Report Digest: *Potential Impacts of Energy Development in New Mexico, With a Case Study of Otero County*

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Overview: This report focuses on the economic and fiscal contributions of the oil and natural gas industries in New Mexico, including a case study of proposed energy development on Otero Mesa in Otero County. The *New Mexico* report will assist the public and elected officials in making informed choices about energy development over the long-term. The study is the eighth in Headwaters Economics' *Energy and the West* series which can be found www.headwaterseconomics.org/energy.

The report is divided into six sections:
(1) The significance of fossil fuel energy development for New Mexico;
(2) The economic role of energy development in Otero County;
(3) The performance of state and local government mineral taxation and distribution policies;
(4) Whether drilling on Otero Mesa would affect state and local revenue;
(5) Whether energy development on Otero Mesa would create more benefits that it forecloses;
(6) Public policy options.

Jobs and personal income from industries associated with the extraction of fossil fuels are a small part of New Mexico's economy.
Today, New Mexico's economy is much larger than several decades ago. The state added more than 700,000 jobs and $41 billion in new personal income from 1970 to 2006. During this time New Mexico's economy diversified to incorporate a much wider range of service and professional industries as well as non-labor income related to retirement and investments.

These sources of jobs and earnings account for 80 percent of all new income earned in the state between 1970 and 2000, and made up about 74 percent of New Mexico's total personal income in 2006. This diversity has made the state less dependent on any single industry.

In 2006, the contribution of mining, including energy development, to overall employment and personal income in the state was relatively small: two percent of total employment and three percent of total personal income. Fossil fuel extraction, however, remains high paying and is focused in three of New Mexico's thirty-three counties—San Juan, Eddy and Lea.

Otero County's economy will see little to no benefit from projected fossil fuel extraction.
Historically, there has been little oil and natural production in Otero County. In 2006, energy development accounted for 0.2 percent of total employment and 0.1 percent of total personal income, and the energy-related jobs paid a quarter of the state average for mining and energy development ($15,455) and well below Otero County average wages ($27,919).

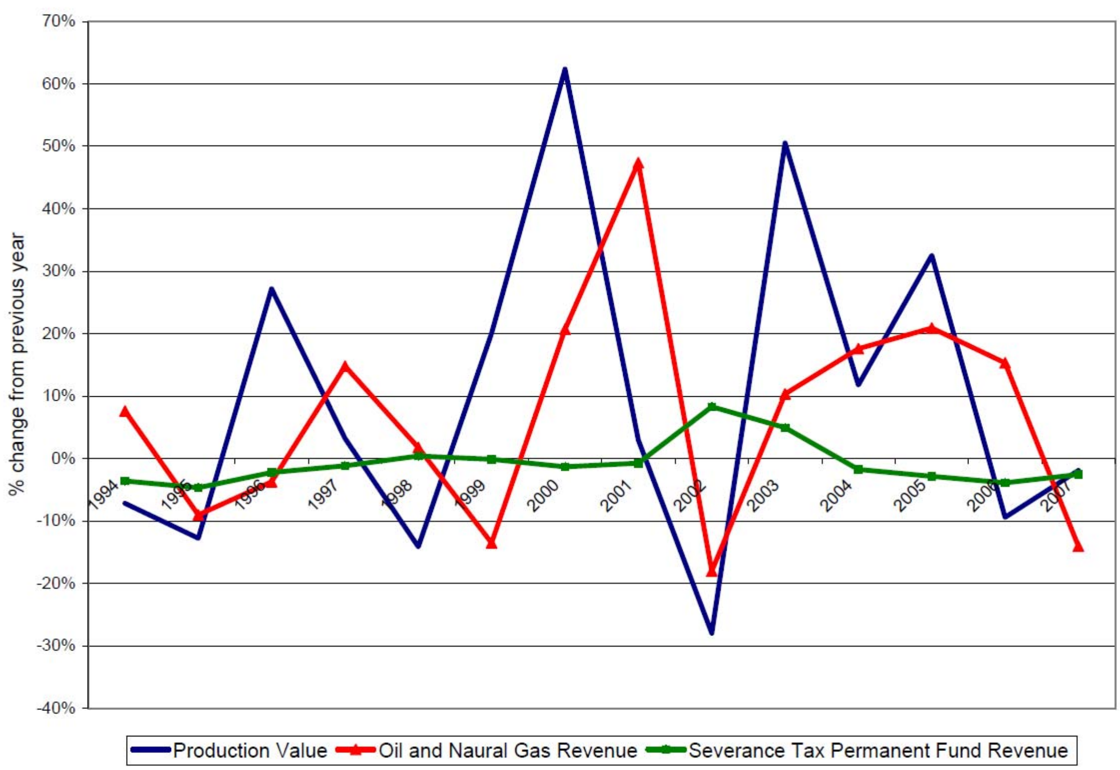
The economic impact of BLM-proposed development of fossil fuel reserves in Sierra and Otero counties also would be limited in scale—representing one percent of total employment in these counties for a period of only four years—and would have even less consequence for Otero County when adverse impacts, employment leakages, and the recent downturn in energy prices are taken into account.

By comparison, Otero County as a whole is growing. From 1970 to 2006 the county's population and employment increased by 50 percent while personal income grew by more than 100 percent. The county's economy has been tied largely to the military, but starting in the 1980s service and professional sectors along with retirement and investment income grew independently of military employment. By 2006, service and professional employment constituted 50 percent of all jobs, and non-labor income was 37 percent of total personal income in the county.

New Mexico does a good job of capturing value from oil and natural gas resources but the state remains exposed to future unpredictability in energy revenue. It also returns the lowest proportion of oil and natural gas revenue to local government in the Intermountain West. New Mexico is the largest oil and natural gas producer in the Intermountain West and has one of the highest effective tax rates. Statewide oil and natural gas activity generated more than $15 billion in production value in 2007, providing 18 percent of all state and local government revenue that same year.

Energy revenue is highly volatile and while the state's permanent funds help to smooth this somewhat, government budgets and services remain exposed to this volatility. Despite hedging strategies, funding for basic government services like education remain highly exposed to oil and natural gas revenue volatility and this contributes to periodic budget shortfalls. Figure 1 shows oil and natural gas revenue volatility (red) is dampened compared to production value (blue); one reason being the much more stable trajectory of severance tax permanent fund revenue (green).

Figure 1: Volatility in Oil and Natural Gas Production Value and Related State and Local Government Revenue in New Mexico, 1993-2007.



Source: See full New Mexico report, www.headwaterseconomics.org/energy.

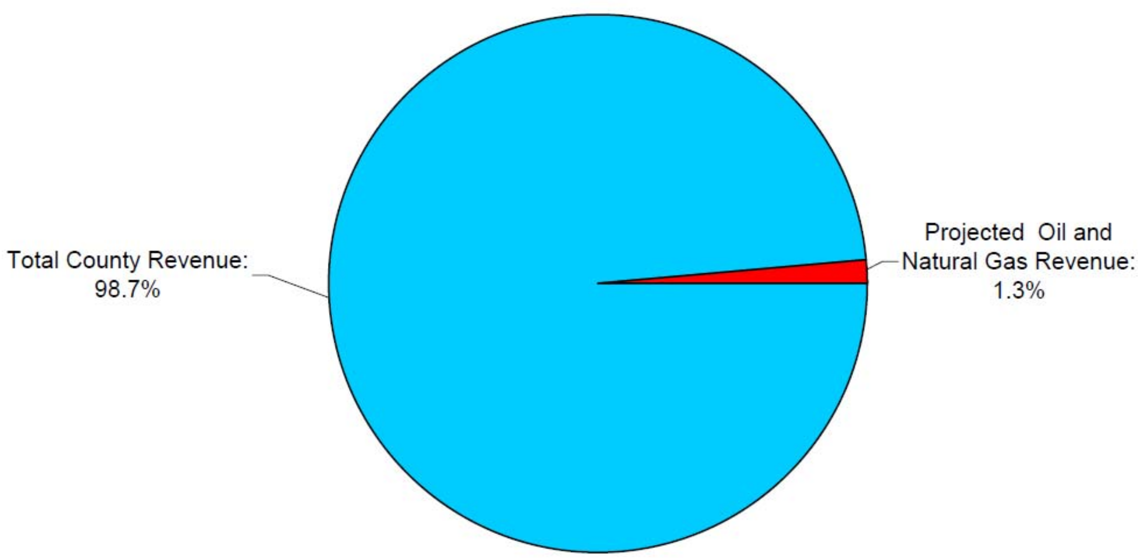
Local governments in New Mexico, where many of the impacts of energy development are managed, receive the smallest share (6%) of oil and natural gas revenue of any state in the Intermountain West. This small share of energy revenue may mean that municipal and county governments do not have the resources they need to deal with the impacts of extraction activities on local services such as roads, public safety, and social services.

Drilling Otero Mesa would have no discernable impact on New Mexico revenue and little impact on Otero County revenue.

The production taxes and royalties from the proposed drilling in the BLM Planning Area (Sierra and Otero counties) would net the state approximately $4.6 million in annual revenue, or 0.27 percent of all 2007 revenue from oil and natural gas production taxes and royalties. The Otero County portion would be roughly $3.4 million—representing 0.20 percent of state totals in the same year.

Locally, the majority of expected local revenue from proposed drilling in Otero County would come from an oil and natural gas property and equipment taxes, peaking at about $285,000 in annual revenue—or 4.4 percent of all property tax revenue and 1.3 percent total revenue from all sources for Otero County in 2007. (See Figure 2.)

Figure 2; Projected Oil and Natural Gas Property Tax Revenue as a Portion of Total Otero County Revenue, 2007.



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Drilling Otero Mesa would create few economic and fiscal benefits while potentially foreclosing future economic opportunities.

This analysis reviewed how energy policy could direct revenue toward two basic purposes: to facilitate energy extraction and mitigate its impacts; and to ensure that wealth generated from the depletion of fossil fuels contributes to long-term economic prosperity. In this context, it is difficult to see how the limited revenue and economic activity generated by proposed energy development in Otero County would benefit the state or region in net terms.

As noted earlier, the employment and revenue impacts from proposed drilling—even at peak production—are small, representing increases of roughly one percent, and may not even cover the county's share of infrastructure and service costs.

Economic sectors that could be negatively affected by drilling include agriculture, which is small in scale, and travel and tourism industries, which are relatively large (about 6% of current employment) in Otero County. The large water resources in the Salt Basin, which lies under Otero Mesa, will become more valuable over time as population growth continues and could be threatened by drilling activities.

Another key consideration is whether maintaining the natural assets of Otero Mesa will support greater longer-term value than the one-time wealth that would be extracted as oil and natural gas. There is a case to be made that the fragile nature of this unique desert grasslands has intrinsic value and could not be remediated after disturbance.

During the last 20 years, the Otero County economy has diversified into a range of service and professional industries, and fast-growing retirement–related income. These sectors are associated with above average economic performance in rural, public land counties in the West, and they have provided the county with a complimentary economic alternative to area military bases.

Public Policy Options

The question of how New Mexico and Otero County will best develop energy policy remains open. With ongoing economic turmoil, the stakes are even higher. Government is not a passive player and should consider steps to ensure the public benefits from energy extraction, including:

1) Further delink essential annual government services from highly volatile revenue sources such as oil and natural gas revenue;

2) Utilize more aggressive saving and hedging strategies to manage revenue risk;

3) Provide larger and more predictable intergovernmental transfers of energy revenue to local government to help mitigate the impacts of industry activities without harming economic development opportunities in other sectors;

4) Support more detailed study of the Salt Basin Aquifer and guard this resource for measured future use.

5) Protect and brand landscapes like Otero Mesa to build on the region's tourism industry and, more importantly, to cultivate a growing service and retirement economy as a diversification strategy.