What’s Coming Down the Pipe?
Pipeline Safety & Natural Gas Utility Efforts to Upgrade Aging Infrastructure

May 21, 2015
American Gas Association
The American Gas Association (AGA), founded in 1918, represents more than 200 local natural gas utilities that deliver natural gas to 177 million Americans nationwide. In addition, AGA’s broader membership includes natural gas pipelines, Canadian local distribution companies, natural gas gatherers, marketers and storage companies and more than 350 associate members who provide critical products and services to the natural gas industry.
Pipeline Safety & Infrastructure Replacement
Commitment to **Safety**

The natural gas industry has a long-standing record of providing natural gas service safely and effectively to more than 177 million Americans and is dedicated to the continued enhancement of pipeline safety.
Safely transported
Across the Country

• Natural gas pipelines, are an essential part of the nation’s infrastructure. Transportation by pipeline is the safest form of energy delivery in the country.

• Natural gas utilities spend $19 billion annually to help enhance the safety of natural gas distribution and transmission systems.
There is significant oversight and regulation focused on the natural gas industry to help ensure public safety.

The U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (PHMSA) establishes federal safety standards for pipelines, and PHMSA partners with state pipeline safety agencies on inspections and enforcement of intrastate pipelines. Individual states can regulate intrastate pipeline systems above and beyond federal requirements, and there are hundreds of state-specific pipeline safety regulations currently in place.

AGA supports continuous improvements to the safe delivery of natural gas through:

- Information sharing among emergency responders and the public that effectively informs and enhances pipeline safety
- Research and development of safety-enhancing technologies
- Collaboration with key stakeholders
- Advocating for the effective enforcement of “Call 811”
- Conducting forums for the industry that facilitate the sharing of leading practices
DOT Pipeline Safety Action Plan

- Raise the bar on pipeline safety
- Accelerate rehabilitation, repair and replacement programs for high risk pipelines
- Focus on cast iron, bare steel, older plastic

In Section 7 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, Congress directed the Secretary of Transportation to develop a report on the national cast iron inventory

- AGA Supports the Action Plan and “Smart Modernization” of infrastructure that is no longer fit for service
RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners... encourages regulators and industry to consider sensible programs aimed at replacing the most vulnerable pipelines as quickly as possible along with the adoption of rate recovery mechanisms that reflect the financial realities of the particular utility in question; and be it further;

RESOLVED, That State commissions should explore, examine, and consider adopting alternative rate recovery mechanisms as necessary to accelerate the modernization, replacement and expansion of the nation’s natural gas pipeline systems.
America’s natural gas utilities invest billions in our nation’s natural gas 2.4 million miles of pipeline infrastructure — the most extensive, integrated, safe and reliable in the world — which provides access to homes and businesses across the nation.

Working with governors, legislators and state regulators around the country, utilities are developing innovative models for making these capital investments possible.

Natural gas utilities spend more than $19 billion annually to help enhance the safety of natural gas distribution and transmission systems and to upgrade systems and expand service so more Americans can access this foundation fuel.
The overall trend is positive.

Nine states moved to adopt programs in 2013, alone.

NJ, MA, PA & DC adopted pipeline safety measures in 2014.

West Virginia recently passed legislation.

States address this issue differently.

The basis for these decisions is always just and reasonable rates for consumers.

States with Accelerated Infrastructure Replacement Programs
Overall Cast Iron Makes Up Less than 3% of the Distribution Mileage, and is Decreasing Annually

SOURCE: U.S. Department of Transportation, PHMSA, Distribution Annual Data
AGA conducted a pipeline replacement survey of its membership

Based on the responses from 108 members, **LDCs plan to replace between 3530-3950 miles per year of aging mains and services through 2017 and beyond**

These numbers are projections and are dependent upon a number of factors including but not limited to weather, workforce availability and regulatory certainty

**These numbers will continue to increase as a host of newly-authorized accelerated replacement programs ramp up**

### AGA Pipeline Replacement Survey

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<th>2014</th>
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<th>2016</th>
<th>2017</th>
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The Declining Trend of Natural Gas Emissions
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A concerted effort by America’s natural gas utilities to upgrade and modernize our nation’s pipeline network to enhance safety has contributed to a declining trend in emissions from natural gas distribution systems.
Cleaner Air and Reduced Emissions

According to the Energy Information Agency and the Environmental Protection Agency less than 0.24% of produced natural gas is emitted from systems operated by local natural gas utilities.

Distribution system emissions have dropped 22% since 1990

Less than 0.24% of produced natural gas is emitted from systems operated by local natural gas utilities.
Natural Gas Distribution

Shrinking Emissions by the Numbers

- **65,100** – miles of cast iron & bare steel pipe replaced with PE plastic pipe
- **300,000** – added miles of distribution mains
- **18 million** – number of new customers served (32% increase)
- **16%** - emissions decline since 1990
  - *Note that this is due to an uptick in emissions related to higher throughput in 2013, relative to lower consumption in 2012.*
- **0.26%** - EPA estimated distribution system emissions as a percentage of U.S. Gross Production
  - *Numbers reflect data collected from 1990-2013*
Conclusions

• Safe, reliable natural gas delivery is core to our members businesses.

• *Smart modernization* initiatives (pipeline replacement and infrastructure expansion) are increasing safety and driving down natural gas emissions.
Kyle Rogers  
Vice President, Government Relations  
krogers@aga.org  
(202) 824-7218  

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