

# Repairing Minnesota Natural Gas Distribution Pipelines

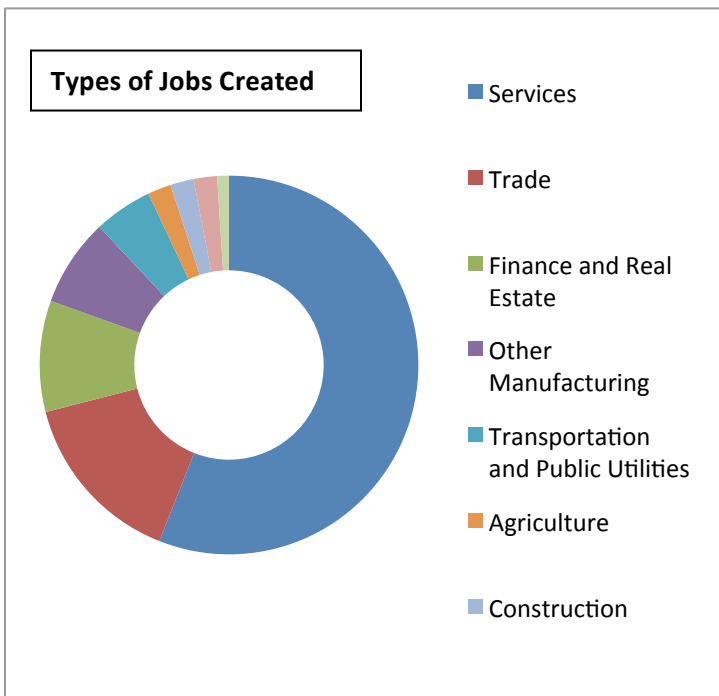
Minnesota’s natural gas distribution pipelines made from leak-prone materials could be responsible for leaking almost 105mcf uncombusted natural gas each year, the equivalent of adding more than 8,800 cars to the road.<sup>i</sup> Accelerating replacement of Minnesota’s distribution pipelines made from 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.<sup>ii</sup>

Mileage of leak-prone materials:

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

Source: U.S. data from American Gas Foundation. Gas Distribution Infrastructure: Pipeline Replacement and Upgrades: Cost Recovery and Approaches. Minnesota data from PHMSA 2013 Distribution Annual Data.

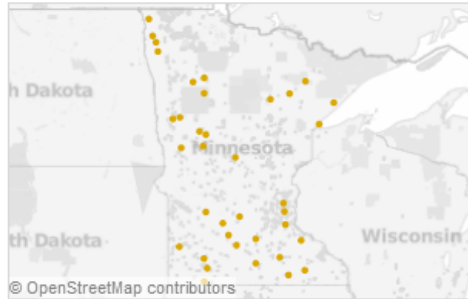


## Total Job Creation from Pipeline Repair

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.<sup>iii</sup> 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

### Operator Office Locations



### Overview

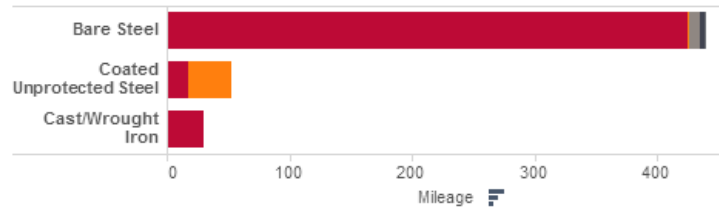
**47 Operators** Serve Minnesota  
**30,450 Total Miles** of Distribution Main Pipeline  
**1,483,509 Total Number** of Pipeline Services to Users

**Data Source:**  
**PHMSA 2013 Distribution Annual Data**  
<http://1.usa.gov/1kPTSCQ>

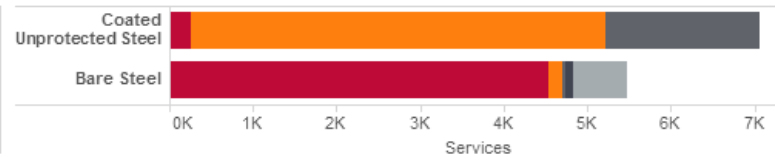
Gray data points represent Minnesota operators not including the following:

- **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%)

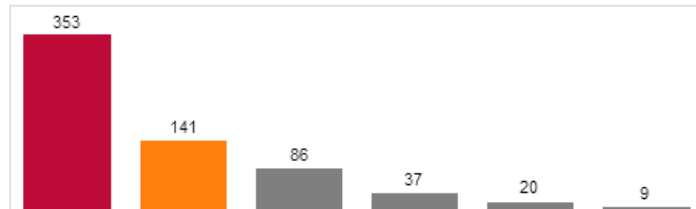
### 521 Miles of Pipeline made from Leak-Prone Materials



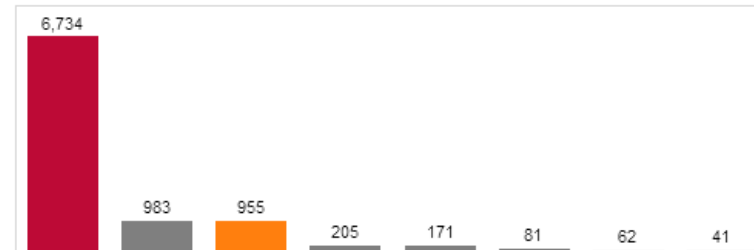
### 12,540 Services made from Leak-Prone Materials



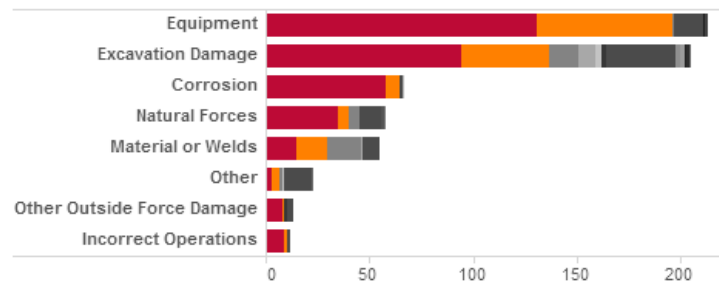
### 646 Total Leaks Reported for 2012: Main



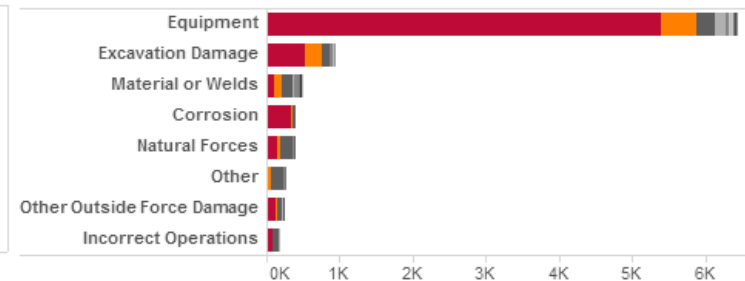
### 9,232 Total Leaks reported for 2012: Services



### Causes of Leaks: Main



### Causes of Leaks: Services





## ENDNOTES

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

<sup>ii</sup> Details calculated from the BlueGreen Alliance [Interconnected](#) report and accompanying jobs model.

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