Repairing Minnesota Natural Gas Distribution Pipelines

Minnesota’s natural gas distribution pipelines made from leak-prone materials could be responsible for leaking almost 105mcf uncombusted natural gas each year, the equivalent of adding more than 8,800 cars to the road. Accelerating replacement of Minnesota’s distribution pipelines made from leak-prone materials from 30 years to 10 years will:

- Cost $17.19M each year.
- Increase job creation from 194 to 583, creating 389 more jobs.
- Save $20 million in gas that would have leaked during the 20 years pipes were still being replaced.

Mileage of leak-prone materials:

<table>
<thead>
<tr>
<th>Material</th>
<th>Miles- U.S.</th>
<th>Share of Total- U.S.</th>
<th>Miles- MN</th>
<th>Share of Total- MN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare Steel</td>
<td>6,239</td>
<td>5.1%</td>
<td>430</td>
<td>1.4%</td>
</tr>
<tr>
<td>Unprotected Coated Steel</td>
<td>15,935</td>
<td>1.3%</td>
<td>53</td>
<td>0.2%</td>
</tr>
<tr>
<td>Cast Iron</td>
<td>34,329</td>
<td>2.8%</td>
<td>30</td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Subtotal: Leak Prone</strong></td>
<td><strong>112,593</strong></td>
<td><strong>9.1%</strong></td>
<td><strong>521</strong></td>
<td><strong>1.7%</strong></td>
</tr>
<tr>
<td>Protected Coated Steel</td>
<td>473,871</td>
<td>38.5%</td>
<td>7,065</td>
<td>23.2%</td>
</tr>
<tr>
<td>Plastic</td>
<td>644,418</td>
<td>52.3%</td>
<td>22,868</td>
<td>75.1%</td>
</tr>
<tr>
<td>Other</td>
<td>893</td>
<td>0.1%</td>
<td>4</td>
<td>0.01%</td>
</tr>
<tr>
<td><strong>Total, All Materials</strong></td>
<td><strong>1,231,775</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>30,450</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>


Total Job Creation from Pipeline Repair

Investment in repairing pipeline infrastructure creates and maintains construction jobs for pipefitters, welders, equipment operators, truck drivers, laborers, inspectors, iron workers, electricians, and others. These projects drive demand for materials and equipment like pipe and valves as well as surveying services, legal services, financing, catering, and others—creating indirect jobs. Economic activity and increased spending on pipeline replacement then creates induced jobs. The chart on the left shows the breakdown of which economic sectors experience job growth from investment in pipeline repair.
Summary of Minnesota Natural Gas Distribution Pipeline Systems

Overview
47 Operators Serve Minnesota
30,450 Total Miles of Distribution Main Pipeline
1,483,609 Total Number of Pipeline Services to Users

Gray data points represent Minnesota operators not including the following:
- CENTERPOINT ENERGY MINNESOTA GAS: 13,425 miles of pipeline (44%), 747,489 services (50%)
- NORTHERN STATES POWER CO OF MINNESOTA: 8,917 miles of pipeline (29%), 400,144 services (27%)

521 Miles of Pipeline made from Leak-Prone Materials
- Bare Steel
- Coated
- Unprotected Steel
- Cast/Wrought Iron

12,540 Services made from Leak-Prone Materials
- Coated
- Unprotected Steel
- Bare Steel

9,232 Total Leaks reported for 2012: Services

Online at: http://bit.ly/1qRGK5v
ENDNOTES

i The EPA estimates that nationally, 23 bcf gas leaks from the 112,593 miles of distribution pipelines made from leak-prone materials each year.

ii Details calculated from the BlueGreen Alliance Interconnected report and accompanying jobs model.

iii The INGAA Foundation, Jobs & Economic Benefits of Midstream Infrastructure Development 2012, p. 2-7, 3-1.