EXHIBIT 2
DATE 3/20/15
HB

Revenue Estimate Analysis

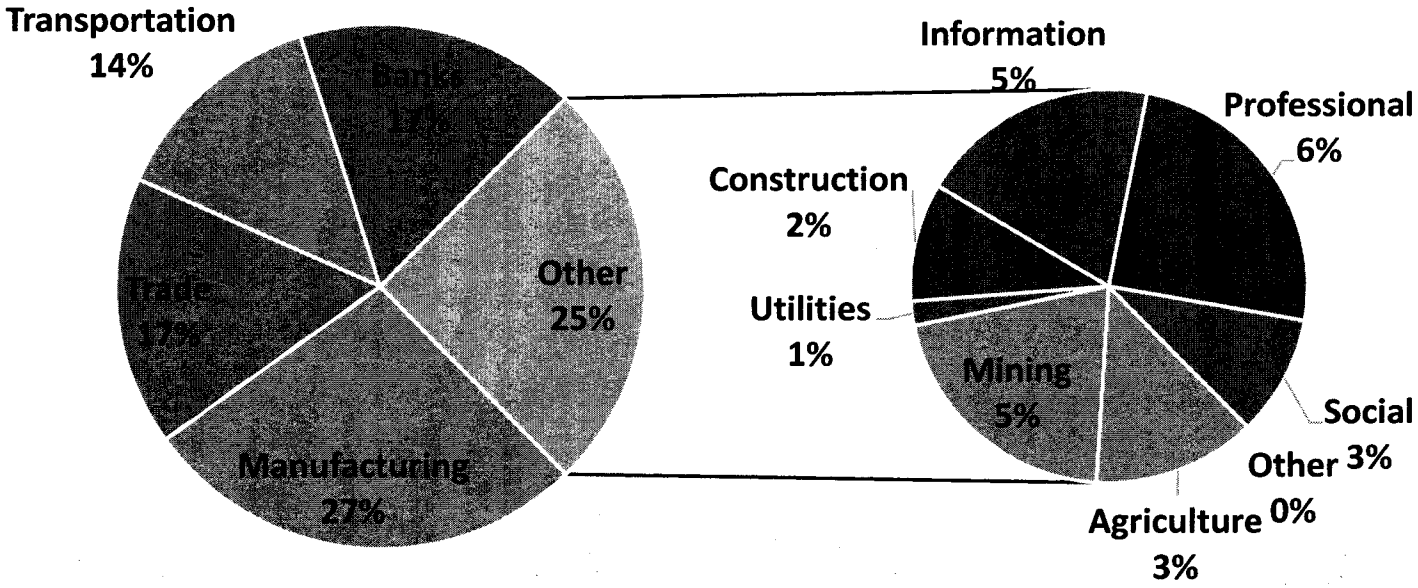
Montana's Corporation and Individual Income Tax

By Terry W. Johnson, Montana Taxpayer's Association

Legislative versus Executive Revenue Estimates (in Millions)

	Corporation Income Tax			Individual Income Tax			
Fiscal Year	Leg. Est.	Exec. Est.	Difference	Leg. Est.	Exec. Est.	Difference	Combined Difference
2015	$177.1	$171.8	$5.3	$1,088.6	$1,160.1	($71.5)	($66.2)
2016	$151.1	$214.4	($63.3)	$1,160.9	$1,229.6	($68.7)	($132.0)
2017	$163.3	$197.4	($34.1)	$1,221.7	$1,313.0	($91.3)	($125.4)
Three Year Totals			**($92.1)**			**($231.5)**	**($323.6)**

Montana Corporation Tax Liability by Sector, 2012



Source: Legislative Fiscal Division

Montana Corporation Sectors Manufacturing (27%)

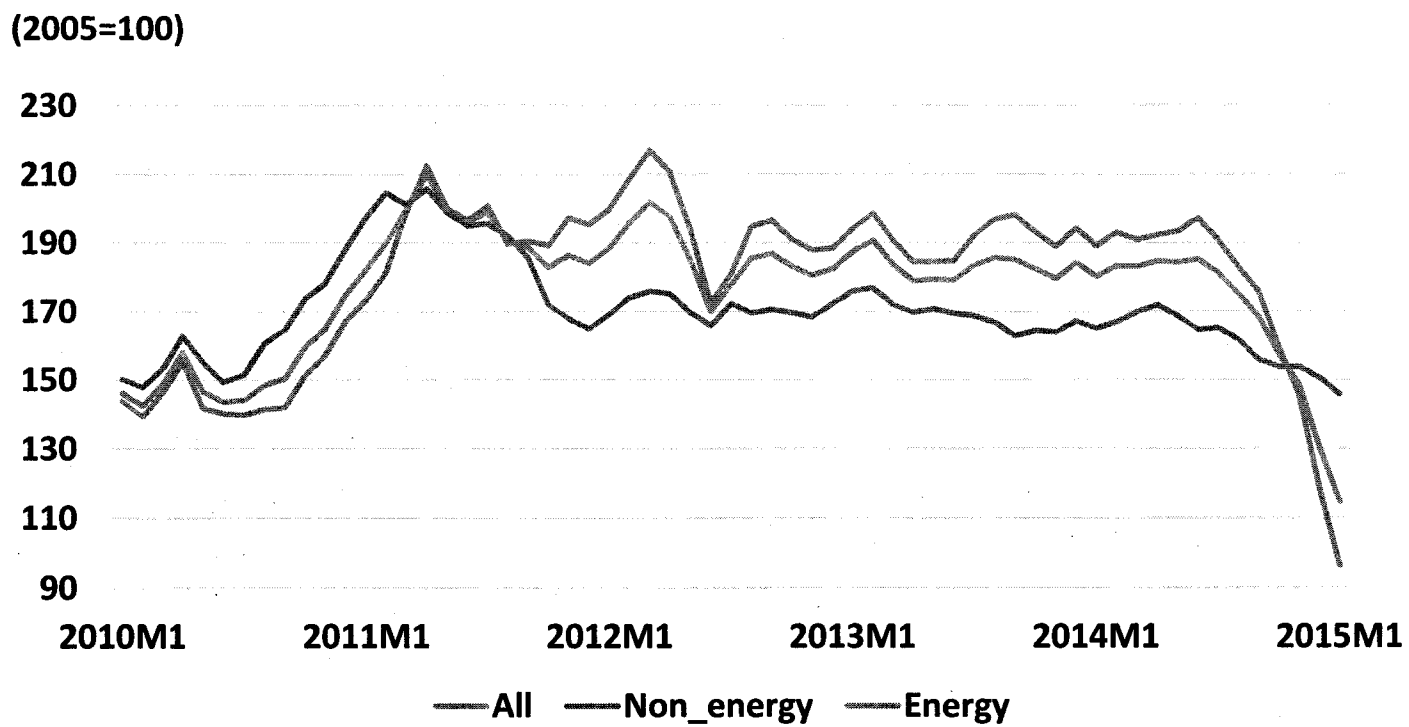
- Dominant Component – Refineries
- Measure of Profitability
  - "Crack" Spread 3:2:1
    - 3 barrels of input to 2 barrels of gasoline, 1 barrel of distillate
  - Operational costs are primarily fixed
- Profits margins are down at least 40 percent

Montana Corporation Sectors Banks (17%)

- Slow Housing Starts – still below Great Recession levels
- Why?
  - New Mortgage Underwriting Standards
  - Large Accumulation of Debt
    - Student Loans
    - Other Personal Debt
- Median Age of Homeowners Increasing
  - 36 in 2001 to 44 in 2014

Montana Corporation Sectors Transportation,Agriculture,Mining (22%)

- Cost Reductions – Lower Oil Prices
- Commodity Price Decline

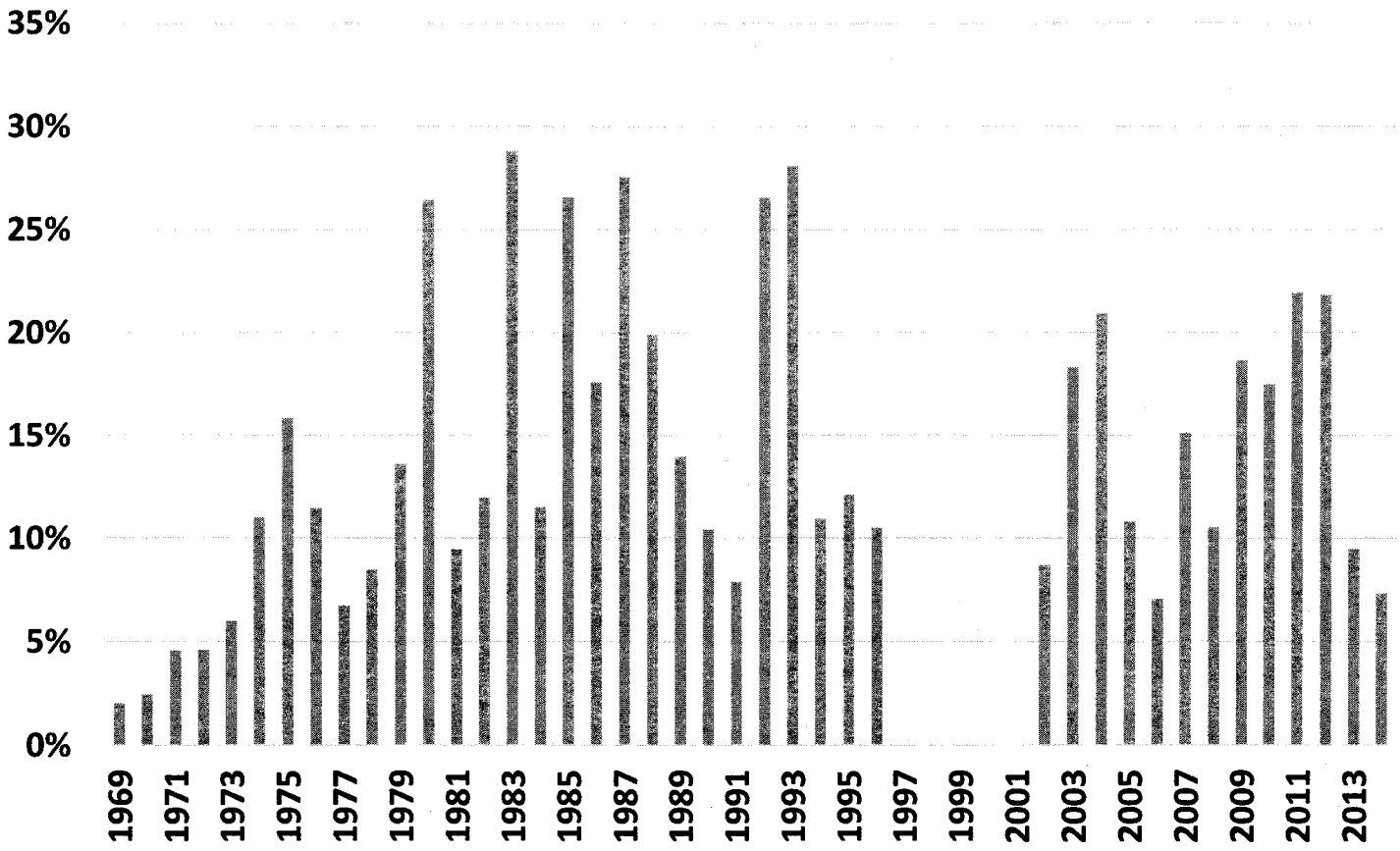


Source: International Monetary Fund

Montana Corporation Sectors Trade (17%)

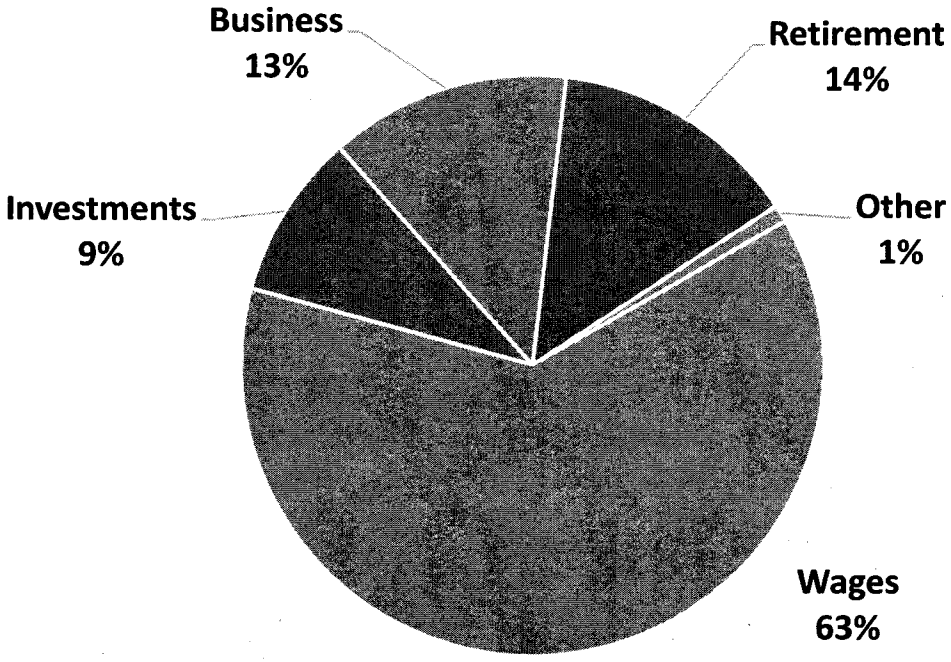
- Positive Outlook
  - US Economic Recovery (IHS 2.7%)
  - MT Non-Farm Earnings (BBER 2.4%)

Montana Corporation Tax Audit Receipts as % of Total



Source: Statewide Budgeting and Accounting System

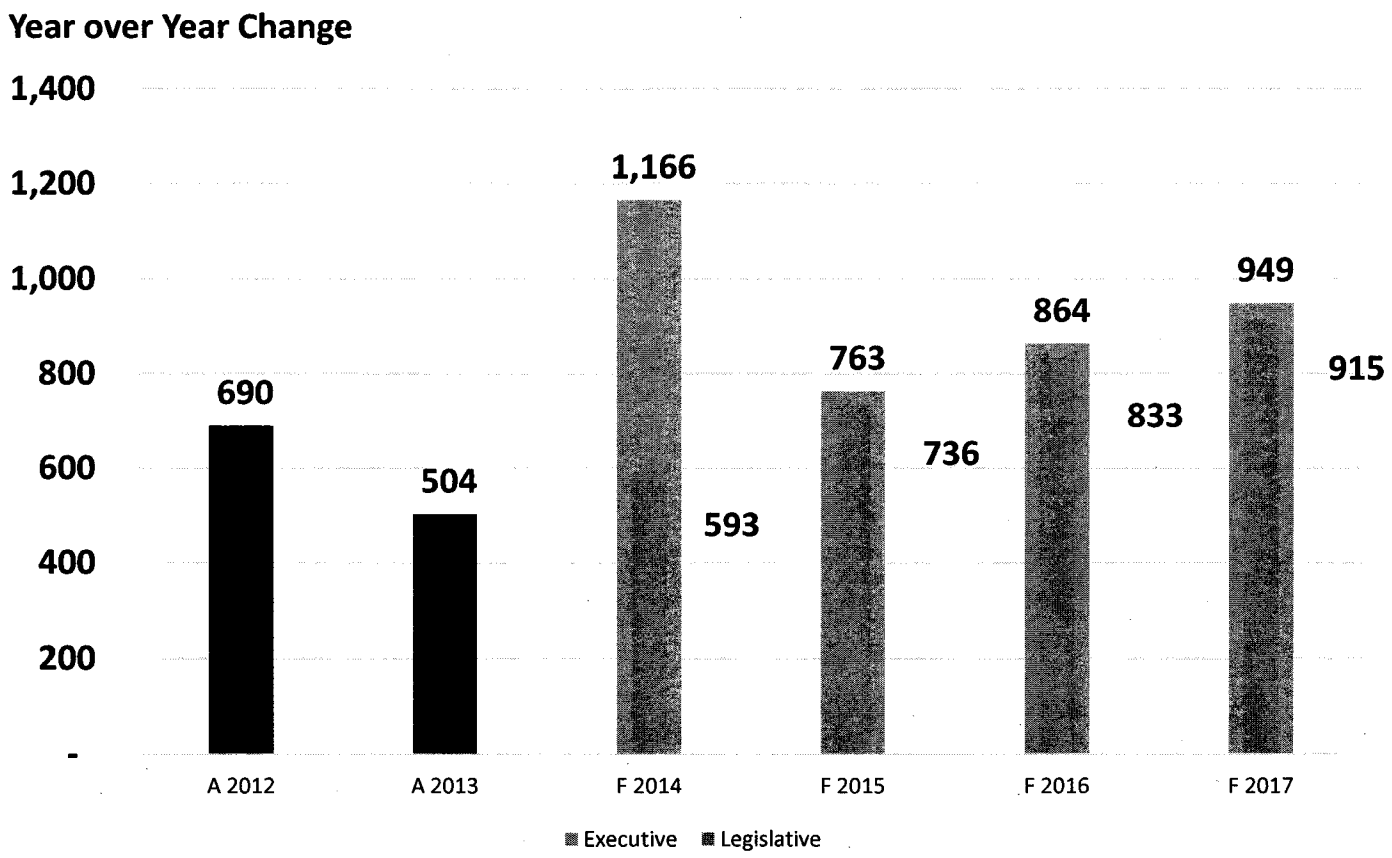
Montana Individual Income Tax Liability by Income Component, 2013



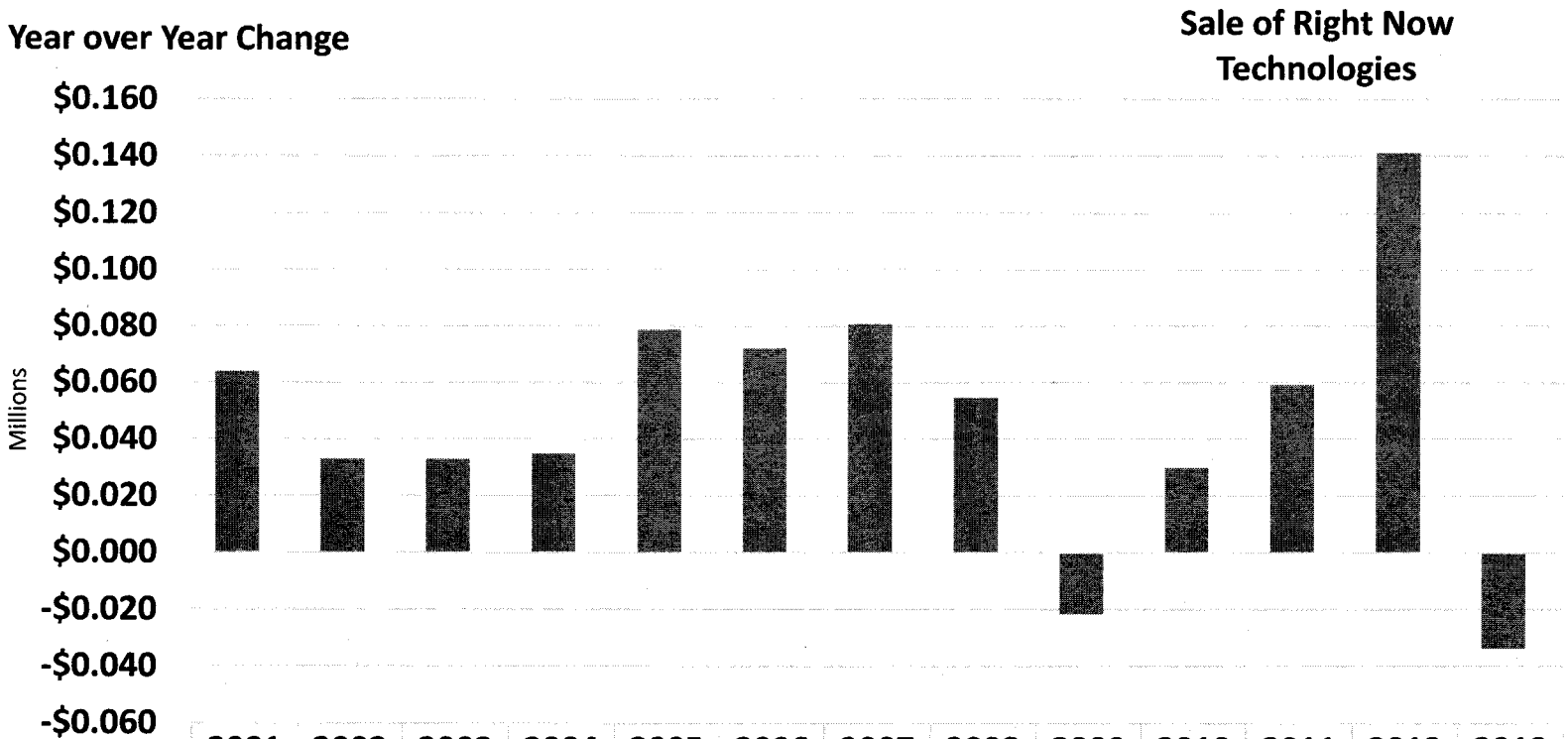
Excluding Negative Income Category

Source: Legislative Fiscal Division

Montana Individual Income Tax
Tax Return Wage Income Forecasts



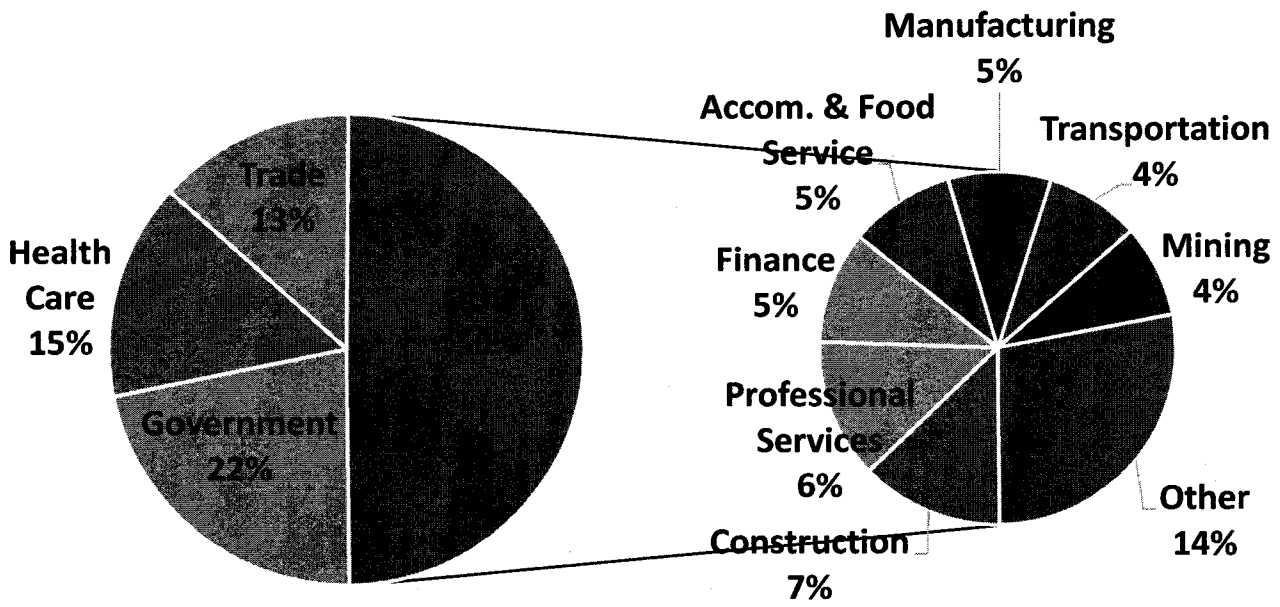
Montana Individual Income Tax
BEA Non-Farm Wage Income



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
$ Change	0.064	0.033	0.033	0.035	0.079	0.072	0.081	0.055	-0.02	0.030	0.059	0.141	-0.03
% Change	13.47	6.12%	5.75%	5.75%	12.33	10.05	10.23	6.27%	-2.33	3.30%	6.34%	14.20	-2.97

Source: US Department of Commerce, Bureau of Economic Analysis

Montana Individual Income Tax
BEA Non-Farm Wage Income, 2013



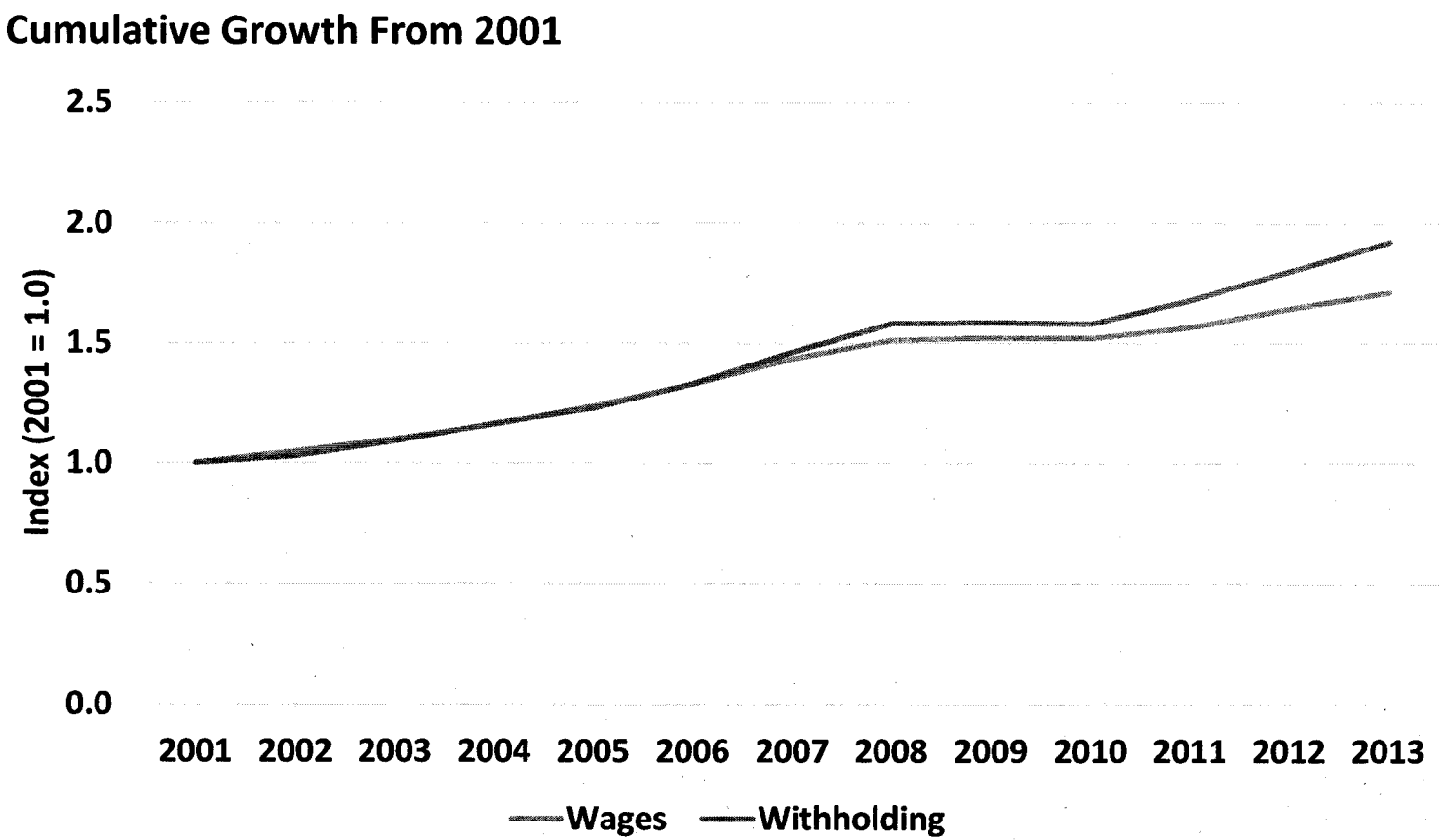
Source: US Department of Commerce, Bureau of Economic Analysis

Montana Individual Income Tax Average Sector Growth

Sector	Growth/Yr 2010-2013	Percent Total Wages
Government	0.8%	22%
Health Care	4.8%	15%
Trade	4.5%	13%
Other	4.1%	50%

Source: US Department of Commerce, Bureau of Economic Analysis

Montana Individual Income Tax
BEA Wage Growth vs. Withholding



Sources: US Department of Commerce, Bureau of Economic Analysis
Statewide Budgeting And Accounting System

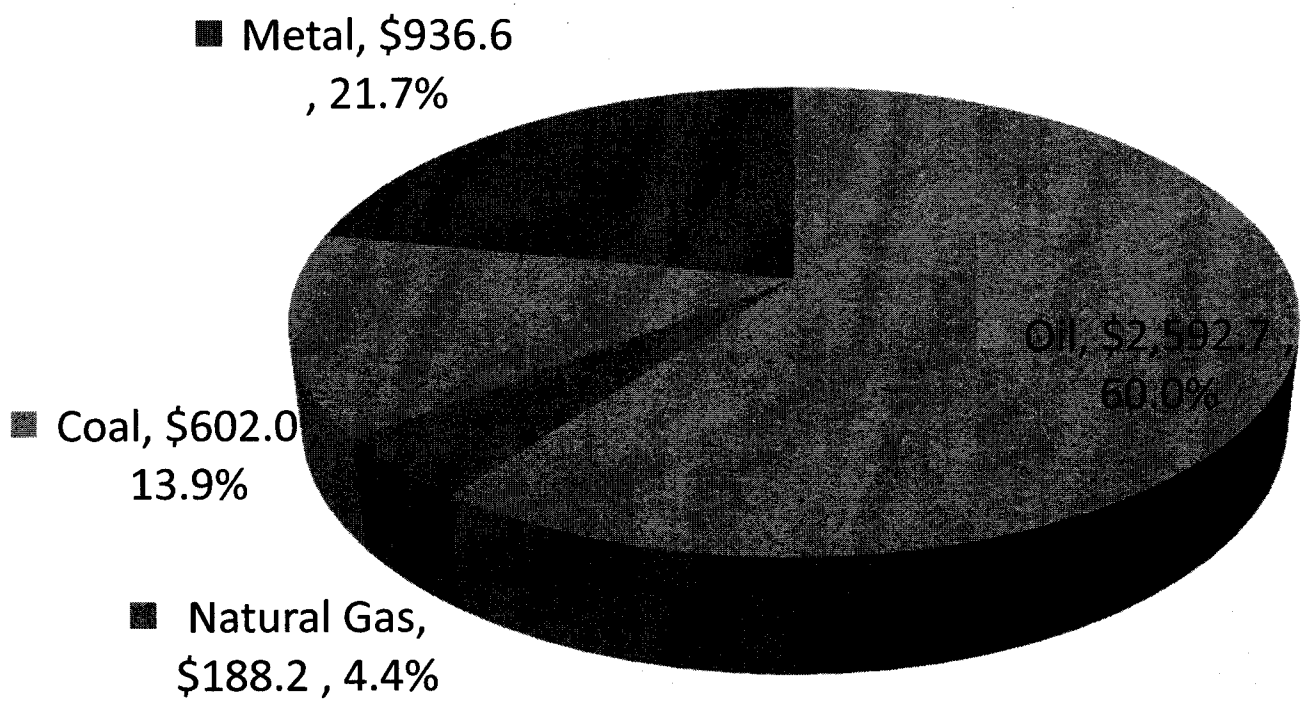
Revenue Estimate Summary

- Corporation Income Tax
  - Manufacturing (Oil Price Impact)
  - Banking (Housing & Interest Rates)
  - Audits and Timing of Payments
- Individual Income Tax
  - Major Sector Growth
  - BEA Wage Growth vs. Withholding Growth
  - Timing of Payments

Questions ?

Total Value of Production in Montana Oil, Natural Gas, Coal, Metals

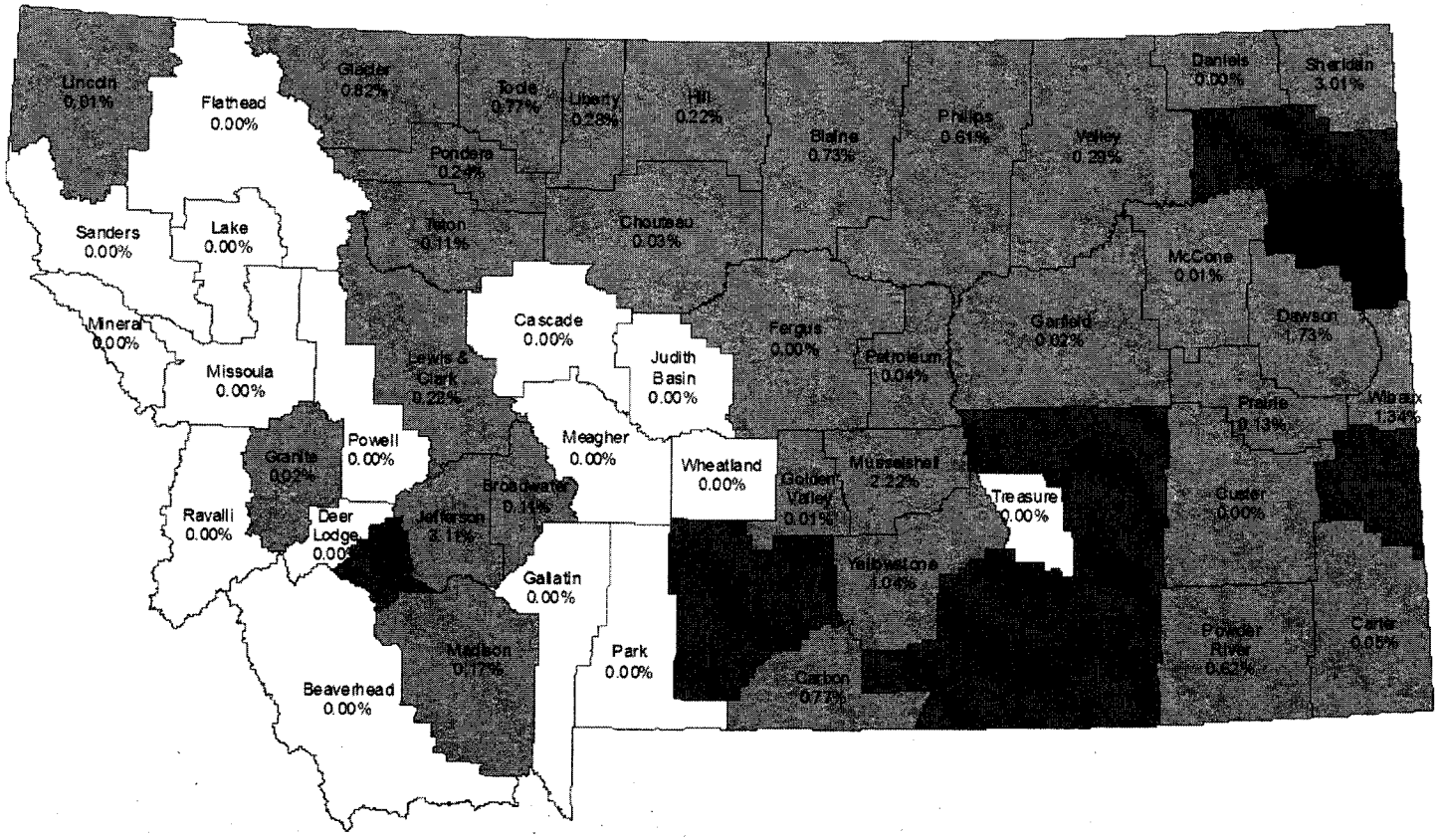
How Big is the Industry ? 2013 $4.3 Billion



Source: Montana Department of Revenue

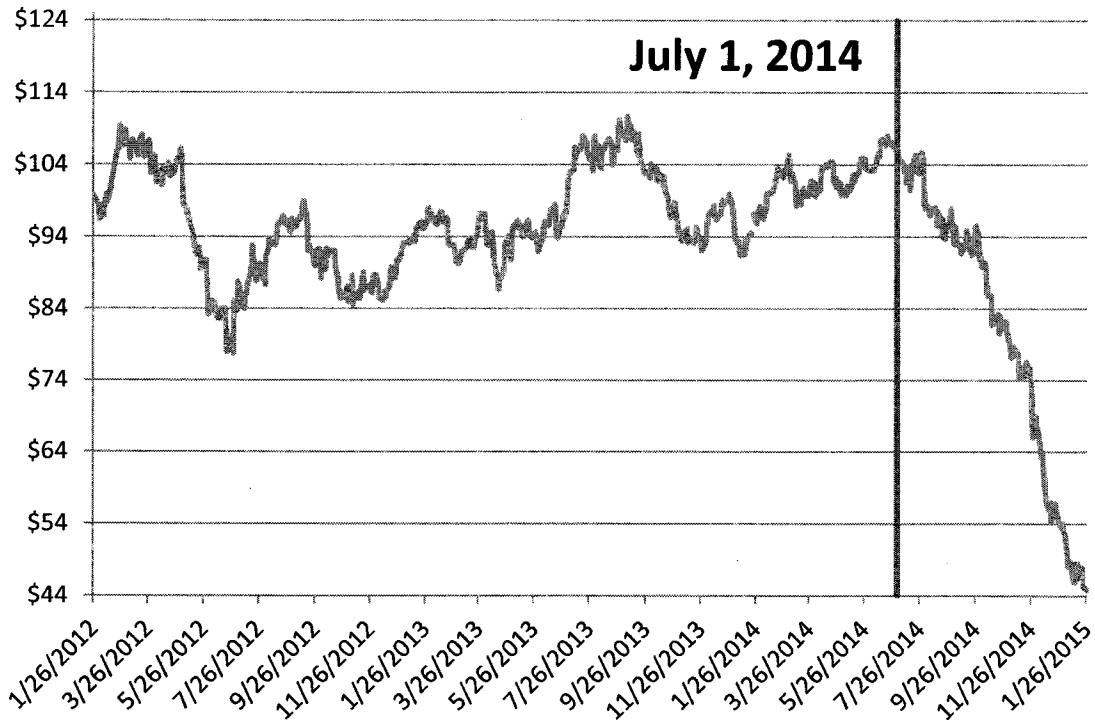
2013 Production Value by County Oil, Natural Gas, Coal, Metals

Only 16 Counties Do Not Have Production Activity



Source: Montana Department of Revenue

Oil Situation
Oil Price Plunge

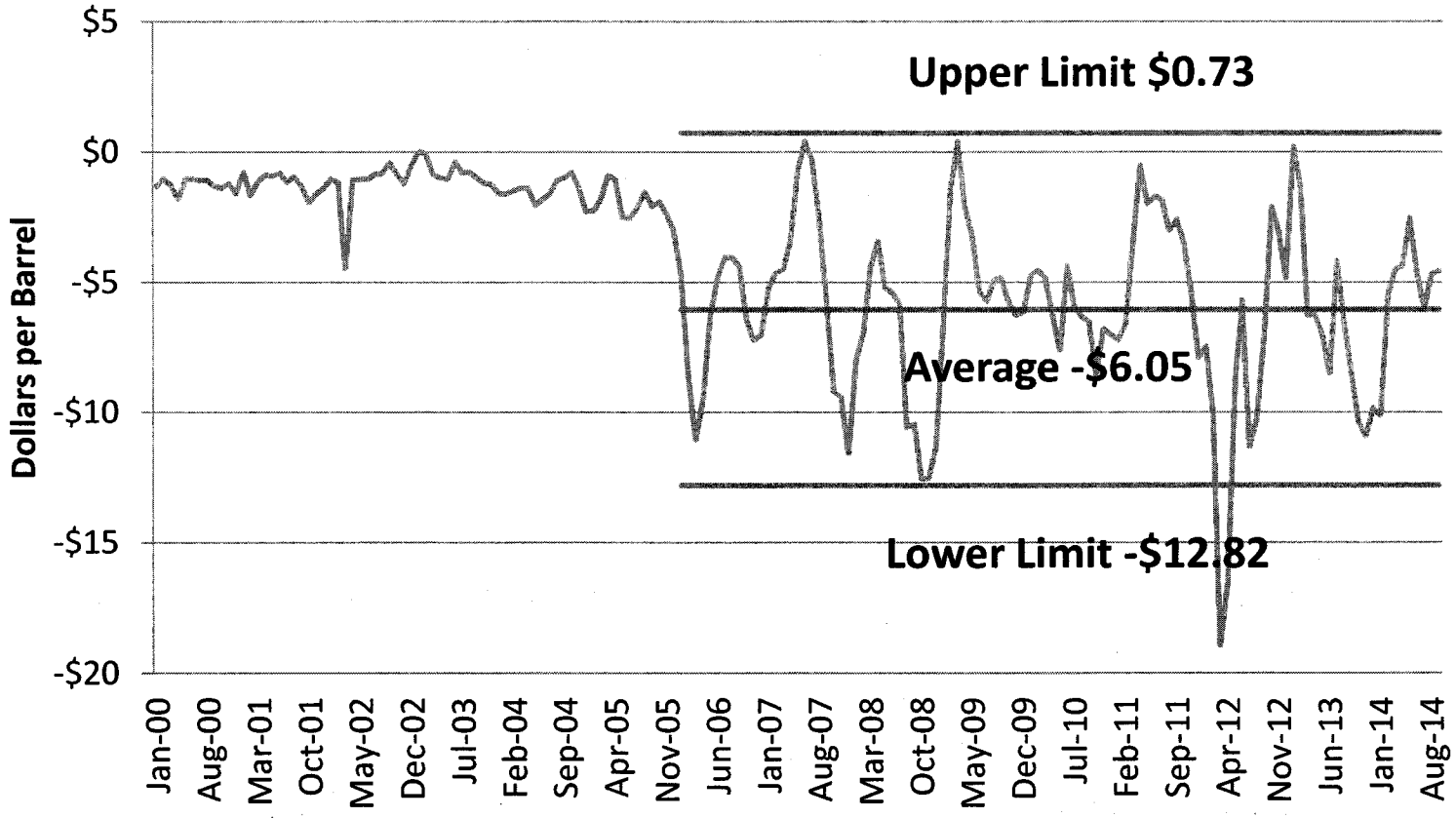


- **Increased US Production**
  - ✓ **Texas & North Dakota**
- **Slower Economic Growth**
  - ✓ **China & Other Asian Countries**
- **OPEC Maintaining Production Quotas**
  - ✓ **30 million B/D**

57.8% decline

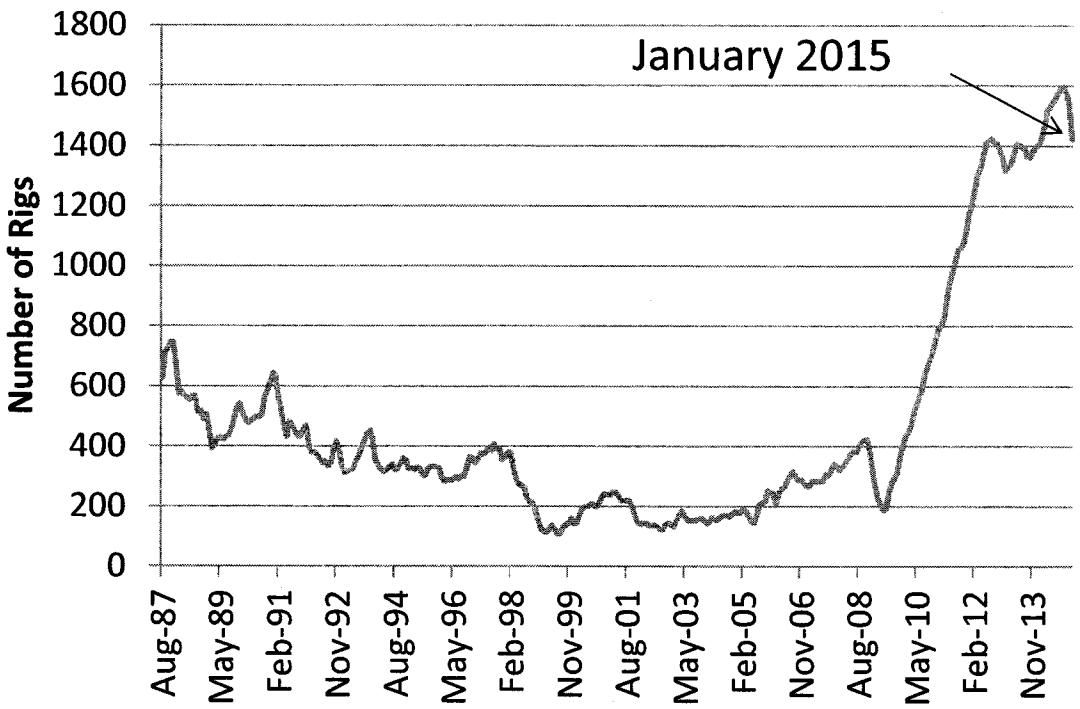
Source: Energy Information Administration

Oil Price Differential
Montana vs. West Texas Intermediate



Source: Energy Information Administration

U.S. Rotary Rigs in Operation



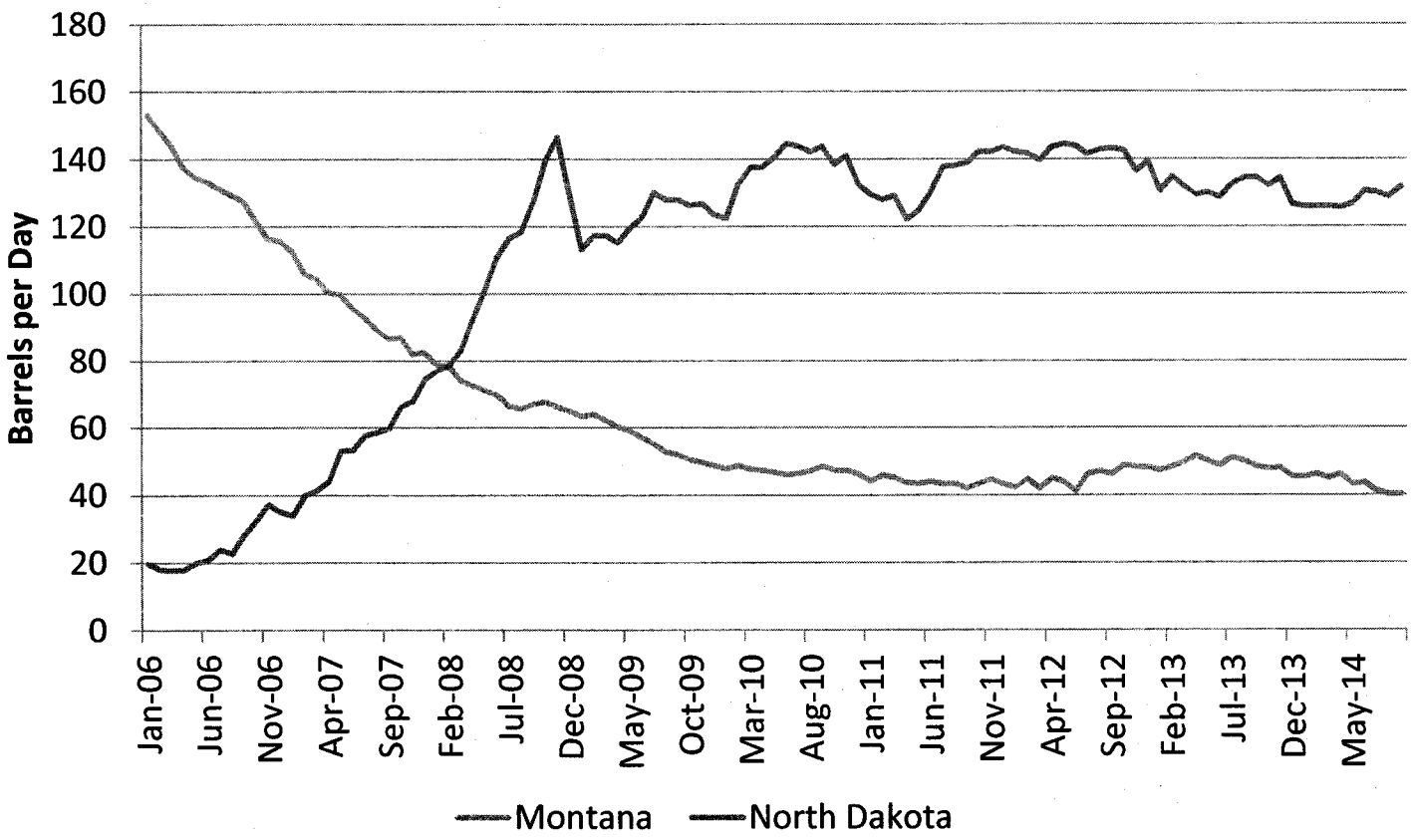
The Bad News …

- "Texas drilling permits drop 57% in November."
- "Continental Resources will cut spending 40%." (largest producer in MT.)
- "Will also reduce drilling rigs by a third."

Source : RIGZONE.com 12/23/2014

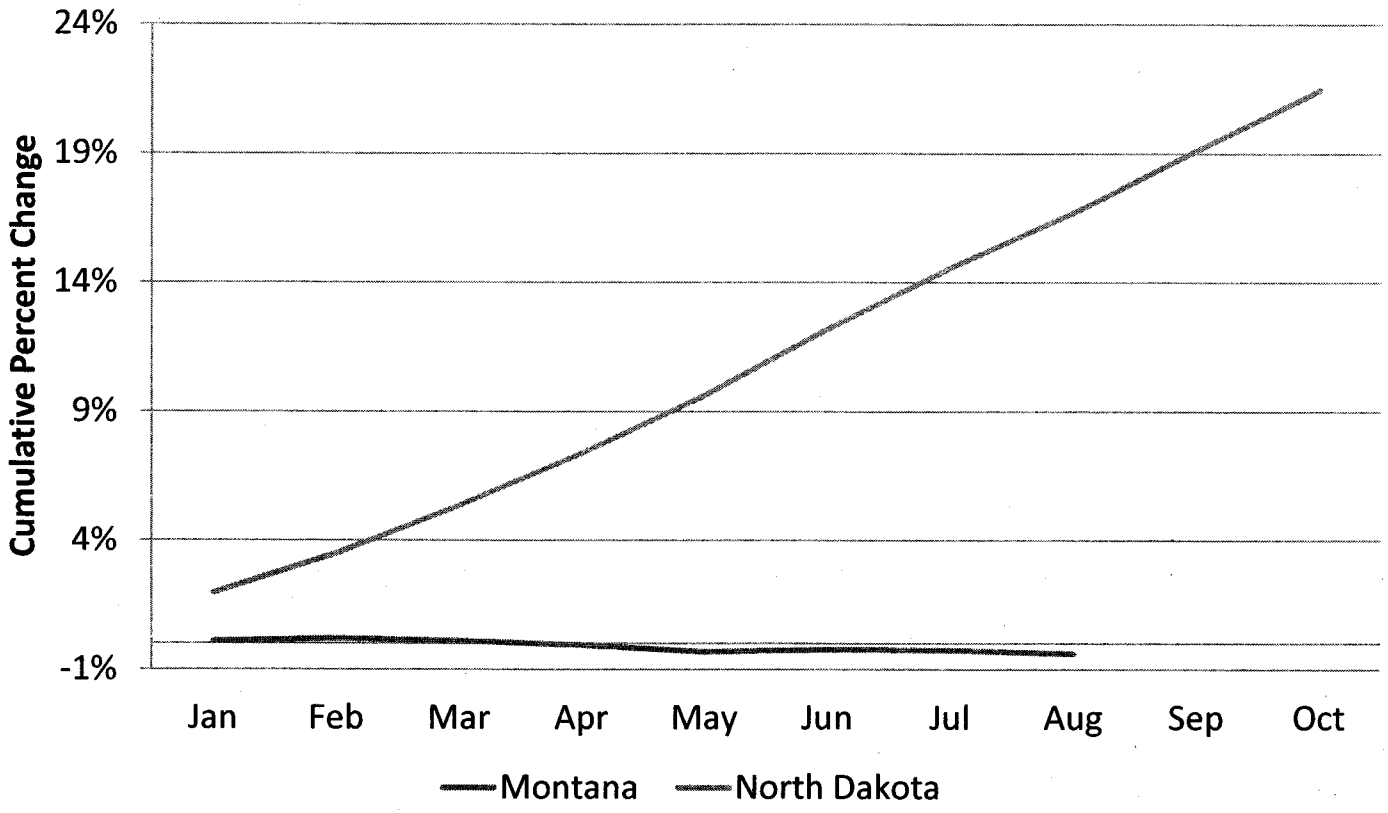
Source: Energy Information Administration

Average Barrels per Day per Well
Bakken Formation



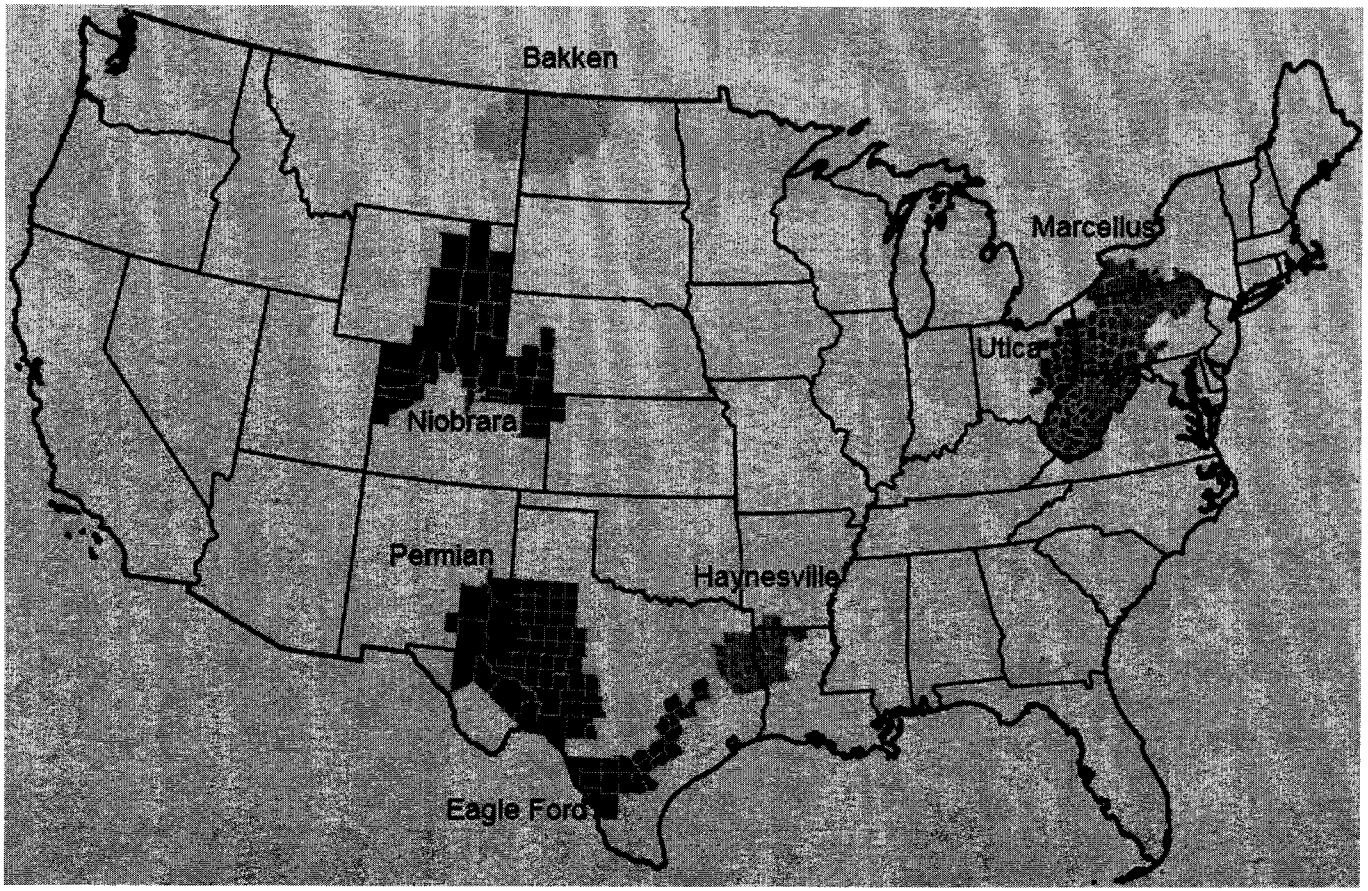
Source: MT. Board of Oil and Gas, North Dakota Industrial Commission

Cumulative Production Change 2013 to 2014 – Mt. vs. ND.



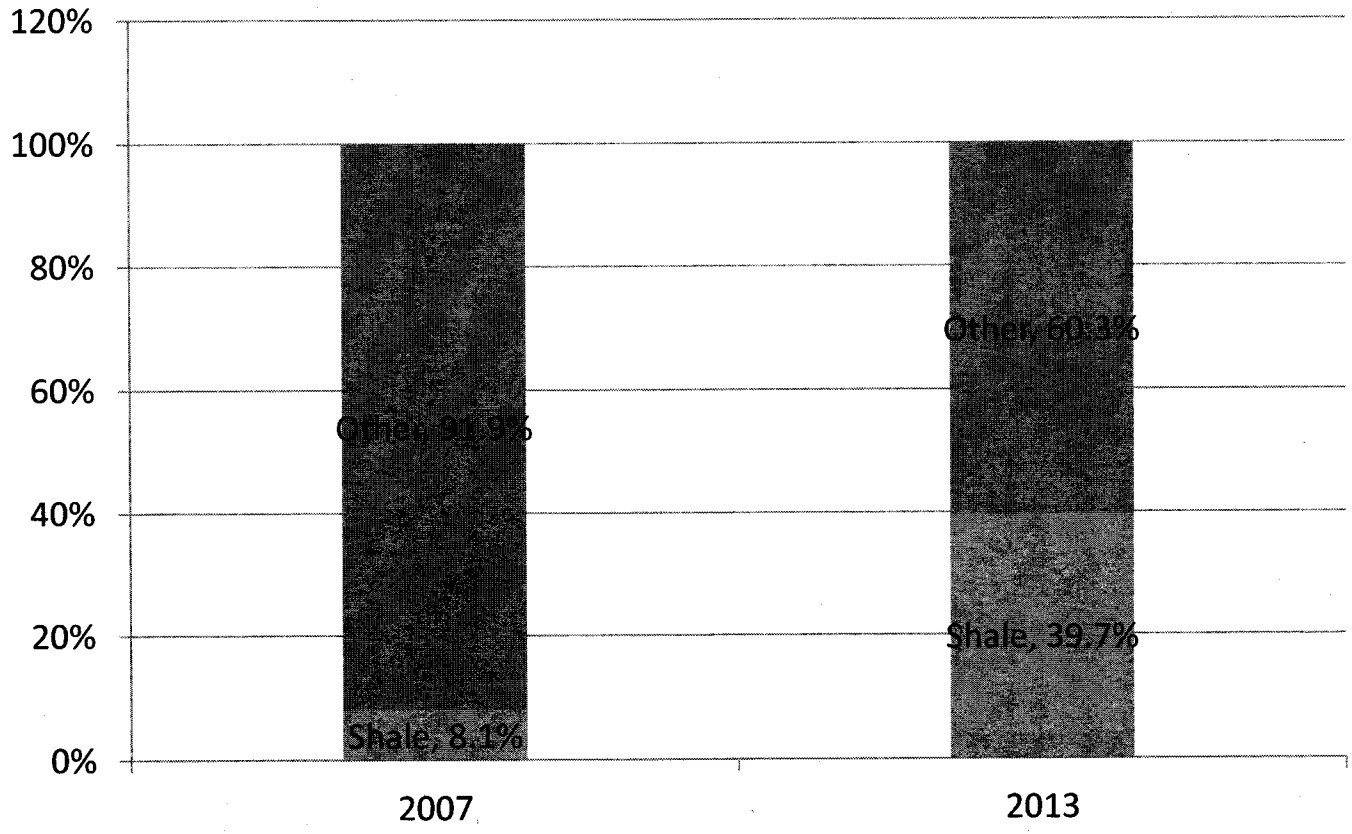
Source: MT. Board of Oil and Gas, North Dakota Industrial Commission

US Domestic Shale Formations



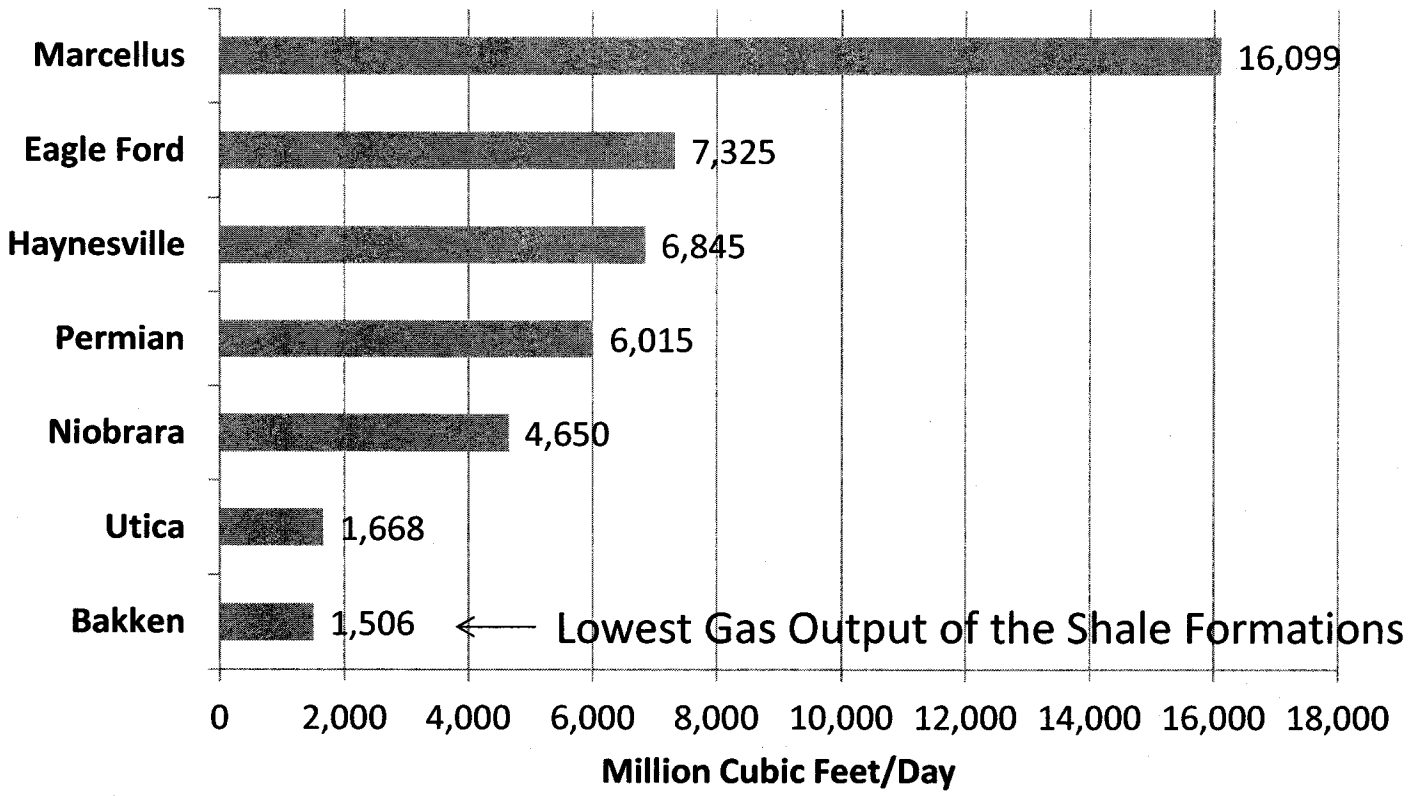
Source: Energy Information Administration

US Natural Gas Production By Type of Well



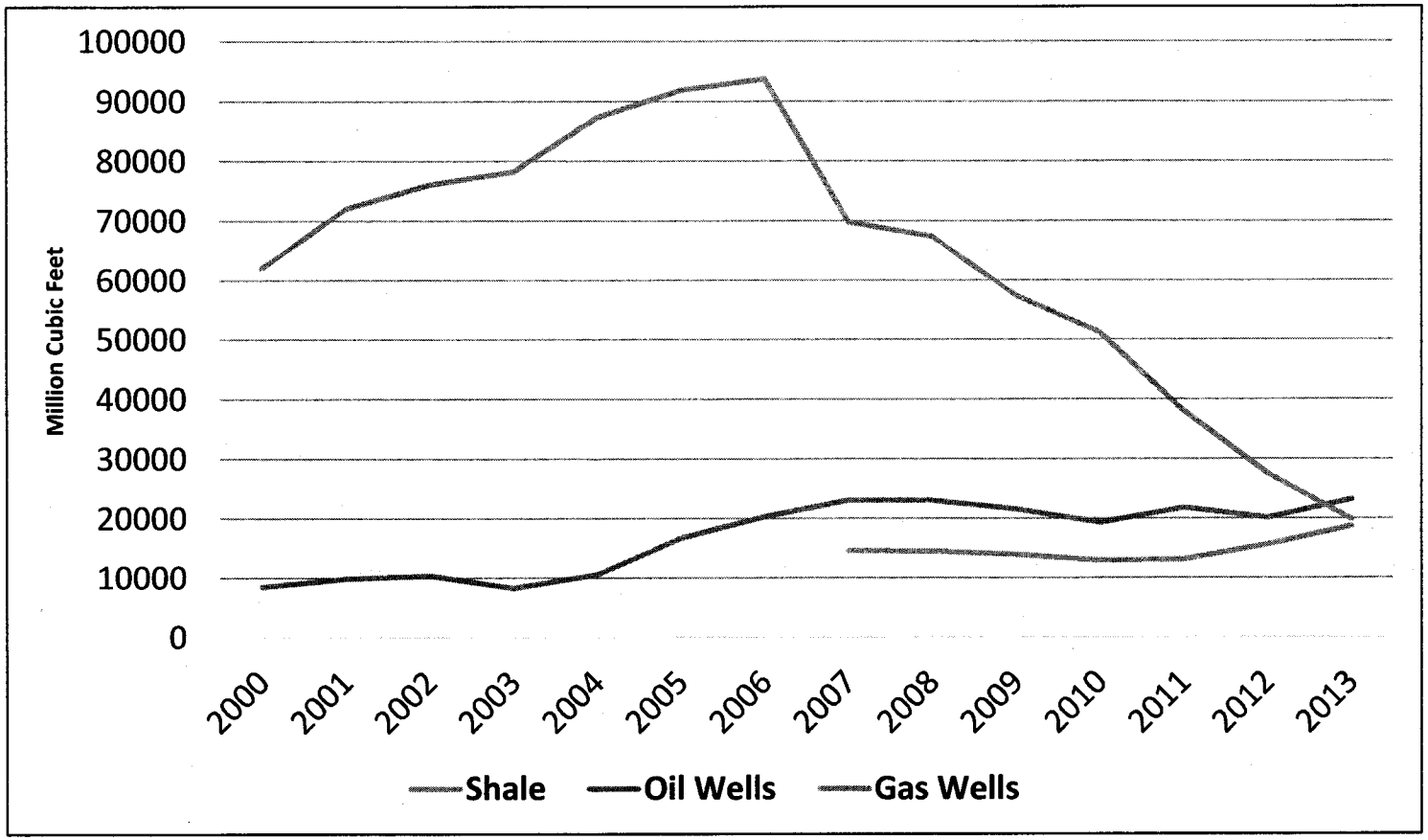
Source: Energy Information Administration

US Natural Gas Production December 2014 Shale Formations



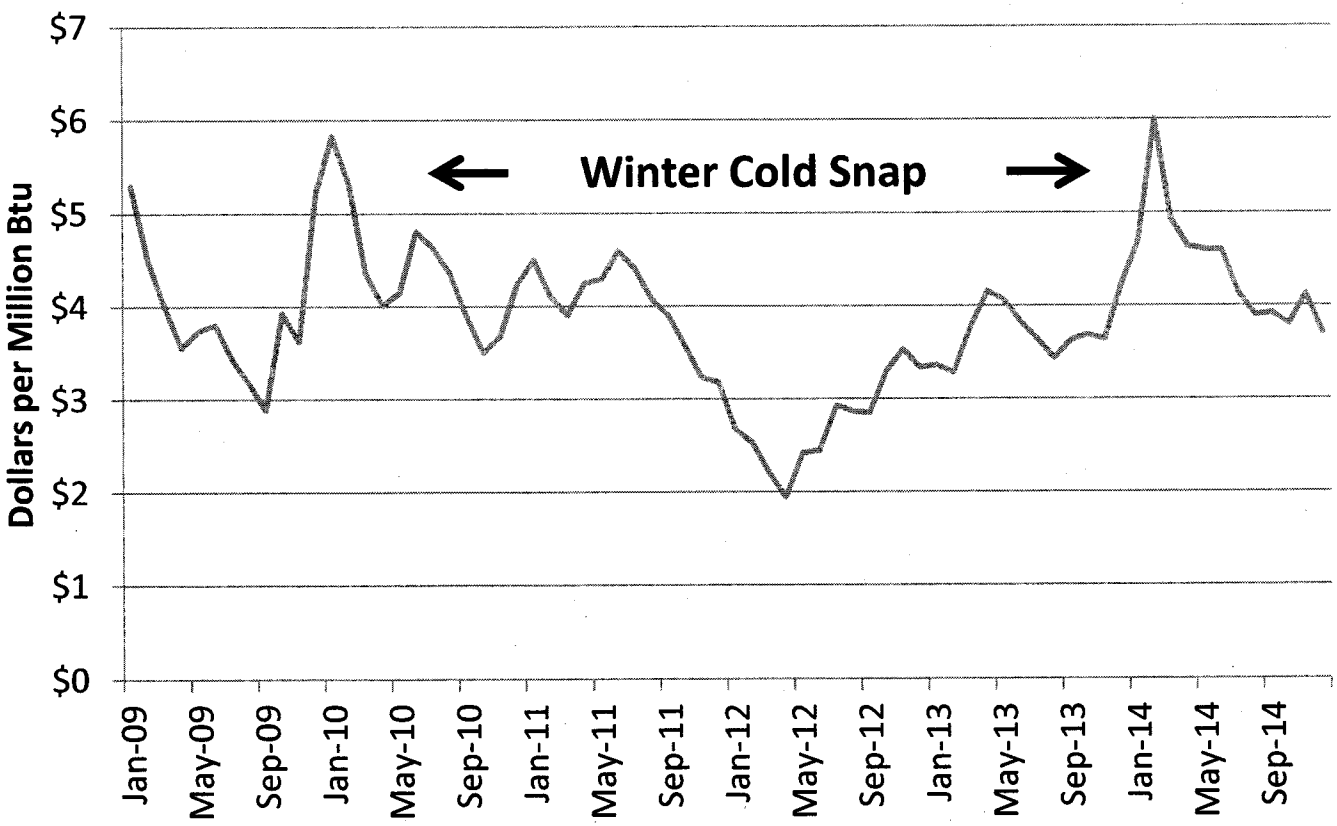
Source: Energy Information Administration

Montana Natural Gas Production By Well Type



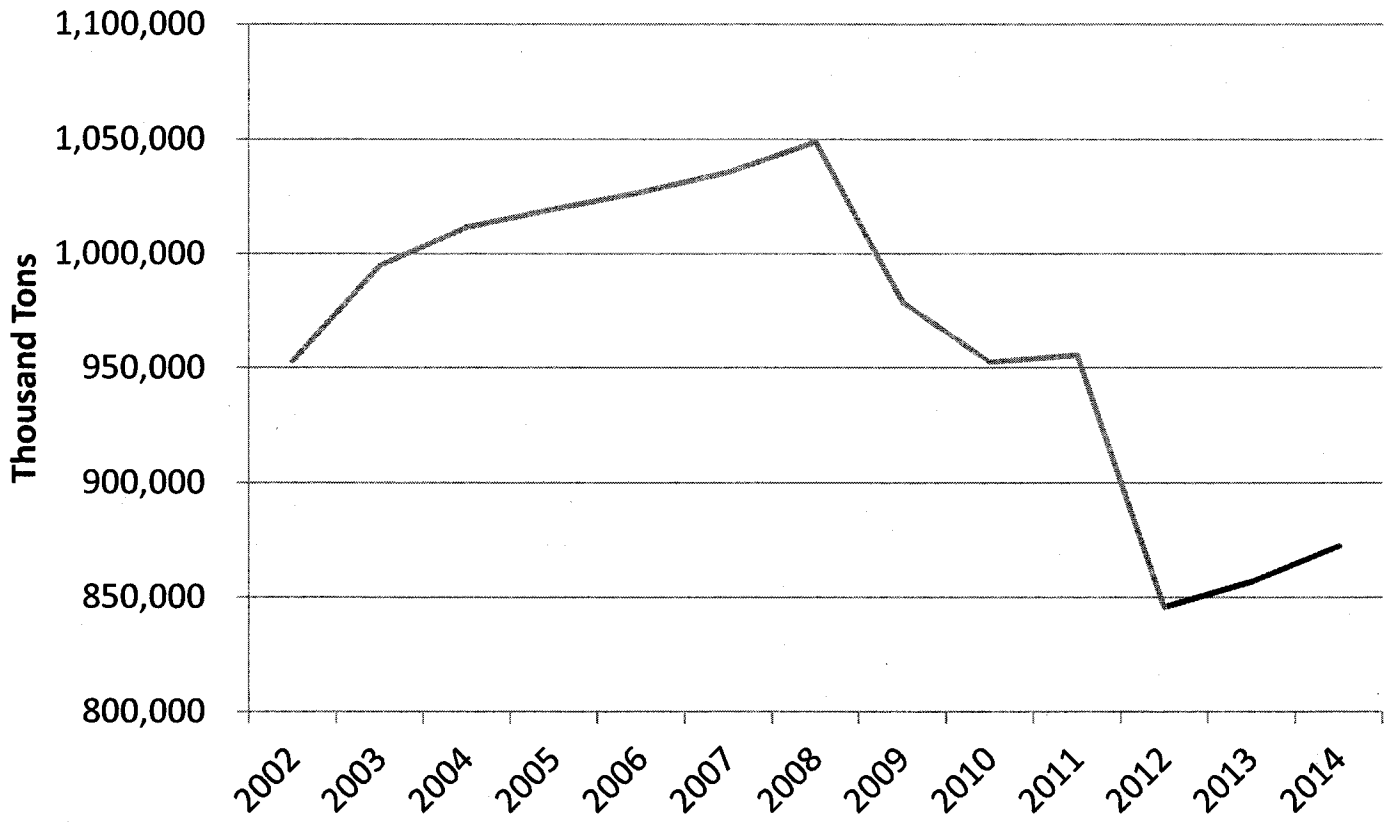
Source: Energy Information Administration

Henry Hub Price
Natural Gas



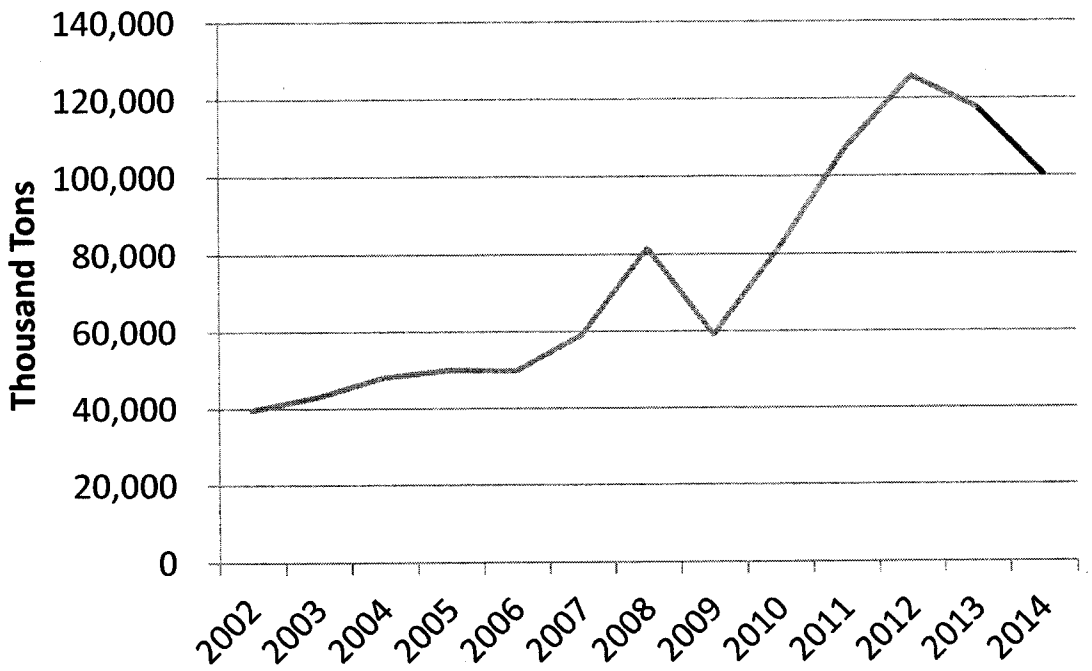
Source: Energy Information Administration

US Coal Consumption By Electric Utilities (Fiscal Year)



Source: Energy Information Administration

US Coal Exports (Fiscal Year)

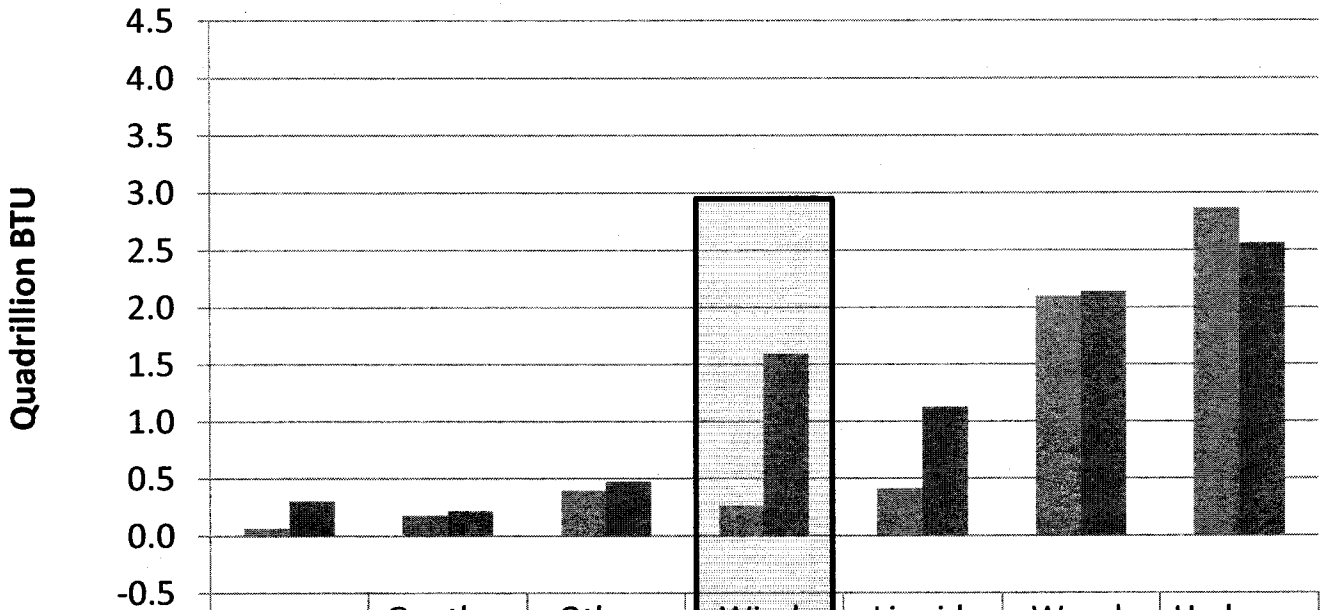


US Export Markets - 2013

- **Europe 61 Million**
- **Asia 27 Million**
- **North America 13 Million**
- **South America 13 Million**
- **Africa 4 Million**

Source: Energy Information Administration

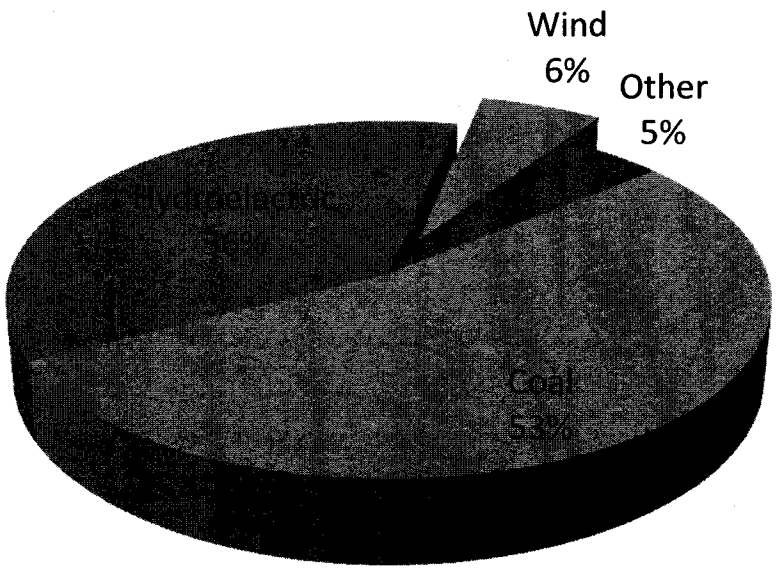
US Renewable Energy By Type



	Solar	Geothermal	Other biomass	Wind power	Liquid biofuels	Wood biomass	Hydropower
2006	0.068	0.181	0.397	0.264	0.414	2.099	2.869
2013	0.307	0.221	0.476	1.595	1.126	2.138	2.561
% Change	315.3%	21.2%	19.2%	390.8%	128.7%	1.8%	-12.6%

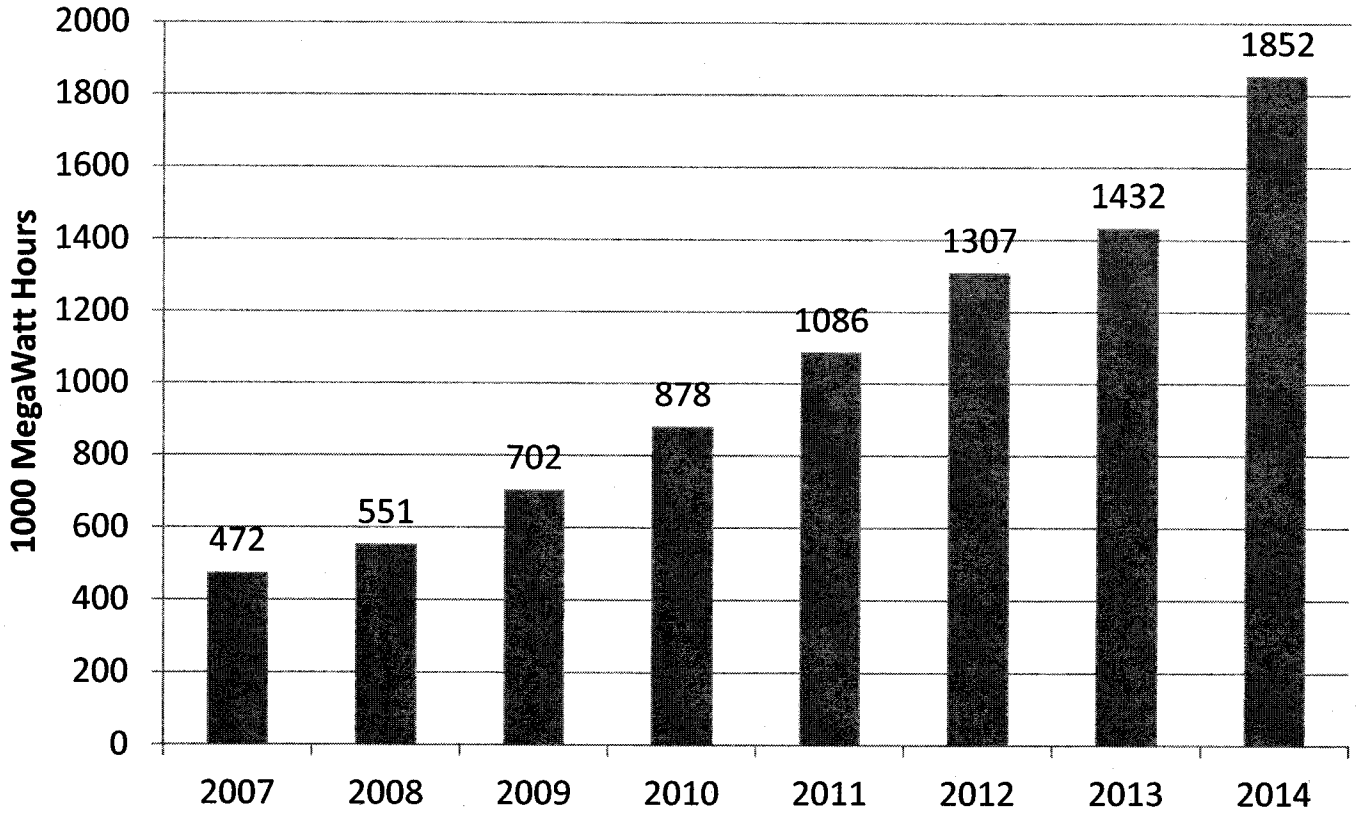
Source: Energy Information Administration

Montana Electricity Generation By Type 2013



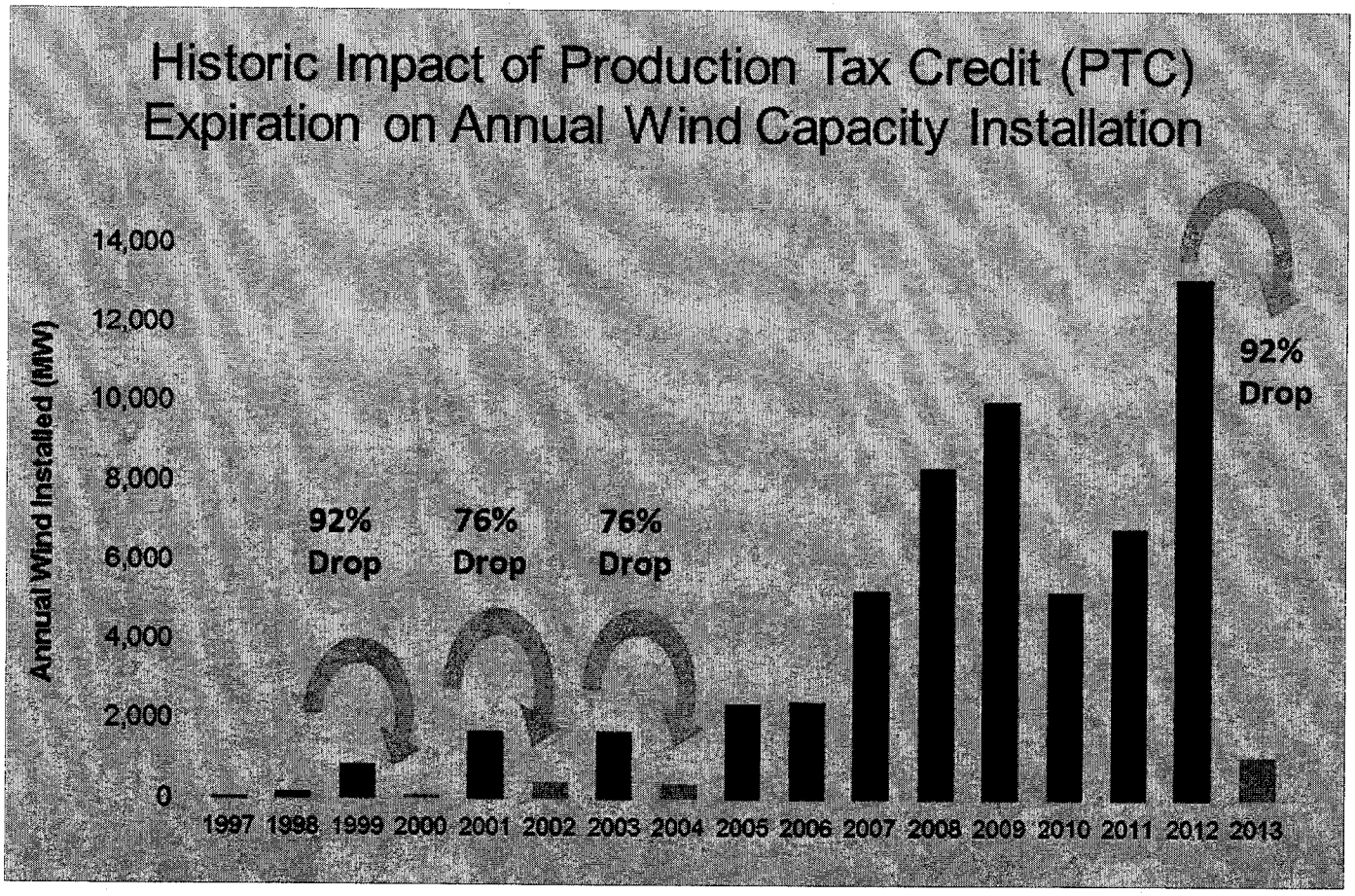
Source: Energy Information Administration

Montana Wind Production By Fiscal Year



Source: Energy Information Administration

Impact of Production Tax Credit



Source: American Wind Energy Administration

Montana's Energy Outlook

- Oil -
  - Low Prices
    - Over supply
    - Slow World Economic Growth
    - OPEC Production Quotas
  - Production Declines
    - Maturing Wells
    - Reduced Investment
- Coal –
  - Stable Prices
    - Transportation and Labor Costs
  - Reduced Production
    - US Power Plant Demand Export Markets

Montana's Energy Outlook

- Natural Gas -
  - Price Declines
    - Over Supply
    - Adequate Inventories
  - Production Declines
    - Maturing Fields
    - Reduced Investment
- Wind -
  - Production Increase
    - Production Tax Credit Extension
  - Production Tax Credit Future Legislation

Questions

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