

Long-Term Revenue Outlook

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Legislative Finance Committee
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Introduction/Forecasts

- Baseline forecasts based on current data and assumptions
 - Built on economic, demographic, and industry indicators
- Does not include future:
 - Recessions
 - Fiscal and monetary policy actions
 - Technological innovations
 - Financial, energy, or other market shocks
 - Wars or geopolitical events
 - State or federal legislation
- As forecasts are extended, possibilities and volatility around the baseline grows
- These models and estimates are useful for planning and discussion purposes
 - Budget and policy
- The main objective is to look at trends
 - With the most current available data and surmise - Where is the state headed?

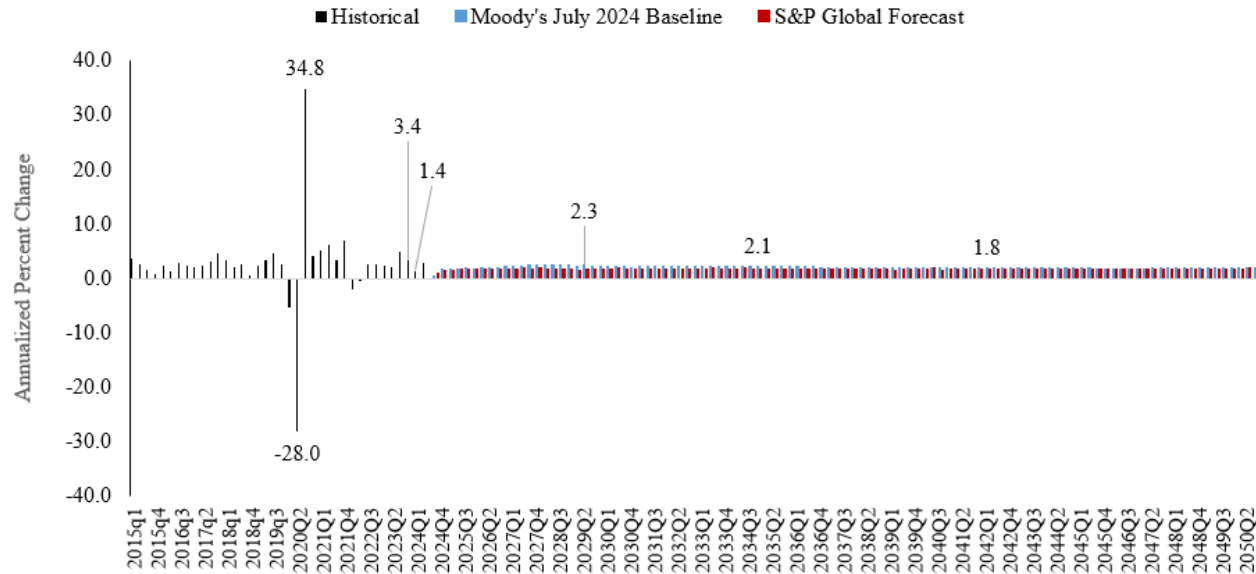
Economic Indicators

U.S. RGDP

Annualized Percent Change in U.S.A Real GDP: 2015 Q1 to 2024 Q2

Moody's Forecast 2024Q3-2050Q4, S&P Global Forecast 2024Q3-2050Q4

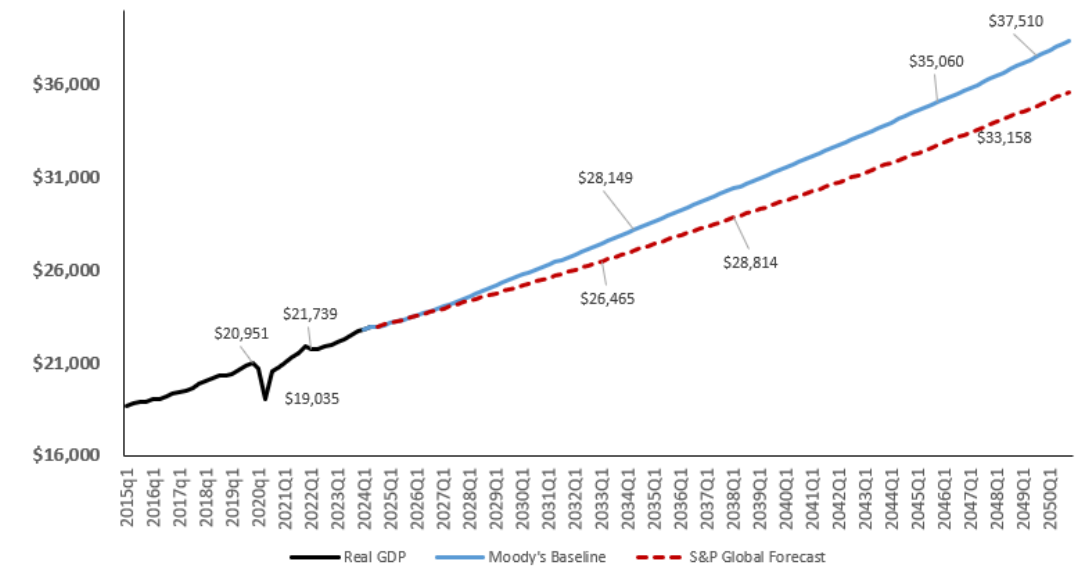
(Quarter-over-Previous-Quarter)



Source: bea.gov seasonally adjusted at annual rates, Moody's Current Baseline, S&P Global May Baseline

U.S. Real Gross Domestic Product: 2015 Q4 to 2024 Q2

Moody's and S&P Global Forecasts 2024 Q3-2052Q4

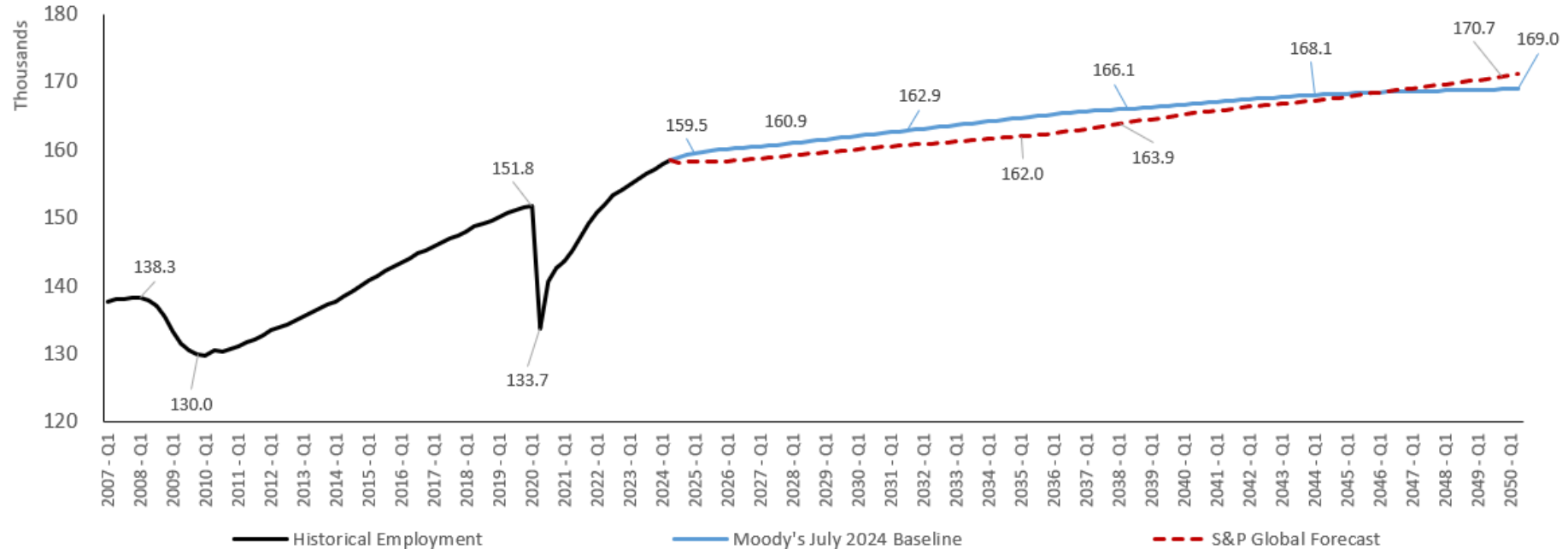


Source: GDP in billions of chained 2017 dollars, retrieved from bea.gov.

- Current national forecasts do not include a national recession in baseline forecasts
- Recession risks have decreased as the nation's economic growth returns to long-run economic growth rates
- Both Moody's and S&P Global expect growth to continue
- S&P Global expects more moderate long-term growth than Moody's

U.S. Employment

U.S. Total Non-Employment: 2007Q1 to 2024Q2. Moody's and S&P Global Forecasts: 2024Q3 to 2050Q2
(1,000s of jobs)

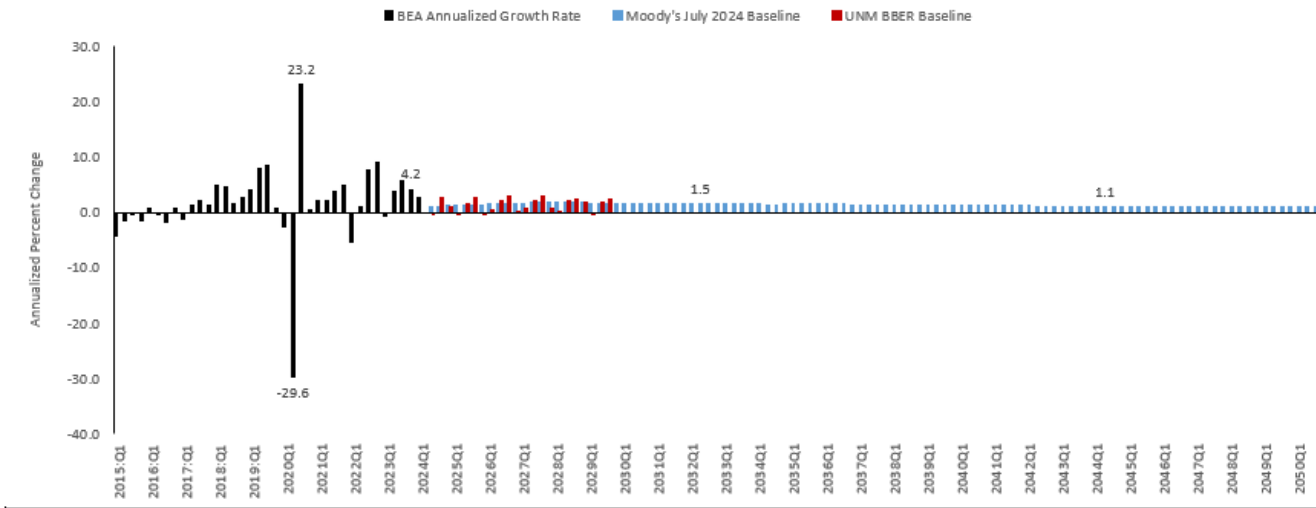


Source: Bureau of Labor Statistics

- National forecasts see national employment moderating in the long run
 - Country at full employment with an unemployment rate at 3.5% to 4.0%
- Recent labor market data indicated the demand for labor is moderating

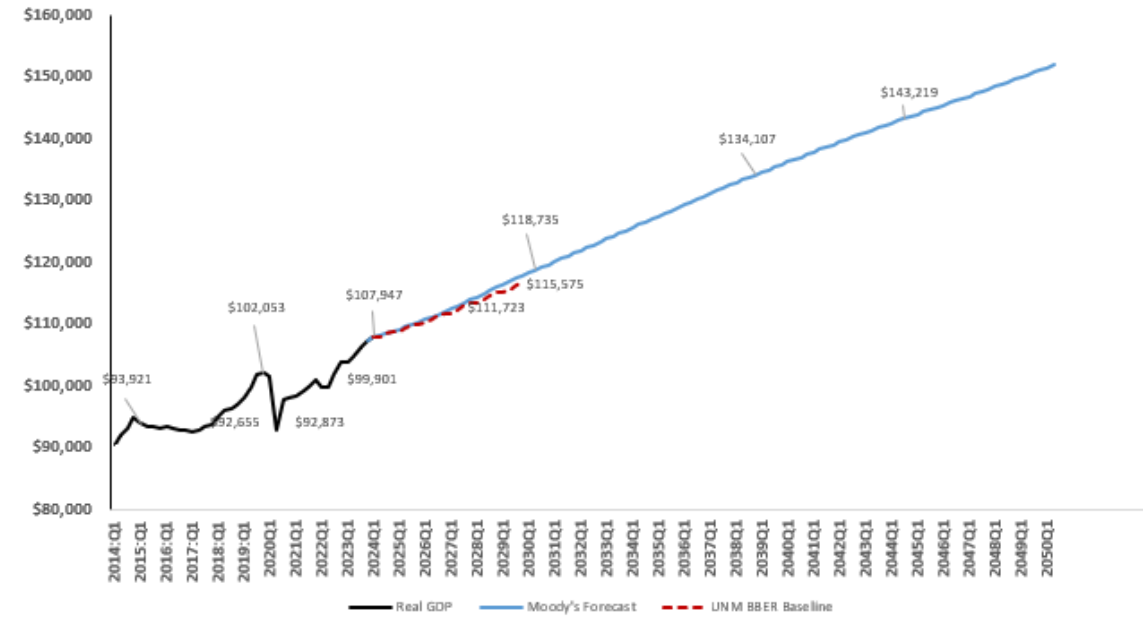
N.M. RGSP

Annualized Percent Change in N.M. Real GDP 2014Q1 to 2024Q1, Moody's Forecasts 2024Q2-2053Q4, UNM BBER Forecast from 2024Q2 to 2029Q4 (Quarter to Quarter)



Source: bea.gov, Moody's April 2024 Baseline Scenario vs. Historical Values

New Mexico Real Gross Domestic Product 2014Q1-2024Q1, Moody's Forecasts 2024Q2-2050Q4 UNM BBER Forecast 2024Q2-2029Q4

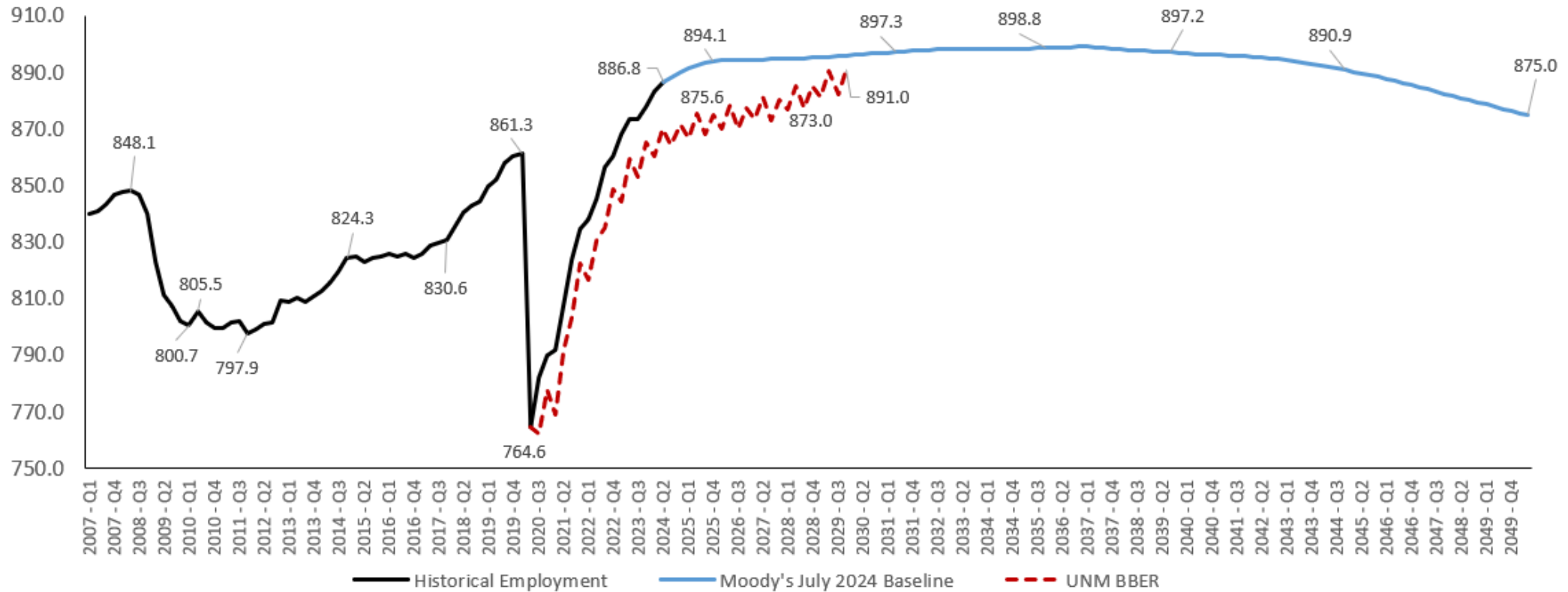


Source: Moody's July 2024 Baseline vs. Historical Values from the Bureau of Economic Analysis

➤ Current Moody's and UNM Bureau of Business and Economic Research (BBER) baseline forecasts expect moderate to slow growth

N.M. Employment

N.M.'s Quarterly Total Non-Employment: 2007Q1 to 2024Q2, Moody's Forecast 2024Q3 to 2050Q2, UNM BBER Forecast 2024Q3 to 2029Q4
(1,000s of jobs)



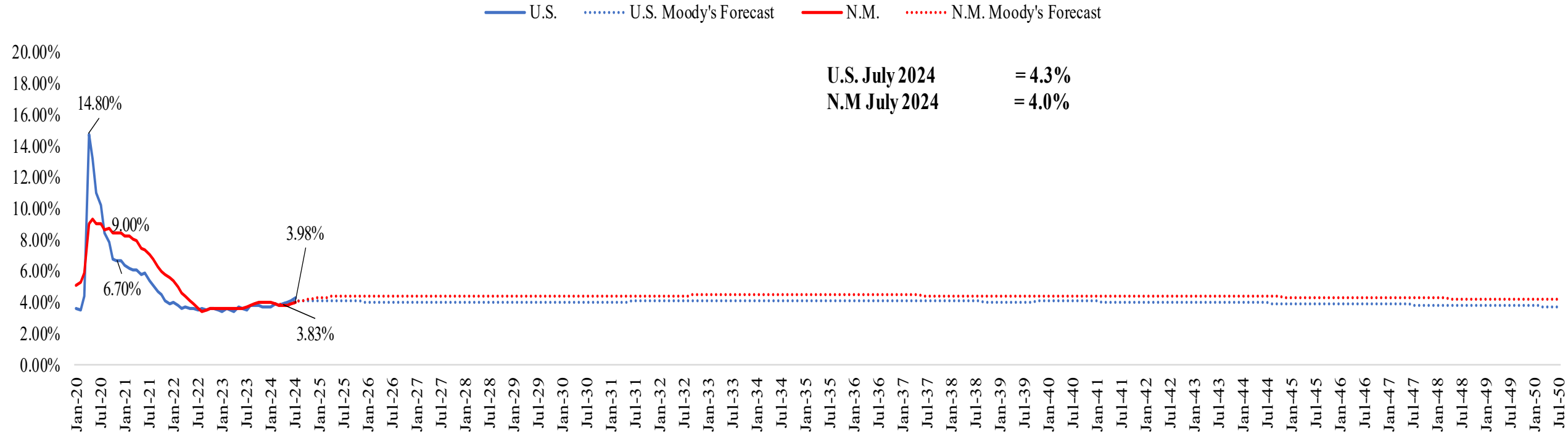
Source: Bureau of Labor Statistics

➤ Moody's forecasts that NM total employment will grow through CY 2036-2037 and then begin to moderate

U.S. and N.M. Unemployment

U.S. and N.M. Unemployment Rate (percent) : January 2020 to Present

Moody's Forecast: August 2024 to June 2050

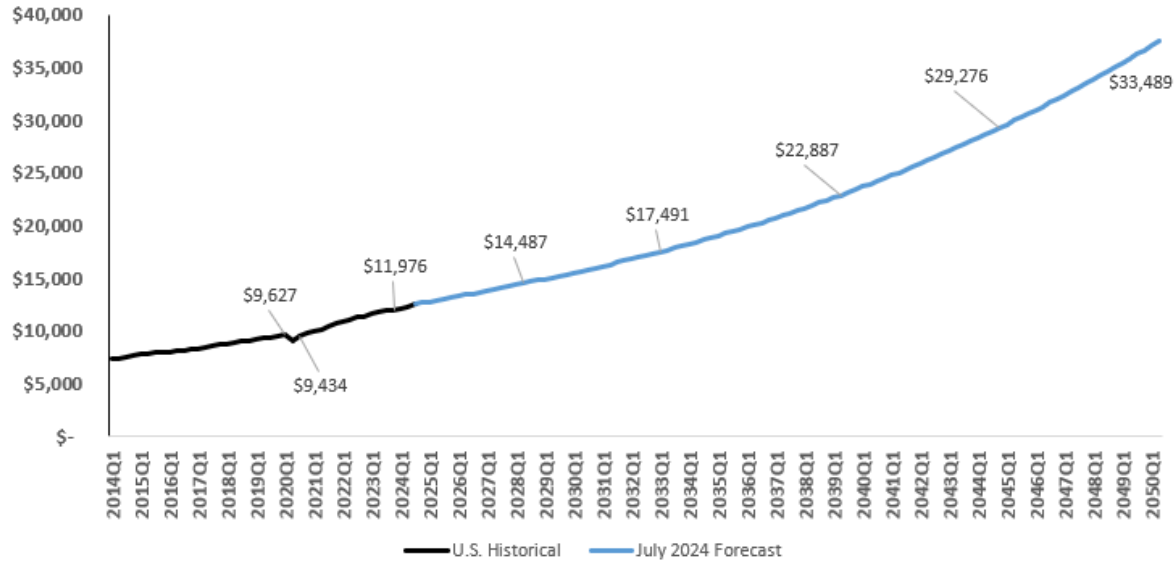


Source: bls.gov, seasonally adjusted

➤ National and state unemployment rates are estimated to hover around 4% through FY50

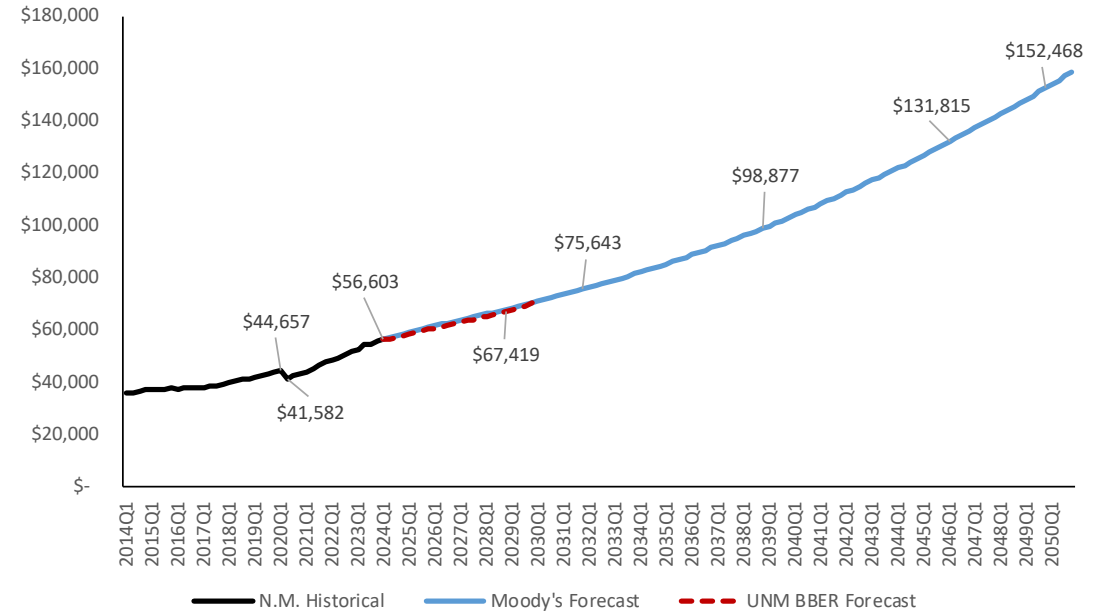
U.S. and N.M. Wages & Salaries

**U.S.A Total Nominal Wages and Salaries by Moody's Analytics and S&P Global (in billions)
CY 2014Q1 to 2050Q2**



Source: bls.gov

**N.M. Total Wages and Salaries by Moody's Analytics
CY 2014Q1 to 2050Q4**

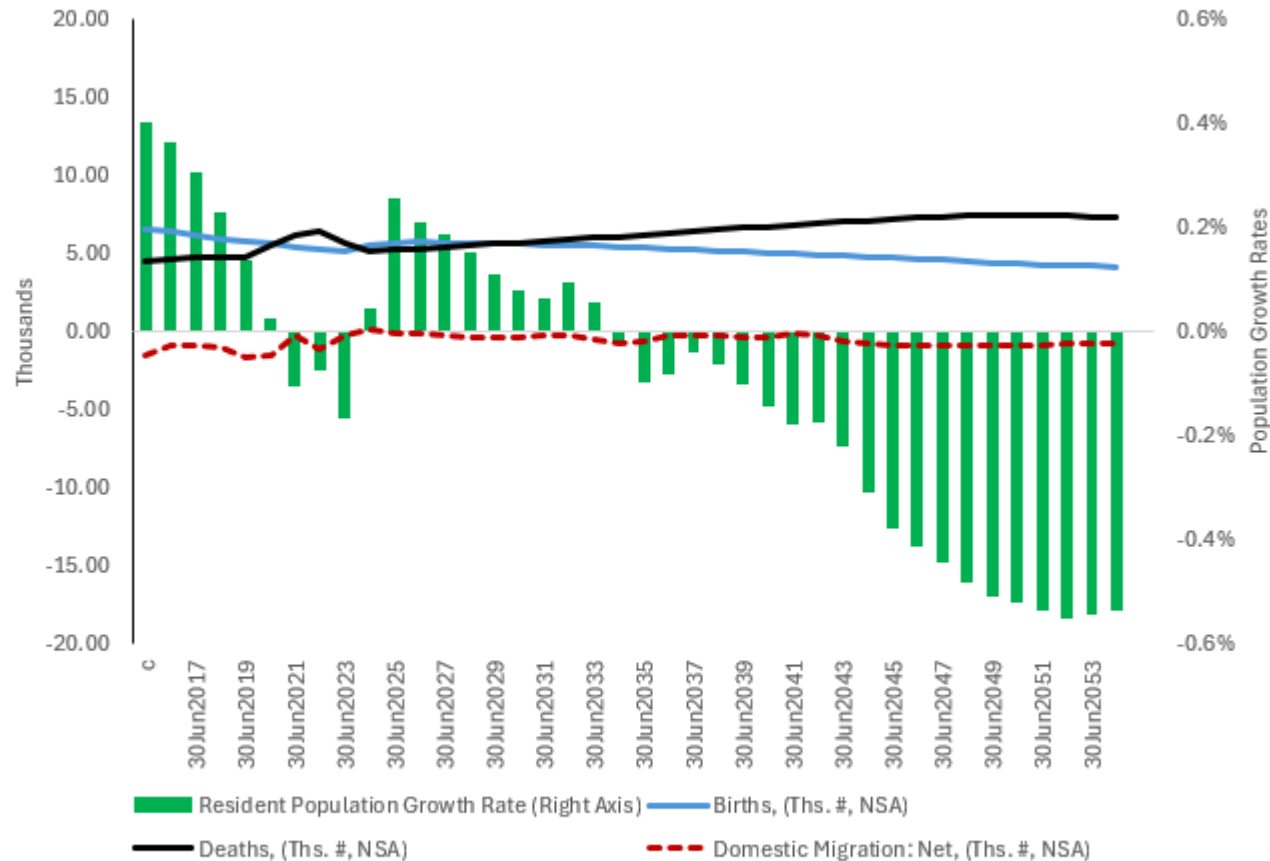


Source: bls.gov

- Demographics and pandemic impacts on the labor market contributed to recent increases in wages and salaries
- Higher persistent inflation is also driving wages and salaries higher
- Wages and salary growth are forecasted to average 1.85% for the nation and 0.96% for the state.

The Demographic Shift

Births, Deaths, and Domestic Net Migration (1000s, NSA*) vs N.M. Population Growth: FY2015 to FY2054
Moody's Estimate: FY2024 to FY2055



Moody's Analytics July 2024 Estimates

*NSA=not seasonally adjusted

- N.M. births will exceed deaths until the end of the decade
- From FY2030 onward, the number of deaths will exceed the number of births.
- Domestic net migration continues to decline through the forecast
- Overall, the state will experience little to flat population growth through FY2035.
- New Mexico's population is anticipated to decline through FY2055
- Population forecast underpins the employment forecast

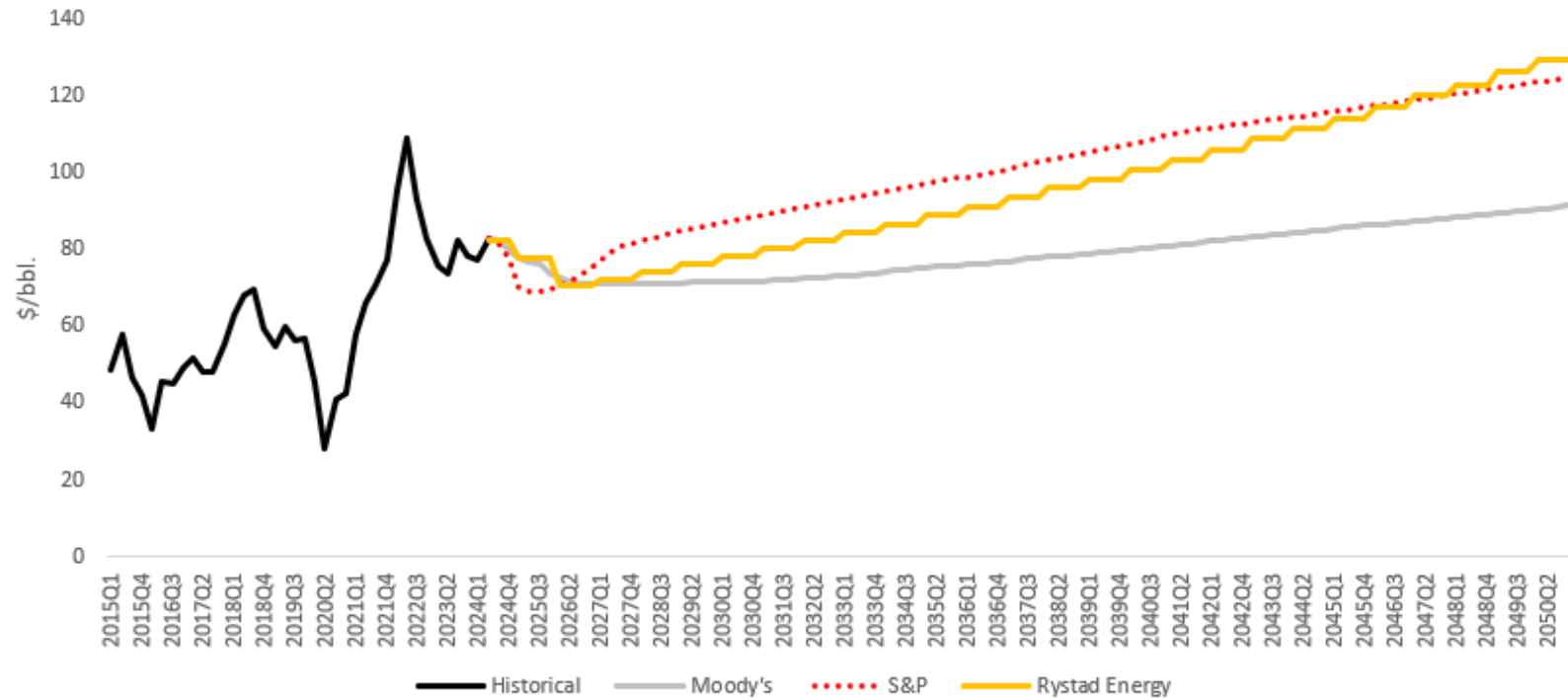
Oil & Natural Gas

U.S. Oil WTI Prices (Moody's, S&P, Rystad)

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

S&P WTI Price Forecast (2024Q3 to 2050Q2)

Rystad Energy WTI Price Forecast (2023Q2 to 2050Q2)

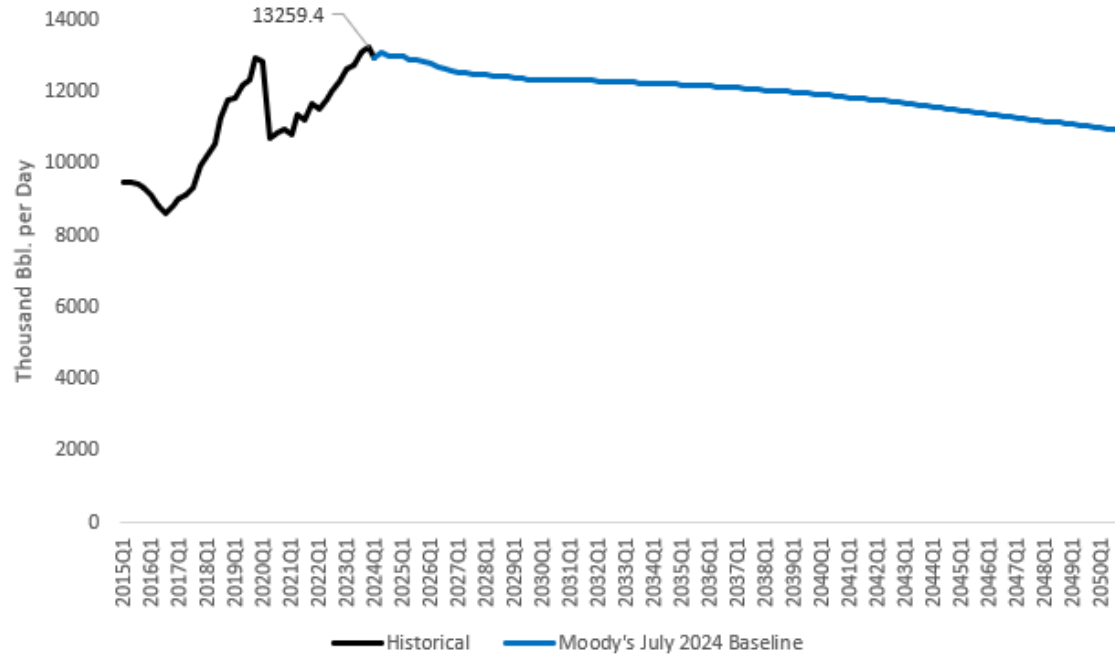


Source: Moody's Analytics, S&P, Rystad Energy

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

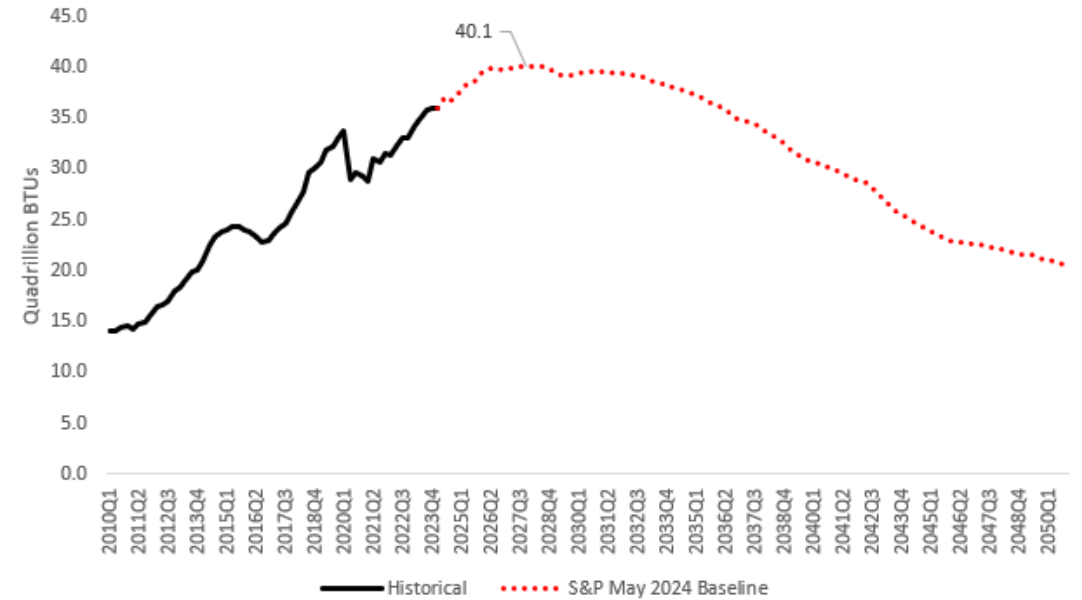
U.S. Oil Production (Moody's & S&P)

US Crude Oil Production Moody's Forecast (2024Q2 to 2050Q4)



Source: Moody's Analytics

US Crude Oil Production S&P Forecast (2024Q2 to 2050Q4)



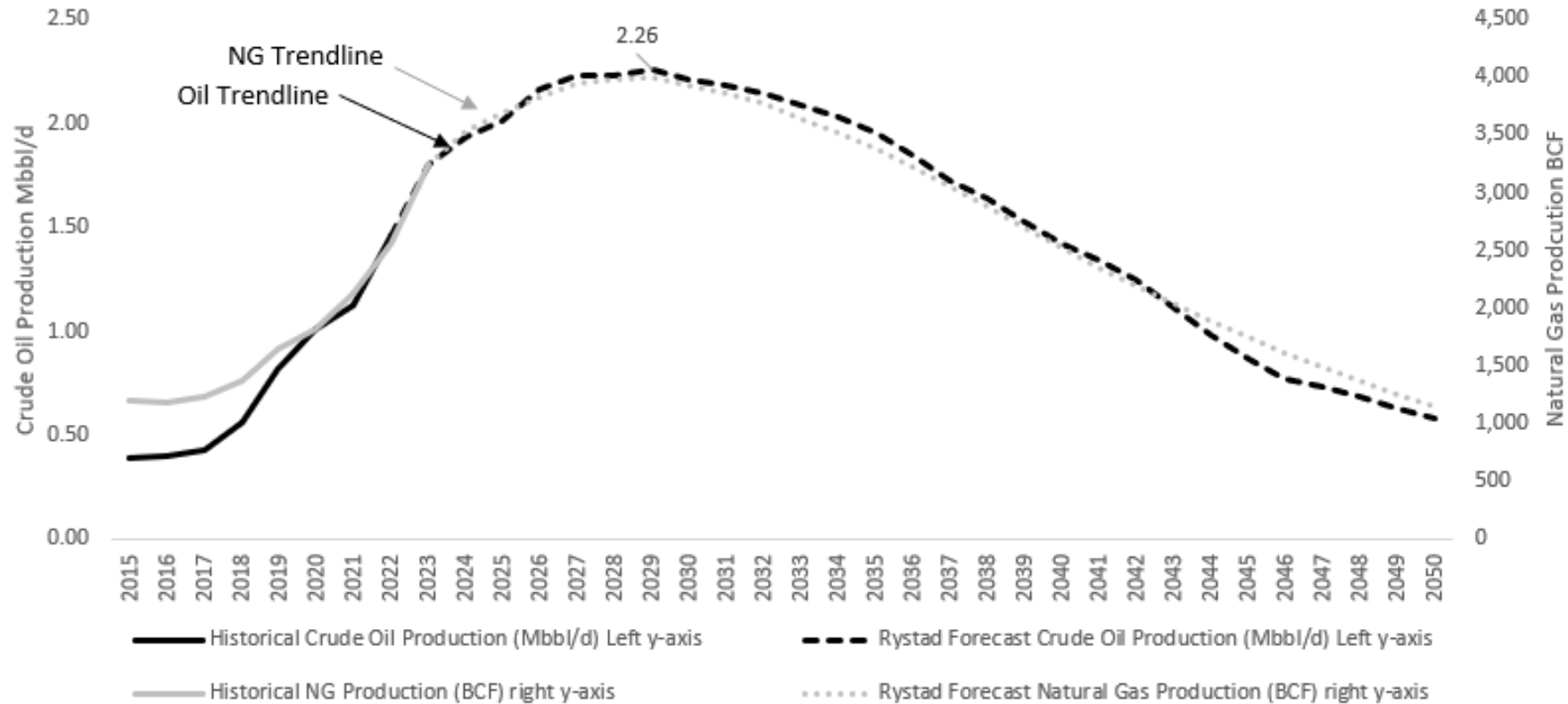
Source: S&P

➤ Both national forecasters see U.S. oil production peaking between 2024 and 2027

N.M. Oil Production Long-Term Forecast

NM Crude Oil Production Forecast (FY 2024 to 2050)

NM Natural Gas Forecast (FY 2024 to 2050)



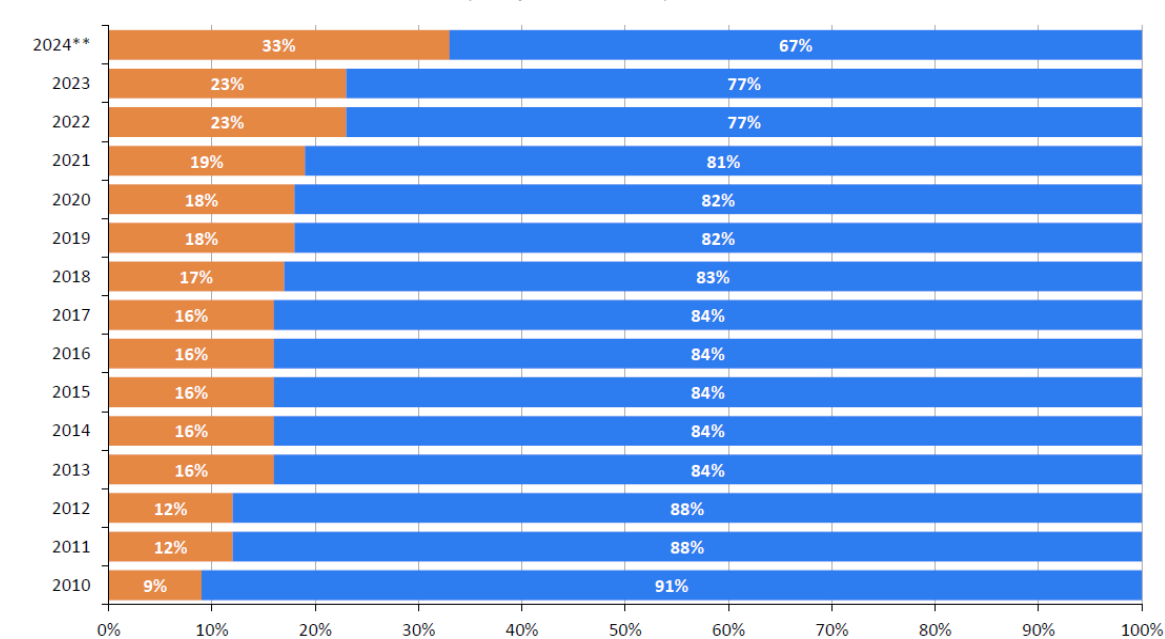
Source: CREG, Rystad Energy Ucube & Energy Transition Scenarios, Moody's Analytics, S&P

➤ Expected N.M. oil and natural gas production is in line with national expectations

Permian Basin Matures (Shale 4.0)

Supermajors set to control an unprecedented portion of US shale resources

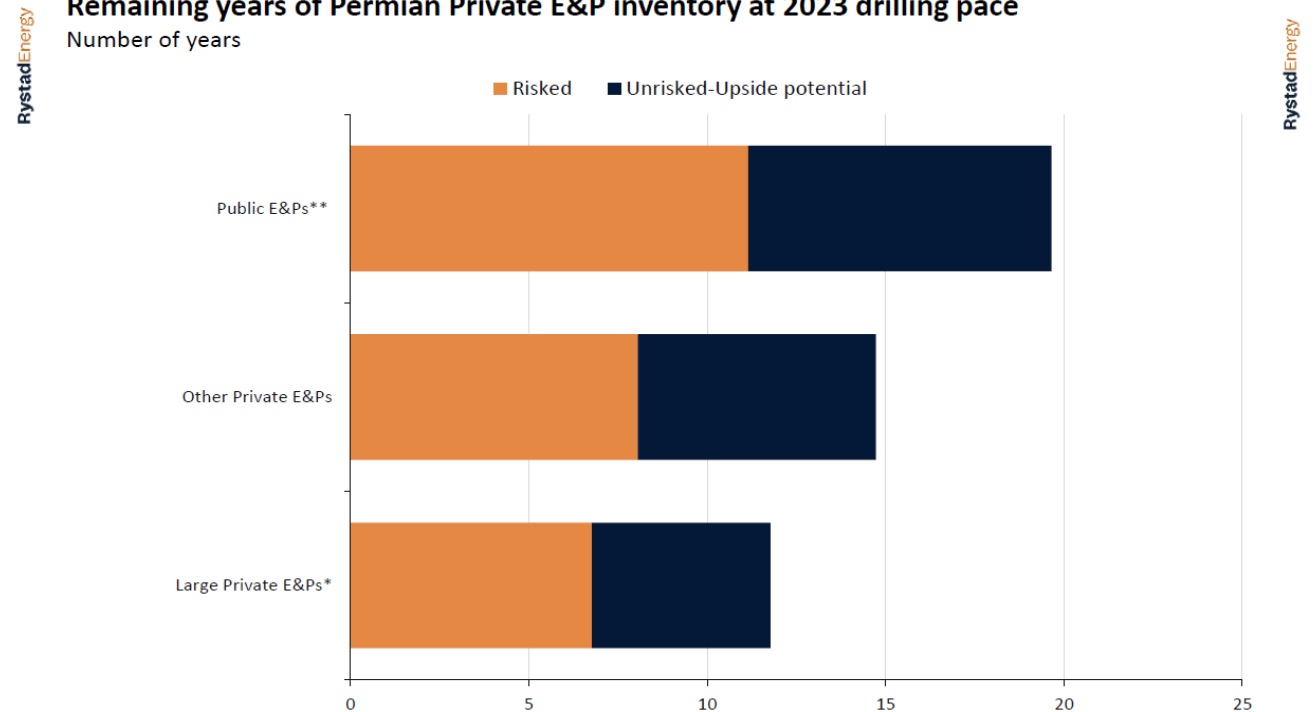
Share of remaining US tight oil resources by year*, controlled by company type
Percent



*Oil and condensate reserves, values as of 1 January
**Assumes Hess and Pioneer owned by Chevron and ExxonMobil, respectively, as of 1 January 2024
Source: Rystad Energy UCube May 2024

Remaining years of Permian Private E&P inventory at 2023 drilling pace

Number of years



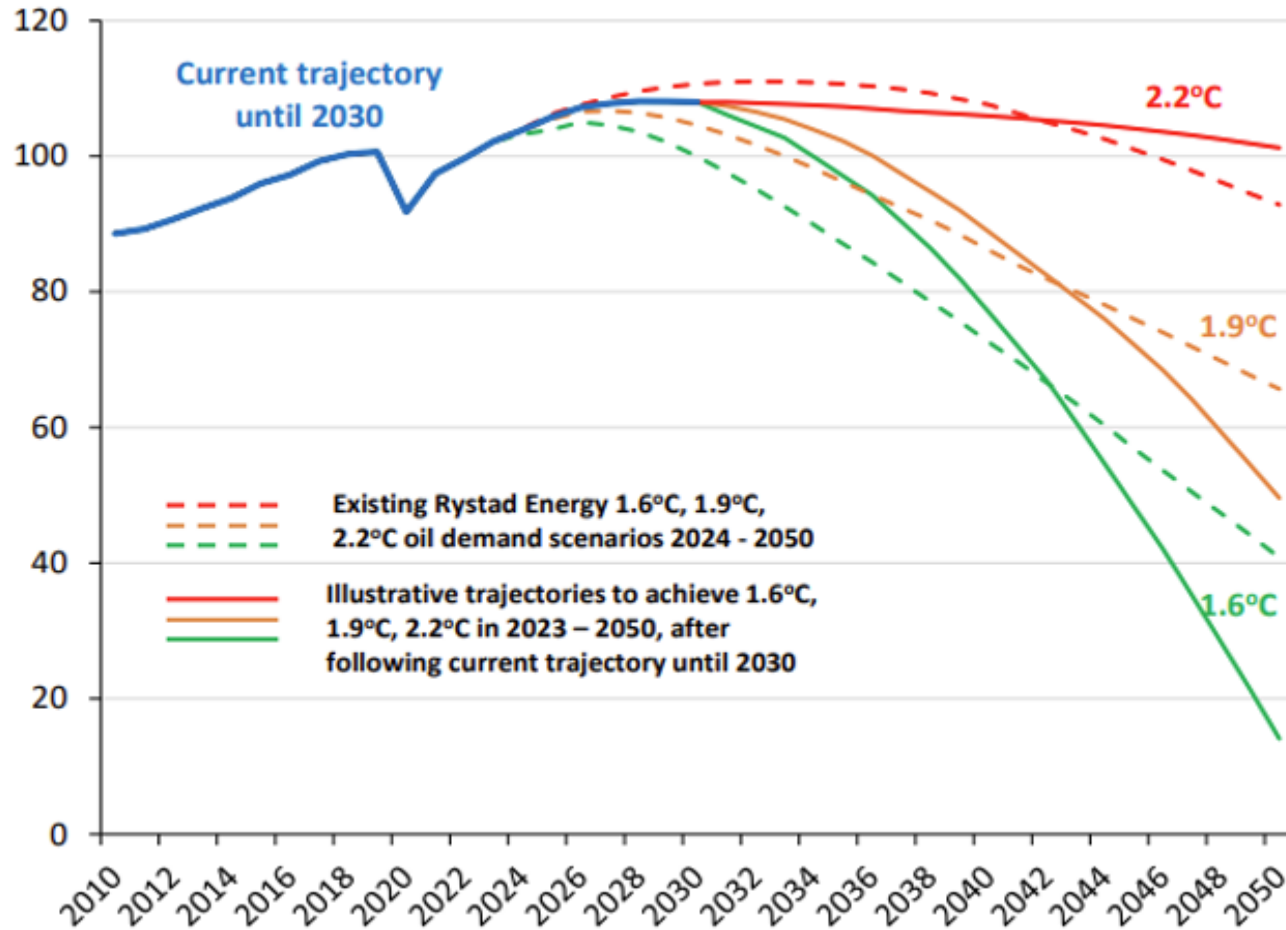
*Includes Endeavor, Mewbourne, CrownQuest, Birch, Kaiser-Francis, Surge Energy and Continental Resources
**Includes Supermajors
Source: Rystad Energy UCube, Rystad Energy research and analysis

- The Shale 4.0 era is a shift by management teams and investors towards building companies of scale for the long term
- Mergers and acquisitions by Supermajors
- With the strategic goal of managing resources and inventories to ensure that their assets can continue to deliver returns

Global Energy Transition

Oil demand current trajectory and scenarios (illustrative)

Million barrels per day



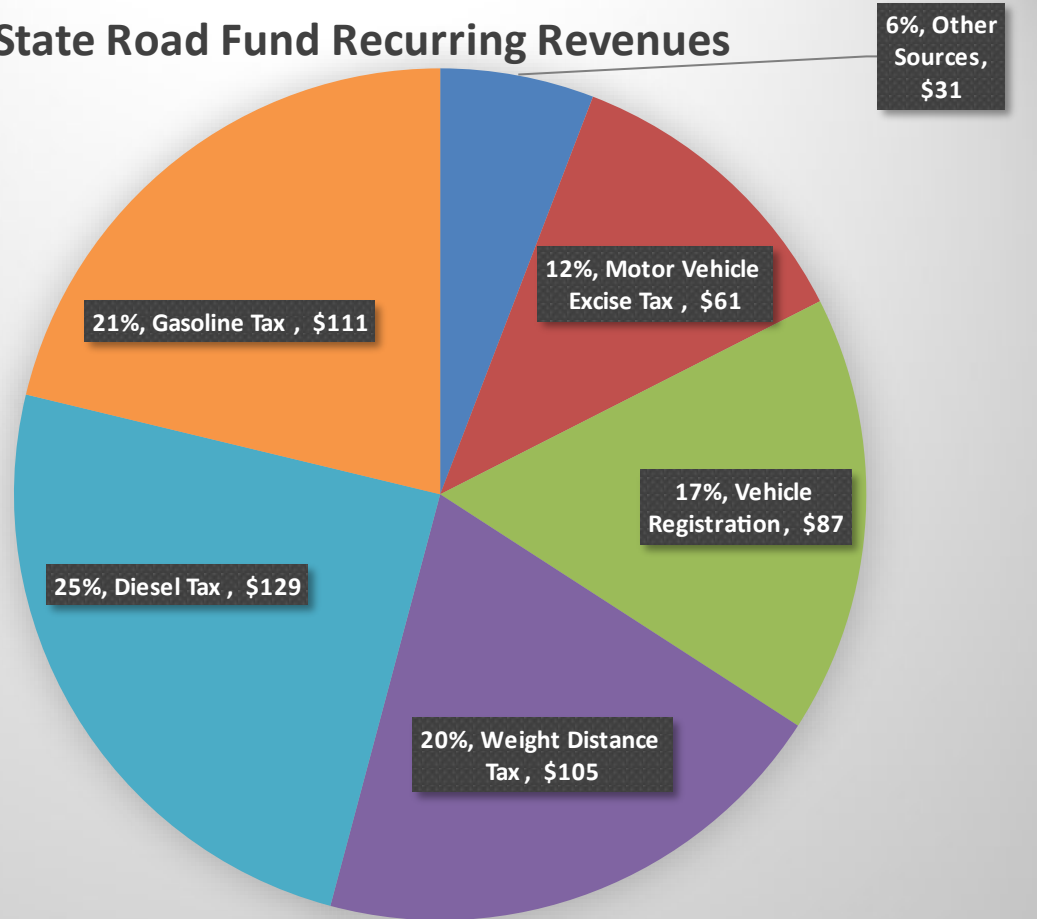
Source: Rystad Energy OilMacroCube

- Rystad Energy demand scenarios:
 - The +Sigma (2.2°C) scenario outlines a future shaped by a sluggish energy transition, with slow decarbonization.
 - The Mean (1.9°C) scenario is the mid-case, long-term oil demand trajectory, with a moderate pace of decarbonization
 - The –Sigma (1.6°C) scenario outlines an aggressive pace of transition, accounting for greater climate commitment from global heavy hitters such as the US, and for stronger corporate targets.
- Analysis illustrates the following factors will drive oil demand:
 - Global passenger vehicles
 - Global commercial transport (trucks)
 - Petrochemicals
 - Government initiatives
- Understanding the trajectory of oil demand lays the foundation for projecting long-term trends

N.M. State Road Fund

NM State Road Fund – Overview

State Road Fund Recurring Revenues

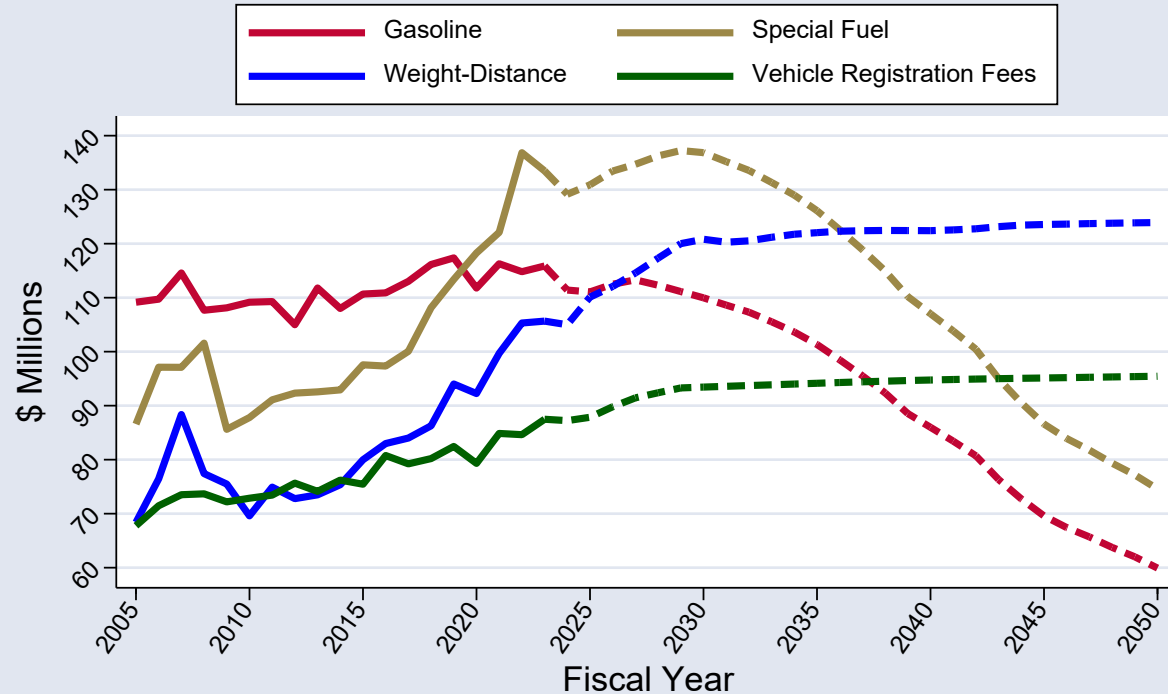


- State Road Fund received \$550 million in recurring revenues in FY23.
- NMDOT's July 2024 Road Fund Outlook forecasts the recurring revenues to shrink ~0.5% in FY24
 - Growth in Motor Vehicle Excise Tax and interest revenue were offset by declines in Gas, Special Fuel and Weight Distance Taxes
 - Since FY13, the State Road Fund recurring revenues have grown at an annual average rate of 3.5%.
- Biggest revenue sources are:
 - Gasoline Tax
 - Diesel Tax
 - Weight-Distance Tax
 - Vehicle Registration Fees

*Based on NMDOT's July 2024 Road Fund Outlook

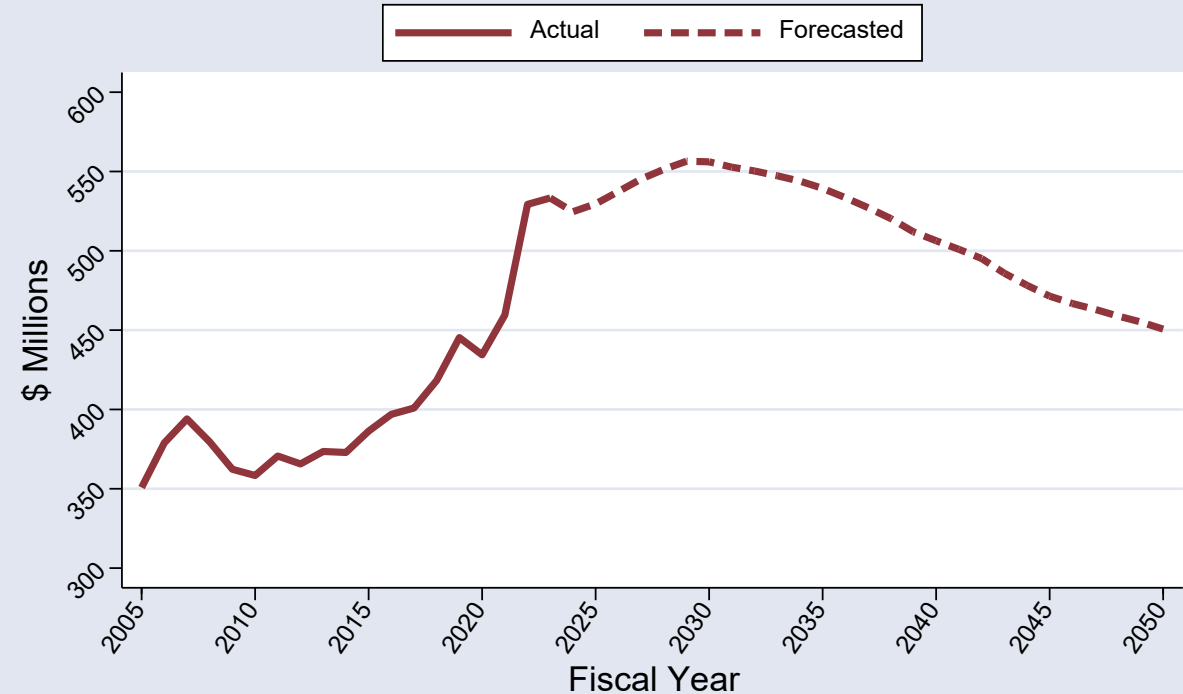
Long Term State Road Fund Outlook

Four Major State Road Fund Revenue Sources



Near term forecast based on NMDOT's July 2024 Road Fund Outlook.
Longer term forecast based on projections from S&P Global.

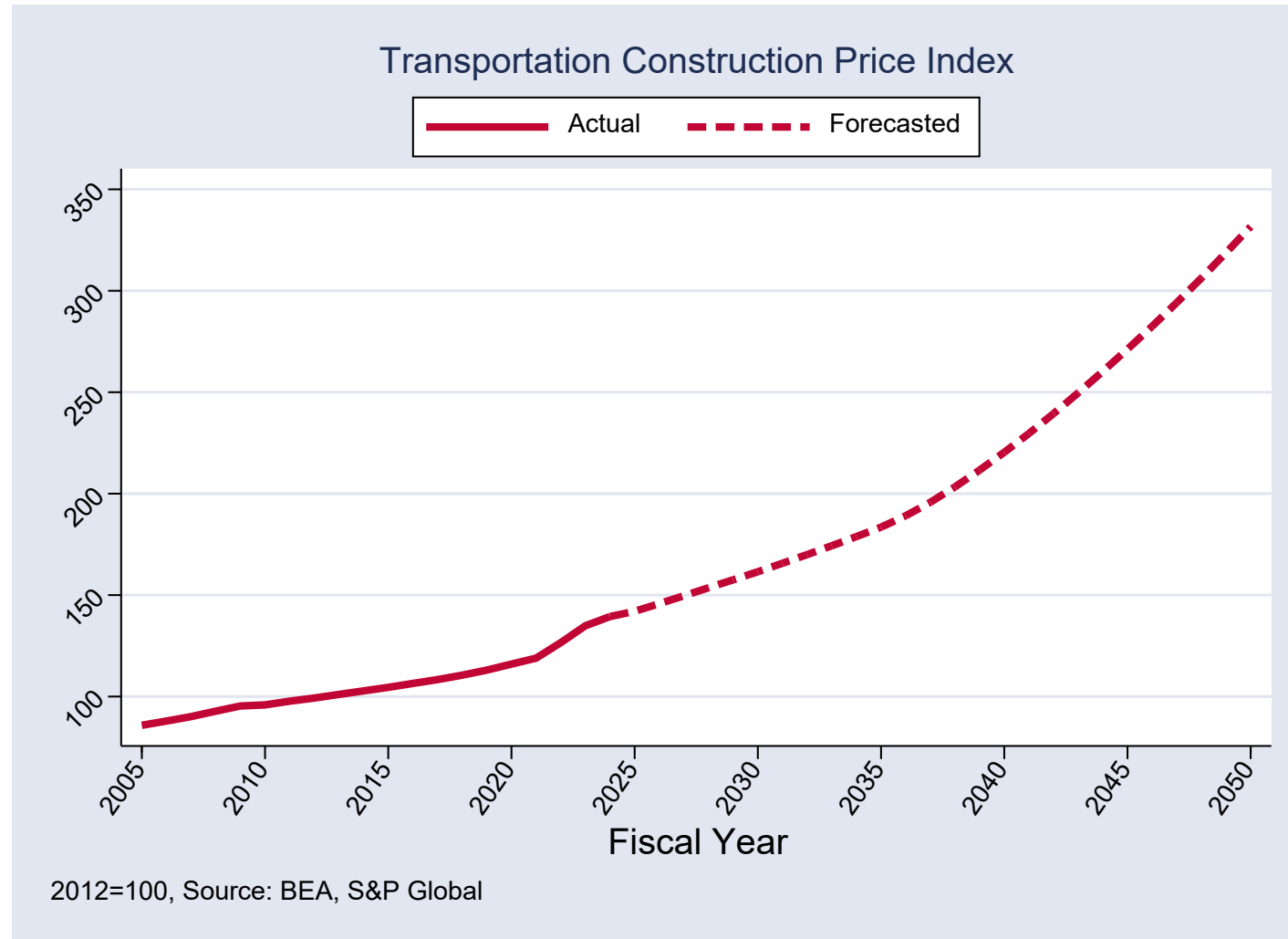
Total Road Fund Revenues



Near term forecast based on NMDOT's July 2024 Road Fund Outlook.
Longer term forecast based on projections from S&P Global.

- Over the next 5 years, State Road Fund revenues are expected to grow at an annual average rate of 1.2%, 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.

State Road Fund – Future Issues



- Road construction costs are expected to grow 138% between 2024 and 2050. 5.1% average annual growth rate.
- State Road Fund recurring revenue is expected to shrink 14% between 2023 and 2050. -0.5% average annual growth rate.

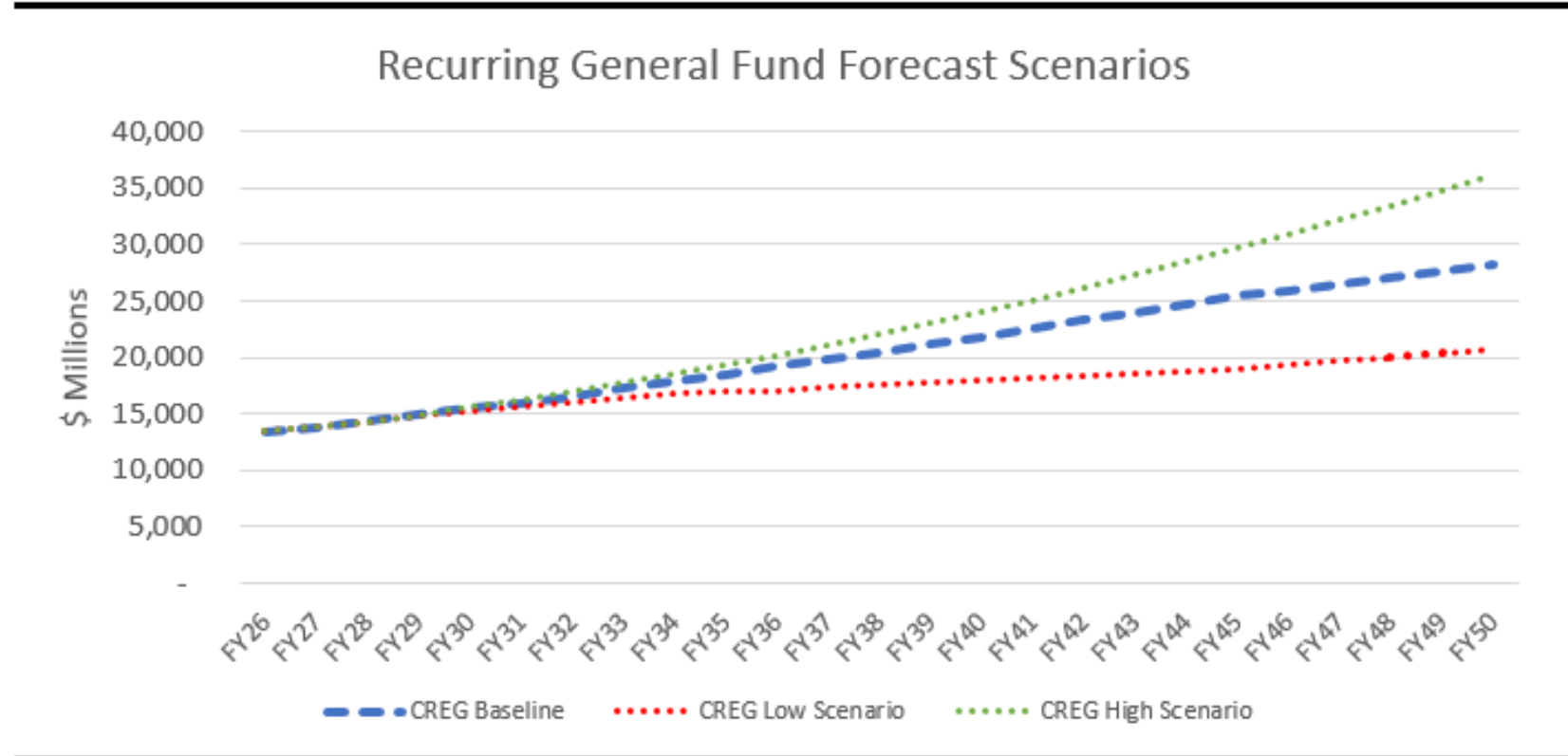
State Road Fund – Future Issues

- 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 for inflation since:
 - FY1996 – Gasoline Tax
 - FY2004 – Diesel Tax
- New Mexico's gasoline tax, at 17 cents per gallon
 - 4th lowest in the nation
 - US average 32.44 cents per gallon
- New Mexico's diesel tax, at 21 cents per gallon
 - 9th lowest in the nation
 - US average 34.74 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

General Fund Long-Term Forecast Scenarios

- Benchmarked to FY29 in the August 2024 forecast with legislative adjustments.
- Oil and Natural Gas forecast
 - Consensus analysis with State Investment Council and CREG
 - Assume Rystad Energy Oil and Natural Gas production turning point for New Mexico in baseline scenario is FY30
- 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 FY25 coupled with low oil and natural gas prices and production



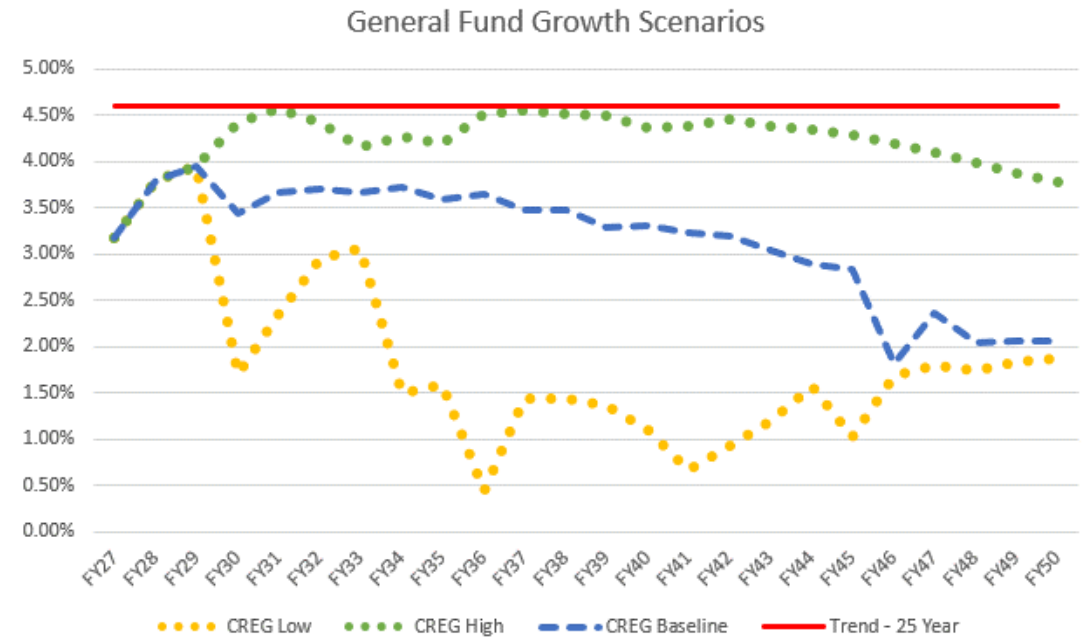
Source: S&P, Moody's Analytics, Rystad Energy, CREG Analysis 2024

Major Assumptions

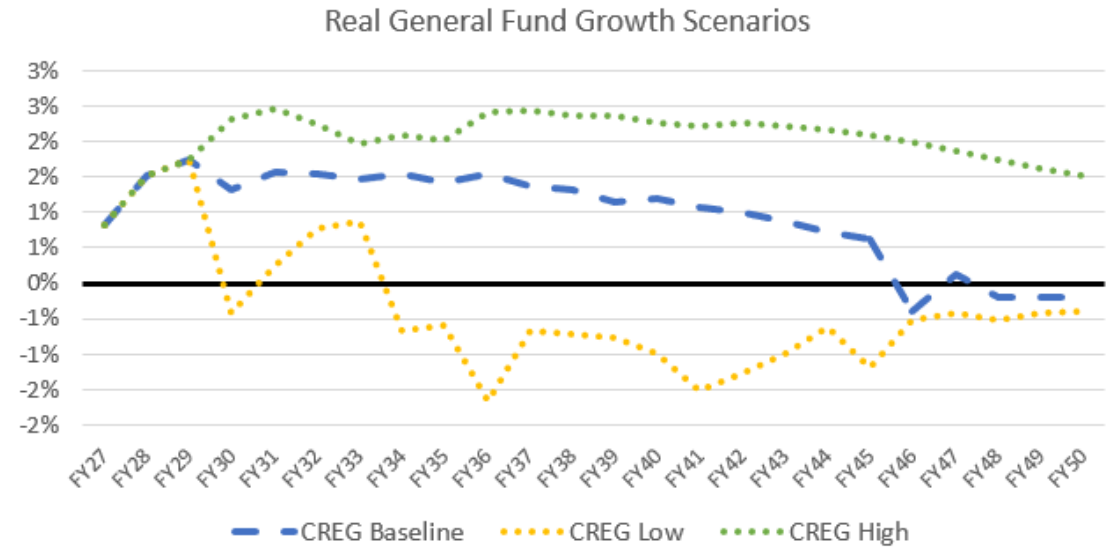
- Assume all state tax expenditures remain as per current law
- Assume no change to federal-level income tax
 - Tax Cuts & Jobs Act (TCJA) renewed as projected in national forecasters' baselines
- Assume no change in current tax rates or personal or corporate income brackets
- Assume no change in state population outlook or labor force participation

General Fund Scenarios Outlook

- Trend Analysis, extended to 25-year (1999-2023) Growth Rate for General Fund
 - The trend growth rate – centers the long-term outlook to current 25-year general fund growth
 - Above average General Fund growth rates in FY22 and FY23 have contributed to a higher trend rate of 4.6%
- Extending to the 25-year trend, only the high scenario reaches growth rates at or just below trend
- Past downturn in oil and natural gas production, growth rates in the baseline outlook drop significantly below trend
- In real terms, only the low scenario would see general fund contraction in near-term
- The models and estimates trends are useful for planning, budgeting, and policy purposes



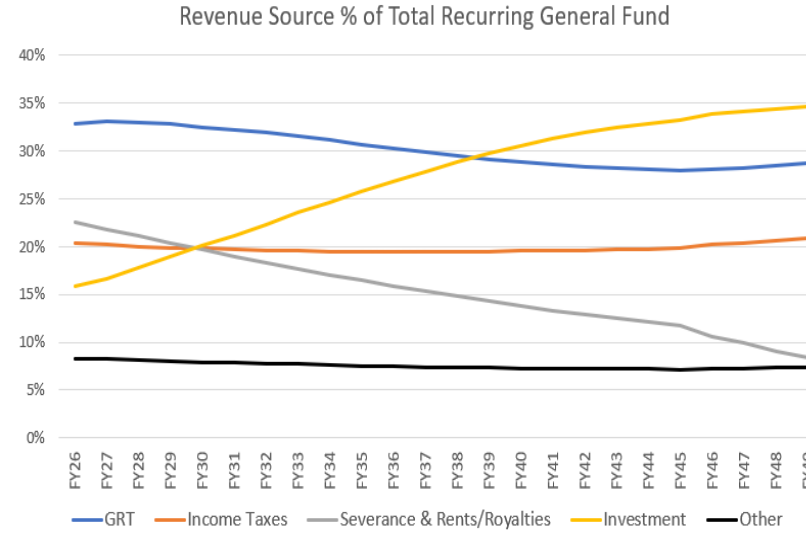
Source: S&P, Moody's Analytics, Rystad Energy, CREG Analysis 2024



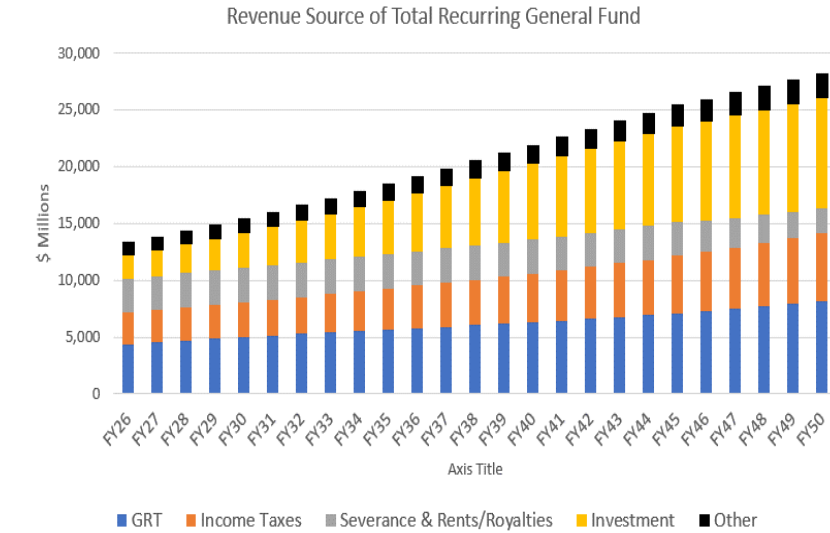
Source: S&P, CREG Analysis 2024

General Fund by Component

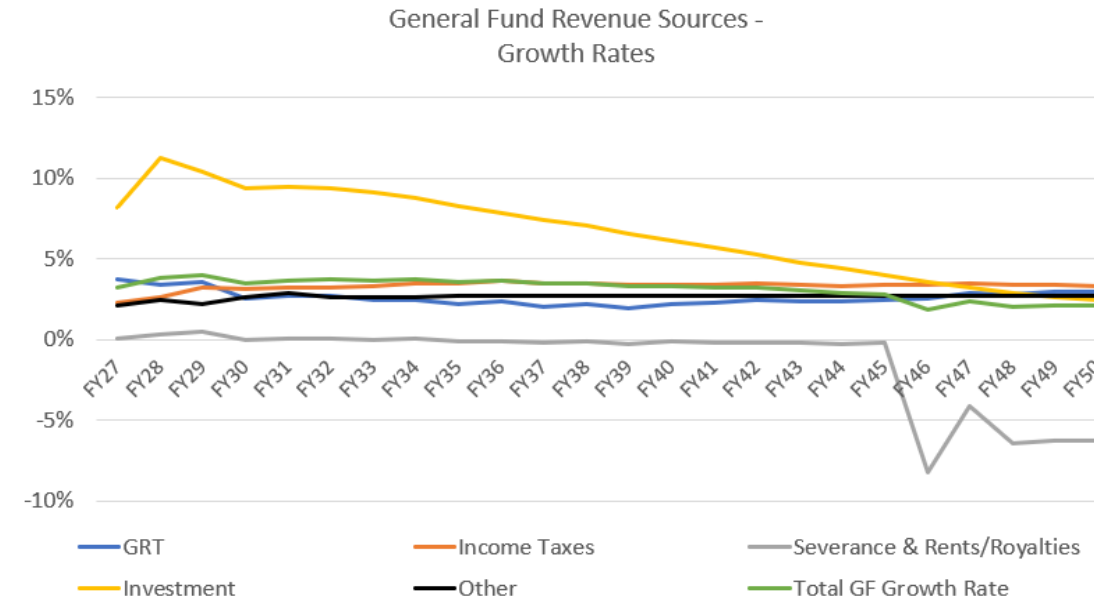
- Direct Severance Revenue as a percentage of General Fund declines from 23% to 8%.
- Recent investments in permanent funds lead to strong growth in investment earnings
- Investment earnings rise from 15% to 35% of General Fund to become largest revenue source by FY40.
 - Investment yields can be volatile, but general fund is protected by 5-year market value averaging
- Decades of investment into the permanent funds have provided general fund stability and the state is now benefiting from that revenue stability
- Investment revenue is not tax-based and its growth offsets New Mexicans' tax burden
- Investment earnings are expected to grow at a decreasing rate due to the expected decline in the oil and gas sector but still at a positive rate
 - Averaging a growth rate of 8% in the 2030s
 - Averaging a growth rate of 4% in the 2040s



Source: S&P, Moody's Analytics, Rystad Energy, CREG Analysis 2024



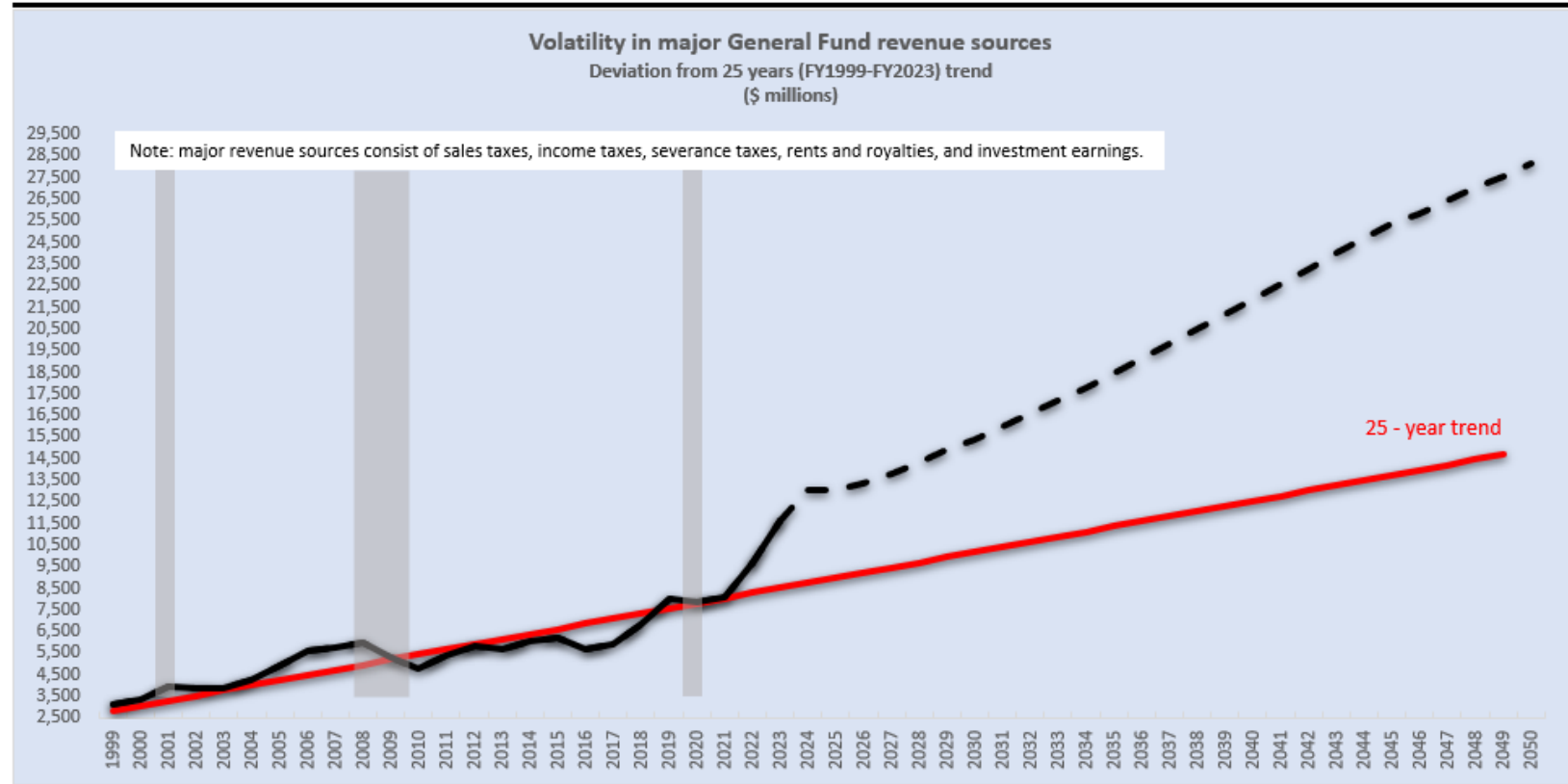
Source: S&P, Moody's Analytics, Rystad Energy, CREG Analysis 2024



Source: S&P, Moody's Analytics, Rystad Energy, CREG Analysis 2024

General Fund Scenarios Conclusion

- Forecast revenue is well above the 25-year trend level but
 - Growth rate below trend rate
 - Expect fluctuations as there will be recessions and shocks
- Risks and Sustainability of Long-Term Forecast
 - Recession Cycle
 - State Legislation
 - Federal Legislation
 - Federal Fiscal Policy
 - Federal Funding: National Labs, Military Installations
 - Environmental Disaster Economic Impacts
 - Future Pandemic
 - Technology Innovations

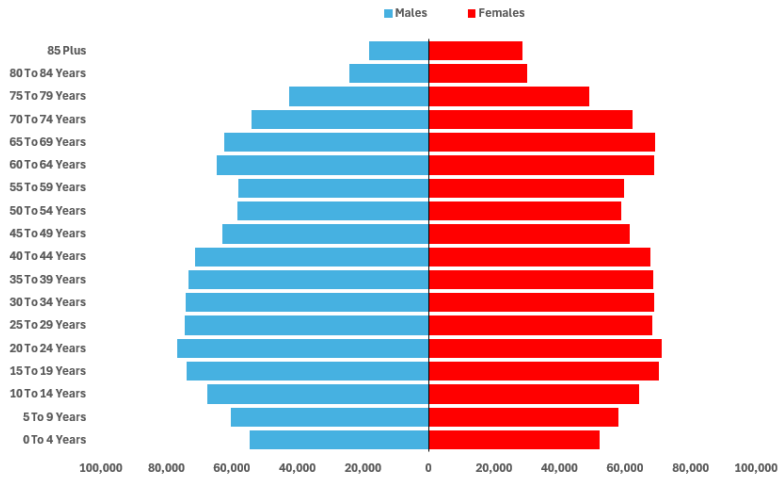


Source: CREG Analysis 2024. Gray shaded areas indicate U.S. Recessions

Appendix

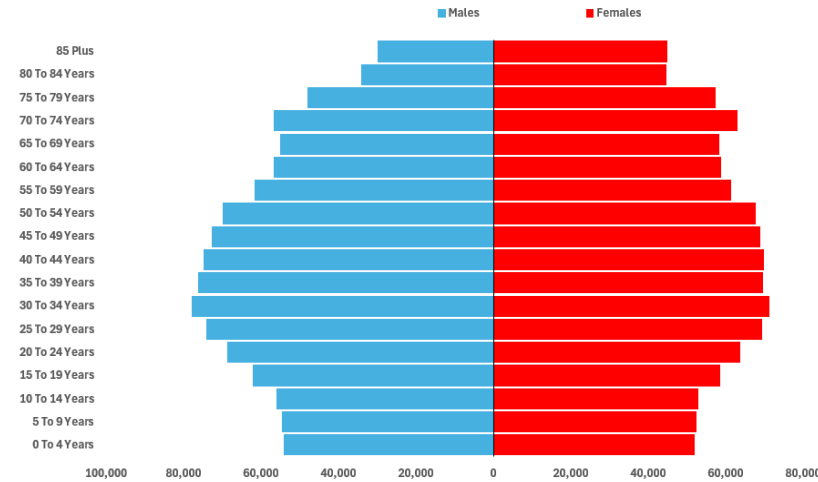
New Mexico's Population by Age and Sex: 2025 to 2050

New Mexico's Population Pyramid by Age and Sex: 2025



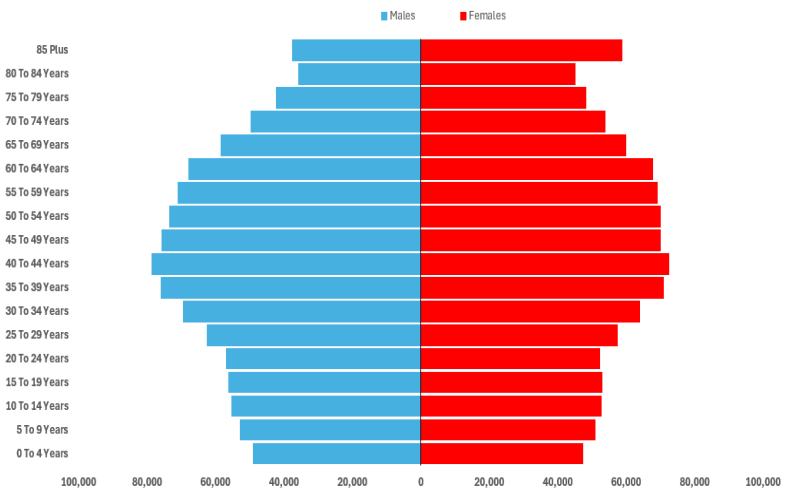
Source: University of New Mexico, Geospatial and Population Studies (2022)

New Mexico's Population Pyramid by Age and Sex: 2035



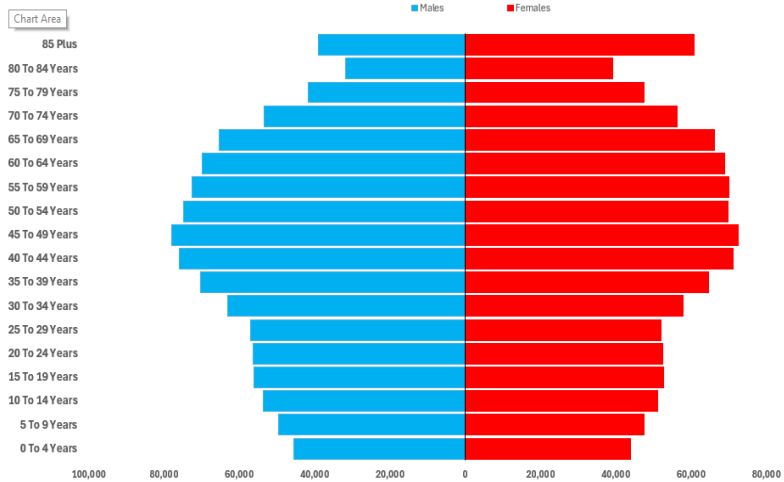
Source: University of New Mexico, Geospatial and Population Studies (2022)

New Mexico's Population Pyramid by Age and Sex: 2045



Source: University of New Mexico, Geospatial and Population Studies (2022)

New Mexico's Population Pyramid by Age and Sex: 2050

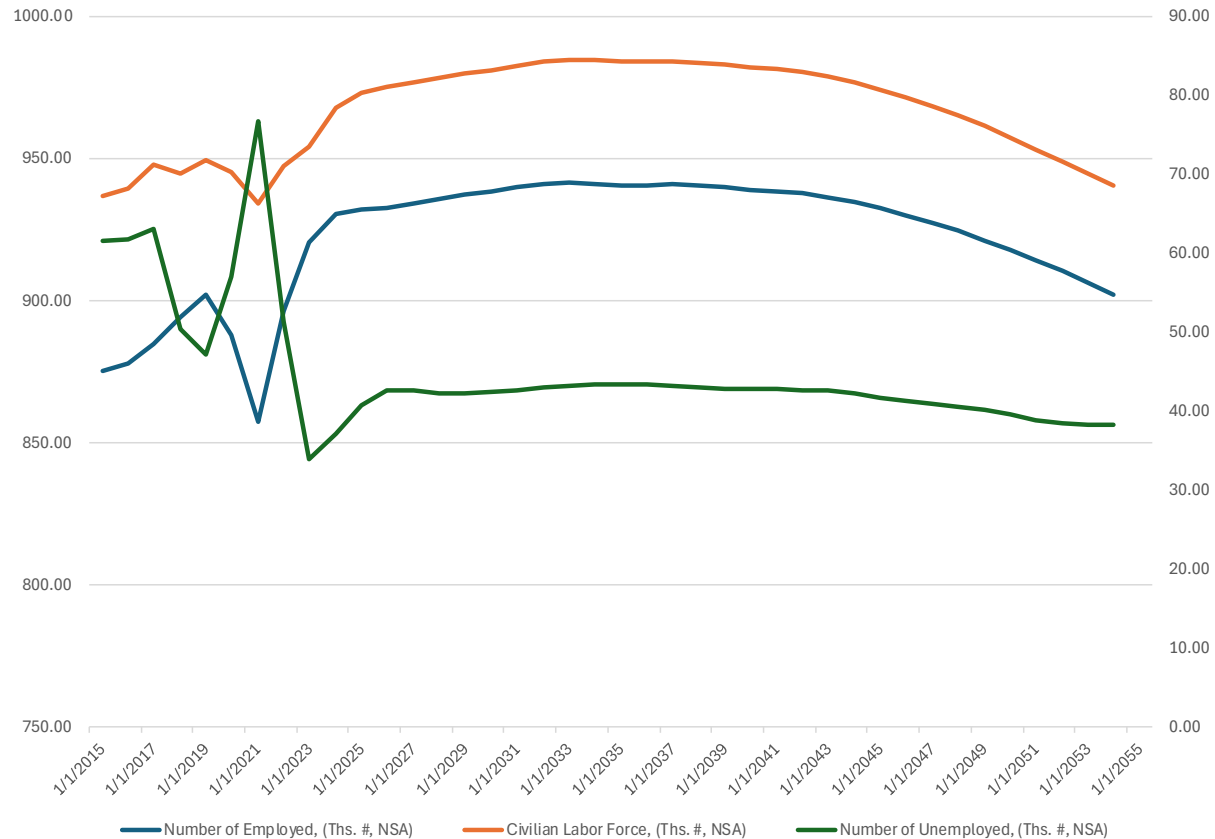


Source: University of New Mexico, Geospatial and Population Studies (2022)

- UNM's Geospatial and Population Studies estimated the state's population by age and sex
- The population is expected to age and birth rates moderate
- The shifts in the population provide insight into future service needs, labor force size, and tax revenue

New Mexico's Population by Age and Sex: 2025 to 2050

New Mexico's Employed, Unemployed, and Civilian Labor Force: FY2015 to FY2055
Moody's Estimates: FY2024 to FY2055



Moody's Analytics July 2024 Estimates

- The state's labor force is the result of past demographic shifts
- The size of our labor force is partly influenced by the birth rates, death rates, and past migration
- The number of employed is projected to plateau in the next ten years
- Employment will start to decline in FY2027
- A similar trend is evident in the civilian labor force and the number of unemployed