Small Business COVID Assistance Informational Session

"Impacts of COVID-19 and Declining Energy Prices on Wyoming's Economy"

Presented by the

University of Wyoming College of Business

June 2, 2020

University of Wyoming | College of Business

College of Business Hosts

- **Steve Farkas, Assistant Dean**

WYOMING BUSINESS RELIEF PROGRAMS

wyobizrelief.org

WHERE TO GO FOR HELP …

"If everyone is moving forward together, then success takes care of itself."
– Henry Ford

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- Register to receive WBC press releases
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Wyoming BUSINESS COUNCIL

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JUNE 1	JUNE 2	JUNE 2	JUNE 4	JUNE 4
4 PM	7 AM	4 PM	7 AM	4 PM

Wyoming BUSINESS COUNCIL

Featured Experts

- **Dave Aadland,**
  Department Chair, Economics
  Co-Director, CBEA

- **Anne Alexander,**
  Interim Provost

- **Ben Cook,**
  Director, MBA Program
  Co-Director, CBEA

- **Rob Godby,**
  Associate Dean, Haub School
  Director, CERP

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Dave Aadland

Department Chair, Economics & Co-Director, CBEA

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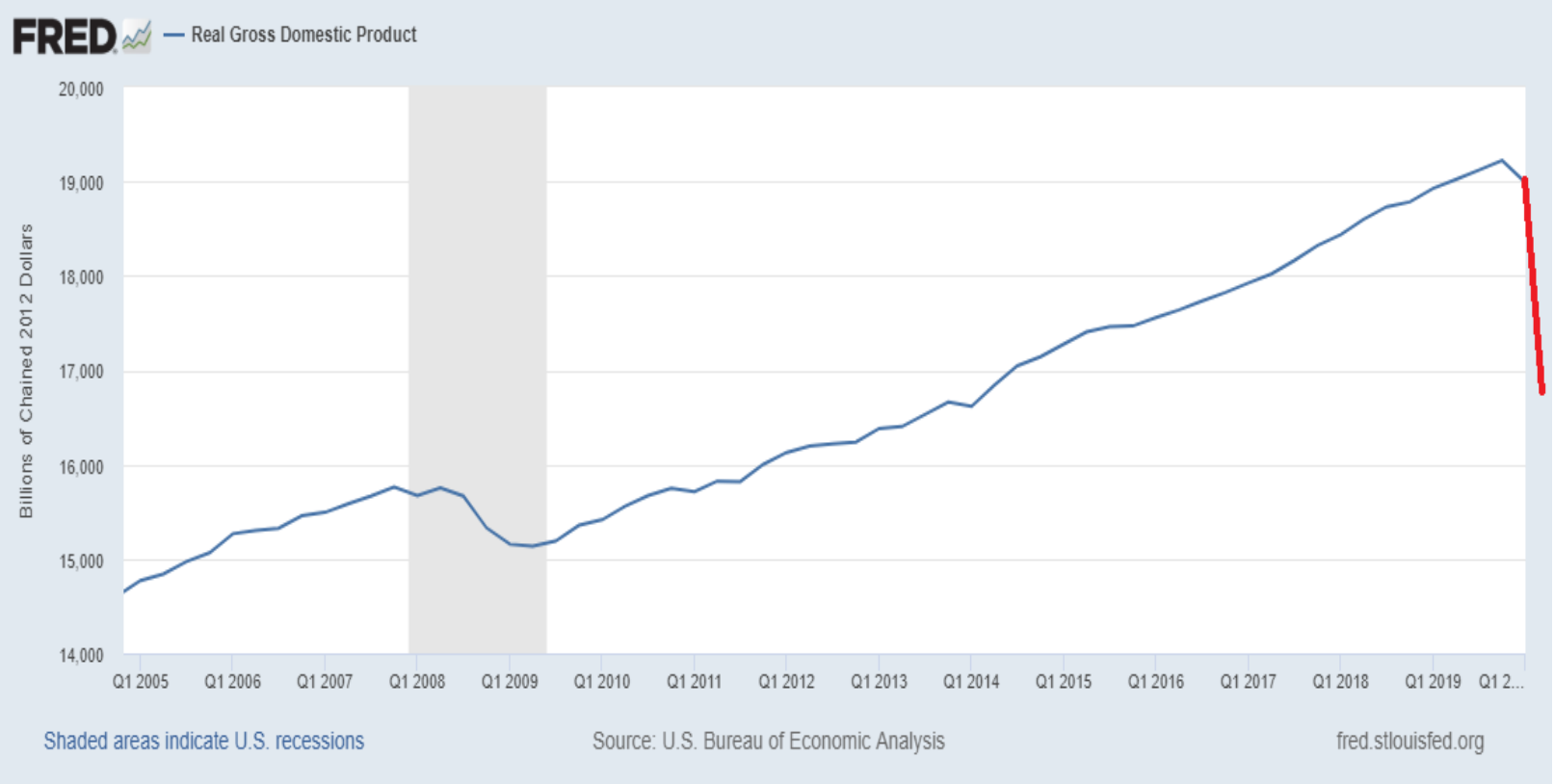
Center for Business and Economic Analysis (CBEA)

- **Origin:** Created in 2017
- **Mission**: Support the economic growth and diversification of Wyoming's economy through applied economic and business analytics.
- **Outreach**: Regular meetings and presentations with industry and policymakers regarding Wyoming's economy.
- **Personnel**: Interim Directors (Ben Cook and Dave Aadland)
  Future Director (Anne Alexander)
- **Clients**: Wyoming Business Council, Ciner, Laramie Jubilee Days Committee, Wyoming State Parks & Cultural Resources, Power Wyoming

CBEA
UNIVERSITY OF WYOMING

COVID-19: Impact on U.S. GDP

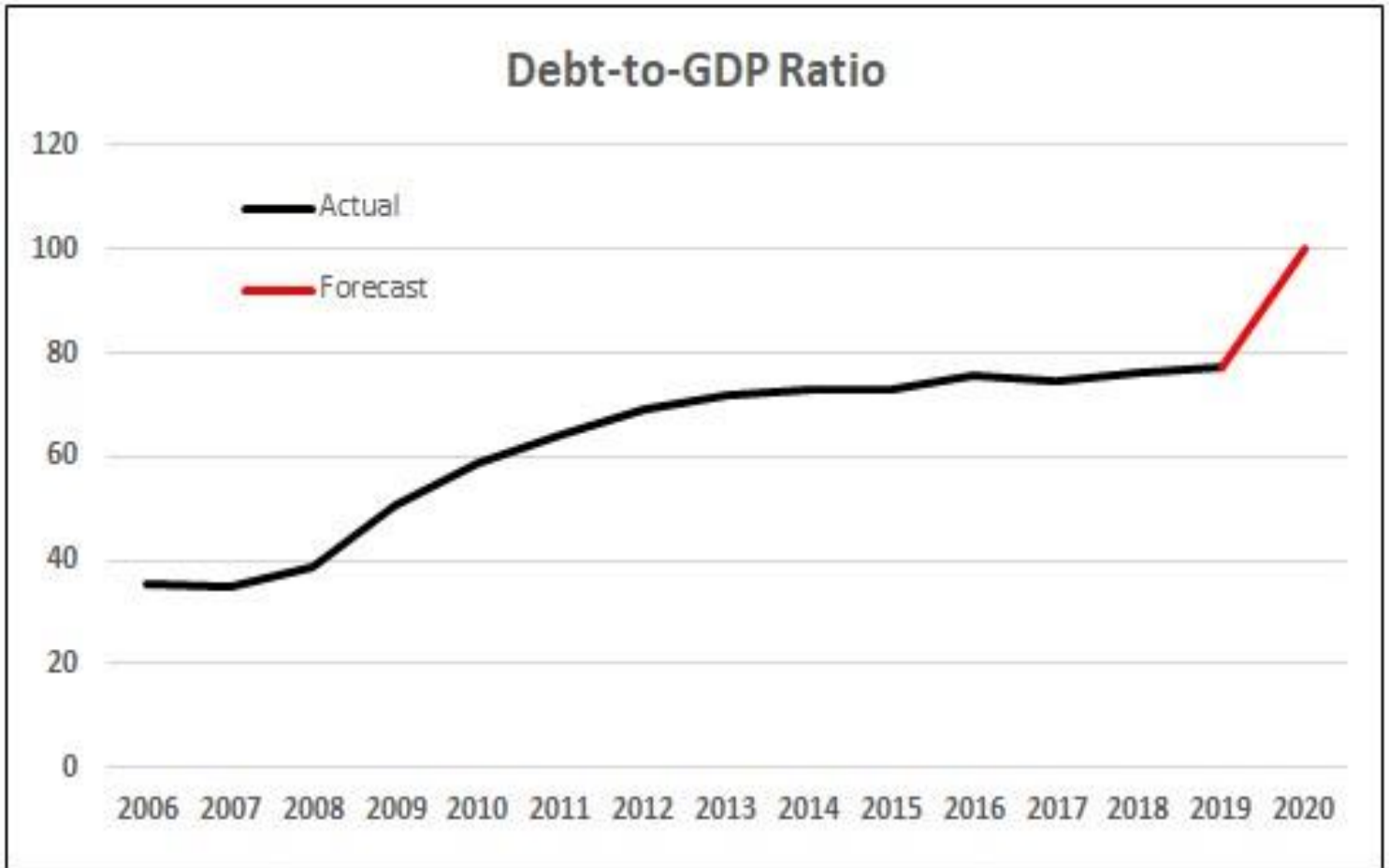
- GDP IS THE VALUE OF ALL FINAL GOOD & SERVICES
- PRIOR TO COVID-19, CURRENT DOLLAR GDP = $21.5 TRILLION



- REAL GDP FELL 1.2% IN Q1
- CBO PROJECTS REAL GDP TO FALL 12.2% IN Q2
- COVID ERASES ALL GDP GAINS SINCE 2014

COVID-19: Fiscal Policy Response

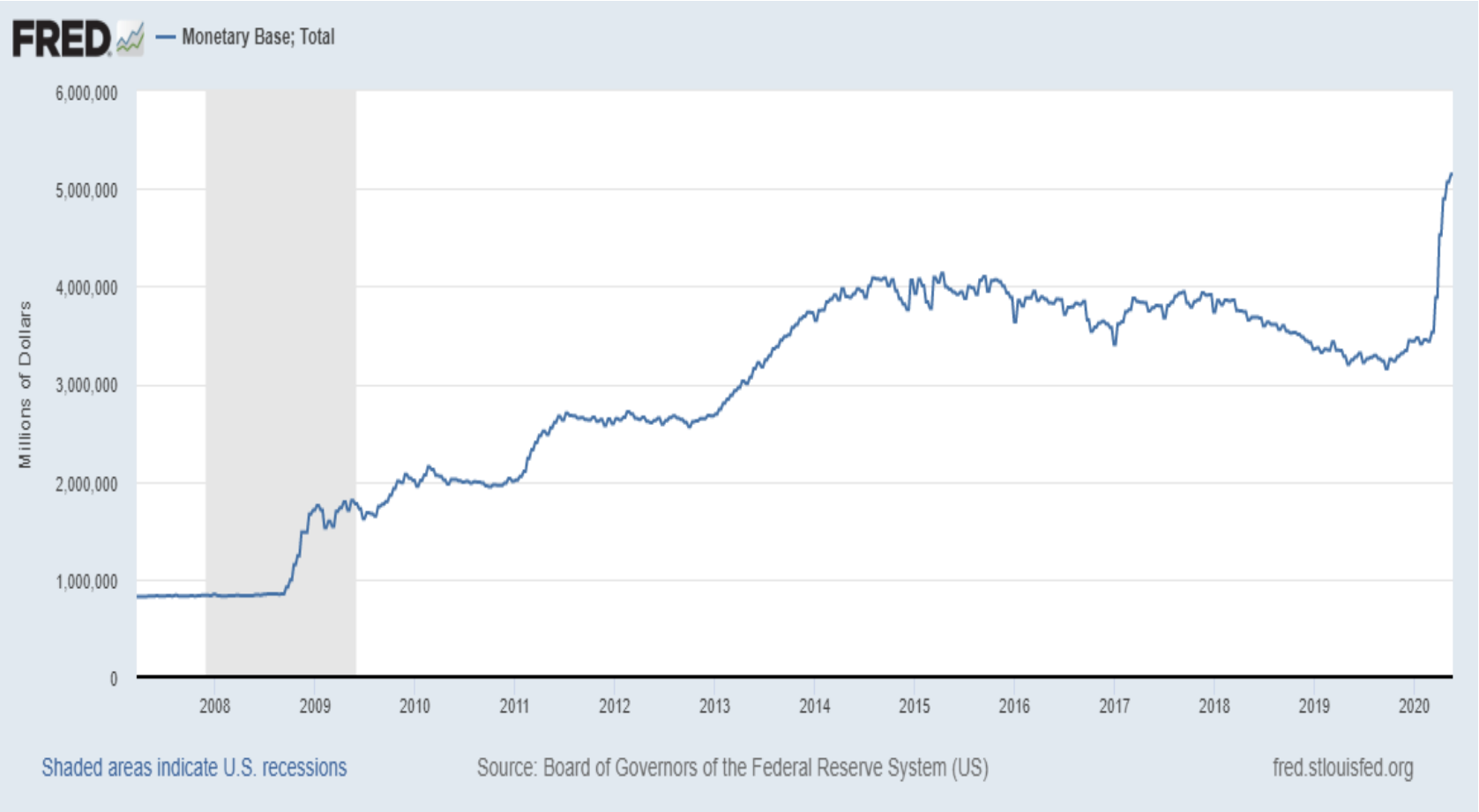
- CONGRESS PASSED THE CORONAVIRUS, AID, RELIEF, & ECONOMIC SECURITY (CARES) ACT



- $2 TRILLION IN EMERGENCY SUPPORT (~10% OF GDP)
- SUPPORT FOR HOUSEHOLDS, SMALL BUSINESS, BIG BUSINESS, HEALTH CARE, STATE & LOCAL GOVERNMENTS, EDUCATION
- CARES ACT HAD BI-PARTISAN SUPPORT, BUT ADDS TO FEDERAL DEBT
- CBO ESTIMATES DEBT-TO-GDP RATIO WILL JUMP TO 100%

COVID-19: Monetary Policy Response

- THE FEDERAL RESERVE LOWERED THE FEDERAL FUNDS RATE TO 0%



- MORE QUANTITATIVE EASING

<u>OTHER TOOLS</u>:

- FORWARD GUIDANCE
- PROVIDE LIQUIDITY:

✓ DIRECT LENDING
✓ LOWER RESERVE REQUIREMENTS
✓ BACKSTOP LENDING FOR CARES ACT

Anne Alexander

Interim Provost and overall super awesome lady

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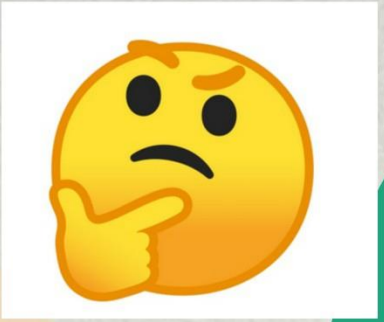
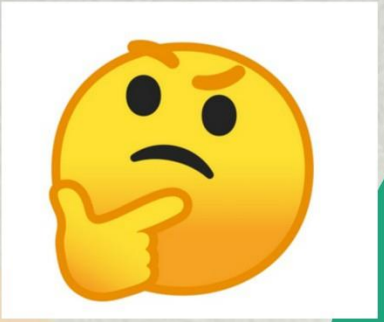


Feb. 2020: National unemployment rate was at its lowest point in 50 years.

GDP growth was steady, and the US was in the midst of the longest recorded expansion in its history.



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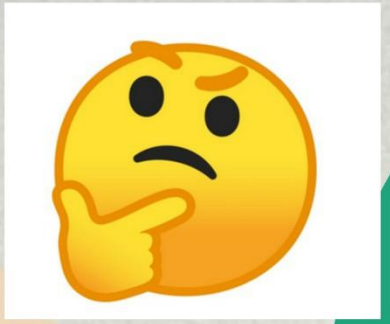

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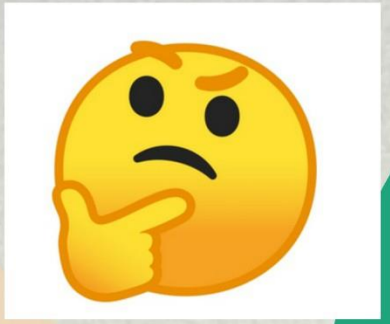

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Unprecedented times....

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~ 30 million initial unemployment claims March - April 2020

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~ 20.5 million jobs reported as lost in April, 701,000 in March

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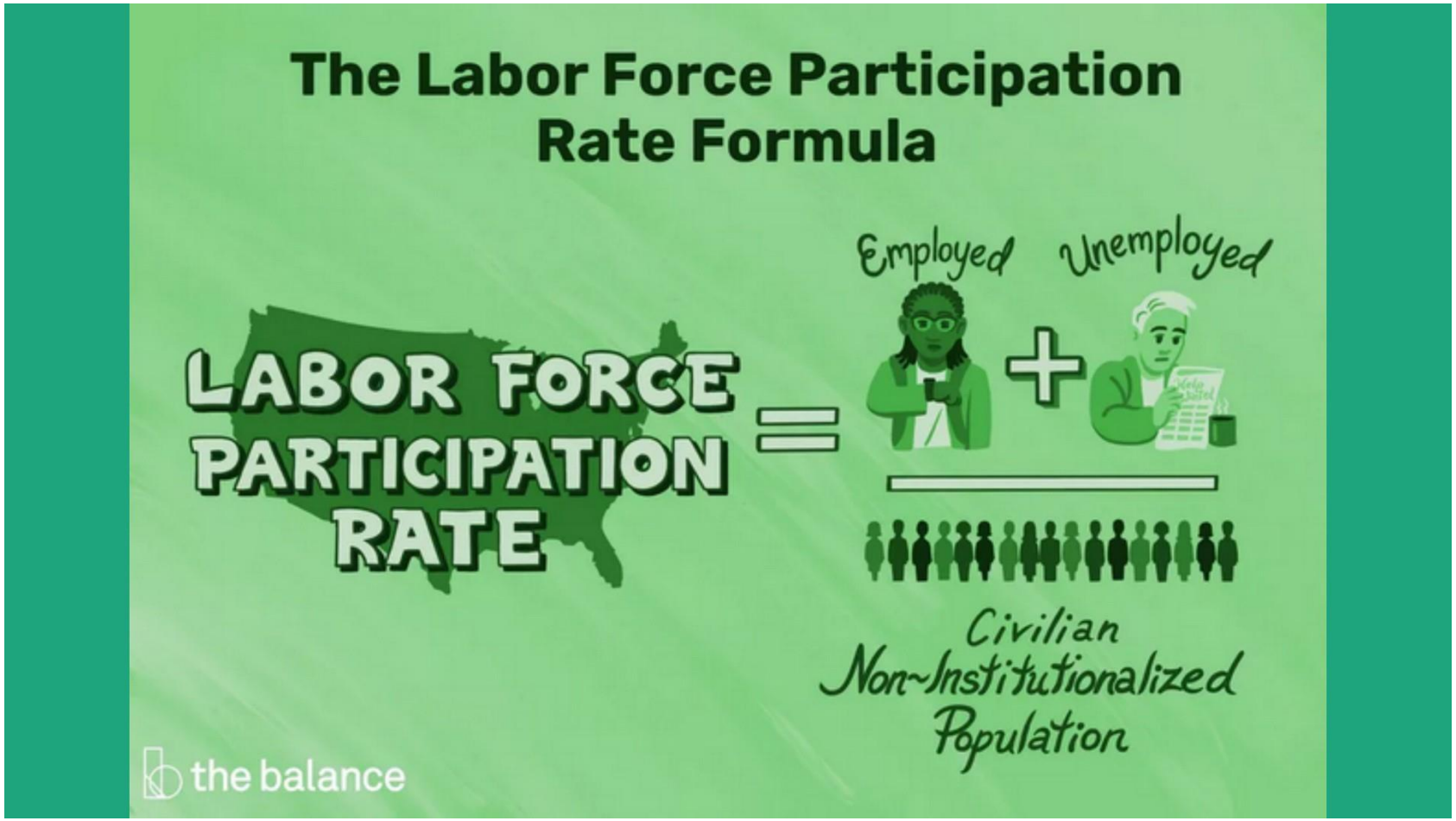
~ 30 million initial unemployment claims March - April 2020

~ 20.5 million jobs reported as lost in April, 701,000 in March

4.8% wage growth (that's not actually good news...)

Labor force participation rate

Labor force participation rate


The Labor Force Participation Rate Formula
LABOR FORCE PARTICIPATION RATE
=
Employed
Unemployed
+
Civilian Non-Institutionalized Population
the balance

Labor force participation rate

Limitations

Labor force participation rate

Limitations

If you're unemployed and have given up looking because you're discouraged.

Labor force participation rate

Limitations

If you're unemployed and have given up looking because you're discouraged.

Most acutely limiting during recessions

Labor Force Participation Rate, 2003-2020
67.0
66.0
65.0
64.0
63.0
62.0
61.0
60.0
59.0
58.0
57.0
Jan-03
Apr
Jul
Oct
Jan-04
Apr
Jul
Oct
Jan-05
Apr
Jul
Oct
Jan-06
Apr
Jul
Oct
Jan-07
Apr
Jul
Oct
Jan-08
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Jan-15
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Jan-17
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July
Oct
Jan-18
April
July
Oct
Jan-19
April
July
Oct
Jan-20
April

Down from ~63% to ~60% in one month

Unemployment rate, Jan. 2020 = 3.6%

Unemployment rate, Jan. 2020 = 3.6%

Unemployment rate, Feb. 2020 = 3.5%

Unemployment rate, Jan. 2020 = 3.6%

Unemployment rate, Feb. 2020 = 3.5%

Unemployment rate, March 2020 = 4.4%

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Unemployment rate, April 2020 = 14.7%

Unemployment rate, Jan. 2020 = 3.6%

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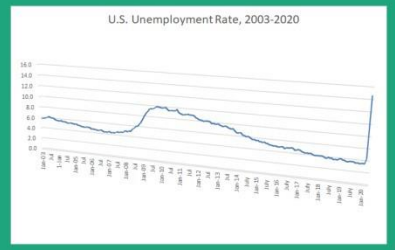
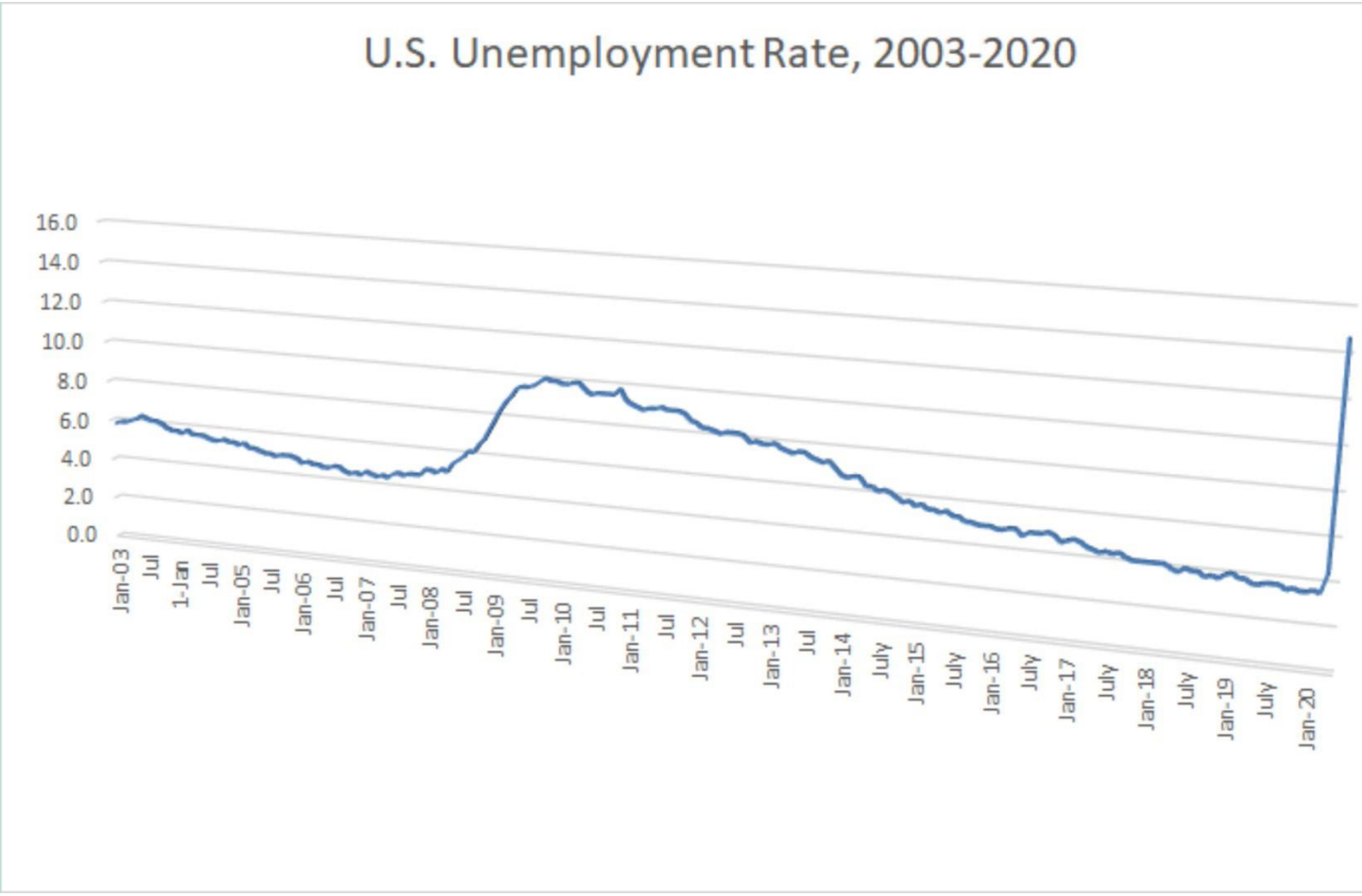
Unemployment rate, April 2020 = 14.7%




U.S. Unemployment Rate, 2003-2020
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan-03
Jul
1-Jan
Jul
Jan-05
Jul
Jan-06
Jul
Jan-07
Jul
Jan-08
Jul
Jan-09
Jul
Jan-10
Jul
Jan-11
Jul
Jan-12
Jul
Jan-13
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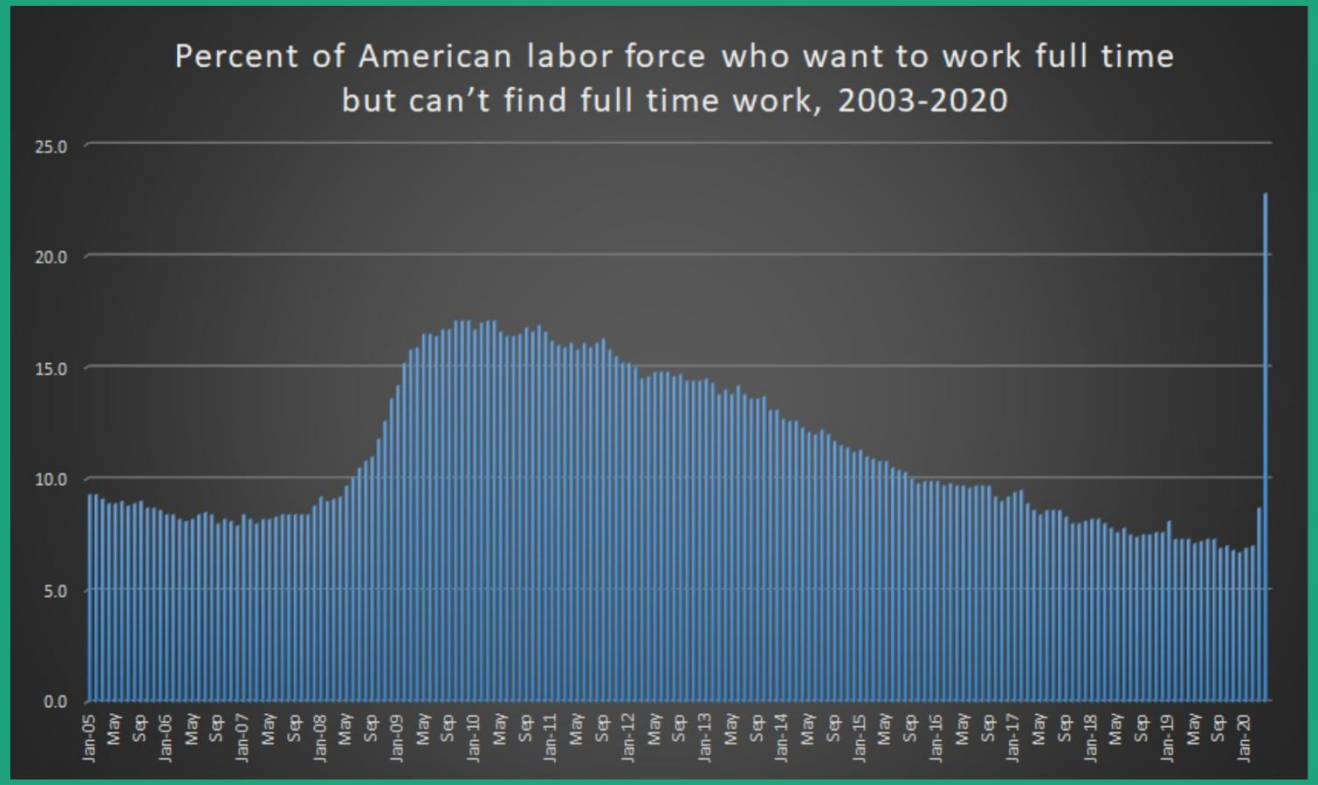
July
Jan-19
July
Jan-20


Percent of American labor force who want to work full time but can't find full time work, 2003-2020
25.0
20.0
15.0
10.0
5.0
0.0
Jan-05
May
Sep
Jan-06
May
Sep
Jan-07
May
Sep
Jan-08
May
Sep
Jan-09
May
Sep
Jan-10
May
Sep
Jan-11
May
Sep
Jan-12
May
Sep
Jan-13
May
Sep
Jan-14
May
Sep
Jan-15
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Jan-16
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Jan-17
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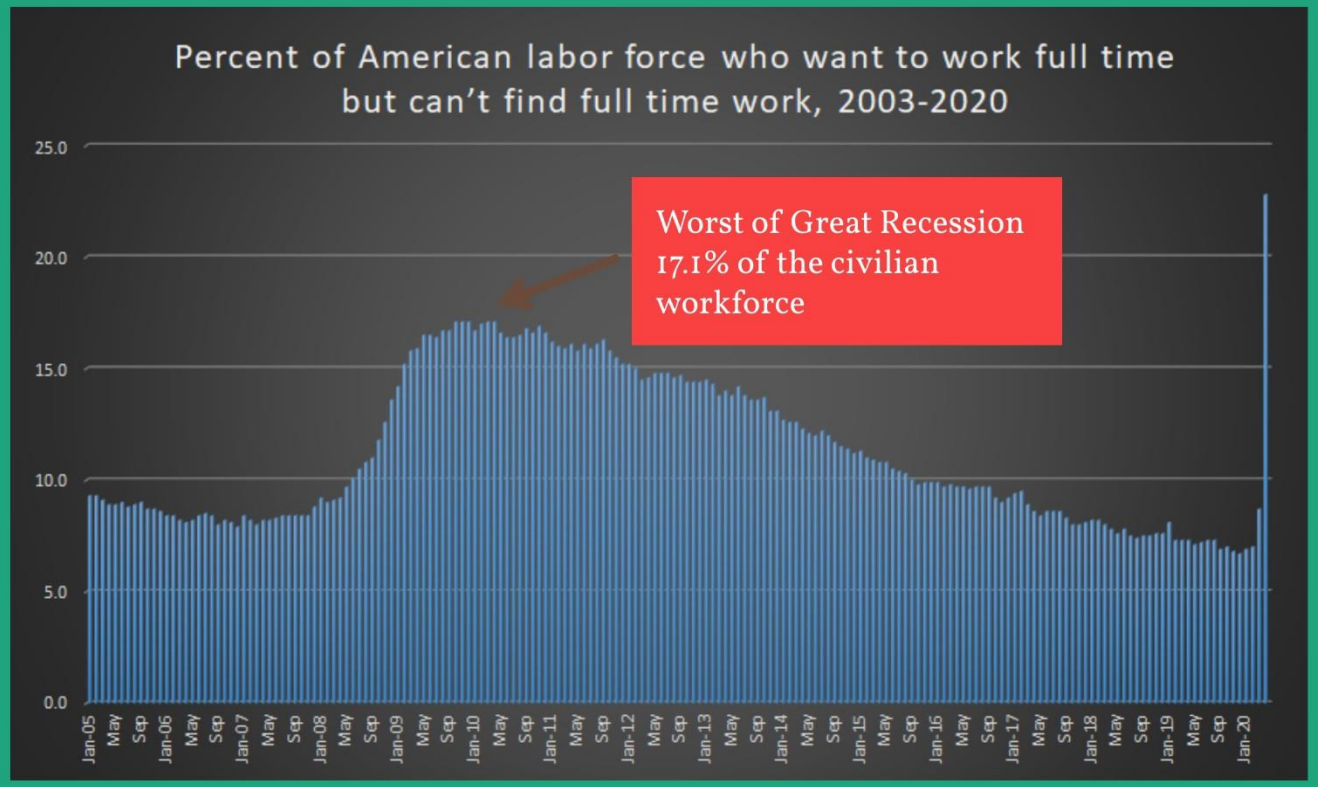
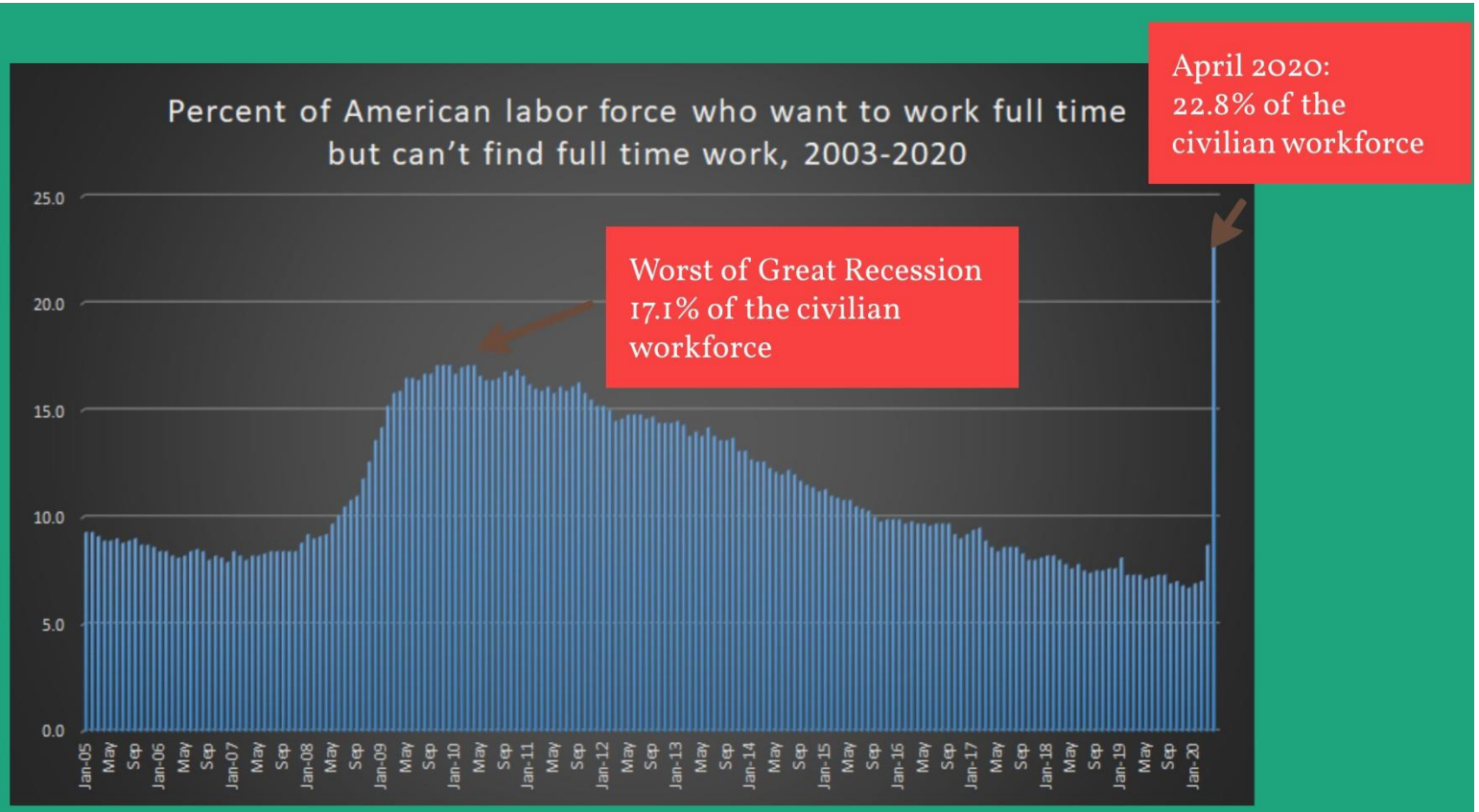
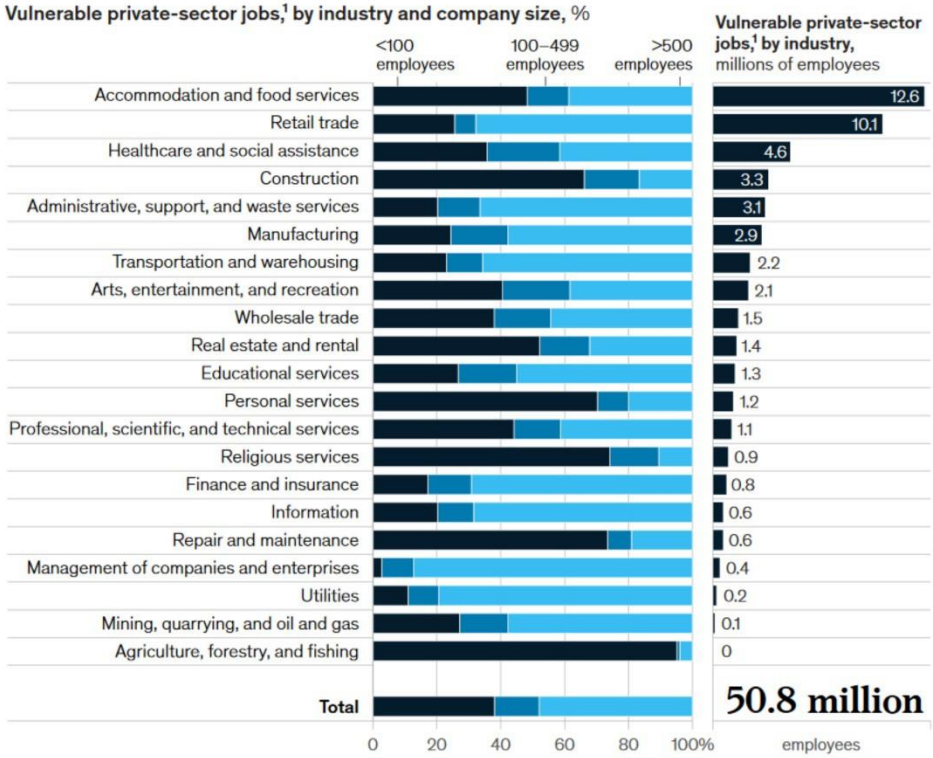
Jan-18
May
Sep
Jan-19
May
Sep
Jan-20


Percent of American labor force who want to work full time but can't find full time work, 2003-2020
Worst of Great Recession 17.1% of the civilian workforce
25.0
20.0
15.0
10.0
5.0
0.0
Jan-05
May
Sep
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20


Percent of American labor force who want to work full time but can't find full time work, 2003-2020
April 2020: 22.8% of the civilian workforce
Worst of Great Recession 17.1% of the civilian workforce
25.0
20.0
15.0
10.0
5.0
0.0
Jan-05
May
Sep
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20

More than a third of vulnerable private-sector jobs are in small firms with fewer than 100 workers.



[1]"Vulnerable" jobs are subject to furloughs, layoffs, or being rendered unproductive (eg, workers kept on payroll but not working) during periods of high social distancing.
Source: BLS Occupational Employment Statistics, US Bureau of Labor Statistics; LaborCube; Moody's Analytics; McKinsey Global Institute analysis

Wyoming Employment Situation

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42,700 initial unemployment claims were filed in Wyoming in 2020.

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19,199 initial claims were filed in Wyoming in April 2020,
an increase of 60.2% over the month
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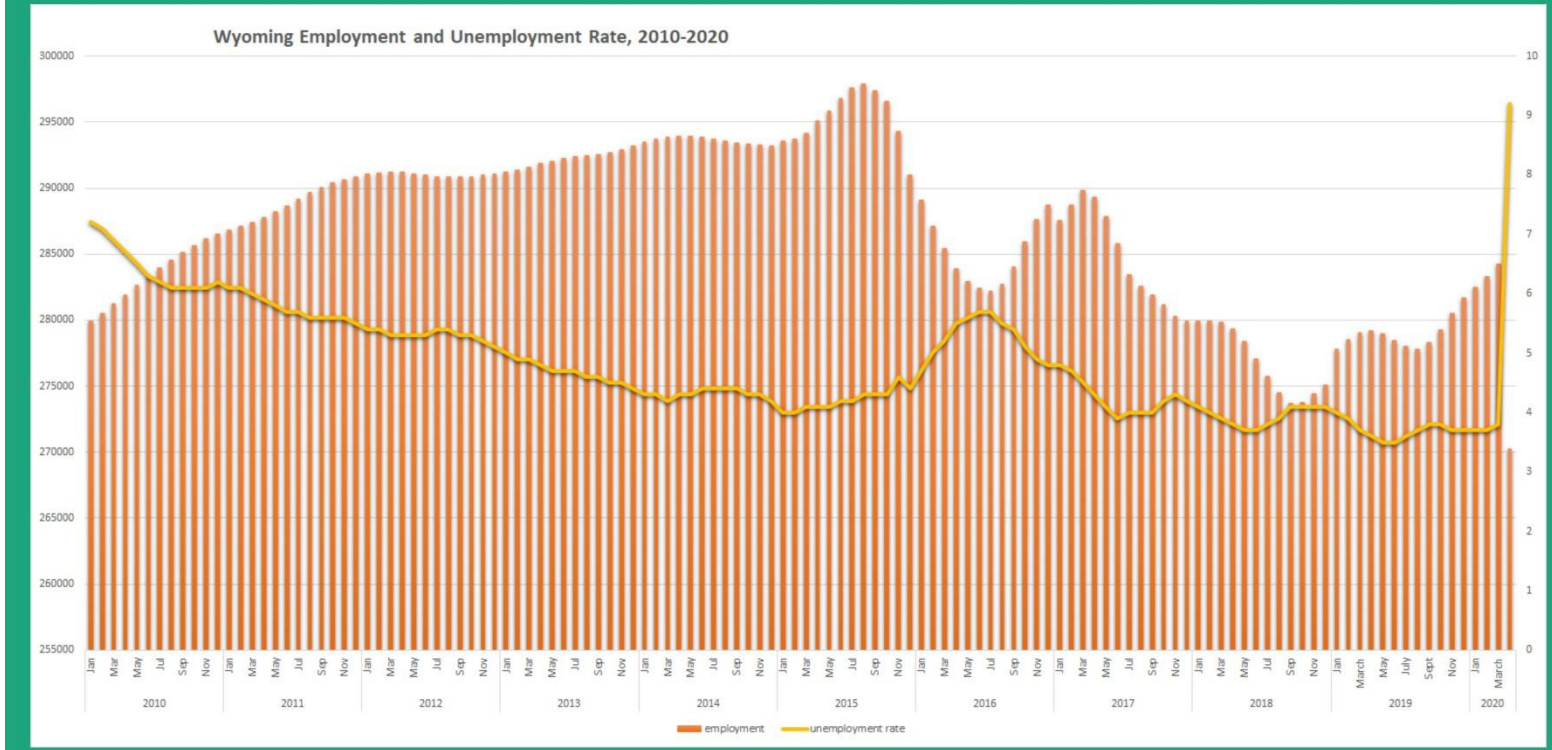
Unemployment rose from 3.8% to 9.2% from March to April 2020


Wyoming Employment and Unemployment Rate, 2010-2020
300000
295000
290000
285000
280000
275000
270000
265000
260000
255000
10
9
8
7
6
5
4
3
2
1
0
Jan Mar May Jul Sep Nov
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
Jan March May July Sept Nov
employment
unemployment rate

WY Business Cycle Index

The majority of the initial unemployment claims escalation has been concentrated in the leisure and hospitality, retail and wholesale trades, health care and social assistance, and professional and business services sectors.

The continuing claims in 2020 are concentrated in the leisure and hospitality sector (26%), followed by construction and mining sectors (10% each) and unknown (15%), which is likely self-employed employers and gig workers.

Ben Cook

Director, MBA Program & Co-Director, CBEA

University of Wyoming | College of Business

Rob Godby

Associate Dean, Haub School & Director, CERP

University of Wyoming | College of Business

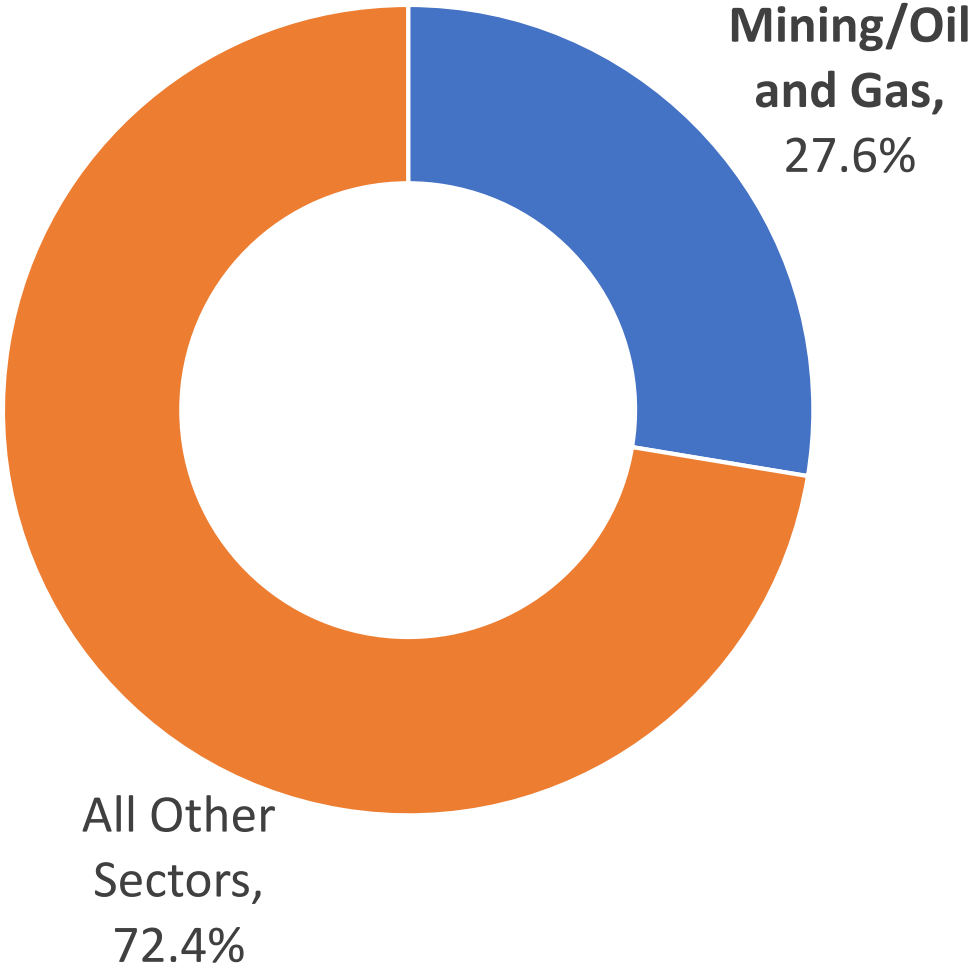
Energy Implications for Wyoming’s budget

Mining/Oil and Gas produce over ¼ of Wyoming Output

(2019, Q4)

All Other Sectors:

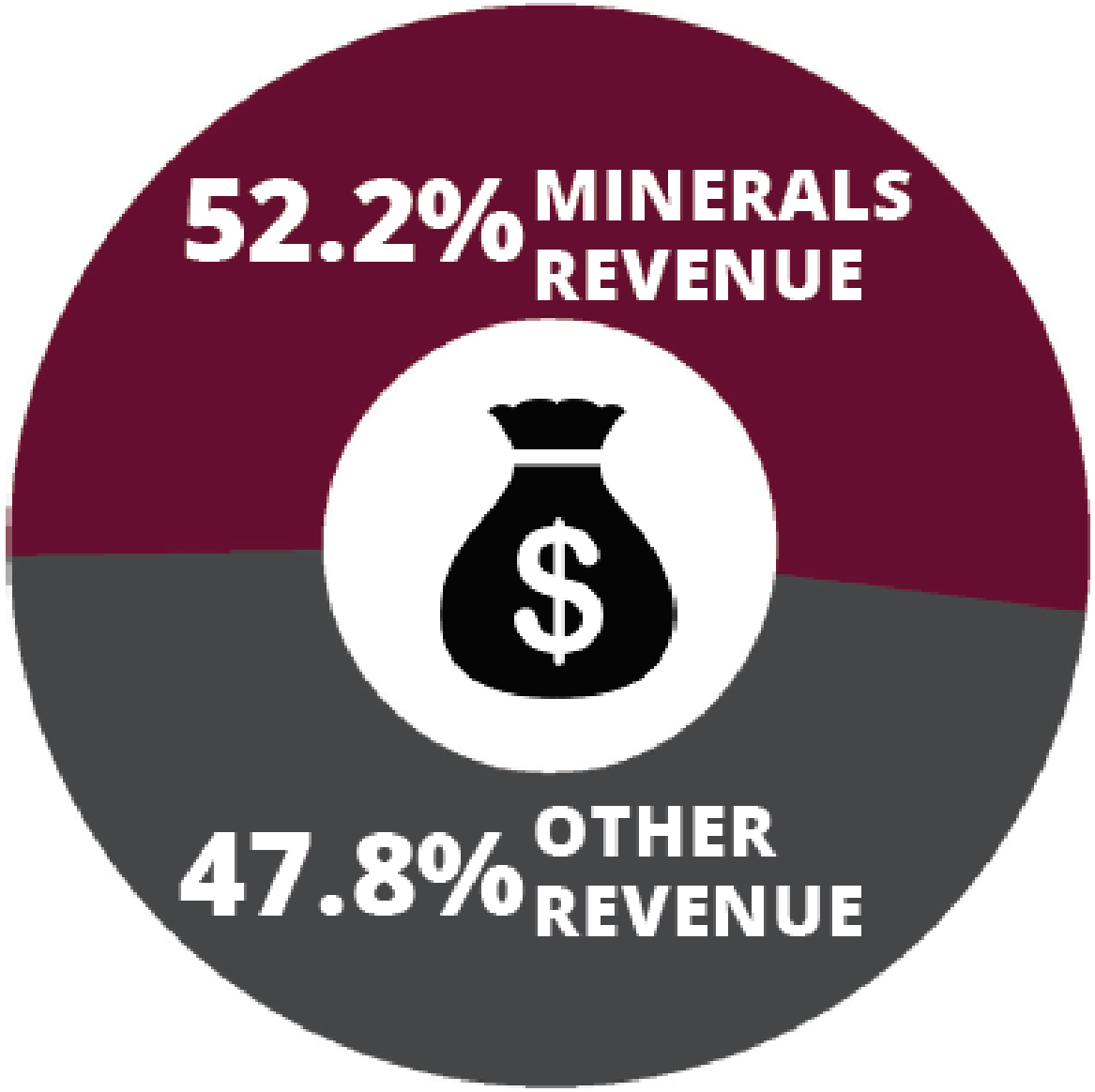
Gov.	13.7%
Real Est.	9.6%
Transport	7.1%
Manuf.	5.7%
Retail	5.5%
Constr.	4.3%
Health	4.1%
Whole. Trd	3.6%
Acc/Food	3.1%
Pro Serv.	3.0%
Agric.	2.6%
Utilities	2.4%
Finance	2.1%
Info.	1.8%
Oth. Serv.	1.3%
Admin	1.3%
All Others	1.1%



Source: US. BEA

Mineral Revenues as a Percentage of the Wyoming Budget (2017)

Source: Wyoming Taxpayer's Assoc.

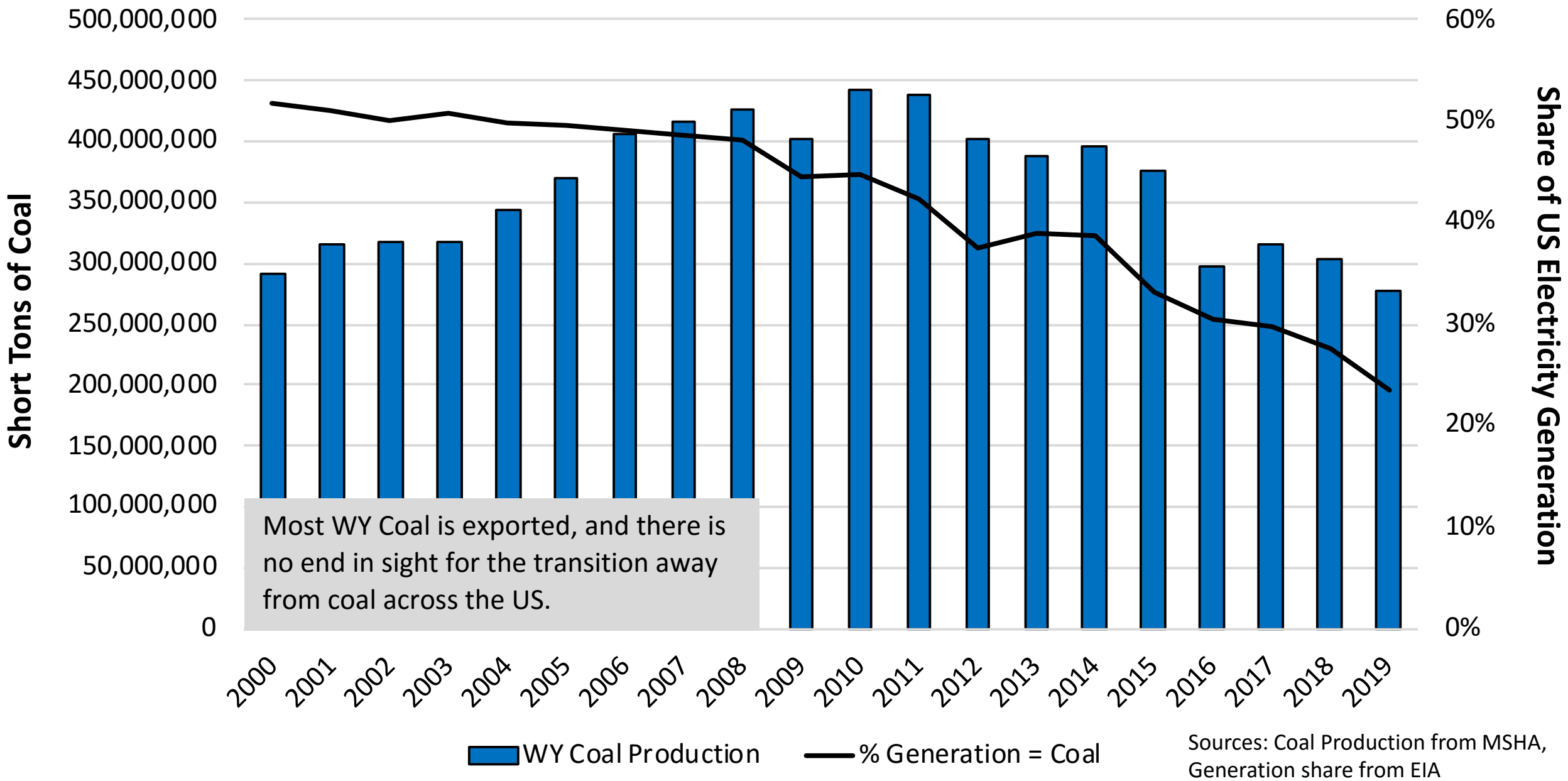


Tax Sensitivity to Mineral Value Change

($millions) Price Changes	Severance Taxes	Federal Royalties	Ad Valorem (SFP, 43mills)	Total (excl. Sales & Use)
$5 change in Oil	$24.10	$12.40	$16.80	$53.30
$0.5 change in Gas	$31.05	$35.15	$21.50	$87.70
$1 change in Coal	$15.10	$14.90	$9.50	$39.50
Production Changes				
1MMbbl change in Oil	$3.20	$1.60	$2.40	$7.20
100 Bcf	$11.30	$12.80	$8.40	$32.50
10 Million Tons	$6.40	$6.30	$4.00	$16.70

2019 Budget Fiscal Data Book https://wyoleg.gov/budget/2019databook.pdf

WY Coal Production vs % US Generation from Coal

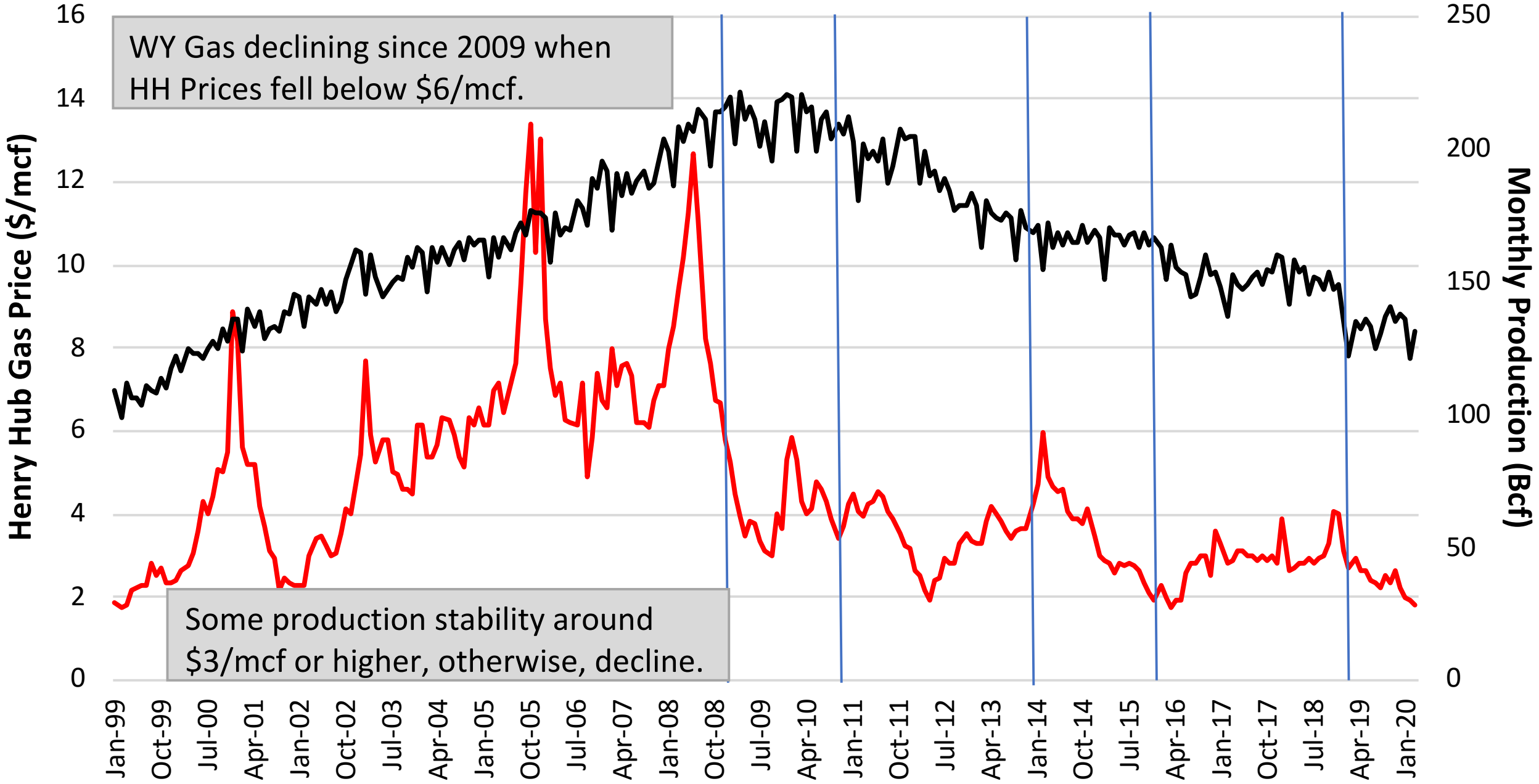


Most WY Coal is exported, and there is no end in sight for the transition away from coal across the US.

Sources: Coal Production from MSHA, Generation share from EIA

WY Monthly Gas Production

Sources: Gross Production from WOGCC, Prices from EIA



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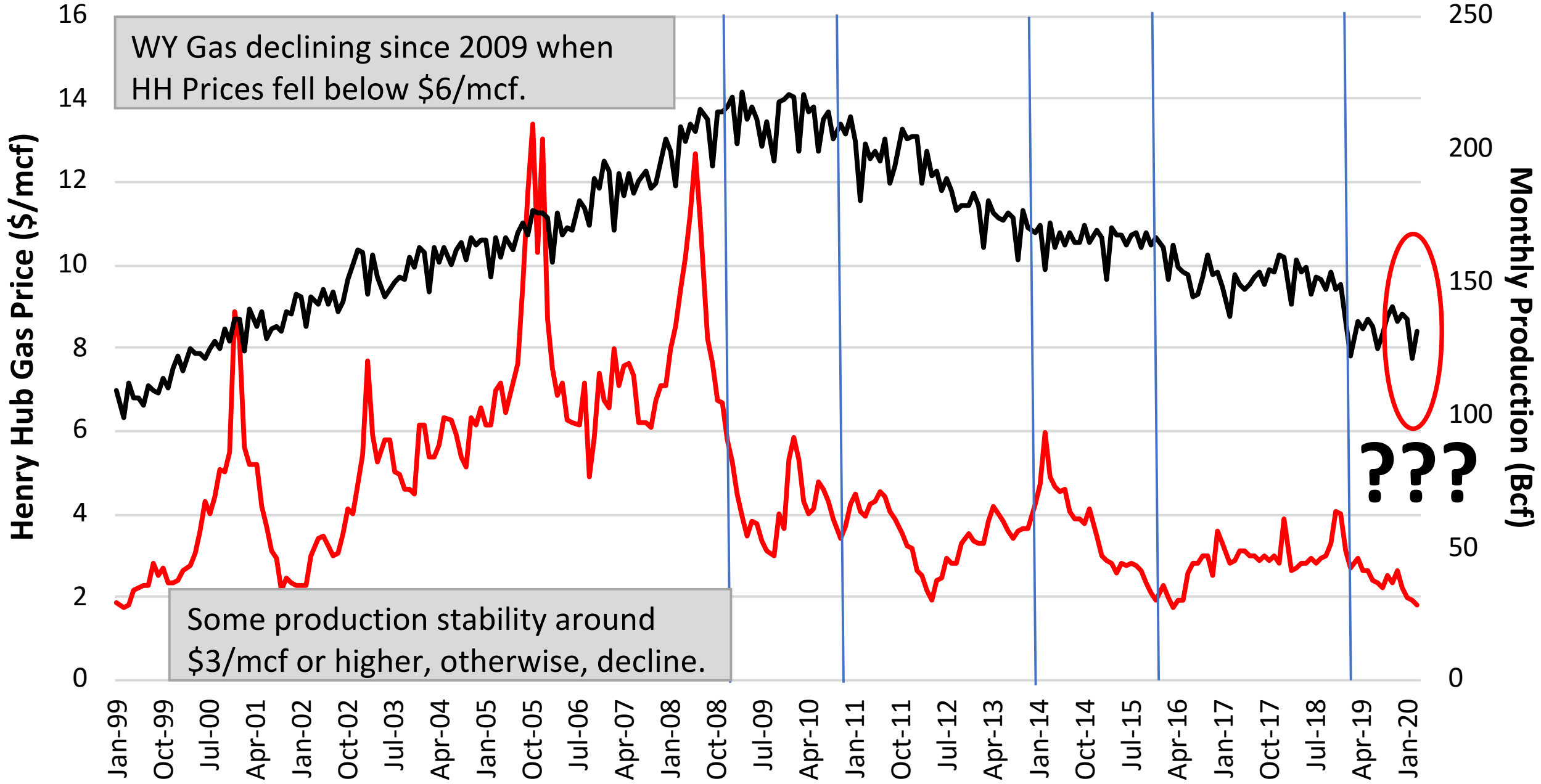
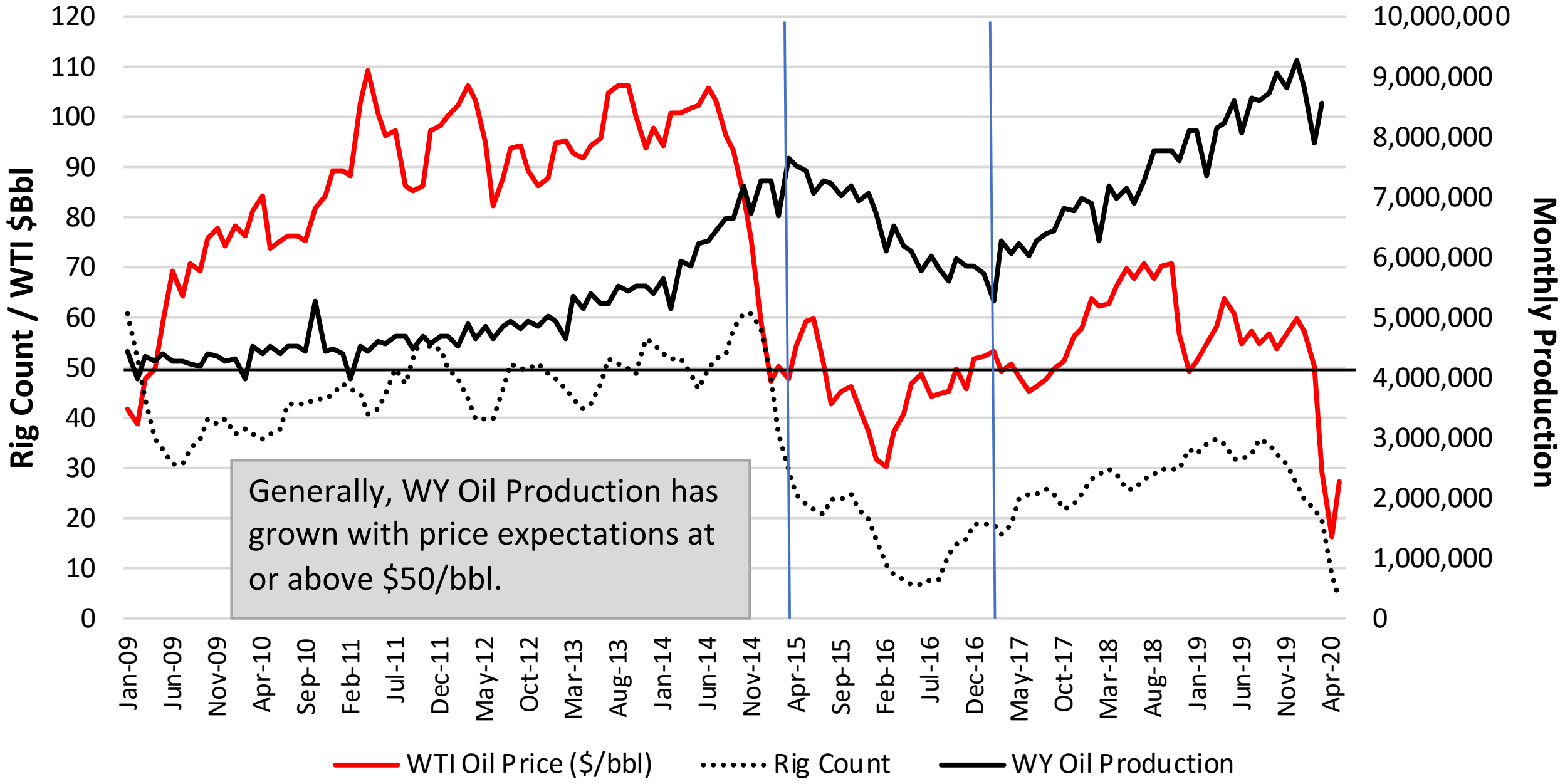


WY Monthly Oil Production & Rig Counts

Sources: Gross Production from WOGCC, Prices from EIA, Rigs from GE-Baker



Assessed Valuation of Minerals

- Minerals are assessed at 100% of the prior year's production value
  - Introduces a 1-year lag to valuation and payments
  - Puts margin pressure on companies in falling price environment
- Commercial property is assessed at 11.5% of value
- Residential property is assessed at 9.5% of value

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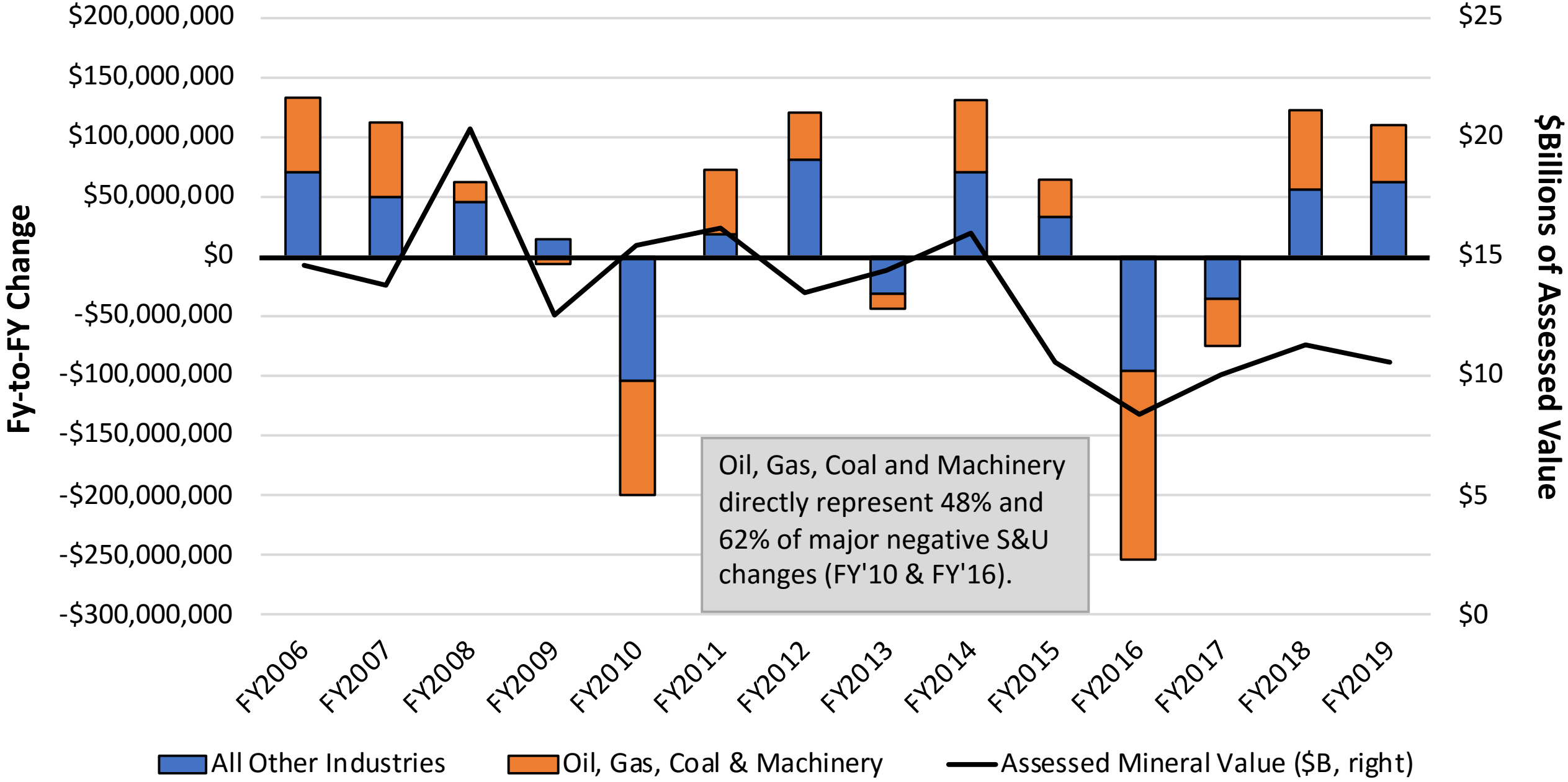
Key Insight: It takes 10x as much commercial/residential property value to replace every dollar lost in mineral production values every year.

- **$5 Billion** lost in mineral valuation since 2014 requires **$50 Billion** in new commercial/residential property value.
  - WY State GDP is about $40 billion per year.

WY Sales & Use Tax Collection Changes

Sources: WY Dept. of Revenue Sales/Use Distributions, CREG Assessed Valuations



Residents do not pay the full cost of public services they receive.

Economic diversification efforts are unable to improve revenue flow in Wyoming - <u>without tax reform</u>.

"Under its current tax structure, Wyoming effort to stimulate non-resource sectors in the state presents fiscal challenges. Only growth in resource sectors has significant positive fiscal impacts." - **REMI**

WYOMING TAXPAYERS ASSOCIATION

Source: Wyoming taxpayer's Assoc (2018)

Wyomingites pay for 1/9 of public services received

Direct Tax Collections & Public Service Costs

For a 3-person family with income of $60,000 and owning a home valued at $200,000

Personal Tax Collections

Retail Sales	$	900
Gasoline	$	220
Cigarettes	$	110
Alcohol	$	90
Vehicle Registration	$	460
Property Tax	$	1,400

$ 3,180

Public Service Costs

County	$	2,970
City/Town	$	3,320
Special District	$	5,310
K-12 Education	$	7,320
State Services	$	8,130

$27,050

So What does Wyoming’s budget look like going forward?

Recent coal declines: Wyoming Impacts
(Pre-COVID)

18%

Employment decline since 2015

27%

Production decline since 2015

32%

Coal severance tax decline since 2015

Sources: MSHA and CREG

Natural gas declines (Pre-COVID):

13%

Price decline since 2015

18%

Projected Production decline since 2015

19%

Nat. gas severance tax decline since 2015

Sources: EIA and CREG

Oil outcomes (Pre-COVID):

14%

Projected Production increase since 2015

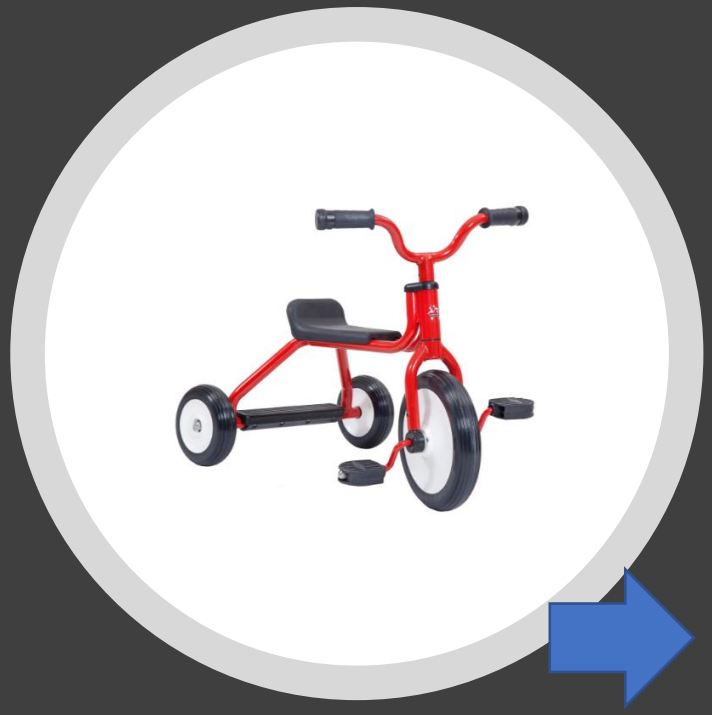
28%

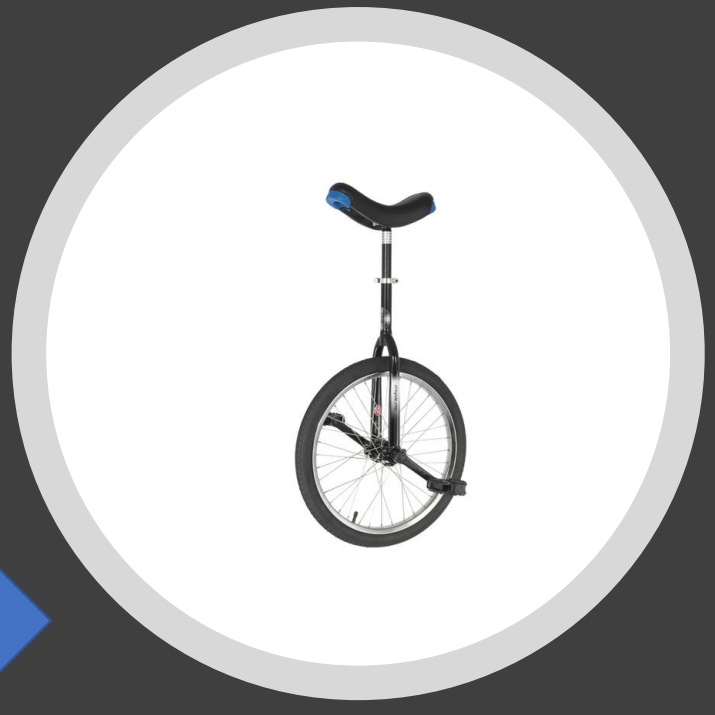
Projected Price increase since 2015

9%

Oil severance tax increase since 2015

Sources: EIA and CREG

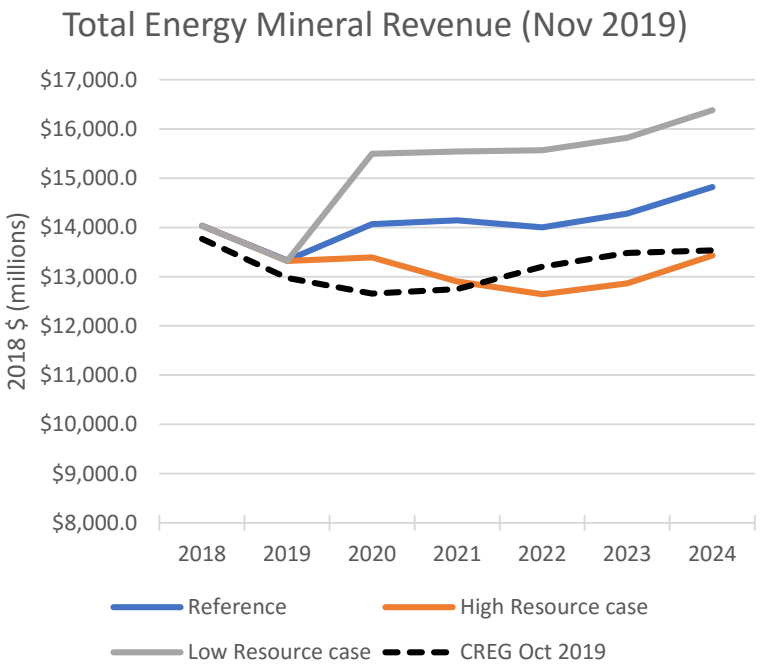




Increasing instability in our revenue stream

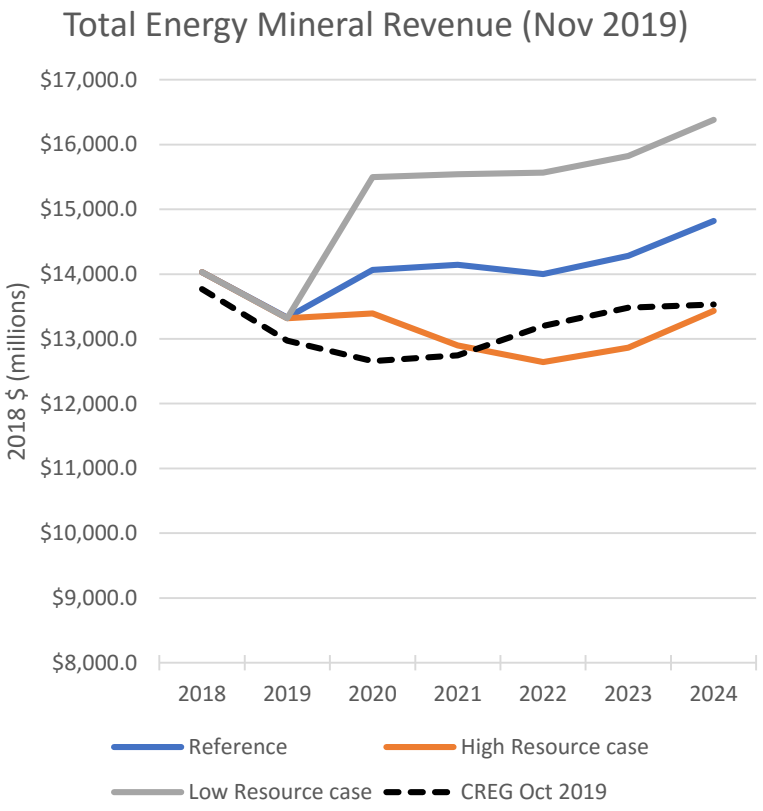
Our energy revenue outlook is falling fast!

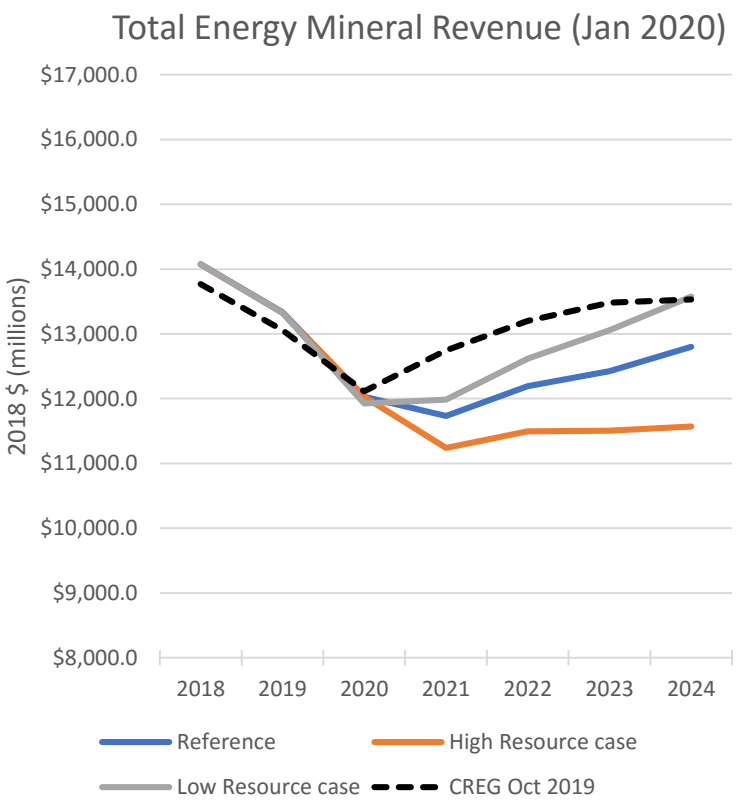
Fall 2019



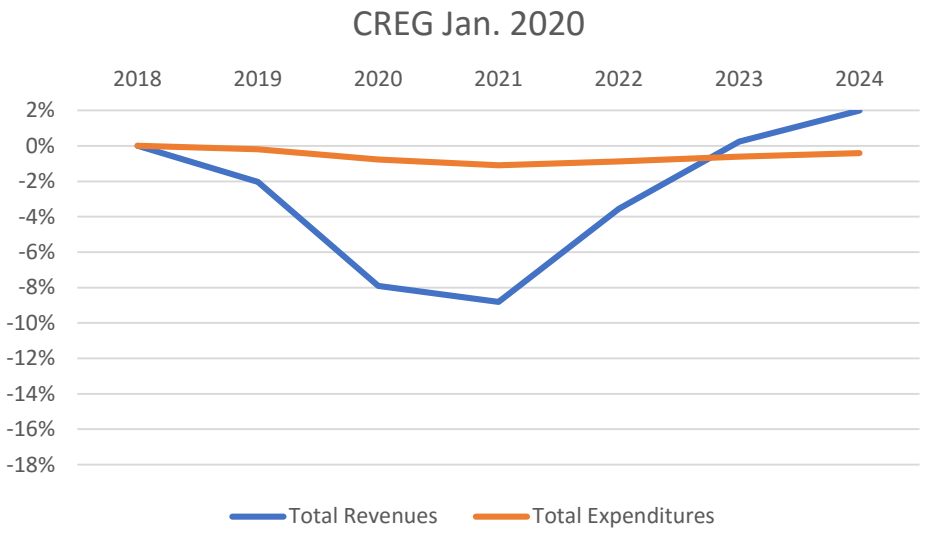
Our energy revenue outlook is falling fast!

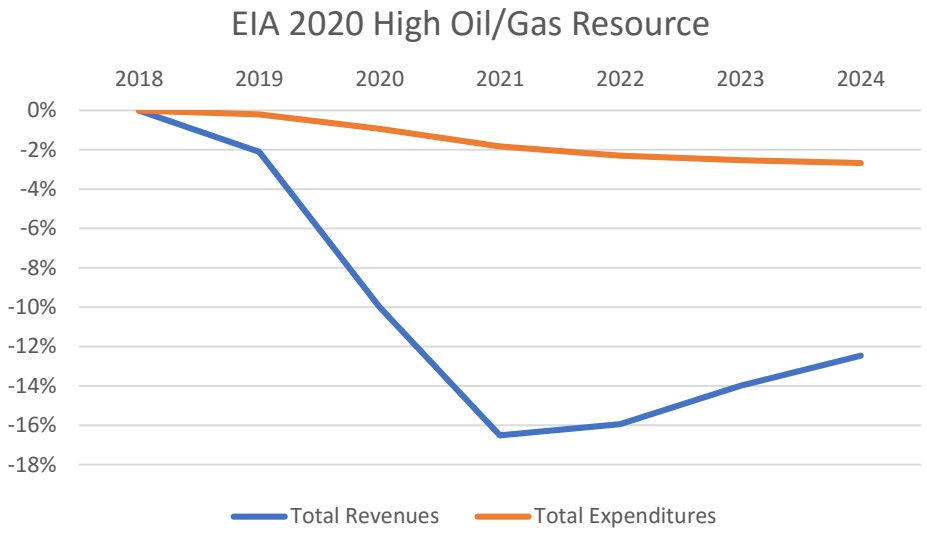
Fall 2019 vs. Jan. 2020

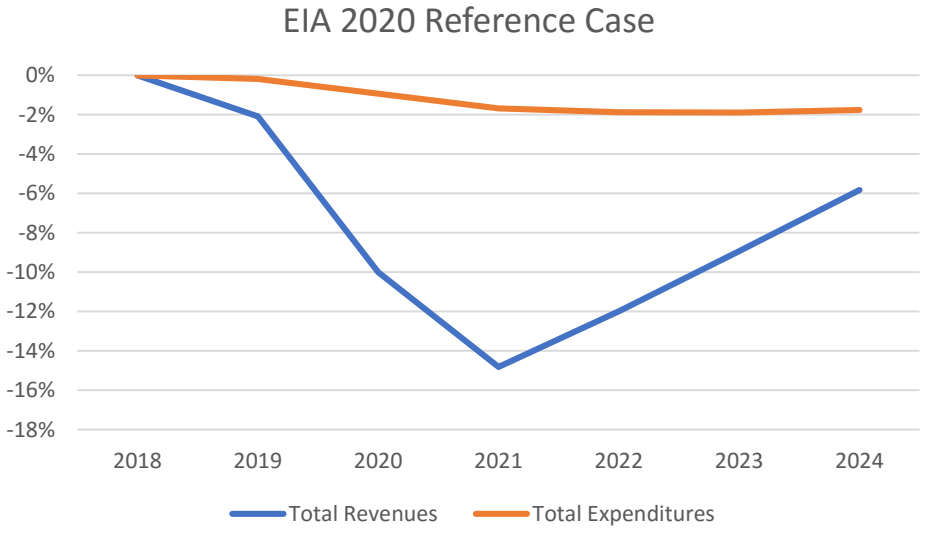


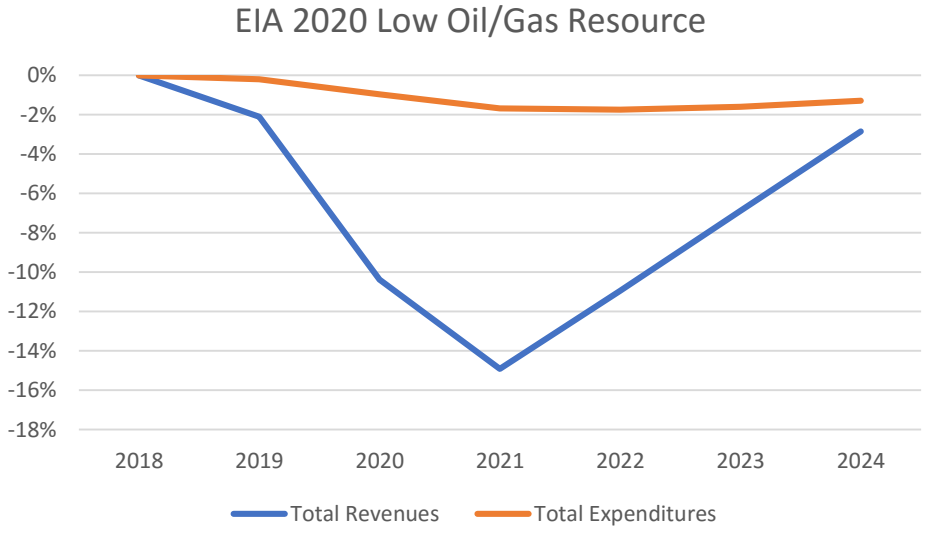


Looming Structural Deficit Known before COVID









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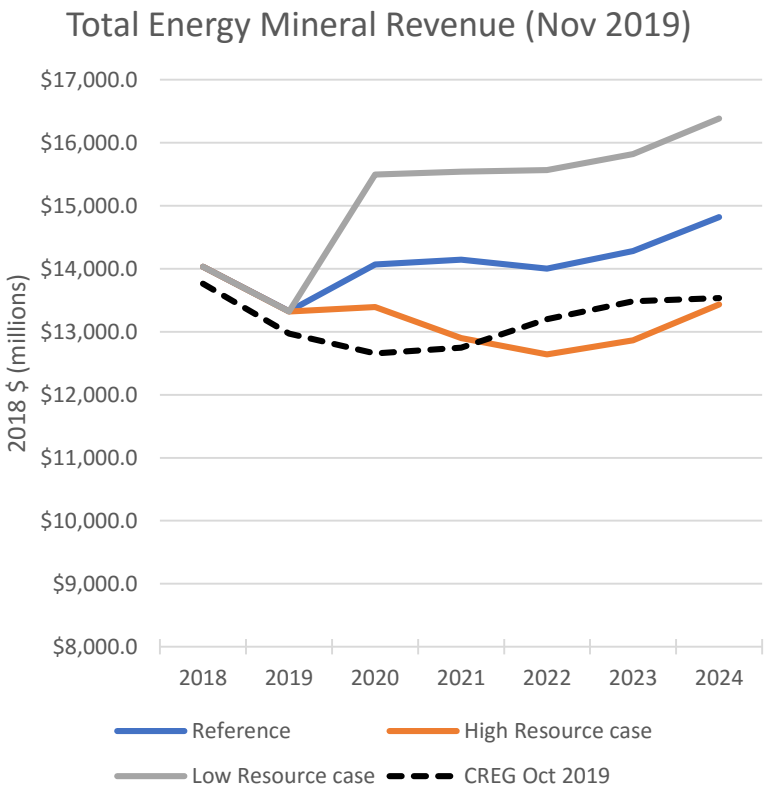
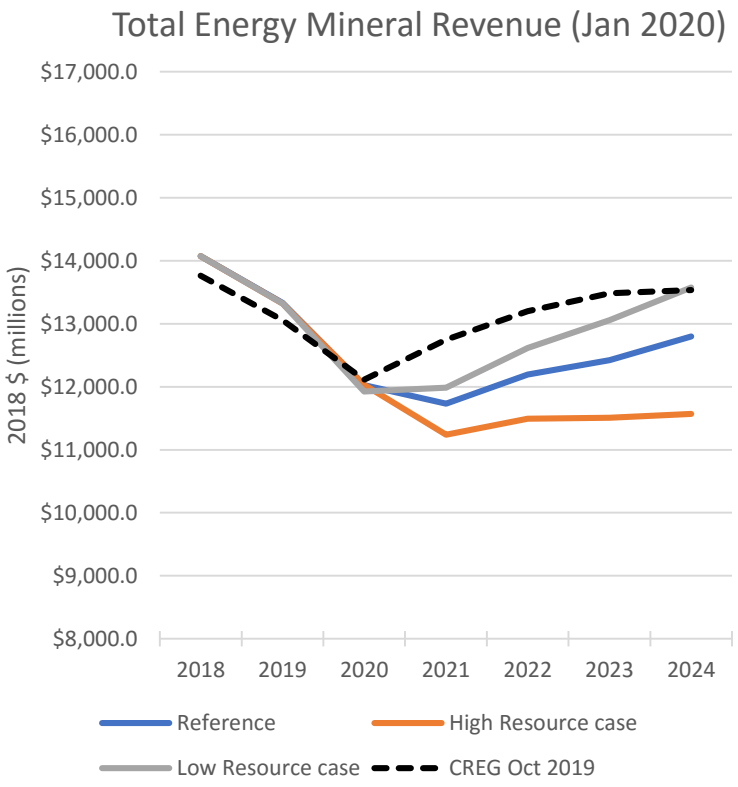
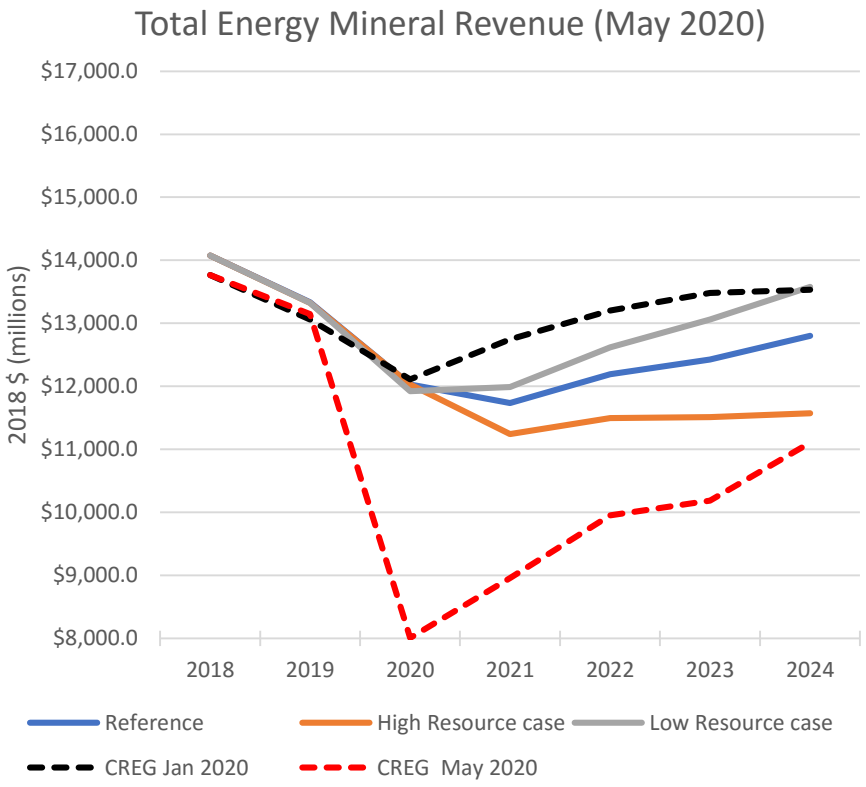
Fall 2019 vs. Jan. 2020 vs. May 2020







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- Coal production declines 25% with stable prices in 2020
  - Structural decline continues – production in 2024 predicted 36% below 2019 (175 vs. 275 mill. tons in 2019) with prices only 2% lower.

Sales Tax Outlook

- Outlook depends on shape of recovery (COVID resurgence?) and energy production
- Forecast a 13.9% decline in 2020
  - -30.1% in 2021
  - -25.8% in 2022
  - -21.6% in 2023
  - -19.2% in 2024

Property Tax Outlook

- Primary recipient is education, with cities and counties using this as a significant source of income
- 2019 forecast a 1.5% increase in assessed value
  - -20.6% in 2020
  - -20.5% in 2021
  - -18.9% in 2022
  - -15.7% in 2023
  - -12% in 2024

What does this all mean?

- The baseline CREG forecast:
  - FY2020: $200.7 mill to shortfall to General Fund, $39 mill shortfall to Educ.
  - For the upcoming biennium,
    - a shortfall of $896 mill to General Fund
      - a 30% shortfall to the budget passed in March.
    - a $357 mill shortfall to schools/education
      - Shortfalls continue into next biennium due to lag in property tax collections.

How can the State deal with these shortfalls?

1. State can cut, however cuts of this magnitude would require either
   - Completely defunding the entire Dept. of Health in Wyoming, or
   - Completely defunding all higher ed (comm colleges+ UW), all justice and corrections, or
   - Completely defunding all other Wyoming government agencies not listed above, or
   - Laying off all state employees (would then be able to fund all agencies, but then there would be no one to provide the services!)

- You cannot cut your way out of this shortfall.

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4. State could borrow or hope for Federal aid.
   - Does not solve underlying structural deficit.

Questions

Please utilize the chat feature in Zoom for your questions and comments.

Thank you for participating in today's seminar.

Participants will receive an email with a link to an evaluation form and an opportunity to ask questions not covered in session.

A video of the session and an FAQ will be posted at www.uwyo.edu/business/covid-19/