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# Ohio Land Use Conference

# An Economic Renaissance in Ohio: Energy, Opportunity, Jobs

**Ohio Oil and Gas Energy Education Program Study by Kleinhenz & Associates Estimated 204,000 Jobs in 2015 based on E&P, Midstream and Supply**

**Ohio Chamber of Commerce Study Estimated 65,680 in 2014 based mostly on upstream and midstream**

**Both Studies Show Tremendous Job Growth**

# 8. Jobs

It takes 75 jobs to take a typical well from planning to production

Every shale well site requires about 400 workers

Covering over 150 job titles.

Some jobs require training and field work

Some jobs require a two or four year degree

# 8. Jobs Direct

Roughneck

Roustabout

Toolpusher

Driller

Motorman

Derrickhand

Truck Drivers

Welders

Construction

Maintenance

# Other Jobs In Development



**Lease Analysts**

**Land Mapping Technicians (GIS)**

**Accountant**

**Geoscience Professional**

**Environmental, Health, & Safety (EHS) Advisor**

**Engineering Professional**

**Community Relations**

**Automation Technician**

**Business Development Representative**

**Communications**

**Human Resources**

# What Has Happened In PA.



**Nearly 48,000 people have been hired in the last year by industries related to drilling in the Marcellus Shale, and 71 percent of those people were Pennsylvania residents.**

**The average wage in the core industries was \$69,995, which is more than \$24,500 greater than the statewide average. (Center for Workforce Information & Analysis – a research arm of the Dept. of Labor & Industry)**

# 8. Jobs Indirect

Hotels  
Restaurants  
Food Trucks  
Car Dealers  
Excavation  
Mechanics  
Manufacturing  
Aggregate Industry  
Dry Cleaning  
Communications

# 8. Jobs In Shale Developing Areas



Fossil Fuel Electric Power Generation	\$108,084	
Natural Gas Distribution	\$78,454	
Water Supply & Irrigation Systems	\$54,241	
Crude Petroleum & Natural Gas Extraction		\$81,219
Natural Gas Liquid Extraction		\$93,341
Drilling Oil & Gas Wells	\$69,169	
Support Activities for Oil & Gas Operations		\$61,913
Oil & Gas Pipeline Construction		\$63,590
Pipeline Transportation of Natural Gas	\$79,574	
Water & Sewer Construction		\$64,379
Highway, Street, & Bridge Construction	\$54,506	
Nonresidential Site Preparation Contractors		\$51,740
Petrochemical Manufacturing		\$74,199
Industrial Gas Manufacturing		\$77,507
Iron & Steel Mills & Ferroalloy Manufacturing		\$72,114
Oil & Gas Field Machinery Manufacturing		\$54,813
Specialized Freight Trucking, Local	\$42,918	
Industrial & Equipment Repair & Maintenance		\$50,327

# 7. Economics of Investment

Over the next five years, oil and gas producers are projected to spend over \$34 billion in exploration and development, midstream, royalty and lease expenditures

2011	\$ 246 million
2012	\$ 1.4 billion
2013	\$ 6.8 billion
2014	\$12.4 billion
2015	\$14 billion

# Recent Investments in Utica Shale



**V&M Star – Youngstown  
\$650 Million +**

**U.S. Steel, Lorain  
\$240 Million**

**Timken, Canton  
\$225 Million**

**Chesapeake Energy, M3 Midstream, &  
EV Energy Partners, Columbiana  
County  
\$900 million**

**Halliburton – Muskingum County  
\$150 million and 300 jobs**

**MarkWest – Harrison &  
Noble Counties  
\$500 million and  
700+ construction jobs**

**Exterran – Columbiana County  
\$13 million and about 100 jobs**

**Baker Hughes – Stark County  
\$64 million and 700 jobs**

**Select Energy Services – Carroll  
County  
\$10 million and 185 jobs**

**\$2.75 BILLION** and Counting – NOT Including Lease and  
Royalty Payments, Operations, etc.

# Community Preparation



## **Guernsey County**

- **CIC and Chamber of Commerce Collaboration**
- **Guernsey County Energy Coalition**

## **Jefferson County**

- **Progress Alliance and Chamber of Commerce Collaboration**
- **Jefferson County Oil and Gas Committee**

## **Carroll County**

- **First Ohio County in Utica Production**
- **Wealth Of Knowledge About Progress**
- **Amy Ruttledge of Carroll County CVB**

# Future Opportunities

- **Shale Development Providing Tools For New Manufacturing**
  - Cheap Fuelstock Means Lower Energy Prices For Manufactures
  - Cheap Feedstock- Natural Gas Liquids (NGL's)
  - NGL's Important to Chemical Industry, A Major Industry In Ohio
  - NGL's Like Ethane Needed For Plastic Manufacturing- Ethylene and PolyEthlyene
  - Cheap Natural Gas Attractive To Direct Reduced Iron Steel Manufacturing
  
- **New Revenue For Eastern Ohio**
  - Tax Revenues Can Be Reinvested For Future Projects
  - Expand Broadband Network in Rural Areas
  - Provide Revenue for New Business Parks
  - Provide Revenue To Invest In Infrastructure

This is what we are talking about! 

**Today there are over 6,000 products refined from Natural Gas and Crude Oil.**



# THANK YOU!



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