

# Long-Term Outlook

Presentation to:  
Legislative Finance Committee  
July 20<sup>th</sup>, 2022

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Office of the Governor

**MICHELLE LUJAN GRISHAM**



# Consensus Revenue Estimating Group

## Participating Agencies

### **New Mexico Department of Finance and Administration**

**Leonardo Delgado, Chief Economist**  
**Noel Martinez, Senior Economist**

### **New Mexico Taxation and Revenue Department**

**Lucinda Sydow, Chief Economist**  
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### **New Mexico Department of Transportation**

**Mallika Pung, Chief Economist**  
**Michael Morrison, Senior Economist**

### **Legislative Finance Committee**

**Ismael Torres, Chief Economist**  
**Jennifer Faubion, Economist**

# Introduction/Forecasts

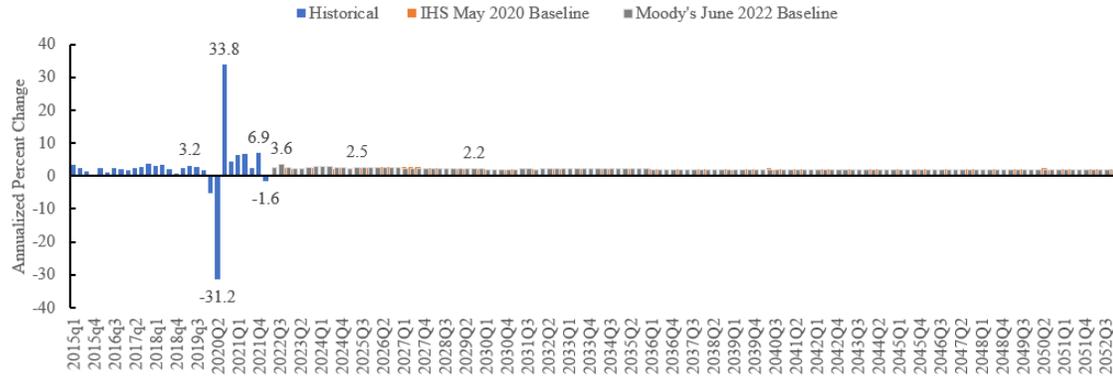
- Baseline forecasts based on current data and assumptions
  - Built on economic, demographic, and industry indicators
- Absent
  - Future recessions
  - Future fiscal and monetary actions
  - Future technological innovations
  - Financial (or other) market shocks
  - Energy market shocks
  - Future wars or international events
  - Future state legislative actions
- Forecasts change
  - There are updates and revisions
- Further out you go the possibilities around baseline grow
- These models and estimates are useful for planning and discussion purposes
  - Budget and policy
- Main objective is to look at trends
  - With the most current available data and surmise - Where is the state is headed?

# Economic Indicators

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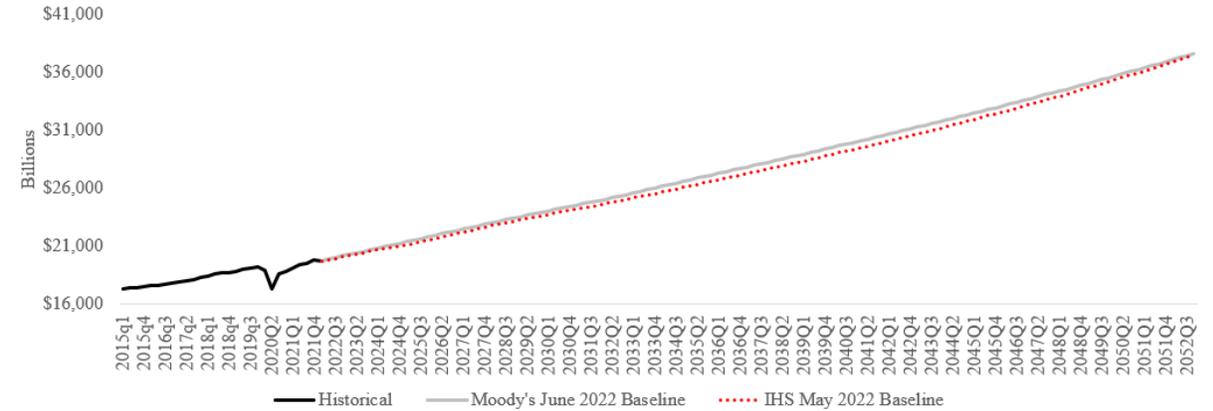
# U.S. RGDP

**Annualized Percent Change in US Real GDP: 2015 Q1 to 2022 Q1, Moody's Forecast 2022Q2-2024Q4  
IHS Forecast 2022Q2-2052Q4  
(Quarter-over-Previous-Quarter)**



Source: bea.gov seasonally adjusted at annual rates, Moody's June 2022 Baseline, IHS May Baseline

**US Real Gross Domestic Product: 2015 Q4 to 2022 Q1, Moody's Forecast 2022Q2-2052Q4,  
IHS Forecast 2022Q2-2052Q4**

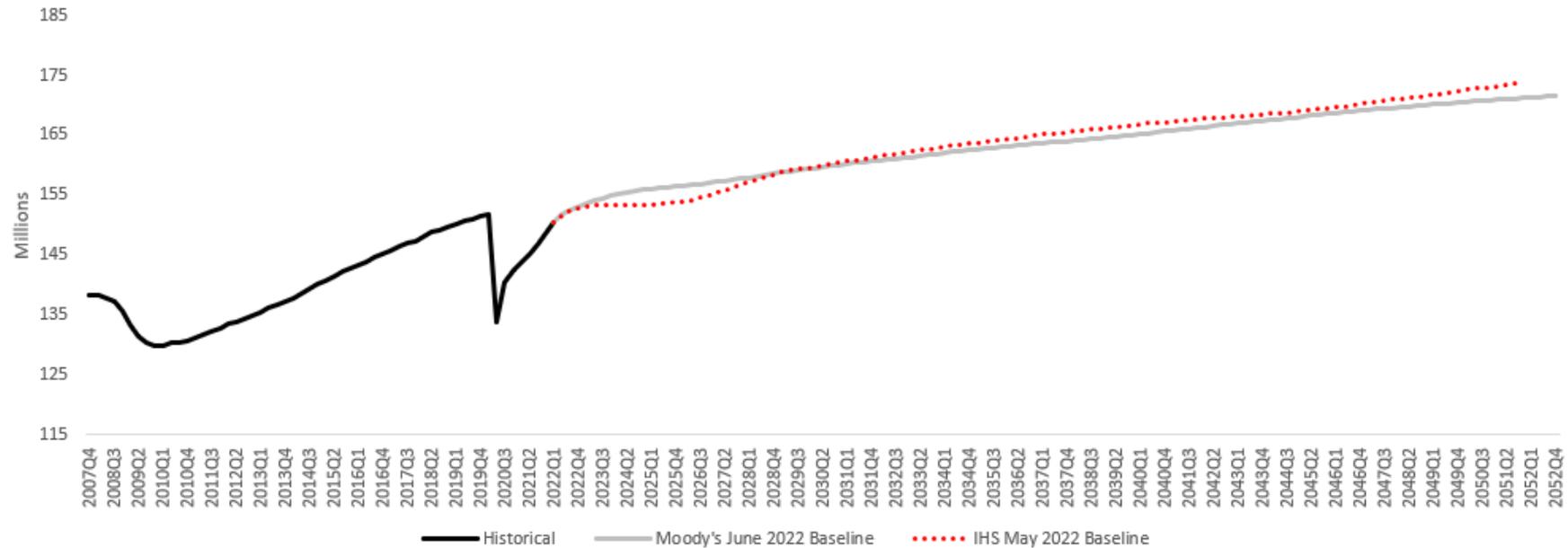


Source: GDP in billions of chained 2012 dollars, retrieved from bea.gov. Moody's Analytics, IHS Markit

- Current national forecasters do not include a national recession in baseline forecasts
- Recession risks have increased due to elevated inflation driven by energy costs, and persistent supply chain constraints
- Negative growth in 2022Q1
- Both Moody's and IHS expect growth to continue

# U.S. Employment

**US Total Nonfarm Employment: 2007Q4 to 2022Q1, Moody's Forecast 2022Q2-2052Q4, IHS Forecast 2022Q2-2051Q4**

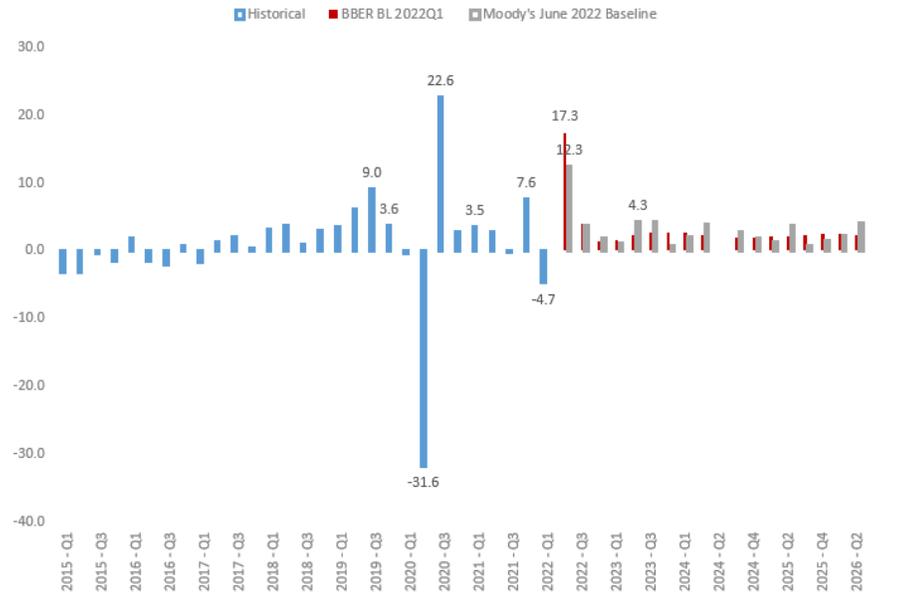


Source: BEA.gov, Moody's Analytics, IHS Markit

- Both national forecaster's see national employment recovery from pandemic
  - Country at full employment with an unemployment rate at 3.6%
- Competitive and tight labor market

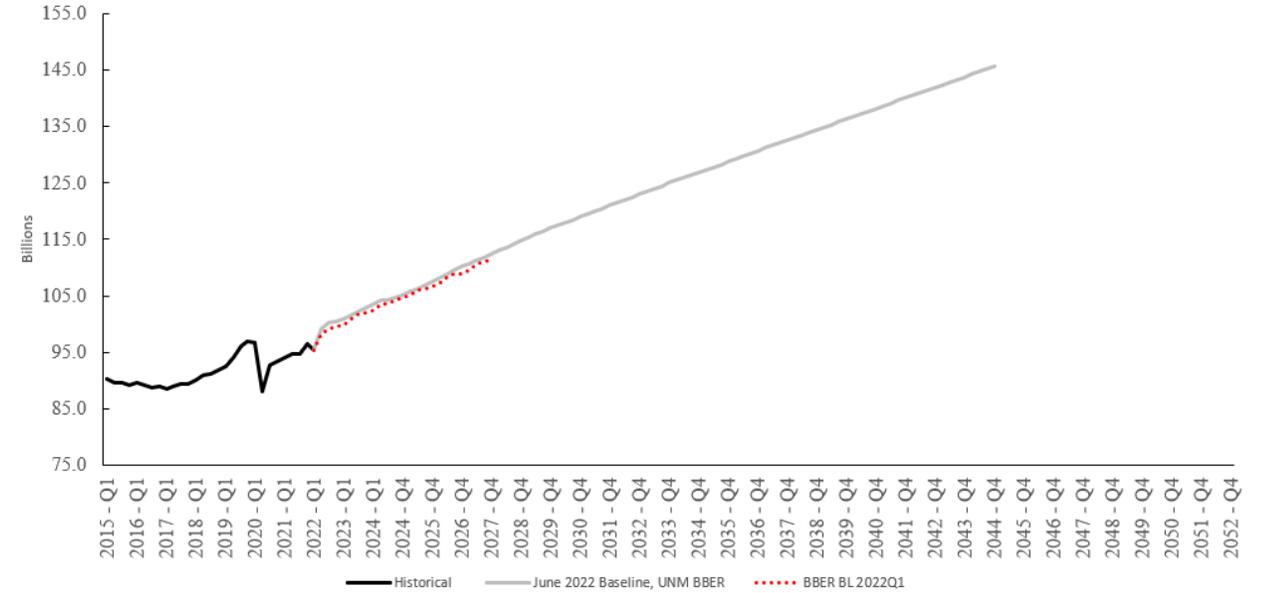
# N.M. RGSP

**Annualized Percent Change in NM Real GSP 2015Q1 to 2022Q1, Moody's Forecasts 2022Q2-2027Q4  
UNM BBER: 2022Q2 to 2027Q4**



Source: Moody's Analytics, UNM BBER

**New Mexico Real Gross State Product, Moody's Analytics: 2015Q1 to 2052Q4  
UNM BBER: 2022Q2 to 2027Q4**

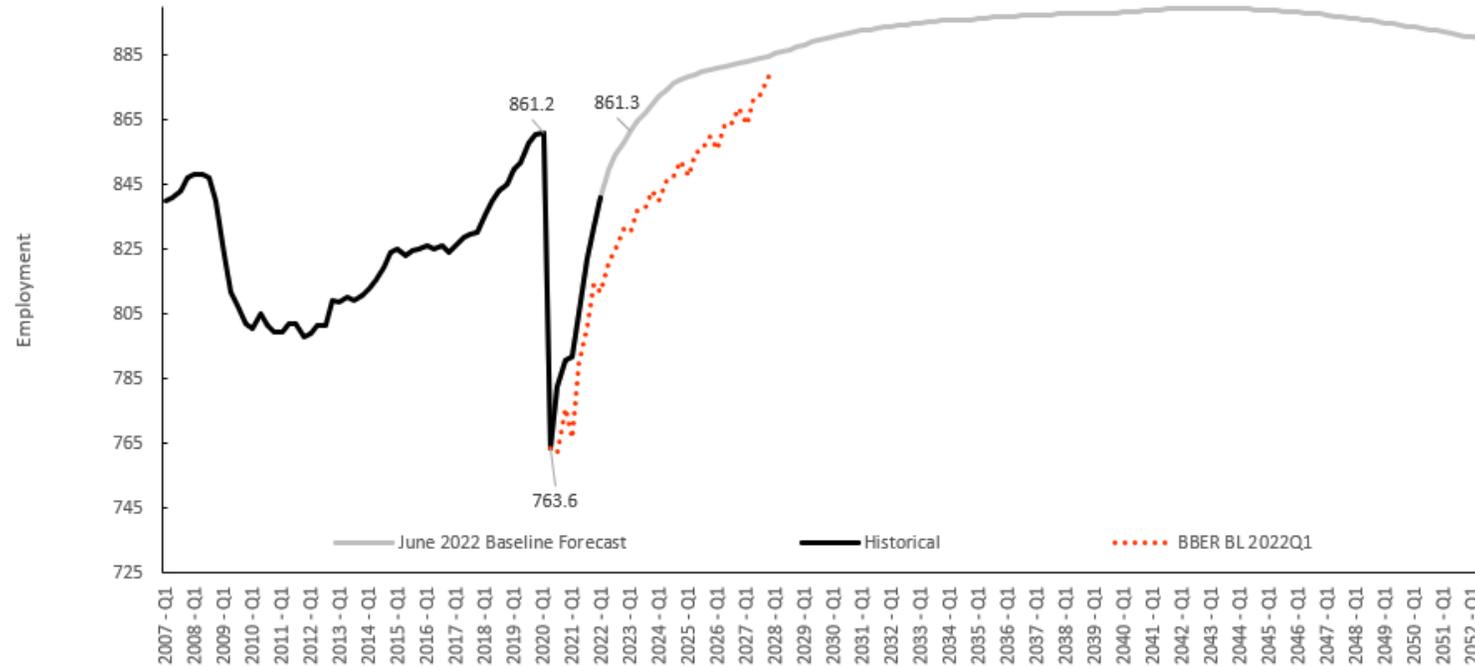


Source: Moody's Analytics, UNM BBER

- New Mexico Real Gross State Product (RGSP) contracted in 2022Q1 same as the nation
- Current Moody's and BBER baseline forecast expect moderate to slow growth

# N.M. Employment

New Mexico Total Non-farm Employment, Moody's Analytics: 2015Q1 to 2052Q4  
UNM BBER: 2022Q2 to 2027Q4

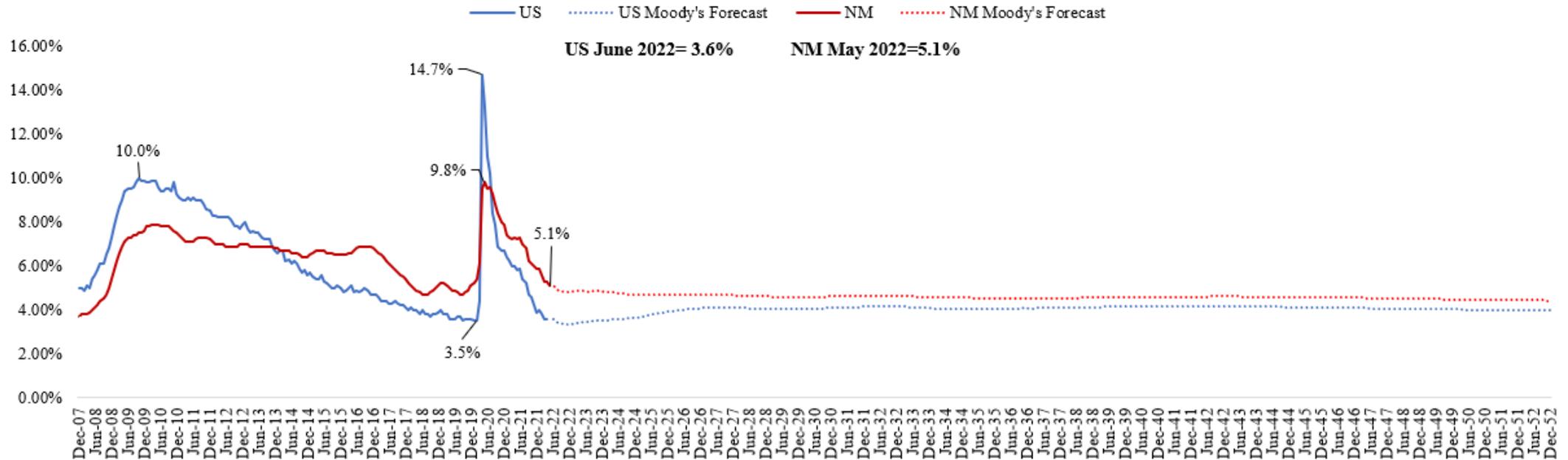


Source: Moody's Analytics, UNM BBER

- Moody's projects N.M. total non-farm employment recovery by 2023Q1

# U.S. and N.M. Unemployment

US and NM Unemployment Rate (percent) : December 2007 to May 2022

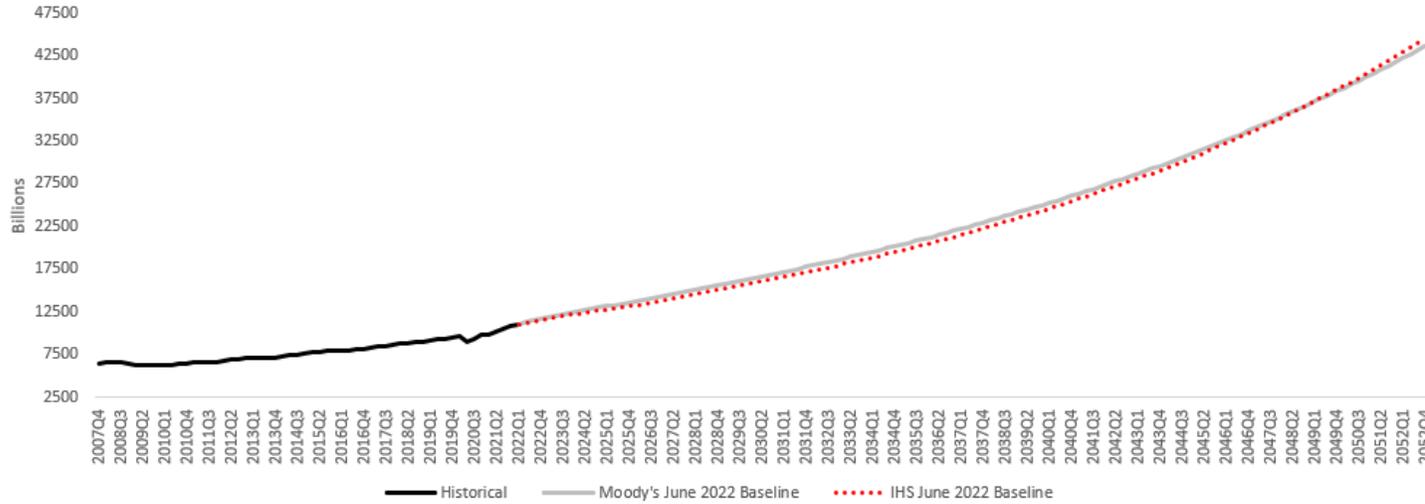


Source: bls.gov, seasonally adjusted

- The national unemployment rate peaked in April 2020 at 14.7% and has declined down to 3.6% in June 2022
- The New Mexico unemployment rate peaked in May 2020 at 9.8% and has declined down to 5.1% in May 2022

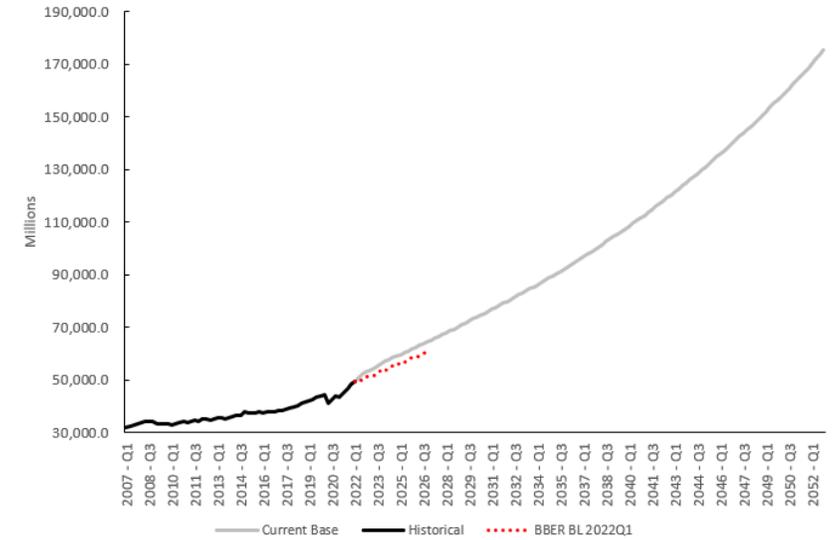
# U.S. and N.M. Wages & Salaries

US Wages and Salaries: 2007Q4 to 2022Q1, Moody's Forecast 2022Q2-2052Q4, IHS Forecast 2022Q2-2052Q4



Source: BEA.gov, Moody's Analytics, IHS Markit

New Mexico Wages and Salaries by Moody's Analytics Scenario: CY 2007Q1 to 2052Q4



Source: Moody's Analytics Forecasted Values in the June 2022 baseline scenario. Updated on July 2022

- Demographic trends and pandemic impacts on the labor market are among the main contributors to increases in wages and salaries
- Higher persistent inflation is also driving wages and salaries higher

# Oil & Natural Gas

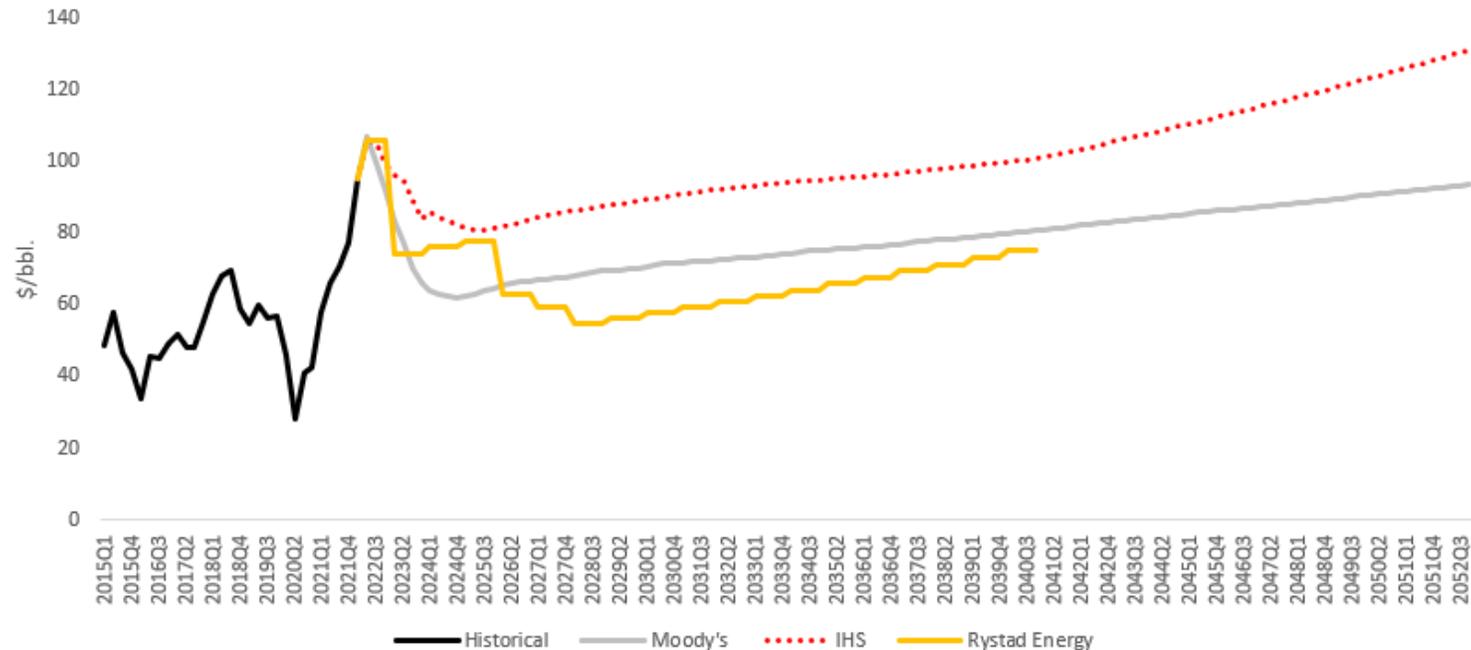
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# U.S. Oil WTI Prices (Moody's, IHS, Rystad)

**Moody's WTI Price Forecast (2022Q2 to 2052Q4)**

**IHS WTI Price Forecast (2022Q2 to 2052Q4)**

**Rystad Energy WTI Price Forecast (2022Q2 to 2040Q4)**

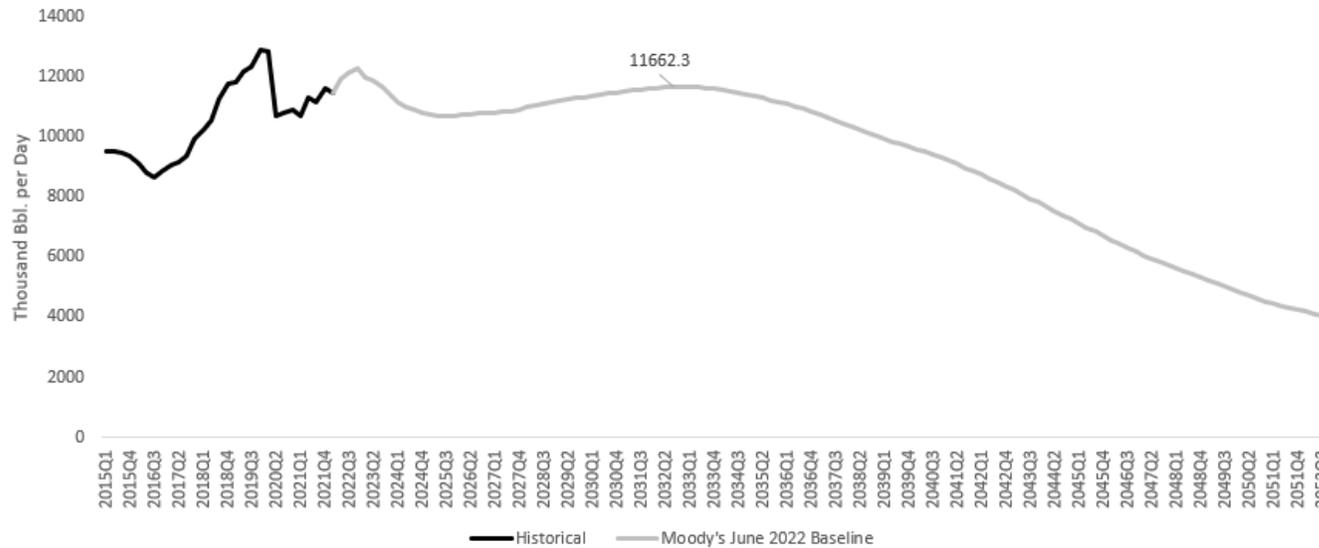


**Source: Moody's Analytics, IHS Markit, Rystad Energy**

- Three analytic firms view on oil prices
- Oil prices are inherently volatile and dependent on oil demand, inventory levels, OPEC+ decisions, and other factors

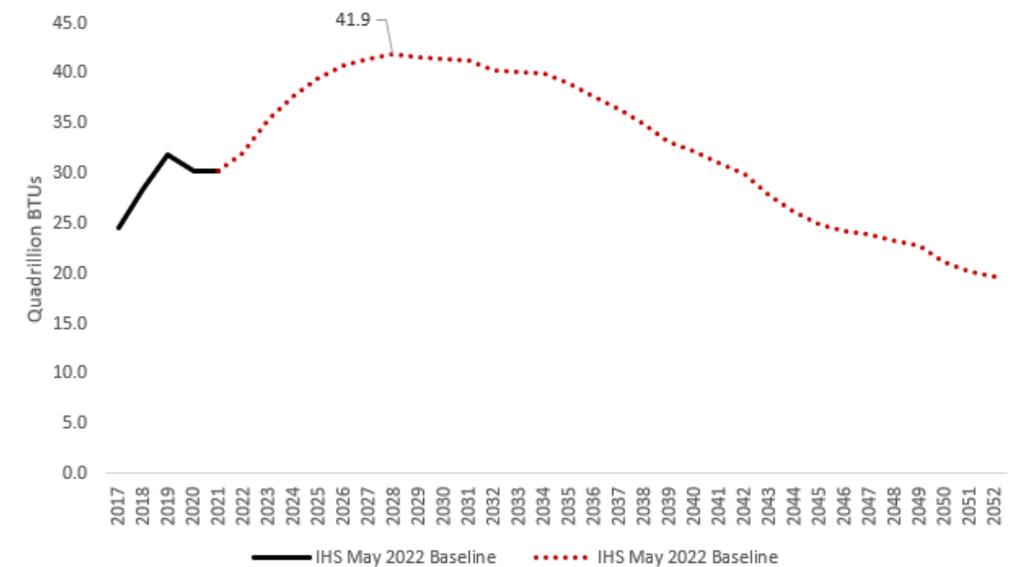
# U.S. Oil Production (Moody's & IHS)

US Crude Oil Production Moody's Forecast (2022Q2 to 2052Q4)



Source: Moody's Analytics

US Crude Oil Production IHS Forecast (2022Q2 to 2052Q4)



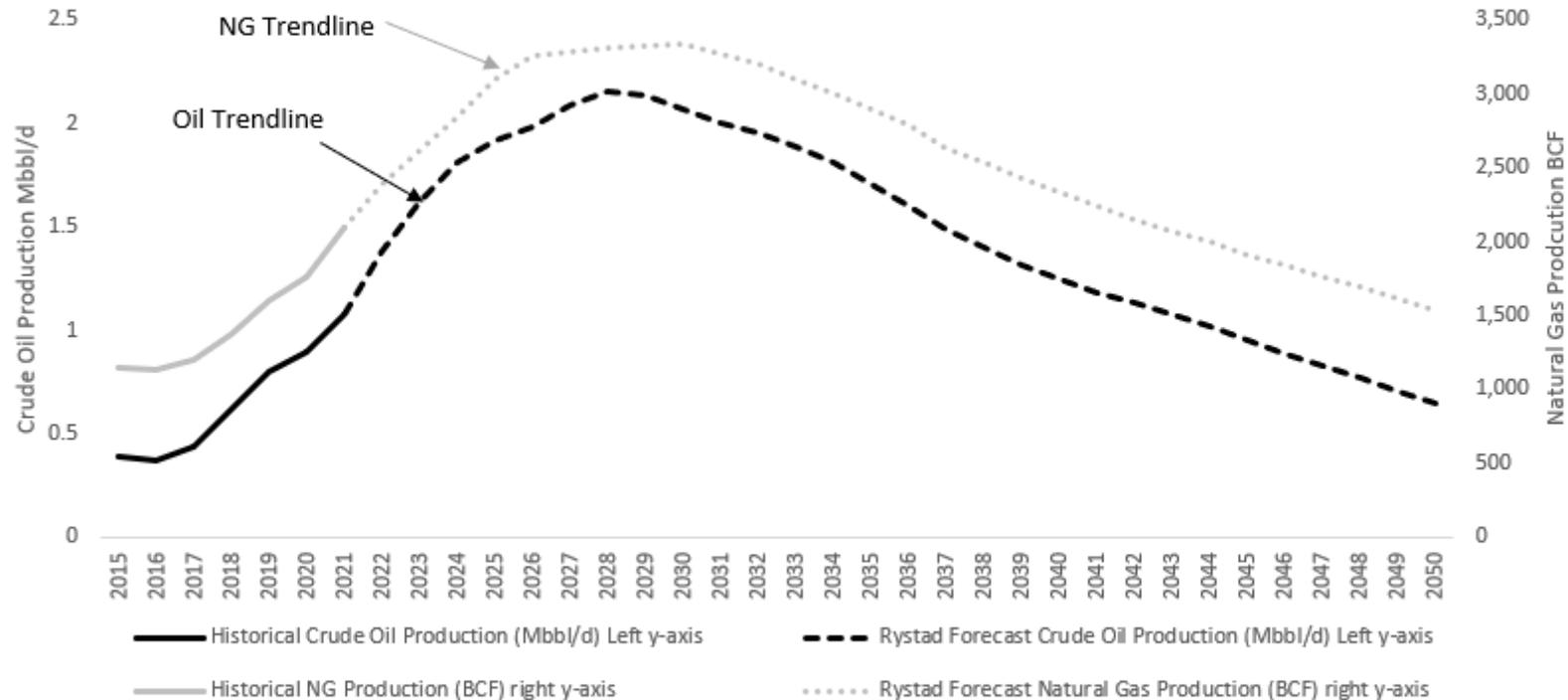
Source: IHS Markit

➤ Both national forecasters see U.S. oil production peaking between 2028 and 2033

# N.M. Oil Production Long-Term Forecast

## NM Crude Oil Production Forecast (CY 2022 to 2050)

## NM Natural Gas Forecast (CY 2022 to 2040)

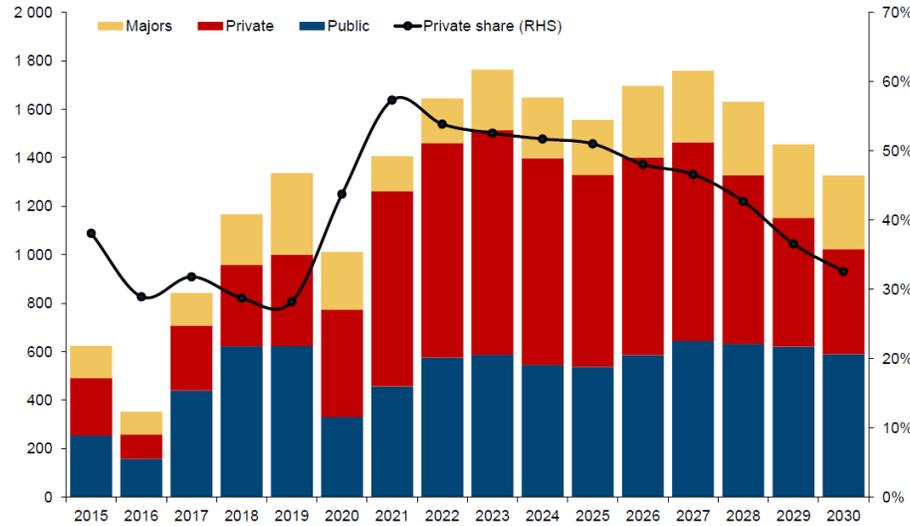


Source: Rystad Energy

- N.M. specific forecast of oil and natural gas production falls inline with national expectations

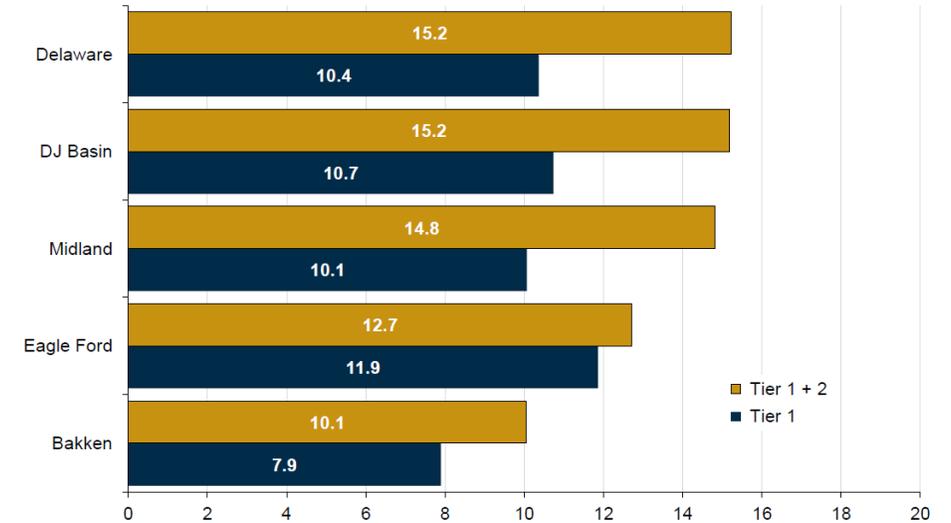
# N.M. Oil Production Detail

**Spudded wells in Permian Delaware New Mexico by company type**  
Number of wells



Supermajors include ExxonMobil, Chevron, BP and ConocoPhillips' (ex-Shell) portfolios  
Source: Rystad Energy UCube

**Remaining years of drilling in Tier 1 and Tier 2 acreage at 2022E pace**  
Number of years



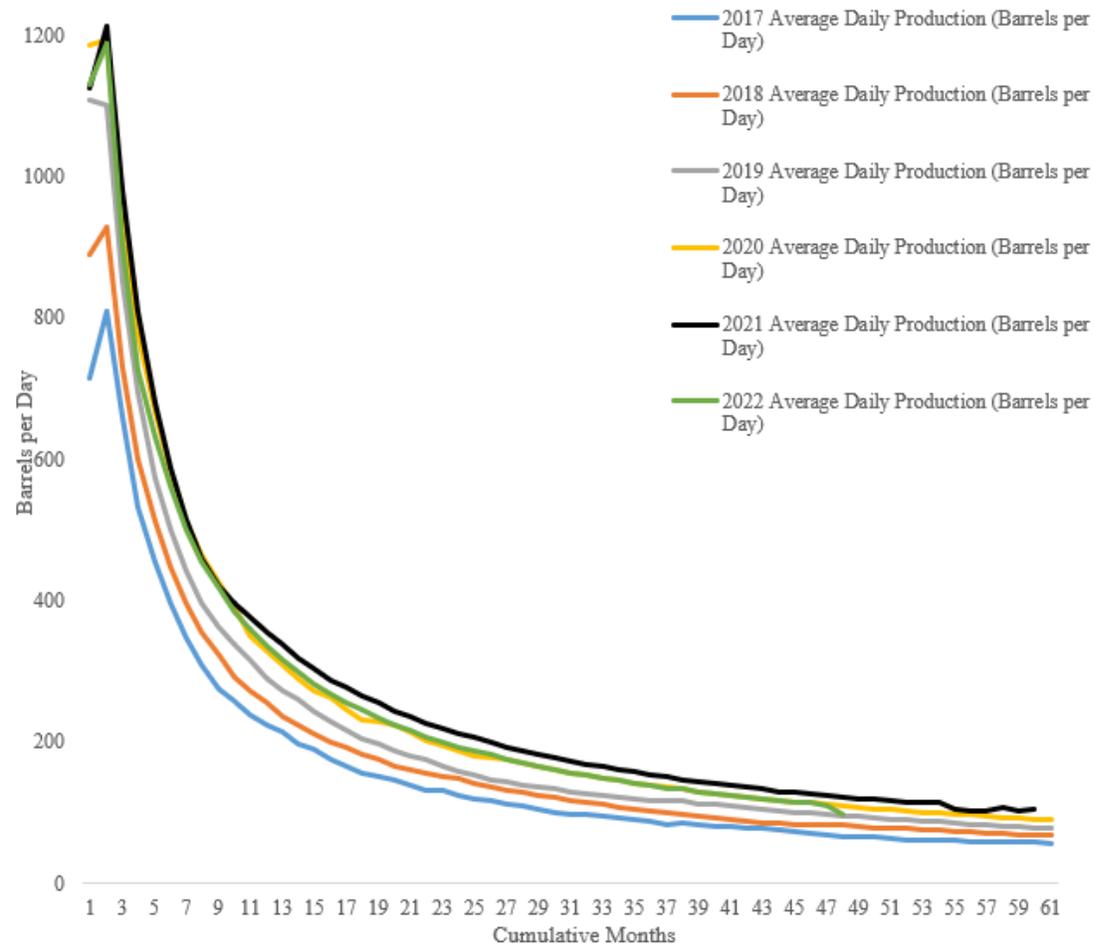
\*Excludes Tier 1 potential from currently unleased acreage and future down-spacing programs  
Source: Rystad Energy UCube, Rystad Energy ShaleWellCube, Rystad Energy research and analysis

- Where is the production coming from?
  - Public producers mainly keeping to development plans
  - Increasing capital but still focused on ROI to shareholders
- Private producers have reentered market (2020 & 2021) and driven growth
  - Remain due to profitability in tiers
  - Can be more reactive to market conditions
  - Stay in market so long as tiers are profitable

- Remaining years of drilling at current pace in Tier 1 are estimated at just over 10 years
- Remaining years of drilling at current pace in Tier 1 and Tier 2 are estimated at just over 15 years
- Range of drilling at current pace in Tier 1 and Tier 2 between 10 to 15 years

# N.M. Well Curves

New Mexico Well Curves by Start-up Year

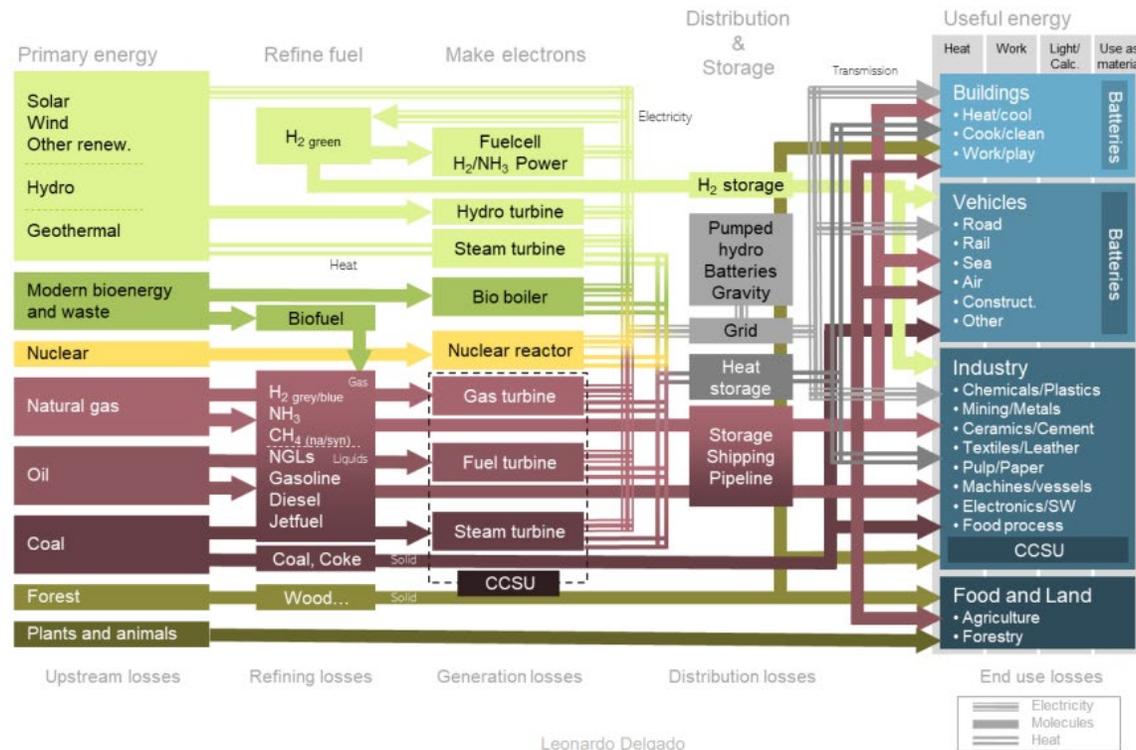


Source: Rystad Energy

- Why is drilling activity important?
  - Wells have high yields of production in the first few months but quickly drop off
  - Drilling activity must keep pace in order to maintain high levels of production

# Global Energy Transition

## Introduction to the Global Energy System



Leonardo Delgado

New Mexico Department of Finance and Administration

Source: Rystad Energy research and analysis

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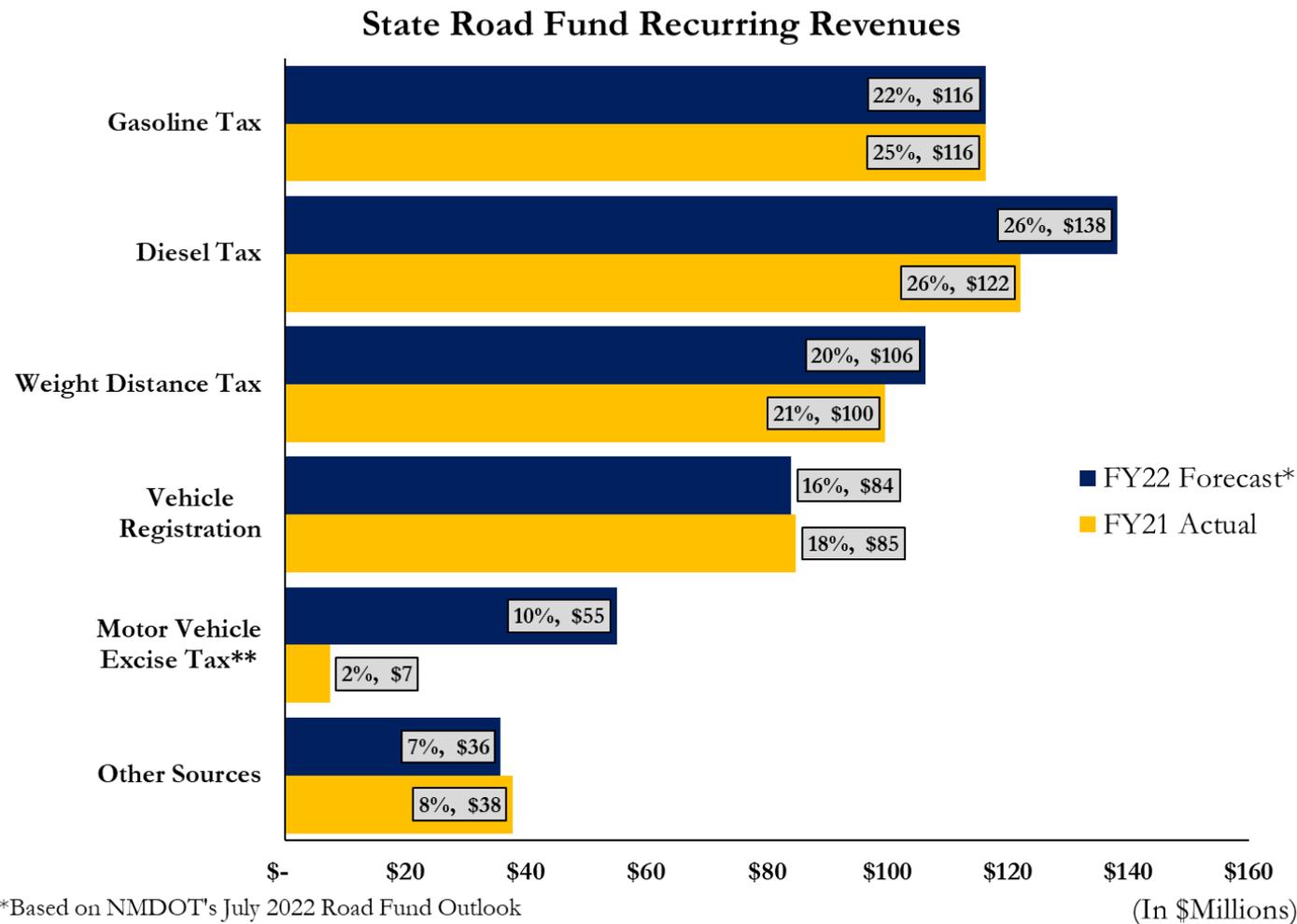


- Around the world, industries and governments are setting targets to minimize CO2 emissions
- Many companies and governments are slowly moving toward net zero emissions
- Growth in renewable energy capacity
- Ongoing improvements in battery technology, storage, and distribution systems
- Growth in electric vehicles (EVs) as percent of the total fleet
- Construction and building practices
- Consumption patterns

# N.M. State Road Fund

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# N.M. State Road Fund – Overview

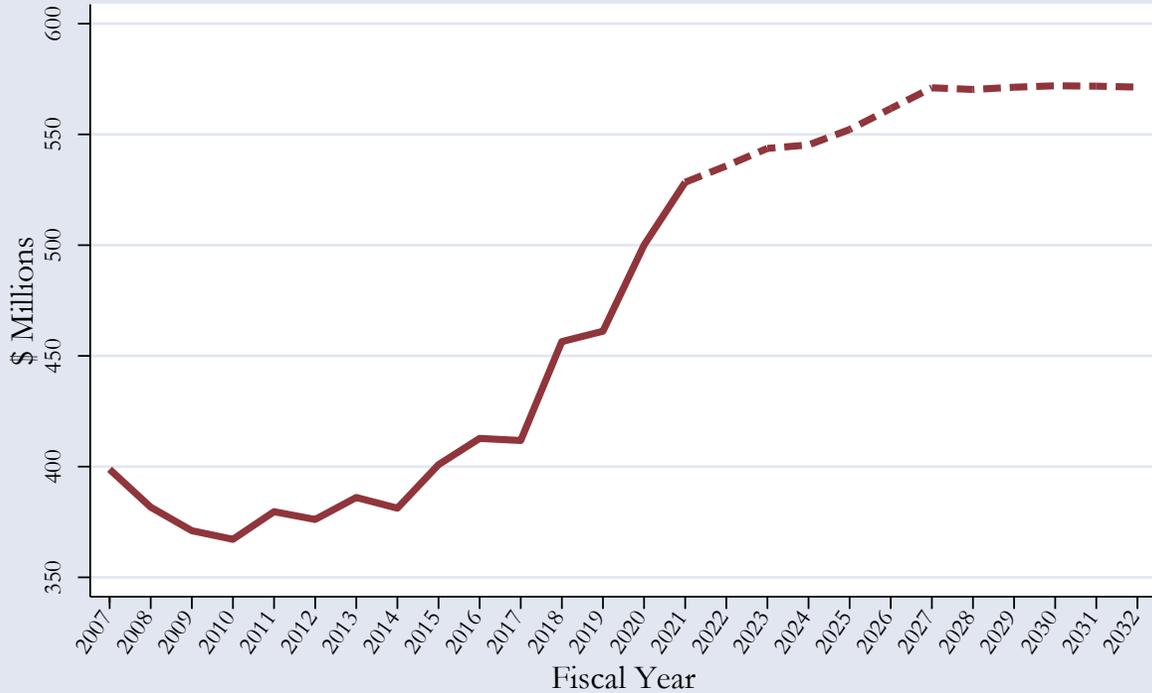


\*Based on NMDOT's July 2022 Road Fund Outlook  
 \*\* 0.12% points till FY21; 0.87% points in FY22 and thereafter

- State Road Fund received \$468 million in recurring revenues in FY21.
- NMDOT's July 2022 Road Fund Outlook forecasts the recurring revenues to grow ~14% in FY22
  - Driven by increased Motor Fuel Excise Tax distribution to the Road Fund beginning FY22
  - Since FY12, the State Road Fund recurring revenues have grown at an annual average rate of 2%.
- Biggest revenue sources are:
  - Gasoline Tax
  - Diesel Tax
  - Weight-Distance Tax
  - Vehicle Registration Fees

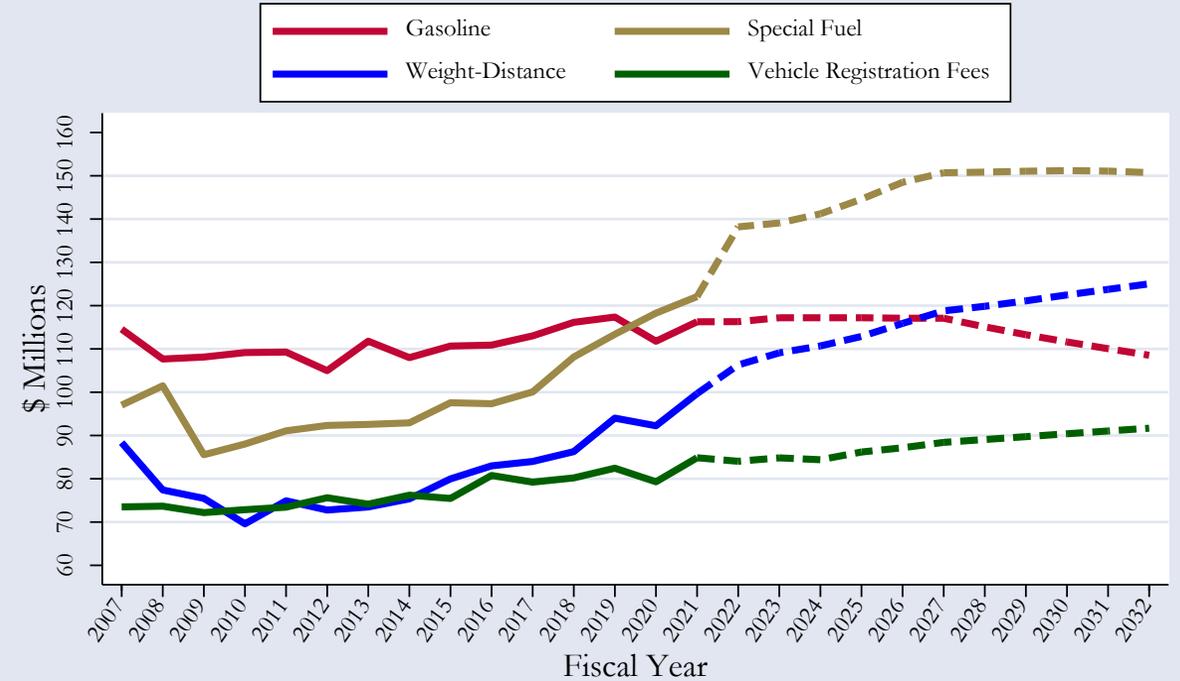
# Long-Term State Road Fund Outlook

## Total Road Fund Revenues



Near term forecast based on NMDOT's July 2022 Road Fund Outlook.  
 Longer term forecast based on projections from CBO, EIA, IHS.

## Four Major State Road Fund Revenue Sources



Near term forecast based on NMDOT's July 2022 Road Fund Outlook.  
 Longer term forecast based on projections from CBO, EIA, IHS.

- Over the next 5 years, State Road Fund revenues are expected to grow at an annual average rate of 1.3%, plateauing thereafter.
  - Future growth mainly driven by commercial vehicle revenue sources and is tied to overall economic activity.
  - Future revenue expectations being pulled down by declining revenues from gasoline tax based on assumptions around fuel economy standards and national trends towards increased adoption of electric vehicles.
- Usual caveats apply.

# State Road Fund – Future Issues

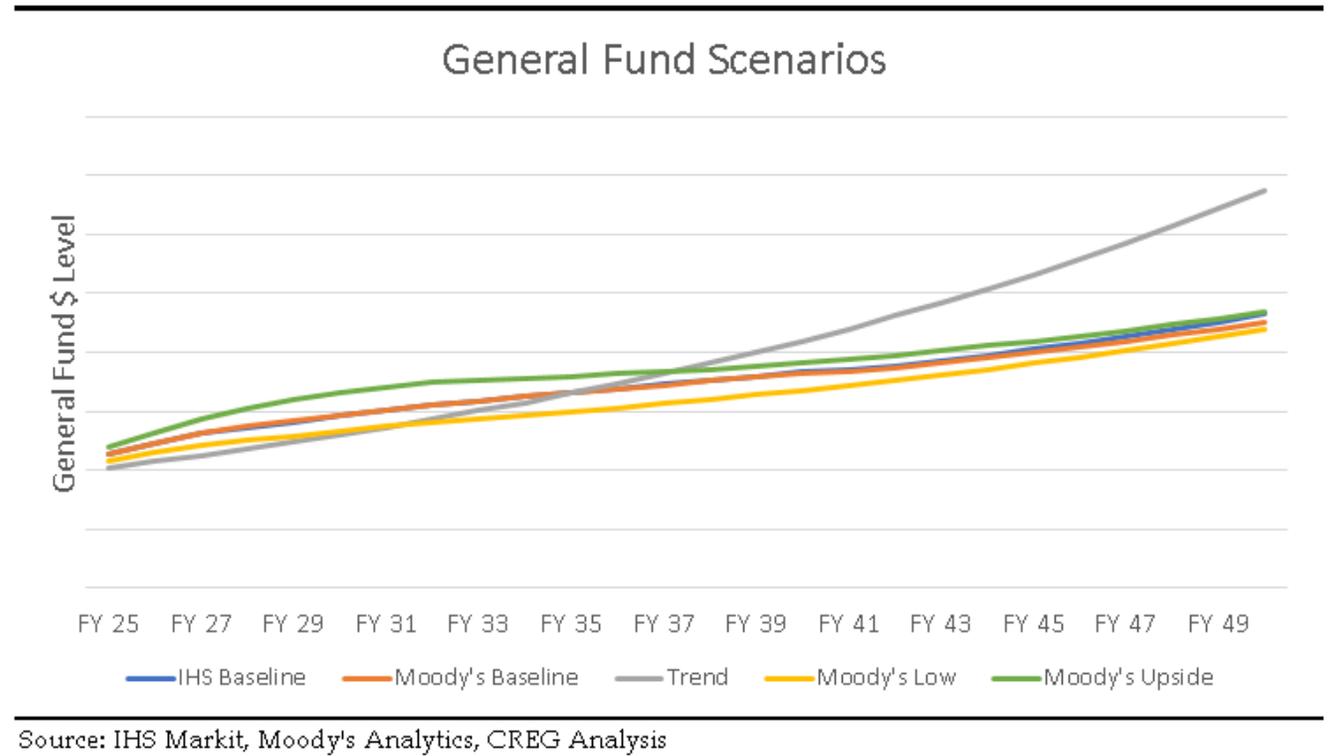
- Weakening connection between road use and fuel use
  - Motor fuel taxes are New Mexico State Road Fund's largest revenue source
- New Mexico fuel taxes have not been revised since:
  - FY1996 – Gasoline Tax
  - FY2004 – Diesel Tax
- New Mexico's gasoline tax, at 17 cents per gallon,
  - 3rd lowest in the nation
  - U.S. average 38.69 cents per gallon
- New Mexico's diesel tax, at 21 cents per gallon,
  - 9th lowest in the nation
  - U.S. average 40.24 cents per gallon
- New Mexico's passenger vehicle registration fees are significantly lower than the U.S. average.
- Major concerns for future of State Road Fund – Increased fuel efficiency of vehicles and adoption of Electric Vehicles
- To mitigate the loss in fuel tax revenues, other states have explored:
  - Additional registration fees
  - Road User Charges

# N.M. General Fund

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# General Fund Long-Term Forecast Scenarios

- Benchmarked to FY25 in the December 2021 forecast
- IHS May 2022 forecast – national 30-year forecast for wage and salary growth
- Moody's June 2022 forecast – national 30-year forecast for wage and salary growth (baseline, low and high)
- Oil and Natural Gas forecast scenarios incorporated into Moody's and IHS
  - Assume Rystad Energy Oil and Natural Gas production turning points for New Mexico, FY29 and FY31 respectively
- Assume a GRT adjustment for change in oil and gas production for IHS and Moody's forecasts
- Trend Analysis, Extended 10-year (2012-2021) Growth Rate for General Fund



# High Level Assumptions

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Assume all state tax expenditures remain as is, including:

- Film Credit
- GRT Food Deduction and Hold Harmless distributions
- Health facilities, prescriptions and health care GRT deductions
- Working Families Tax Credit

Assume no change to federal level income tax

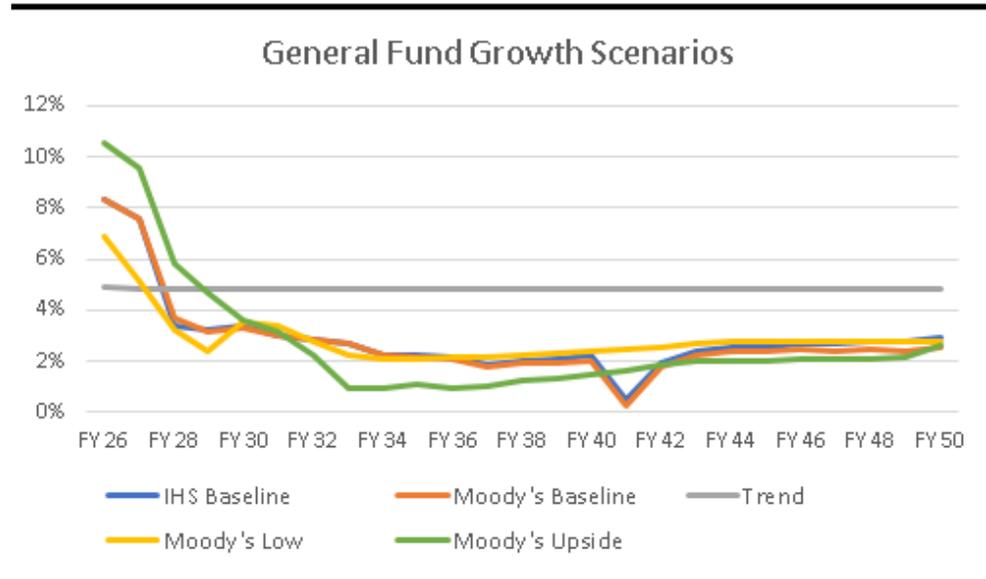
- Tax Cuts & Jobs Act (TCJA) renewed as baseline

Assume no change in current tax rates or personal or corporate income brackets

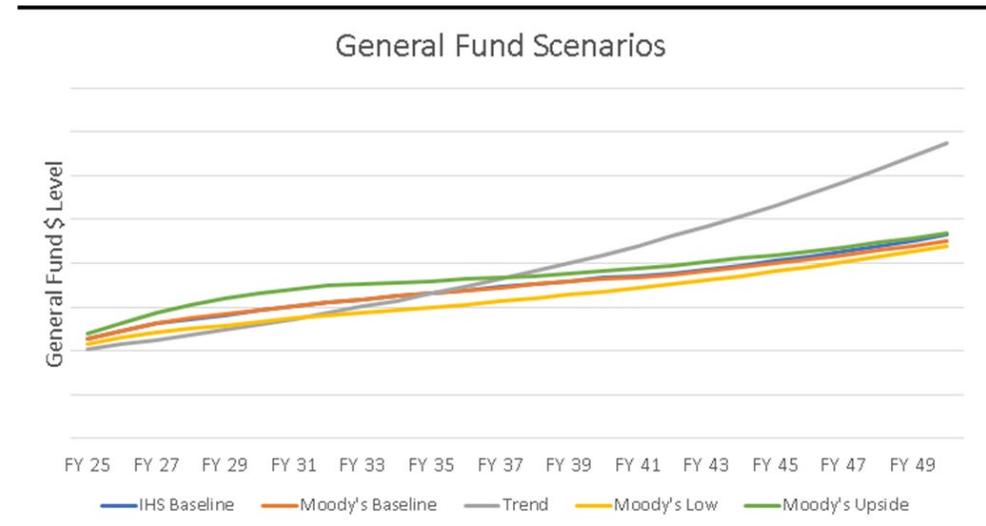
Assume no change in state population – or labor force participation

# General Fund Scenarios Outlook

- The Trend growth rate – centers the long-term outlook to current 10-yr general fund growth
- Given near-term outlook for oil and gas, all general fund scenarios have growth rates above the trend
- Despite baseline general fund levels being above the trend through FY34, growth rates fall below the trend by FY29 and FY30



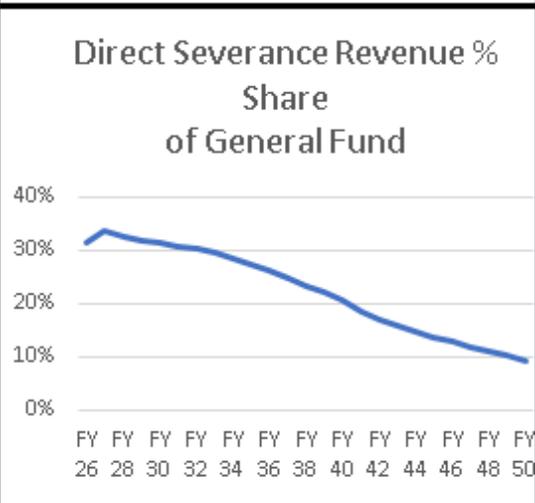
Source: IHS Markit, Moody's Analytics, CREG Analysis



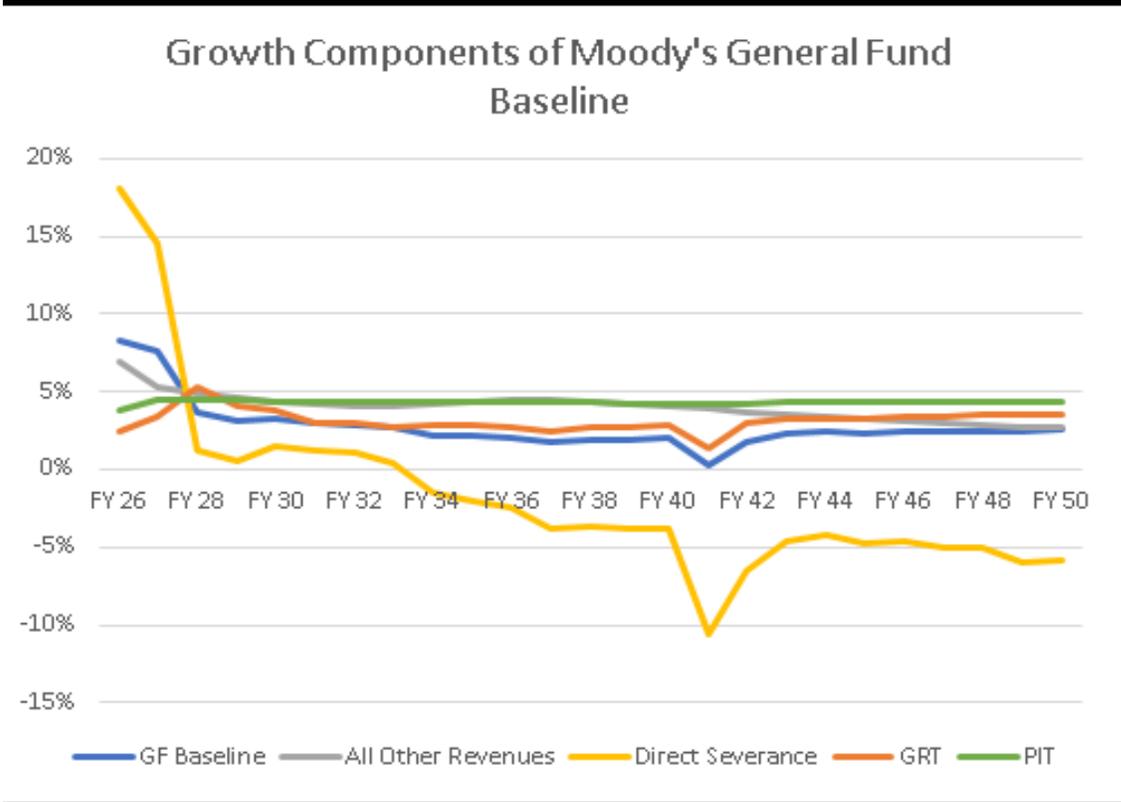
Source: IHS Markit, Moody's Analytics, CREG Analysis

# General Fund Component Growth

- Despite steady growth from GRT, PIT and Other Revenues, the sharp decline in direct Oil and Gas Severance Revenue, pulls the General Fund Growth down
- Direct Severance Revenue as a percentage of General Fund declines from above 30% to 10%



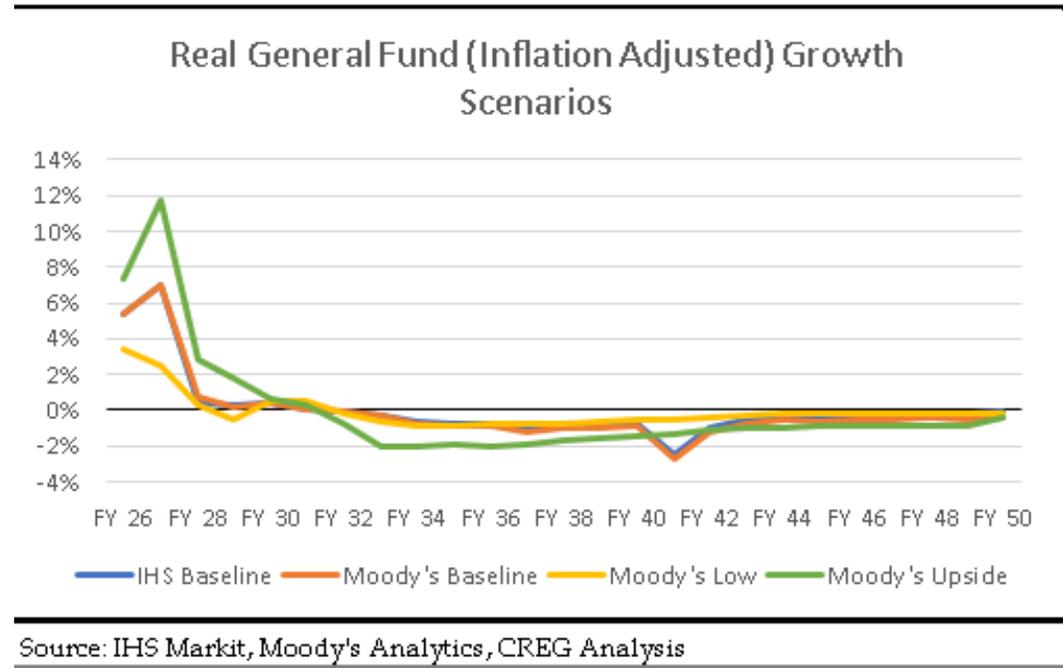
Source: Moody's Analytics, CREG Analysis



Source: Moody's Analytics, CREG Analysis

# General Fund Scenarios Conclusion

- Adjusted for inflation, the general fund is looking at contraction
- Risks and Sustainability of Long-Term Forecast
  - State Legislation
  - Recession Cycle
  - Size and Federal Funding: National Labs, Military Installations
  - Environmental Disaster Economic Impacts
  - Future Health Pandemic
  - Technology Innovations
  - Federal Legislation
  - Federal Fiscal Policy



➤ These models and estimates are useful for planning, budgeting, and policy purposes