

PIPELINE AGE



Bottom Line:

A pipeline's age itself is not a safety factor when the pipeline is adequately inspected and maintained.

Frequently Asked Questions

How old are pipelines?

Pipeline ages range from brand new to several decades. New domestic production in areas such as the Bakken, Eagle Ford and Permian Basin are spurring new pipeline construction. Pipeline construction went through similar growth spurts when the economy was rapidly expanding in the 1950s and 60s.

What do safety experts say about pipeline age?

NTSB Chairwoman Deborah Hersman testifying before Congress on pipeline safety said in response to questioning that, "if [a pipeline] is adequately maintained and inspected, age is not an issue." Senate Commerce Committee, January 2013.

What safety programs protect older pipelines?

Federal pipeline safety law and PHMSA regulations require regular evaluation, inspection and maintenance of pipelines in population centers and environmentally sensitive areas. This Integrity Management Program provides preventative maintenance keeping pipelines of all ages operating safely.

What pipeline issues are unique to older pipelines?

Pipeline age poses no unique threat. Instead, the issues pipeline operators watch for and act upon cross pipe regardless of age: potential corrosion, damage from dents, welding failures, etc. Different construction techniques and materials have been used at different points in time. Pipeline operators design integrity management plans with monitoring and maintenance to address the specific characteristics of each pipeline, its construction materials and methods.

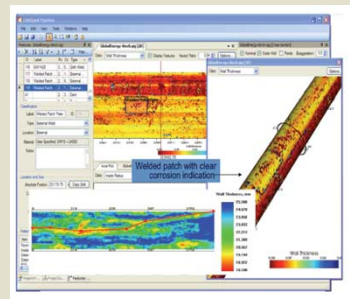
"If a pipeline is adequately maintained and inspected, age is not an issue"



Deborah Hersman, U.S. National Transportation Safety Board Chair, 2013



A "smart pig" being readied for an internal pipeline inspection



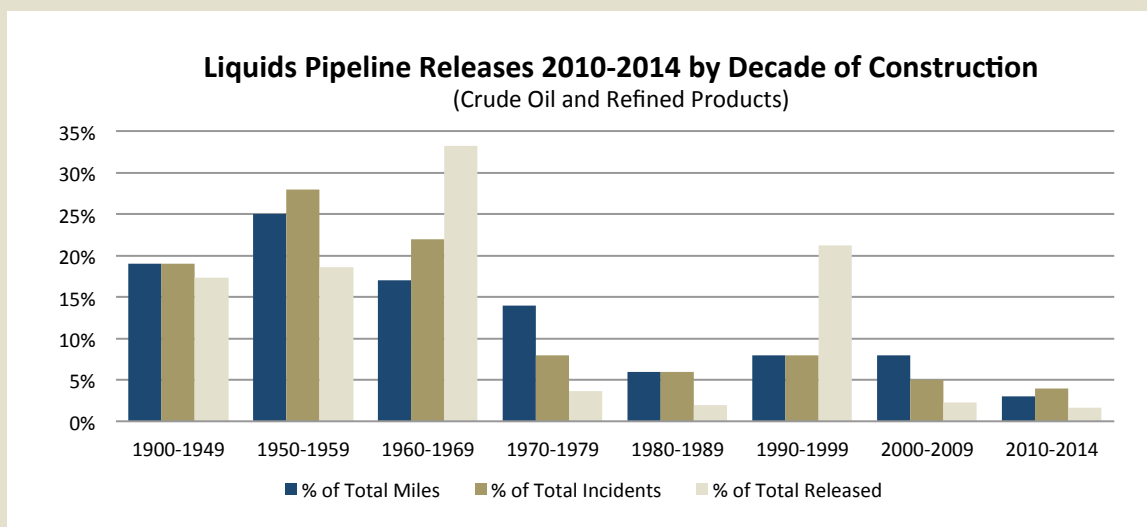
Pipeline inspection data for analysis and diagnosis

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How does history show age is not a safety factor?

Some will say there are more incidents in pipe constructed in earlier decades without noting that there was proportionally more pipe constructed during those decades. Comparing pipeline releases to their construction dates shows that most decades have proportionally fewer barrels released from their pipelines than the mileage they represent.



What actions are the pipeline industry taking to improve pipeline safety?

1900-1949, 1950s, 1970s, 1980s, 2000s, 2010s – Pipeline incident data shows pipe constructed from these decades is performing consistent with the mileage they represent in the fleet. This pipe is benefitting from all of the *Pipeline Safety Excellence™* initiatives underway from improved ILLI “smart pig” R&D through crack detection and management, pipeline safety management systems, leak detection program management and emergency response improvements.

1960s – Pipeline incident data does show proportionally more incidents and barrels released from pipe constructed in the 1960s. An example of this is the Marshall, MI release. Pipe constructed in this decade used different welding and protective coating than other decades before or after. Pipeline operators are making a number of safety changes and improvements based on the lessons of Marshall and root cause analysis of the specifics of this pipe include:

- Modern pipe quality & construction techniques under API standards & federal regulation
- New API industry-wide recommended practices to improve evaluation and inspection techniques for pipes with weld types, material properties and coatings from this era
- New API industry-wide recommended practices for better leak detection program management, emergency response capabilities and pipeline safety management systems

1990s – A single pipeline incident caused by a lightning strike caused this data spike. However, pipe in this and from all decades will benefit from a new leak detection recommended practice.