

PHMSA Class Location Methodology

Public Workshop

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Washington DC

A Public Interest Perspective

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The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011

SEC. 5. INTEGRITY MANAGEMENT.

(a) EVALUATION.—Not later than 18 months after the date of enactment of this Act, the Secretary of Transportation shall evaluate—

(1) whether integrity management system requirements, or elements thereof, should be expanded beyond high-consequence areas; and

(2) with respect to gas transmission pipeline facilities, whether applying integrity management program requirements, or elements thereof, to additional areas would mitigate the need for class location requirements.

Two Ideas Tied Together

**Expansion of Integrity
Management Program
Requirements Beyond
HCAs**

**Changes to Class
Location
Requirements in
Areas beyond HCAs**



Part 192 Impacted by Class Location

Subpart A –General – Definitions, etc.

Subpart A – Gathering Line Determinations

Subpart B –Materials – Pipe Wall Thickness or Grade/Strength

Subpart C - Pipe Design – Operating Pressures

Subpart D -Design of Pipeline Component -Operating Pressures

Subpart E -Welding of Steel in Pipelines – Non-destructive Tests

Subpart G -General Construction Reqts. – Depth of Cover

Subpart I – Reqts. for Corrosion Control – Corrosion Repairs

Subpart J -Test Requirements – Pressure Test Factor

Subpart K – Uprating – MAOP, Test Pressure, Class Loc., & Repair

Subpart L—Operations – Class Location and MAOP

Subpart M—Maintenance – Inspection Intervals

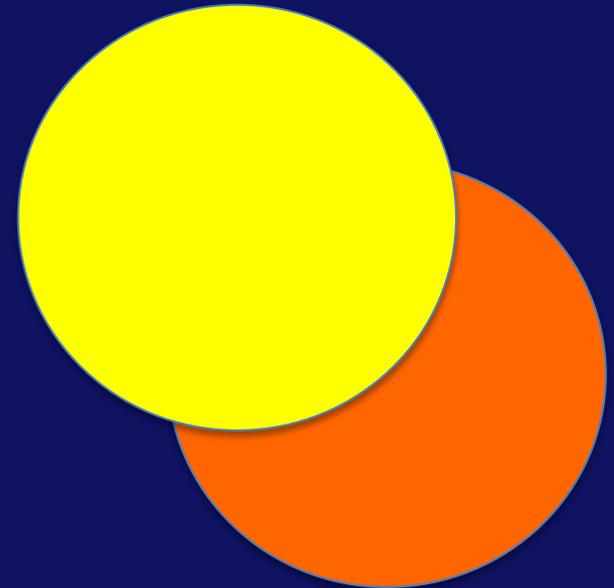
Subpart O—Gas Transmission Pipeline IM-HCAs – Method 1

Where do Class Location & IMP Overlap?

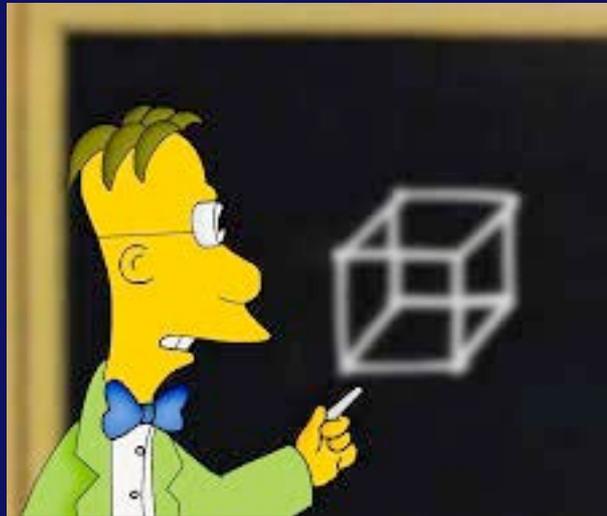
Already densely populated areas

In the future where denser
population may occur

In these types of areas the two different
safety requirements provide an
overlapping safety regime



Theoretically



We believe at some point the older one-size-fits-all Class Location risk mitigation requirements can be replaced with a more science informed risk based Integrity Management Program.

Unfortunately We Don't Think Integrity Management is There Yet

We would first want to see:

- Secretary of DOT's IMP Audit
- Long awaited IMP 2.0 from PHMSA
- Long delayed rules on liquid and gas transmission
- ILI Tool & Interpretation Improvements
- Clear descriptions of how current class location requirements would be handled under a pure IMP system
- Data that shows incidents that Class Location rules would have prevented are not still occurring

NTSB Recommendations

Recommendation: P-11-018

TO THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION: Revise your integrity management inspection protocol to (1) incorporate a review of meaningful metrics; (2) require auditors to verify that the operator has a procedure in place for ensuring the completeness and accuracy of underlying information; (3) require auditors to review all integrity management performance measures reported to the Pipeline and Hazardous Materials Safety Administration and compare the leak, failure, and incident measures to the operator's risk model; and (4) require setting performance goals for pipeline operators at each audit and follow up on those goals at subsequent audits.

Recommendation P-11-019

TO THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION: (1) Develop and implement standards for integrity management and other performance-based safety programs that require operators of all types of pipeline systems to regularly assess the effectiveness of their programs using clear and meaningful metrics, and to identify and then correct deficiencies; and (2) make those metrics available in a centralized database.

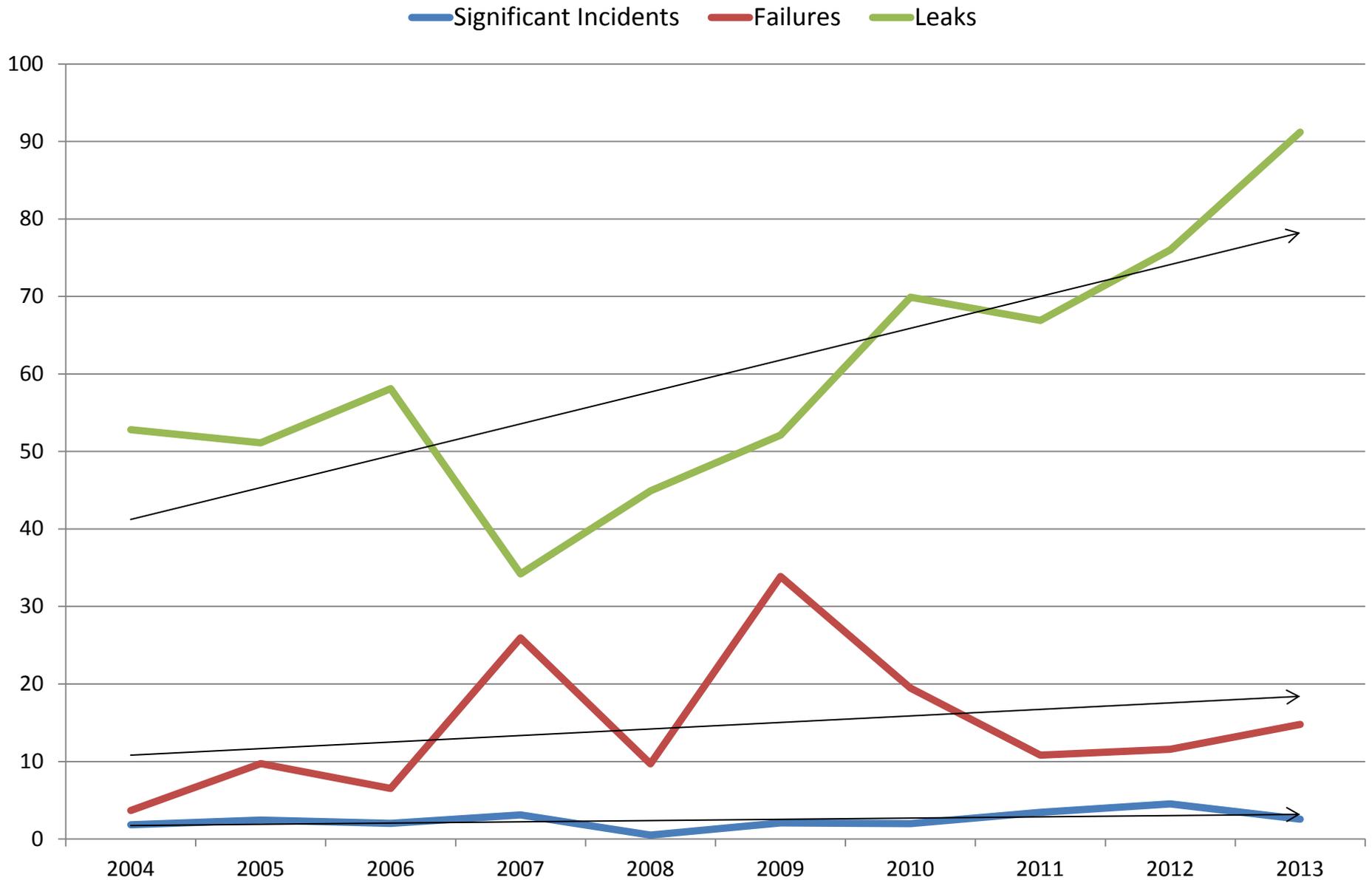
Some incidents and data suggest there is more work yet to do on Integrity Management



Not all operators are equal to the IMP task, so a one-size-fits-all completely risk based system is premature

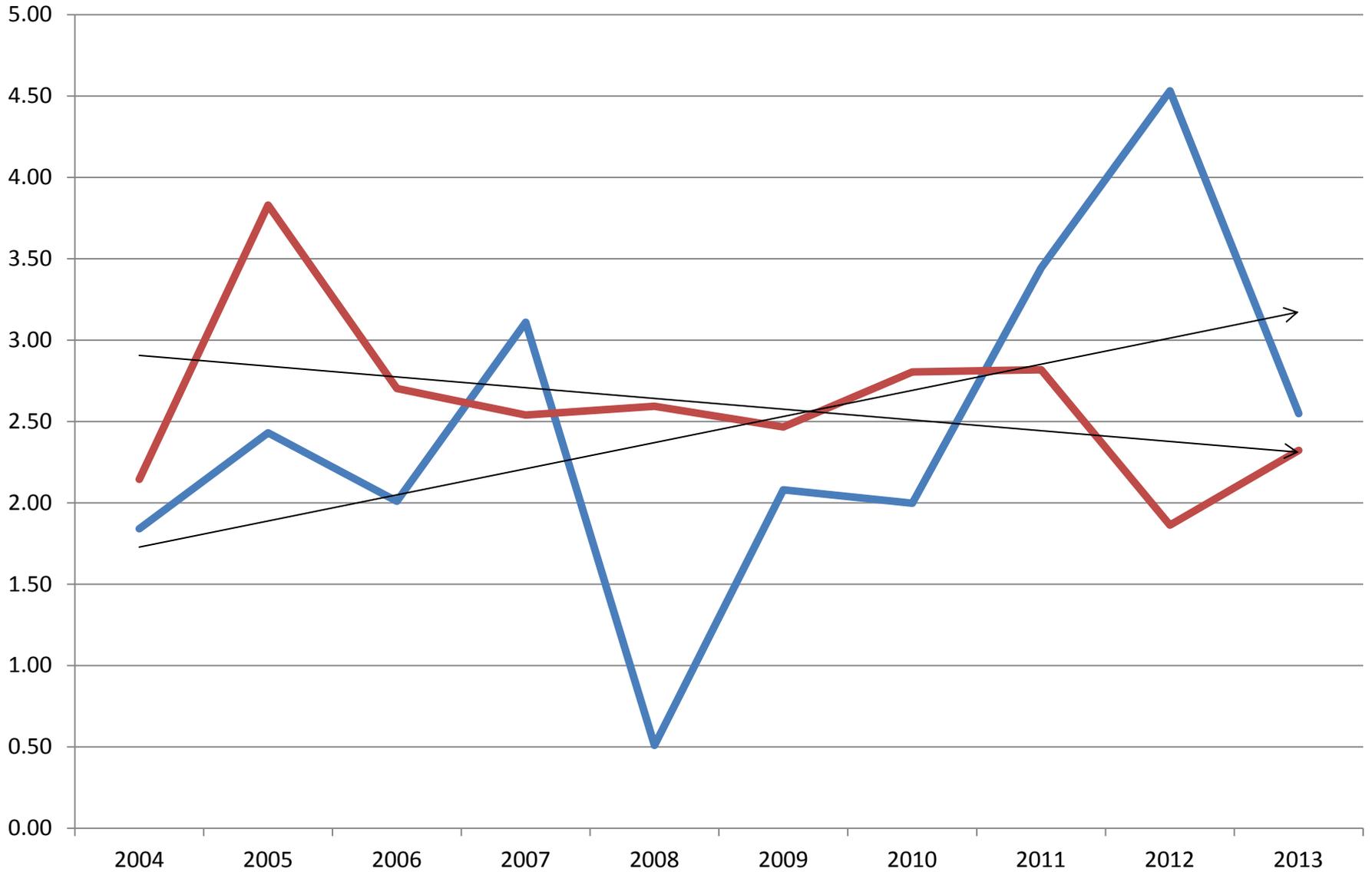


Incidents, Failures & Leaks - Gas Transmission HCAs



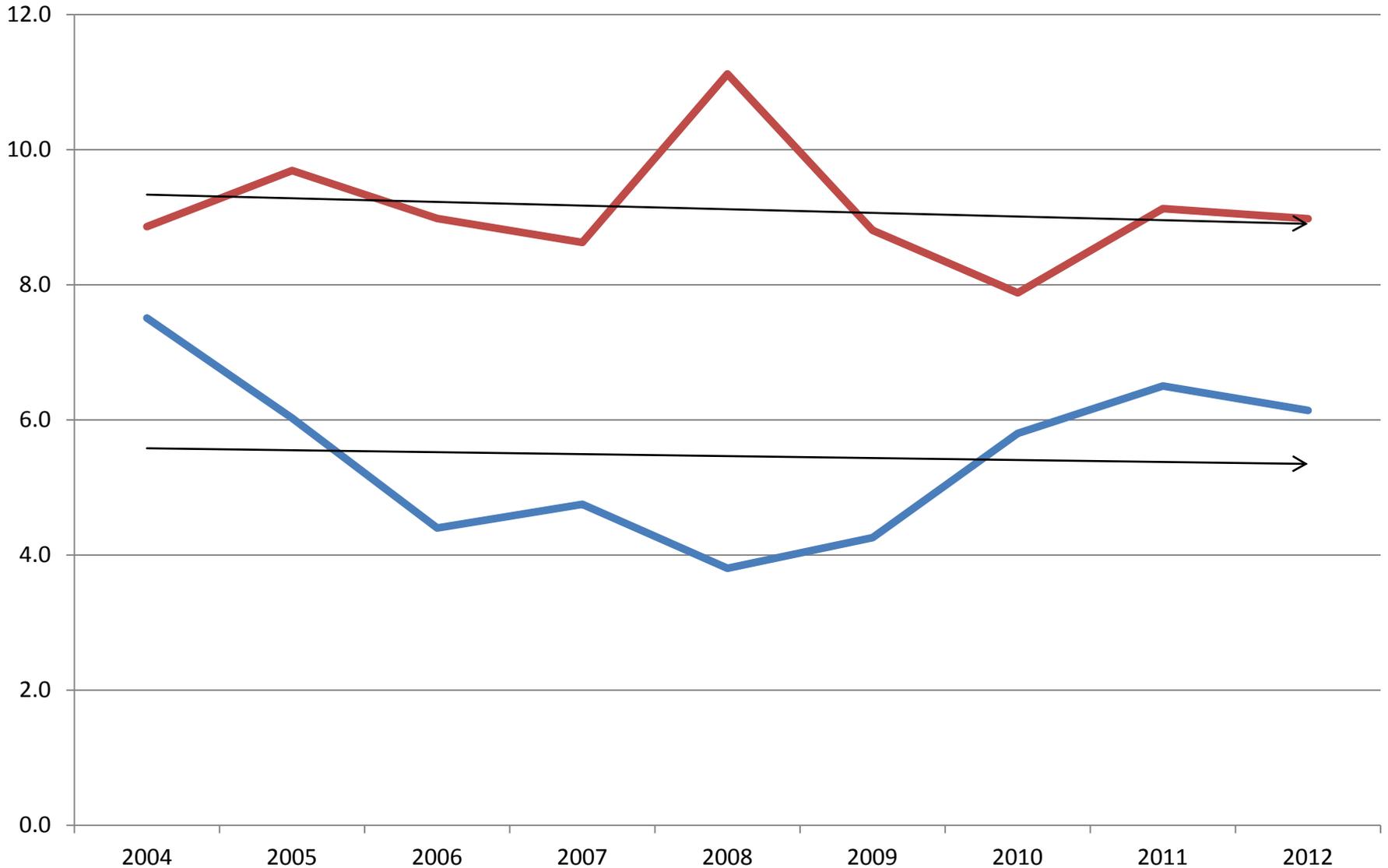
Gas Transmission Significant Incidents

— Per 10000 miles of pipe in HCA — Per 10000 mile of pipe outside of HCA

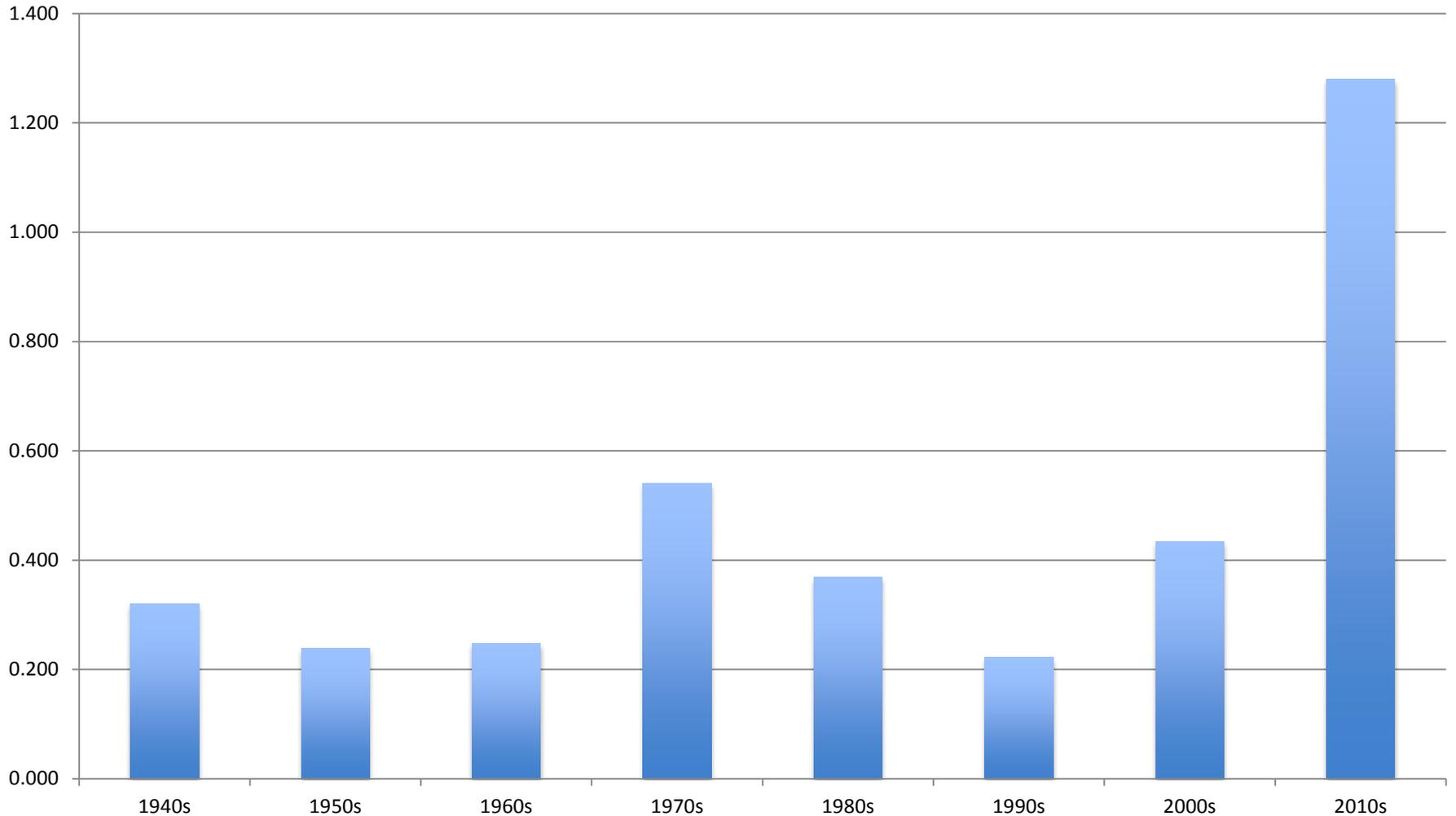


Hazardous Liquid Significant Incidents

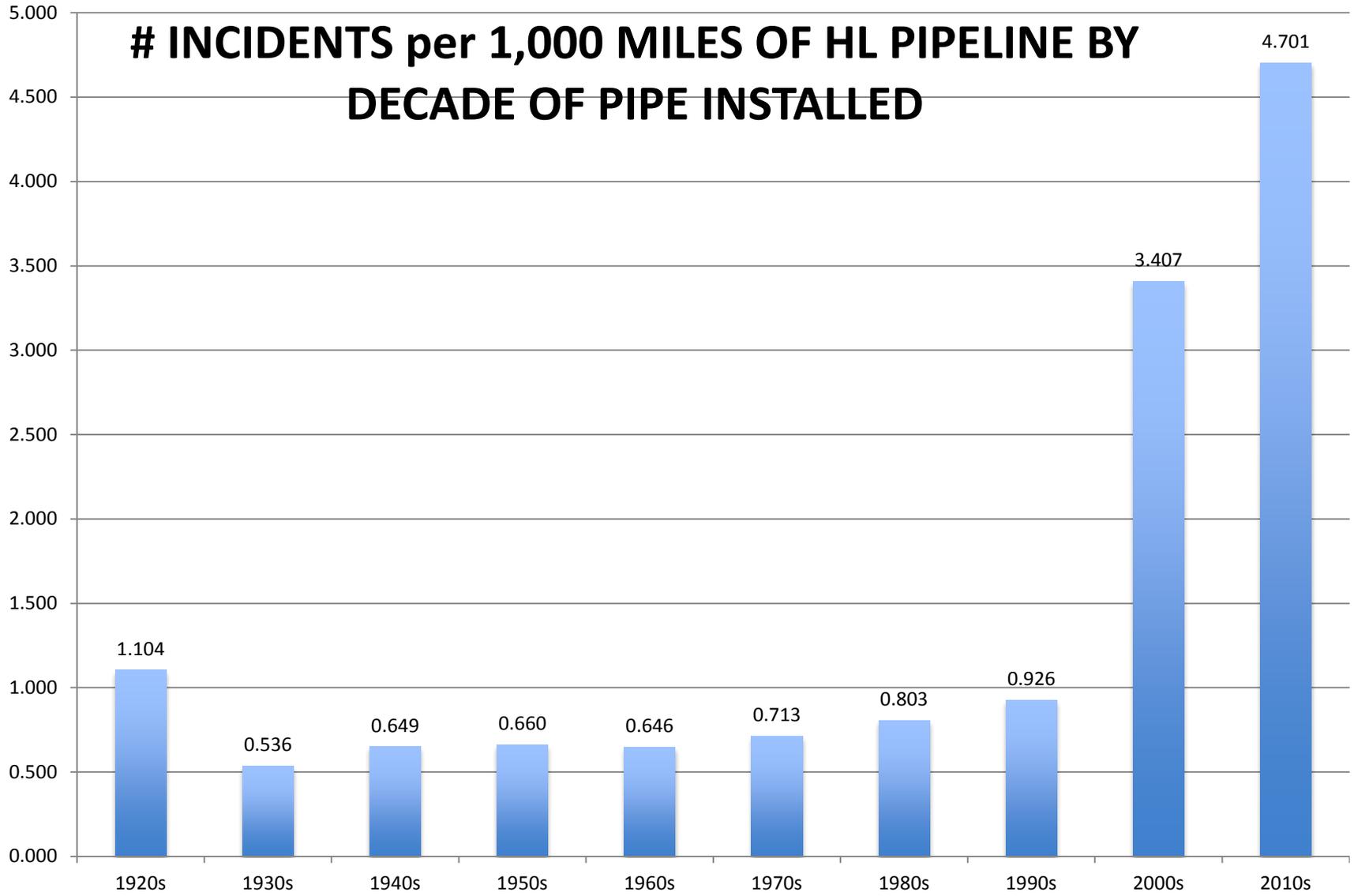
Per 10000 miles of non-HCA pipe per 10000 miles of HCA pipe



INCIDENTS per 1,000 MILES OF GAS TRANSMISSION PIPELINE BY DECADE OF PIPE INSTALLED



INCIDENTS per 1,000 MILES OF HL PIPELINE BY DECADE OF PIPE INSTALLED



We Support Expansion of IMP outside of HCAs using the PHMSA MCA Idea

	Total	HCA	Non-HCA	MCA
Class 1	237,756	1,660	236,096	(est.) 25,394
Class 2	30,210	1,412	28,798	28,798
Class 3	32,613	15,854	16,759	16,759
Class 4	962	752	209	209
Total	301,540	19,678	281,862	(est.) 71,160

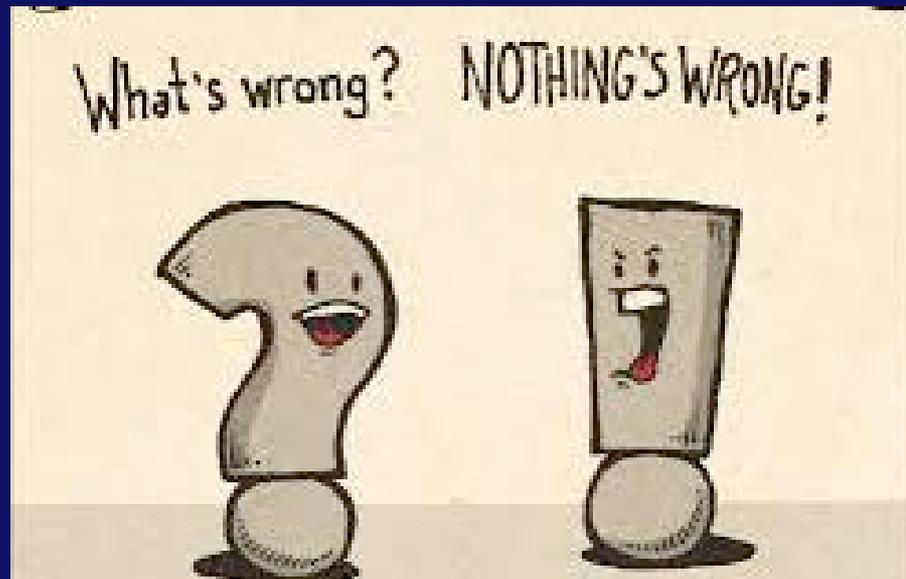
The MCA idea would capture about a third of all gas transmission lines, and nearly all that could impact residential areas

Possible Changes to Class Locations and HCAs

- Class locations based on 660 feet may need to be expanded or contracted based on a more science based PIR calculation
- PIR determination may need to be reevaluated for larger high pressure pipelines

What's Wrong With Special Permits?

PHMSA already grants special permits to compensate for population density increases on a case by case basis if an operator can demonstrate safety. What is wrong with this approach?



Summary

Class Location requirements along with Integrity Management Programs provide overlapping layers of safety.

Based on data and incidents we see no reason to change this at this time.

Thank You!



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