Long-Term Outlook

Presentation to:
Legislative Finance Committee
July 20th, 2022

Office of the Governor
MICHELLE LUJAN GRISHAM

NEW MEXICO
LEGISLATIVE
FINANCE
COMMITTEE

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 Robert McGrail, Senior Economist Efrain Ibarra, Senior Economist
New Mexico Department of Transportation Mallika Pung, Chief Economist Michael Morrison, Senior Economist	**Legislative Finance Committee** Ismael Torres, Chief Economist Jennifer Faubion, Economist

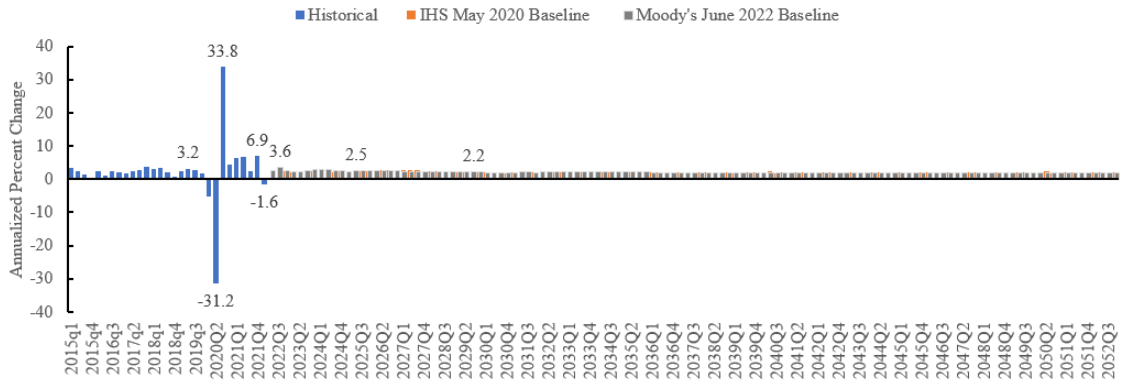
Introduction/Forecasts

- 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

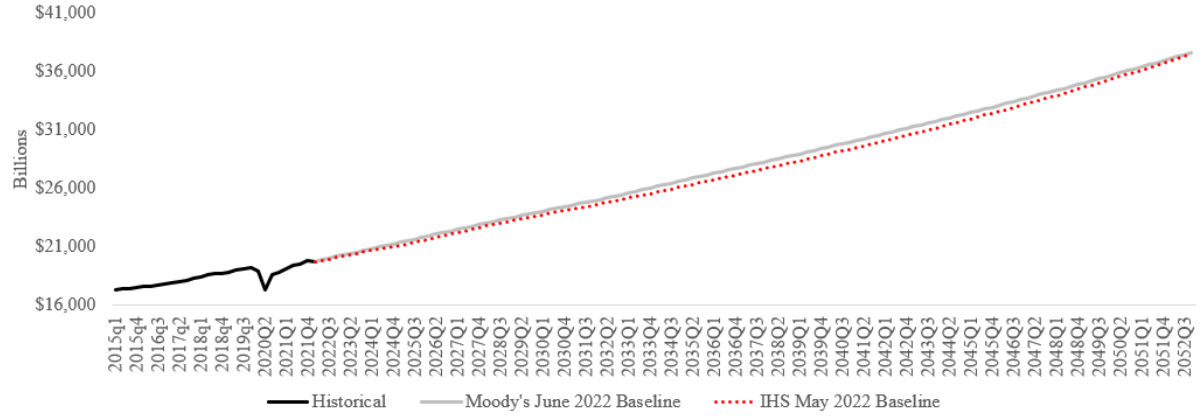
U.S. RGDP

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

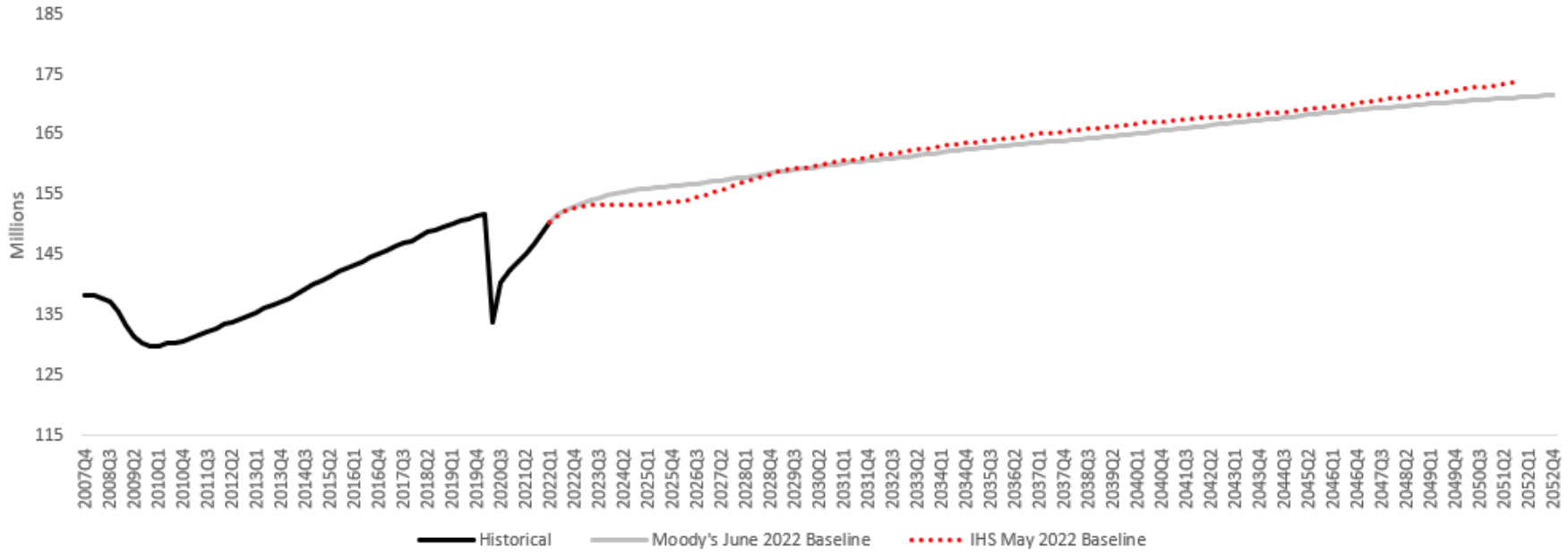


Source: GDP in billions of chained 2012 dollars, retrieved from bea.gov. Moody's Analytics, IHS Markit

- 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

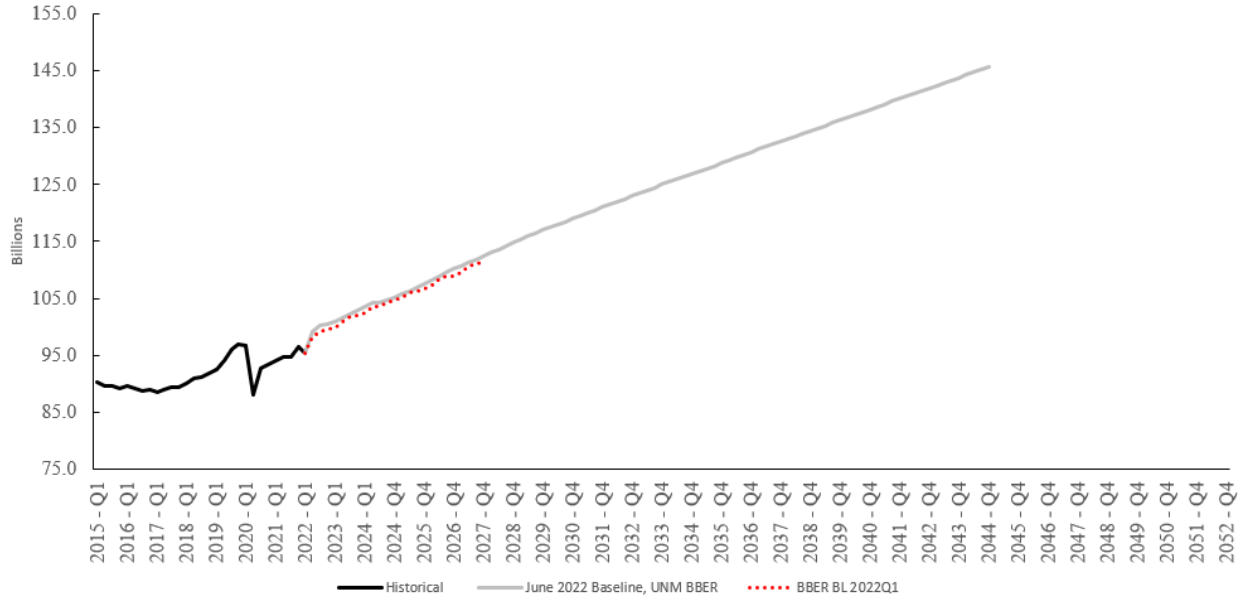
- Both national forecaster's see national employment recovery from pandemic
  - Country at full employment with an unemployment rate at 3.6%
- Competitive and tight labor market

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

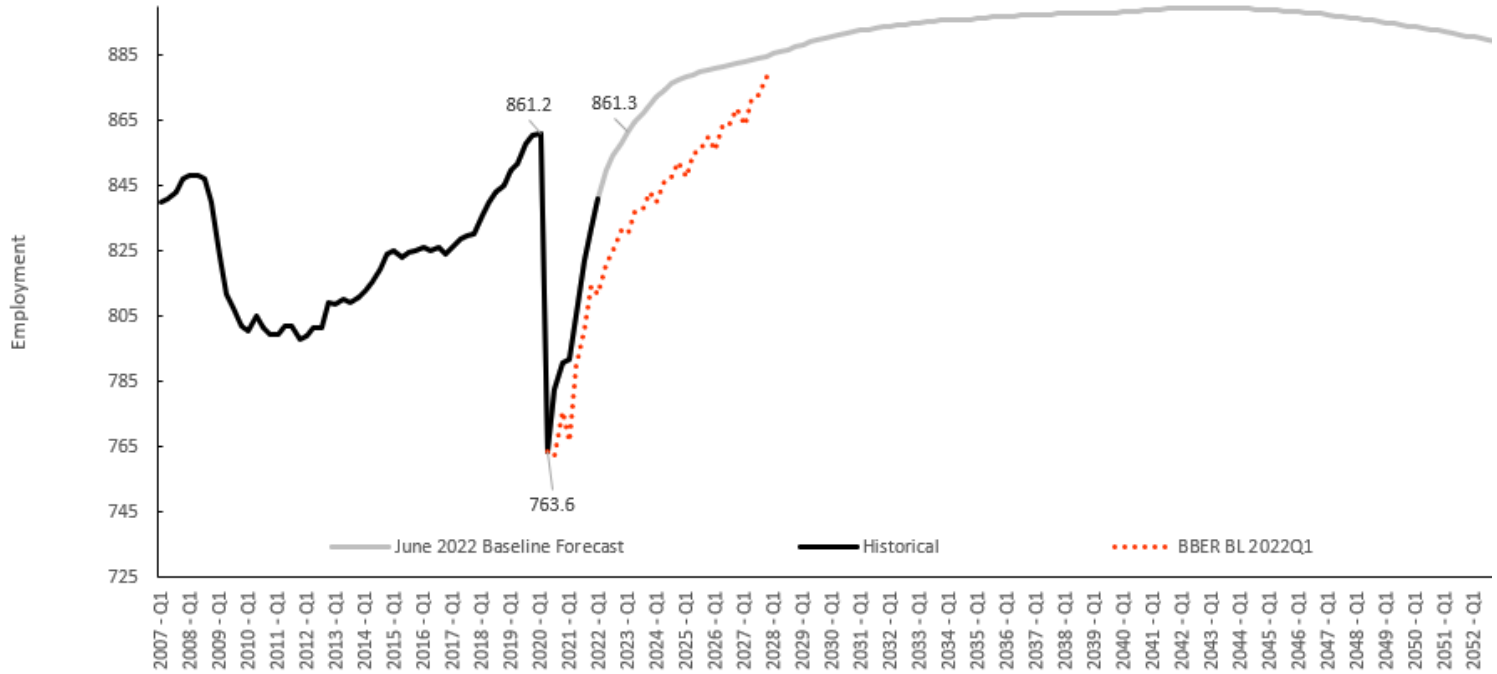


Source: Moody's Analytics, UNM BBER

- 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

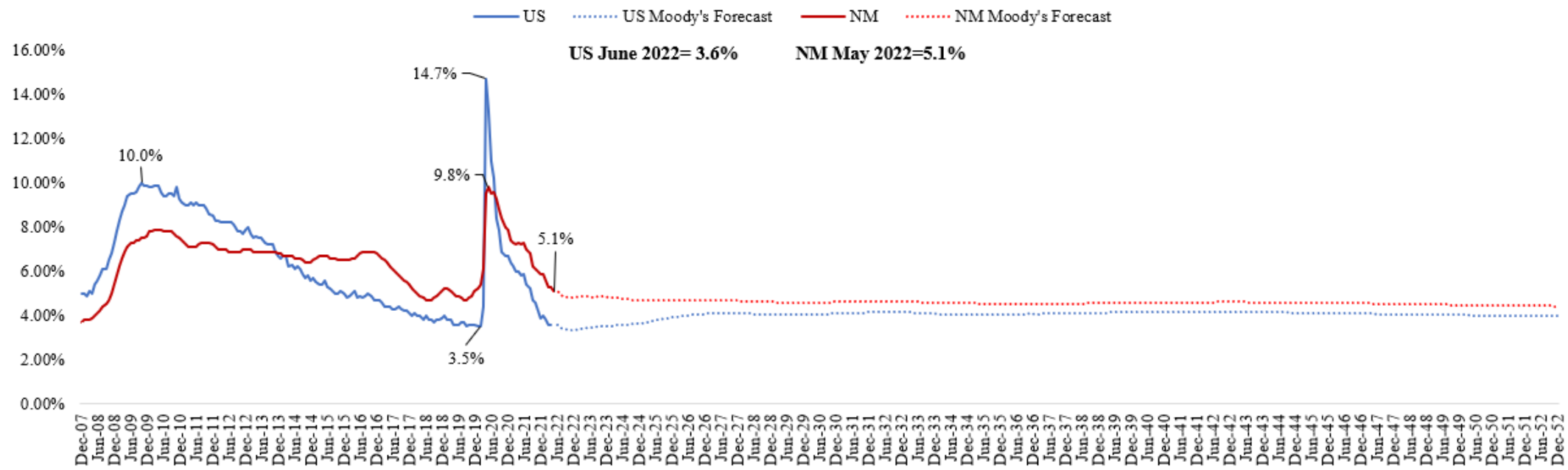


Source: Moody's Analytics, UNM BBER

- 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

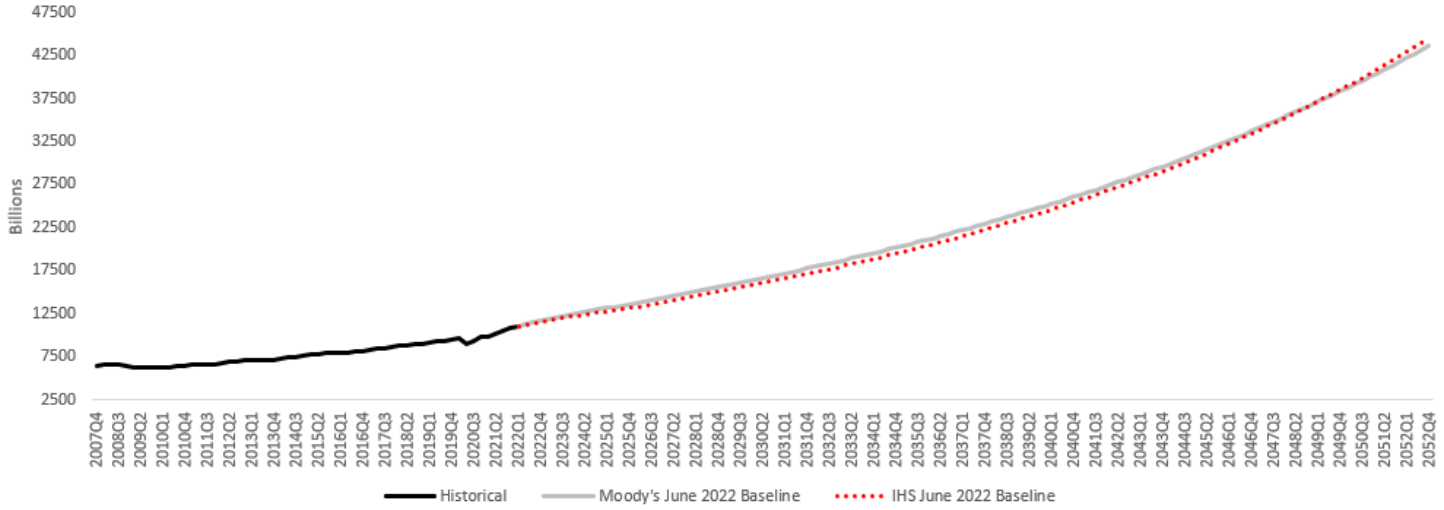


Source: bls.gov, seasonally adjusted

- 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

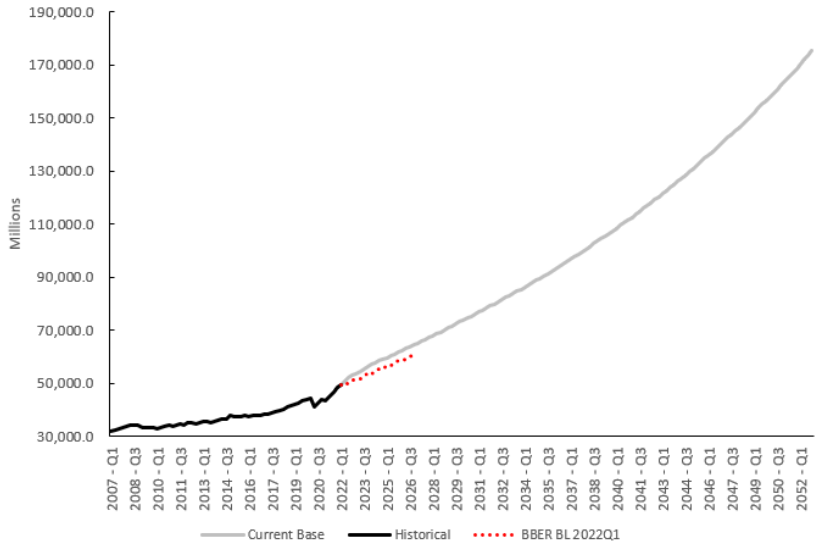
U.S. and N.M. Wages & Salaries

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



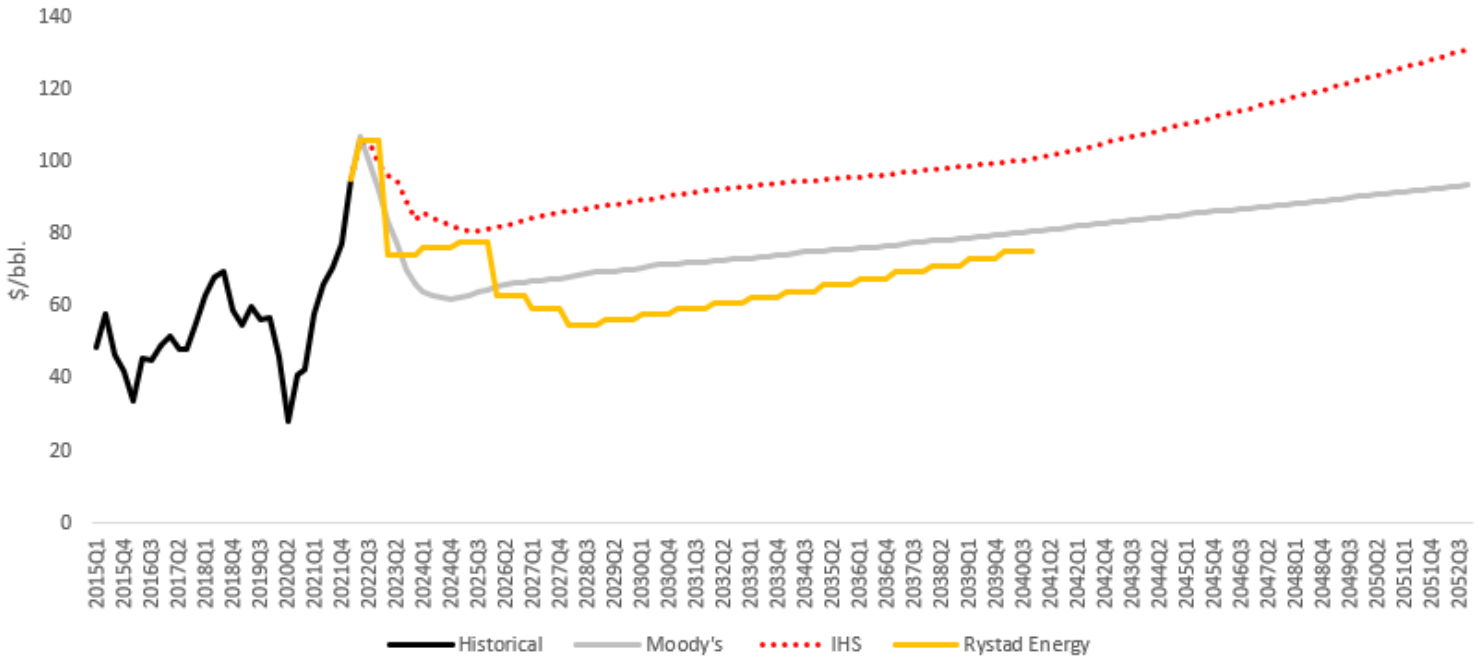
Source: Moody's Analytics Forecasted Values in the June 2022 baseline scenario.Updated on July 2022

- 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

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)

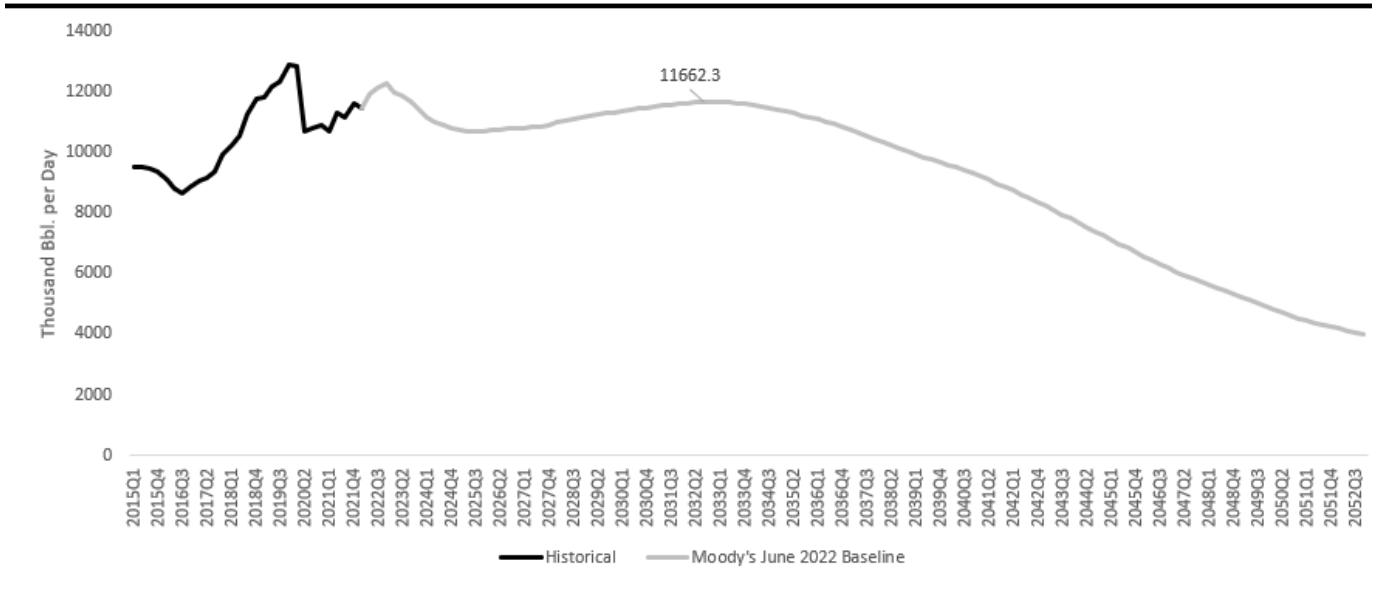


Source: Moody's Analytics, IHS Markit, Rystad Energy

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

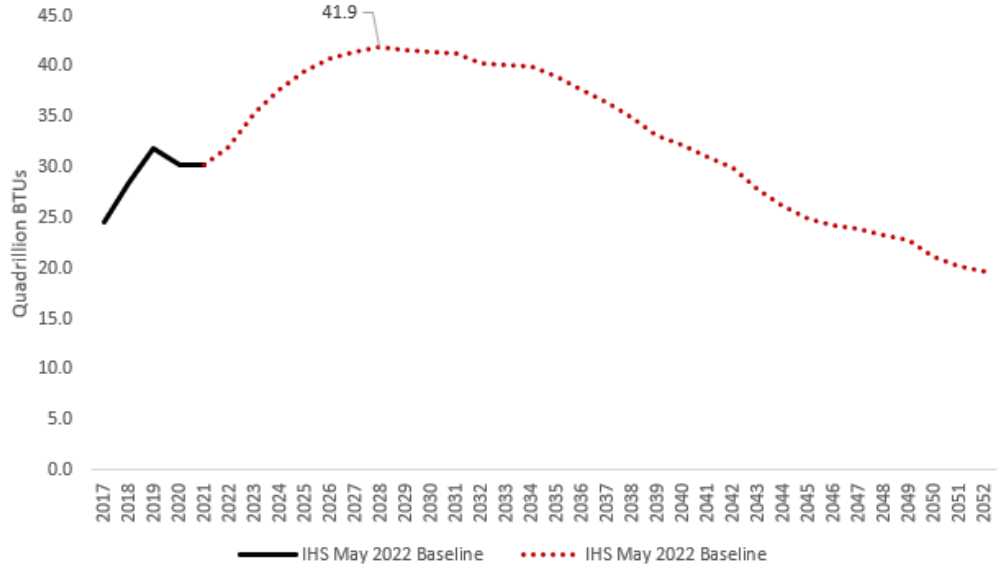
U.S. Oil Production (Moody's & IHS)

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



Source: Moody's Analytics

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

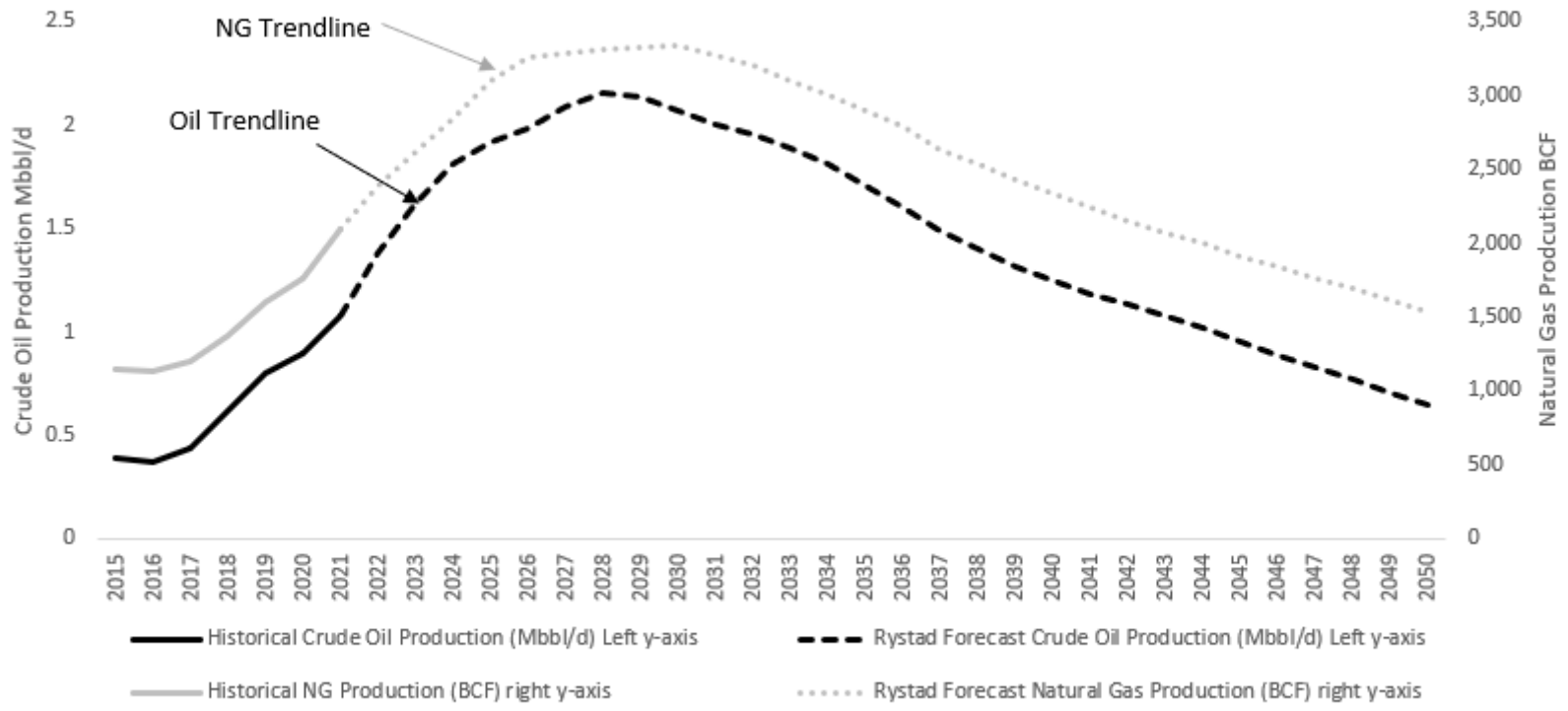


Source: IHS Markit

- 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)

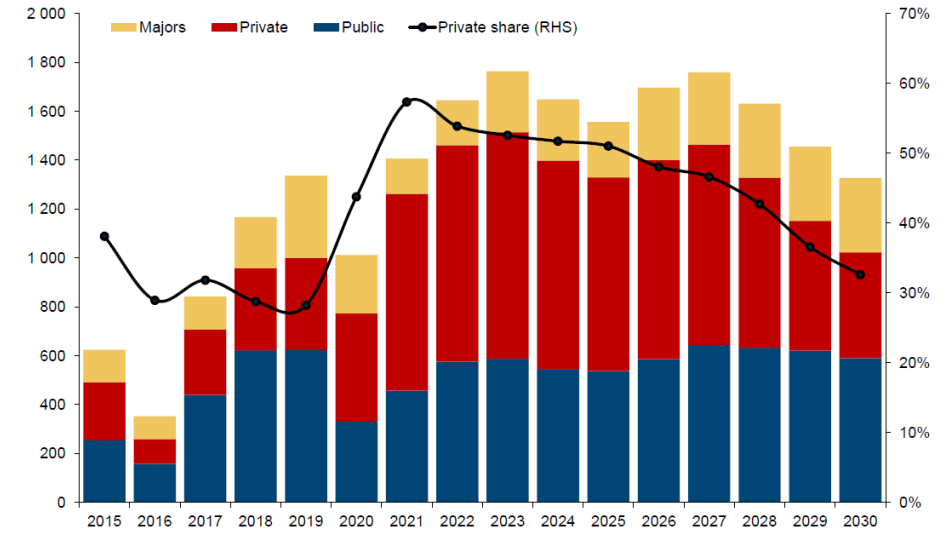


Source: Rystad Energy

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

N.M. Oil Production Detail

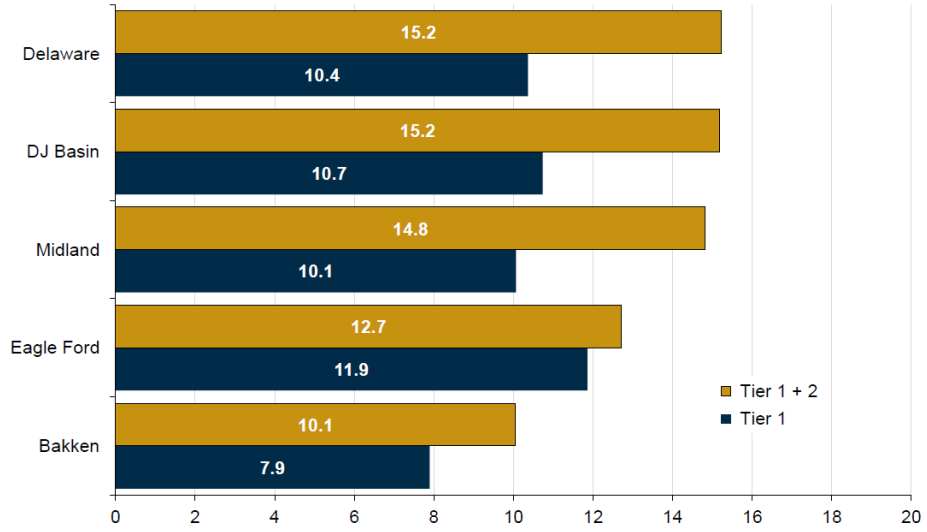
Spudded wells in Permian Delaware New Mexico by company type
Number of wells



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

- 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

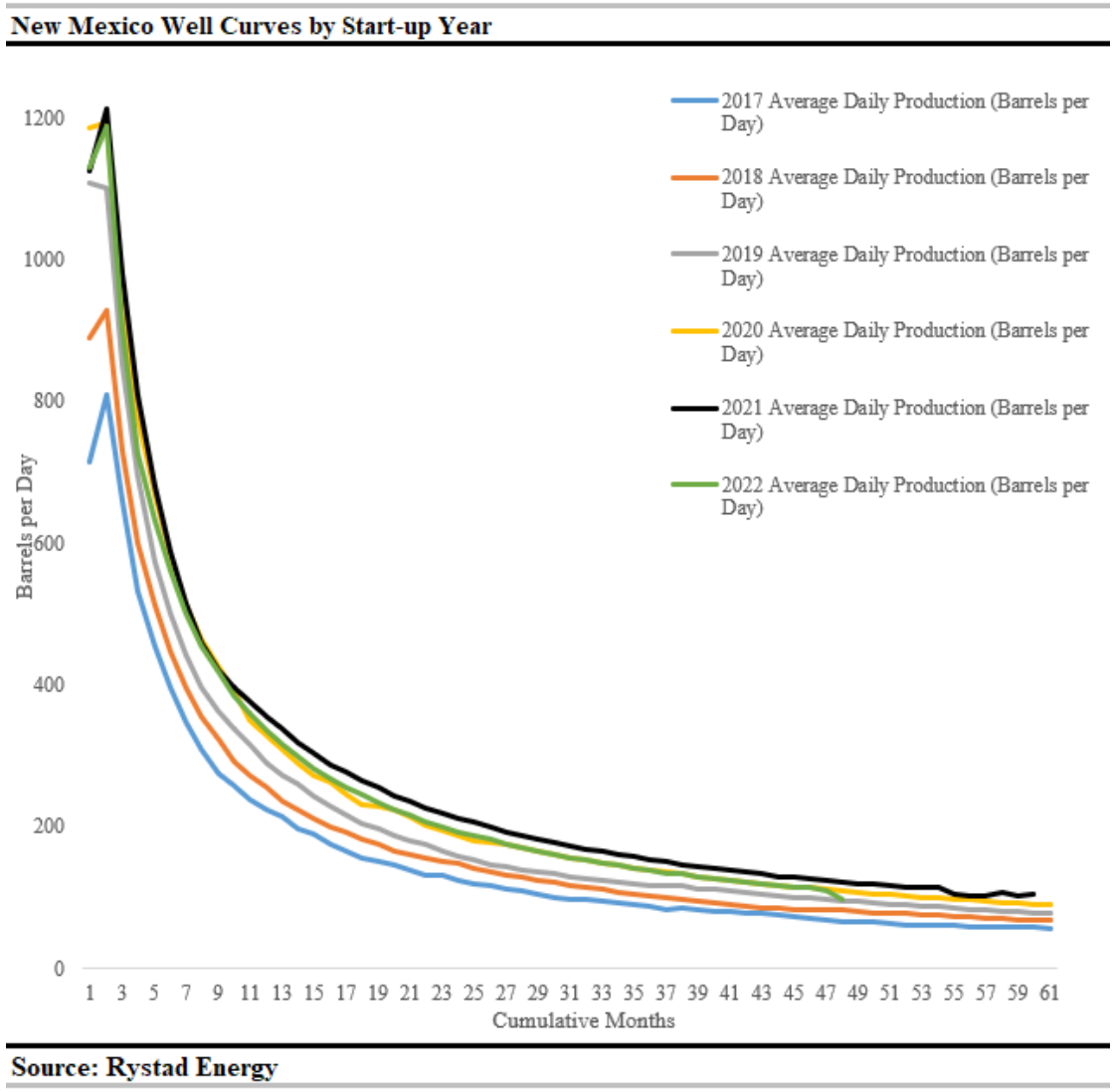
Remaining years of drilling in Tier 1 and Tier 2 acreage at 2022E pace
Number of years



*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

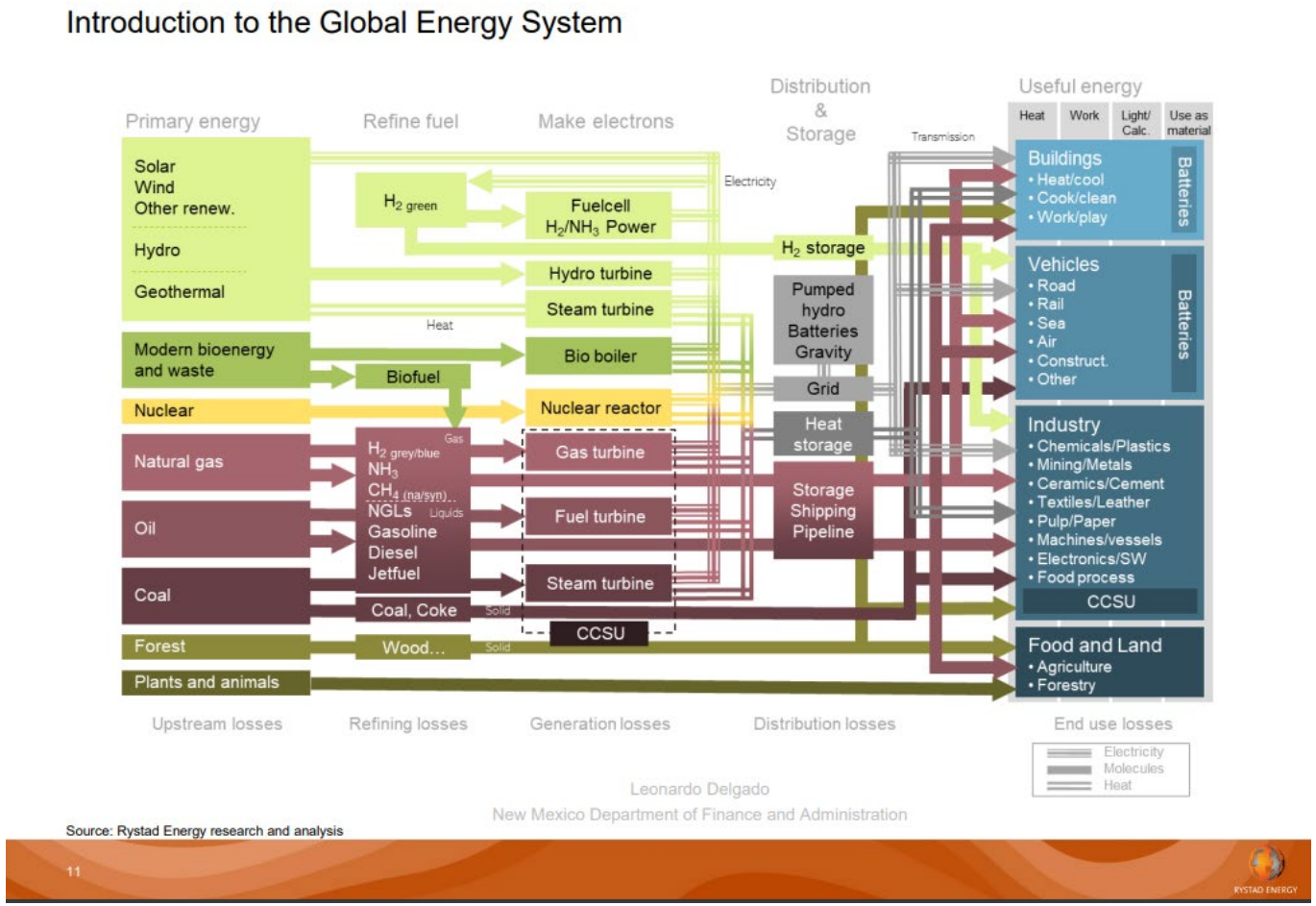
- Remaining years of drilling at current pace in Tier 1 are estimated at just over 10 years
- Remaining years of drilling at current pace in Tier 1 and Tier 2 are estimated at just over 15 years
- Range of drilling at current pace in Tier 1 and Tier 2 between 10 to 15 years

N.M. Well Curves



- 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

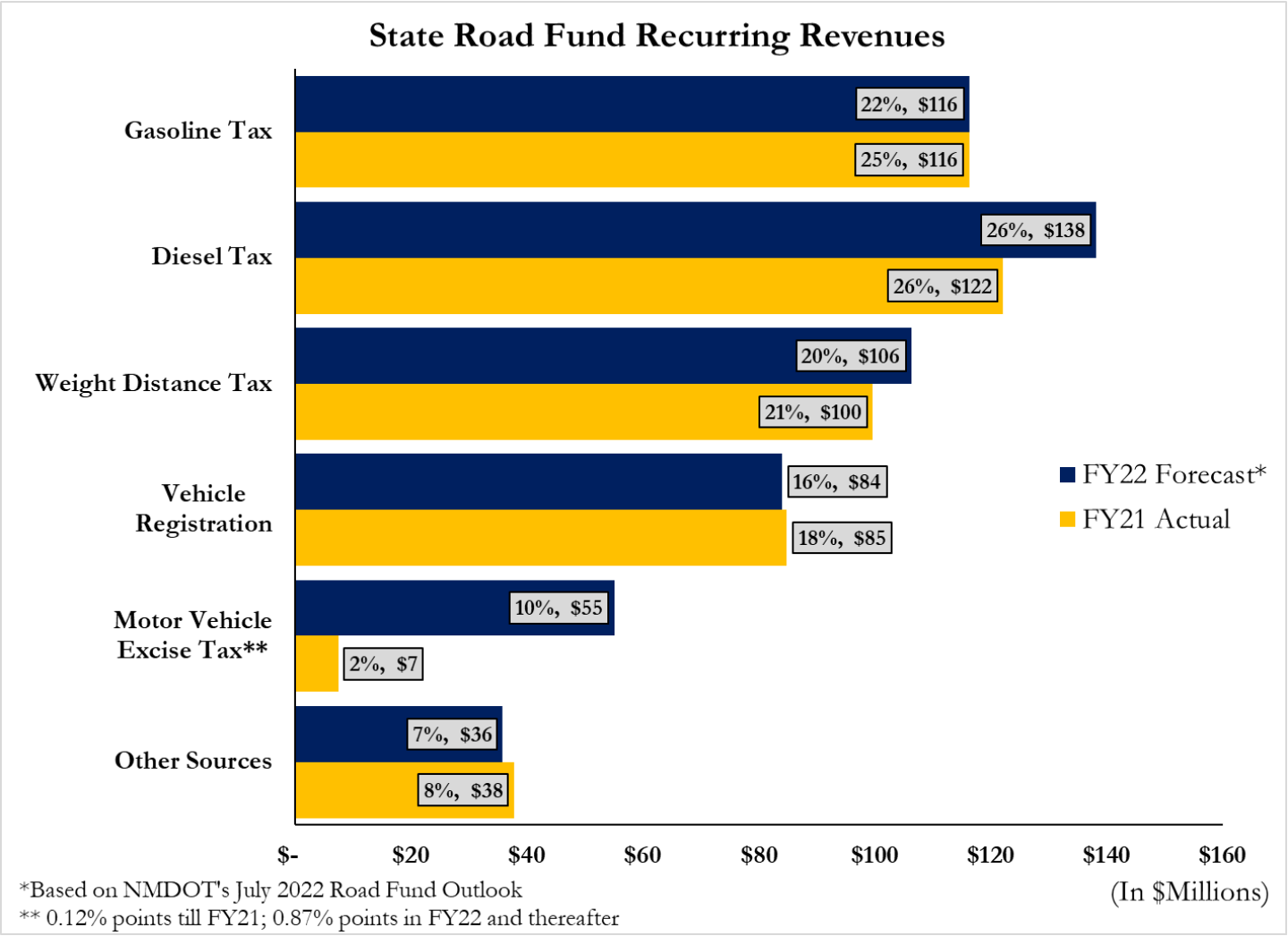
Global Energy Transition



- 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
- Consumptions patterns

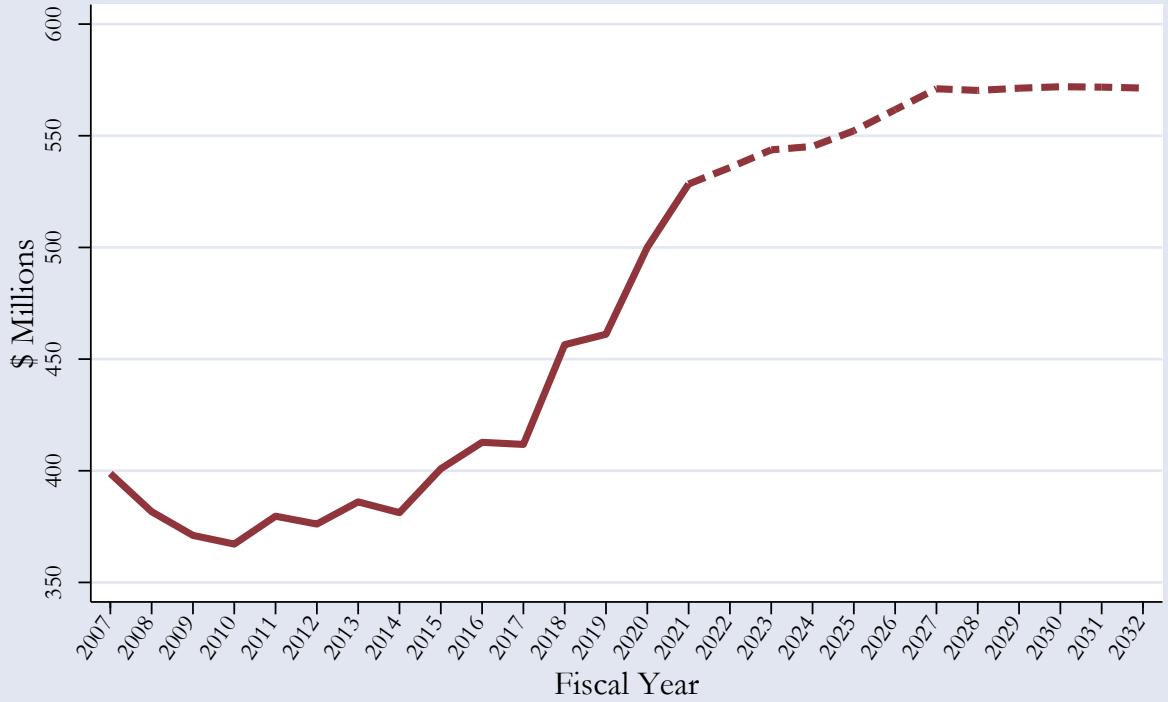
N.M. State Road Fund

N.M. State Road Fund – Overview

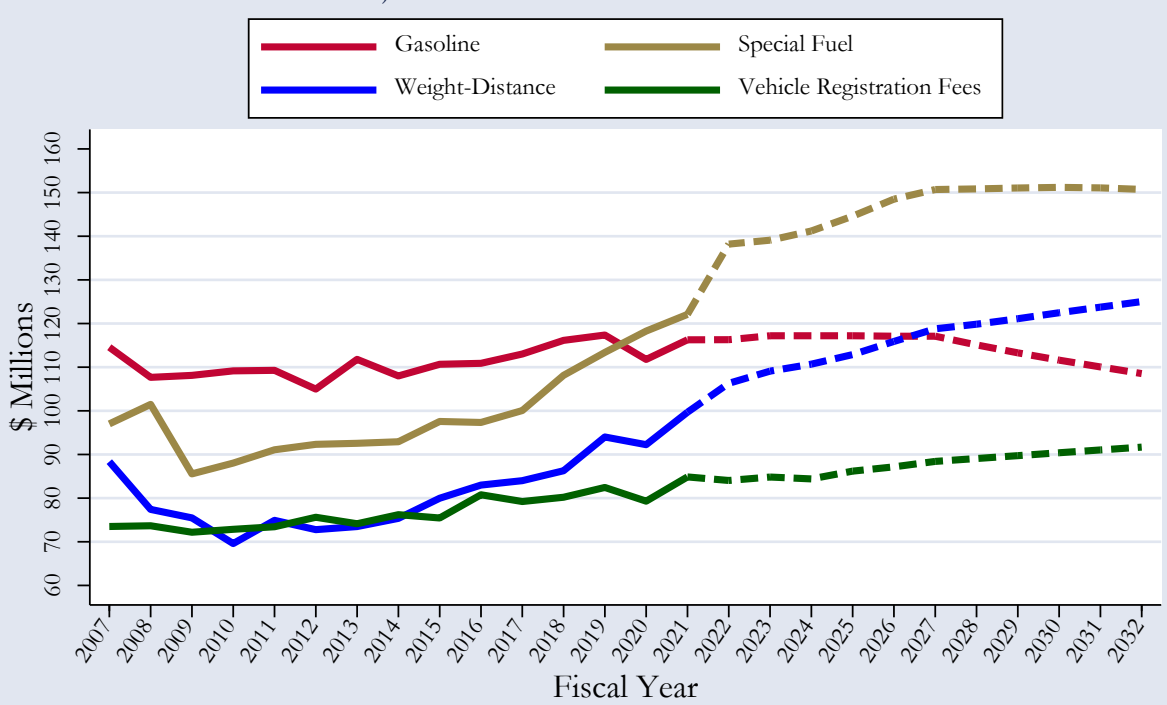


- State Road Fund received $468 million in recurring revenues in FY21.
- NMDOT's July 2022 Road Fund Outlook forecasts the recurring revenues to grow ~14% in FY22
  - Driven by increased Motor Fuel Excise Tax distribution to the Road Fund beginning FY22
  - Since FY12, the State Road Fund recurring revenues 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



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



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.

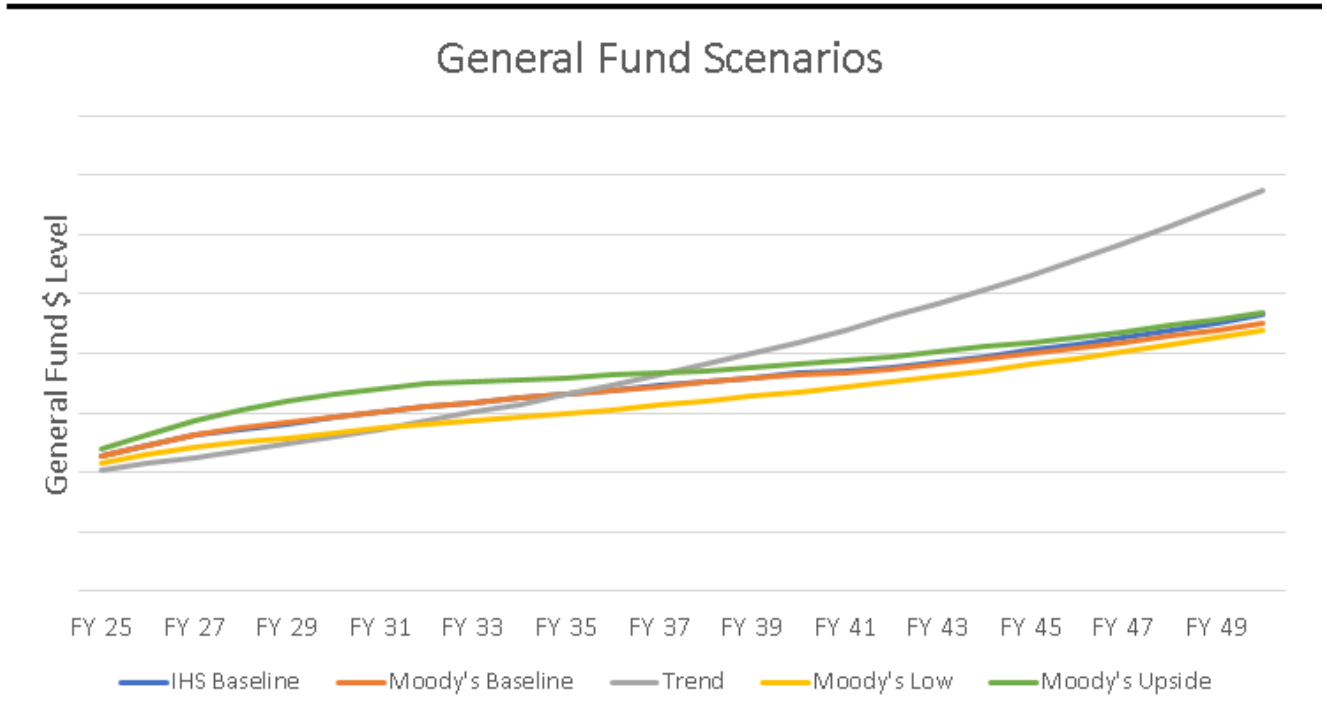
State Road Fund – Future Issues

- 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

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



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

High Level Assumptions

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

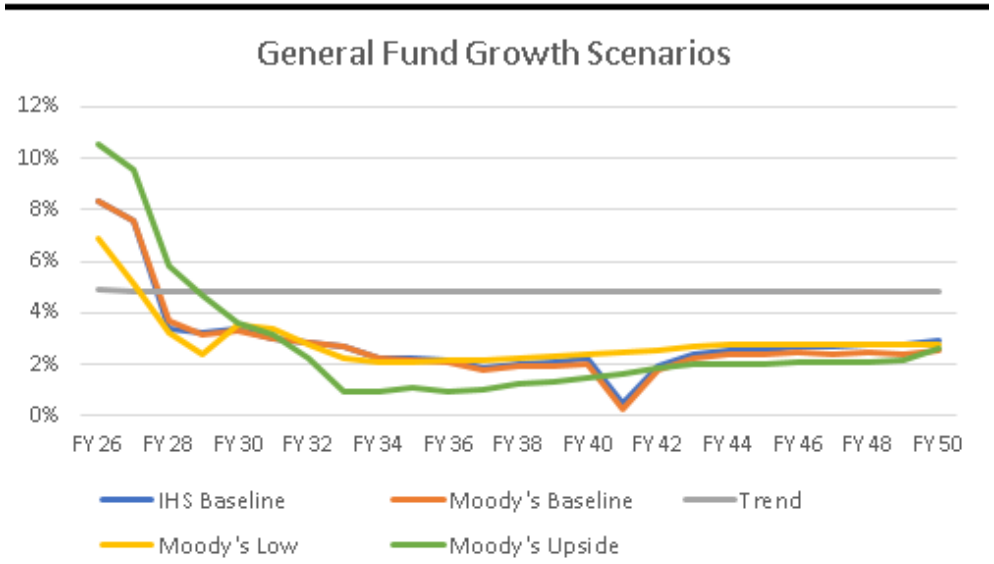
- Tax Cuts & Jobs Act (TCJA) renewed as baseline

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



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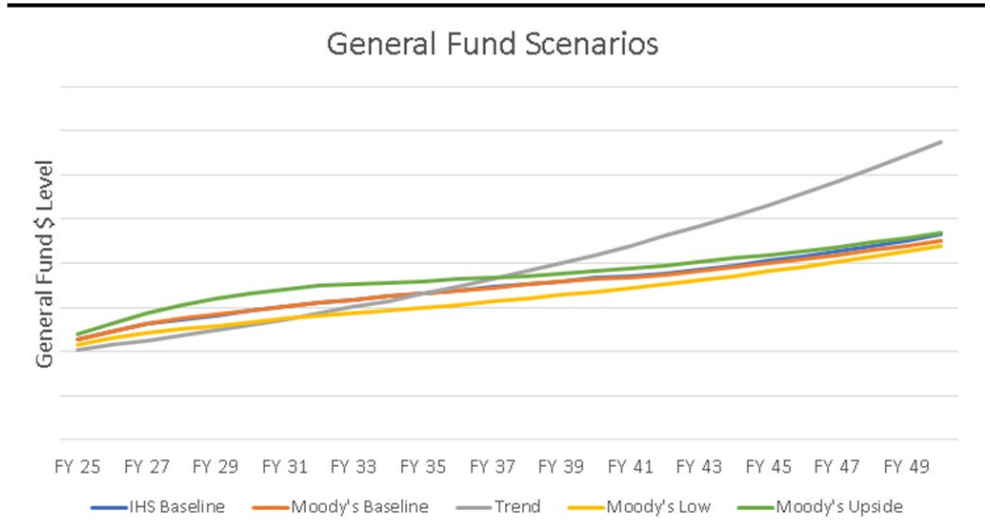
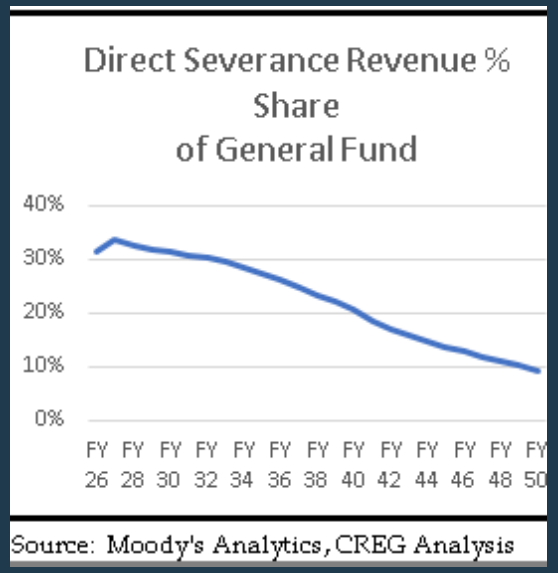
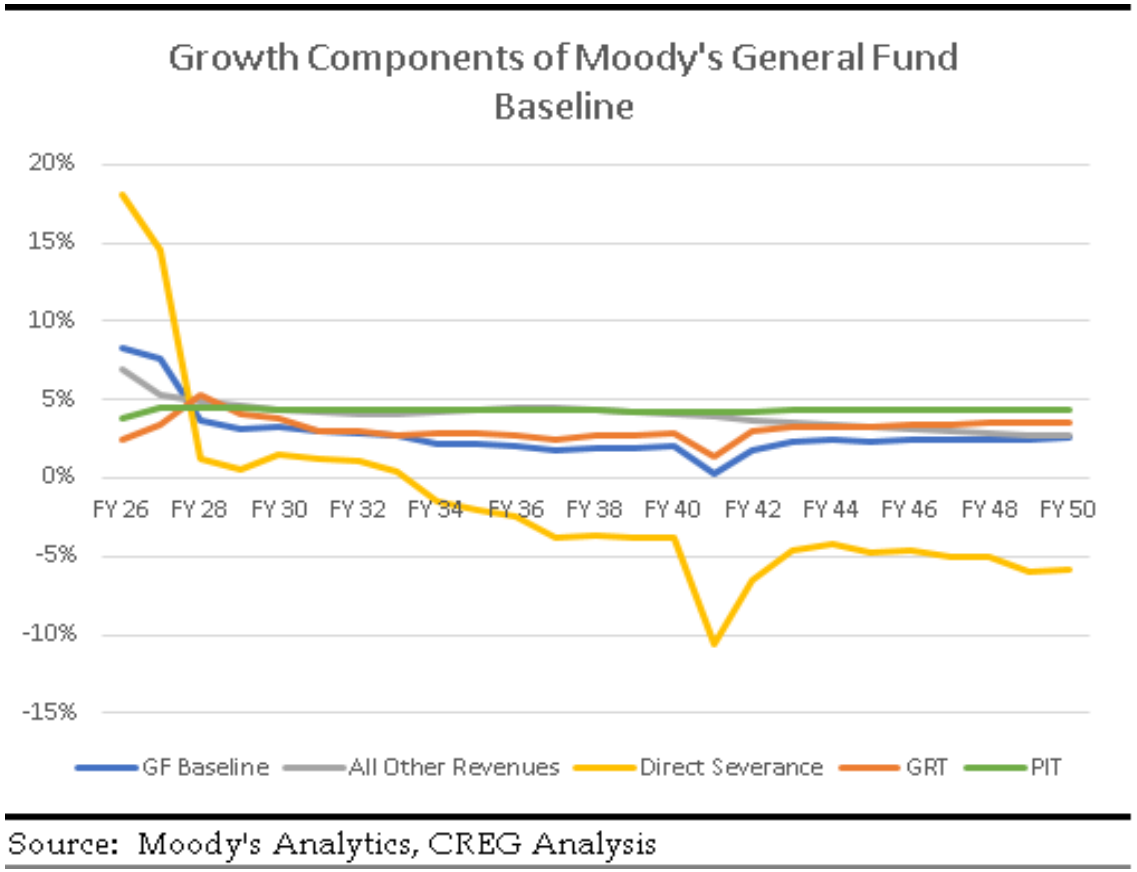


Source: IHS Markit, Moody's Analytics, CREG Analysis

General Fund Component Growth

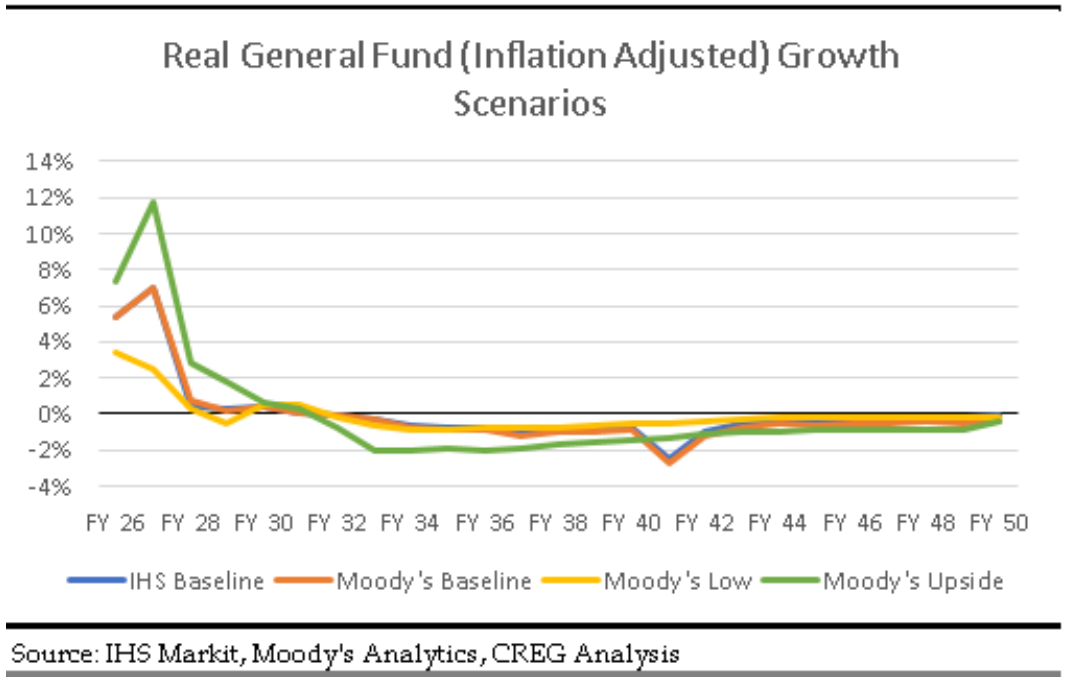
- Despite steady growth from GRT, PIT and Other Revenues, the sharp decline in direct Oil and Gas Severance Revenue, pulls the General Fund Growth down
- Direct Severance Revenue as a percentage of General Fund declines from above 30% to 10%





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