

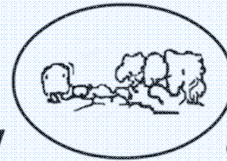


## Western North Dakota Energy Project

# Marcellus Shale Policy and Revenue Implications for Pennsylvania

January 27, 2012

*The Center for*



# *Rural Pennsylvania*

*A Legislative Agency of the Pennsylvania General Assembly*

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# The Center for Rural Pennsylvania

A legislative research agency of the  
Pennsylvania General Assembly  
(*Act 16, 1987*)

## Mandates

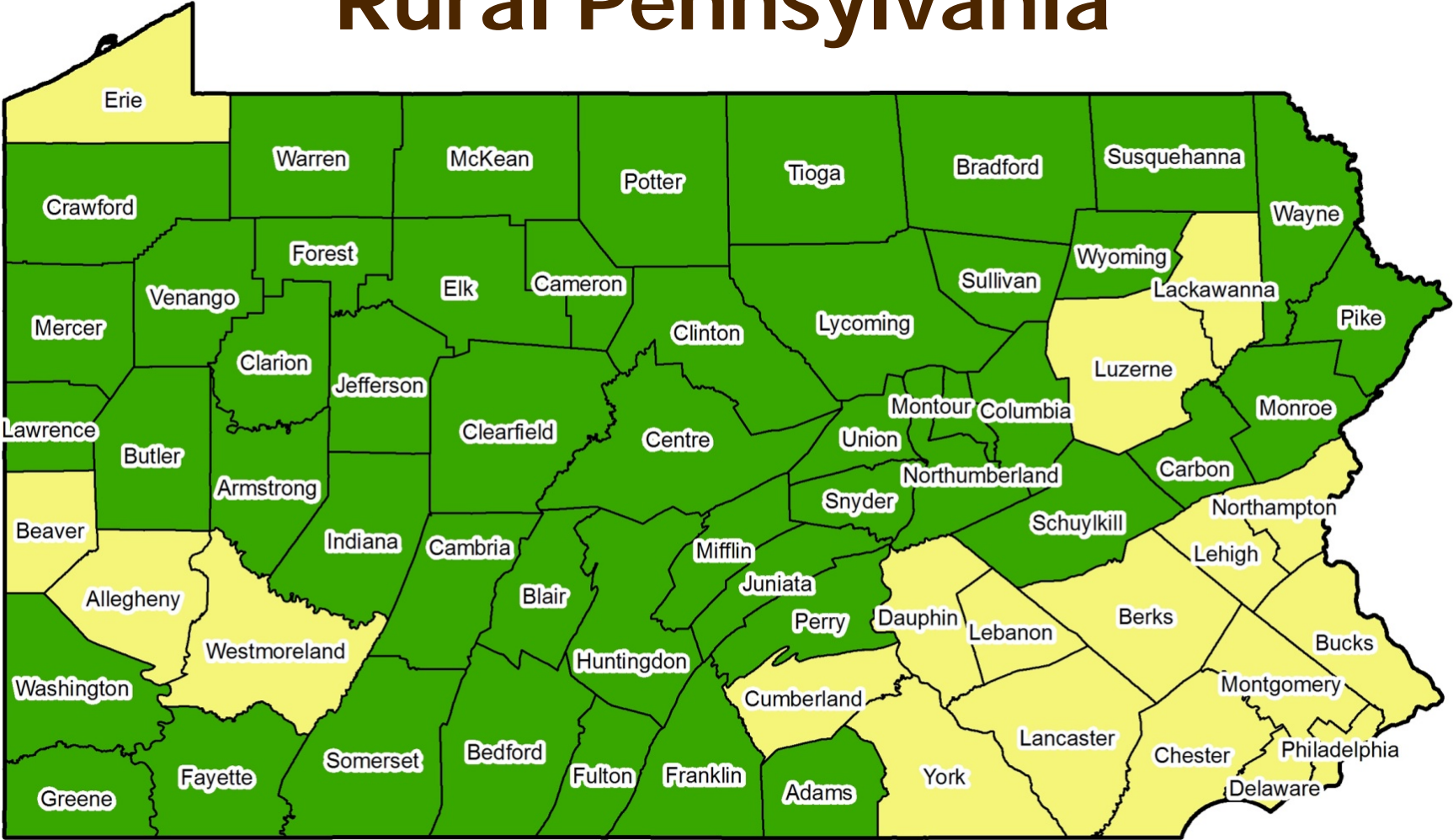
- Administer grants to conduct research on rural conditions.
- Maintain a database on rural conditions and needs.

# The Center for Rural Pennsylvania Research Efforts

- Health Professional and Medically Underserved Areas (Re)Designations
- Area Health Education Centers (AHECs)
- K-12 Distance Learning
- Private Well Water Quality
- Main Street/Elm Street Programs
- Statewide Heritage Tourism
- Agritourism
- PA Blueprints – Land Use



# Rural Pennsylvania

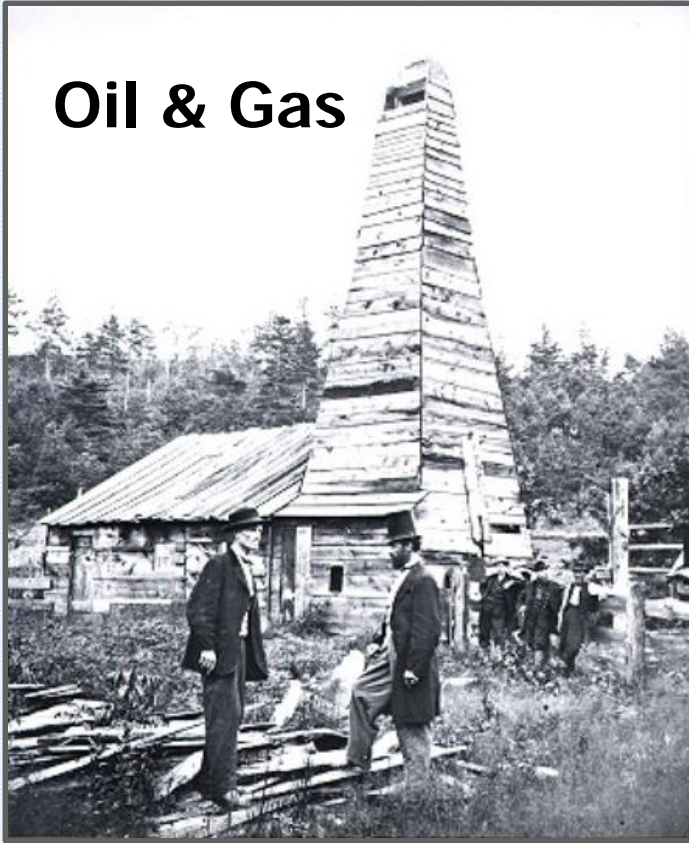


Source: U.S. Census Bureau, 2010 Census

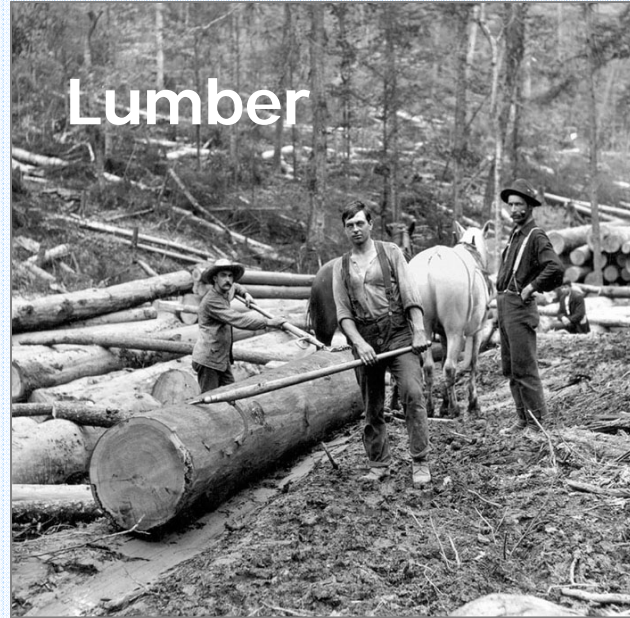
Urban Rural

# Extraction History in Pennsylvania

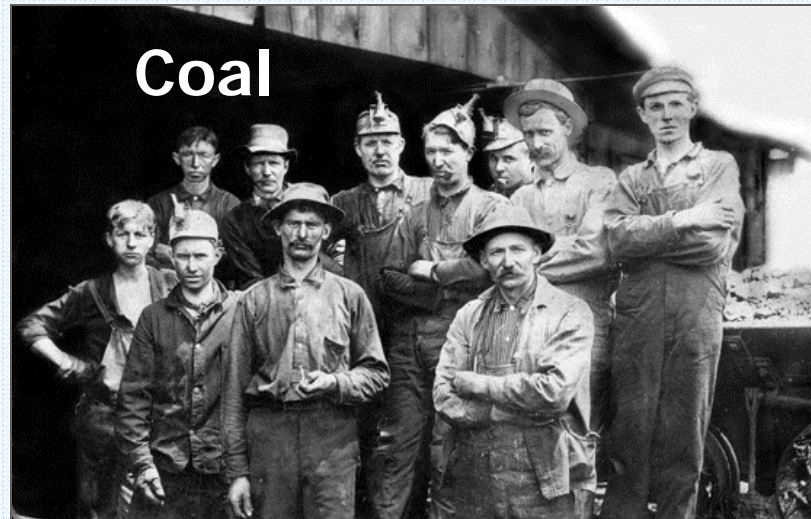
**Oil & Gas**



**Lumber**



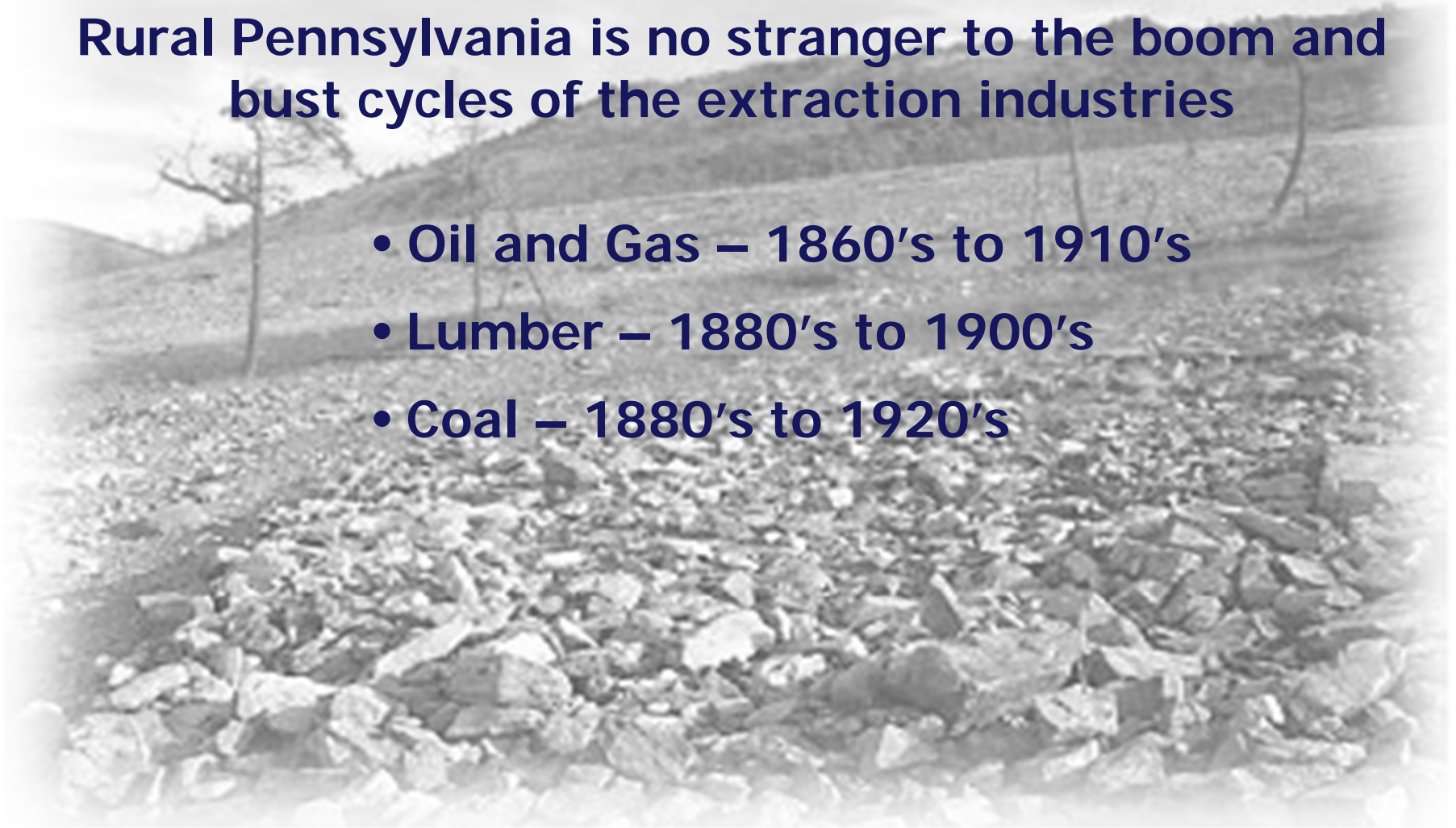
**Coal**



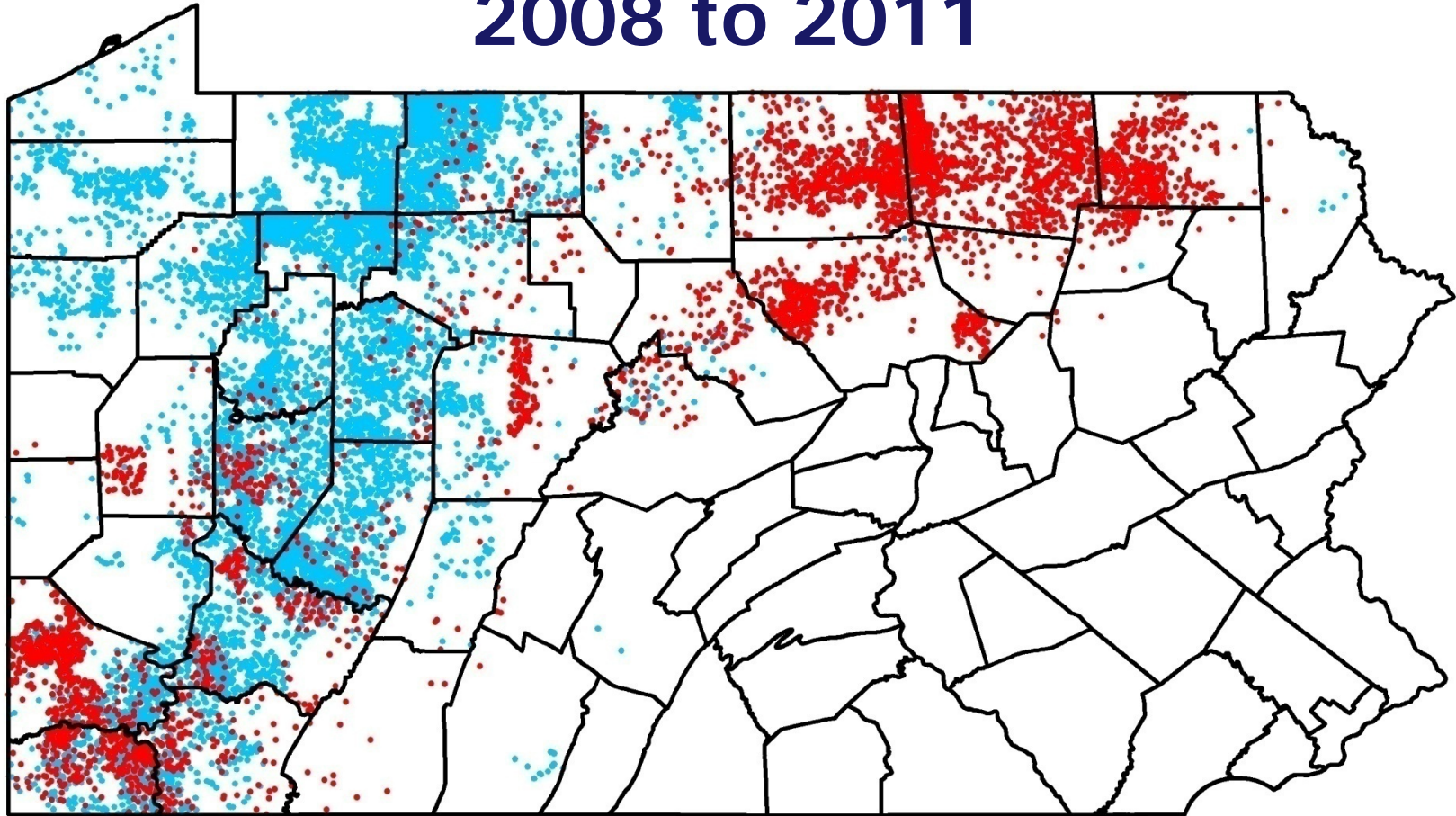
# Boom and Bust Cycles

**Rural Pennsylvania is no stranger to the boom and bust cycles of the extraction industries**

- **Oil and Gas – 1860's to 1910's**
- **Lumber – 1880's to 1900's**
- **Coal – 1880's to 1920's**



# Number of Gas and Oil Wells Drilled, 2008 to 2011

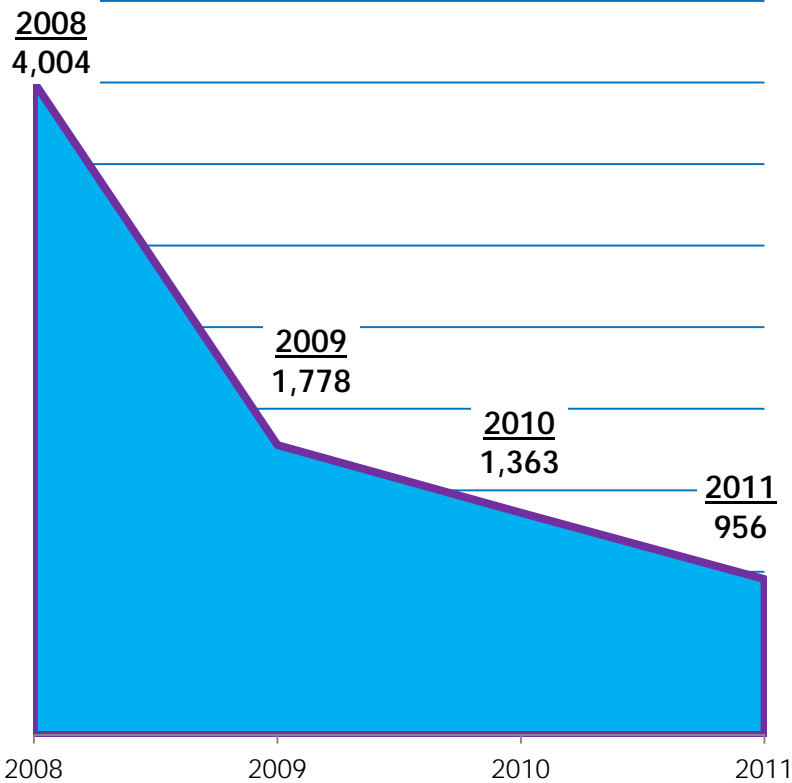


*Red Dot = 1 Marcellus Shale Well*  
*Blue Dot = 1 Other Gas or Oil Well*

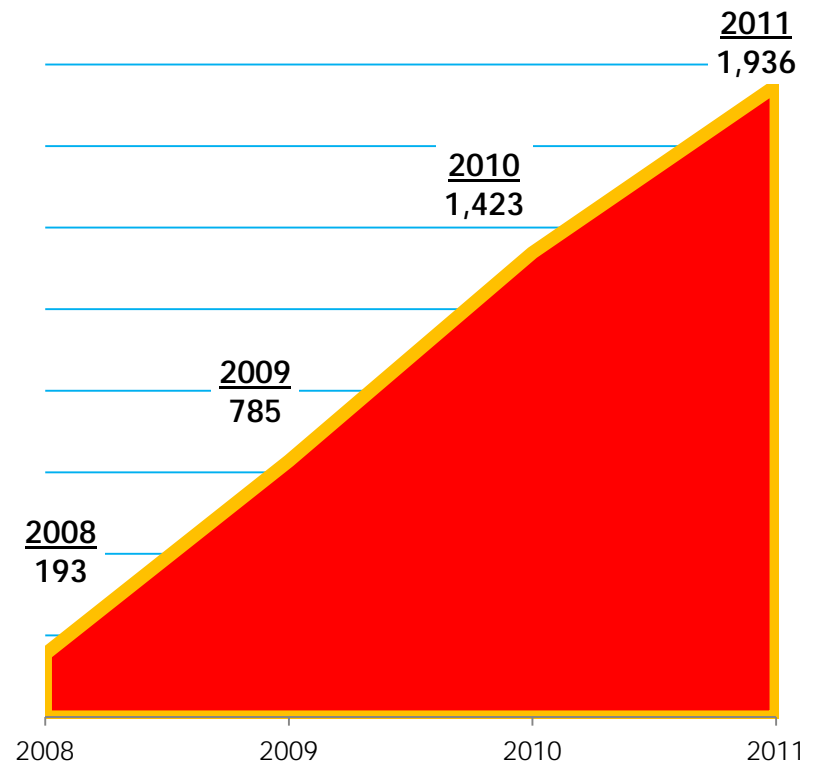


# Number of Gas and Oil Wells Drilled, 2008 to 2011

## Number of Other Gas & Oil Wells Drilled



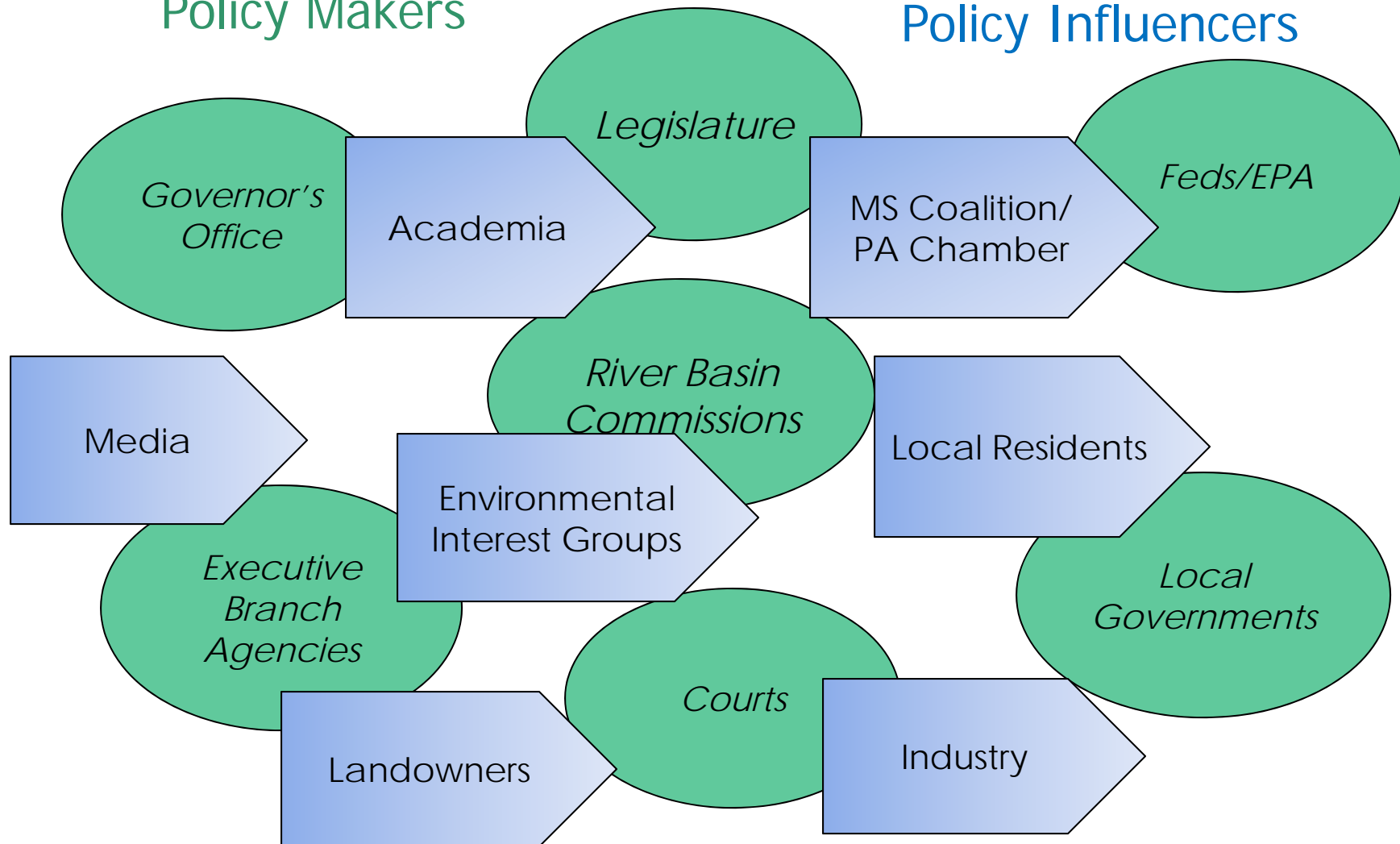
## Number of Marcellus Shale Wells Drilled



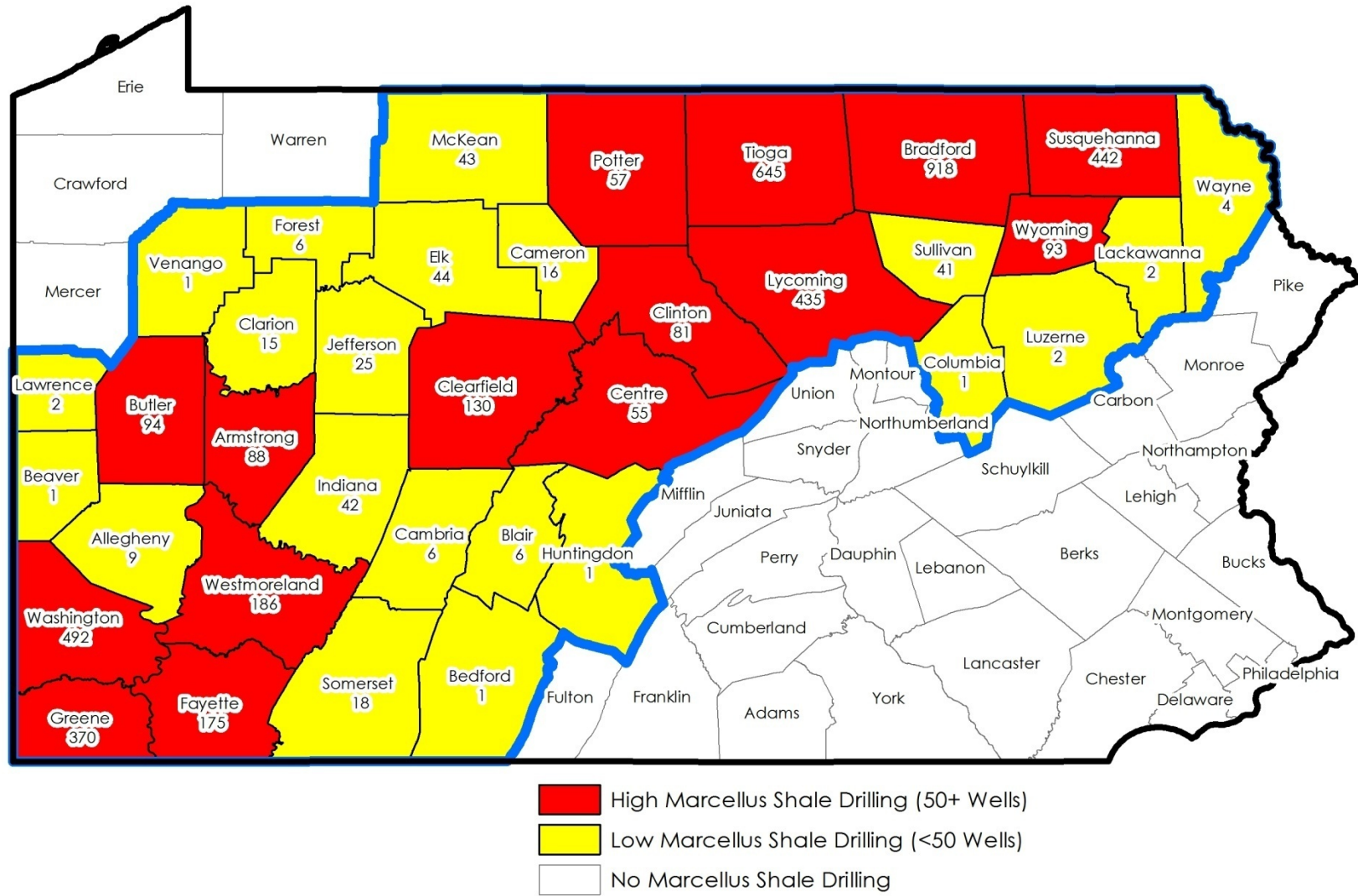
# Marcellus Shale Policy Discussion

Policy Makers

Policy Influencers



# Marcellus Shale Drilling Activity, 2008 - 2011



Data source: Pennsylvania Department of Environmental Protection's SPUD reports

# Statewide Marcellus Shale Policy Implications

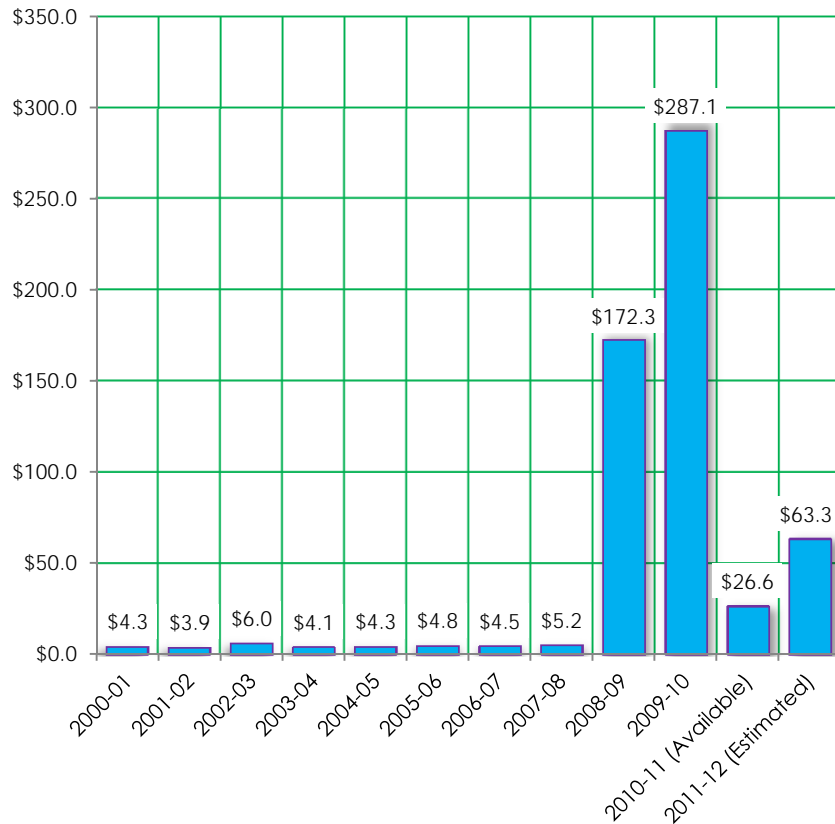
- Revenues
- Fees
- Taxes
- Environment
- Community
- Work Force Development
- Infrastructure
- Property Rights
- PA Local Governments



# Revenues

- State Forest Land Leases
- Drilling Permit Fees
- Other Related Revenues (sales tax, etc.)

**Pennsylvania Oil & Gas Lease Fund Revenue** *(In Adjusted \$ Million)*



- All revenues and royalties from oil and gas leases in state-owned land must go into Oil & Gas Lease Fund.
  - Funds intended to be used for conservation, recreation and flood control.
  - Funds used to purchase 26 State Parks.
  - In 2009 some Funds were diverted to General Fund.
- 700,000 acres of state forest land currently being leased.
  - In 40% of that land, the state does not own oil/gas rights.

Data source: Pennsylvania Office of the Budget

# Fees

- House and Senate Legislation Addressing Impact Fees
  - HB 1150: creates a per-well fee at the county level that begins at \$40,000 and shrinks to \$10,000-per-well over the levy's 10-year lifespan. The measure keeps 75 percent of revenue at the local level, and sends the rest to a handful of state agencies.
  - SB 1100: creates a 20-year fee, with a per-well rate beginning at \$50,000. The fee would be collected on the state, not county, level, and would give counties and municipalities hosting wells 55 percent of fee revenue.
  - Both plans limit local revenue to counties hosting drillers, rather than distributing it throughout the state. The two proposals also share near-identical language restricting municipalities' abilities to zone and regulate natural gas drilling.
- How the Legislation is Playing Out

# Environment



- Disposal of Brine Waste Water
  - treatment facilities
- Private Well Water
  - Set backs, infiltration, no regs. on construction, well drillers.
- Forest Fragmentation
- Gathering/Transmission Lines
- Clean Up from Accidents and Spills
  - Cost, local response time, volunteers, emergency preparedness plans.
- Drilling in State-Owned Forest Lands
  - Environmentalists, tourism

# Community



- Haves and Have Nots
- Housing
- Health Care
- Crime
- Quality of Life Changes
- Tourism
- Zoning
- Emergency Response Capabilities





# Work Force Development



- Workforce Availability
  - Lack of skilled workers
  - Work ethic
  - Drug testing
- Labor Shortages
- Local vs. Out-of-Area
- Entrepreneurship
- Recruiting of Post-Drilling-Related Industries



# Infrastructure



- Road Repairs
  - Industry reports spending \$40 million
- Gathering/Transmission Lines
- Road Bonding – State law 1978
  - Up to \$12.5k per paved road mile
- Telecommunications



# Property Rights

- Pooling
- Mineral Rights vs. Property Rights
- Royalties
- Leasing
- Well Setback
- Local Zoning
  - H/S bills would declare gas drilling as a “permitted use” in all zoning districts
  - > 150 municipalities have adopted > 145 ordinances (land use, road restrictions, noise, well setbacks)



# Pennsylvania Local Governments



- 67 Counties
- 2,562 Municipalities
- Limited Staff and Professional Capacity
  - Title searches, etc.
  - Limited local police force
- County Emergency Planning and Local Volunteer EMS/Fire-Rescue
- Road Maintenance

# Current Bills and Pending Legislation

Legislation Targeting Marcellus Shale Industry 2011-2012 Session						
Category*	House	Senate	Total	Referred to Committee	Floor Vote	Adopted
Fees, penalties, taxes	13	4	17	17	-	-
Drinking water quality	6	4	10	10	1	-
Moratoriums on Drilling/Permits	4	3	7	7	-	-
Emergency preparedness	4	2	6	6	1	-
Increase environmental protection regs.	3	2	5	5	1	-
Tax credits for Marcellus industry	3	-	3	3	-	-
Training and certification of workers	-	1	1	1	-	-
Using acid mine water for fracking	-	1	1	1	1	1

Legislation	House	Senate	Total
Bills	17	10	27
Resolutions	3	2	5
Democrat Prime Sponsor	12	9	21
Republican Prime Sponsor	10	3	13

Regular Session Legislation

2011-2012  
27 Bills, 5 Resolutions

2009-2010  
9 Bills

2007-2008  
1 Bill

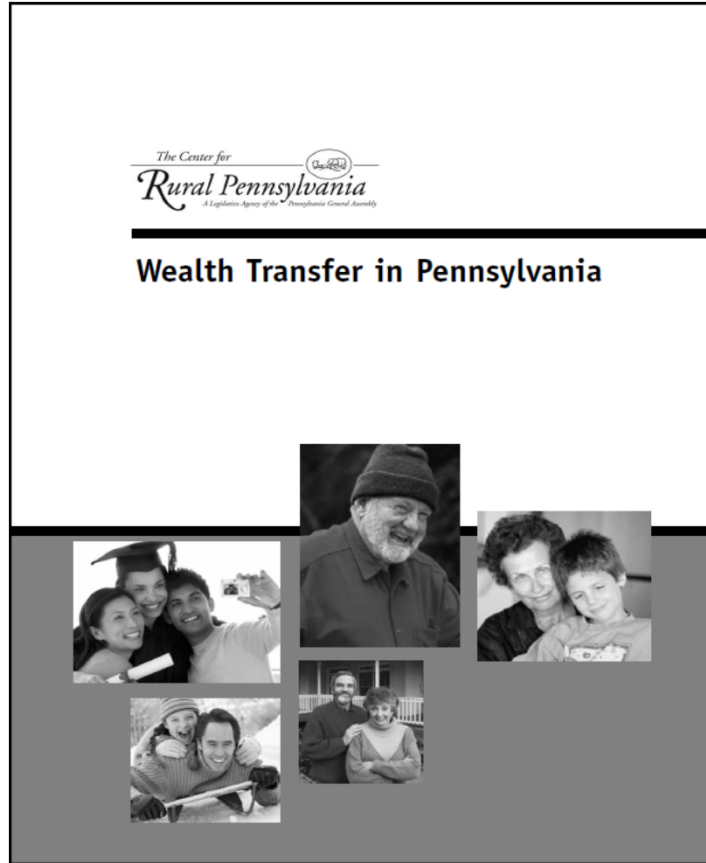
\*categories are not mutually exclusive

# Pennsylvania Programs and Studies

- Penn State University
  - Marcellus Shale Outreach and Education Center
- Cooperative Extension
- Univ. of Pitt School of Public Health
- Private Colleges
  - Lycoming College, Wilkes University
- Geisinger Hospital
- The Center for Rural Pennsylvania
  - Private water wells
  - Six-year longitudinal study
  - Opportunities for wealth transfer



# Transfer of Wealth in Pennsylvania

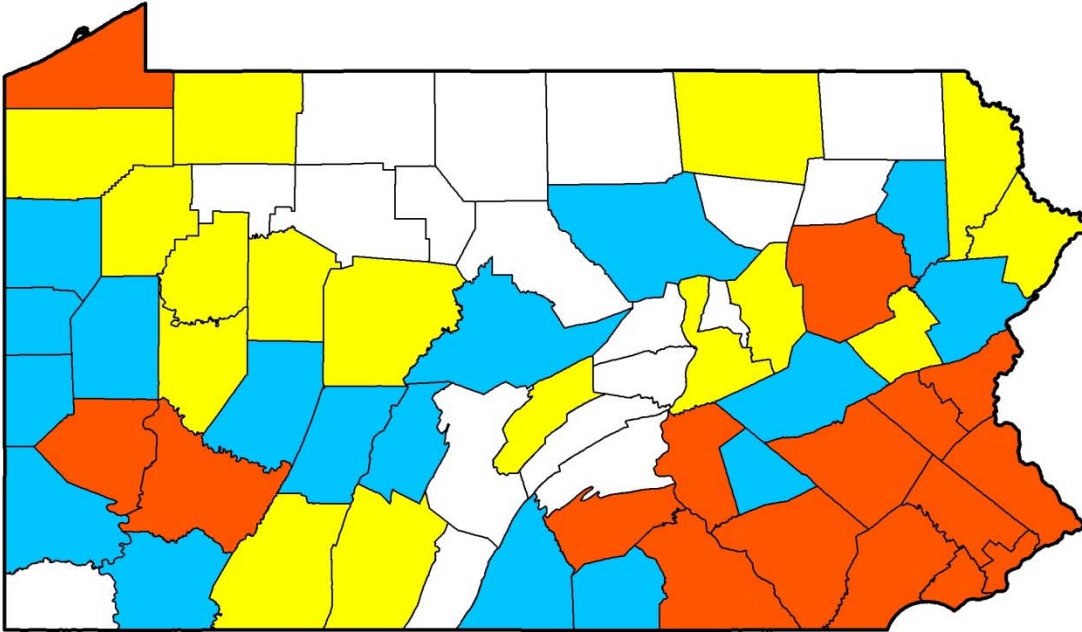


- Based on 2005 data.
- Published in 2008.
- Measured the wealth in Pennsylvania, by county.
- Determined how much of this wealth will be transferred from one generation to the next and when.
- Estimated how much of this wealth transfer can be "captured" for community development.
- 50-year TOW for Pennsylvania is \$1.17 trillion.
- TOW figures are pre-recession but also pre-Marcellus Shale.

# Pennsylvania Net Worth, 2005

Statewide = \$1.01 trillion

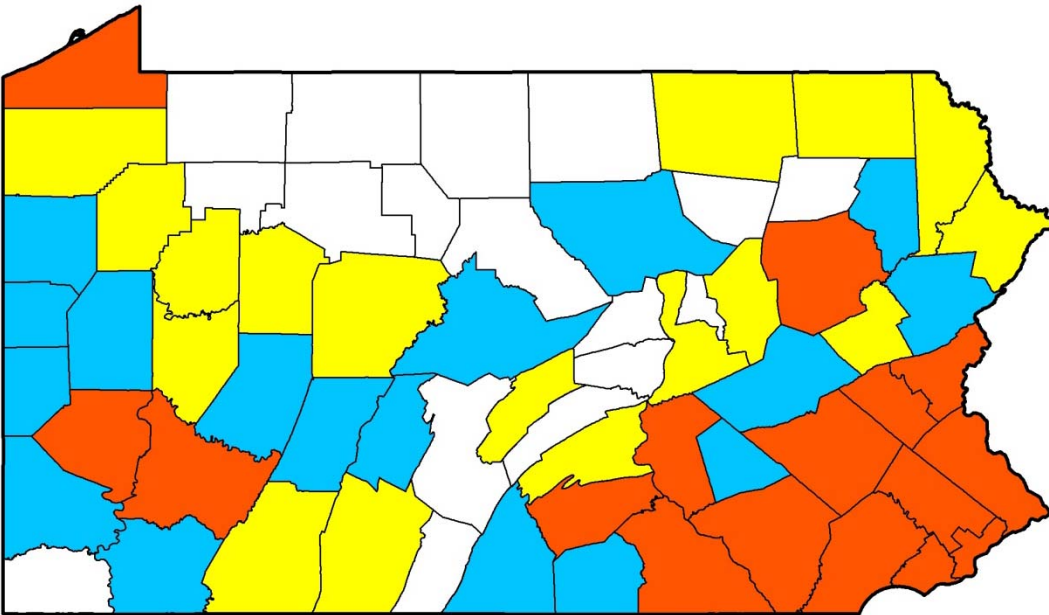
- Less than \$2.66 Billion
- \$2.66 to \$5.54 Billion
- \$5.55 to \$14.98 Billion
- \$14.99 Billion or more



# 10-Year TOW

Statewide = \$193.38 billion

- Less than \$0.53 Billion
- \$0.53 to \$1.11 Billion
- \$1.12 to \$3.26 Billion
- \$3.27 Billion or more

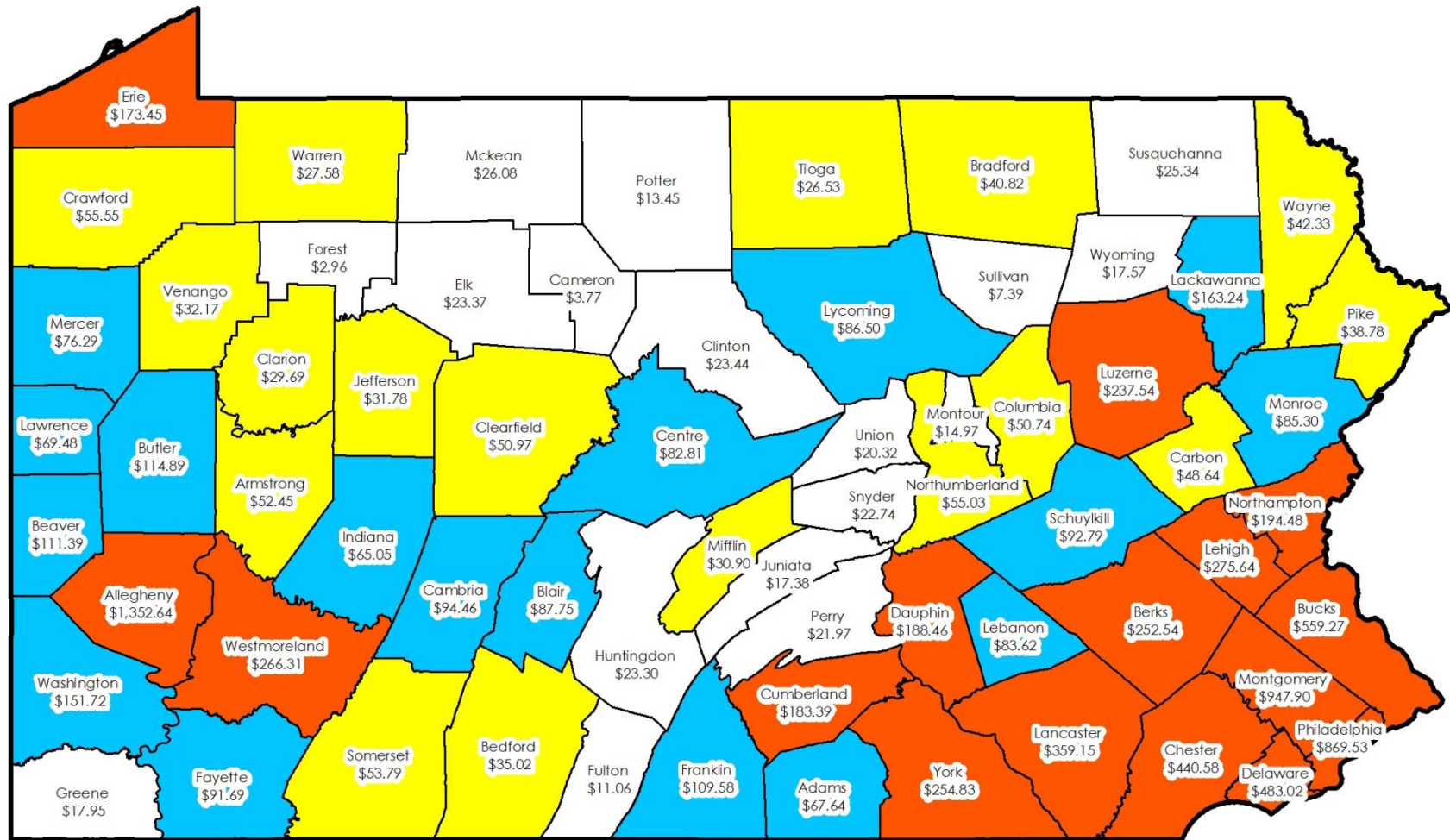




# 5% Capture for the 10-Year TOW

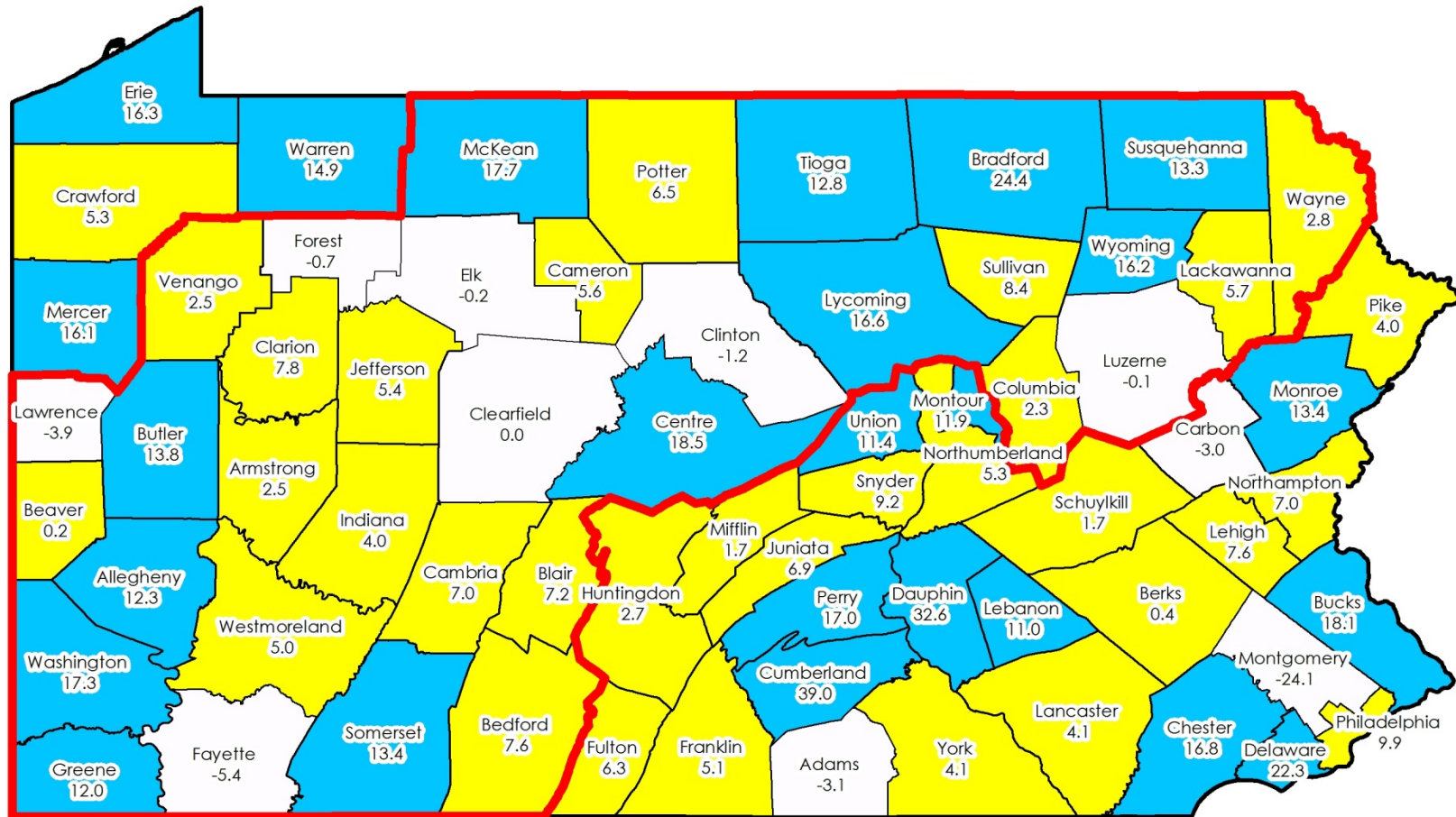
## Pennsylvania's 5% capture total is \$9.67 billion

5% payout on \$9.6B of endowed funds is \$483.44M.



Data Source: Center for Rural Pennsylvania

# Percent Change in Bank Deposits, June 2008 to June 2011\*



- Decline or No Change in Bank Deposits
- 0.1% to 9.9% Increase
- 10.0% or More Increase

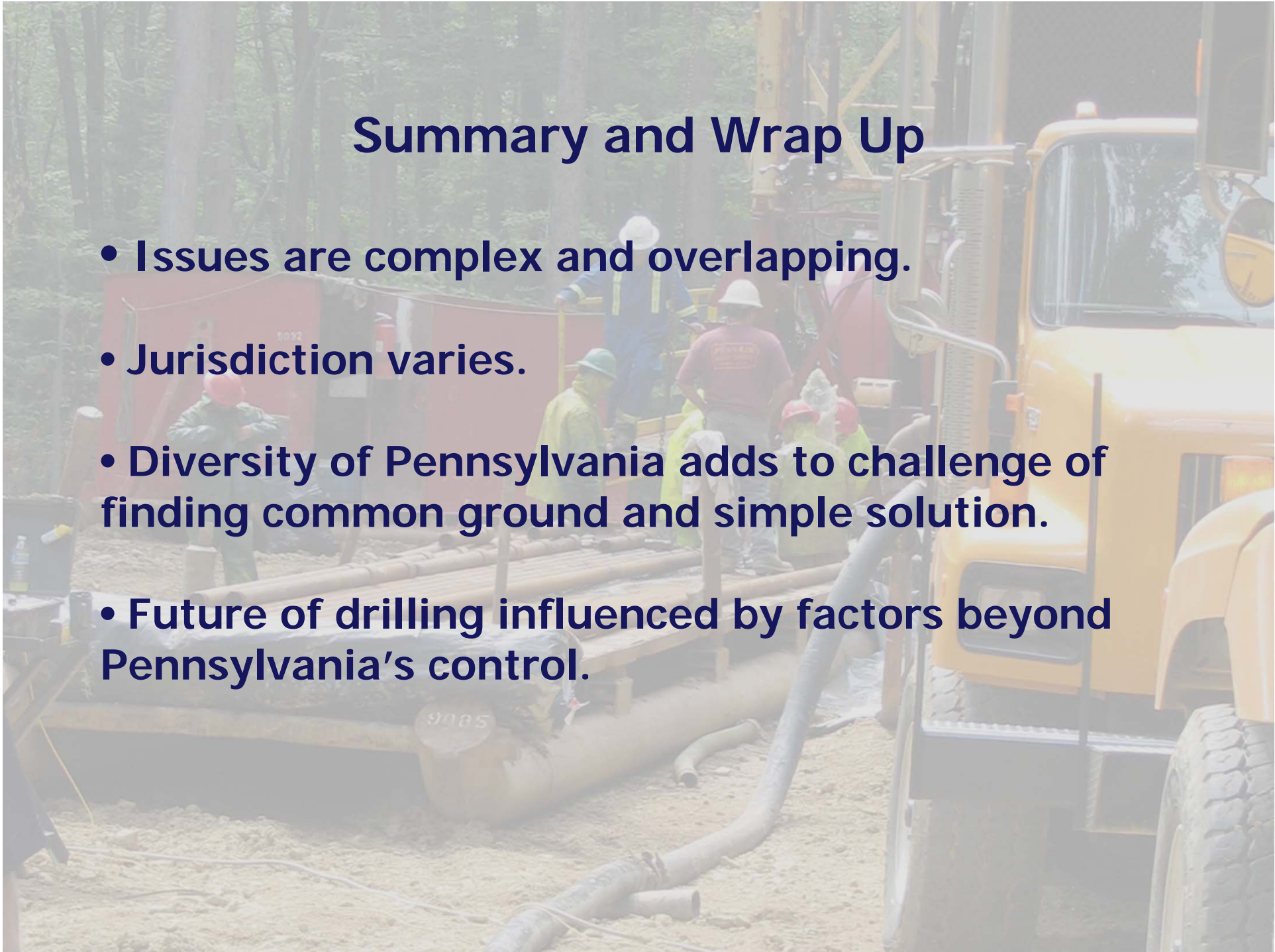
\*Data adjusted for inflation using the CPI-U with June 2011 = 100  
Data Source: FDIC

# Updating Transfer of Wealth

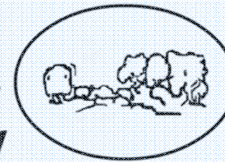
- Center is working with Appalachian Regional Commission, the state Department of Community and Economic Development and Community Foundations.
  - Foundation board/staff training and development
  - Making a case for foundation investment in economic development
  - Approaching these “mailbox millionaires”
- Center is also looking to update the Transfer of Wealth study.

## Summary and Wrap Up

- Issues are complex and overlapping.
- Jurisdiction varies.
- Diversity of Pennsylvania adds to challenge of finding common ground and simple solution.
- Future of drilling influenced by factors beyond Pennsylvania's control.



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