Pipeline Safety Conference
New Orleans, LA

Pipeline and Hazardous Materials Administration
Office of Pipeline Safety

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Welcome

Thank you for Your Participation at the Pipeline Safety Conference!

Today's Topics

- Current Events
- Review of ANPRM topics
- Impact of San Bruno, CA Incident
- Integrated Inspections

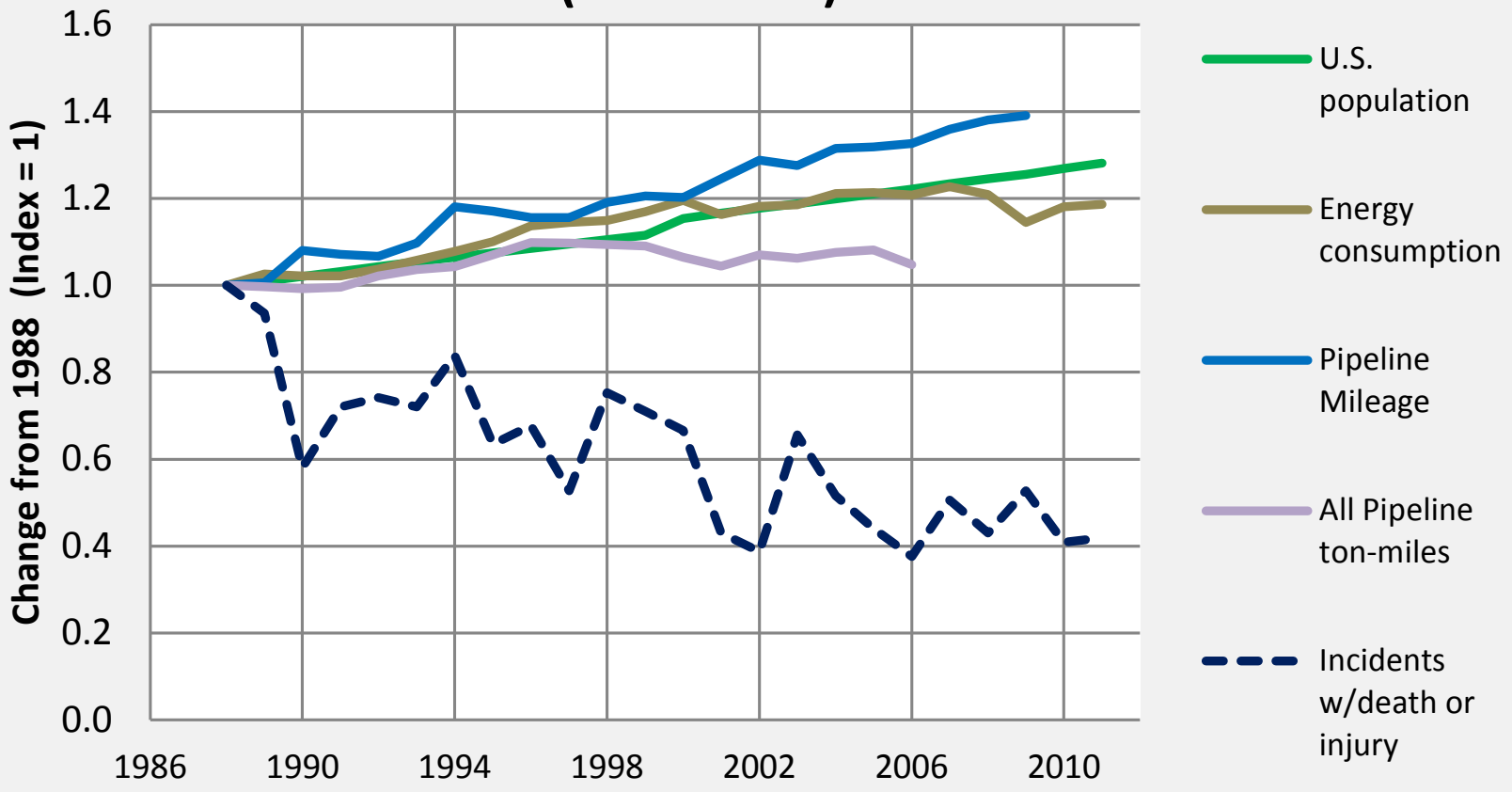
A Systematic Way to Manage Risks

- High profile incidents reinforced the need for Integrity Management Systems
  - Know pipeline systems better
  - Understand threats
  - Assess for current conditions
  - Prevent and Mitigate
  - Continually learn and Improve
- Feds, States, Industry, Gas Workers, Public – Everyone is working hard to improve safety

Many Are Still Concerned

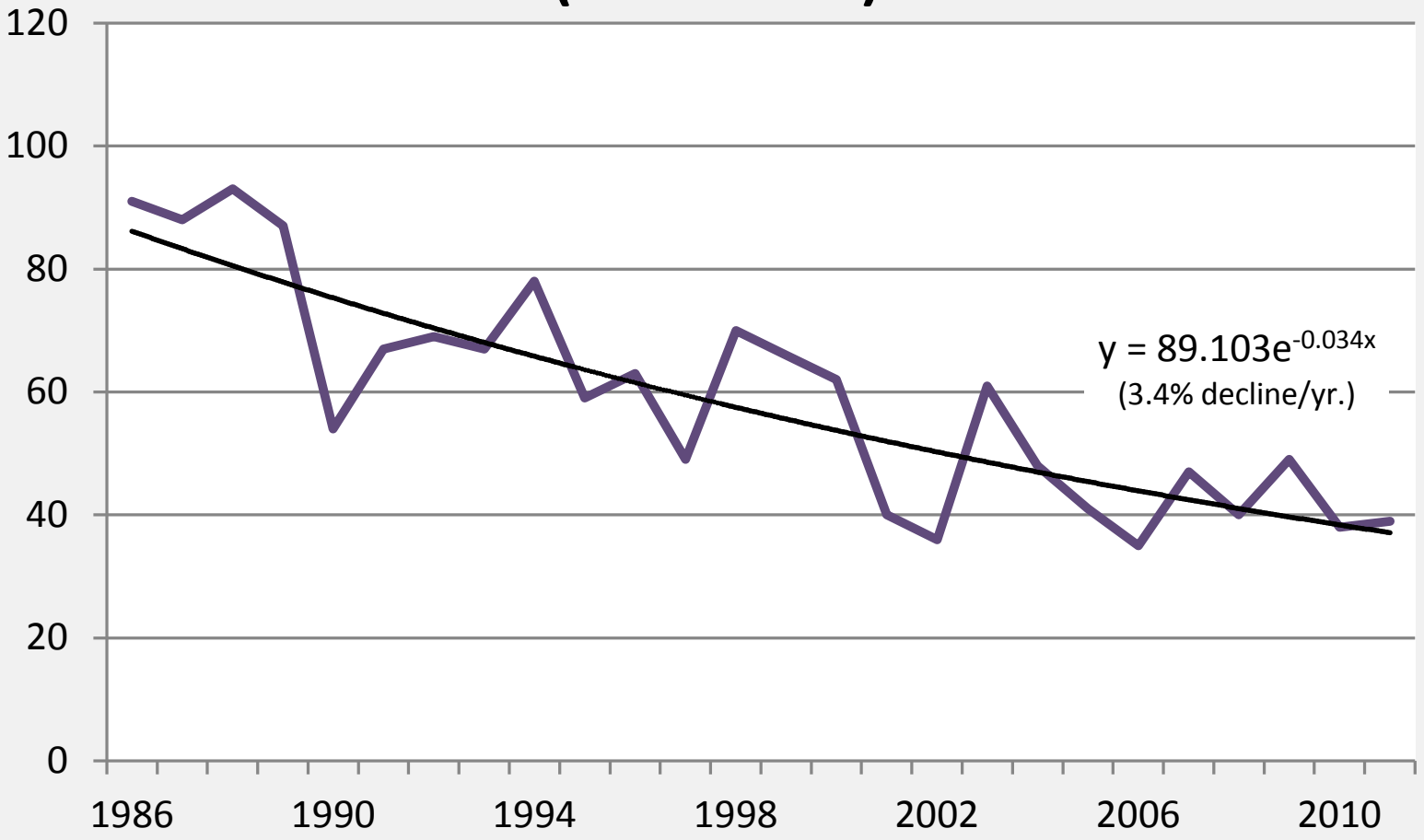
- Congress – 39 mandates
- GAO – 2 recommendations
- OIG – 9 recommendation
- NTSB – 13 recommendations (San Bruno)
- Pipeline Safety Trust and Others
- Call for Action to Address High Risk Infrastructure from OST

Pipeline Safety: Context Measures
(1988-2011)



Data Sources: Census Bureau, Energy Information Administration, PHMSA Annual Report Data, BTS ton-mile estimates, PHMSA Incident Data - as of Jan. 18, 2012

Pipeline Incidents w/Death or Injury (1986-2011)



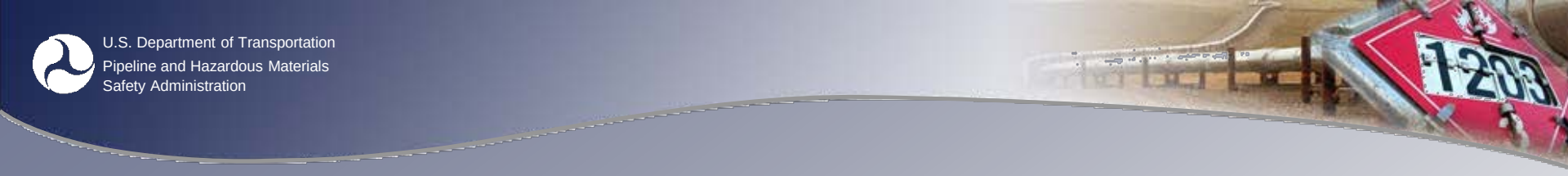
Data source: DOT-PHMSA Incident data (as of Jan. 18, 2012)

Many Are Still Concerned

- Overall safety has improved, but significant incidents continue to occur
- The World is Changing...Recent Events are Bringing a LOT of Attention Our Way
- The Public is Expecting and Demanding more from Regulators and Operators
- We all Need to Be Ready with reasonable explanations for the actions we have and have not taken

Gas Transmission ANPRM

- On August 25, 2011, (76 FR 53086) PHMSA published in the Federal Register an Advance Notice of Proposed Rulemaking (ANPRM) titled: “Safety of Gas Transmission Pipelines” seeking comments on the need for changes to the regulations covering gas transmission pipelines. PHMSA has received requests to extend the comment period in order to have more time to evaluate the ANPRM. PHMSA is extending the comment period from December 2, 2011, to January 20, 2012.



Gas Transmission ANPRM

- "In particular, PHMSA is considering whether integrity management (IM) requirements should be changed, including adding more prescriptive language in some areas, and whether other issues related to system integrity should be addressed by strengthening or expanding non-IM requirements."

Performance Based Regulations

- Regulators have commented that performance based language is a challenge to inspect.
- Time must be allowed during inspections for drill downs of data sets to obtain a comprehensive understanding of an operator's system.
- Inspectors are required to use judgment during their inspections in making decisions regarding compliance.

Gas Transmission ANPRM

- PHMSA Management has placed a high priority on this rulemaking
- The topics discussed in the ANPRM will probably be handled in 2 phases of rulemaking as some topics have required studies that must be performed
- Today, I am going to provide highlights of what topics are in the ANPRM

Gas Transmission ANPRM

A. Modifying the Definition of HCA

- Should PHMSA revise the existing criteria for identifying HCAs to expand the miles of pipeline included in HCAs?
- Should the HCA definition be revised so that all Class 3 and 4 locations are subject to the IM requirements?
- Should PHMSA develop additional safety measures, including those similar to IM, for areas outside of HCAs?

Gas Transmission ANPRM

B. Strengthening Requirements To Implement Preventive and Mitigative Measures for Pipeline Segments in HCAs

- Have any additional P&MMs been voluntarily implemented in response to the requirements of § 192.935?
- Are any additional prescriptive requirements needed to improve selection and implementation decisions?
- What measures, if any, should operators be required explicitly to implement?

Gas Transmission ANPRM

C. Modifying Repair Criteria

- Should the immediate repair criterion of FPR ≤ 1.1 MAOP be revised to require repair at a higher threshold?
- Should anomalous conditions in non-HCA pipeline segments qualify as repair conditions subject to the IM repair schedules?
- How do operators currently treat assessment tool uncertainties when comparing assessment results to repair criteria?

Gas Transmission ANPRM

D. Improving Requirements for Collecting, Validating, and Integrating Pipeline Data

- Should PHMSA make current requirements more prescriptive so operators will strengthen their collection and validation practices necessary to implement significantly improved data integration and risk assessment practices?

Gas Transmission ANPRM

E. Making Requirements Related to the Nature and Application of Risk Models More Prescriptive

- Should PHMSA either strengthen requirements on the functions risk models must perform?
- How, if at all, are existing models used to inform executive management of existing risks?
- Can existing risk models be used to understand major contributors to segment risk and support decisions regarding how to manage these contributors?

Gas Transmission ANPRM

F. Strengthening Requirements for Applying Knowledge Gained Through the IM Program

- How many times has a review of other portions of a pipeline in accordance with §192.917(e)(5) [Corrosion] resulted in investigation and/or repair of pipeline segments other than the location on which corrosion requiring repair was initially identified?
- Do pipeline operators assure that their risk assessments are updated as additional knowledge is gained, including results of IM assessments?
- What do operators require for data integration to improve the safety of pipeline systems in HCAs?

Gas Transmission ANPRM

G. Strengthening Requirements on the Selection and Use of Assessment Methods

- Should the regulations require assessment using ILI whenever possible, since that method appears to provide the most information about pipeline conditions?
- How do operators decide whether their knowledge of pipeline characteristics and their confidence in that knowledge is adequate to allow the use of direct assessment?
- Should a one-time pressure test be required to address manufacturing and construction defects?

Gas Transmission ANPRM

H. Valve Spacing and the Need for Remotely or Automatically Controlled Valves

- Are the spacing requirements for sectionalizing block valves in § 192.179 adequate?
- Should PHMSA consider a requirement for all sectionalizing block valves to be capable of being controlled remotely?
- Should PHMSA strengthen existing requirements by adding prescriptive decision criteria for operator evaluation of additional valves, remote closure, and/or valve automation?

Gas Transmission ANPRM

I. Corrosion Control

- Should PHMSA revise subpart I to provide additional specificity to requirements?
- Should PHMSA prescribe for HCAs and non-HCAs external corrosion control survey timing intervals for close interval surveys that are used to determine the effectiveness of CP?
- Should PHMSA require a periodic analysis of the effectiveness of operator corrosion management programs?

Gas Transmission ANPRM

J. Pipe Manufactured Using Longitudinal Weld Seams

- Should all pipelines that have not been pressure tested at or above 1.1 times MAOP or class location test criteria (§§ 192.505, 192.619 and 192.620), be required to be pressure tested in accordance with the present regulations?
- Are other technologies available that can consistently be used to reliably find and remediate seam integrity issues?

Gas Transmission ANPRM

K. Establishing Requirements Applicable to Underground Gas Storage

- Should PHMSA develop Federal standards governing the safety of underground gas storage facilities?
- What standards are used?
- Does the current lack of Federal standards and preemption provisions in Federal law preclude effective regulation of underground storage facilities by States?

Gas Transmission ANPRM

L. Management of Change

- Experience has shown that changes to physical configuration or operational practices often cause problems in the pipeline and other industries.
- Are there standards used by the pipeline industry to guide management processes including management of change?
- PHMSA is considering adding requirements in this area to provide a greater degree of control over this element of pipeline risk.

Gas Transmission ANPRM

M. Quality Management Systems (QMS)

- Quality management includes the activities and processes that an organization uses to achieve quality including formulating policy, setting objectives, planning, quality control, quality assurance, [performance-based assessments], performance monitoring, and quality improvement.
- Should PHMSA establish requirements for QMS?
- Do gas transmission pipeline operators require their construction contractors to maintain and use formal QMS?

Gas Transmission ANPRM

N. Exemption of Facilities Installed Prior to the Regulations

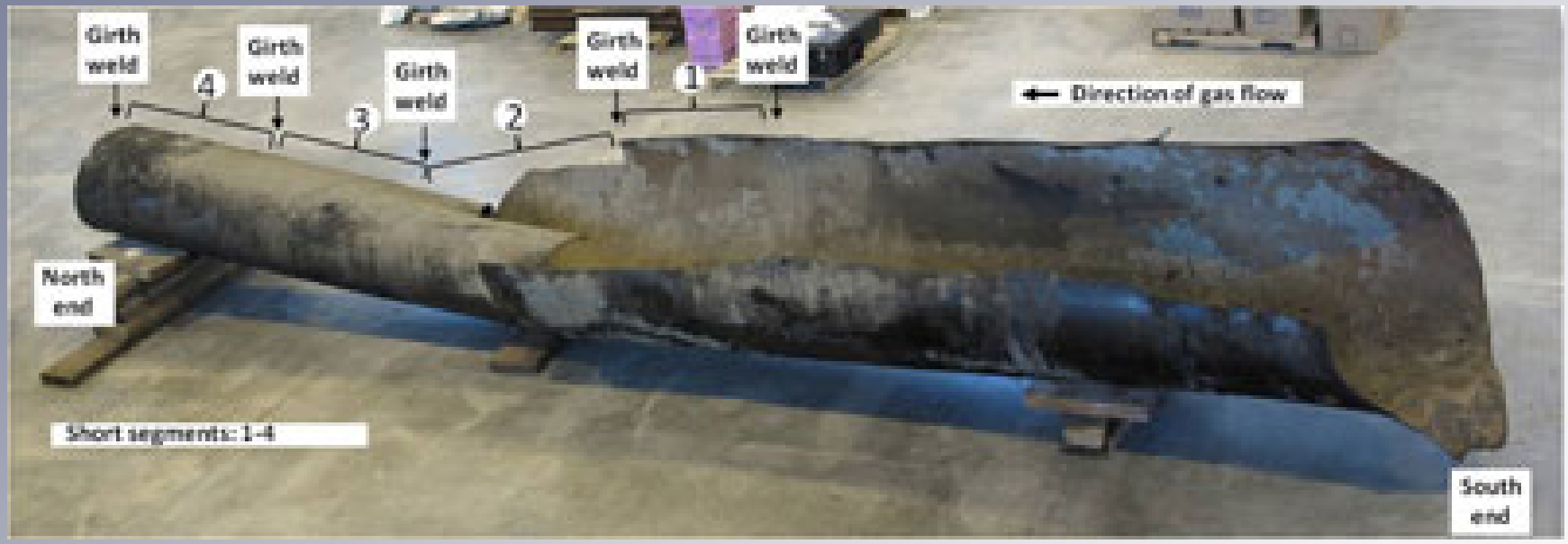
- Should PHMSA repeal provisions in part 192 that allow use of materials manufactured prior to 1970 and that do not otherwise meet all requirements in part 192?
- Should PHMSA repeal the MAOP exemption for pre-1970 pipelines?
- Should PHMSA take any other actions with respect to exempt pipelines?
- Should pipelines that have not been pressure tested in accordance with subpart J be required to be pressure tested in accordance with present regulations?

Gas Transmission ANPRM

O. Modifying the Regulation of Gas Gathering Lines

- Conflicting and ambiguous language of API RP 80 can produce multiple classifications for the same pipeline system. Are there any difficulties in applying the definitions contained in RP 80?
- Should PHMSA amend 49 CFR part 192 to include a new definition for the term ‘‘gathering line’’?
- Should PHMSA consider establishing a new, risk-based regime of safety requirements for large-diameter, high-pressure gas gathering lines in rural locations?

San Bruno, CA Incident on 9/9/10



- Eight fatalities and numerous injuries. Destroyed 37 homes and damaged 18 others.
- Pipeline was 30” in diameter, operating at 375 - 390 psig.
- Records indicated seamless pipe, but segments of seam-welded pipe were discovered.

NTSB Findings on San Bruno, CA Incident on September 9, 2010

- The NTSB identified certain deficiencies and areas for improvement in Pipeline Safety IM Programs.
- PHMSA is working to address the NTSB recommendations
- A finding discussed in several recommendations is that without effective and meaningful metrics in performance- based pipeline safety programs, neither the Operator nor the Regulator was able to effectively evaluate or assess the Operator's pipeline system and detect the inadequacies of the Operator's IMP.

NTSB Findings

- Relevant to Integrity Management Programs NTSB also made the following comments:
  - The IM Program was based on incomplete and inaccurate pipeline information
  - The IM Program did not consider the design and materials contribution to the risk of a pipeline failure.
  - The structure of the IM Program led to internal assessments of the program that were superficial and resulted in no improvements.

NTSB Recommendations

- Recommendations that can be immediately addressed:
  - Operators should provide system-specific information about their pipeline systems to the emergency response agencies of the communities and jurisdictions in which those pipelines are located. [P-11-8]
  - Operators immediately and directly notify the 911 emergency call center(s) for the communities and jurisdictions in which those pipelines are located when a possible rupture of any pipeline is indicated. [P-11-9]
  - Operators should conduct post accident drug and alcohol testing of all potentially involved personnel despite uncertainty about the circumstances of the accident. [P-11-12 & P-11-13]

NTSB Recommendations

- NTSB has discussed with PHMSA several key topics:
  - Pressure excursions
  - Appropriate records
  - QA/QC to ensure validity of records/assumptions
  - Identification of information gaps
  - Knowledge of what information is unknown
  - Documentation of replacements and decisions made
  - Performance metrics that provide meaningful insight
- NTSB's concerns include ensuring adequate oversight of the operator and adequate field inspections.

Questions and Answers