



A partnership among Keystone College, King's College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Wilkes-Barre, University of Scranton, & Wilkes University

(Formerly known as Joint Urban Studies Center (JUSC))

Thank you Honorable Chairman Corman and esteemed members of the majority policy committee.

The Joint Urban Studies Center is a higher education and business partnership formed to provide essential research, consultation, facilitation, and convening services to governments needing services in economic and community development, public policy, planning and programming. In addition, The Institute provides similar services to non-profits, institutions, and business.

The Center is changing its name to The Institute for Public Policy & Economic Development to better reflect the types of services it provides. The Institute was founded and is managed by Wilkes University. There are seven other higher education partners involved: Keystone College, King's

College, Marywood University, Misericordia University, Penn State/Wilkes-Barre, and the University of Scranton.

The Institute is supported financially by the business community works underneath an advisory board consisting of business, education, non-profits, and government. The Institute is raising its profile and trying to financially sustain itself by seeking fee for service revenue and has been since hired by organizations and governments in northeastern and central Pennsylvania.

The Institute is opening an office in Scranton, Pennsylvania to better serve its students from the higher education institutions in Lackawanna County and to better demonstrate that regionalism is the most successful method of problem solving and planning.

The Institute provides students with real world research and problem for internships with academic credit. Over 70 students have graduated from The Institute in the past four years. The Institute also has faculty research opportunities to assist its client base and the overall community.

The Institute began noticing the importance of the Marcellus Shale play in early 2008. As a result, we began to complete some foundation research. Given the past six months, so much more information is available, that new research and analysis is sorely need to evaluate the true impact – both positive and negative that the shale play will have upon Pennsylvania.

Our first study was an attempt to look at how communities in Texas and Arkansas were impacted.

First, The Institute looked at Barnett Shale in Texas, where the natural gas industry has helped the Dallas/Fort Worth economy stay virtually recession-proof. Referred to as the icing on the cake for that region, Barnett Shale generates a multi-billion-dollar direct impact on the economy, with multiplier effects rippling through virtually all regional industries. Texas production has resulted in \$10.1 billion in annual output, and 55,000 permanent jobs. Specifically The Institute studied Denton County circa 1995 – before the Barnett Shale play. At the time, this Texas county was very similar to some the counties that comprise the 10th Congressional District. The Institute tracked Denton County's growth in terms of population, income and housing. By 2004, Denton County's population increased by 66.4 percent. There was an 835.9 percent increase in its number of wells, and a 2,976 percent mineral valuation increase.

The county experienced growth in median household income and wealth. Barnett Shale industry has also had a ripple effect on many business activities. The industry has increased the number of permanent maintenance, repair, and construction jobs by nearly 300. Jobs in the hospitality industry have increased by 365. Most notably, there have been more than 600 permanent jobs added in the retail trade category. The industry has also increased the county's gross domestic product and personal income.

Next, we examined Fayetteville Shale in the state of Arkansas. Newer than the Barnett Shale play, the Fayetteville Shale play has already increased employment and significantly contributed to the state's local economies. Projections indicate major population increases and significant gains in employment through 2025. Specifically, The Institute looked at Faulkner County and White County – areas that are also similar to some of those in Pennsylvania's 10th Congressional District. Here too, The Institute found ripple effects on businesses unrelated to the natural gas industry.

Faulkner County's population is expected to double digit population increases by 2025. Leasing land and mineral rights, drilling, and other activities of energy companies within Faulkner County accounted for total economic activity of \$308.6 million from 2005 to 2008. By 2008, 0.9 percent of Faulkner County employment or 484 jobs are attributable to Fayetteville Shale play activities. A total of \$21.5 million in local and state tax revenues resulted from energy company investments made between 2005 and 2008.

The same can be told of White County in terms of population. Leasing land and mineral rights, drilling, and other activities of energy companies within White County account for total economic activity of \$892.2 million from 2005 to 2008. By 2008, 4.8 percent of White County's total employment is attributable to Fayetteville Shale play activities. Between 2005 and 2008, \$55.6 million in local and state tax is attributable to energy company investments.

Finally, The Institute examined the possible affects of northeastern Pennsylvania's Marcellus Shale play. After reviewing current activity throughout each Pennsylvania county studied, The Institute found that many residents indeed have leasing agreements with natural gas companies, that many of these companies have obtained state drilling permits, and that some companies have already begun drilling. In April, 93 drilling permits have been issued and 18 wells drilled in Bradford, Lycoming, Susquehanna and Wayne Counties. Per DEP over 500 permits were issued in August 2008 alone. In April there were, however, 594 lease agreements in place with nine energy companies, today that number is over 1000. At the time of this study's completion, there was no data available on how much natural gas the region was producing.

The Institute examined the potential cash flow of a typical Pennsylvania wells and calculated potential royalties a landowner may receive. The example below uses Barnett Shale production rates as a base for estimates:

- If you own 100 acres of gas-producing land, and
 - You receive a royalty of 15%, and
 - Natural gas is priced at \$7.25 per unit , and
 - The daily production rate is 2 million cubic feet (Mmcf) per day (a conservative estimate), then
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- **Total royalty would be \$793,000 in the first year and \$6m at the end of 20 years.**

Few can predict a well's output at any point in time – especially so early in the Marcellus Shale play. This is only one possible scenario. It is also important to note that output declines quickly at first, but such decline slows towards the well's half life. A well's production typically lasts 20 – 30 years. The figure above does not include the lease value or sign on bonuses.

As a result of this study, we were commissioned to complete a second study on the impact this shale play could have on charities, non-profits, social services and public safety. The client gave us permission to post the research on our site for public consumption.

The Institute tracked several charities by examining IRS Form 990. All charities examined experienced increases in increased in both direct public support and net assets. In addition to the individual donations, the energy companies themselves are good corporate citizens. Many companies have identified high six and seven figured gifts to charities. In addition, The Institute tracked giving and community support in a number ways:

- Donations to volunteer fire fighting units
- Sponsored training of EMS, firefighters, and police
- Sponsorship of events to raise money for police and firefighters memorial

Most companies identify corporate giving and support on their websites, but their true civic engagement is largely unpublicized.

Overall, we saw increases in both poverty level and crime, yet these are natural occurrences that often accompany rapid population growth. In terms of charitable contributions, there were increases in both direct public support and net assets in all charities examined.

The Marcellus Shale play could be the second catalytic event to happen in the NEPA region of late. In November 2007, The Institute published a study dealing with recent population shifts. Specifically, that this region has experienced real population growth [albeit in small numbers] over the past few years as a result of population migration from New York and New Jersey due to available and affordable housing. Based on “who” is moving and “why” they are moving, this new trend will fuel double digit population growth over the next 15 years.

Although the Marcellus Shale play is in its early development, the comparison to the case study counties allowed The Institute to conclude that Pennsylvania is in for growth in terms of wealth, employment, and housing. Experts from financial markets, geologists, government officials, and economists all predict that Marcellus Shale is the next big opportunity for Appalachia, with unprecedented growth. Likewise, oil companies have already invested hundreds of millions of dollars in the Pennsylvania Marcellus Shale play; it is easy to conclude that opportunity exists.

Natural Gas drilling from the Marcellus Shale has the potential to drastically change our state for the better. As jobs come and wealth

increases, we may find Northeast Pennsylvania's population rapidly increasing and we must be prepared.

It is likely that natural gas jobs will attract employees from all walks of life to our region. Because it's so early in the Marcellus Shale play, we don't yet know when we will begin to see this increase or how rapid it may be. As more energy companies come to our regions and explore the drilling the picture will become clearer. The direct, indirect, and induced impact across the economy will also become clearer in the near future.

We must ask questions now?

How does this affect land use and transportation? What impact will this have on our public school systems? How will local government handle increases in need for public services and safety? What about health care? Do we have enough medical personnel, facilities, and state of the art medical equipment and procedures? What other businesses and job growth will result from this new industry? How much will the cost of housing increase? What types of housing will be available? In what areas will crime rise? What types of social service needs should we plan for?

The key is to plan, to think innovatively, and to harness the best practices from other states that came before us dealing with this opportunity.

This is an incredible opportunity to position the state to increase its wealth while protecting its natural beauty and resources through appropriate regulation and taxation. Further, this gives Pennsylvania the

opportunity to play a major role in US energy policy as we deviate from the use of foreign sources and plan for a future of renewable energy. The next 20 -30 years position Pennsylvania as a powerful entity in US policy and politics, if we handle it correctly.

Thank you.

Both these studies and additional information about us and our research are available at www.urbanstudies.org. In addition, the information is in your folders.