

# Pipeline Safety Research and Development

## **What is AGA's position about outside funding for government research surrounding pipeline safety?**

The natural gas industry wants the same thing that regulators and the public want—safe and reliable delivery of natural gas, and research and studies undertaken by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) and other relevant government entities part of the solution to continue advancing safety throughout the industry. AGA feels that all funding that goes toward this type of research is extremely important.

Co-funding of projects by PHMSA and industry research organizations allows PHMSA to dictate the direction of research while ensuring that the proposed technologies/solutions are relevant to industry and beneficial to the public. In addition, these efforts help distinguish and educate those in government about the differences, value and risk of both shorter-term solutions and longer-term solutions.

## **What impact does safety research have on the natural gas industry?**

Collaborative research has been critical in advancing innovative technologies, and AGA looks forward to working with Secretary LaHood and other key stakeholders to help ensure that this type critical research, development and implementation continues to advance safety throughout the industry.

One example of the benefits of this type of research is that industry now has access to robotic technologies for inspection of unpiggable lines, which is a huge advance and extremely beneficial to the public. This technology would have likely been delayed several years had PHMSA co-funding not been available.

## **How much has AGA spent on pipeline safety in recent years?**

Natural gas pipeline and utility companies spend approximately \$7 billion per year to help ensure the safety and reliability of natural gas infrastructure, but please note that this includes a variety of safety initiatives and is a figure for the industry as a whole.

AGA's purpose is focused on advocacy rather than technical research, which means we work with reputable research organizations, industry and government agencies including the U.S. Department of Energy and the U.S. Department of Transportation to encourage research and development in areas that can help to ensure an even safer, more reliable and efficient delivery systems.

**How does PHMSA determine which research projects to focus on and which parties will be involved in co-funding?**

While PHMSA receives input from industry, research organizations, universities and others, it is ultimately PHMSA who determines which projects to fund based on input received and the expertise of their own personnel.

Based on information gathered from stakeholders on pipeline safety issues, technology needs and gaps, and opportunities for technology innovation, PHMSA has established research and development (R&D) objectives to improve pipeline safety, integrity, and reliability by: Developing technology that supports the PHMSA regulatory mission; Focusing on near-term technology development needs and opportunities; Conducting an effective program of technology transfer and communication with stakeholders; Maximizing the return on the R&D investment by coordinating activities with other sources of R&D funding, including other federal agencies; and, Efficiently and effectively managing the R&D program.

The 2002 Pipeline Safety Act instructed PHMSA to seek industry input when initiating R&D projects: "In preparing the program plan and selecting and prioritizing appropriate project proposals, the Secretary of Transportation shall consult with or seek the advice of appropriate representatives of the natural gas, crude oil, and petroleum product pipeline industries, utilities, manufacturers, institutions of higher learning, Federal agencies, pipeline research institutions, national laboratories, State pipeline safety officials, labor organizations, environmental organizations, pipeline safety advocates, and professional and technical societies." This is the type of collaborative focus and transparency that is critical to helping ensure the continued advancement of the safe and reliable delivery of this foundation fuel.

Internal, external, stakeholder and peer reviews and oversight are in place to help ensure output quality assurance for PHMSA Research and Development Program and project activities. For more detail regarding PHMSA's R&D programs and project co-funding, please visit <http://primis.phmsa.dot.gov/rd/index.htm>.

**Does PHMSA have a peer review process to ensure R&D funding is used effectively?**

Yes. Both the Office of Management and Budget (OMB) and the Government Accountability Office (GAO) have issued reports with specific guidance on how to develop peer reviews for government R&D programs. The National Academy of Science and many other government and non-government boards and panels have addressed this issue and have provided guidance as well. There is currently no recognized definition of peer review which applies across the federal government. PHMSA defines "Peer Reviews" as a process of independent reviews and evaluations which provide feedback for adjusting program management to accomplish the following: raising program efficiency, funding projects with activities which provide relevance to the mission and vision, assuring high quality project outputs and outcomes with effective performance. PHMSA has divided project peer reviews into three parts, pre-solicitation, pre-award and post-award. Each part of the project peer review provides quality assurance that R&D projects funded are appropriate for the challenges faced, of high quality and assist the achievement of program goals.