## Cascade County’s Economic Base 2013-2015

<table>
<thead>
<tr>
<th>Sector</th>
<th>Feb. ‘15</th>
<th>Aug. ‘15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Basic</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Agriculture and Related</td>
<td>3% Down Slightly</td>
<td>Weather?</td>
</tr>
<tr>
<td>Trade Center-Wholesale, Retail, Finance</td>
<td>4% 2015 Hopeful</td>
<td>Asurion?</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9% New Plants Open</td>
<td>Strong Growth</td>
</tr>
<tr>
<td>State Gov’t and Higher Ed.</td>
<td>8% Pay Freeze Over</td>
<td>✓</td>
</tr>
<tr>
<td>Transportation</td>
<td>10% Energy Growth</td>
<td>✓</td>
</tr>
<tr>
<td>Trade Center-Health Care</td>
<td>8% Costs vs Demand</td>
<td>✓</td>
</tr>
<tr>
<td>Federal Civilian</td>
<td>12% Headwinds</td>
<td>Declines</td>
</tr>
<tr>
<td>Malmstrom AFB</td>
<td>40% ???</td>
<td>No unit transfers</td>
</tr>
<tr>
<td>Construction</td>
<td>End of Drag?</td>
<td>✓</td>
</tr>
</tbody>
</table>
Actual and Projected Change in Nonfarm Earnings, Cascade County, 2011-2018

Actual and Projected Change in Nonfarm Earnings, Cascade County, 2011-2018

Percent

Actual

Projected

'11 '12 '13 '14 '15 '16 '17 '18

-0.6 -0.2 -0.3 2.0 2.2 2.2 2.1 2.1

-2 -1 0 1 2 3 4 5
Actual and Projected Change in Nonfarm Earnings, Cascade County, 2011-2018

Percent

Actual

Projected

'11  '12  '13  '14  '15  '16  '17  '18

-0.6  0.2  0.3  2.0  2.2  2.2  2.1  2.1
Inflation Adjusted Wages and Salaries, 2008-2014

Index, 2008Q2=1.00

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

Index, 2008Q2=1.00

2008 2009 2010 2011 2012 2013 2014

Montana
Silver Bow Deer Lodge
Lewis & Clark
Cascade
Inflation Adjusted Wages and Salaries, 2008-2014

Index, 2008Q2=1.00

Montana

Yellowstone

Gallatin
Inflation Adjusted Wages and Salaries, 2008-2014

Index, 2008Q2=1.00

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
Monthly Oil Production, Montana 2014-2015

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

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

Peak Gas Prices
“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

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>Breakeven</th>
<th>Rigs</th>
<th>12/12/2014</th>
<th>1/7/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billings</td>
<td>$44</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>BOT-REN</td>
<td>$52</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>BOW-SLP</td>
<td>$75</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Burke</td>
<td>$62</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Divide</td>
<td>$73</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Dunn</td>
<td>$29</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>Golden Valley</td>
<td>$52</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>McKenzie</td>
<td>$30</td>
<td>64</td>
<td>59</td>
</tr>
<tr>
<td>McLean</td>
<td>$77</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Mountrail</td>
<td>$41</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>Stark</td>
<td>$37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Williams</td>
<td>$36</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>183</strong></td>
<td><strong>166</strong></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?