.a.

Months spent more than 20% below 5-year rolling avg. price

	Months spent more than 20% below 5-year rolling avg. price				
	As of end Oct 2015	Avg. spent in previous cycles	2008 financial crisis	1997 Asian financial crisis	1980s economic slowdown
Copper	9	15	6	24	15
Oil	11	19	5	14	38
Gold	4	16	11	21	17
BBC index	11	10	11	9	n.a.

TOTAL RETURNS BY ASSET CLASS - %



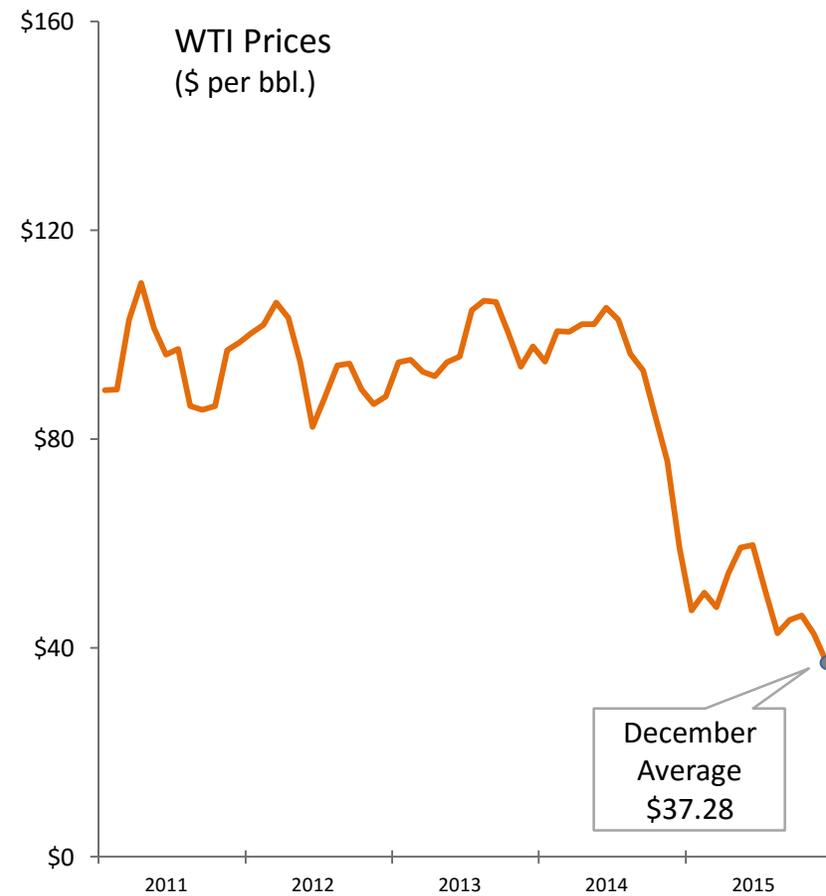
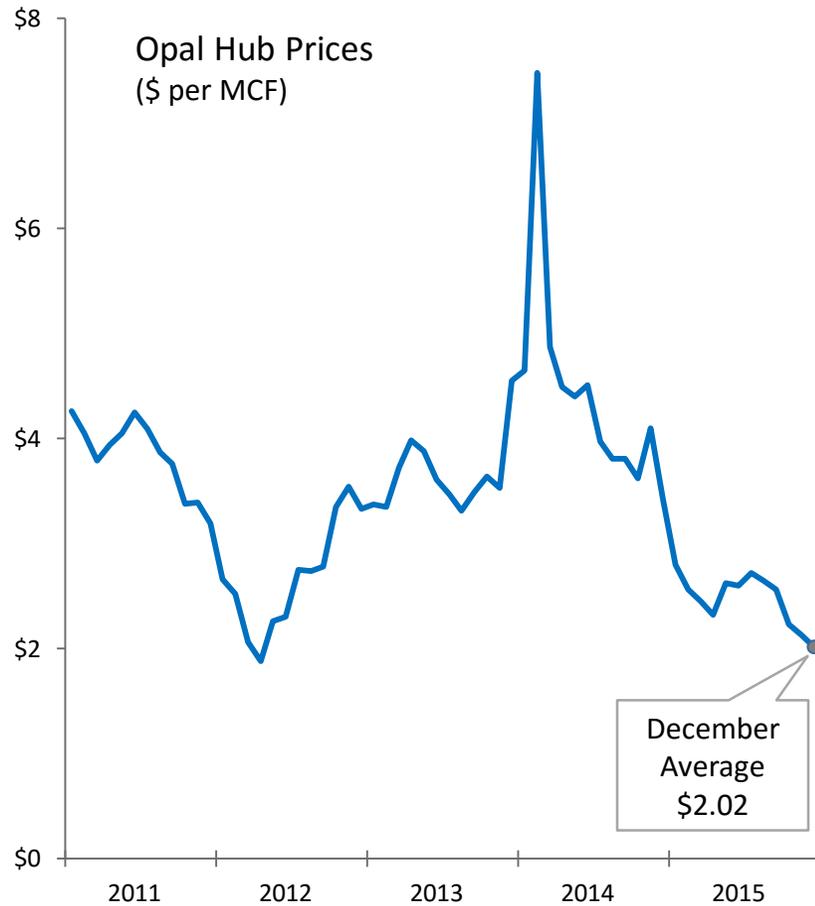
Source:
Northern
Trust

In fact it is a “Perfect Storm”

- Commodity Price Collapse
- 2015 was 3rd worst year for investors
 - No place to hide
- Strong Dollar hurt US exports
- Uncertainty about policy direction
 - Regulation
 - Central Bank Activity
 - China
- *And we anticipated revenues before they came in - A lesson Wyoming learns again from time to time.*



Natural Gas and Crude Oil Prices



Source: Bloomberg.



Global Oil Dynamics

Source:
JP Morgan

Change in production and consumption of oil

Production, consumption and inventories, millions of barrels per day

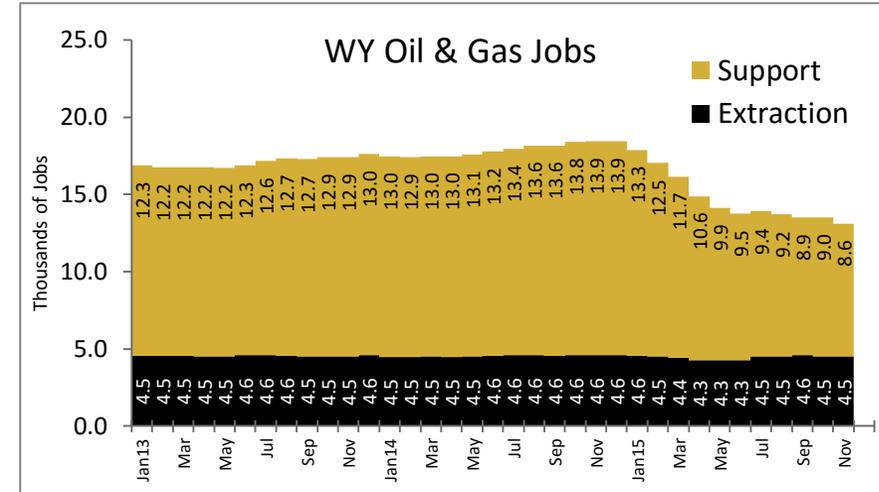
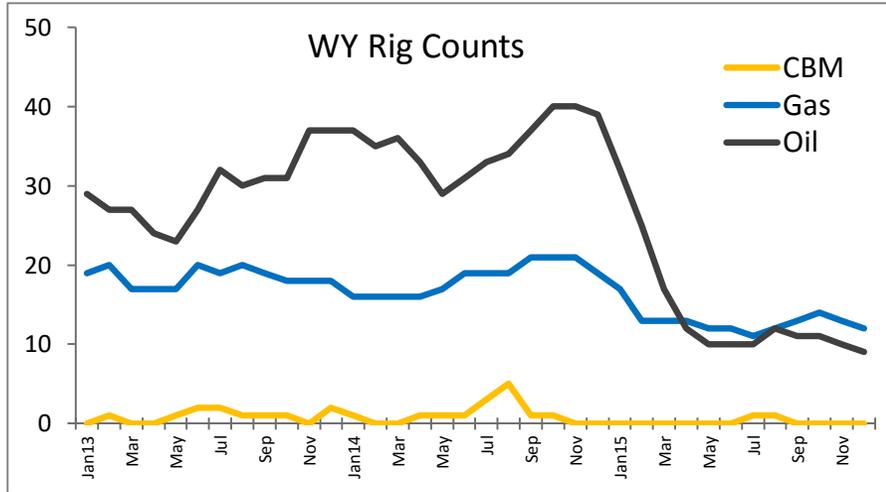
	2013	2014	2015*	2016*	Growth since 2013
Production					
U.S.	12.4	14.1	14.9	14.7	19.0%
OPEC	36.4	36.4	37.4	38.1	4.5%
Global	90.9	93.3	95.5	95.8	5.4%
Consumption					
U.S.	19.0	19.1	19.4	19.6	3.2%
China	10.5	10.9	11.2	11.5	9.7%
Global	91.3	92.5	93.8	95.2	4.3%
Inventory Change	-0.4	0.8	1.7	0.6	

U.S. crude oil inventories and rig count**

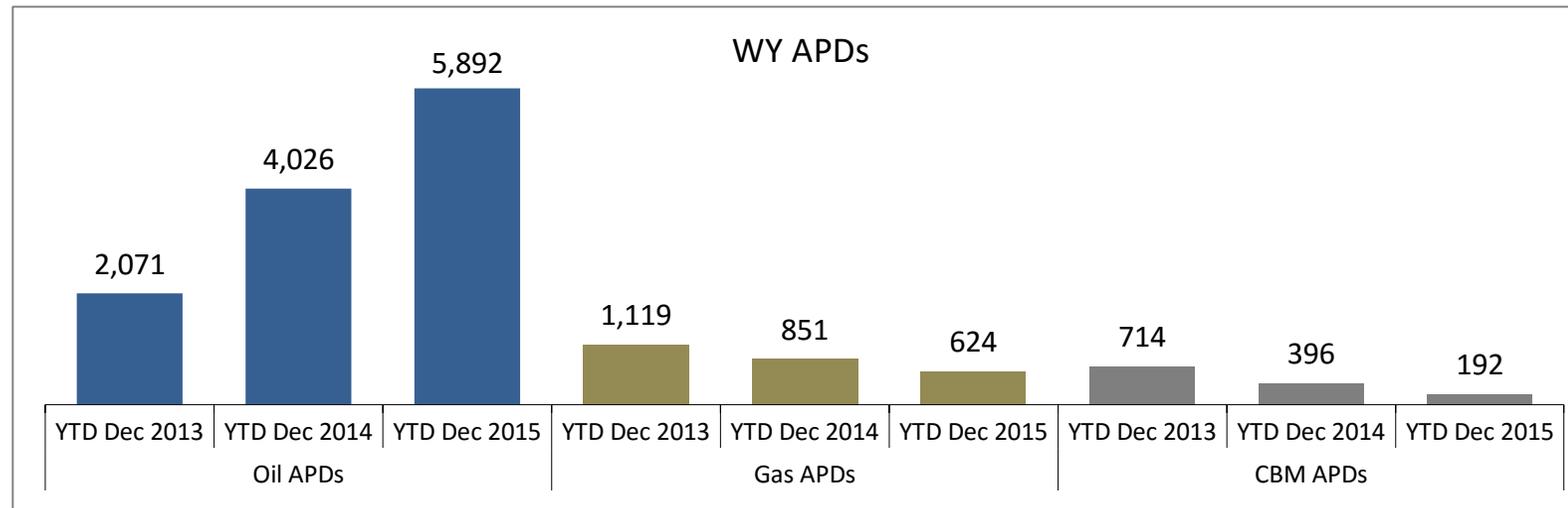
Million barrels, number of active rigs



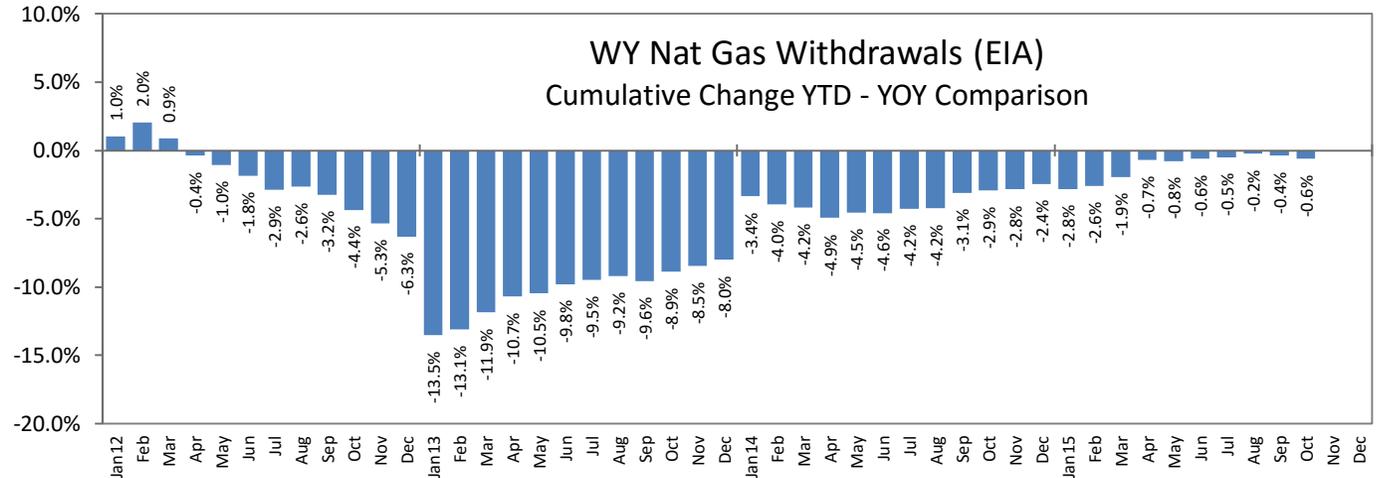
WY Rig Counts, Oil & Gas Jobs, and Applications for Permit to Drill (APDs)



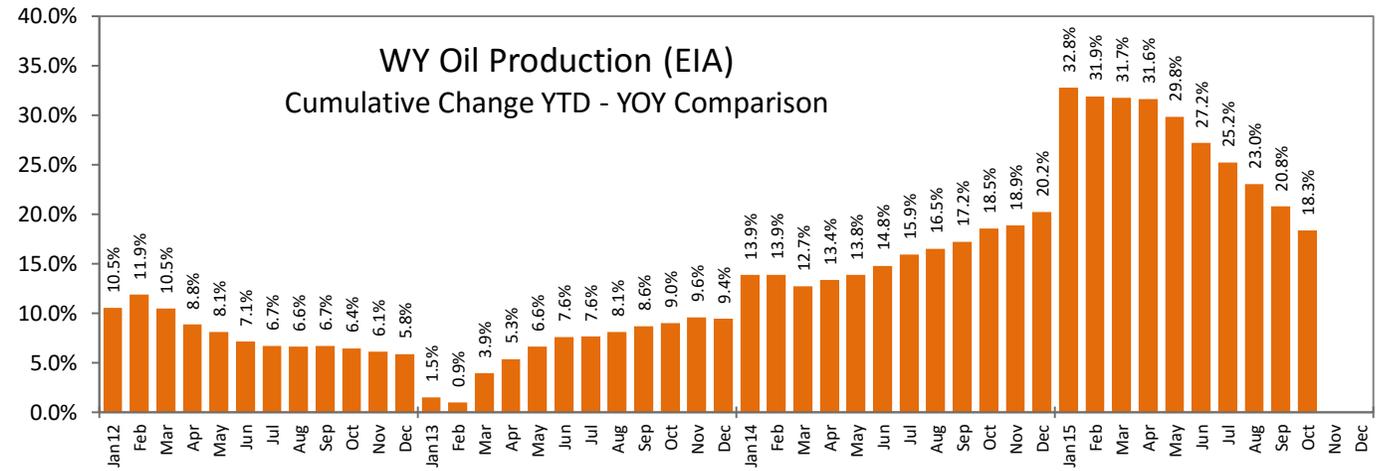
Source: WY Oil and Gas Conservation Commission; U.S. Bureau of Labor Statistics.



WY Natural Gas and Oil Production



Natural Gas Totals
 CY15 Oct TD: 1,653.5 bcf
 CY14: 1,997.7 bcf
 CY13: 2,047.8 bcf
 CY12: 2,225.6 bcf

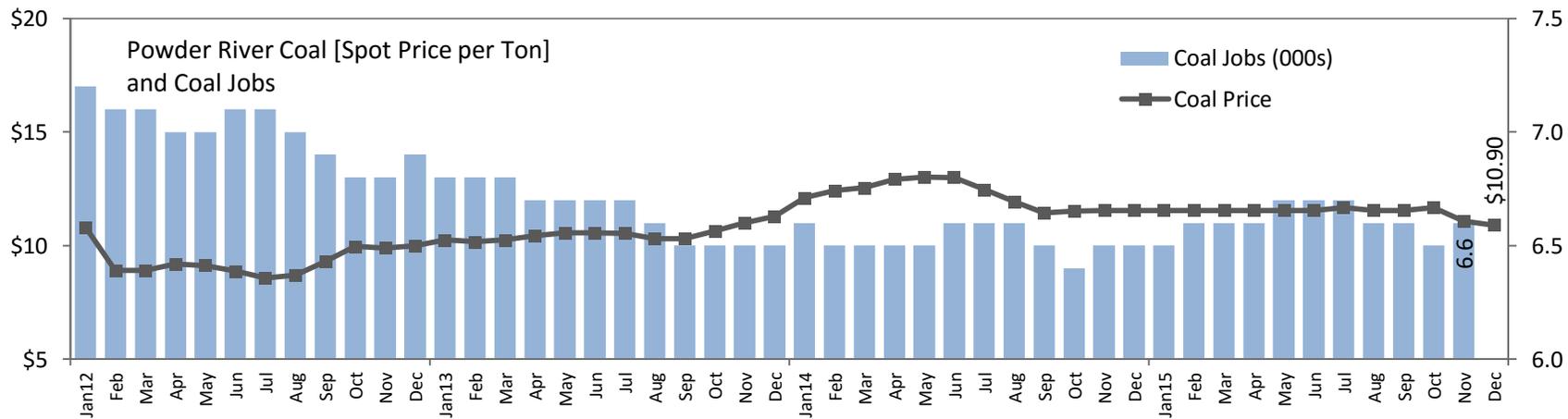
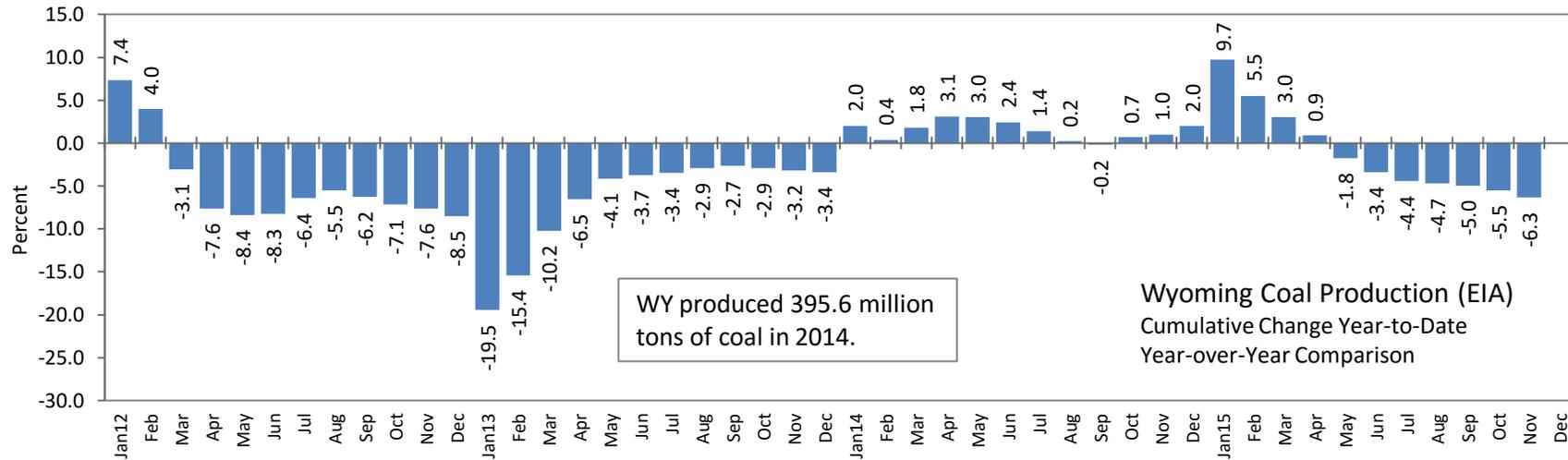


Oil Totals
 (Thousands of bbls.)
 CY15 Oct TD: 73,460
 CY14: 76,077
 CY13: 63,294
 CY12: 57,837

Source: Energy Information Administration.



WY Coal: Production, Prices, and Jobs

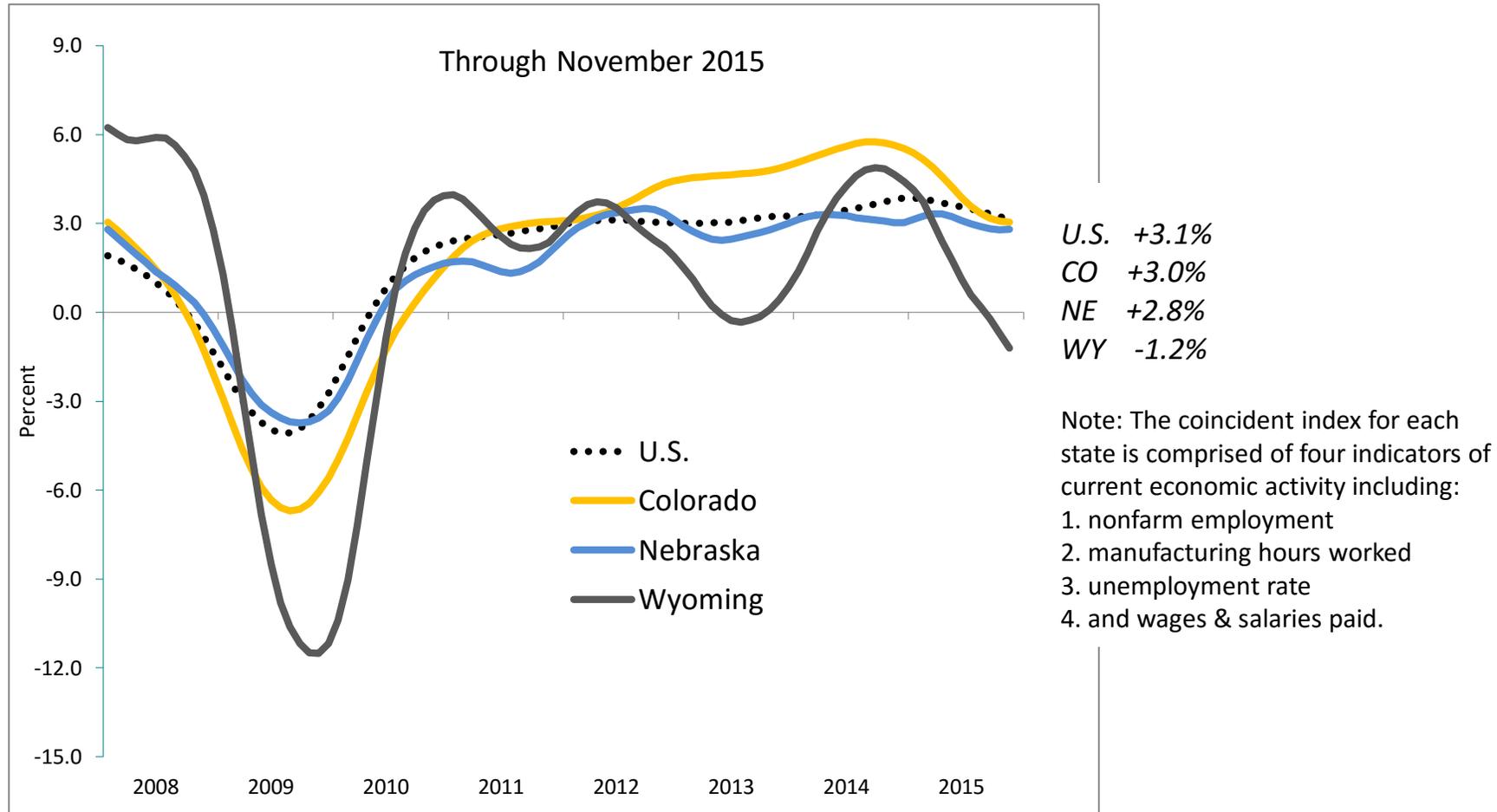


Source: Energy Information Administration; Bloomberg (Prices); Bureau of Labor Statistics.



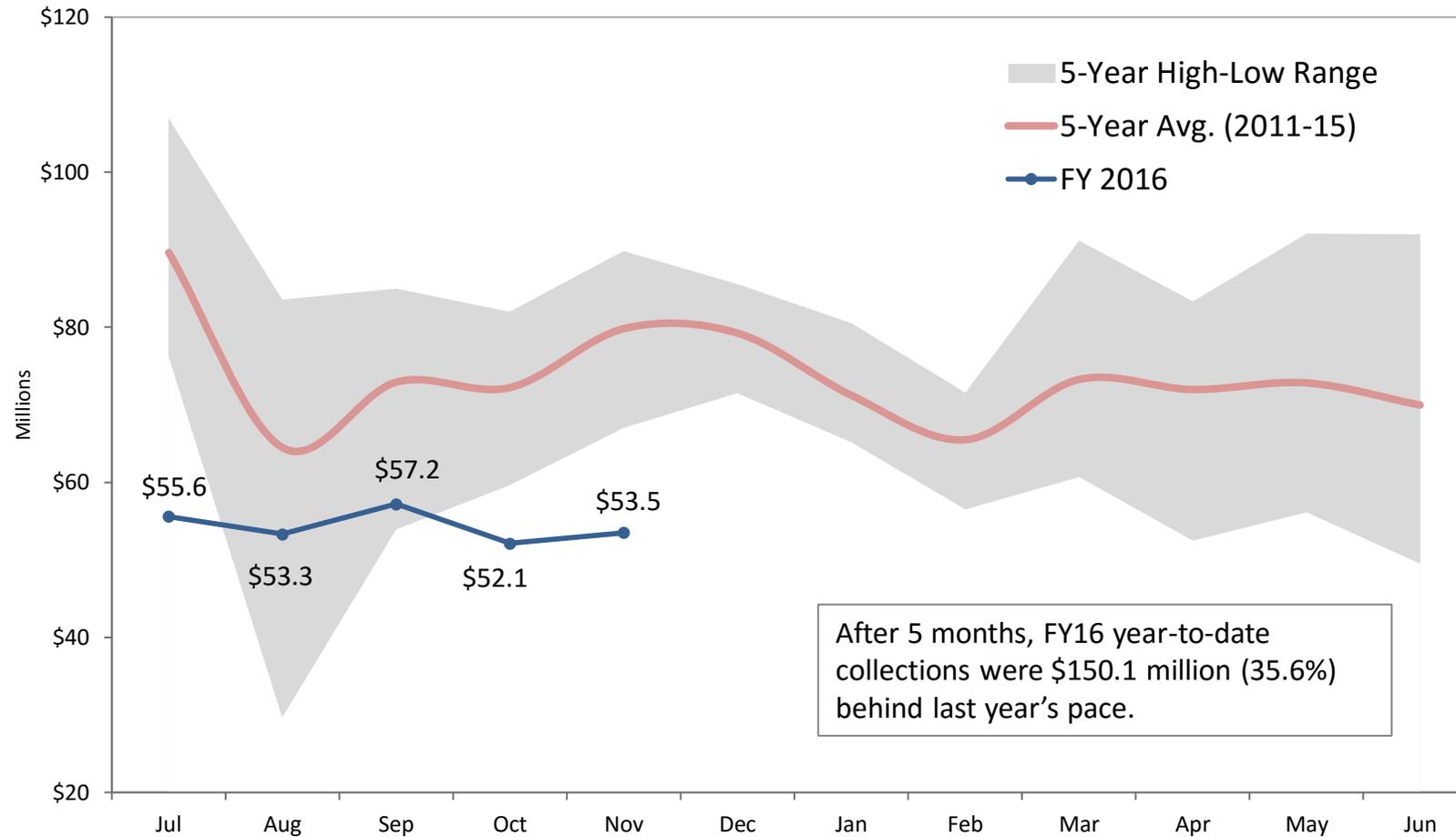
Coincident Index: WY, CO, NE, & U.S.

Year-over-Year Percent Change in Index Values



Source: Federal Reserve Bank of Philadelphia.

WY Statewide Severance Tax Collections

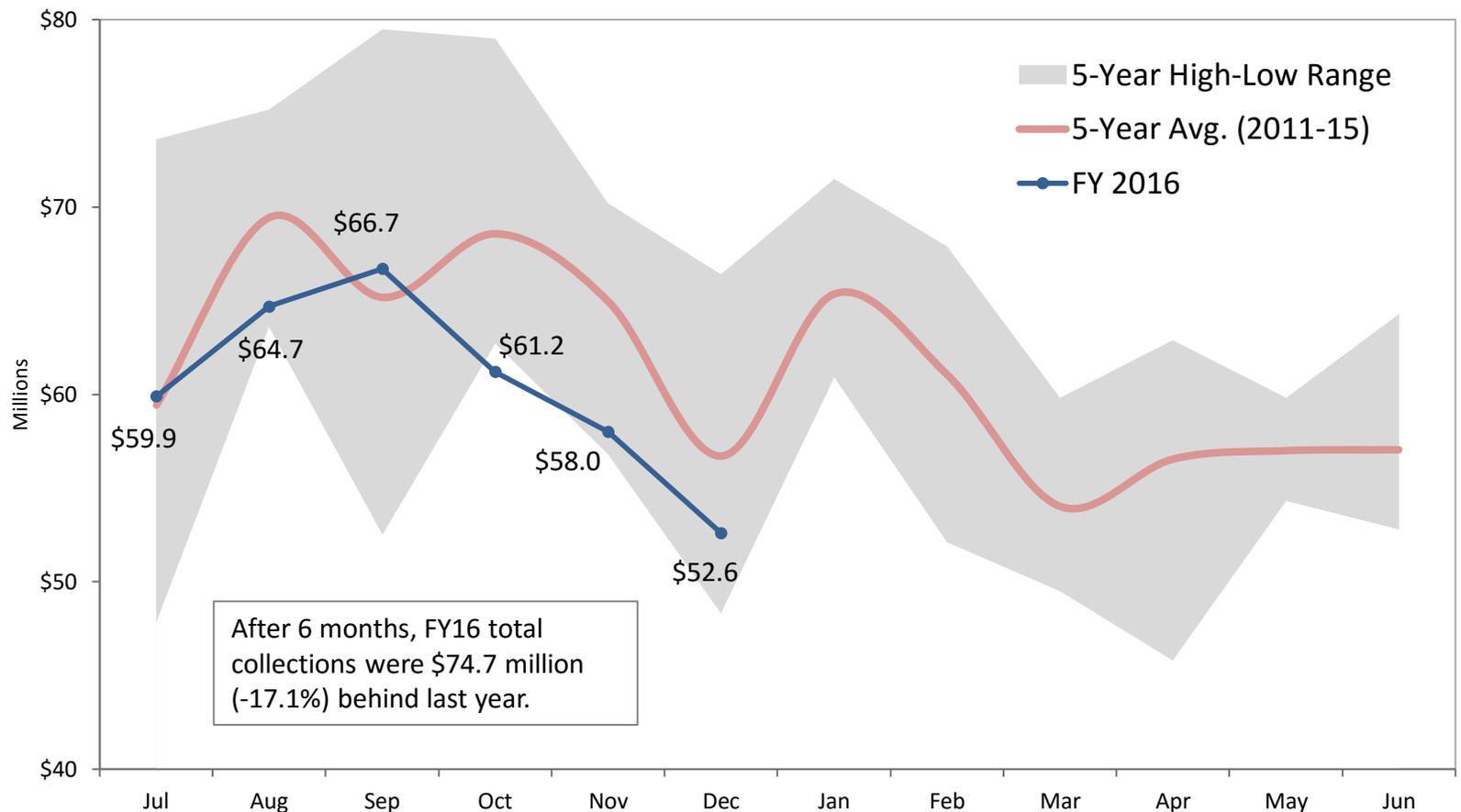


Source: WY Dept. of Revenue.

Note: Includes severance taxes collected on all minerals in Wyoming on a cash receipts basis.



WY Statewide 4% Sales and Use Tax Collections



Source: WY Dept. of Revenue.

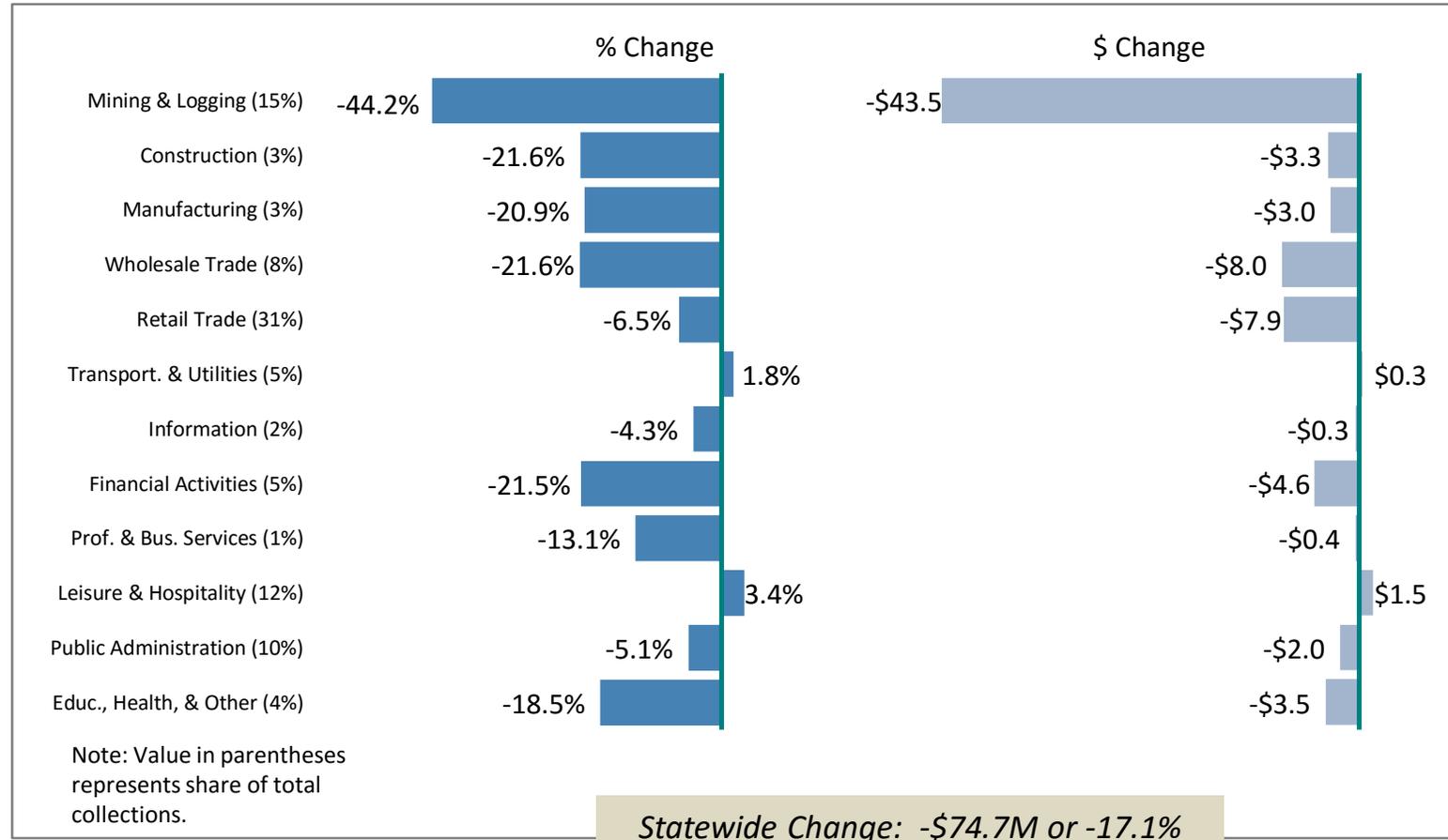
Note: Includes both the state and local shares of the state-wide 4% sales and use tax collections on a cash receipts basis.



WY Statewide 4% Sales and Use Tax Collections by Industry

Change in Percent and Dollars (Millions)

Year-to-Date Fiscal 2016 vs. Fiscal 2015 — Six Months of Collections

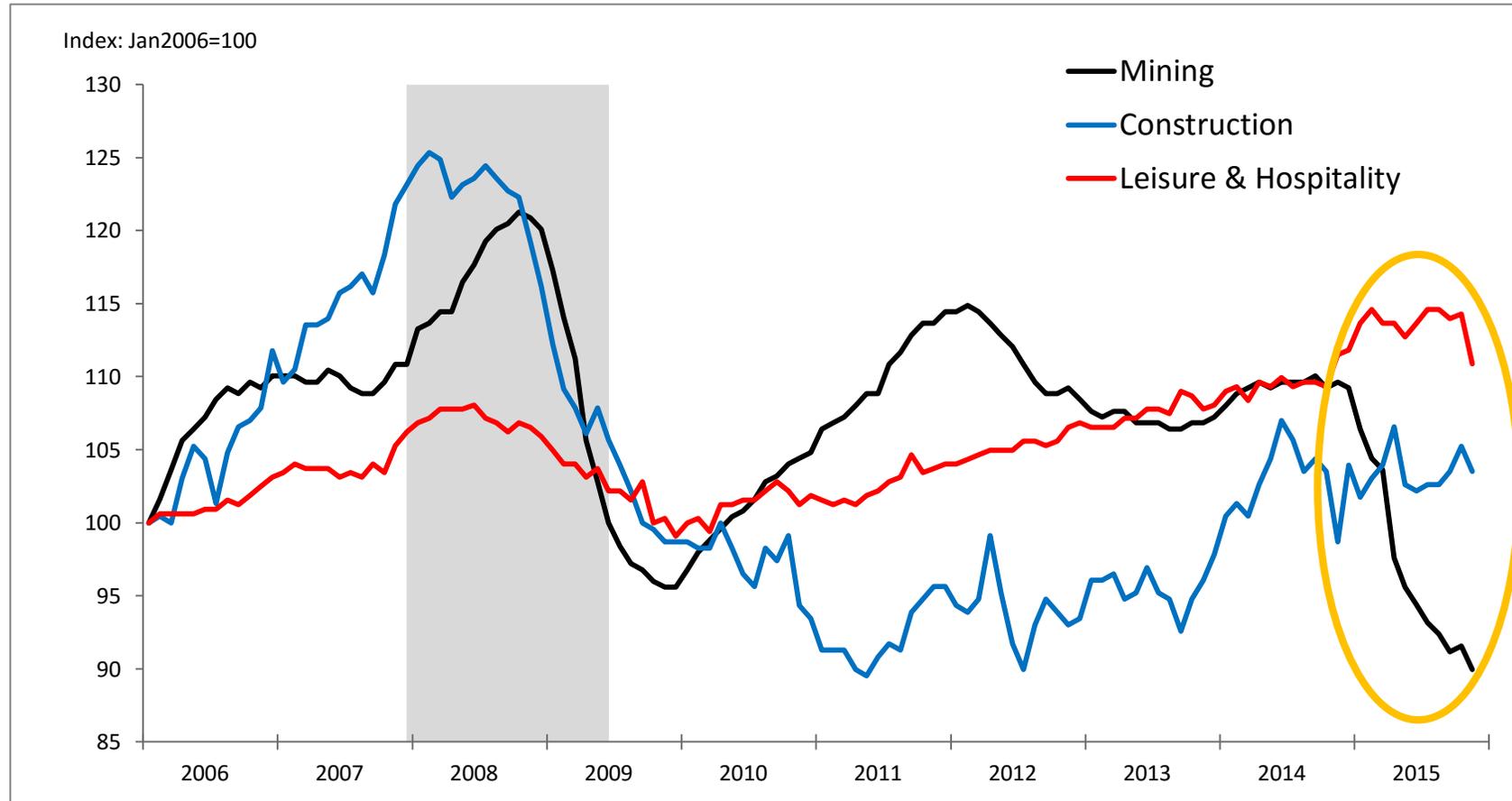


Source: WY Dept. of Revenue.

Note: Includes both the state and local shares of the state-wide 4% sales and use tax collections on a cash receipts basis.



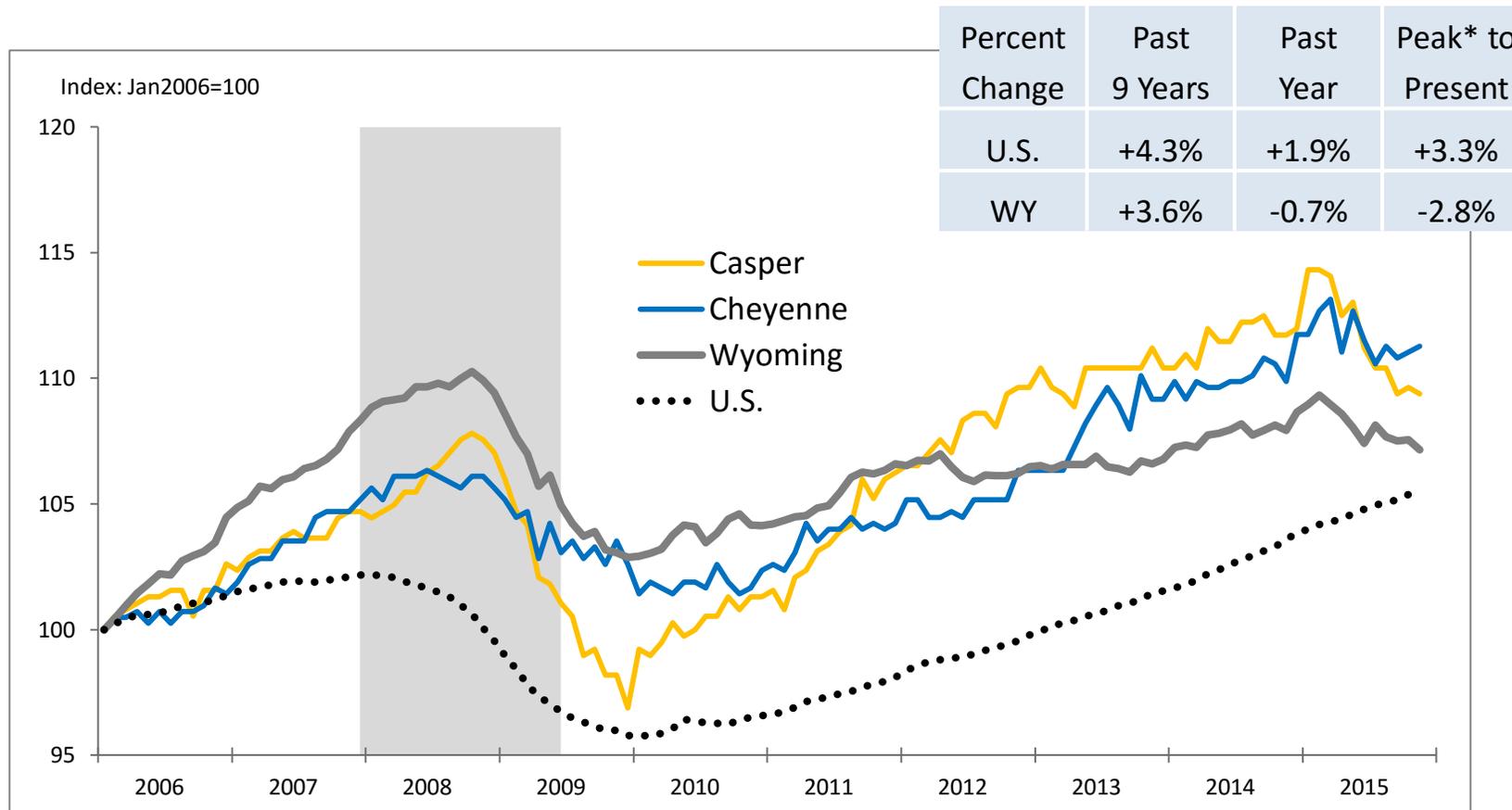
Nonfarm Employment: Mining, Construction, and L&H Seasonally Adjusted — Through November 2015



Source: U.S. Bureau of Labor Statistics.

Note: Shaded area represents recession.

Nonfarm Employment: Casper, Cheyenne, WY, & U.S. Seasonally Adjusted — Through November 2015



Source: Bureau of Labor Statistics.

Note: Shaded area represents recession.

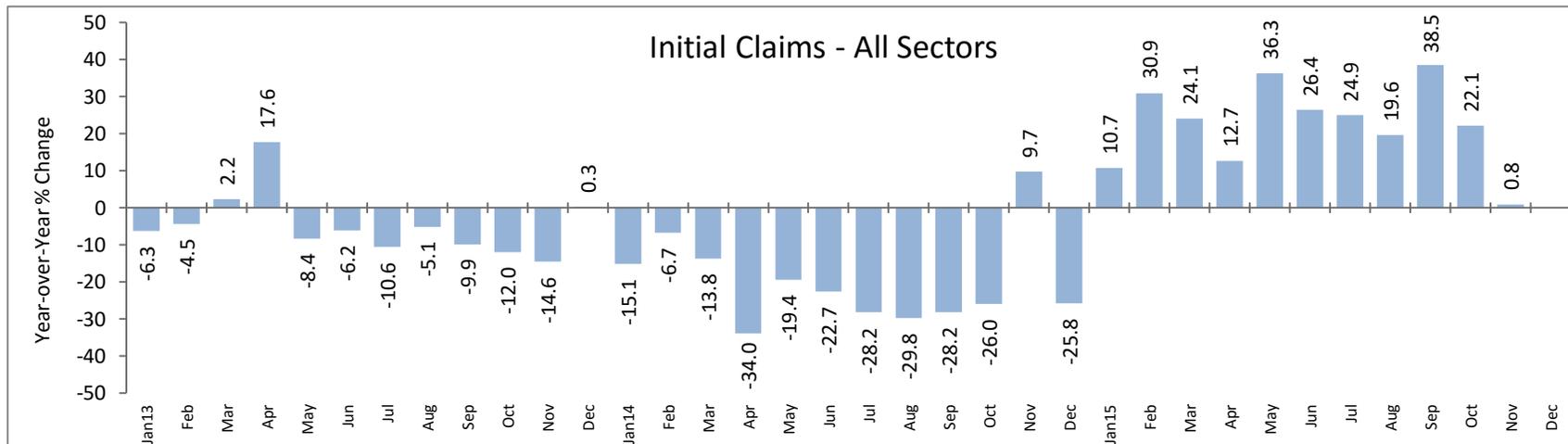
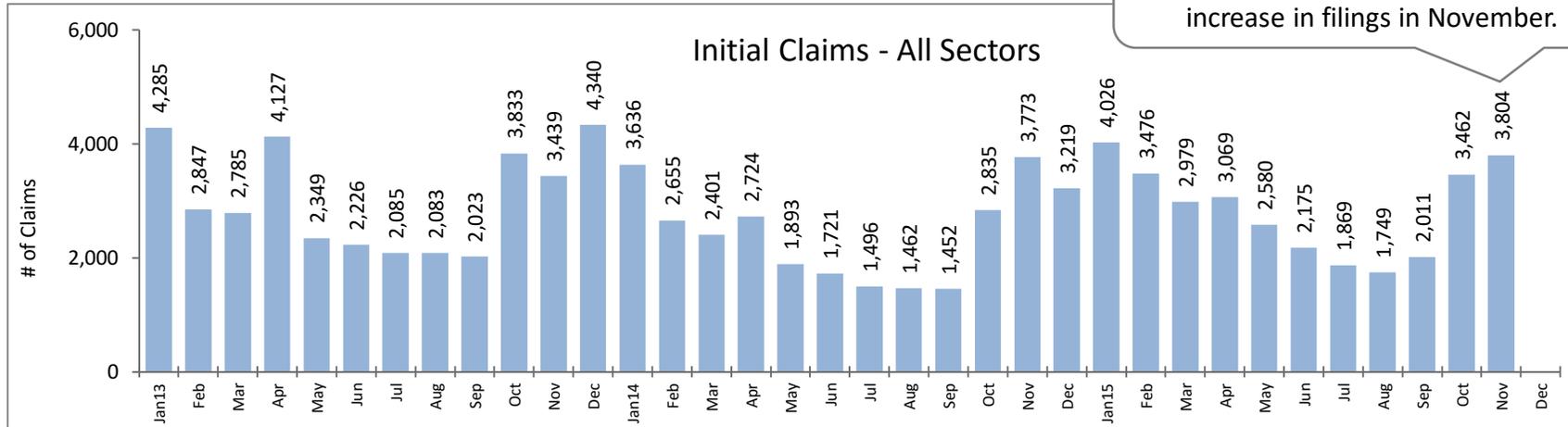
*Refers to pre-recession peak.



WY Initial Unemployment Insurance Claims

Statewide — Through November 2015

The mining and trade/ transportation/ & utilities sectors had the largest increase in filings in November.



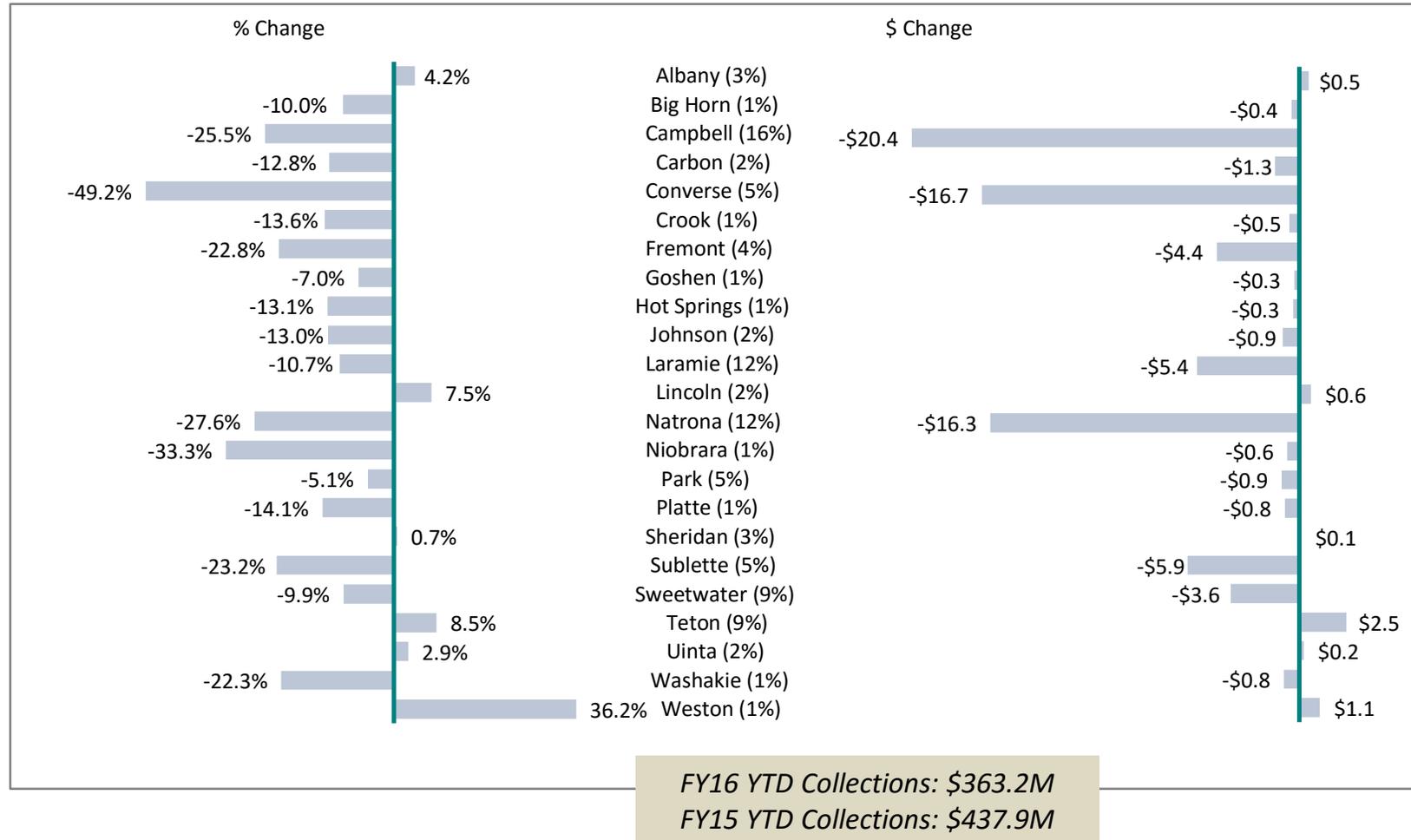
Source: WY Dept. of Workforce Services – Research & Planning Section.



WY Statewide 4% Sales and Use Tax Collections by County

Change in Percent and Dollars (Millions)

Year-to-Date Fiscal 2016 vs. Fiscal 2015 — Six Months of Collections

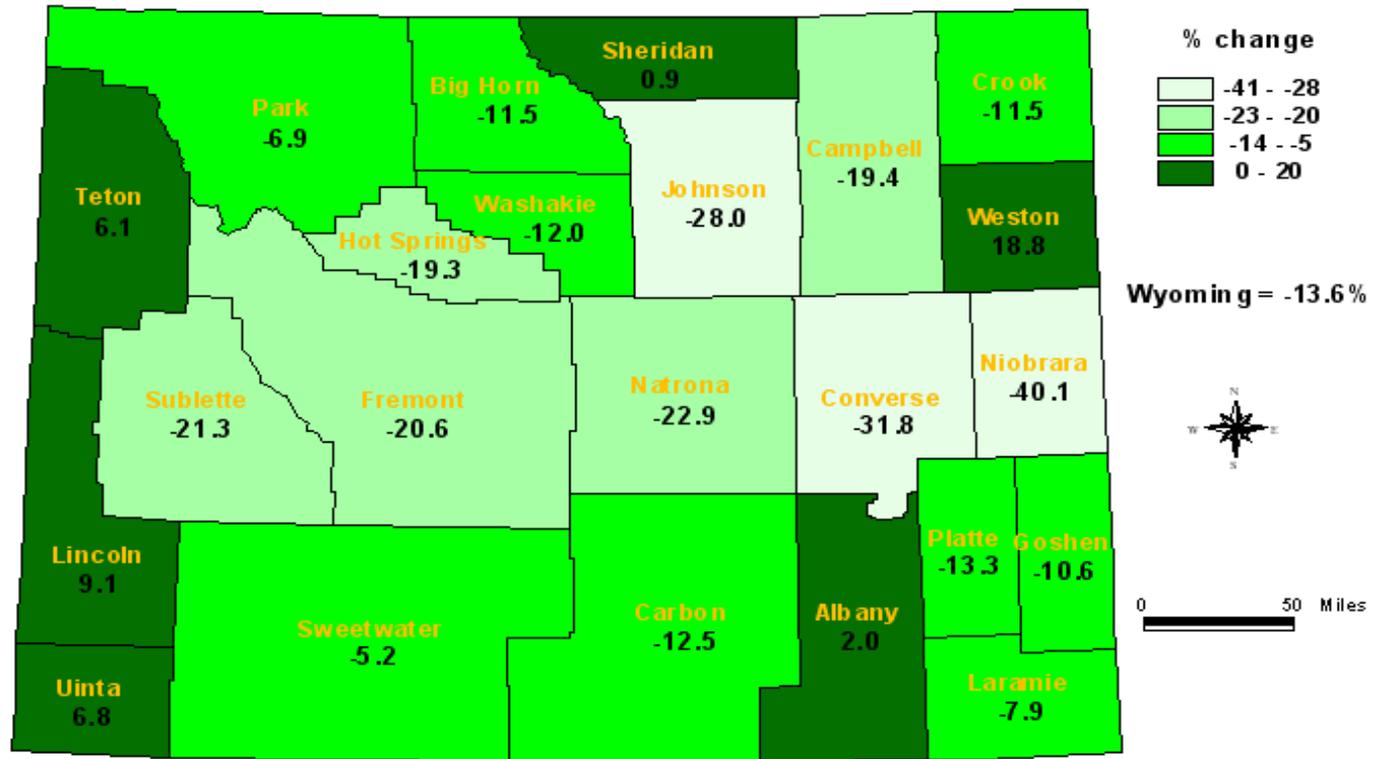


Source: WY Dept. of Revenue.

Note: Includes both the state and local shares of the state-wide 4% sales and use tax collections on a cash receipts basis. Value in parentheses represents share of total collections.



Percent Change in Sales and Use Tax Collections: Apr-Oct 2014 to Apr-Oct 2015





There are some Bright Spots...

Falls in
Yellowstone
National Park

National Park Recreation Visits for Wyoming

Year-to-Date: November 2015 vs. November 2014

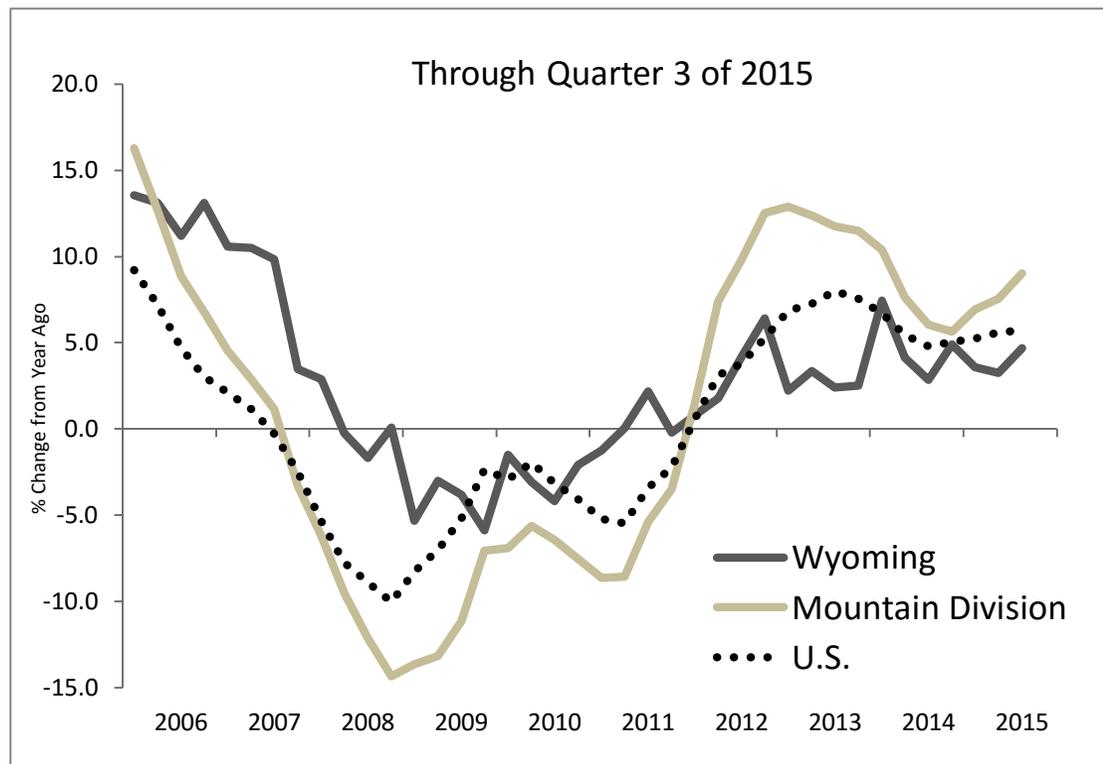
National Park Recreation Visits	YTD	YTD	Difference	
	November 2014	November 2015		
Bighorn Canyon NRA	100,881	102,141	1,260	1.2%
Devils Tower NM	438,595	475,195	36,600	8.3%
Fort Laramie NHS	47,830	50,788	2,958	6.2%
Fossil Butte NM	16,540	19,211	2,671	16.1%
Grand Teton NP	2,751,016	3,085,591	334,575	12.2%
John D. Rockefeller, Jr. MEM PKWY	1,259,976	1,425,730	165,754	13.2%
Yellowstone NP - WY Entrances	1,712,621	1,997,848	285,228	16.7%
Wyoming Total	6,327,459	7,156,504	829,045	13.1%

Source: National Park Service Public Use Statistics Office.



House Price Appreciation

Purchase-Only Mortgages: WY, Mountain Division, & U.S.



2015Q3 vs. 2014Q3

	1-Yr. Rate	Rank
Colorado	+12.7%	2
Nevada	+12.4%	3
Arizona	+8.3%	7
Idaho	+8.2%	8
Utah	+7.3%	12
New Mexico	+5.3%	18
Wyoming	+4.7%	24
Montana	+4.2%	28
Mtn Division	+9.0%	
U.S.	+5.7%	

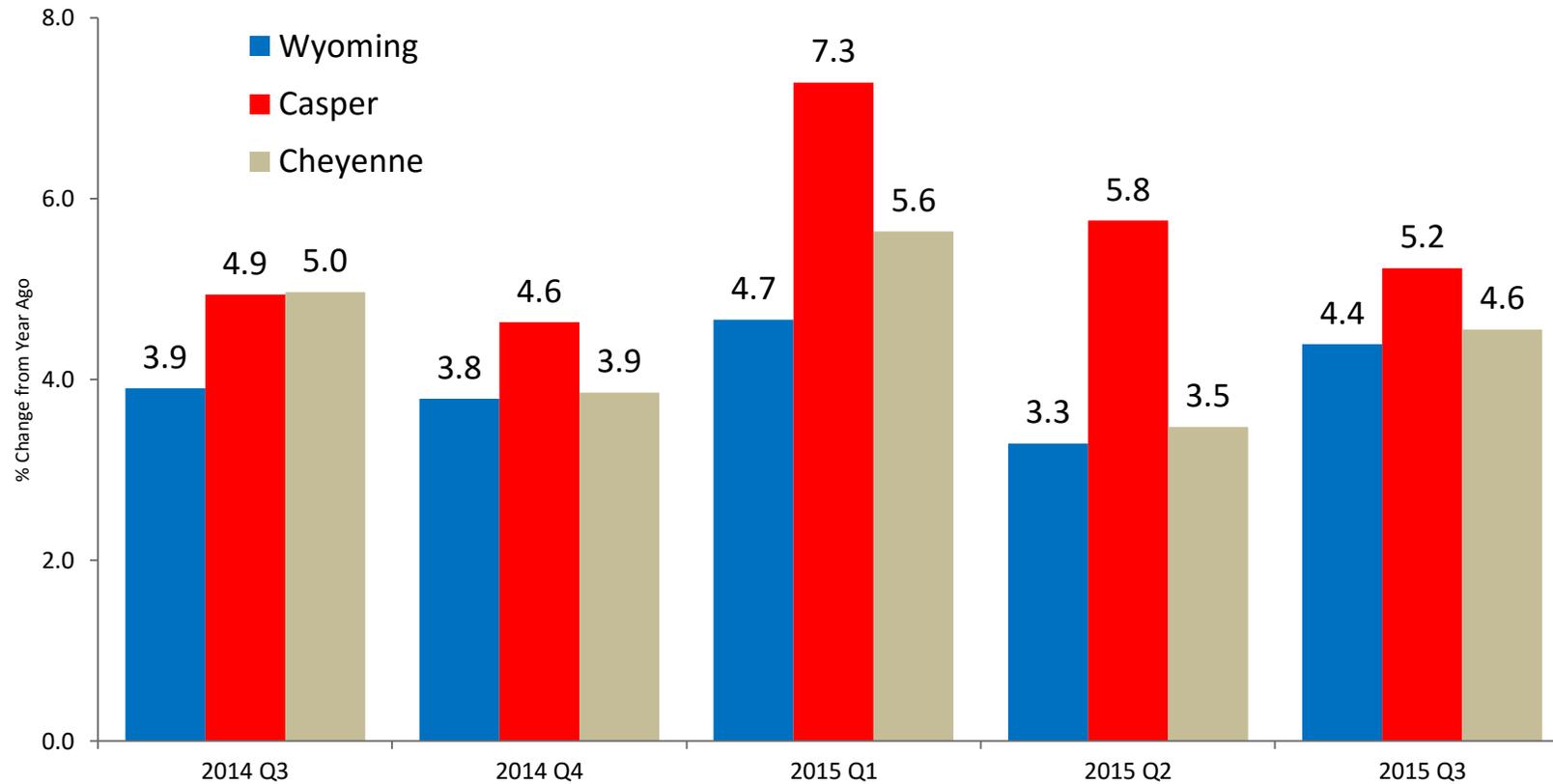
Source: Federal Housing Finance Agency (FHFA) – estimates using FHFA’s seasonally adjusted, purchase-only house price index.

Note: For the Period Ended September 30, 2015.



House Price Appreciation

Purchase and Refinance Mortgages: Casper, Cheyenne, & WY



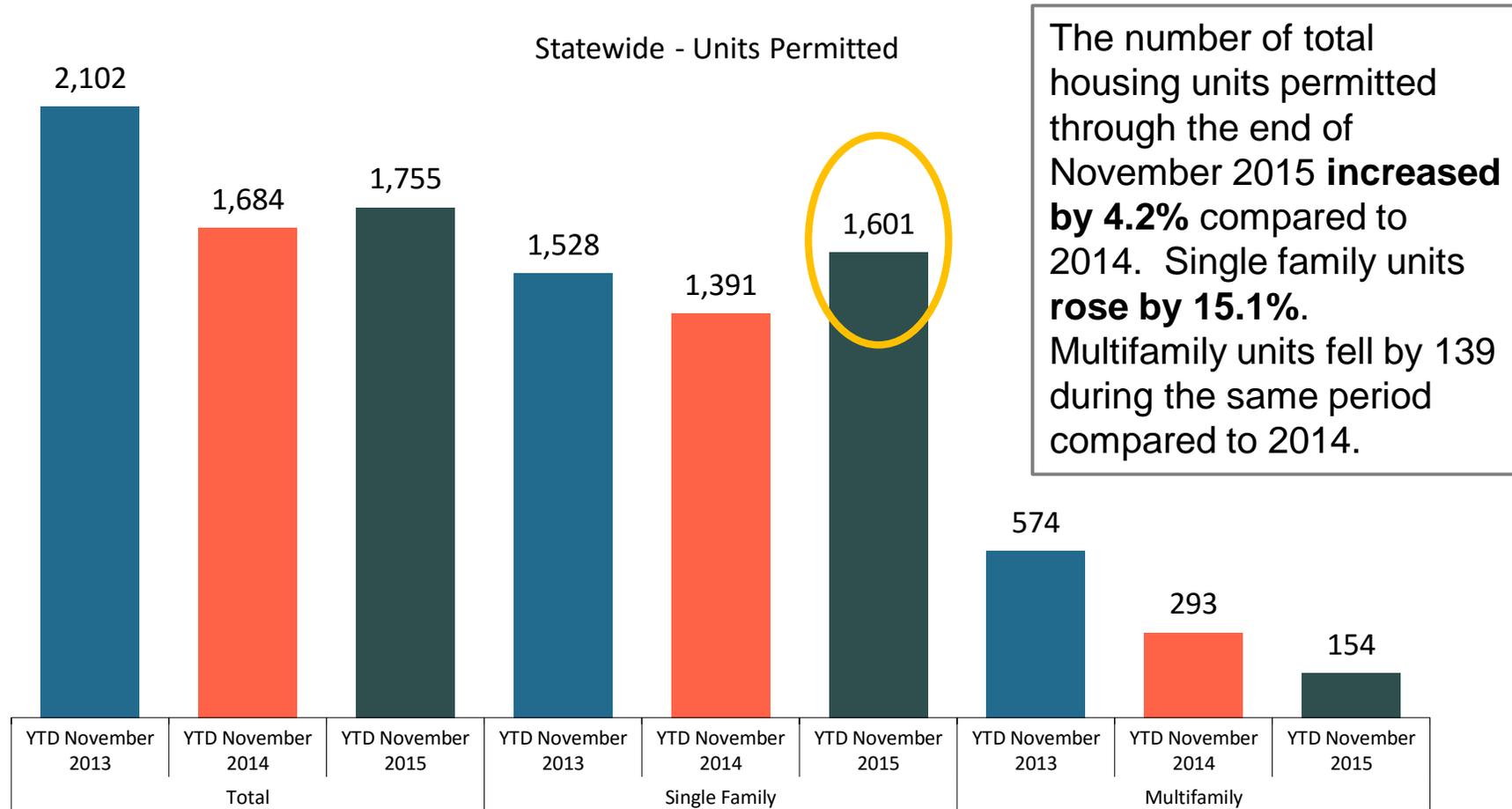
Source: Federal Housing Finance Agency (FHFA) – estimates using FHFA’s not seasonally adjusted, all-transactions house price index, that includes purchase and refinance mortgages.

Note: For the Period Ended September 30, 2015.



Residential Building Permits

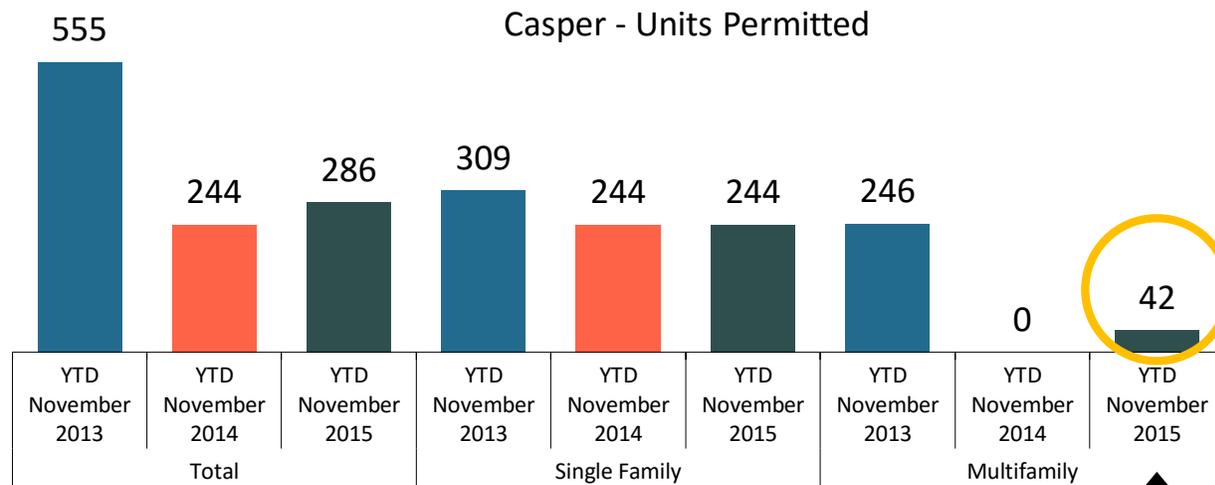
Units Statewide: Year-to-Date through November 2015



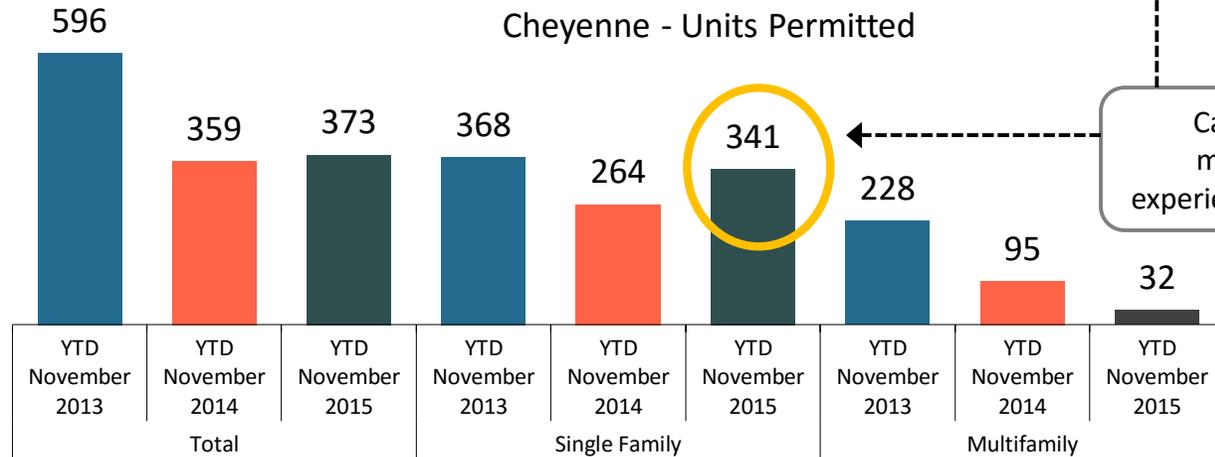
Source: U.S. Census Bureau.

Residential Building Permits

Units for Casper and Cheyenne: Year-to-Date through November 2015



The number of total housing units permitted for Casper through the end of November 2015 **increased by 17.2%** compared to 2014. Total units permitted for Cheyenne over the same time **rose by 3.9%**.

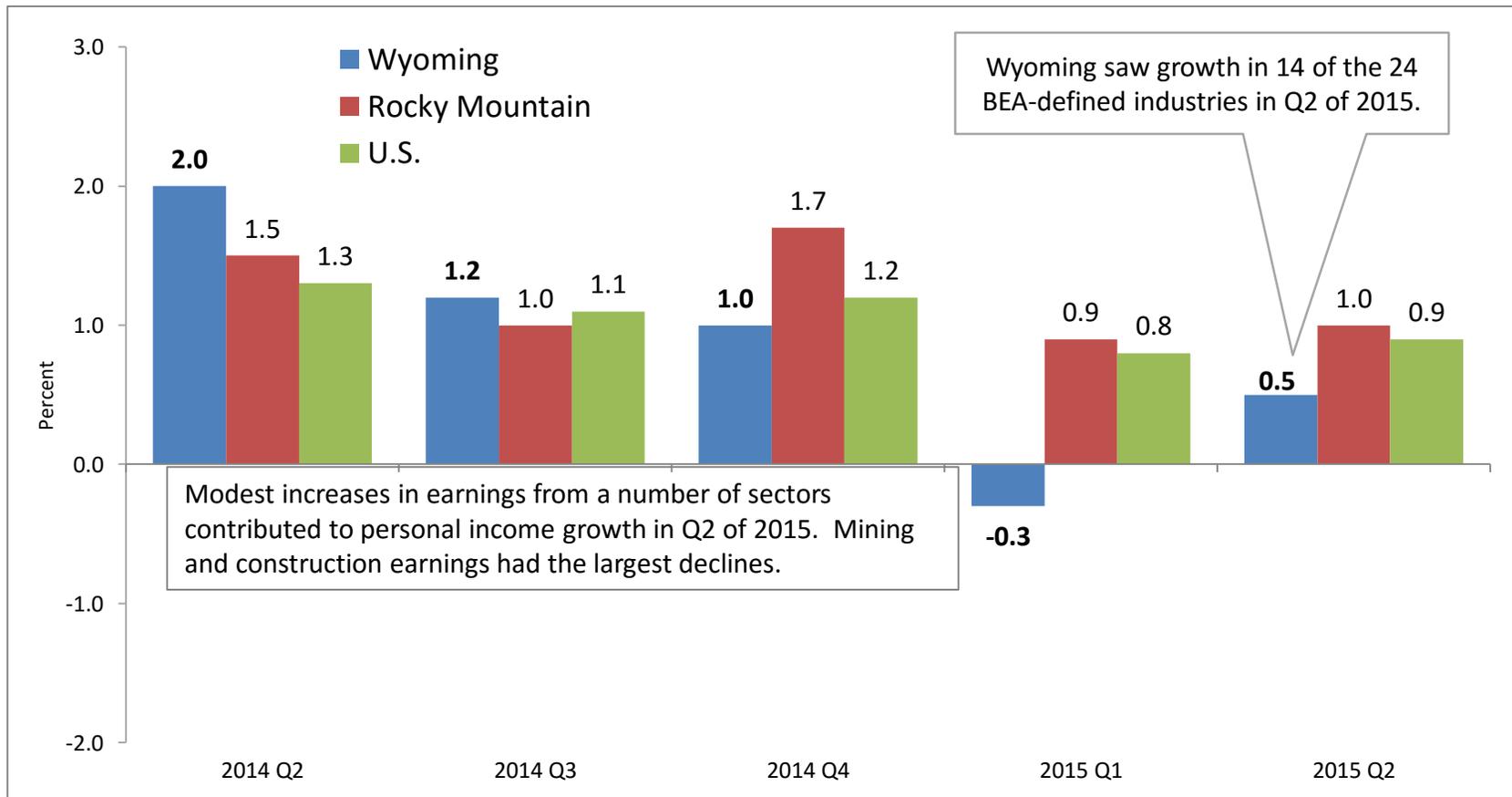


Casper saw an increase in 2015 of multifamily units while Cheyenne experienced a jump in single family activity.

Source: U.S. Census Bureau.



Quarterly Personal Income: WY, Rocky Mtn. Region, & U.S. Percent Change from Preceding Quarter



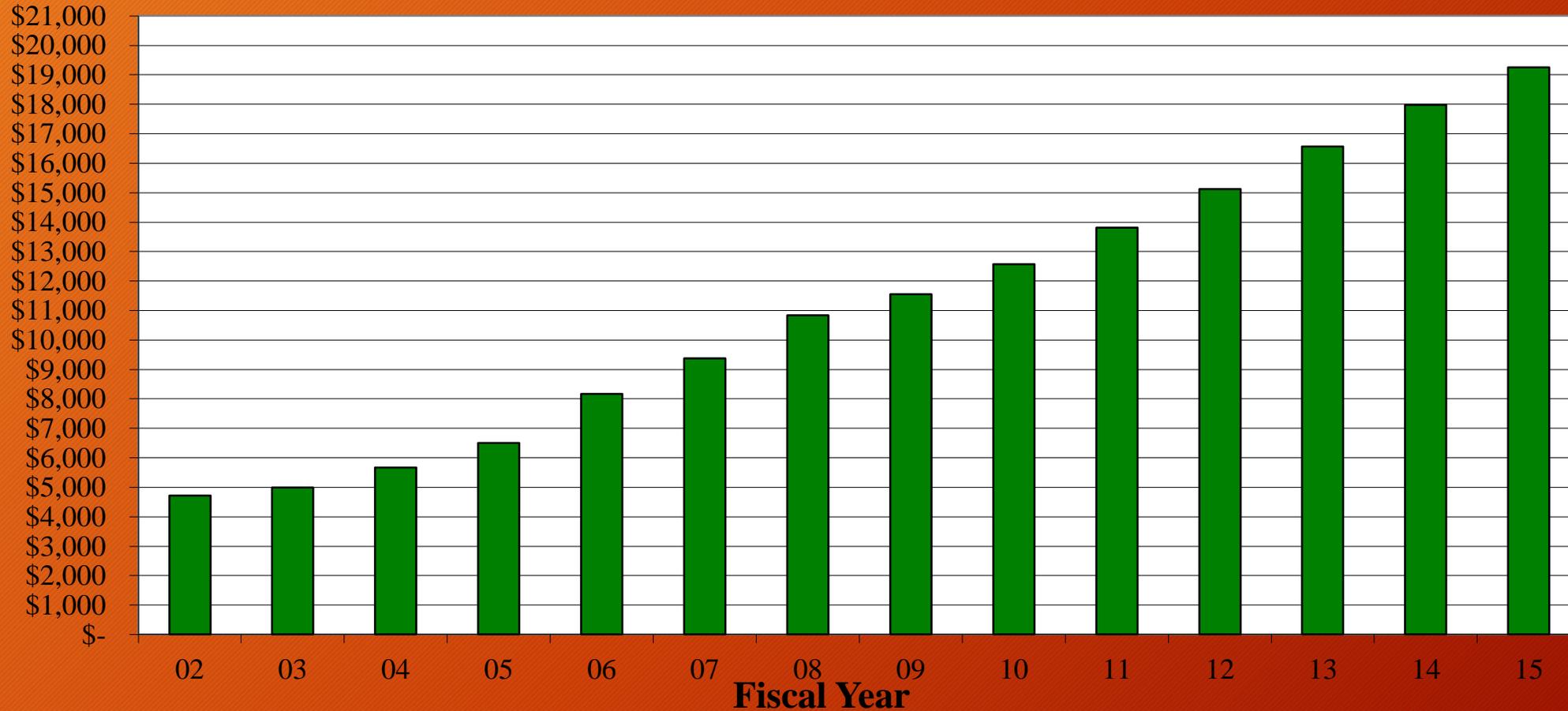
Source: U.S. Bureau of Economic Analysis.



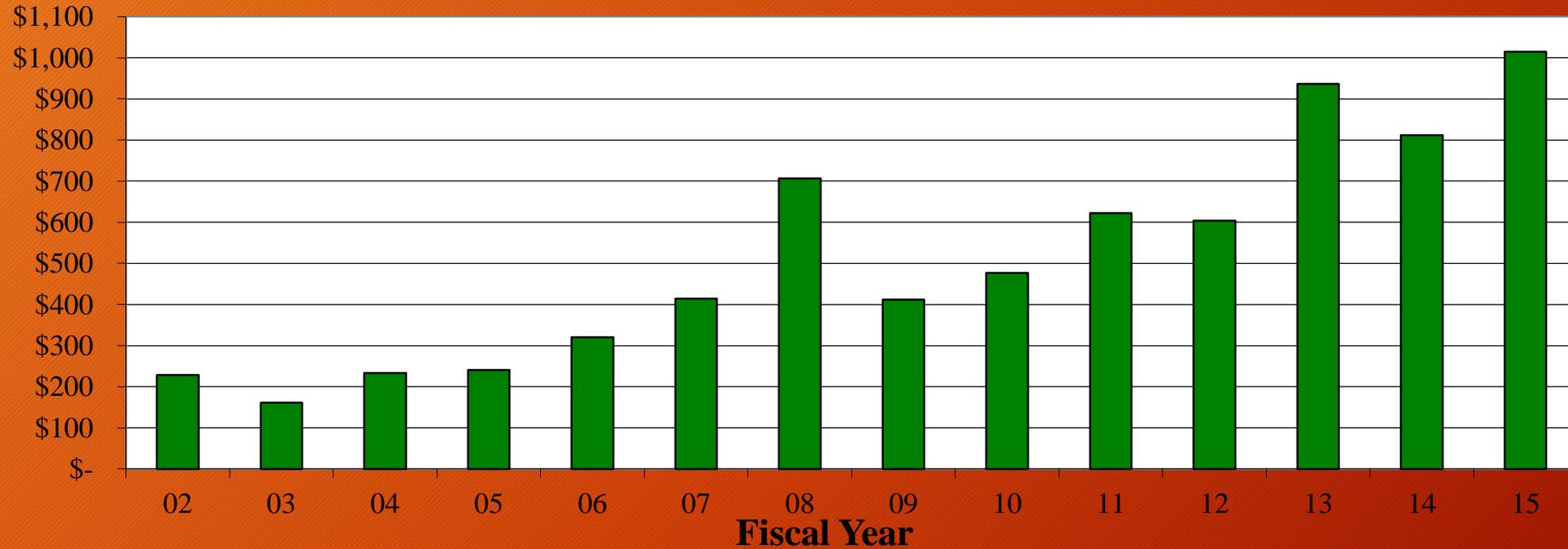
Let's step back for a moment to review why we have the Permanent Mineral Trust Fund.

- To provide a sustainable resource from the one-time harvest of our Mineral wealth so future generations would benefit as we have. And we have...
- Wyoming saw extraordinary growth in the mineral sector with Natural Gas, Coal, Oil, Uranium, and Trona all contributing to our boom times
- Spending policies and budget discipline as well as a Constitutional 1.5% severance tax and an additional statutory severance tax contributed mightily to the growth (all capital gains were captured as income)
- Several Year Bull Stock Market
- Used to be fixed income assets, like bonds, had a good yield before central banks started their respective stimulus programs they have driven values down

Growth of Total Wyoming State Portfolio since 2002

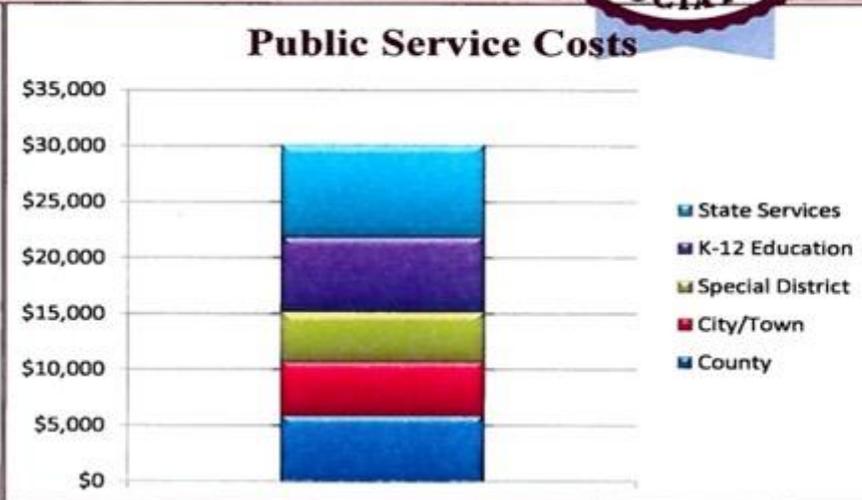
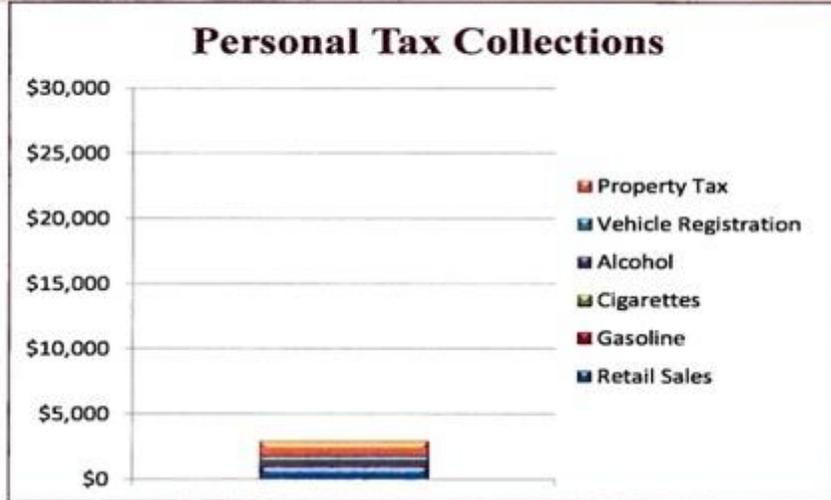


Returned Investment Income (in millions \$) contributed to the budget since 2002



Direct Tax Collections & Public Service Costs 2014

For a 3-person family with income of \$60,000 and owning a home valued at \$160,000



Personal Tax Collections

Retail Sales	\$ 1,000	} \$ 2,960
Gasoline	\$ 200	
Cigarettes	\$ 100	
Alcohol	\$ 10	
Vehicle Registration	\$ 450	
Property Tax	\$ 1,200	

Public Service Costs

County	\$ 5,900	} \$30,100
City/Town	\$ 4,800	
Special District	\$ 4,500	
K-12 Education	\$ 6,700	
State Services	\$ 8,200	

How have we benefitted?

Impact of Price Change



How sensitive are revenues to price change?

- Coal → [\$1.00 per ton price change]
± \$51 million revenue change.
- Natural Gas → [\$1.00 per mcf change]
± \$189 million revenue change.
- Crude Oil → [\$1.00 per bbl. change]
± \$9 million revenue change.

Note: revenue sources include severance taxes (over \$155M), federal mineral royalties (over \$200M), and the 43-mill school foundation portion of ad valorem taxes (based on FY16 projections). Source: October 2014 CREG Forecast and Legislative Service Office 2015 Budget Fiscal Data Book.

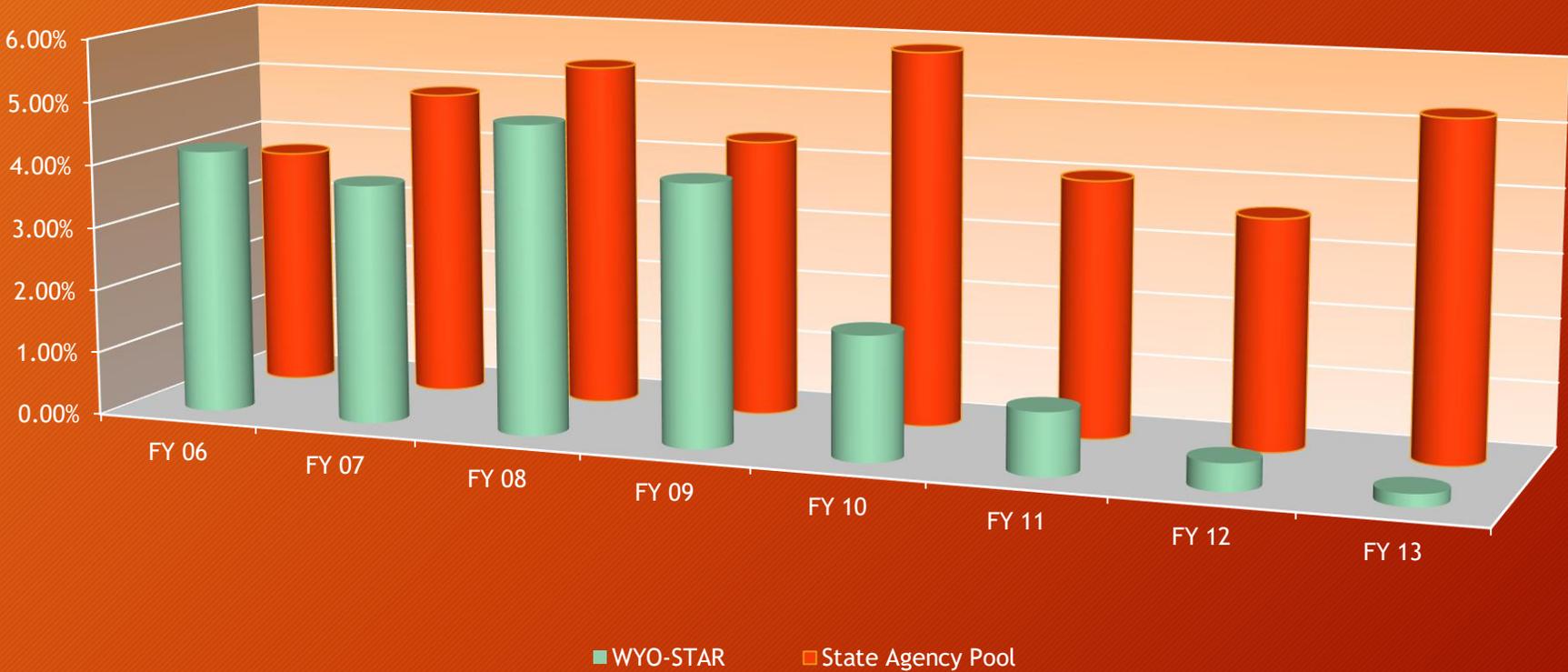
What that means going forward for Wyoming

- Let's not waste a good crisis.
- Last session we passed contingent appropriations based on investment income (including capital gains) essentially betting on the come for several capital projects... oops
- Manage a soft landing and get back to the basics of budget discipline
- Take the opportunity to craft sensible policies going forward
- What can the Treasurer's Office do to add some buoyancy

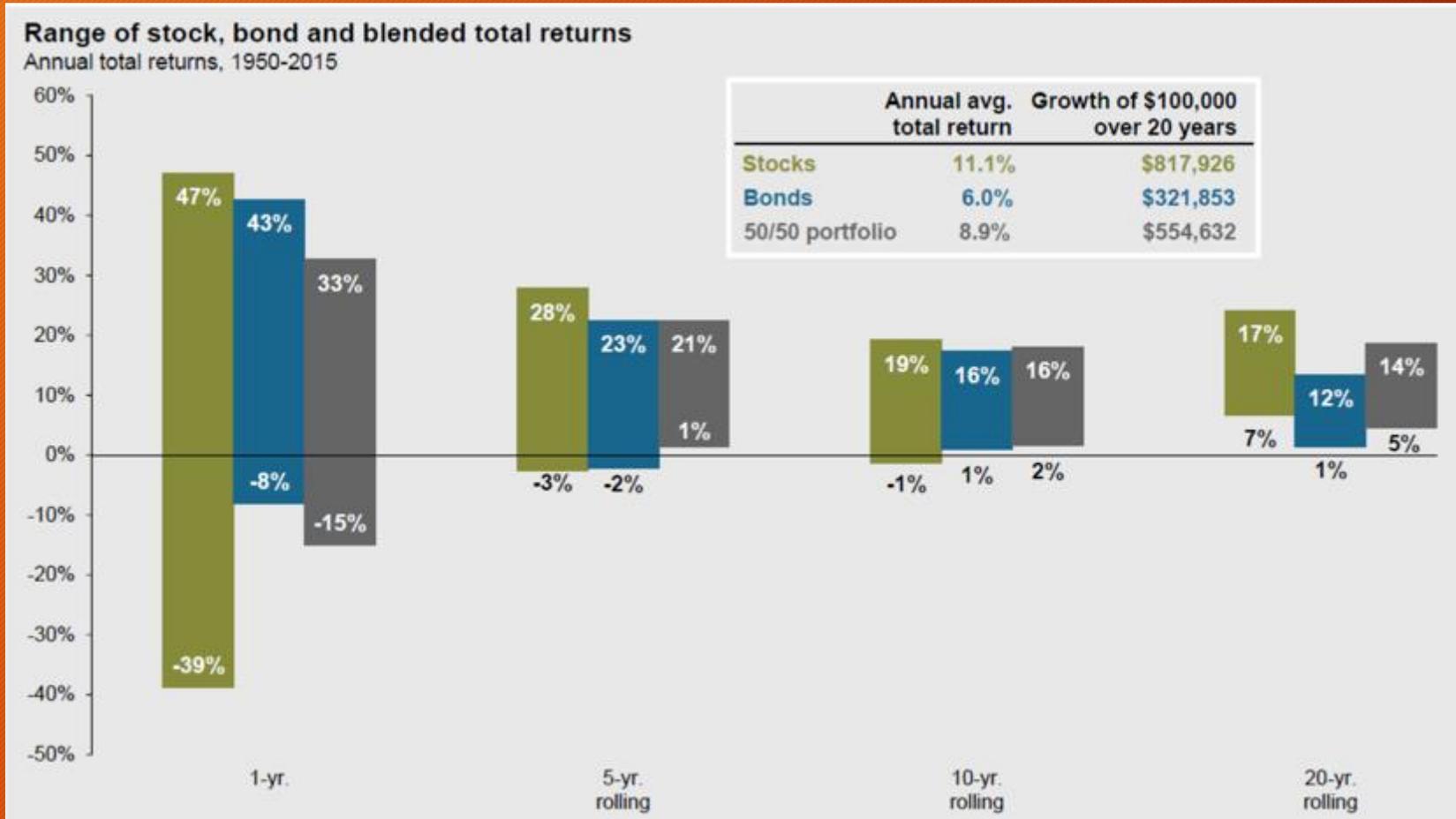
1st of 3 Initiatives: Enhance Local Government Opportunity

1. For local governments that have been constrained by a statutorily established list which has kept their savings returns under 1%, 2 changes: the first have the statute point to the state's Master Investment Policy which is professionally reviewed every year, must adhere to the "Prudent Investor Rule," and is conservatively managed with a broader range of securities to choose from. The average yield is better than what local governments can get.
2. Establish an additional second pool with longer duration (quarterly liquidity) compared to the overnight WYO-STAR program in place today for those entities that can take advantage of the less liquid premiums.

What that could mean for Local Governments



2nd of Three Initiatives: Look to the long-term horizon benefits of a permanent fund



Patience:

A picture is worth a thousand words

Source: J. P. Morgan Asset Management.

3rd of Three Initiatives:

Constitutional Amendment A

This amendment if passed by more than 51% of the electorate in the 2016 General Election will allow the Legislature to establish non permanent funds that can be invested similarly to the permanent funds for potentially better return and certainly better defense.

Ballot Language

Currently, the Wyoming Constitution allows the legislature to authorize the investment of public employee retirement systems funds and permanent state funds in equities, such as stock or shares in private or public companies. Permanent funds of the state include funds designated as permanent funds by the Constitution. The Wyoming Constitution does not allow the state to invest any other funds in equities.

The adoption of this amendment would allow the legislature, by two-thirds vote of the members of both houses, to authorize the investment of additional specified state funds in equities.

1. The State has several “Trust Funds” like the Wildlife and Natural Resource Trust and others that currently cannot be managed as normal trust would.
2. The State lost the potential for dramatically better performance on its “Rainy Day” fund because it was constitutionally constrained to fixed income.
3. As the Federal Reserve begins to raise rates, fixed income securities will be challenged to return what the State has become accustomed to and may in fact have to be sold for a loss if the state needs the money.
4. It just makes sense for the following reason:

Wyoming State Treasurer's Office

Study of Investment Earnings Possibly Gained or (Lost) if Invested in Equities

Fiscal Year	Permanent Wyoming Mineral Trust Fund Corpus Balance at Fiscal Year End	Fiscal Year Yield for the State Agency Pool *	Fiscal Year Yield for the Permanent Wyoming Mineral Trust Fund *	Earnings Based on the State Agency Pool Yield	Earning Based on the Permanent Wyoming Mineral Trust Fund Yield **	Extra Earnings Gained or (Lost) if Invested in Equities
2014	\$6,368,298,515	2.09%	6.43%	\$133,100,000	\$409,480,000	\$276,380,000
2013	5,888,454,801	5.25%	6.45%	309,140,000	379,810,000	70,670,000
2012	5,440,883,650	3.60%	4.48%	195,870,000	243,750,000	47,880,000
2011	5,049,967,702	4.03%	4.49%	203,510,000	226,740,000	23,230,000
2010	4,555,406,396	5.89%	3.16%	268,310,000	143,950,000	(124,360,000)
2009	4,262,215,811	4.36%	3.29%	185,830,000	140,230,000	(45,600,000)
2008	3,896,621,442	5.42%	8.80%	211,200,000	342,900,000	131,700,000
2007	3,341,617,499	4.86%	4.76%	162,400,000	159,060,000	(3,340,000)
2006	2,973,580,235	4.17%	4.67%	124,000,000	138,870,000	14,870,000
2005	2,472,588,704	3.76%	3.87%	92,970,000	95,690,000	2,720,000
2004	2,252,392,362	4.01%	4.76%	90,320,000	107,210,000	16,890,000
2003	2,057,629,508	3.57%	3.06%	73,460,000	62,960,000	(10,500,000)
2002	1,963,832,931	5.22%	5.01%	102,510,000	98,390,000	(4,120,000)
2001	1,839,665,725	5.85%	6.08%	107,620,000	111,850,000	4,230,000
2000	1,629,332,132	6.10%	7.46%	99,390,000	121,550,000	22,160,000
1999	1,566,553,360	6.29%	6.86%	98,540,000	107,470,000	8,930,000
1998	1,251,927,387	6.38%	6.73%	79,870,000	84,250,000	4,380,000
1997	1,187,871,523	6.35%	6.68%	<u>75,430,000</u>	<u>79,350,000</u>	<u>3,920,000</u>
			Totals:	\$2,613,470,000	\$3,053,510,000	\$440,040,000

* Yield is gross of fees prior to FY2006 and net of fees since FY2006

** These are not the actual earnings for the investment pool fund since I am only using the balance of this fund at fiscal year end.

Final Thoughts and Questions

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way - in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only. – Dickens, A Tale of two Cities

Thank You

Thanks to Wyoming Economic Analysis Division, Wyoming Taxpayers, Barclays Research, JP Morgan

Let's not
waste this
crisis!