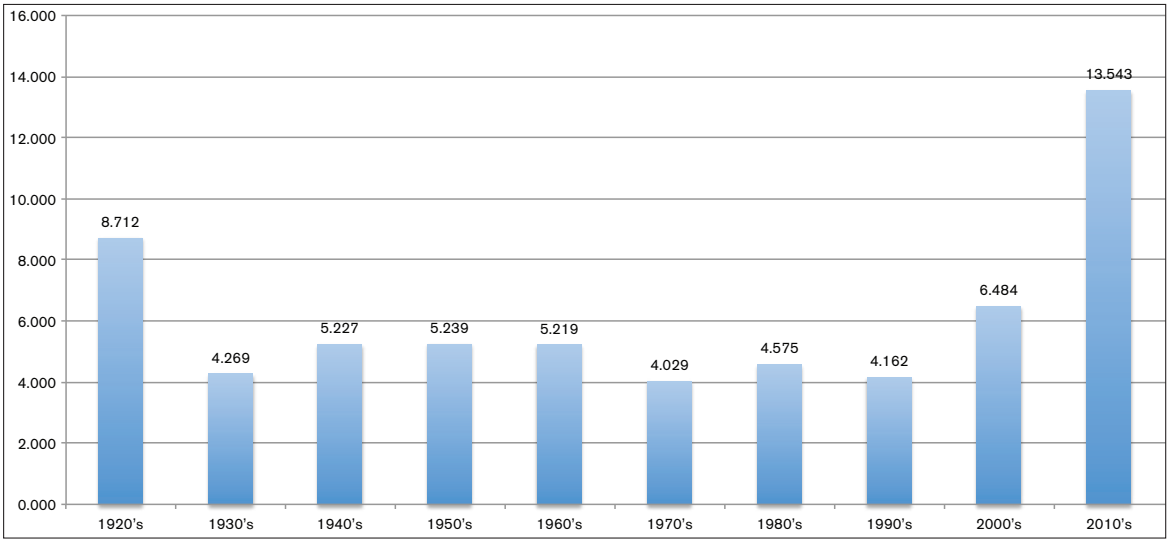
Are Old Pipelines Really More Dangerous?

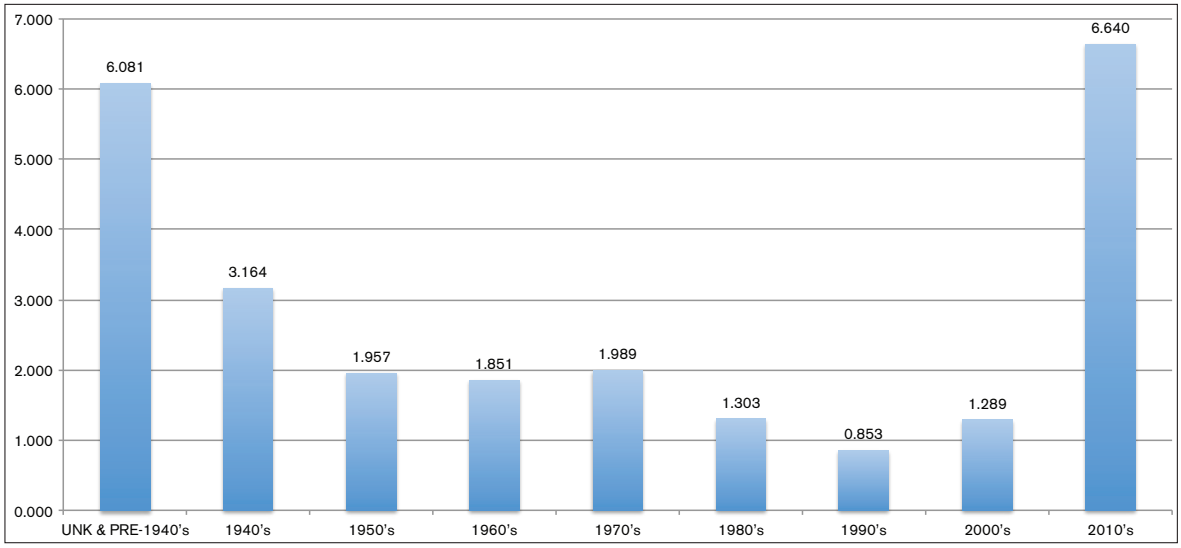
This sentiment is heard frequently, and even more often turned into a statement of fact, that old pipelines are more dangerous. But the truth is that is not necessarily the case. While some *types* of old pipelines are well-known to be riskier, like cast iron pipes and pipes with seams welded using LF-ERW (low frequency electric resistance weld), in general we do not see older pipes failing much more than new pipes on a per mile basis. In fact, we recently analyzed pipeline incidents in relation to the decade those same failed pipes were installed – one analysis for onshore hazardous liquid (HL) pipelines, and one for onshore gas transmission pipelines. The results were surprising. Though they varied between hazardous liquid and gas transmission pipelines (all onshore), generally the very oldest pipes were more dangerous (pipe installed before the 1930s), and – here's the surprising part – more dangerous still were the very newest pipelines – those installed since 2010. Is this a reflection of "getting the kinks out" when pipelines are first installed? Is it a pattern that will continue or change? Unfortunately, we don't have the kind of data we would need to replicate this analysis in decades past, so it will only be in the future that we're able to answer our questions. The graphs are concerning to us though, as one interpretation of the results is that some pipelines are initially installed with weak and vulnerable aspects which fail; and only after fixing these initial failures do the pipelines operate safely. There are surely other interpretations of the results, and we would love to hear from you if you have ideas of why this is occurring. The uncertainty surrounding the safety of new pipelines underscores the need to push for pipelines to be sited, installed, tested and inspected in the best way possible, and for the regulators to ensure that is the case through strong and enforced regulations. And all of this only works well when the public has the ability to be involved in the process and has access to the information needed to understand and review all aspects of pipeline safety. We still have a long way to go.

 # Incidents Per 10,000 Miles Of Onshore Hazardous Liquid Pipeline By Decade Of Pipe Installed
(Avg Of Annual Incidents 2005-2013)



All data from PHMSA. Mileage data from operator's annual reports, incident data from flagged incident reports.
Contact us for more specifics.

 # Incidents Per 10,000 Miles Of Onshore Gas Transmission Pipeline By Decade Of Pipe Installed
(Avg Of Annual Incidents 2005-2013)



All data from PHMSA. Mileage data from operator's annual reports, incident data from flagged incident reports.
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