

# Long-Term Outlook

Presentation to:

Revenue Stabilization and Tax Policy Committee

October 19<sup>th</sup>, 2023

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Office of the Governor

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# Consensus Revenue Estimating Group Participating Agencies

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# Introduction/Forecasts

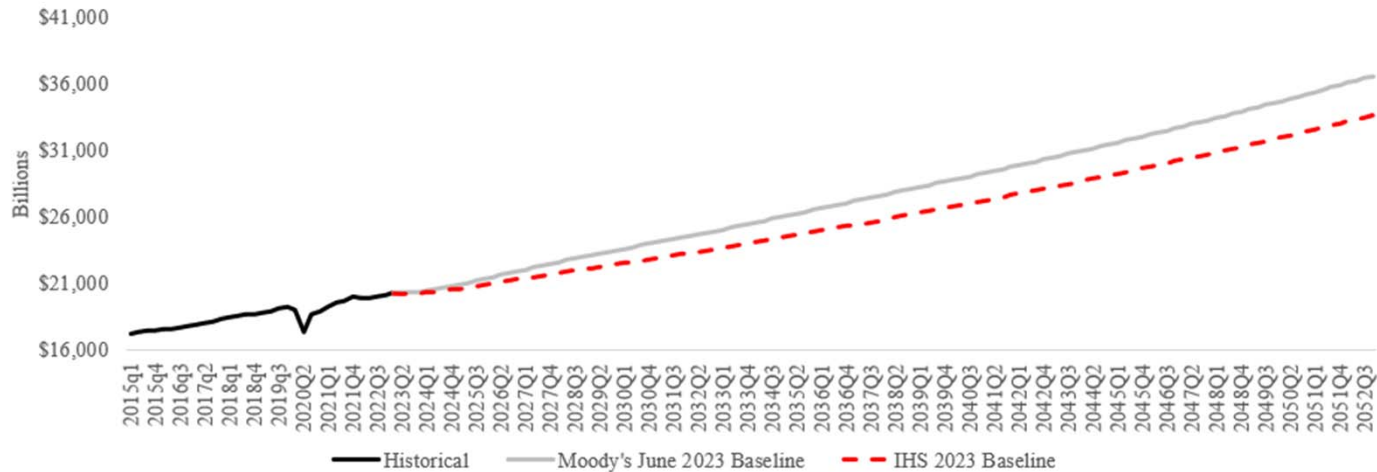
- Baseline forecasts based on current data and assumptions
  - Built on economic, demographic, and industry indicators
- Absent
  - Future recessions
  - Future fiscal and monetary actions
  - Future technological innovations
  - Financial (or other) market shocks
  - Energy market shocks
  - Future wars or international events
  - Future state legislative actions
- Forecasts change
  - There are updates and revisions
- The variation around the baseline grows the further out you go.
- 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

**U.S.A Real Gross Domestic Product: 2015 Q4 to 2023 Q1, Moody's Forecast 2023Q2-2052Q4, IHS Forecast 2023Q2-2052Q4**



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

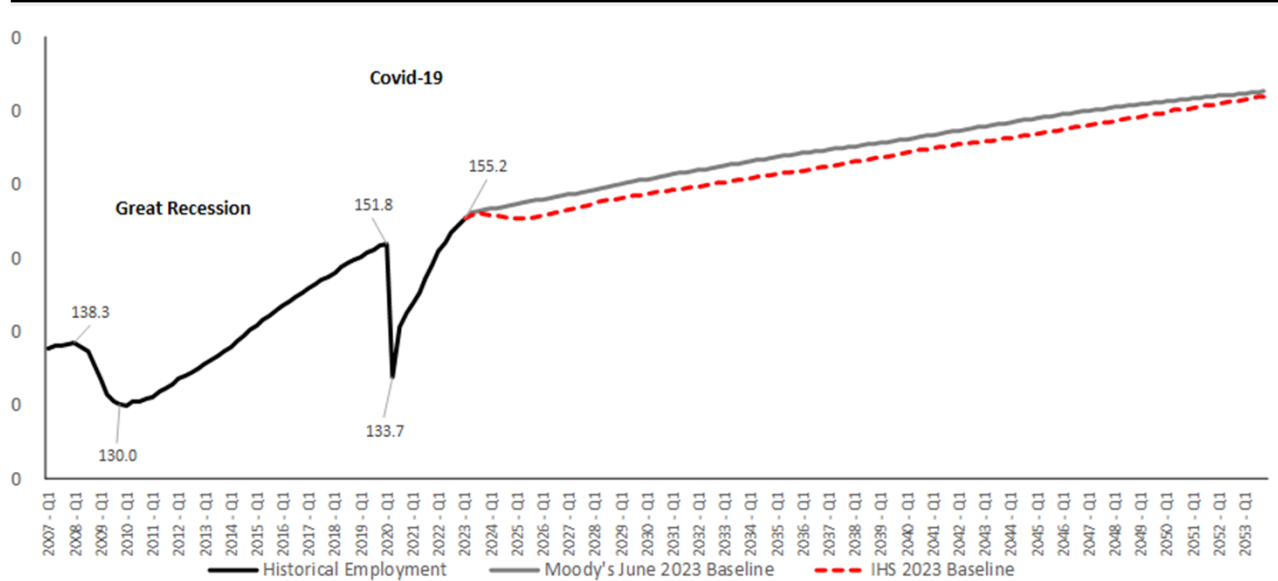
- Current national forecasters do not include a national recession in baseline forecasts
- Inflation continues to moderate in an environment of robust employment gains
- The Federal Reserve continues to balance inflation and labor market tightness against financial conditions
- Both Moody's and IHS expect growth to continue

# U.S. Employment

U.S. Total Non-Farm Employment: 2007Q1 to 2023Q1

Moody's Forecast 2023Q2 to 2053Q4, IHS Baseline Forecast 2023Q2 to 2053Q4

(1,000s of jobs)

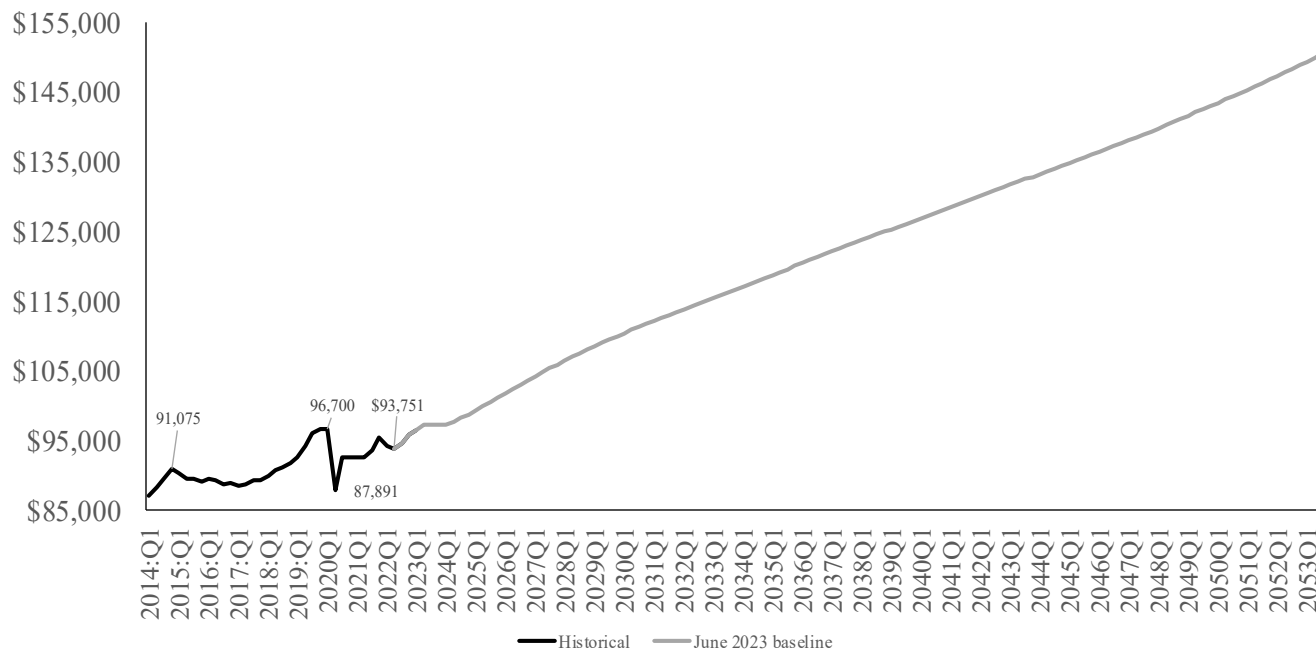


Source: Bureau of Labor Statistics

- National employment gains continue to exceed forecasters' expectations
- Competitive and tight labor market
- Signs of a labor market slow down are present, but they have not been substantial

# N.M. RGSP

**N.M. Real Gross Domestic Product 2014Q1-2023Q1, Moody's Forecasts 2023Q2-2053Q4**

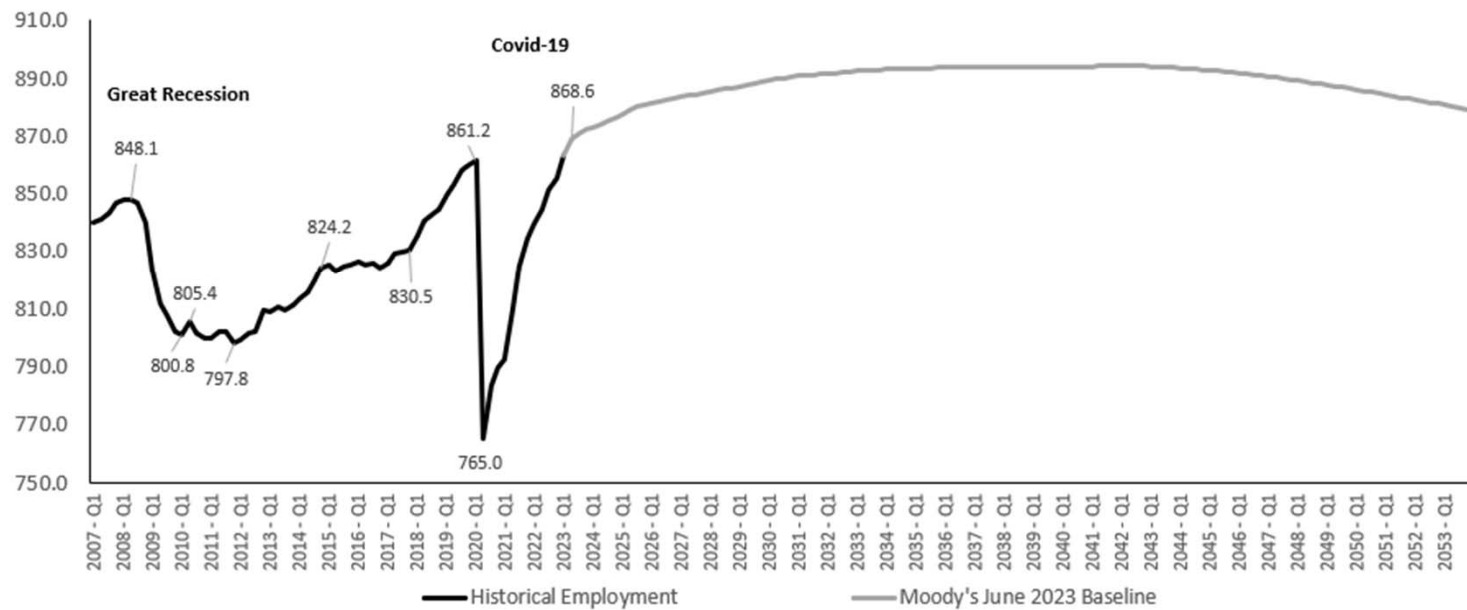


Source: Moody's July 2022 and November 2022 Baseline Scenario vs. Historical Values from the Bureau of Economic Analysis

- Current Moody's and University of New Mexico Bureau of Business and Economic Research (BBER) baseline forecast expect moderate to slow growth
- New Mexico's RGSP is estimated to average about 1.9% growth per quarter in the out years

# N.M. Employment

**N.M.'s Quarterly Total Non-Farm Employment: 2007Q1 to 2023Q1, Moody's Forecast 2023Q2 to 2053Q4**  
**(1,000s of jobs)**



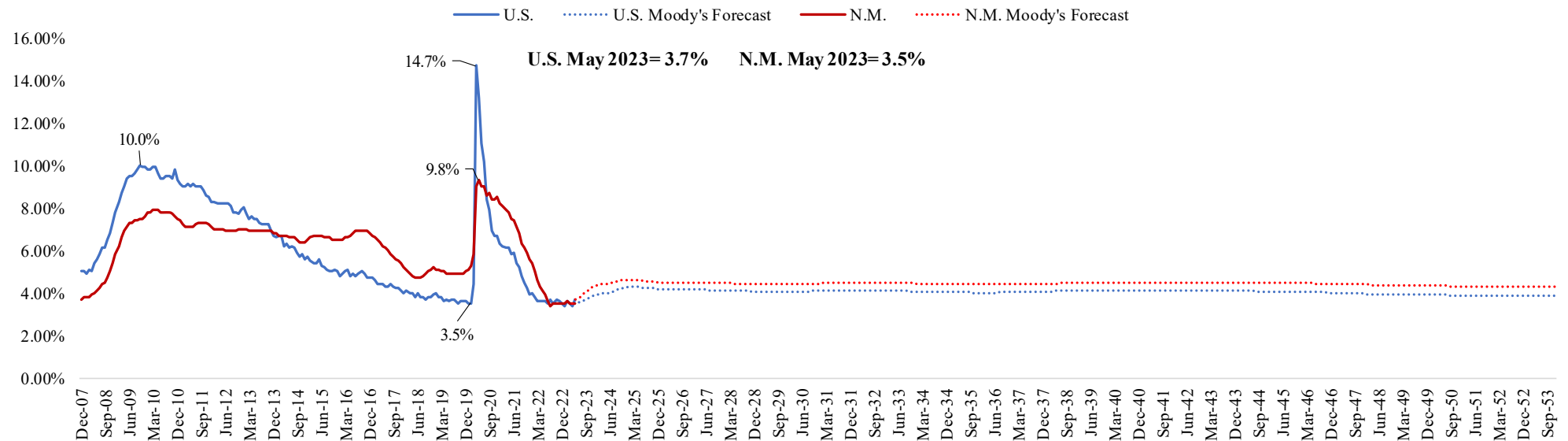
Source: Bureau of Labor Statistics

- New Mexico reached pre-pandemic employment in 2023 Q1
- Employment growth will moderate



# U.S. and N.M. Unemployment

U.S. and N.M. Unemployment Rate (percent) : December 2007 to December 2053

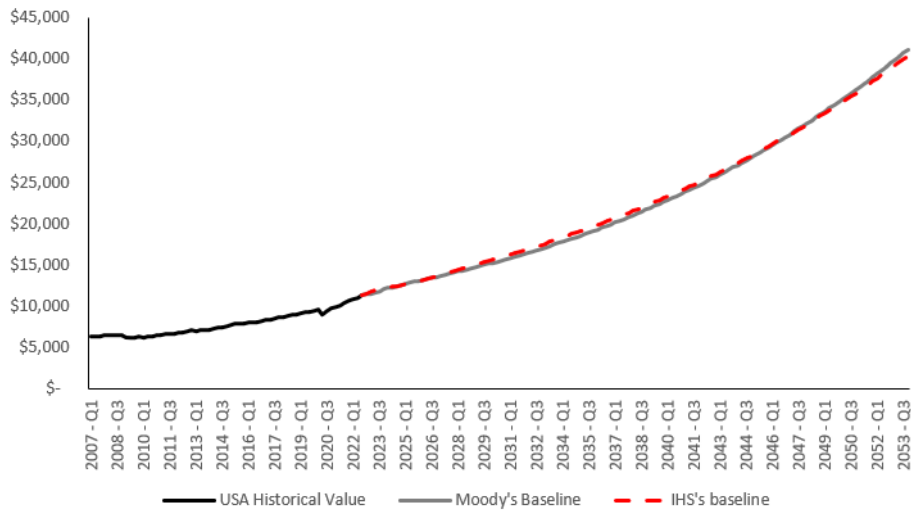


Source: bls.gov, seasonally adjusted

- The national unemployment rate peaked in April 2020 at 14.7% and has declined to 3.7% in May 2023
- The New Mexico unemployment rate peaked in May 2020 at 9.8% and has declined to 3.5% in May 2023

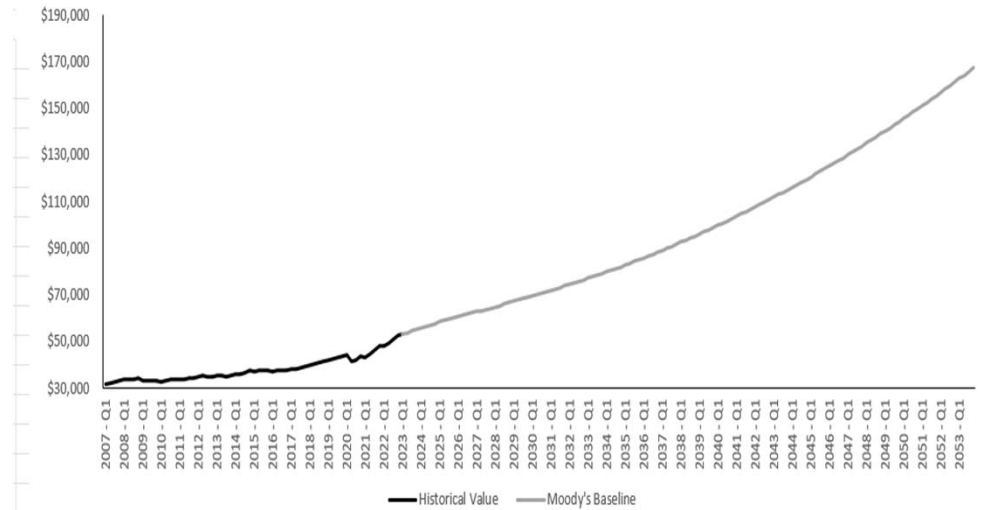
# U.S. and N.M. Wages & Salaries

**U.S.A Total Nominal Wages and Salaries by Moody's Analytics and IHS  
CY 2007Q1 to 2053Q2**



Source: bls.gov

**N.M. Total Wages and Salaries by Moody's Analytics  
CY 2007Q1 to 2053Q2**



Source: bls.gov

- Demographic trends and pandemic impacts on the labor market are among the main contributors to increases in wages and salaries
- Inflationary factors continue to place upward pressure on wages and salaries

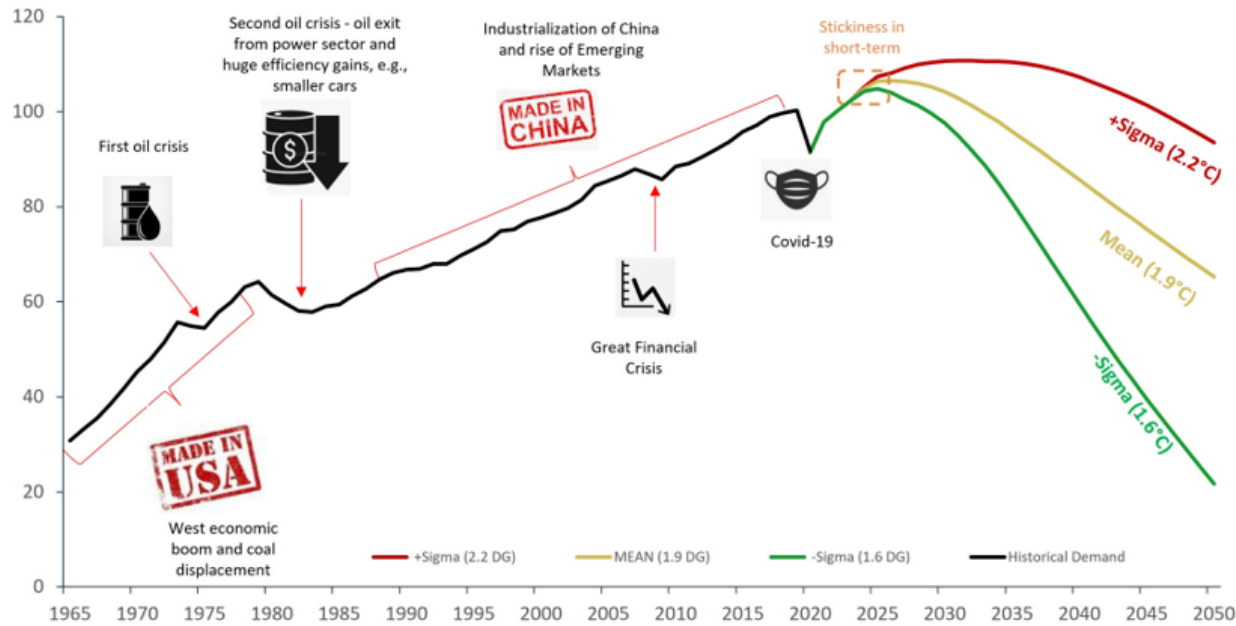
# Global Energy Transition

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# Global Energy Transition

## Long-term oil demand scenarios and historical demand

Million barrels per day



Source: Rystad Energy Oil Market Transition Solution, Rystad Energy OilMarketCube

➤ Rystad Energy analysis suggests oil demand will be driven by three main drivers as the world becomes more electric and more fuel efficient.

- Global passenger vehicles
  - 30% of global oil demand
  - Faster transition driven by EVs
- Global commercial transport (trucks)
  - 17% of global oil demand
  - Slower transition
- Petrochemicals
  - 15% of global oil demand
  - Very difficult to decarbonize

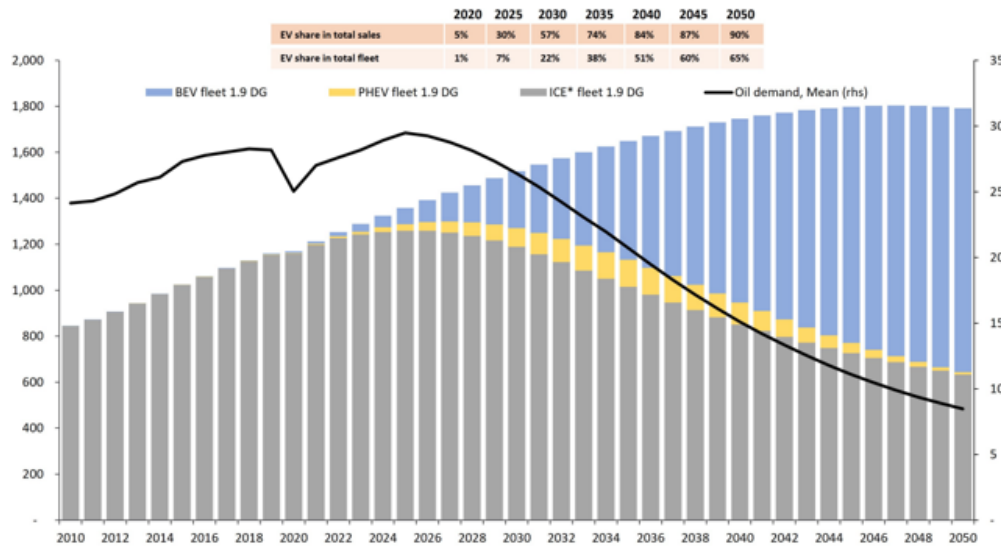
➤ Rystad produced 3 scenarios (on graph: +Sigma, Mean (baseline) and -Sigma) which correspond to varied climate, technological, and policy trajectories

# Global Energy Transition

## Global passenger vehicle fleet and oil demand

Million vehicles

Million barrels per day



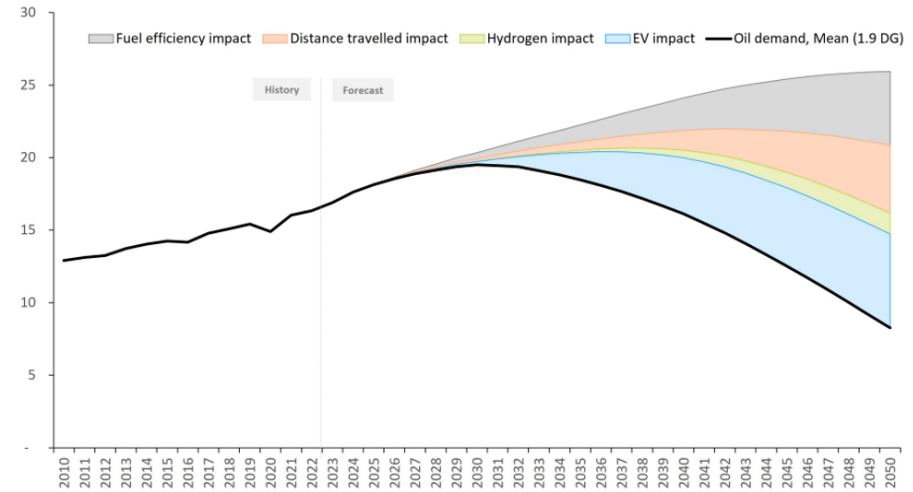
Source: Rystad Energy Oil Market Transition Solution, Rystad Energy OilMarketCube

### ➤ Rystad analysis states:

- Global oil demand for passenger vehicles peaks in 2025
- Rystad maintains electrification trend is irreversible due to strong investments in R&D by all major OEMs
- Most important driver for the decline in oil demand in the next 30 years

## Global trucks oil demand and energy transition impact

Million barrels per day

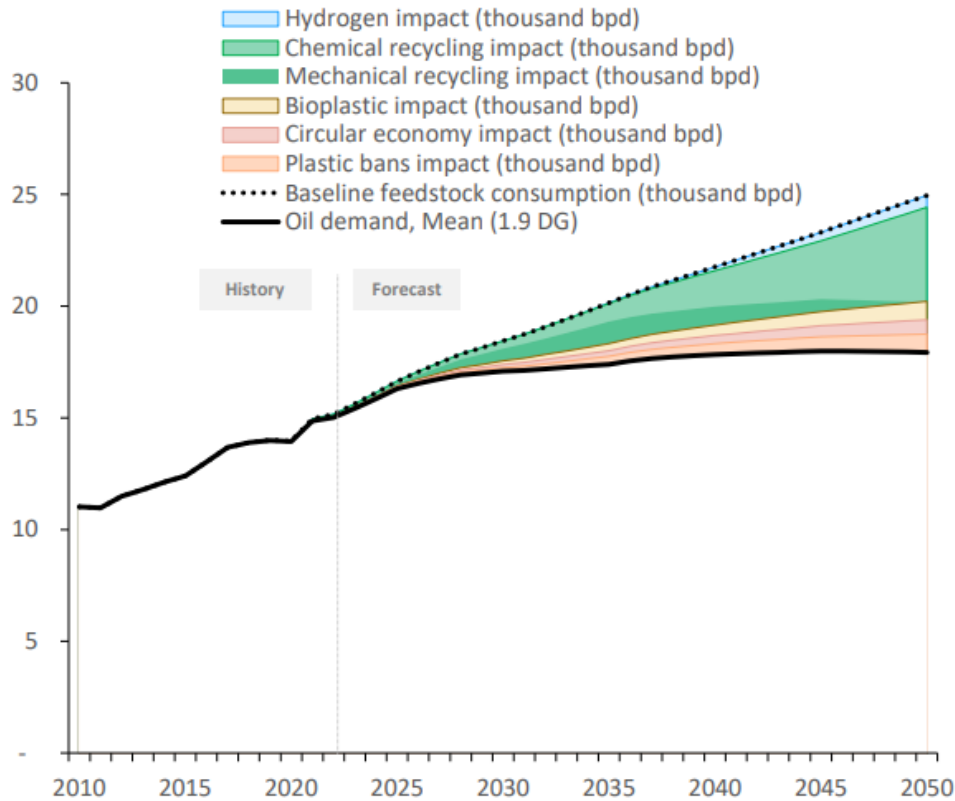


Source: Rystad Energy Oil Market Transition Solution, Rystad Energy OilMarketCube

- Oil demand for commercial road transport increases in near term
- Once technology matures it impacts hauling sector in mid-2030s and beyond
- Additionally impacted by fuel efficiency standards

# Global Energy Transition

**Petrochemicals demand and energy transition impact**  
Million barrels per day



- Petrochemical sector is unlikely to undergo a similar transition
- Very difficult to decarbonize
- Currently no viable substitutes for oil feedstock
- Oil demand in petrochemical sector is set to grow in the short term before stabilizing and plateauing in the medium term

# Oil & Natural Gas

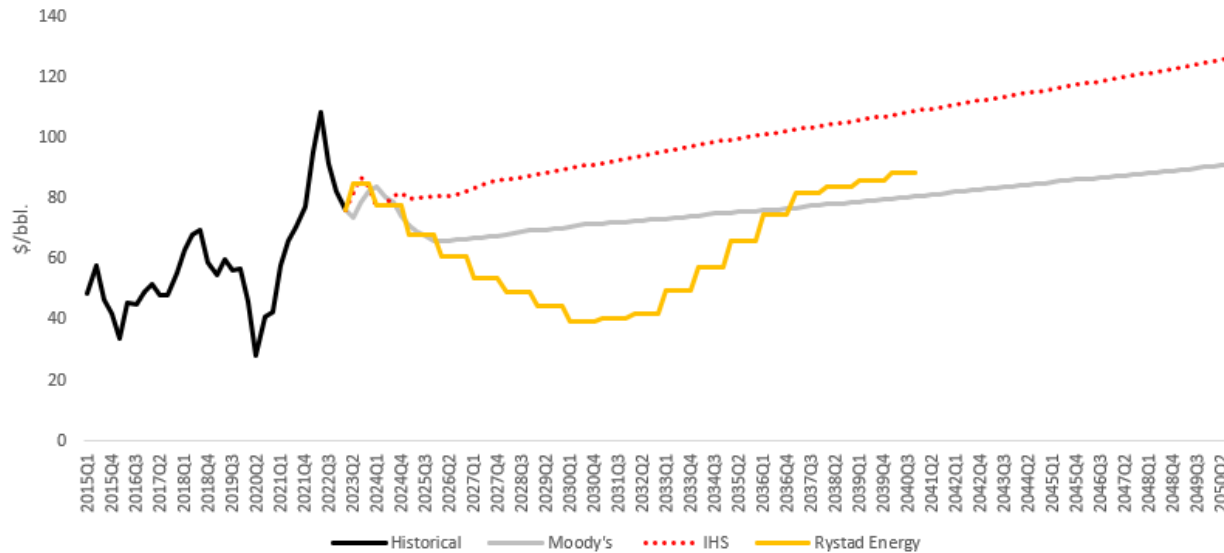
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# U.S. Oil WTI Prices (Moody's, IHS, Rystad)

**Moody's WTI Price Forecast (2023Q2 to 2050Q4)**

**IHS WTI Price Forecast (2023Q2 to 2050Q4)**

**Rystad Energy WTI Price Forecast (2023Q2 to 2040Q4)**



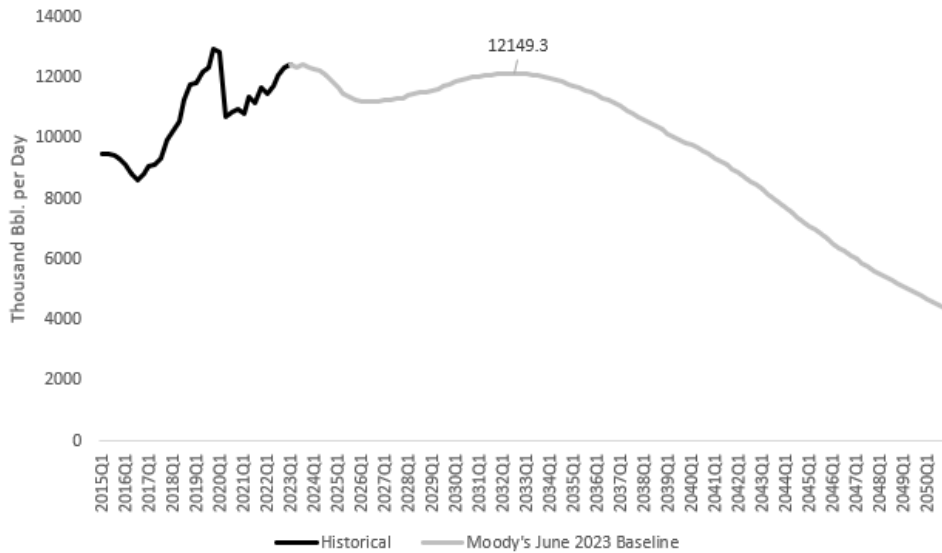
**Source: Moody's Analytics, IHS Markit, Rystad Energy**

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



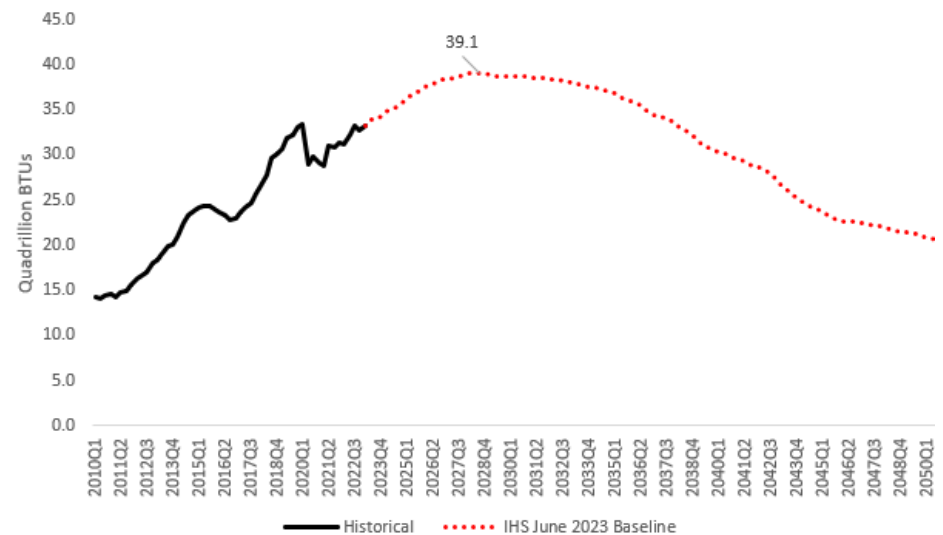
# U.S. Oil Production (Moody's & IHS)

US Crude Oil Production Moody's Forecast (2022Q2 to 2050Q4)



Source: Moody's Analytics

US Crude Oil Production IHS Forecast (2022Q2 to 2050Q4)



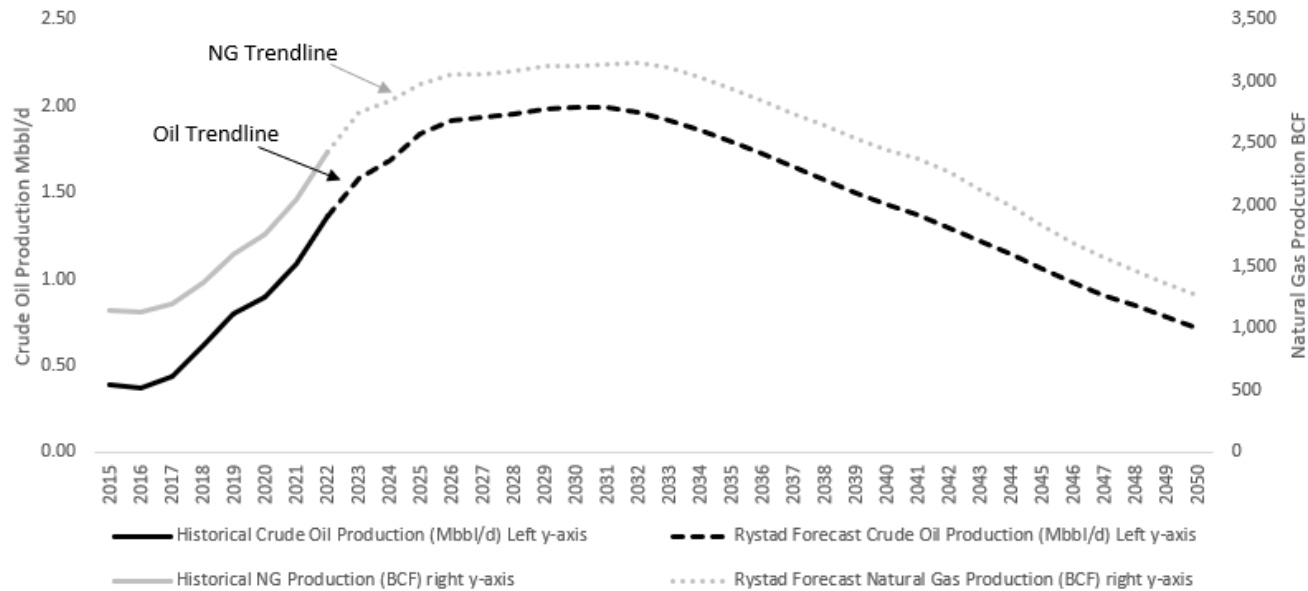
Source: IHS Markit

- Both national forecasters see U.S. oil production peaking between 2028 and 2033
  - IHS estimates U.S. oil production peak in 2028
  - Moody's estimates U.S. oil production peak in 2033

# N.M. Oil Production Long-Term Forecast

## NM Crude Oil Production Forecast (CY 2023 to 2050)

## NM Natural Gas Forecast (CY 2023 to 2050)



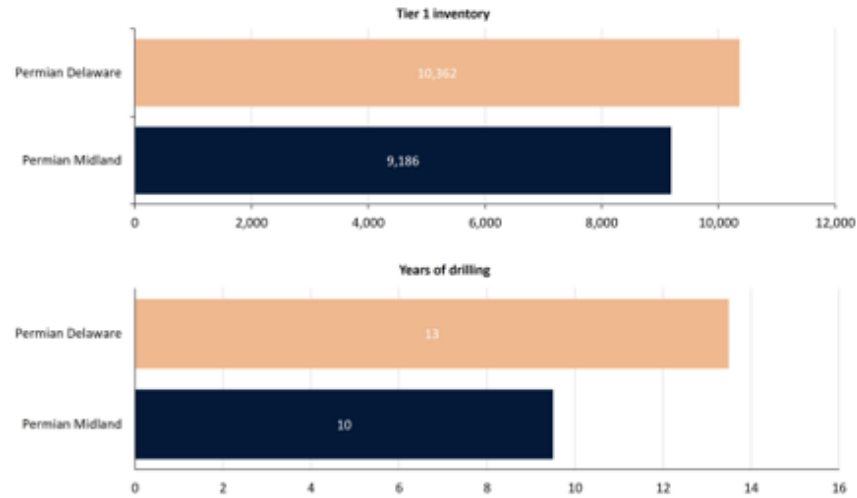
Source: Rystad Energy, Ucube

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

# N.M. Oil Production Detail

## Remaining Tier 1 inventory in Permian Basin and years of drilling

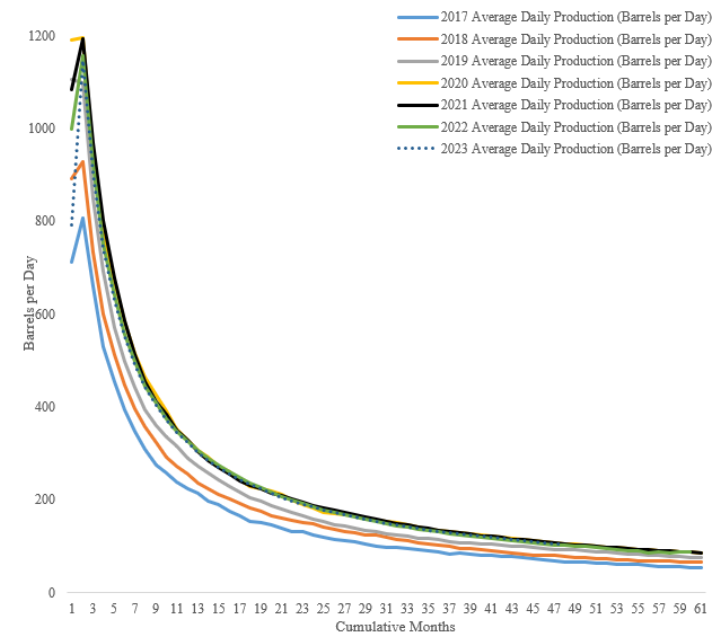
Number of locations and number of years



Source: Rystad Energy ShaleWellCube, Rystad Energy UCube, Rystad Energy research and analysis

- Remaining years of drilling in the Permian Delaware at current pace in Tier 1 acreage are estimated at 13 years (Rystad Energy)

## New Mexico Well Curves by Start-up Year



Source: Rystad Energy, ShaleWellCube

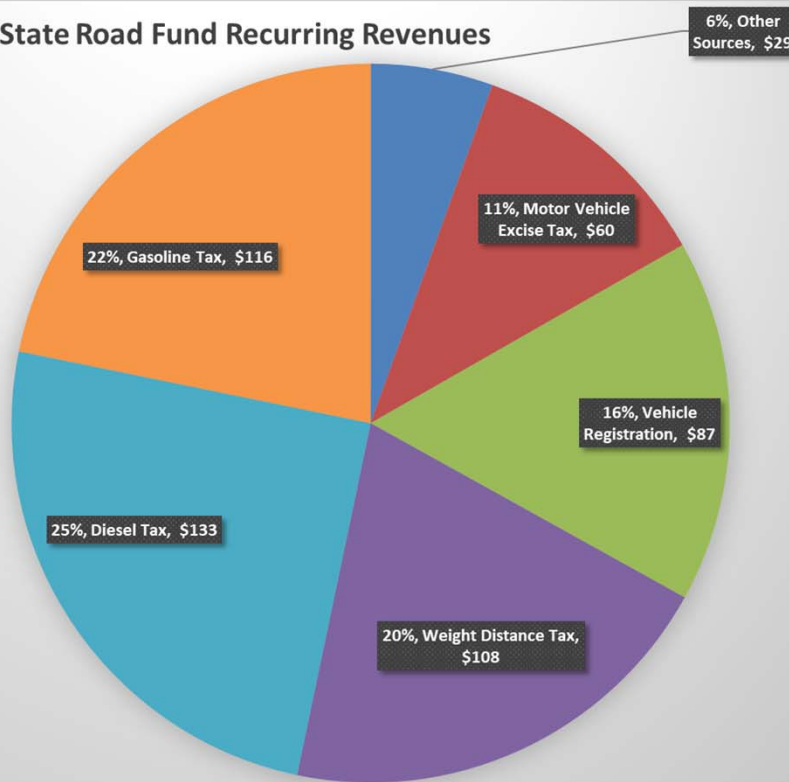
- Wells have high yields of production in the first few months but quickly drop off
- Drilling activity must keep pace in order to maintain high levels of production

# N.M. State Road Fund

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# NM State Road Fund – Overview

State Road Fund Recurring Revenues

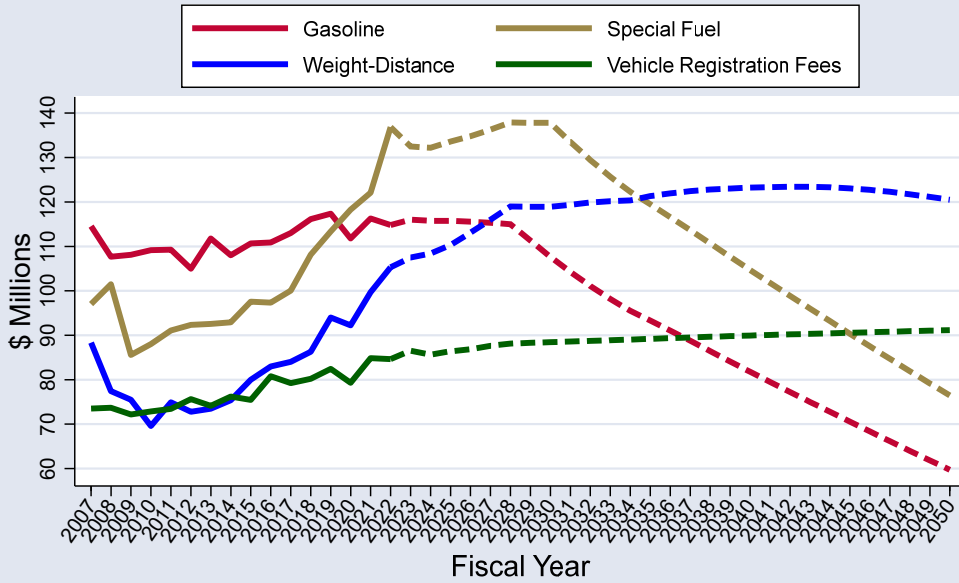


- State Road Fund received \$546 million in recurring revenues in FY22.
- NMDOT's July 2023 Road Fund Outlook forecasts the recurring revenues to grow ~0.1% in FY23
  - Growth in Motor Vehicle Excise and Weight/Distance taxes were offset by declines in Special Fuel and Trip Taxes
  - Since FY13, the State Road Fund recurring revenues have grown at an annual average rate of 4%.
- Biggest revenue sources are:
  - Gasoline Tax
  - Diesel Tax
  - Weight-Distance Tax
  - Vehicle Registration Fees

\*Based on NMDOT's July 2023 Road Fund Outlook

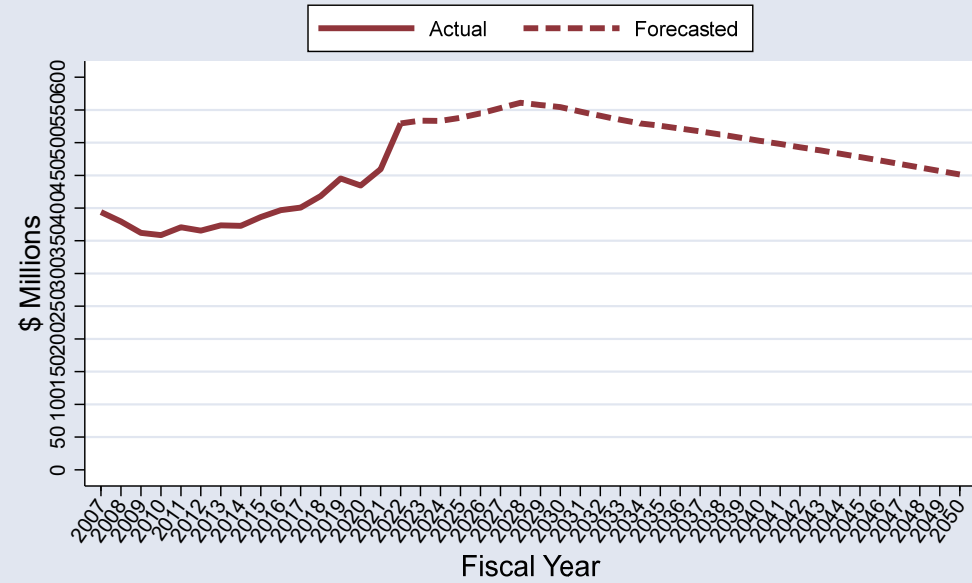
# Long Term State Road Fund Outlook

## Four Major State Road Fund Revenue Sources



Near term forecast based on NMDOT's July 2023 Road Fund Outlook.  
 Longer term forecast based on projections from IHS.

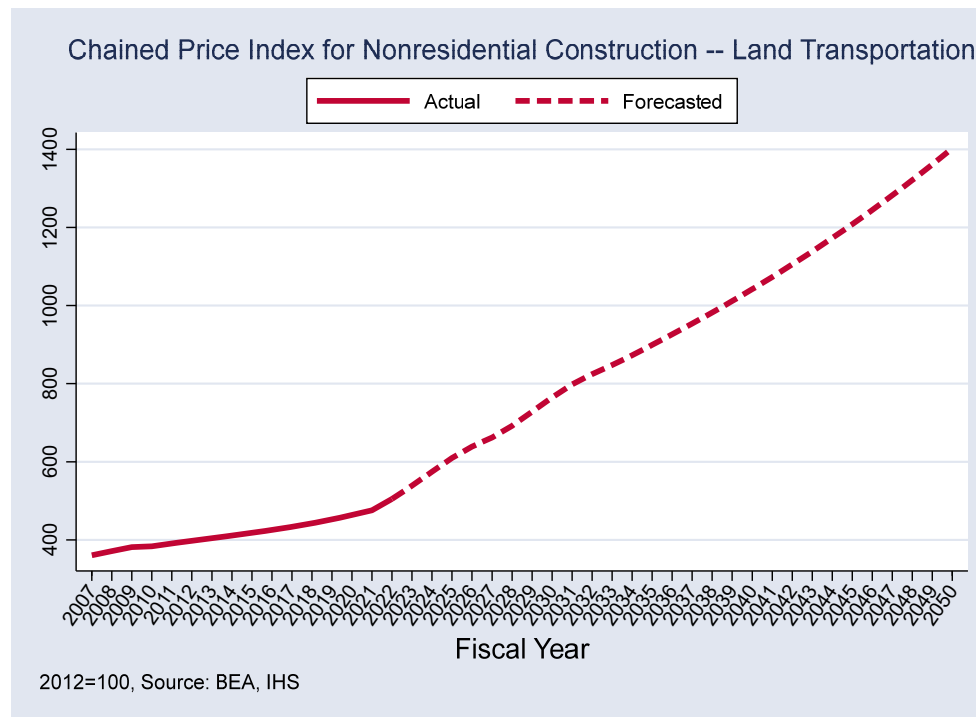
## Total Road Fund Revenues



Near term forecast based on NMDOT's July 2023 Road Fund Outlook.  
 Longer term forecast based on projections from IHS.

- Over the next 5 years, State Road Fund revenues are expected to grow at an annual average rate of 1.0%, slowly shrinking thereafter.
  - Future short-term growth mainly driven by commercial vehicle revenue sources and is tied to overall economic activity.
  - Future long-term revenue expectations being pulled down by declining revenues from gasoline and diesel taxes based on assumptions around fuel economy standards and national trends towards increased adoption of electric vehicles.
- Usual caveats apply.

# State Road Fund – Future Issues



- Road construction costs are expected to grow 160% between 2023 and 2050. 5.9% average annual growth rate.
- State Road Fund recurring revenue is expected to shrink 15% between 2023 and 2050. -0.6% average annual growth rate.

# 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,
  - 5<sup>th</sup> lowest in the nation
  - US average 31.2 cents per gallon
- New Mexico's diesel tax, at 21 cents per gallon,
  - 10<sup>th</sup> lowest in the nation
  - US average 33.64 cents per gallon
- New Mexico's passenger vehicle registration fees are significantly lower than the US 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

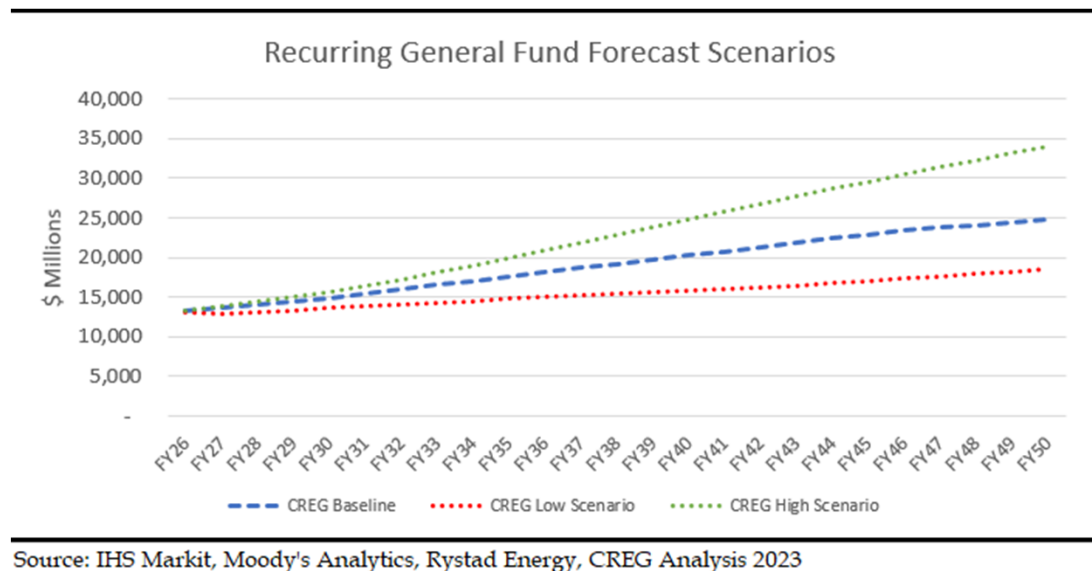


# N.M. General Fund

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# General Fund Long-Term Forecast Scenarios

- Benchmarked to FY26 in the December 2022 forecast with 2023 legislative adjustments
  - In particular impact of SB-26
- Oil and Natural Gas forecast
  - Consensus analysis with State Investment Council and CREG
  - Assume Rystad Energy Oil and Natural Gas production turning points for New Mexico in baseline scenario, FY31 and FY33 respectively
- Assume GRT and PIT forecast adjustments for changes in oil and gas production
- High Scenario – assume Moody’s optimistic scenario for New Mexico economy, higher oil and natural gas prices and production
- Low Scenario – assume Moody’s mild recession in FY26 – FY27 coupled with low oil and natural gas prices and production



# High Level Assumptions

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Assume all state tax expenditures remain as per current law

Assume no change to federal level income tax

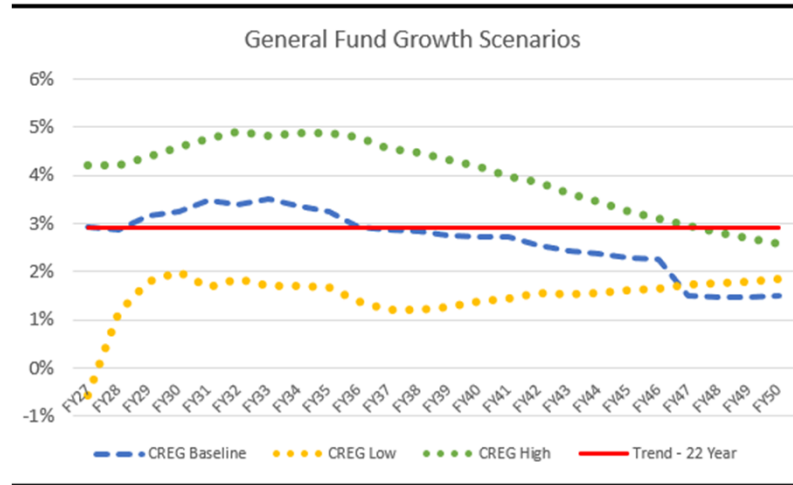
- Tax Cuts & Jobs Act (TCJA) renewed as baseline

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

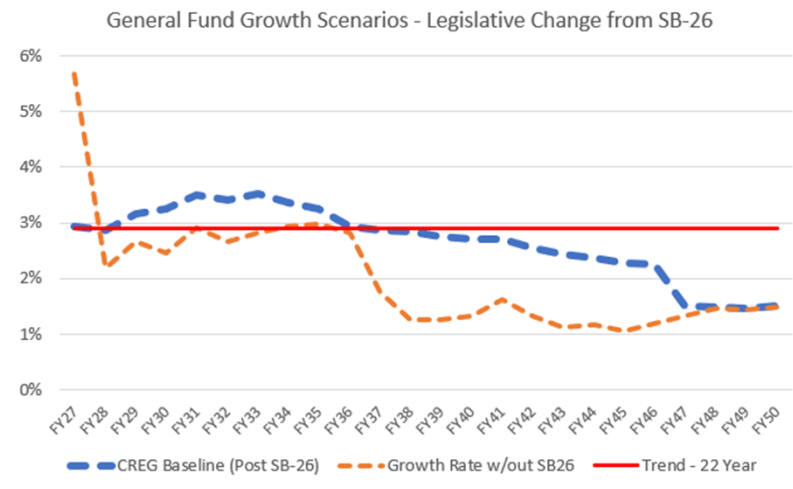
Assume no change in state population outlook – or labor force participation

# General Fund Scenarios Outlook

- Trend Analysis, Extended to 22-year (2000-2022) Growth Rate for General Fund
  - The trend growth rate – centers the long-term outlook to current 22-year general fund growth
- Given near-term outlook for oil and gas, the baseline and high scenarios have growth rates at or above trend
- Past downturn in oil and natural gas production, growth rate in the baseline outlook drops below trend
- SB-26 legislation significantly regulates the general fund growth rate to stabilize the volatility (bottom graph)



Source: IHS Markit, Moody's Analytics, Rystad Energy, CREG Analysis 2023

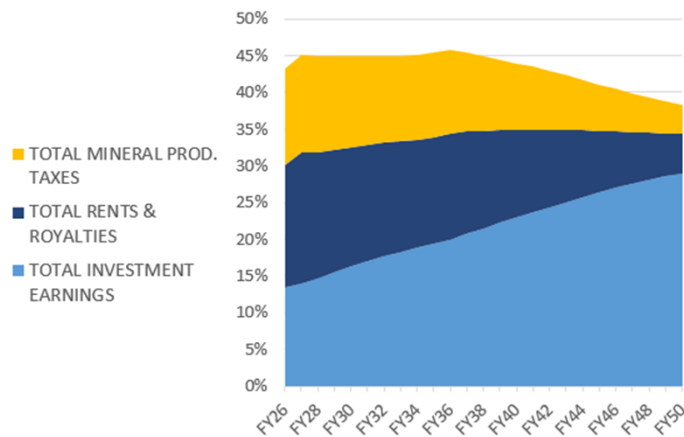


Source:CREG Analysis 2023

# General Fund Component Growth

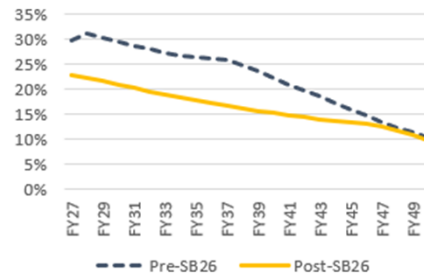
- Direct Severance Revenue as a percentage of General Fund declines from below 24% to 10% compared to without SB26 where the decline is from 30% to 10%
- Investment Earnings as a share of General Fund double in percentage from 15% to 33%

Revenue Source % Share of Recurring General Fund  
Baseline without SB-26



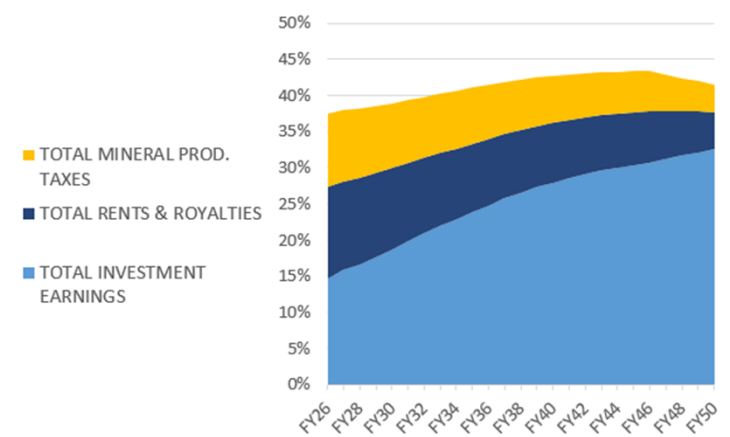
Source: CREG Analysis 2023

Direct Severance Revenue %  
Share of General Fund



Source: CREG Analysis 2023

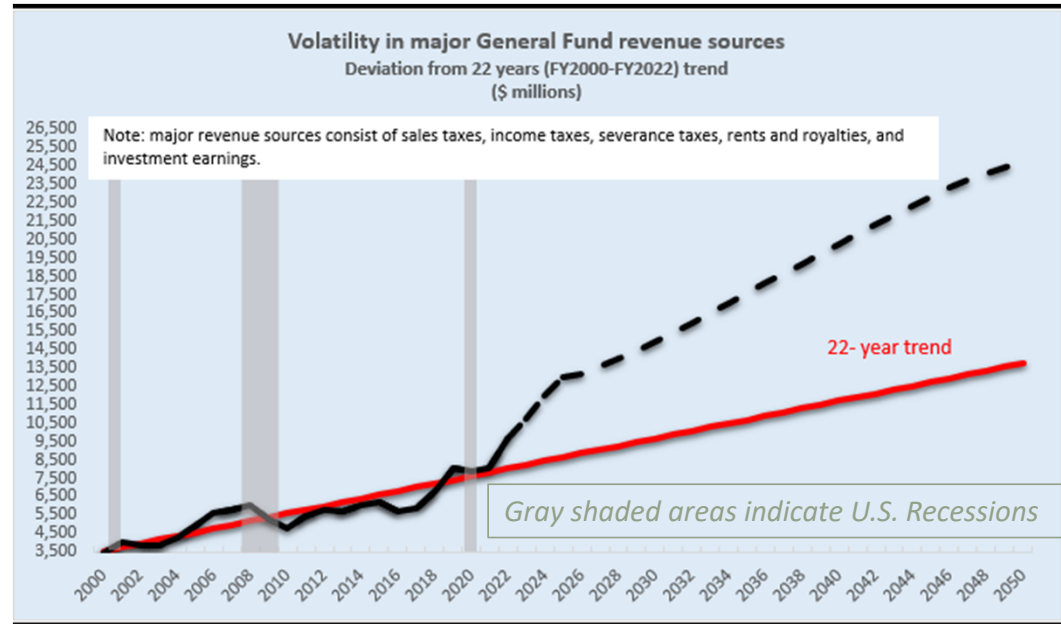
Revenue Source % Share of Recurring General Fund  
Baseline with SB-26



Source: CREG Analysis 2023

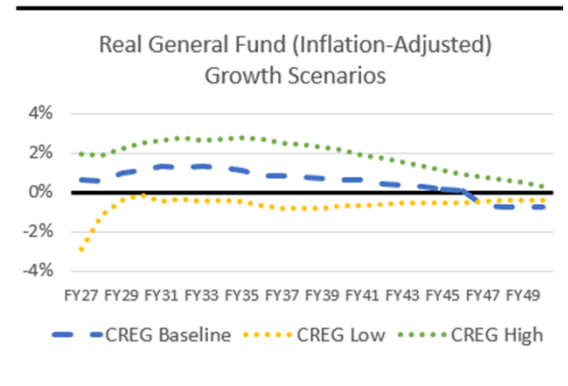
# General Fund Scenarios Conclusion

- Adjusted for inflation, only the low scenario would see general fund contraction in near-term
- The forecast level is well above the 22-year trend level but
  - Growth rate drops below trend rate by FY37
  - Expect fluctuations around the long-term trend as there will be recessions and other noted risks below
- Risks and Sustainability of Long-Term Forecast
  - Recession Cycle
  - State Legislation
  - Federal Legislation
  - Federal Fiscal Policy
  - Size and Federal Funding: National Labs, Military Installations
  - Environmental Disaster Economic Impacts
  - Future Health Pandemic
  - Technology Innovations



Source: CREG Analysis 2023

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



Source: IHS Markit, CREG Analysis 2023