Local government revenues, costs, and net fiscal impacts associated with oil and gas development

Note: the findings presented below are preliminary and are subject to revision
Presentation agenda

• Overview of project

• Key oil- and gas-related revenues and costs for local governments

• Findings from eight states

• Analysis and discussion questions
Shale Public Finance project

• Funded by:
  – The Alfred P. Sloan Foundation
  – The Duke University Energy Initiative

• Carried out by the Duke University Energy Initiative
  – Richard Newell, director and principal investigator
  – Daniel Raimi, key researcher and analyst
Key questions

• What are the fiscal impacts to local governments from new or increased oil and gas development, and how have these impacts varied from region to region?

• Have varying state and local policies affected the net fiscal impact?

• What lessons can be learned?
Research methods

• Regions were selected to complement previous research
  – Some regions have seen large scale growth in recent years
  – Other regions are longtime producers and production is in decline

• Structured interviews with local public officials in eight states

• Interviews with experts from state government, industry, independent researchers

• Analysis of state and local financial documents

• Analysis of state oil- and gas-related tax policies
Travel and interviews
Our travels: heat map of recent drilling permits

Map source: Drilling Info 2.0. Heat map data represents drilling permits issued in the 90 days leading up to Feb. 20, 2015. Permit data not available for Alaska.
Today’s presentation: phase II regions

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Key revenue sources and key costs for local governments related to oil and gas development
Key revenue sources for local governments

• State severance taxes
  – Collected by state governments, may or may not be allocated to local level

• State or federal leasing revenue
  – Collected by state governments, may or may not be allocated to local level

• Local ad-valorem property taxes
  – Collected by local governments, oil and gas property definitions vary by state

• Sales and use taxes
  – Collected by municipal governments in most states, counties in some states

• Direct payments
  – Leasing/royalty revenues for production on local government land
  – Fee-for-service activities

• In-kind contributions
  – Road repairs and/or donations from coal and gas companies
Key costs (i.e., service demands) for local governments in phase II states

- Roads and bridges
  - May be impacted by heavy truck traffic
- Police/fire/EMS
  - Increased vehicle traffic, well site accidents, population can increase demand
  - Specialized training and equipment may be necessary
- Other staff costs
  - Workforce retention is often a challenge for local governments
  - Staff time and resources devoted to oil and gas issues can be substantial
- Sewer and water infrastructure
  - May require upgrades if municipalities experience population growth
- Environment-related costs
  - Legacy environmental issues (CA)
  - Earthquake-related property damage (KS, OK)
State-by-state findings

Kansas
Oklahoma
Ohio
West Virginia
New Mexico
Utah
California
Alaska
Kansas

- Net financial impact
  - Large net positive in longtime producing regions
  - Some counties in MS Lime region have not been able to keep up with road repair

- Key factors
  - Revenue volatility and state “sweeps” of severance tax revenue
  - Property tax valuation process leading to volatility and legal risk
  - Earthquake-related property damage

Daniel Raimi, Shale Public Finance Workshop
Durham, NC August 31, 2015
Oklahoma

• Net financial impact
  – Mostly net positive
  – Counties in MS Lime and Anadarko region with less robust infrastructure have not been able to keep up with road repair

• Key factors
  – Limited pipeline infrastructure in MS Lime and Anadarko regions adds to heavy vehicle traffic
  – Limited flexibility to shift funds to cover road costs
Ohio

• Net financial impact
  – Consistently net positive for counties and munis

• Key factors
  – Road Use Maintenance Agreements (RUMAs) are widespread
  – Property, sales and local income taxes have increased
West Virginia

- Net financial impact
  - Consistently net positive for counties and munis

- Key factors
  - Damage to rural state-maintained roads
  - Limited private employment growth for local residents
New Mexico

• Net financial impact
  – Mostly net positive, some challenges managing growth in Permian region

• Key factors
  – Managing revenue volatility during “boom-bust”
  – Economic diversification for long-term fiscal health
Utah

- **Net financial impact**
  - Mostly large net positive, excepting one county

- **Key factors**
  - Skilled local workforce has limited population growth
  - Waxy crude contributes to heavier vehicle traffic
California

• Net financial impact
  – Little fiscal impact for LA city and county
  – Mixed impacts for some smaller LA munis
  – Mostly large positive impacts in Kern County region

• Key factors
  – LA region has a variety of unusual issues
  – Oil and gas is a key part of Kern Co. economy
Alaska

• Net financial impact
  – Large net positive

• Key factors
  – Most state and local revenue depends on oil/gas
  – Revenues are falling and challenges lie ahead
  – No state sales or income tax
  – Economic diversification is a challenge
Summary of local government net fiscal effects

- Uniformly net positive
- Mixed positive/neutral
- Mixed positive/negative
- Mostly net negative

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Analysis and conclusions

• Most local governments report net positive fiscal impacts
• But local factors and policies matter
  – In rural regions with heavy activity, infrastructure costs can outpace revenues
• Regions with declining production face different issues
  – Economic diversification will be a challenge for some regions
• Revenue volatility can be a major challenge
  – Policies in some regions exacerbate, rather than smooth out this volatility
• Environmental issues can create substantial costs
  – Legacy pollution in LA region, earthquakes in Mississippian Lime region
• Collaboration with industry can help reduce costs
  – Why does collaboration occur in some states/regions and not others?
• Alaska faces a distinct set of challenges
  – Little revenue diversification offers lessons for other states
Questions and feedback

• Are we accurately describing the experience in your region of expertise?

• Have we left out any important issues for local governments?

• Are there key findings or lessons that you have gained from your experience that we have not discussed?
For more information

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