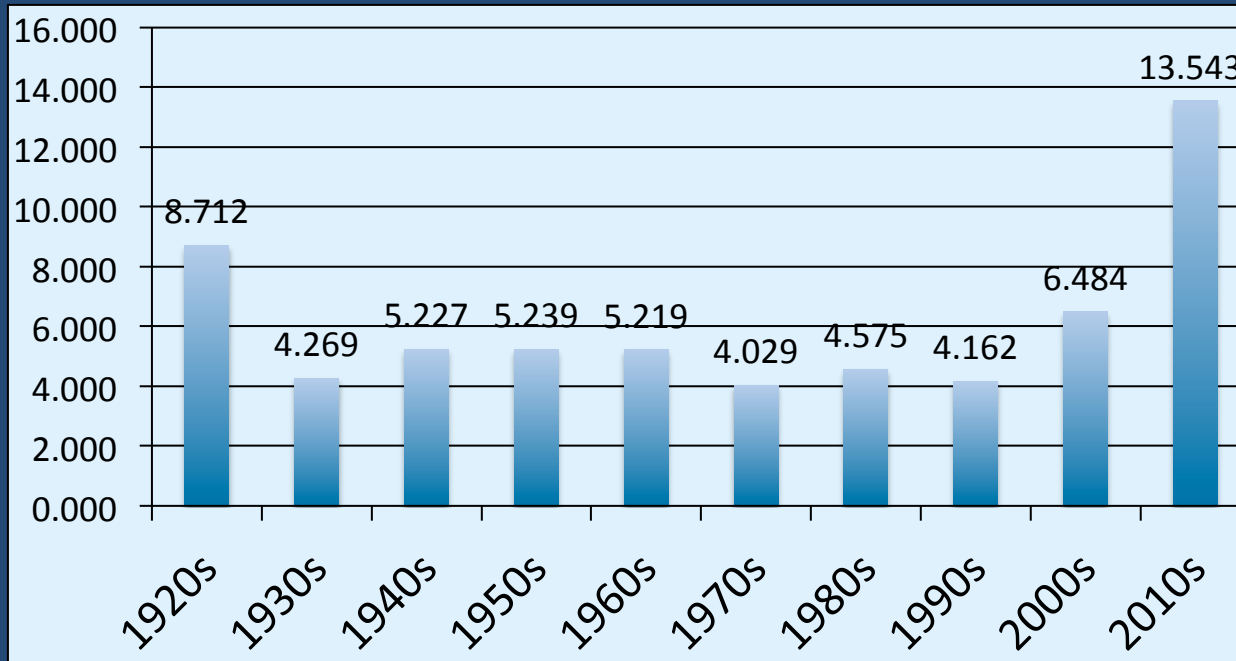


Why so many failures on new pipelines? What needs to change?



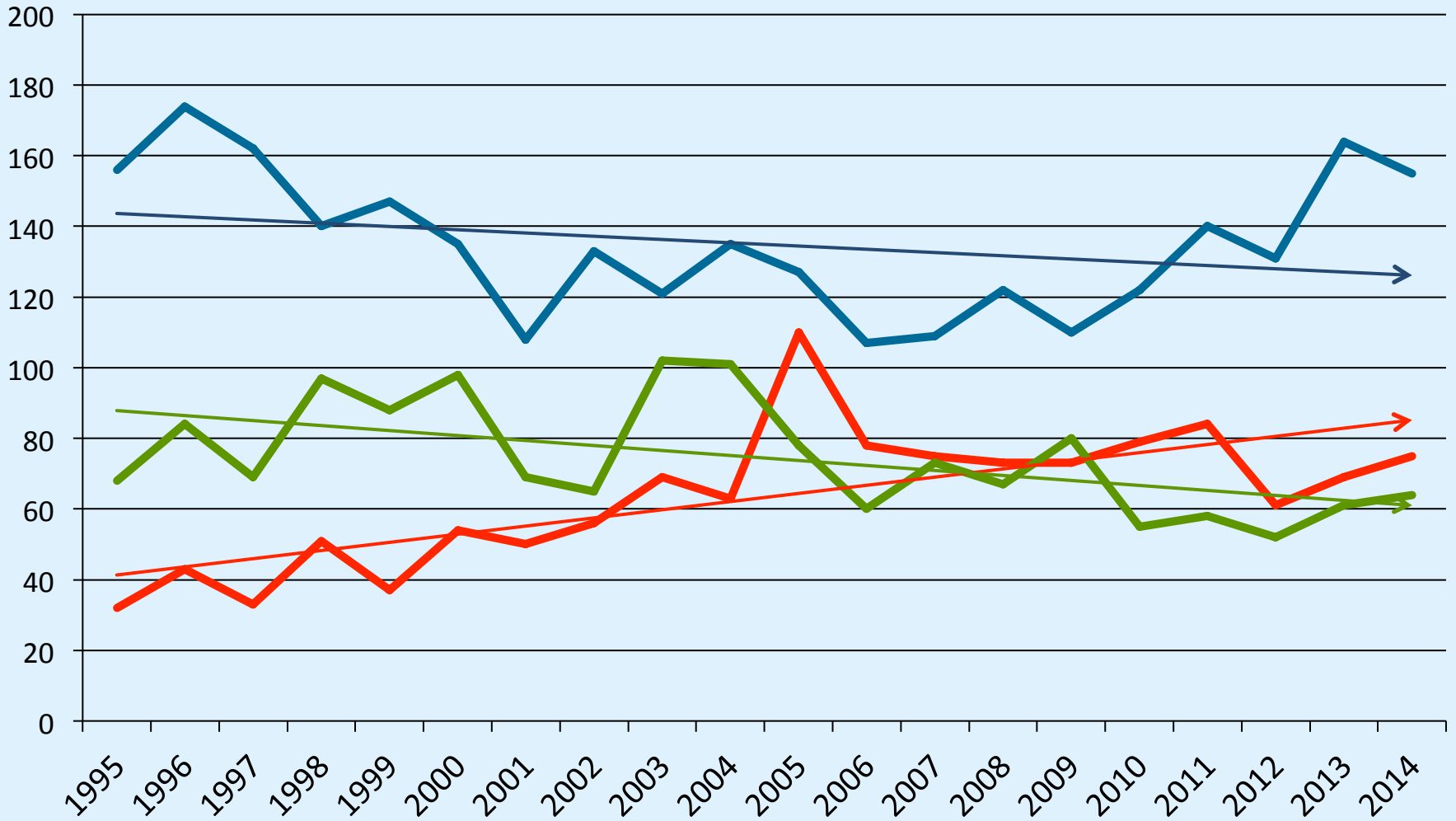
Carl Weimer, Executive Director

Pipeline Safety
TRUST

Credible.
Independent.
In the public interest.

Number of Significant Incidents per Year - Nationwide

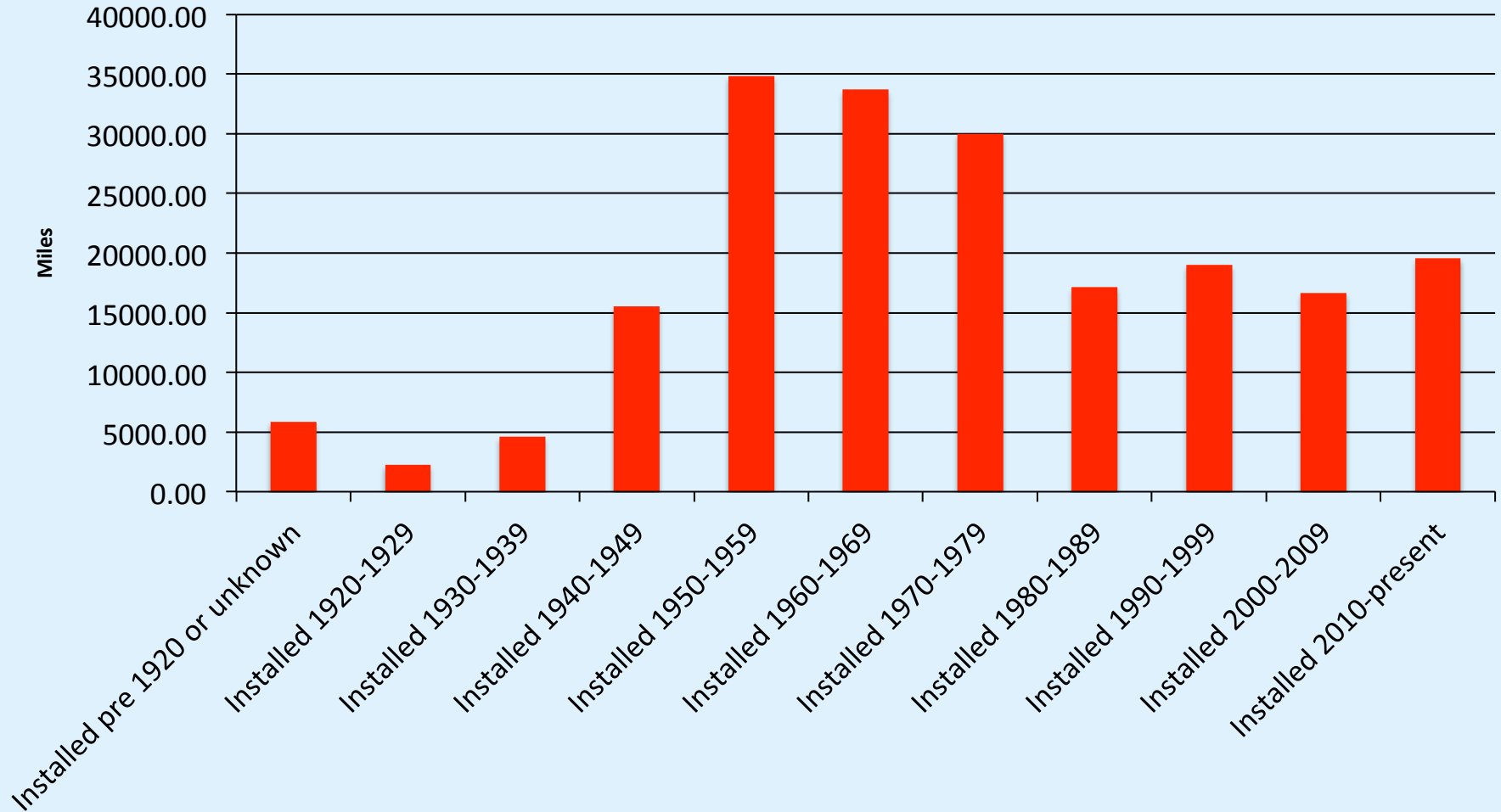
Hazardous Liquid Gas Transmission Gas Distribution



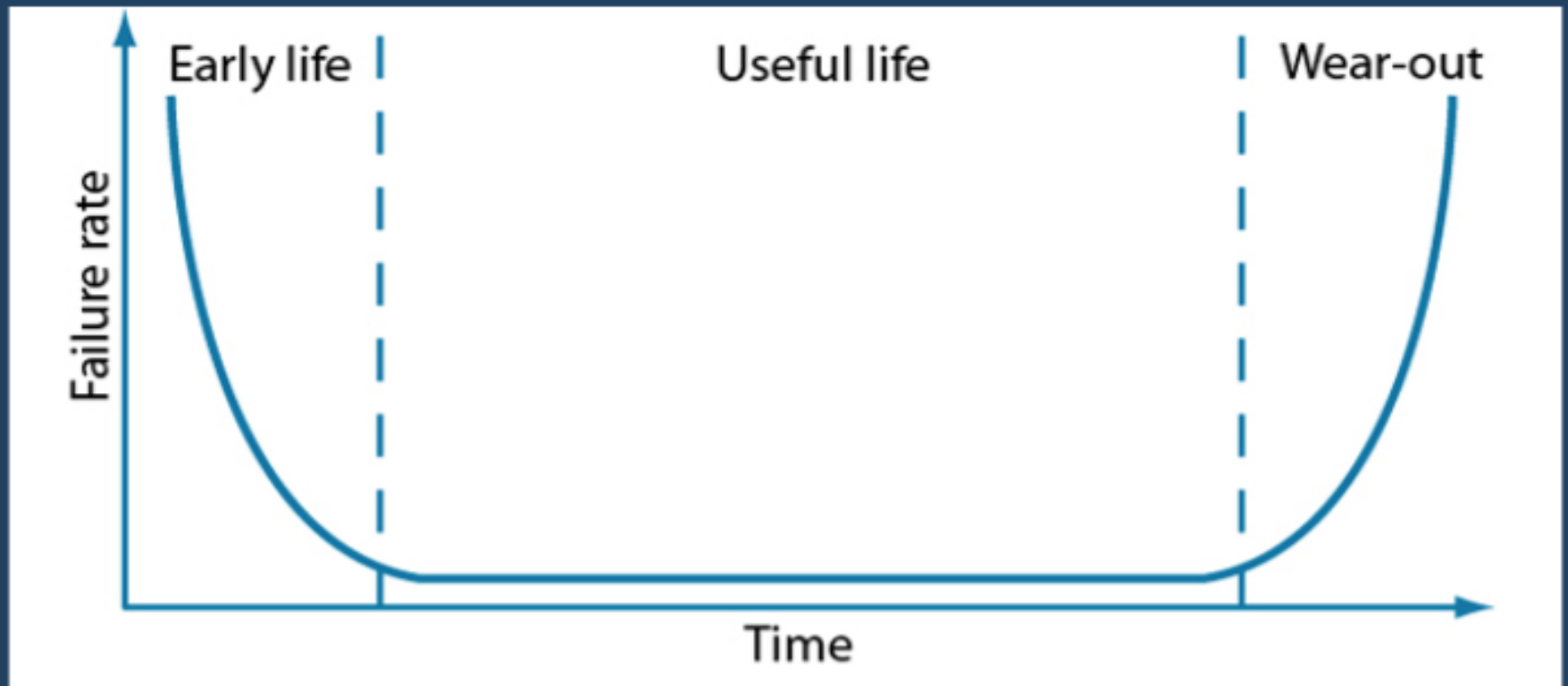
Age of our pipeline system

Nationwide Hazardous Liquid Pipeline Mileage by Year Installed

Source - PHMSA Annual Data as of 9/1/15

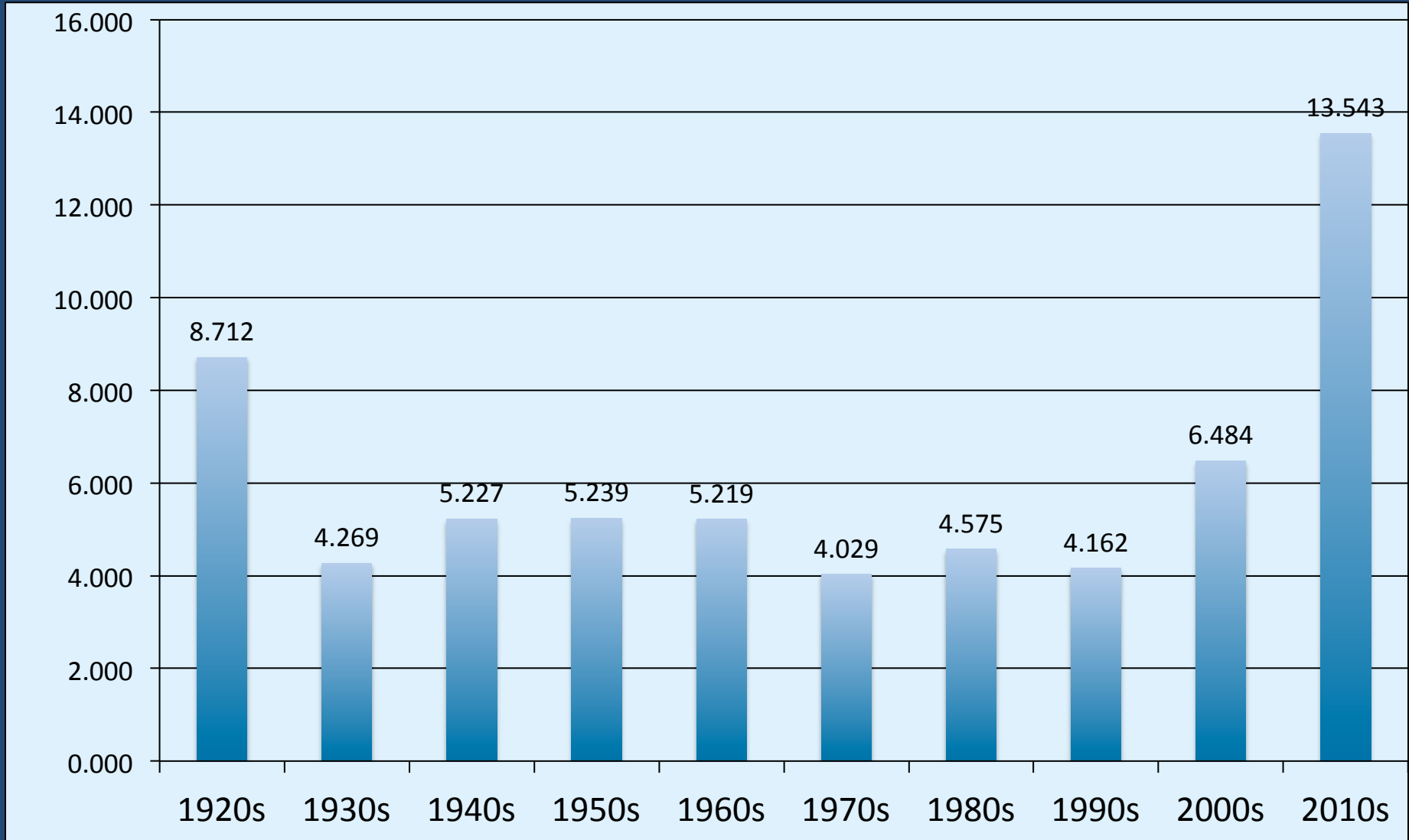


The Bathtub Curve

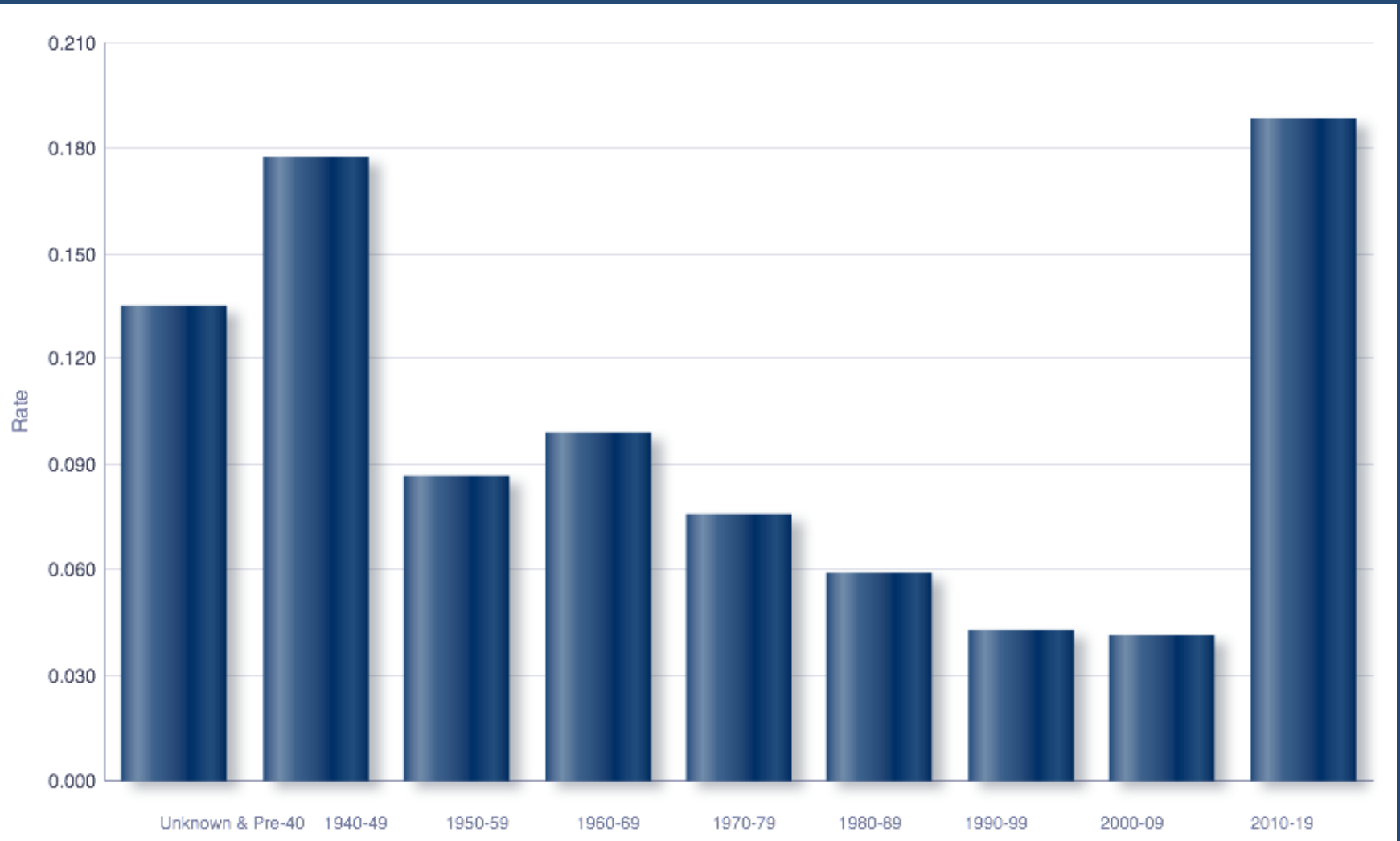


Reliability specialists often describe the lifetime of a population of products using a graphical representation called the bathtub curve.

Incident rate per 10,000 Miles of Hazardous Liquid Pipeline by Decade when Pipe Was Installed



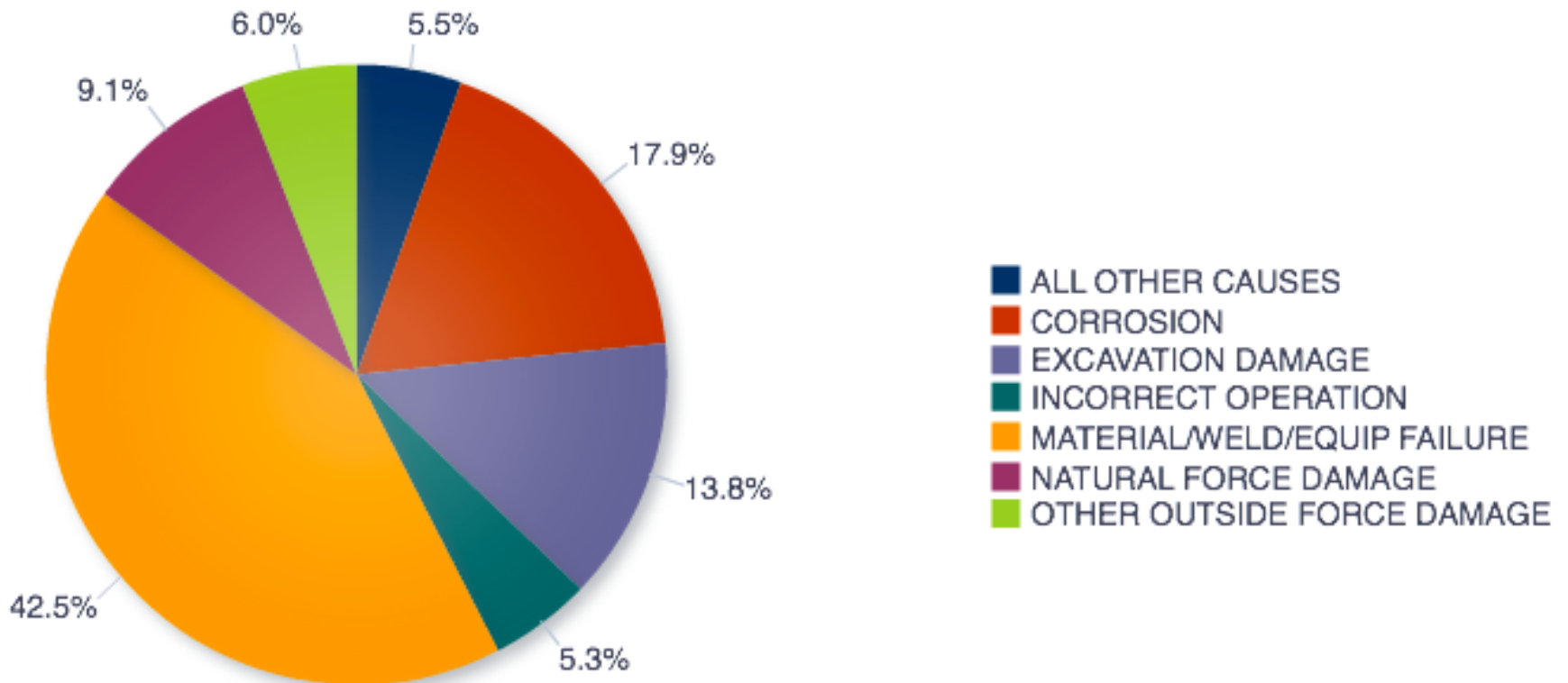
Gas Transmission Pipeline Significant Incidents/ 1000 miles of Pipe



Quick look at Causes

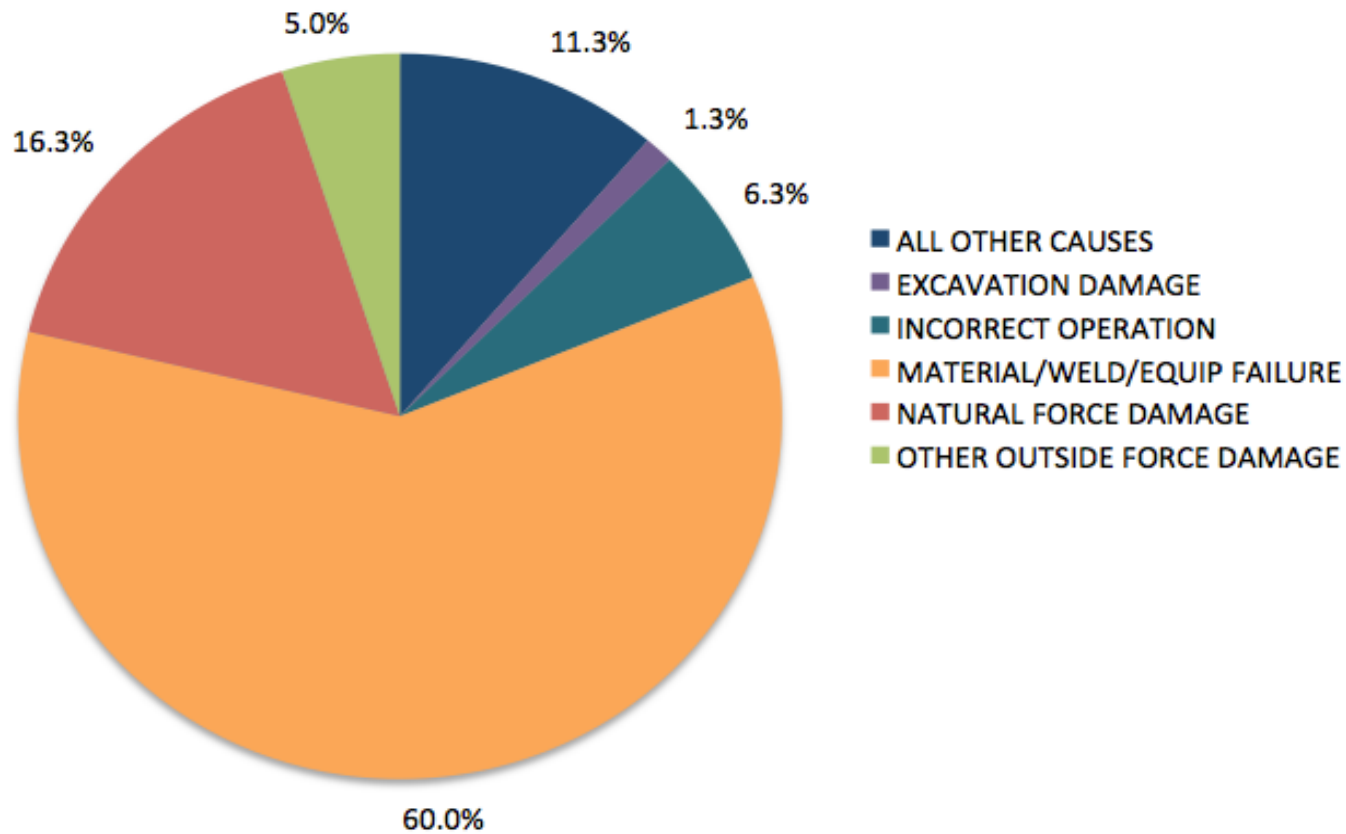
All Reported Incident Cause Breakdown: 5 Year Average (2011-2015)

System Type: GAS TRANSMISSION State: ALL Offshore: ALL



Quick look at Causes

All Reported Gas Transmission Incidents (2011-2015) that occurred on components installed within last 5 years



So while the Bathtub Curve may be the norm from a theoretical reliability engineering standpoint – Does it have to be that way if companies are really committed to zero incidents?

ALLIANCE PIPELINE L.P.
All Incidents, Gas Transmission Pipeline Systems

Year	Number	Fatalities	Injuries	Property Damage (A)
2006	0	0	0	\$0
2007	0	0	0	\$0
2008	0	0	0	\$0
2009	0	0	0	\$0
2010	0	0	0	\$0
2011	0	0	0	\$0
2012	0	0	0	\$0
2013	0	0	0	\$0
2014	0	0	0	\$0
2015 YTD	0	0	0	\$0
Totals	0	0	0	\$0

Thanks for listening and for your
interest in pipeline safety



**Credible.
Independent.
In the public interest.**

Carl Weimer, Executive Director

Pipeline Safety Trust

<http://www.pipelinesafetytrust.org>

360-543-5686

carl@pstrust.org