

# WYOMING DEMOGRAPHIC, ECONOMIC AND REVENUE TRENDS AND OUTLOOK

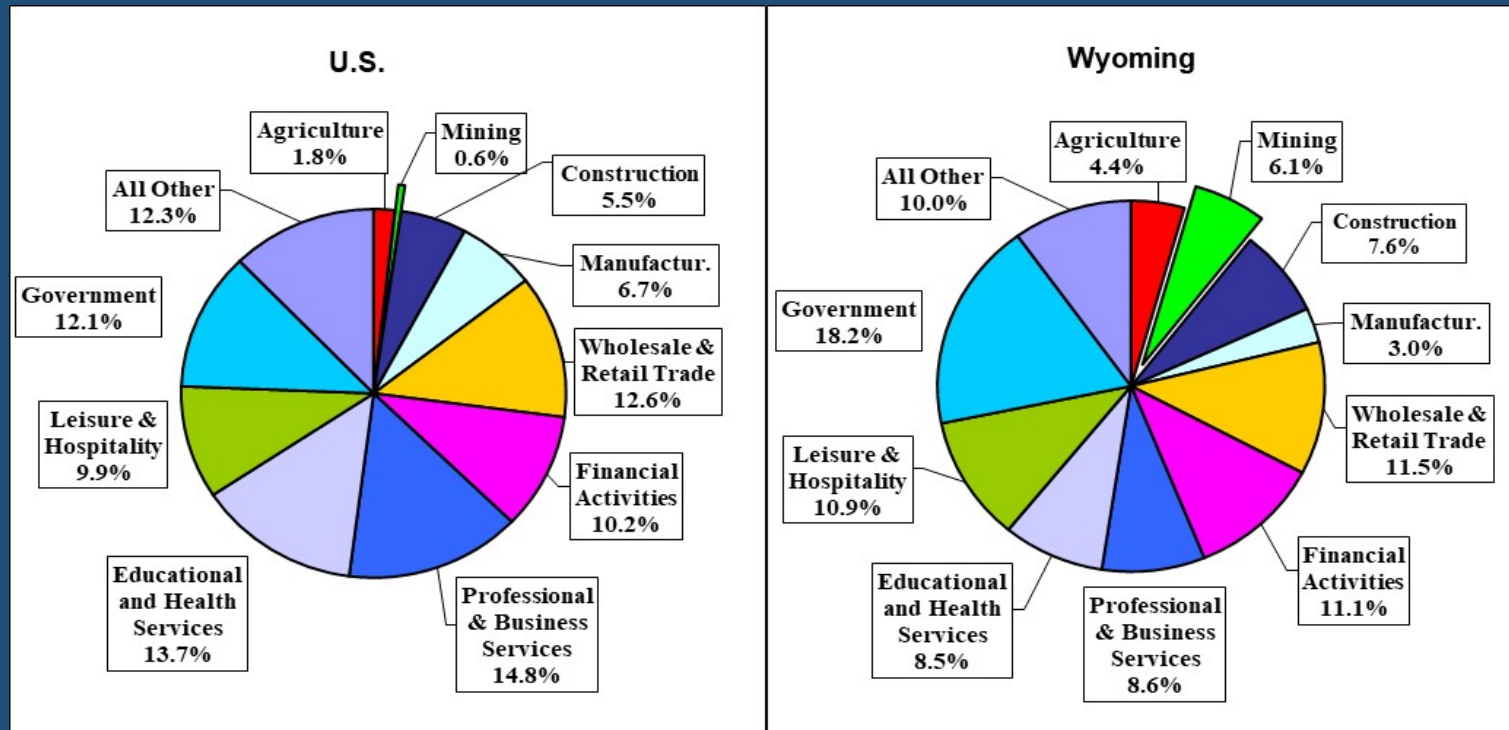


Economic Roundtable  
Federal Reserve Bank of Kansas City  
Nov 12, 2020

Wenlin Liu, Chief Economist  
Economic Analysis Division  
State of Wyoming

## Employment by Industry for U.S. and Wyoming: 2019

(Includes: full and part-time wage and salary jobs, and proprietors employment)

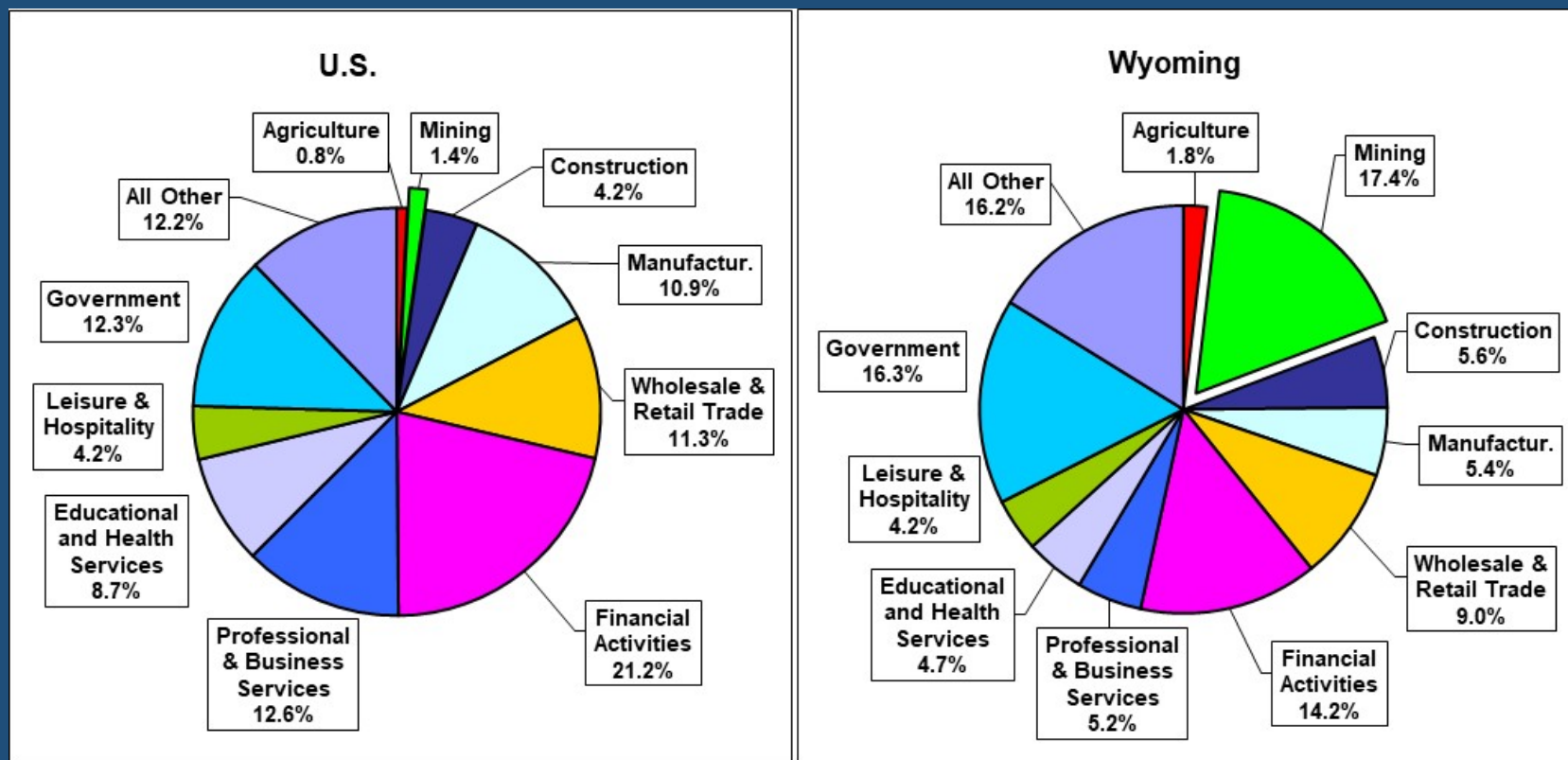


**Wyoming = 412,765**  
**U.S. = 203,809,500**

### Rank of Wyoming's industry share in the U.S.:

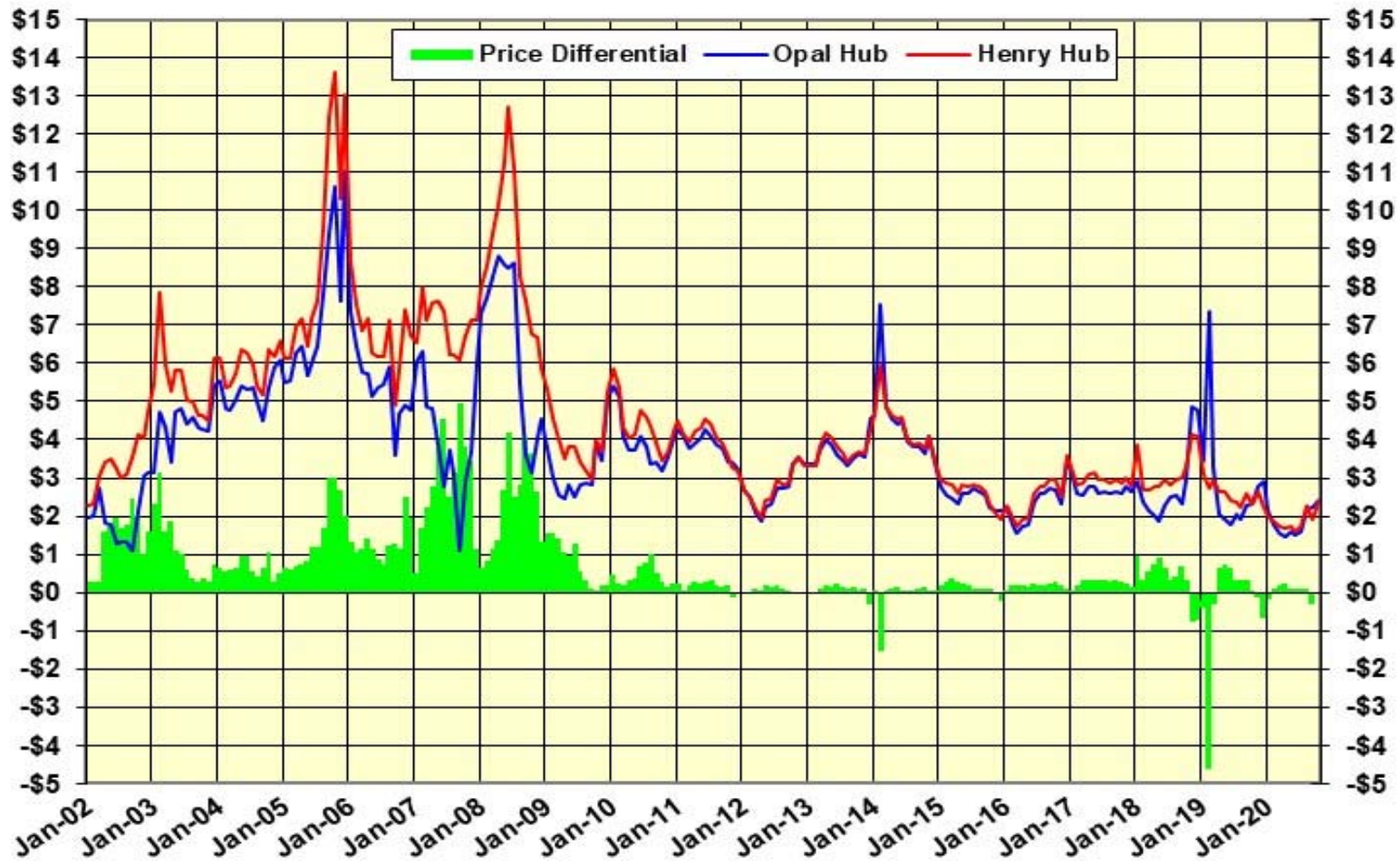
Mining - 1 <sup>st</sup>	Manufacturing - 48 <sup>th</sup>
Construction - 1 <sup>st</sup>	Prof. & Bus. Svcs. - 51 <sup>st</sup>
Government - 3 <sup>rd</sup>	Educ. & Health Svcs. - 51 <sup>st</sup>

## Gross Domestic Product for U.S. and Wyoming: 2019 by Industry



Note: GDP is often referred to as its "value added", is equal to its gross output (sales or receipts and other operating income, plus inventory change) minus its intermediate inputs (consumption of goods and services purchased from other industries or imported).

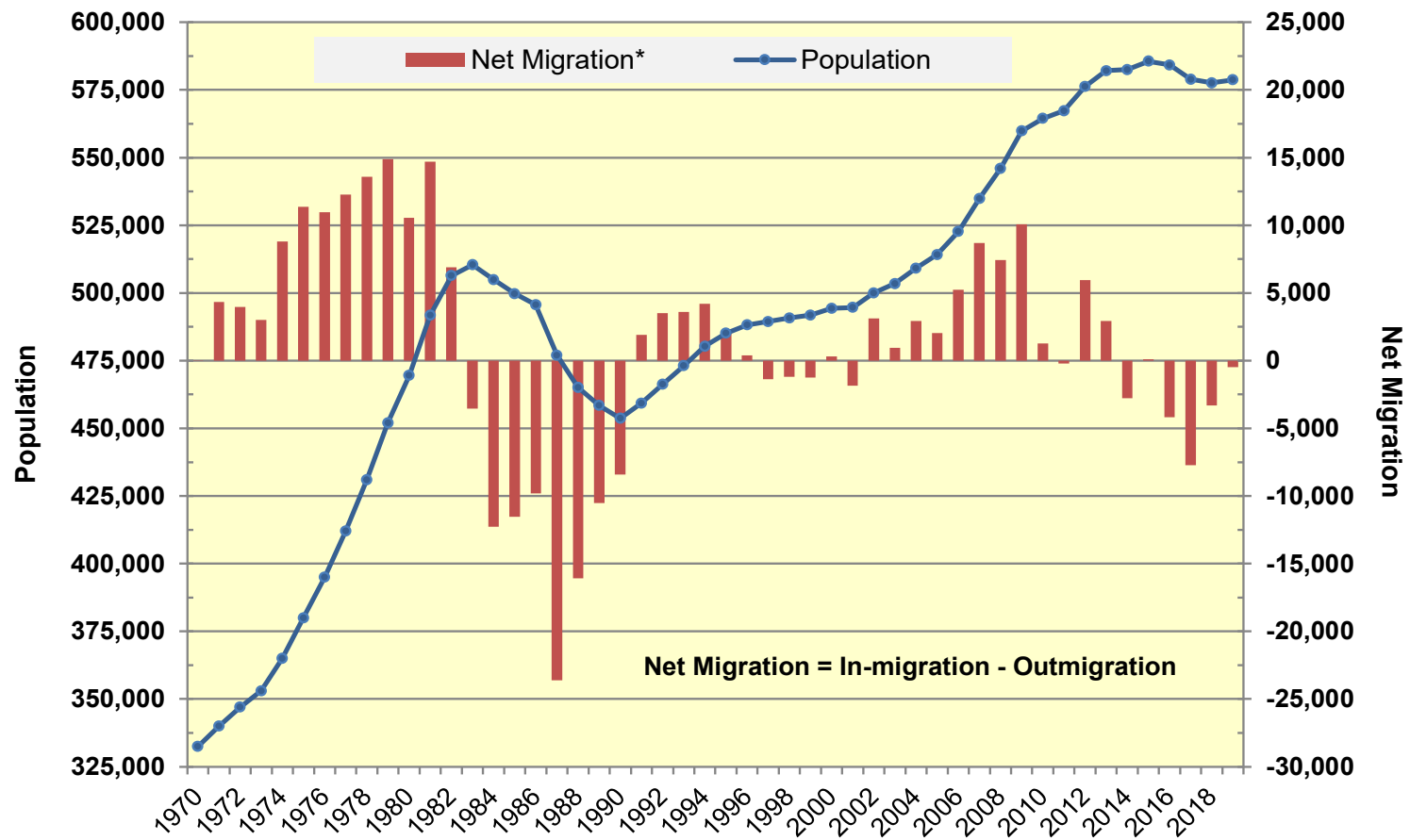
Monthly Natural Gas Spot Prices (\$/mcf): Jan 2002 - Oct 2020



Source: Natural Gas Intelligence

By Wyoming Economic Analysis Division

## Wyoming Population and Net Migration: 1970 to 2019

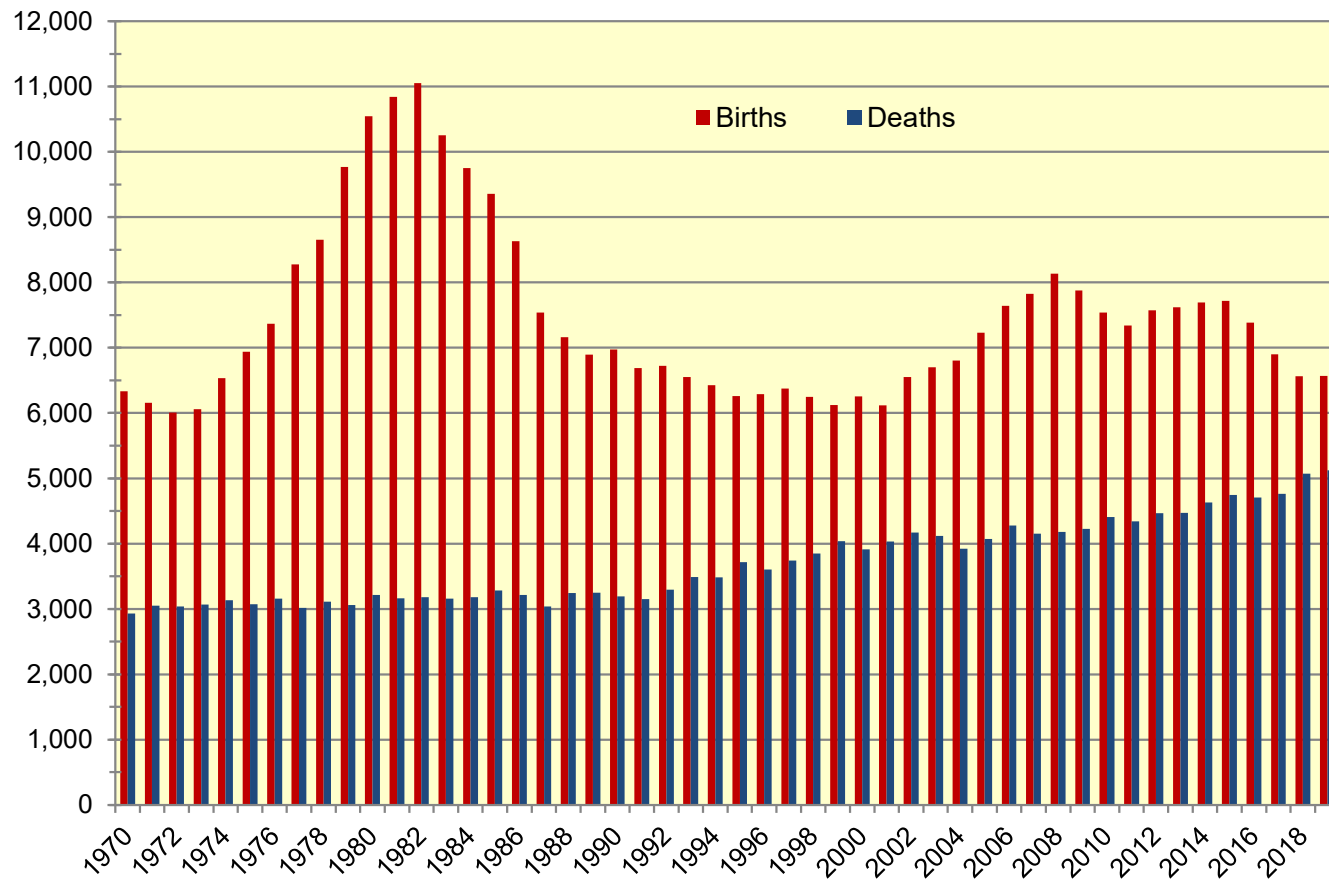


Source: U.S. Census Bureau

Prepared by Wyoming Economic Analysis Division

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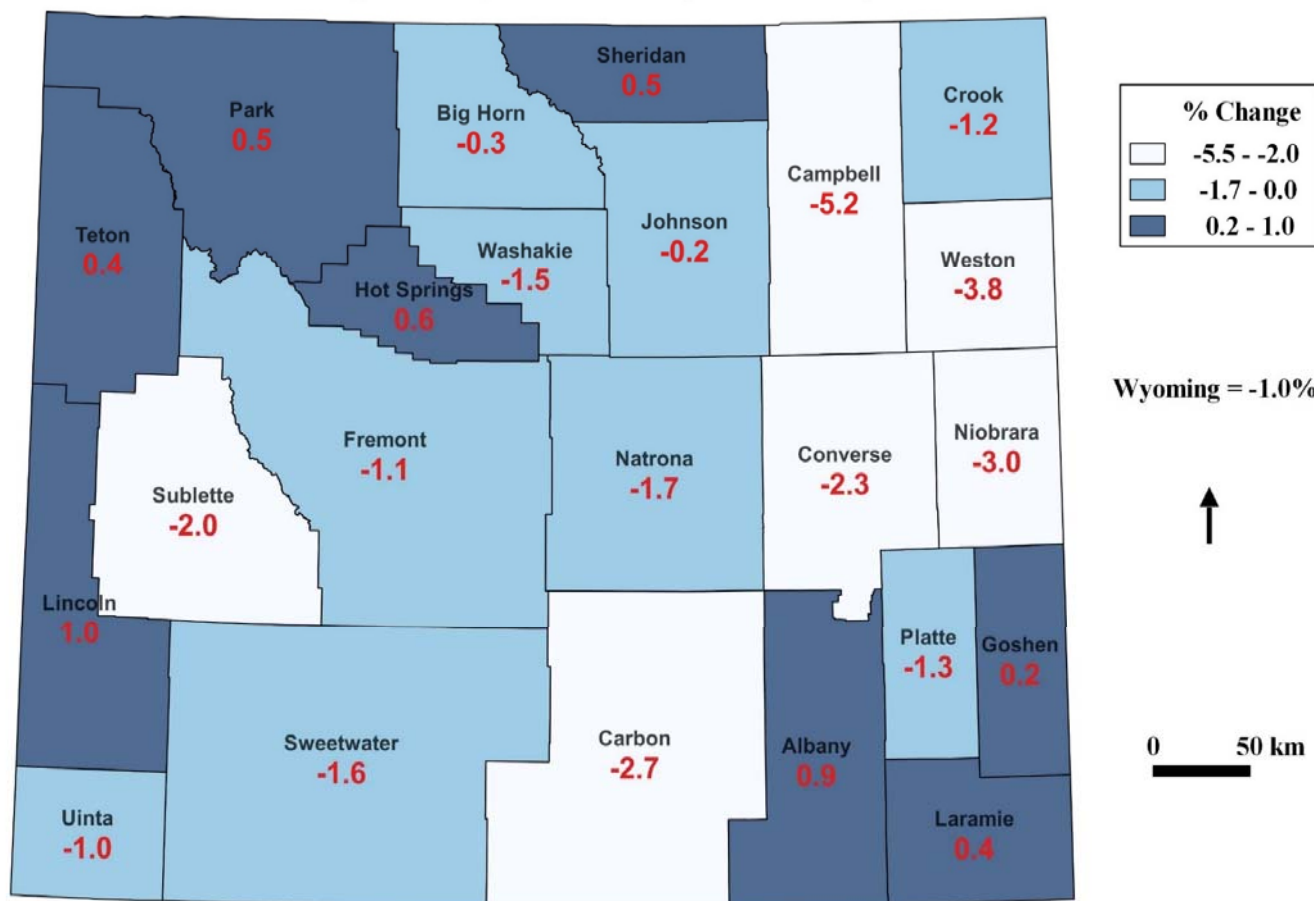
## Number of Births and Deaths in Wyoming: 1970 to 2019



Source: Wyoming Department of Health

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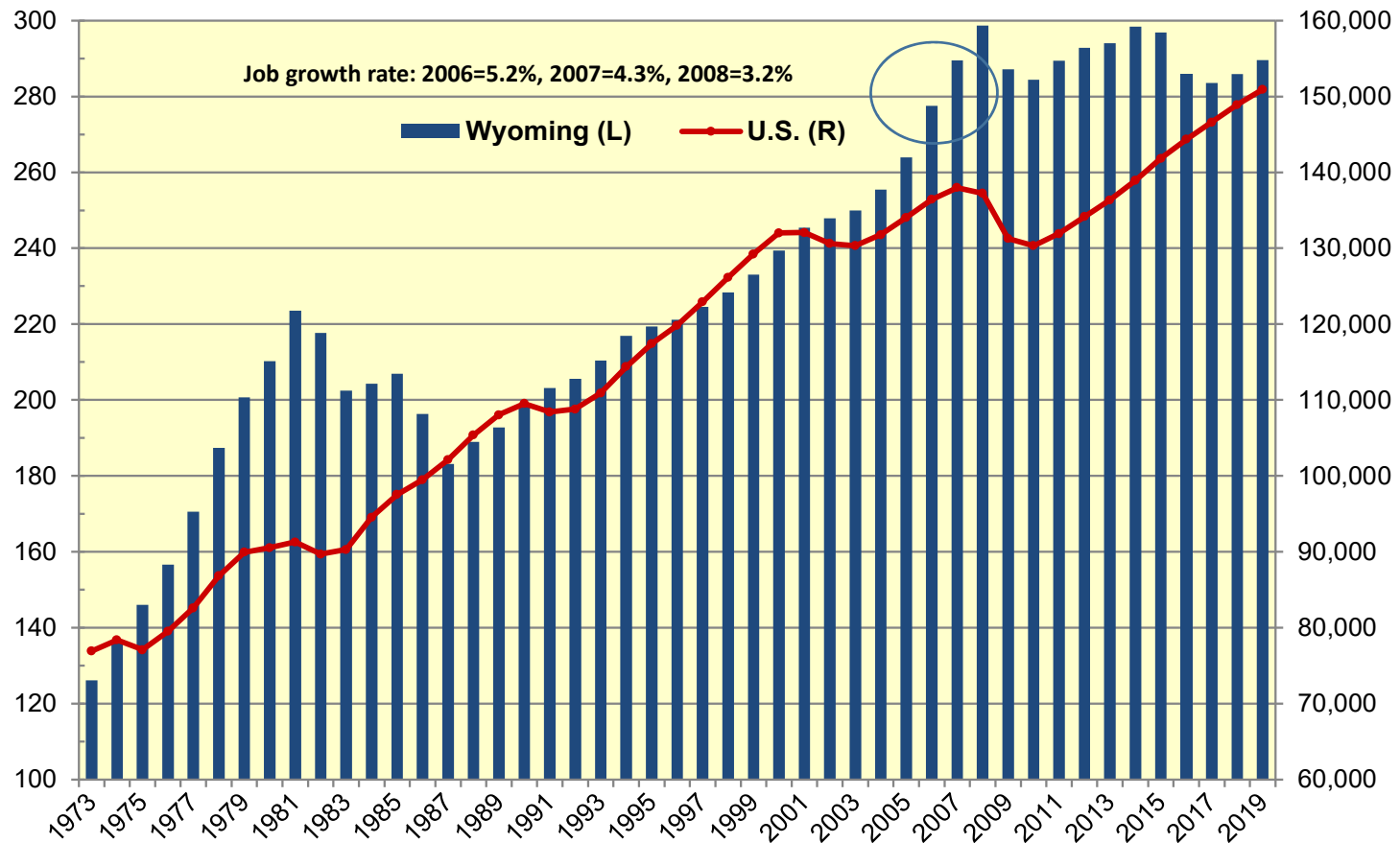
## Percent Change of Population: July 2016 - July 2017



Source: U.S. Census Bureau

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## Non-Agr Wage and Salary Employment for Wyoming and U.S. (in thousands of jobs)

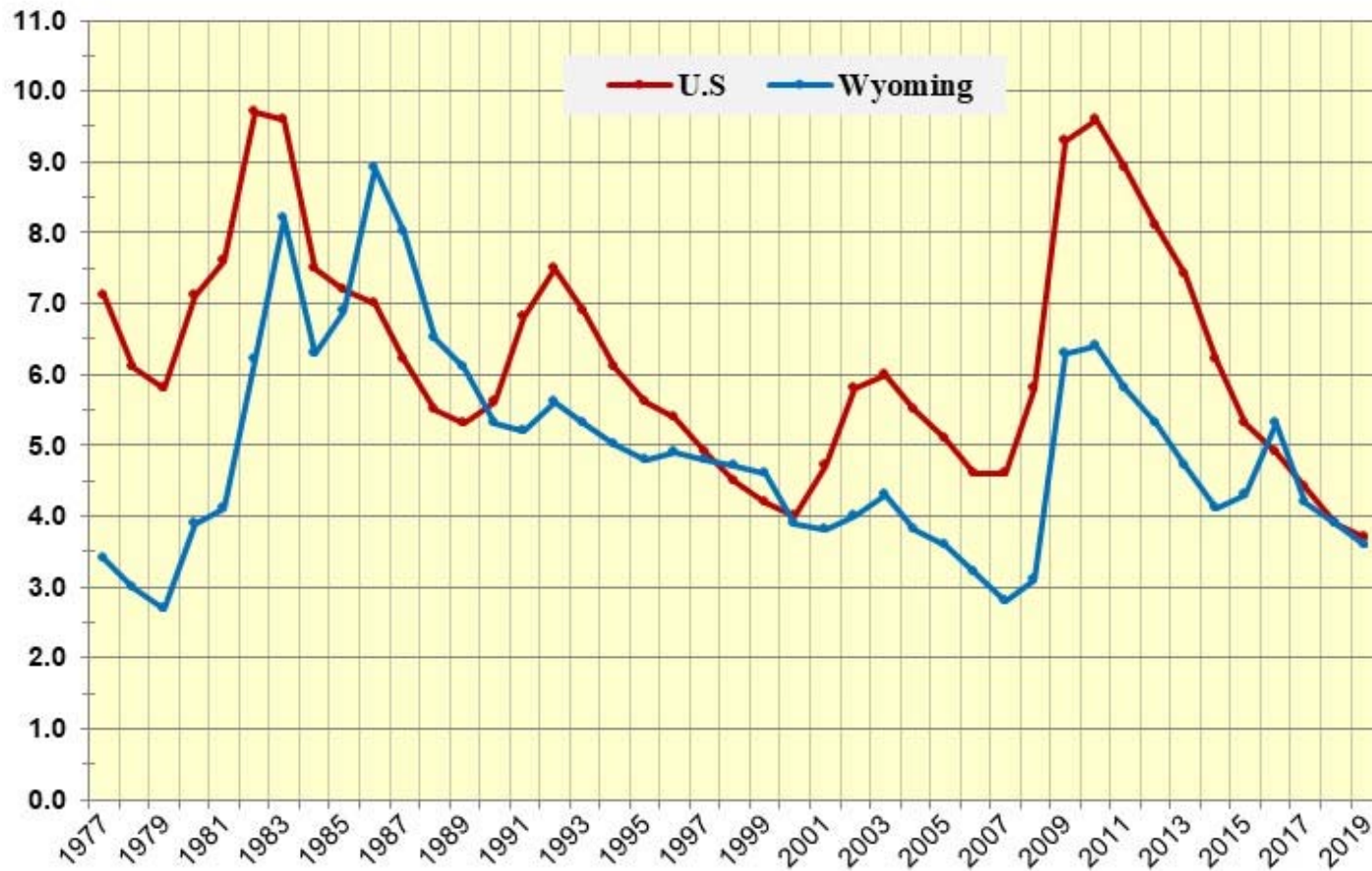


Source: U.S. Bureau of Labor Statistics and Moody's

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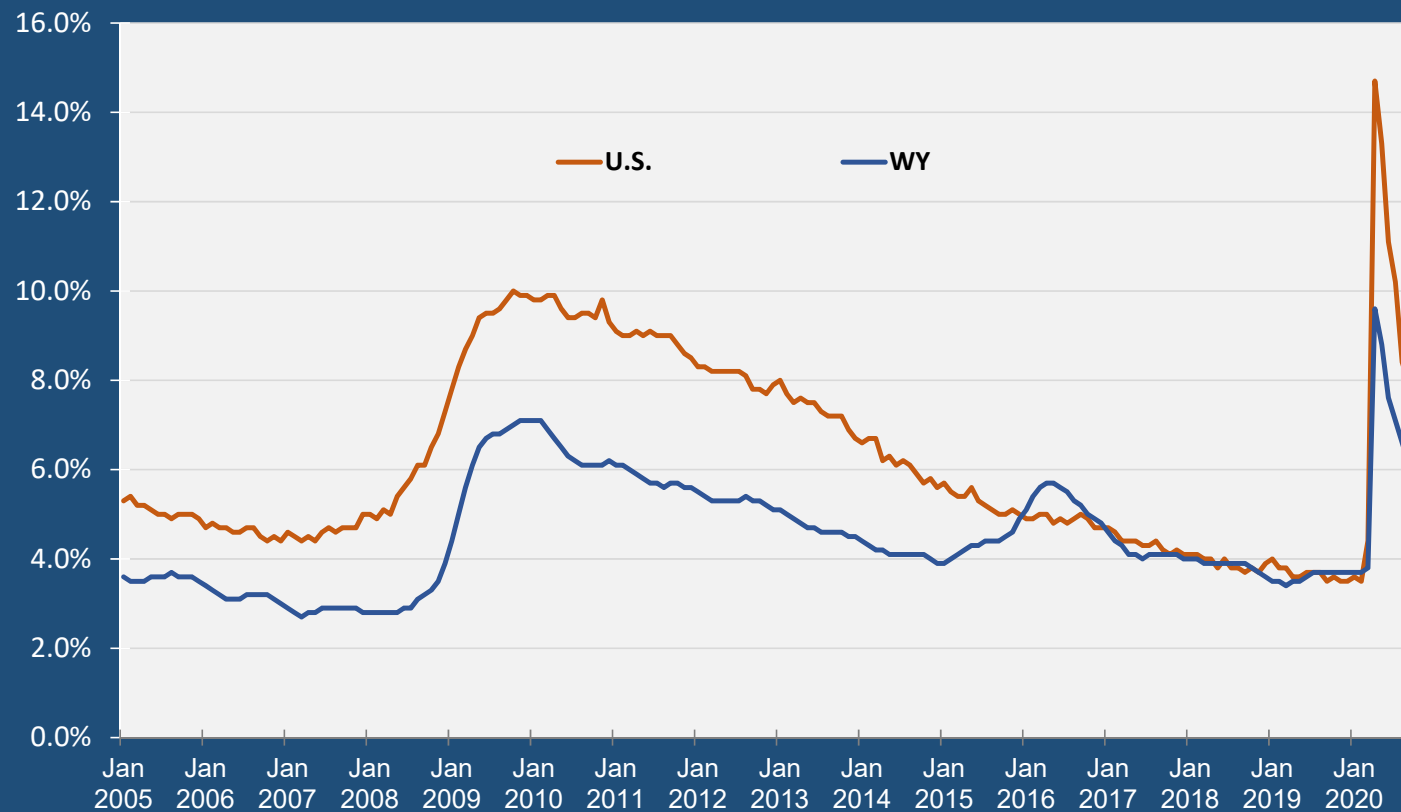
Unemployment Rates (%) for Wyoming and the U.S.: 1977 to 2019



Source: U.S. Bureau of Labor Statistics

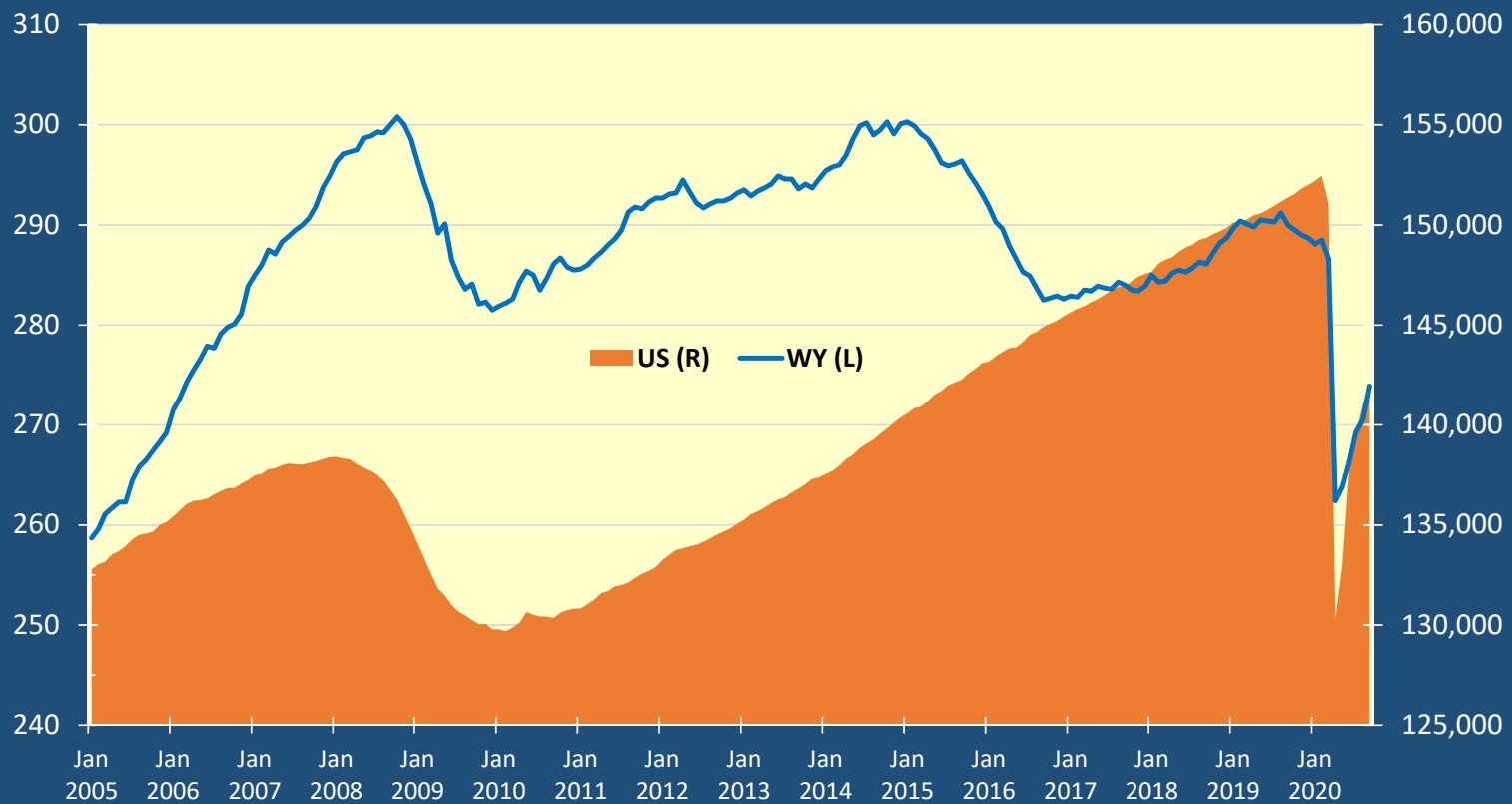
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## Monthly Unemployment Rate for the U.S. and Wyoming: Jan 2005 – Sept 2020

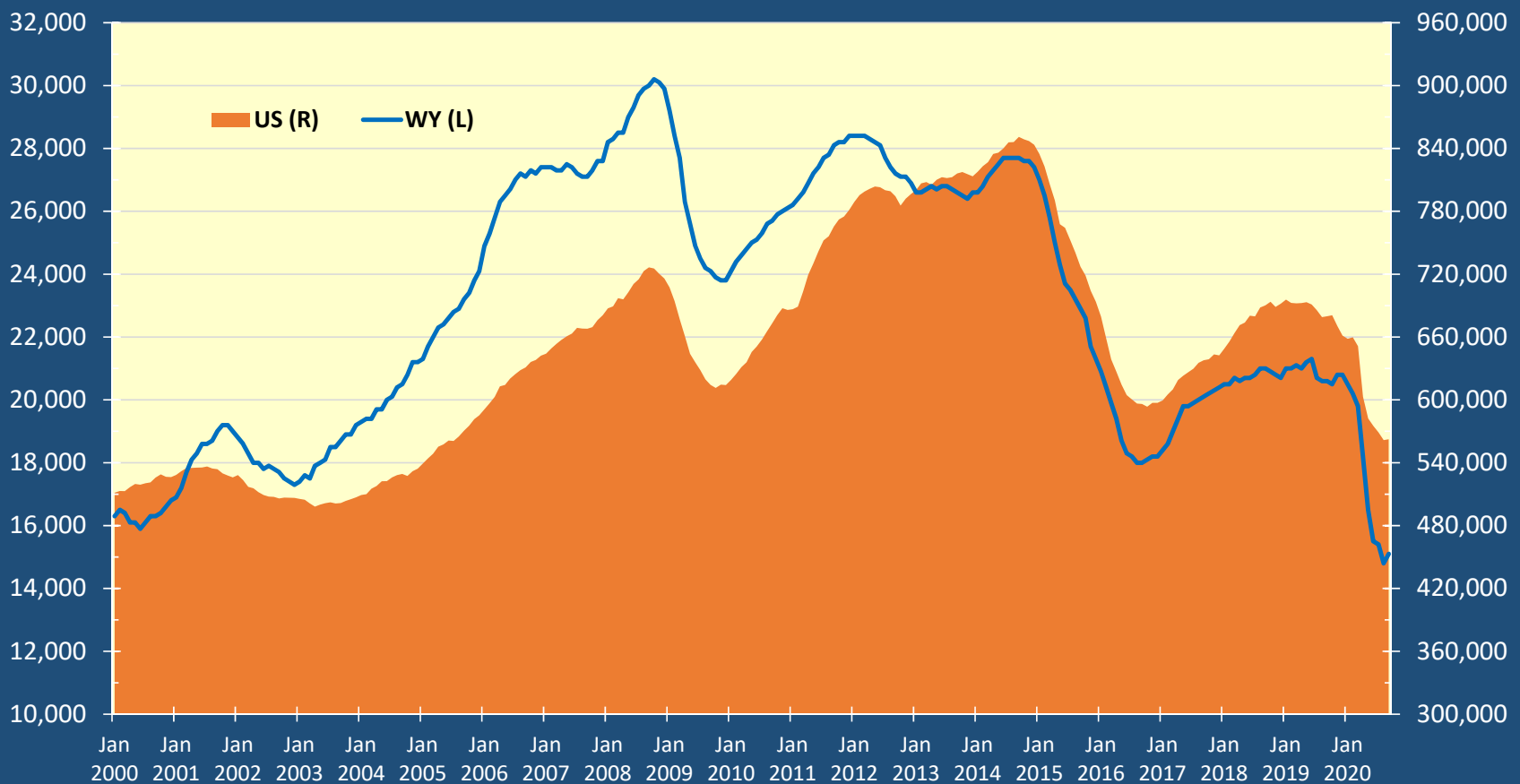


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Total Nonfarm Employment (in thousands) for the U.S. and Wyoming:  
Jan 2005 – Sept 2020



## Mining Employment for the U.S. and Wyoming: Jan 2000 – Sept 2020



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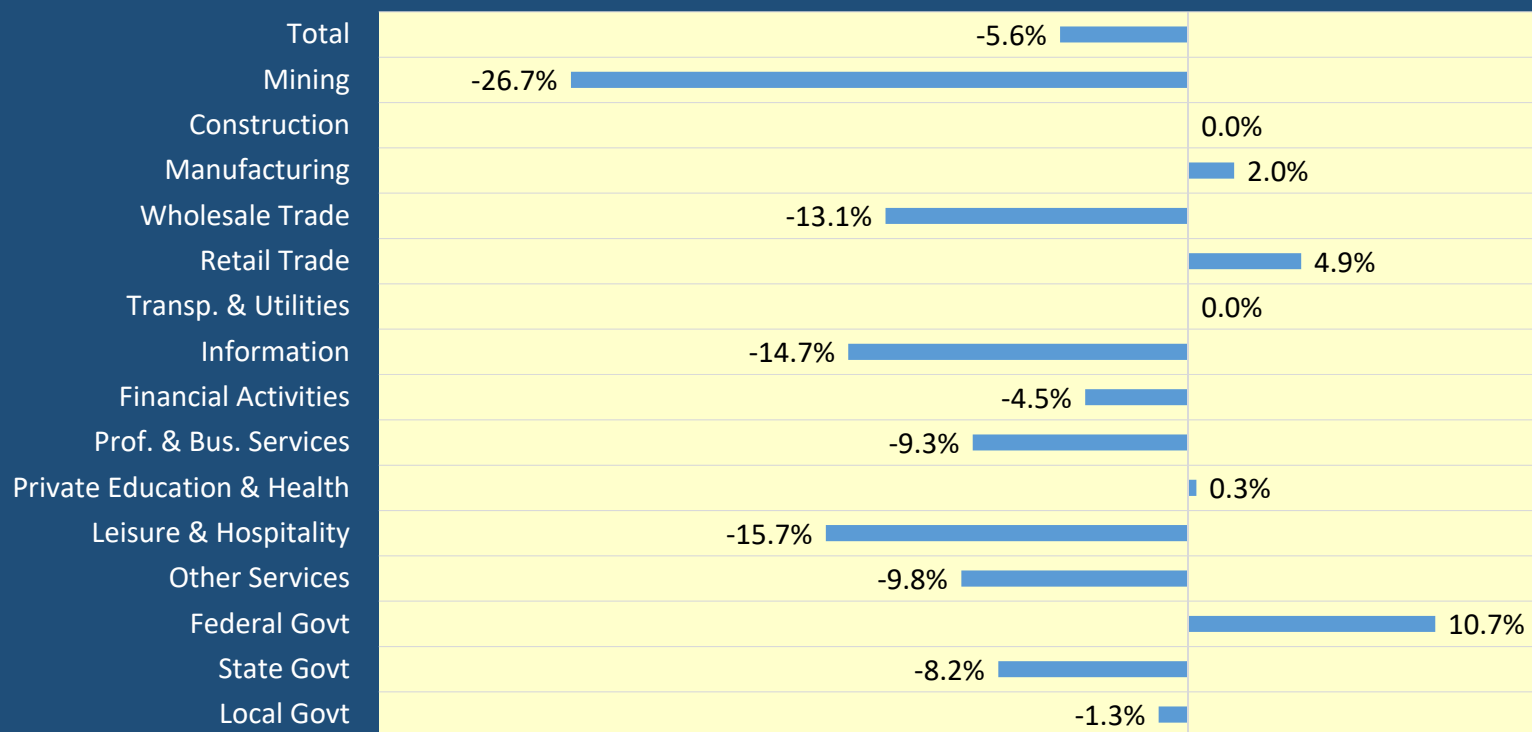
## Sales Taxes from Mining vs. Oil & Gas Rig Count



Source: Baker Hughes

By Wyoming Economic Analysis Division

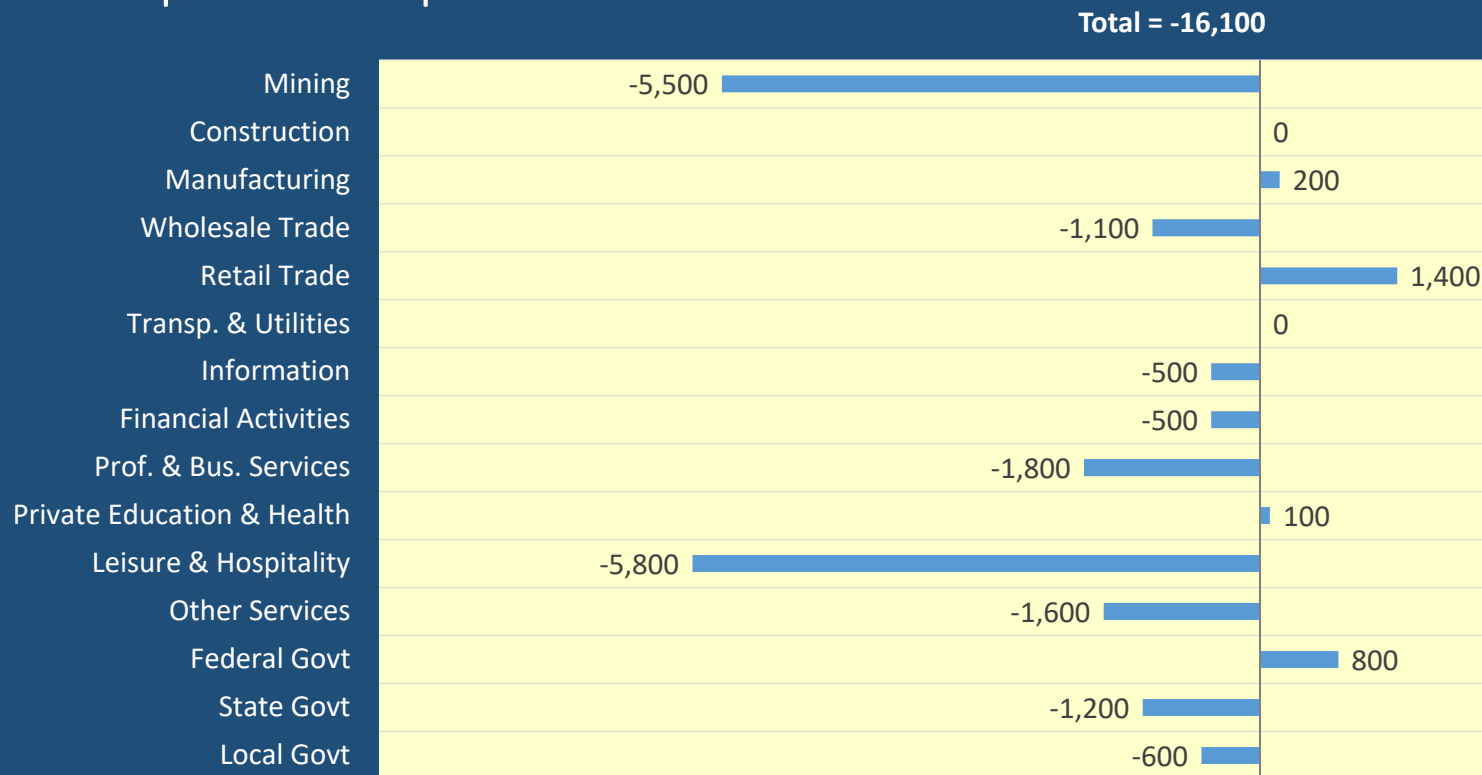
## Change of Employment (%) by Industry in Wyoming: Sept 2019 – Sept 2020



State Government includes higher education

Local Government includes K-12 education and public hospitals

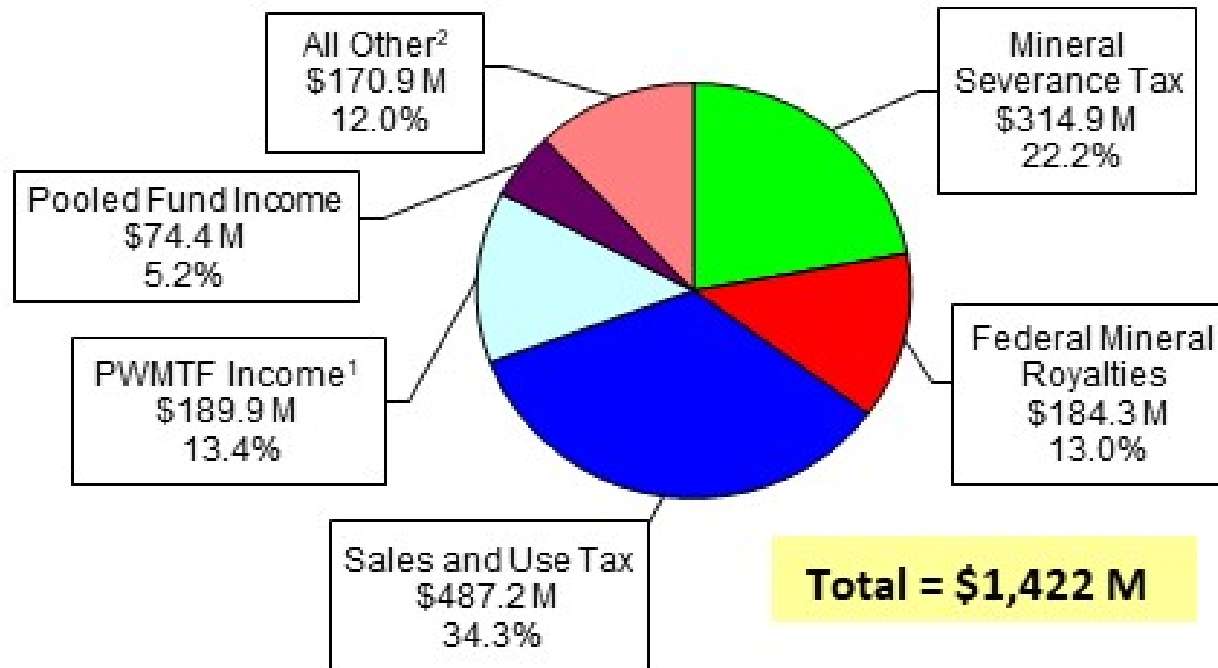
## Change of Employment (Number) by Industry in Wyoming: Sept 2019 – Sept 2020



State Government includes higher education

Local Government includes K-12 education and public hospitals

## General Fund Revenue Sources: FY 2020



<sup>1</sup> PWMTF - Permanent Wyoming Mineral Trust Fund spending policy amount (2.5% of principal).

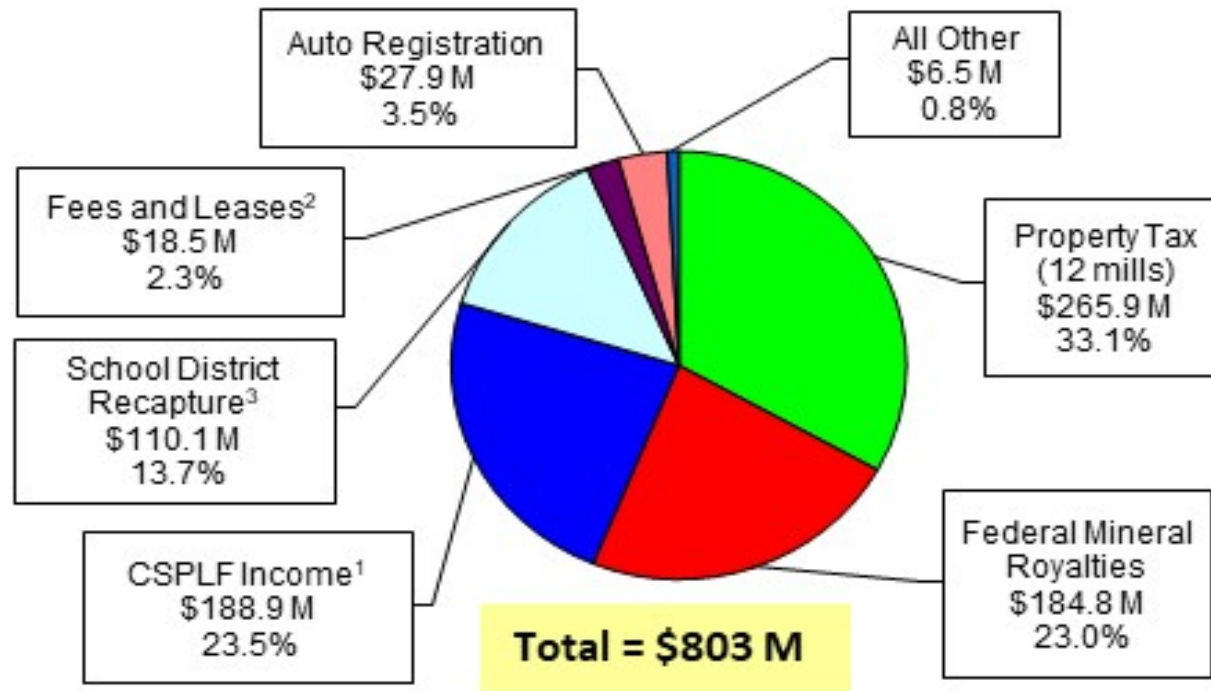
<sup>2</sup> Includes insurance premium, cost allocation, liquor profit, corporation tax, license fee, cigarette tax, penalty & interest, and others.

Source: CREG

Prepared by Economic Analysis Division (EAD)



## School Foundation Program (SFP) Revenue Sources: FY 2020



<sup>1</sup>CSPLF - Common School Permanent Land Fund spending policy amount (5.0% of principal).

<sup>2</sup> Includes grazing fees, bonus payment on mineral leases, and other surface leases of school lands.

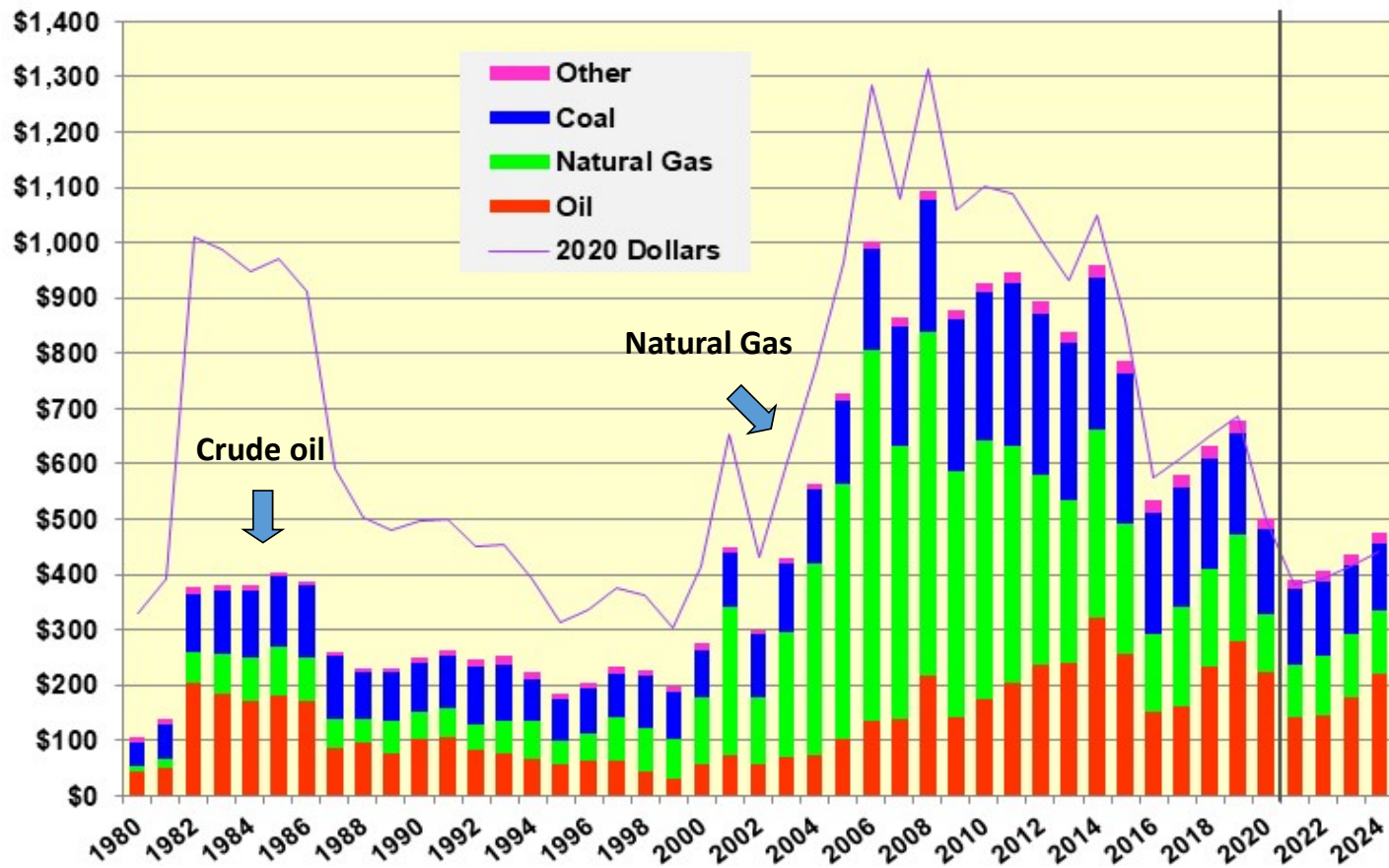
<sup>3</sup> The difference between local revenue for schools (mostly property tax from 31 mills) and SFP guarantee.

Source: CREG and LSO

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## Mineral Severance Taxes: FY 1980 - FY 2024

(in millions of current and constant dollars)



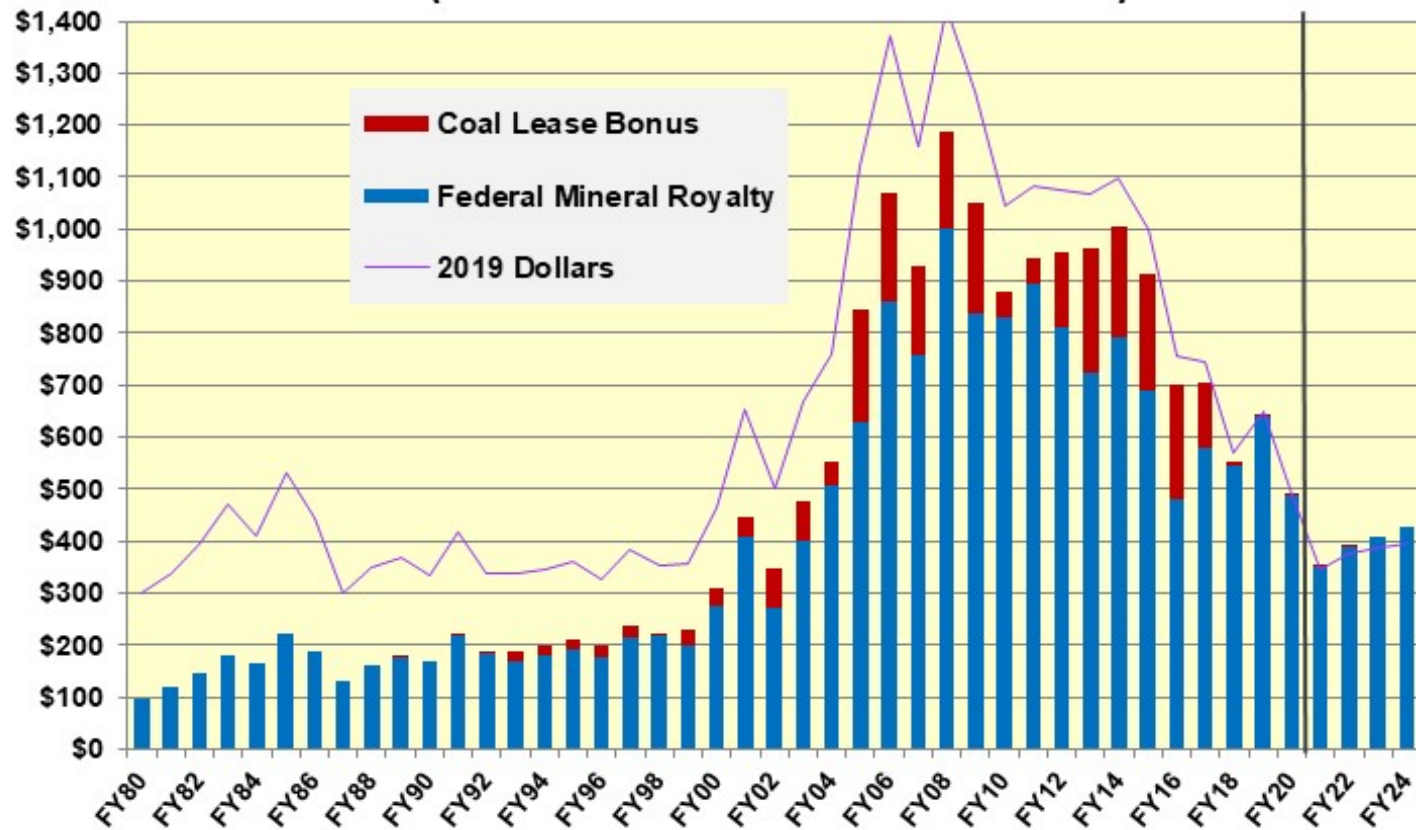
Source: Wyoming CREG

Prepared by Wyoming Department of A & I, Economic Analysis Division

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## Federal Mineral Royalty and Coal Lease Bonus

(in millions of current and costant dollars)

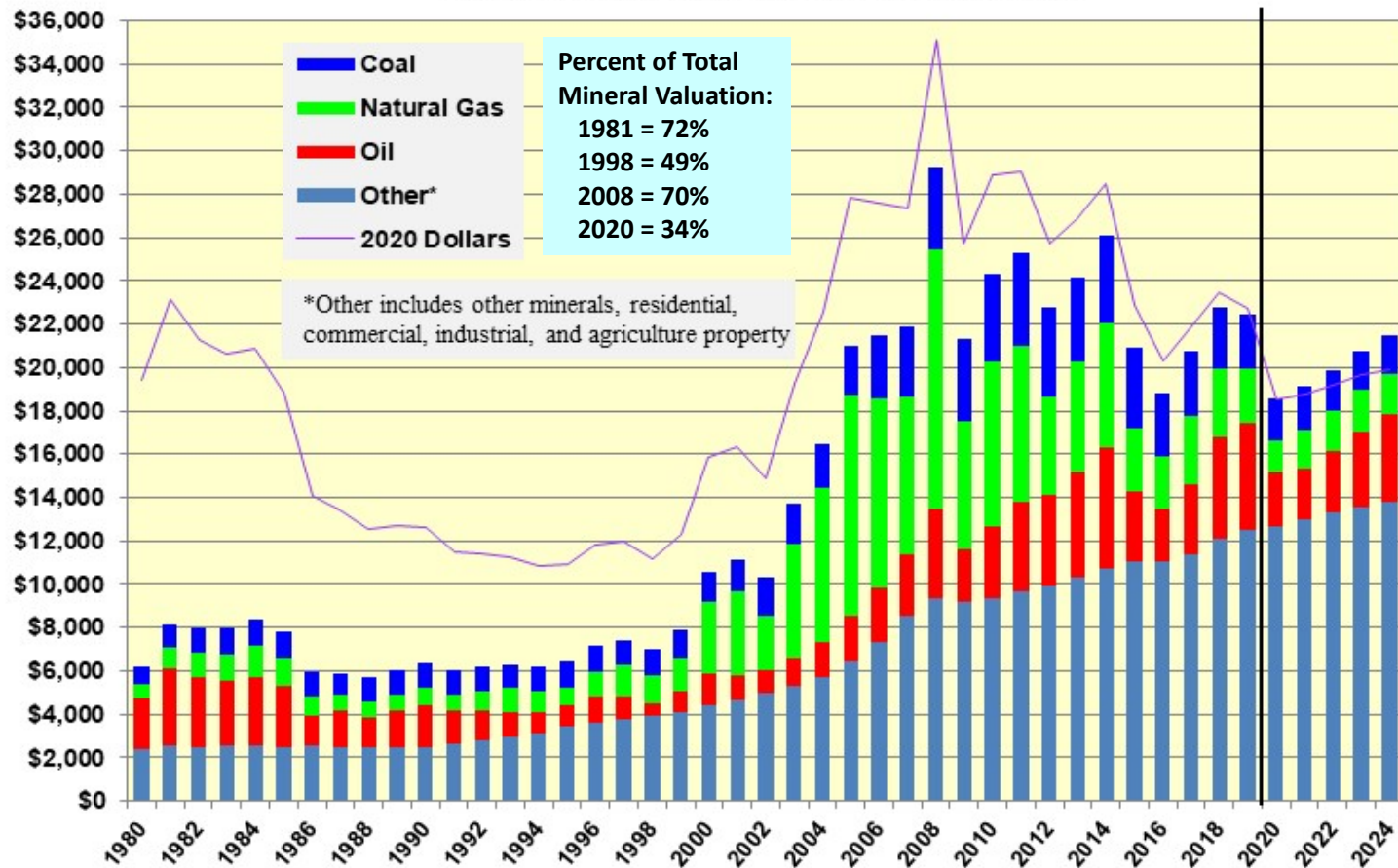


Source: Wyoming CREG

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## Total Locally and State Assessed Valuation (in millions of current and constant dollars)



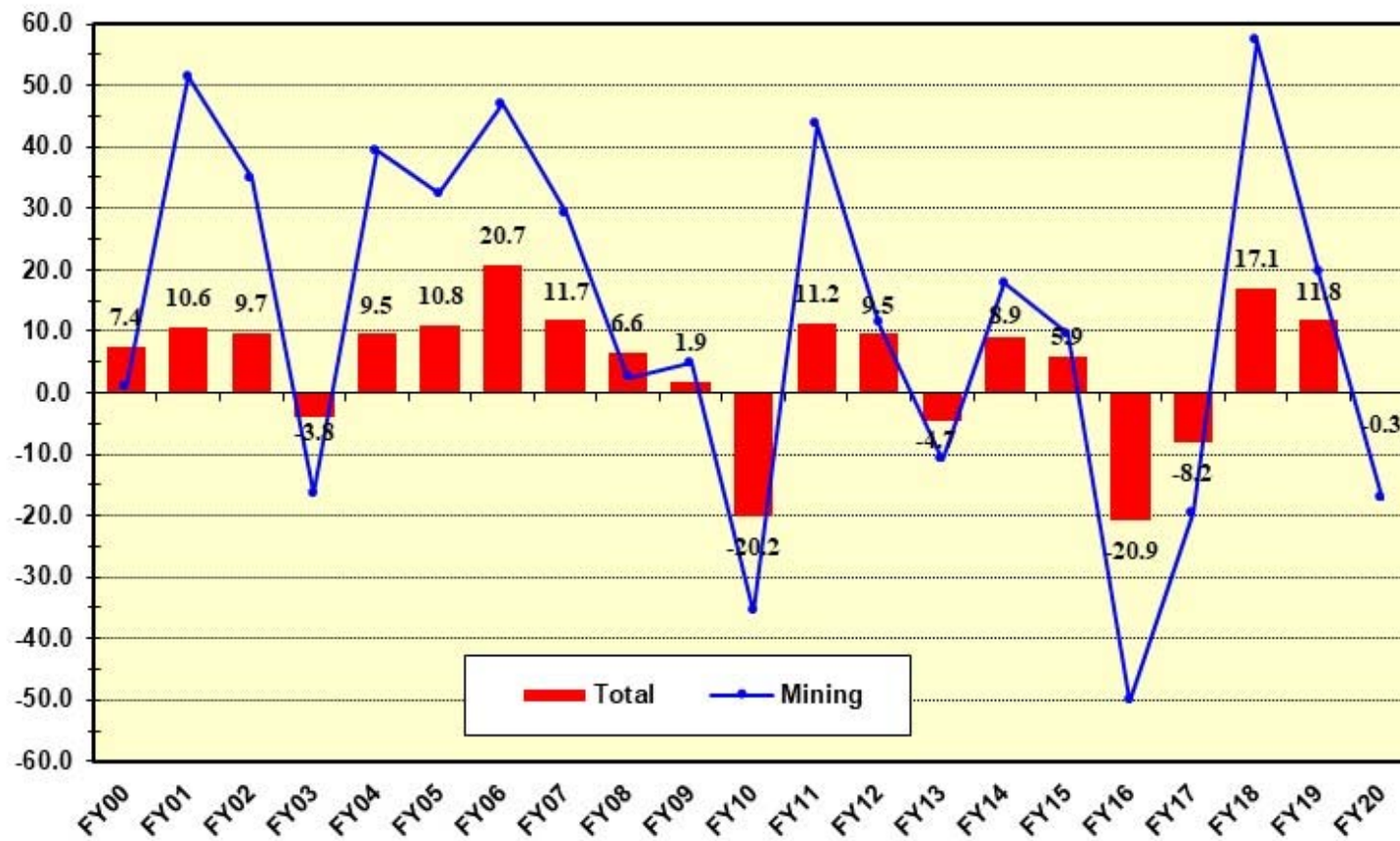
Source: Wyoming Department of Revenue

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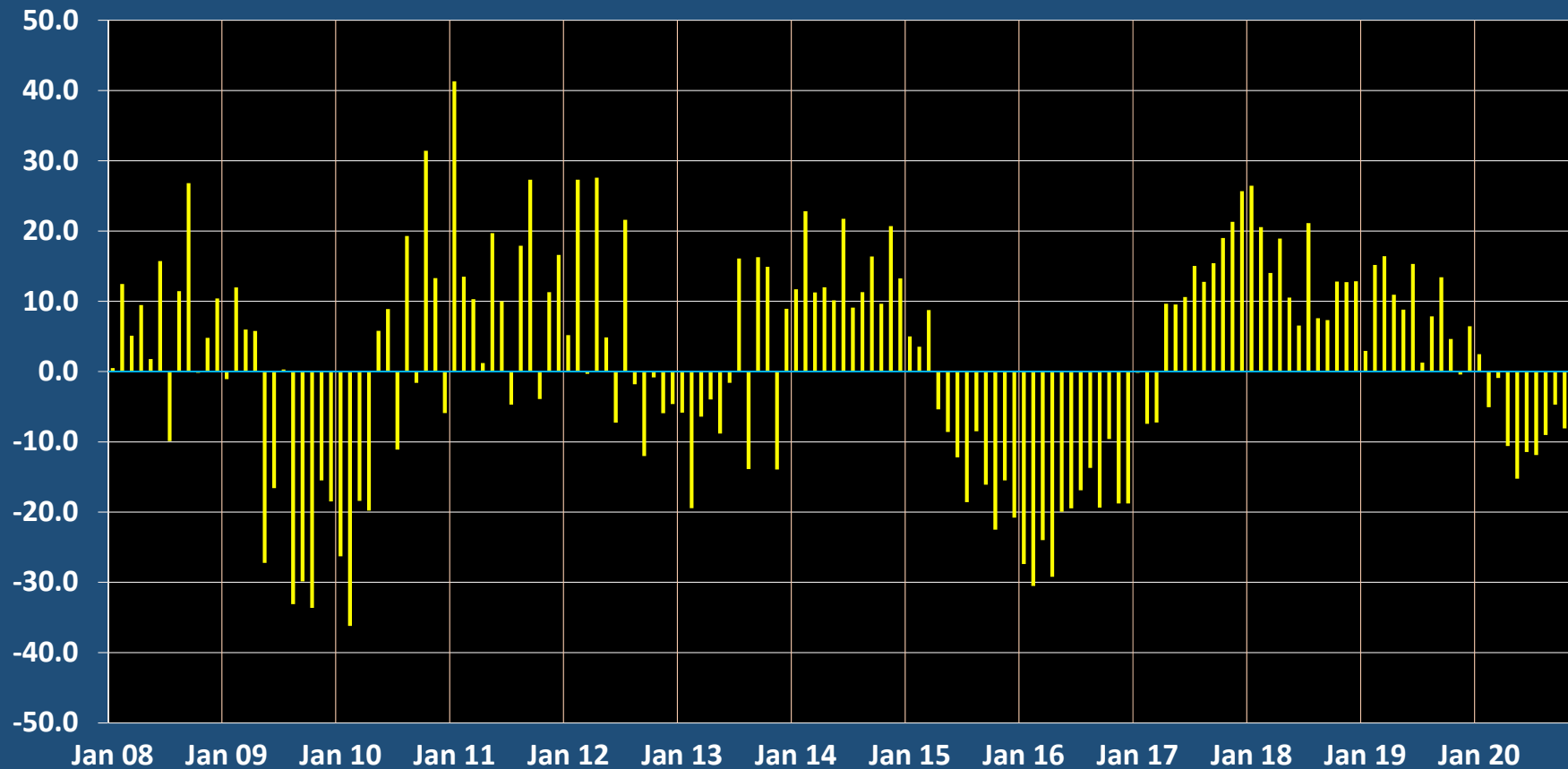
### Annual Percent Change in Sales and Use Tax Collections (includes only the state imposed 4% collections)



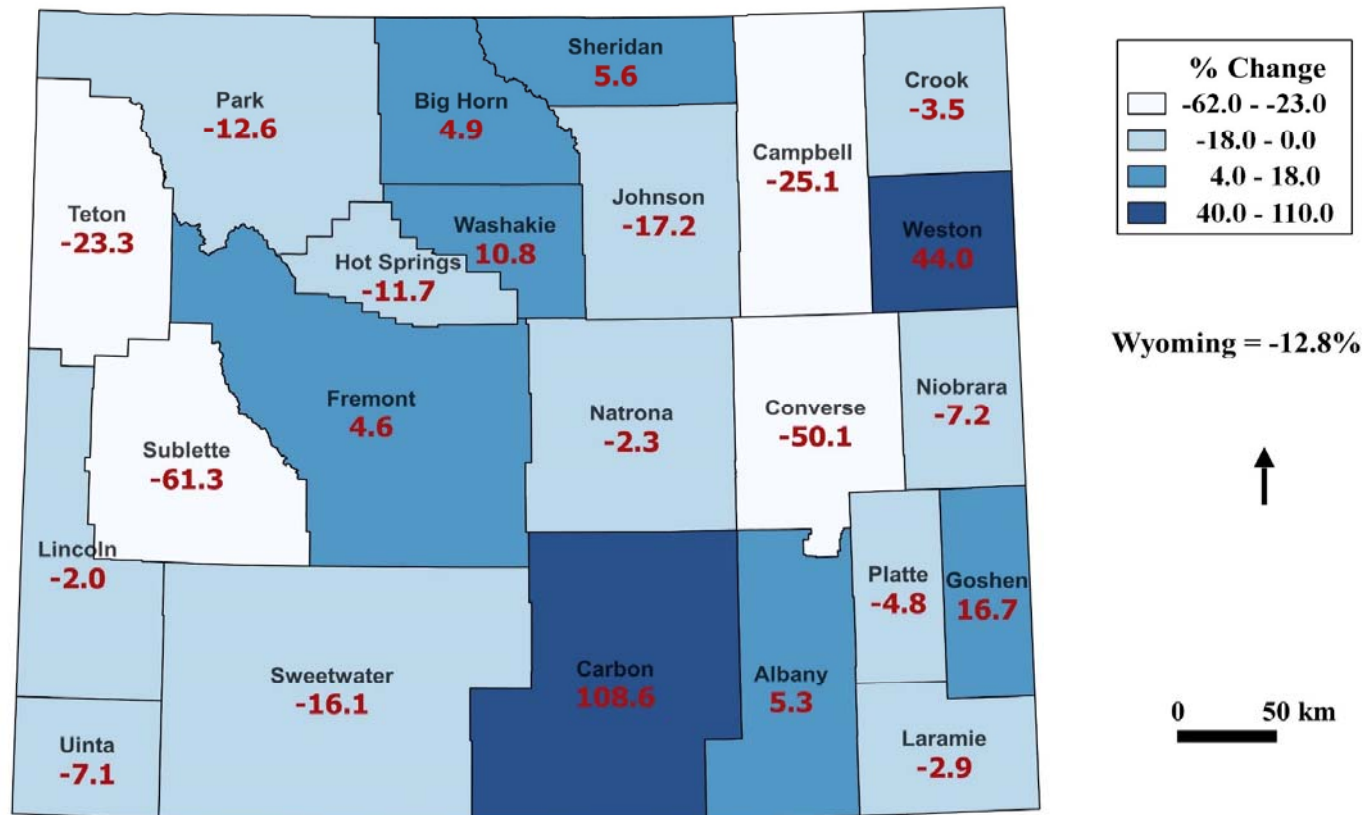
Source: Wyoming Department of Revenue

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## Percent Change in Wyoming's Sales Tax Collections (year over year)

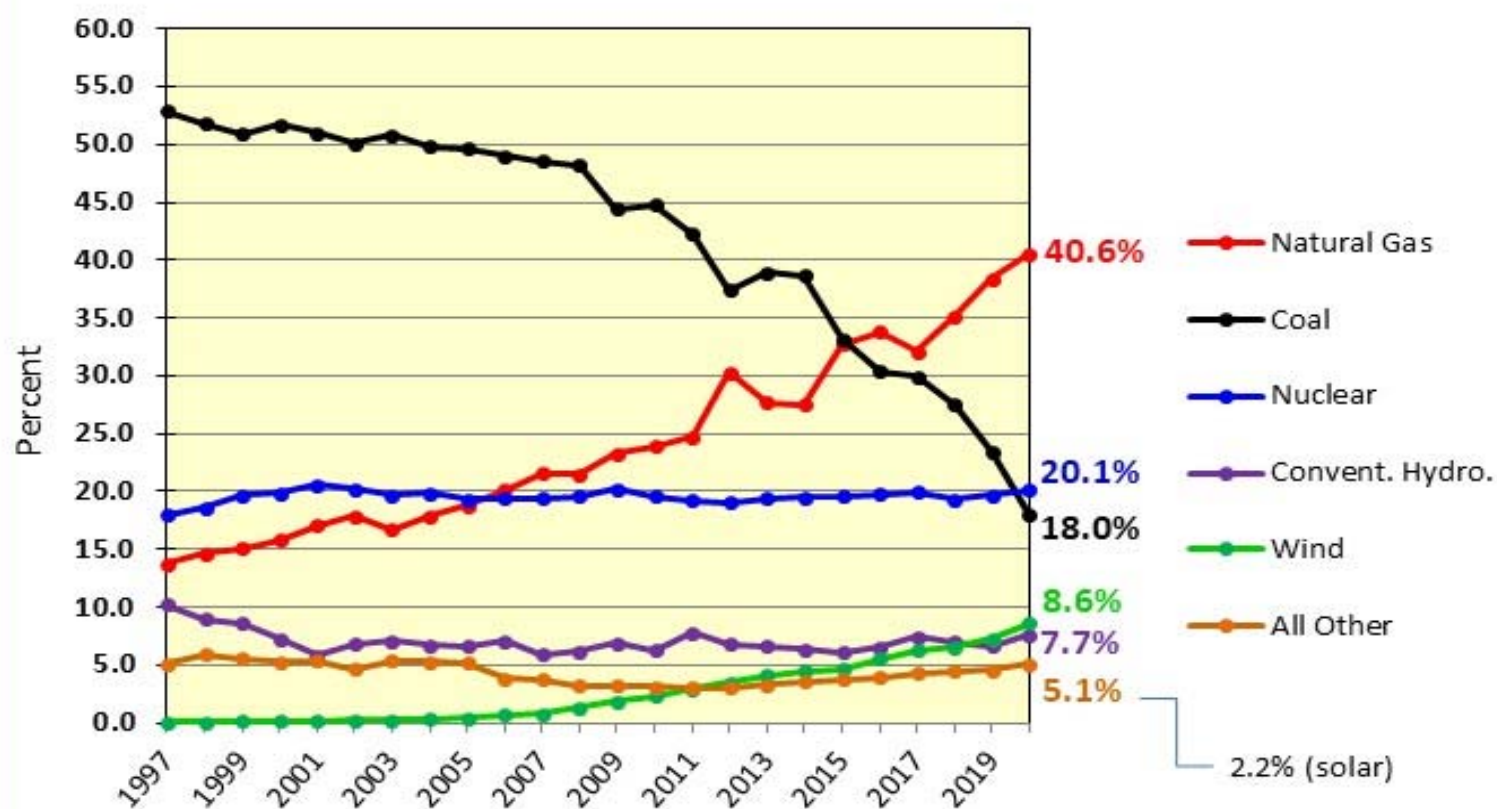


## Annual Percent Change in Taxable Sales: 2Q2019 - 2Q2020



Note: only state imposed 4% sales taxes are included.

## U.S. Electricity Generation by Energy Source

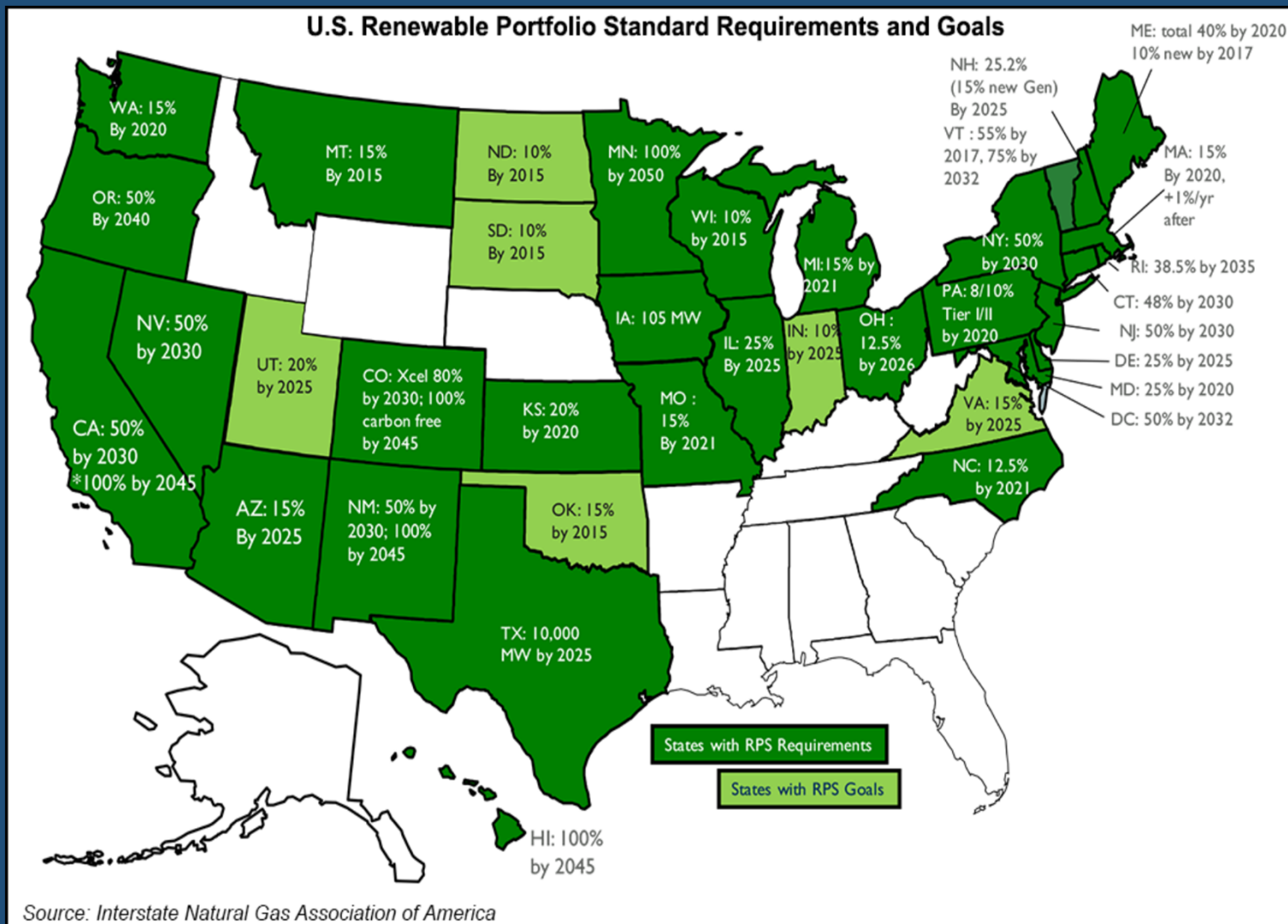


Note: 2020 includes data from Jan to July 2020.

Source: EIA/Electric Power Monthly/1.1 & 1.1A; Prepared by Wyoming Economic Analysis Division

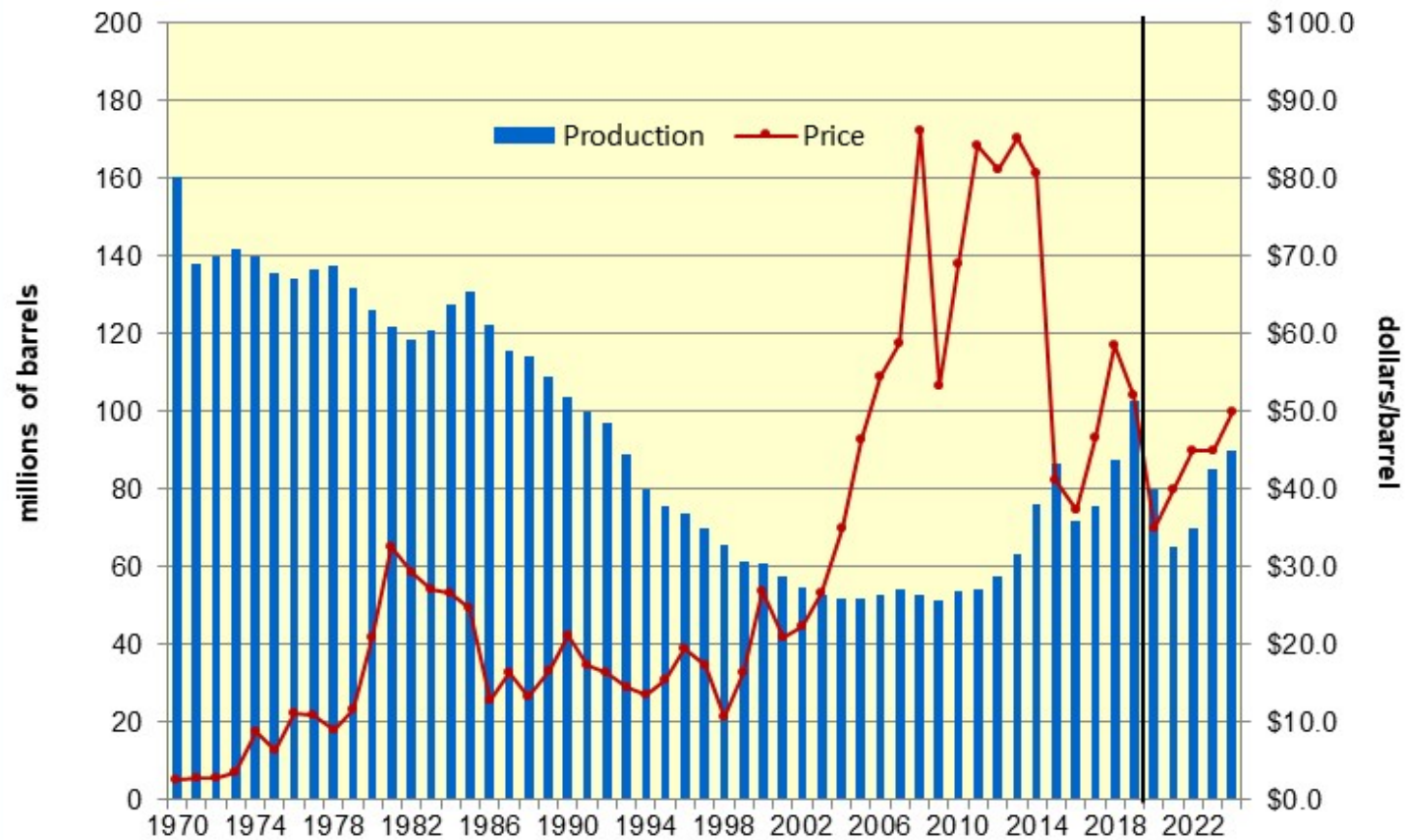
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## Wyoming Oil Production and Prices: 1970 - 2024

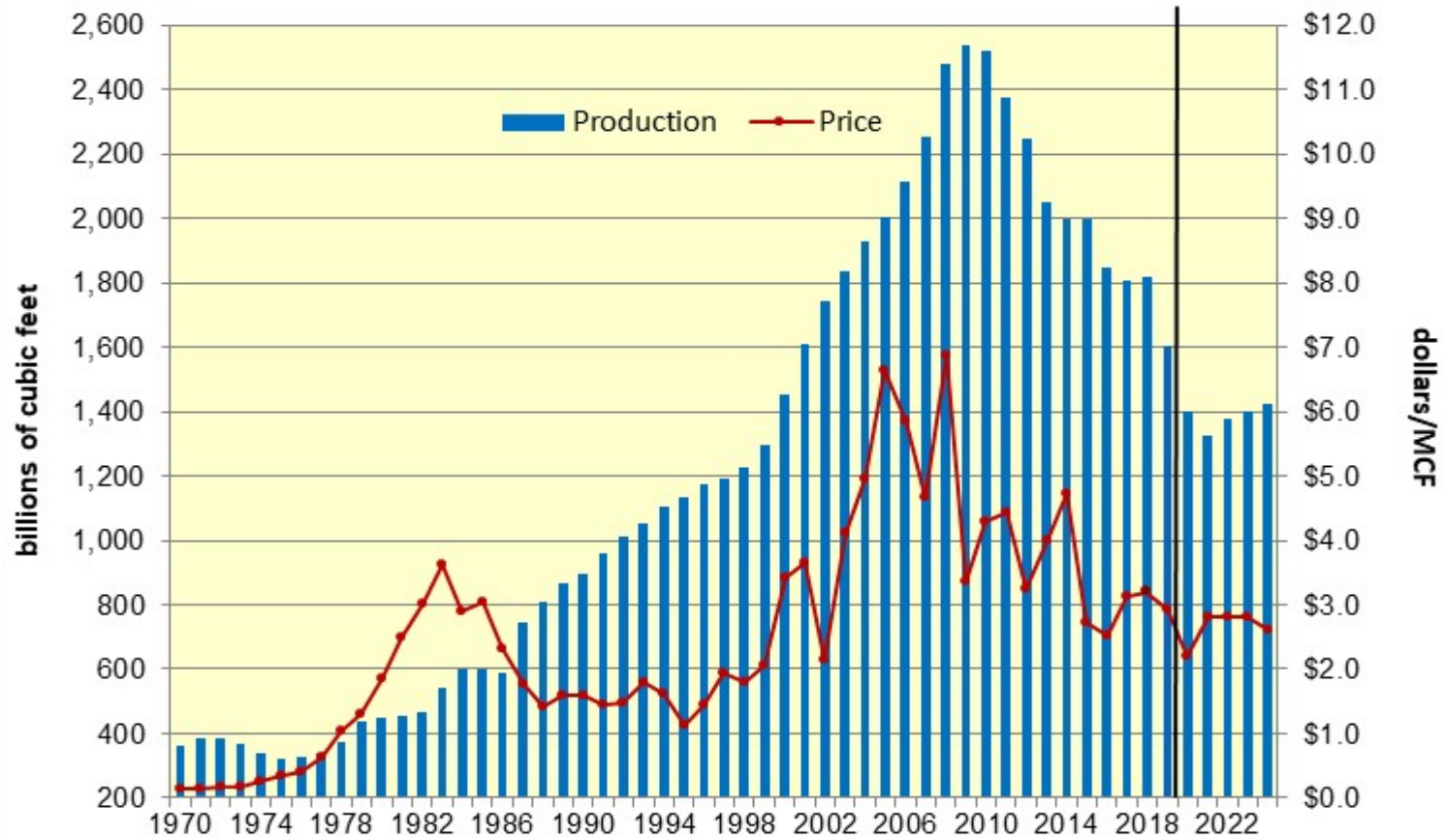


Source: WGS, WDOR, WOGCC, and CREG

Prepared by Wyoming Economic Analysis Division

By Wyoming Economic Analysis Division

## Wyoming Natural Gas Production and Prices: 1970 - 2024

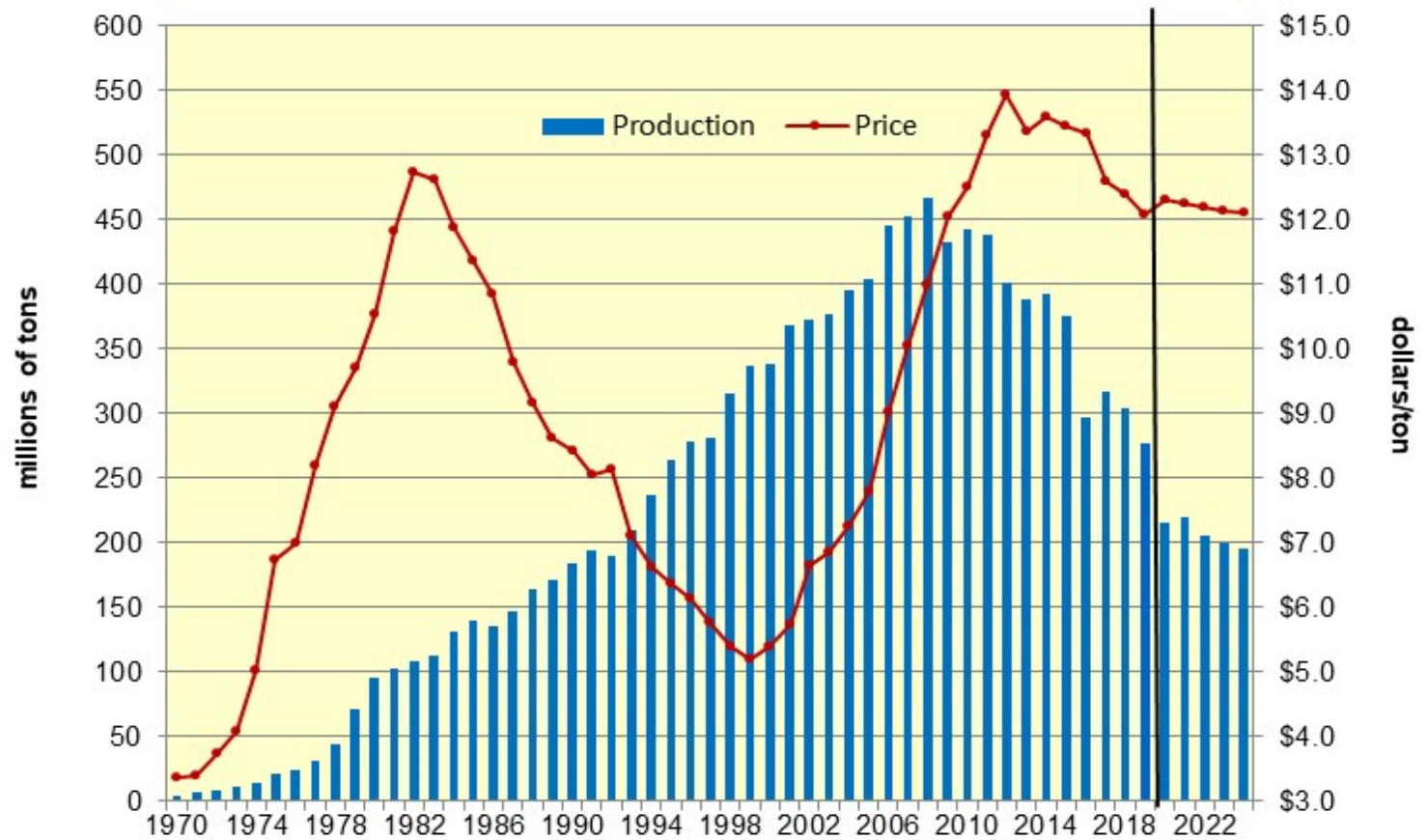


Source: WGS, WDOR, WOGCC, and CREG

Prepared by Wyoming Economic Analysis Division

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## Wyoming Coal Production and Prices: 1970 - 2024

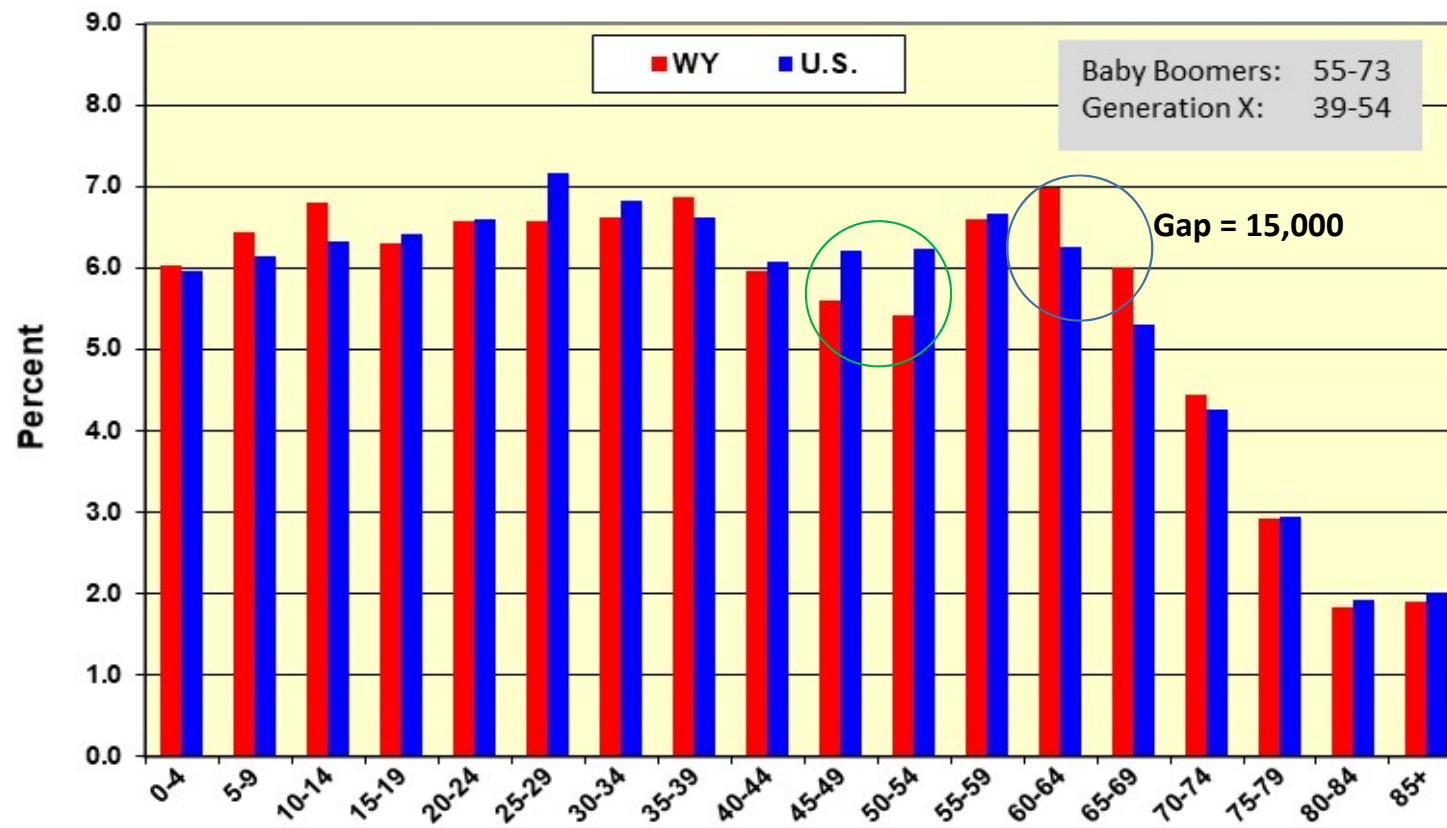


Source: WGS, WDOR, Inspector of Mines, and CREG

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## Percent of Population by Age Group for Wyoming and U.S.: 2019

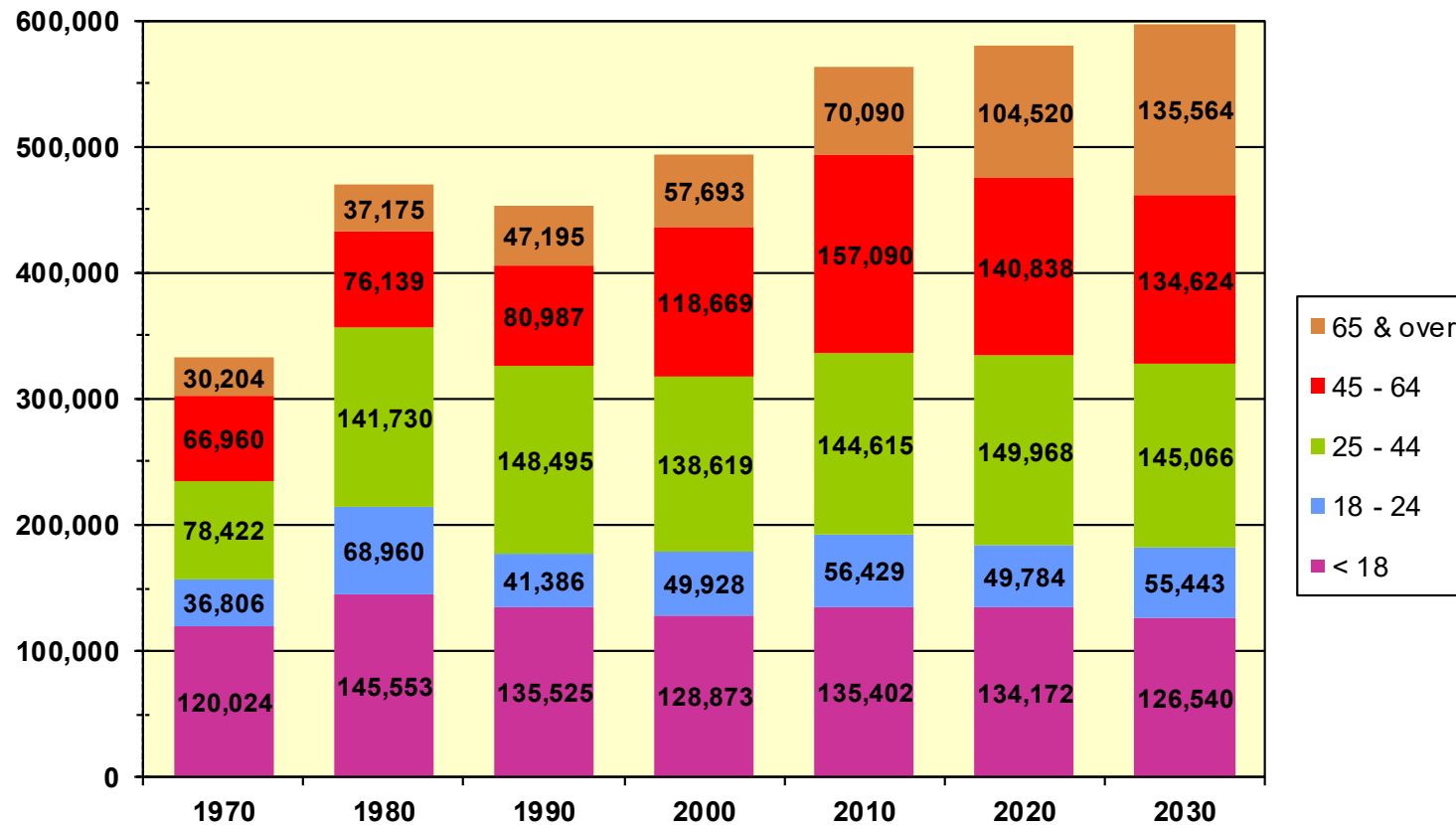


Source: U.S. Census Bureau

Prepared by Wyoming Economic Analysis Division

By Wyoming Economic Analysis Division

## Wyoming Population by Age Group



Source: population from 1970 to 2010 was from U.S. Census Bureau's decennial census, population for 2020 and 2030 were projections from Wyoming Economic Analysis Division

## Weak economic recovery

- During the worst period of COVID-19 - the 2<sup>nd</sup> quarter, Wyoming's overall economic decline somewhat fared better than the U.S. average because our mitigation measures were less as restrictive though this downturn is still the worst since the oil bust in the mid-1980s.
- Due to its pivotal role in WY's economy, the plunge of the energy market is devastating the state's economy and revenue as the oil & gas rigs dropped 90% and coal production is contracting over 25% from the previous year. The slow recovery of oil prices will also hinder our mineral development in the near future.
- Many other industries such as construction, transportation, professional and financial services will be affected due to their chain reaction with the mining industry.
- Structural budget deficits for both state government operation and K12 education are severe, and investment income is challenging due to low interest environment and high stock valuation.
- Federal policy ramification from election such as fracking or new lease on Fed land (70%, 80%, 90%).
- Quite a few wind energy projects are under construction – led by Chokecherry and Sierra Madre. By 2026, it is expected to become the largest wind farm in the United States with 2,000 turbines. It contributes large sales taxes.
- Unemployment rate will be relatively low: rural state and large number of baby boomers who are leaving labor force.
- Rainy day fund of \$1.5 billion (100% of GF) – the largest in the country.
- Whether or not another round of stimulus will greatly impact the resilient retail & motor vehicle sales and housing market, as well as sales tax revenue.

***THANK YOU!***

## Economic Analysis Division – **EAD**

*“Wyoming’s Source for Business and Economic Information”*

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