

# Fracking Economics

# Costs and Benefits to Local Communities



### Multi-State Shale Collaborative

- PA: Keystone Research Center, Pennsylvania Budget and Policy Center
- NY: Fiscal Policy Institute
- Virginia: Commonwealth Institute
- West Virginia Center on Budget and Policy
- Policy Matters Ohio
- Advisory Group: Academics and Experts



### Goals

- Develop and disseminate factual information on social, economic and fiscal impacts of natural gas drilling
- 2. Improve understanding about the size and character of **social impacts**
- 3. Help local officials **anticipate**, plan for, or avoid negative drilling related impacts
- 4. Improve capacity to **factor actual costs** and impacts into decision making



#### Phase I

- Review of literature on local impacts
- Studies in regions where industry more developed

#### Phase II

- Case Studies
- Ohio Carroll County

#### Phase III

- Policy Development
- Discussions, Best Practices

# **Net Benefits**

- Due to increased gas drilling activities across the nation, local communities are experiencing both positive and negative economic impacts.
- The overall economic impact positive or negative is determined in large part by
  - how many of the dollars stay in the community,
  - who gets the jobs,
  - will the industry locate locally,
  - will local businesses provide the services to these industries,
  - will wages and royalties be spent within the state, and
  - What the costs to the community are.

### On Benefits

#### **Potential**

#### Jobs

Leases/Royalties

- Local economic activity
- Business profits

#### **Actual**

- Local hire versus out-of-state workers?
  Temporary versus permanent employment? Pay Good Wages?
- Fair Deals? Length of time receiving royalties? Taper off dramatically? Mandatory pooling? Money invested or spent locally?
- How much? What kind? Support longterm growth? Overbuilding?
- Local or out-of-state companies? Valueadded facilities in community?



# Examples

- Industry studies on Ohio jobs potential inflated: 20,000 not 200,000 jobs, negative impacts on other industries like tourism (OSU study, Partridge/Weinstein, 2011)
- Economic activity increased significantly in shale gas regions of Ohio but employment numbers haven't increased at the same rate, possibly indicative of employment of out-of-state workers (CSU study, Thomas, 2013)
- Penn State study estimates between 25 & 35 percent of new hires in gas companies and related industries are non-state residents who likely send some earnings home (Brundage, 2011).
- 12 County survey of local officials in PA only 4% of respondents reporting gas activity reported increases in income tax (Kelsey 2011)
- Penn State study suggests costs to local government may be greater than revenues. Urban areas like Fort Worth, Texas with mature industry better able to absorb costs and take advantage of benefits than rural areas (What Local Governments Need to Know)



# On Costs

#### **Housing Impact**

 Increased demand for housing

#### Property values

#### **Unrecognized Costs**

- Housing crunch
- Pressure on rent and housing prices to rise
- Shorting on affordable housing
- Increased difficulty recruiting staff for non-energy related work
- Possible negative impact on property values near drilling, more likely if well water, or land used for agricultural purposes



# Examples

- Sublette County, Wyoming (Ecosystems Research Group, 2009). Large population increases, boosted housing prices, shortage of housing.
- Headwaters study of counties in Colorado, difficulty of non energy industry employers recruiting workers because of sharp rise in housing
- Two studies in Pennsylvania found value of homes located near drilling activity were negatively impacted (well water, 4%; agricultural lands, 7.2%)



#### **Roads & Bridges**

Traffic

 Road Damage & Repair

 Road Agreements, industry donations

#### **Unrecognized costs**

- Increased traffic, increase in accidents, increase in heavy and overweight trucks
- Increased wear and tear on roads, road damage, increased wear and tear on vehicles (ie school buses), costs for road repair, need for large-scale road improvements
- Some communities getting donations, engaging in road agreements with industry, but enough to cover total costs? Cover long-term maintenance?



#### Water & Sanitary Waste Unrecognized Costs

Water Volume

Increased water use

Solid Waste

Increased amounts of solid waste

 Water & Sewer Infrastructure • Strain on water and sewer systems

Waste water

 What's happening to fracking related waste water?



#### **Service Impacts**

#### **Unrecognized Costs**

- Crime rates and emergency services
- Increased 911 calls and EMS runs
- Increase in arrests
- Change in types of crimes reported
- More drug activity
- Increased # of dui's, traffic citations
- Increased need for law enforcement personnel

- Caseloads
- Increase in # of cases entering judicial system
- Increased caseloads related to family dysfunction (schools, social service agencies, medical care, law enforcement)



# Examples

- Ecosystems (2009): increased crime, need for law enforcement personnel, EMS runs, arrest grew faster than population
- Headwaters study (2009): sharp increase in crime.
  Chief of Rock Springs Policy narcotics arrests rose from 90 to 450. Caseloads for judges quadrupled.
- Rural areas with no marcellus shale activity, crime steadily declining (Kowalski & Zajac, 2012)



#### **Service Impacts**

#### **Unrecognized Costs**

- Health Care
- Increased demand for medical clinic services
- Expansion of medical clinics
- Rise in # of patients without health insurance
- Rise in uncompensated care. A communityowned hospital in PA estimated loss of ¾ of a million dollars from uncompensated care for subcontractors working on drilling operations)

Worker Safety

- Injuries and fatalities of oil and gas workers
- Injuries and fatalities related to motor vehicles
- Worker compensation claims



#### **Education**

#### **Unrecognized Costs**

- Student enrollment
- Mixed impact on Student Enrollment, higher student turnover rates
- Potential impact on dropout rates, and postsecondary enrollment

Staffing

- Increased need for English-as-a-secondlanguage (ESL) instruction and staff
- Difficulty recruiting teachers and staff because of housing crunch, prices, workforce shortages
- School income/expen ditures
- Increased tax base may benefit schools
- Leasing school district lands for drilling
- Increased expenditures
- Construction of new/additional facilities



### Phase II & III

- Case Study of Counties in respective states
- Conducting interviews, looking through data, possible focus groups
- Shooting for July-September series of releases
- Fall 2013 Legislative Caucus to discuss policy implications



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