U.S. Department of Transportation

Pipeline & Hazardous Materials Safety Administration

Pipeline Safety Forum

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What Are The Highest Pipeline Risks

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Pipeline Safety TRUST

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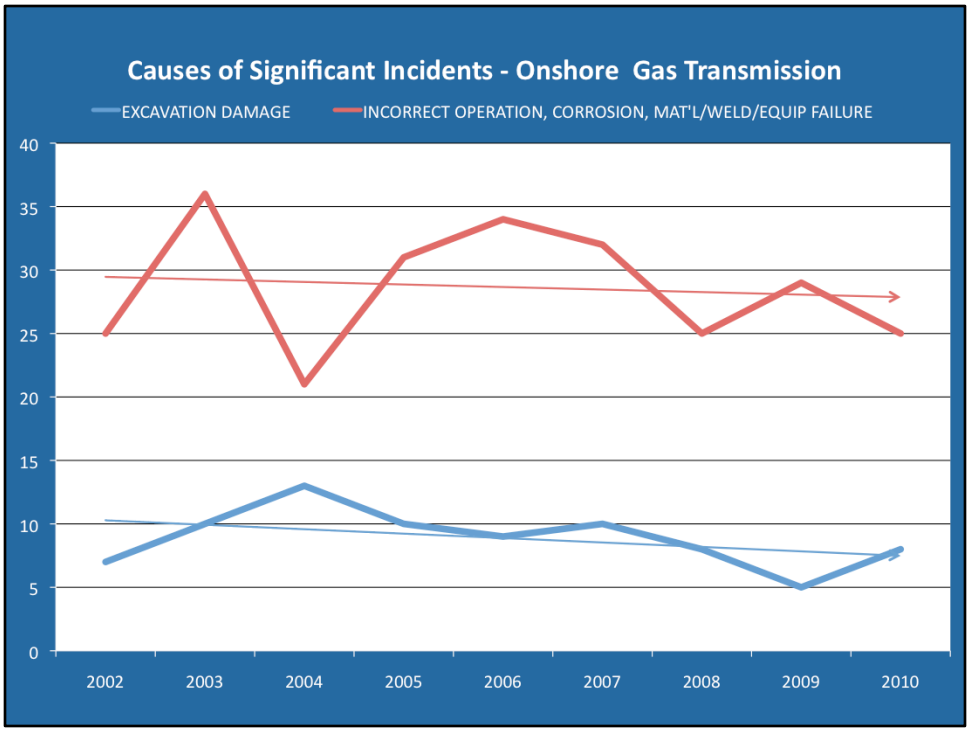
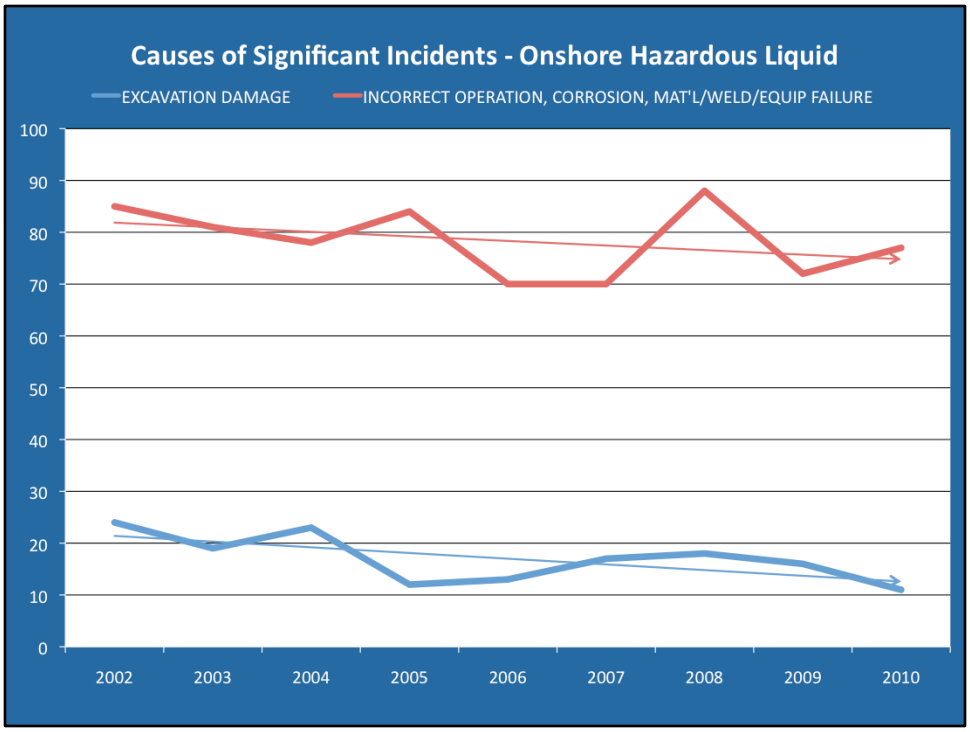
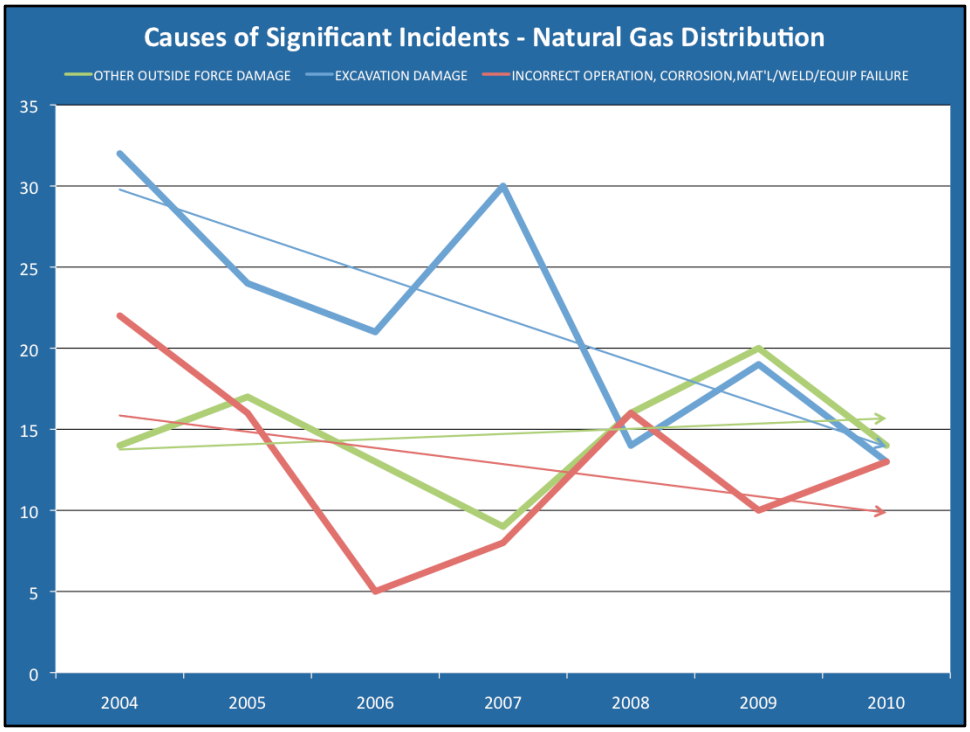


This graph shows that significant incidents in natural gas transmission lines are trending in a downward direction. It also shows that contrary to what is often stated incidents from issues clearly within the operator's control (operations, welds, materials, corrosion, etc) make up a more significant portion of the total than incidents caused by third party excavation damage.



Again this slide shows a downward trend in incidents for hazardous liquid pipelines, with those incidents from causes within the operators control being significantly more than excavation damage. Overall liquid pipelines are still having many more incidents than gas transmission pipelines even though there are nearly half as many total miles.



This slide shows that in gas distribution lines the incident trend is also in a good direction in most categories, and that indeed excavation damage is the leading cause of troubles. Other outside force damage seems to be on the increase, so attention deeds to be paid to understanding this category, especially why vehicles are causing a large number of these incidents. Is the location of gas meters/regulators on homes partially to blame. The decline in excavation damage across all types of lines seems to coincide with the emphasis to address this issue through the Common Ground Alliance.

While incidents statistically seem to be declining the public and media have become much more aware of the consequences of pipeline failures because of the recent rash of high profile, high consequence failures. These failures have shown that while it is true the chance of a failure is very small the consequences can be tremendous, and as people and pipelines continue to be put in closer proximity to one another the potential increases.

Highest Risk – Companies don't fully understand their own systems

Companies need to clearly understand the shape of their systems. This is best done by expanding and perfecting integrity management to all pipelines

New INGAA Guiding Principle

"We are committed to applying integrity management principles on a system-wide basis"

It is our belief that pipelines can be operated safely, as long as an operator understands what is in the ground and then operates, maintains, inspects, and repairs it based on good information. We think integrity management has provided a good foundation for doing just that, and that is needs to be perfected and expanded to all miles of pipelines. We are pleased that INGAA recently adopted a new "guiding principle" that shares our belief that integrity management needs to be expanded. While we believe expansion of integrity management can further reduce the number of incidents, recent incidents have shown that not all operators completely understand their systems or apply integrity management techniques as envisioned. These problems need to be dealt with ASAP.

Lack of Adequate Resources to Accomplish Safety Initiatives in a Timely Manner

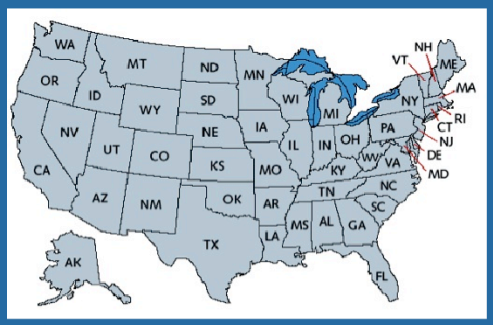
- Do PUCs and FERC provide adequate returns to implement safety initiatives?
- Do companies share costs fairly between ratepayers and shareholders?
- Does the "safety first" culture extends to the boardrooms and accountants?
- Do we Give regulators the resources needed to ensure compliance?
- Do we invest adequately in new technology and public involvement?

At almost every level we need to ensure that decisions are being made that puts safety first

What are the states doing?

The vast majority of pipeline inspectors are part of state regulatory programs. Are these programs:

- Devoting enough resources to the right issues?
- Using their enforcement authorities to change behavior?
- Implementing stronger state regulations where needed?



Who provides oversight on state inspectors to know if they are doing an adequate job? Where's the transparency on this part of the inspection system?

Recent incidents have called into question whether state regulators are doing an adequate job and using their enforcement authority. While in past years focus has been on the industry and PHMSA greater transparency regarding the efforts of the states is needed.

While pipeline operators are clearly responsible for the safe operation of their pipelines, there are some risks that are increased by the actions of others. The Common Ground Alliance has been working successfully to address excavation damage problems. Recently the Pipeline and Informed Planning Alliance released their report with recommended practices to help local government to deal with issues they have control over regarding permitting encroachment of development near existing pipelines. Even issues as seemingly easy as where a builder or gas utility installs the gas meter on a home can either increase or decrease the risk. These types of issues, especially the PIPA effort, need focus like the Common Ground Alliance has provided for excavation damage.

Proliferation of gathering lines in populated areas

Many of these lines are the same size and pressure as transmission lines, but none of them are under the same protective regulations, and many are covered by nearly no regulations at all

With huge new efforts taking place to drill for natural gas in places such as Texas, Pennsylvania, Arkansas, and Louisiana thousands of miles of gathering lines will be going in soon to connect all the new wells and deliver the gas to the transmission system. Some of this activity is taking place in highly populated areas, like this picture here from Fort Worth. While many of these gathering lines are of the same size and pressure as transmission pipelines, none of them are covered by the same protective regulations and some of them are regulated hardly at all.

Inaction

Enough with the talk and the reports and the studies and the cost benefit analysis

Congress has had 8 hearings on pipelines safety in the past year

NTSB has been talking about many of these issues for years, and is now stretched thin investigating failures

We have been testifying to Congress and PHMSA for years now on the need for

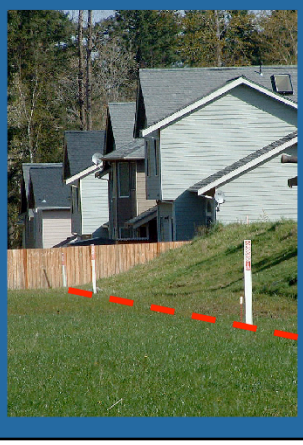
- Standards for leak detection
- Standards for automated valves, EFVs, and valve placement
- Closing the loophole on reporting over pressure events
- Meaningful public awareness programs
- Etc. Etc. Etc.

It's time to act!

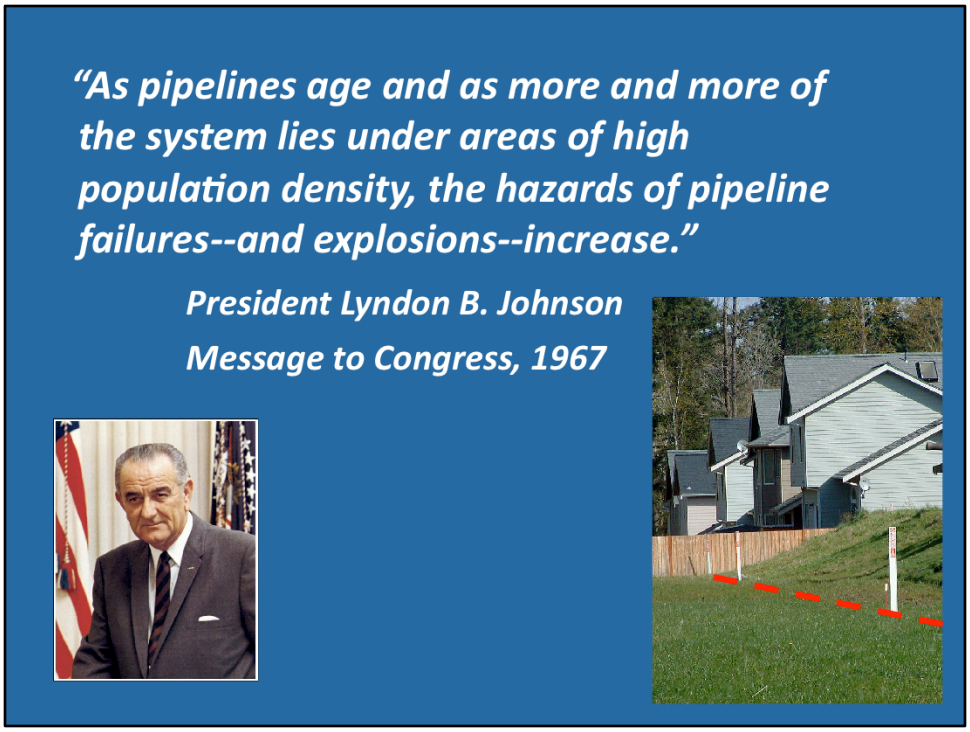
Perhaps the largest risk to pipeline safety is inaction by those who can make things more safe. While we appreciate the chance to come here today and speak about pipeline safety issues, there have already been 8 congressional hearings on these same subjects in the past year. The NTSB has raised concerns about much of this for years, and even now is spread thin investigating so many tragedies. As the federal regulator we believe PHMSA already knows all of this, or should. While the Trust is a relatively recent player in this discussion, even we have been testifying about many of these issues, such as expanding integrity management, setting clear standards for leak detection and automated valves, closing the loophole that lets companies escape reporting over pressure events, and making more information available to the public while increasing the effectiveness of public awareness program for years. The time for talk is past and the time for action is now. We hope the Secretary's "call to action" is exactly that, and not a call for more talk and reports. We hope the administration steps forward soon with some truly comprehensive recommendations to fix these problems that go much further than what they last proposed.

"As pipelines age and as more and more of the system lies under areas of high population density, the hazards of pipeline failures--and explosions--increase."

The above quote in many ways sums up today's situation



Finally I would like to close with this quote that someone recently sent to me that I believe very succinctly describes our current situation.



Unfortunately, the quote is from President Johnson nearly 45 years ago, demonstrating once again the time for action is now.

Thank You