Lewis & Clark County
Midyear 2015

By Paul E. Polzin
Director Emeritus
Bureau of Business and Economic Research
The University of Montana
## Lewis & Clark County’s Economic Base 2013-2015

<table>
<thead>
<tr>
<th>Industry</th>
<th>Feb. ‘15</th>
<th>Aug. ‘15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Mining</td>
<td>4%</td>
<td>Commodity Prices Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weather, Prices</td>
</tr>
<tr>
<td>Transportation &amp; Information</td>
<td>3%</td>
<td>Energy Growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4%</td>
<td>Boeing Connection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Education, Other</td>
<td>7%</td>
<td>Stable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Trade Center-Insurance</td>
<td>7%</td>
<td>Ownership Change?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Trade Center-Prof. and Tech</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stable</td>
</tr>
<tr>
<td>Federal Government</td>
<td>21%</td>
<td>Headwinds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>State Government</td>
<td>48%</td>
<td>Slightly Upward</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td>Residential Rebound?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Actual and Projected Change in Nonfarm Earnings, Lewis & Clark County, 2011-2018
Actual and Projected Change in Nonfarm Earnings, Lewis & Clark County, 2011-2018
Inflation Adjusted Wages and Salaries, 2008-2014

Index, 2008Q2=1.00

Montana

Cascade

Lewis & Clark

Silver Bow Deer Lodge

Montana
Inflation Adjusted Wages and Salaries, 2008-2014
Inflation Adjusted Wages and Salaries, 2008-2014

Index, 2008Q2=1.00

Montana

Richland

Roosevelt

Montana
2015: A Different Oil “Bust”

By Paul E. Polzin
Program for Energy and Resource Economics
Bureau of Business and Economic Research

Thous. Barrels /day

Peak Gas Prices
Monthly Oil Production, North Dakota, 2014-2015

Barrels

0 50000000 100000000 150000000 200000000 250000000 300000000 350000000 400000000

Peak Gas Prices

Jan-14  Mar-14  May-14  Jul-14  Sep-14  Nov-14  Jan-15  Mar-15  May-15
Monthly Oil Production, Montana 2014-2015

Barrels
2,700,000
2,600,000
2,500,000
2,400,000
2,300,000
2,200,000
2,100,000
2,000,000

Jan-14  Mar-14  May-14  Jul-14  Sep-14  Nov-14  Jan-15  Mar-15

Peak Gas Prices

Thousands of Workers

Month:
- Jan-14
- Mar-14
- May-14
- Jul-14
- Sep-14
- Nov-14
- Jan-15
- Mar-15
- May-15

Values:
- 7.0
- 7.2
- 7.4
- 7.6
- 7.8
- 8.0
- 8.2
- 8.4
- 8.6
- 8.8
- 9.0

Thousands of Workers

Jan-14, Mar-14, May-14, Jul-14, Sep-14, Nov-14, Jan-15, Mar-15, May-15
“Midland has witnessed multiple booms and busts since the 1920s. Graced by Ferraris during the 2012-2014 boom, its highways are now populated by pickup trucks. Some 20,000-30,000 temporary workers have left.”
Monthly Employment, Midland, TX
Metro Area
2014-2015

Thousands of Workers

120.0
100.0
80.0
60.0
40.0
20.0
0.0

Jan-14  Mar-14  May-14  Jul-14  Sep-14  Nov-14  Jan-15  Mar-15  May-15

Total Nonfarm

Mining and Logging
“Oil bust leaves energy states in the dust”
- money.cnn.com (June, 10 2014)

“What happened after the North Dakota oil boom went bust?”
- The Atlantic (June 27, 2015)
THE END IS NEAR!
<table>
<thead>
<tr>
<th></th>
<th>Breakeven</th>
<th>Rigs</th>
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<tbody>
<tr>
<td></td>
<td>12/12/2014</td>
<td>1/7/2015</td>
</tr>
<tr>
<td>Billings</td>
<td>$44</td>
<td>2</td>
</tr>
<tr>
<td>BOT-REN</td>
<td>$52</td>
<td>5</td>
</tr>
<tr>
<td>BOW-SLP</td>
<td>$75</td>
<td>2</td>
</tr>
<tr>
<td>Burke</td>
<td>$62</td>
<td>3</td>
</tr>
<tr>
<td>Divide</td>
<td>$73</td>
<td>4</td>
</tr>
<tr>
<td>Dunn</td>
<td>$29</td>
<td>28</td>
</tr>
<tr>
<td>Golden Valley</td>
<td>$52</td>
<td>0</td>
</tr>
<tr>
<td>McKenzie</td>
<td>$30</td>
<td>64</td>
</tr>
<tr>
<td>McLean</td>
<td>$77</td>
<td>1</td>
</tr>
<tr>
<td>Mountrail</td>
<td>$41</td>
<td>33</td>
</tr>
<tr>
<td>Stark</td>
<td>$37</td>
<td>0</td>
</tr>
<tr>
<td>Williams</td>
<td>$36</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>183</td>
</tr>
</tbody>
</table>

Breakeven costs reflect a price at which new drilling would cease.
The price at which production from existing wells would be shut-in is $15/bbl.
Questions?