



Welcome to the Joint Technical Pipeline Safety Standards Committee



Housekeeping

- Jeff Wiese – Designated Government Official
- Introductions – Committee members
- Audience Participation – Please hold comments until we open the floor. Identify yourself and keep comments short. Meeting record will be available on website. PHMSA-2011-0127
- Emergency exits/rest rooms
- Call to Order – Turn off your cell phones or place in silent mode.



DRAFT Report to America on Pipeline Safety

Jeff Wiese

and

The TAC Subcommittee



Why a Report to America?

- Several major pipeline accidents trigger a Secretarial “Call to Action”.
- April 18 Pipeline Safety Forum + Direct engagement of many stakeholders at the Executive level.
- Identified need to communicate/educate the American public about pipelines, challenges and current performance.
- Action Plan and Pipeline Safety Awareness Website
 - We are working through a number of action items.
 - Today, we are focusing on the Report to America.



Action Items

Near Term (Spring – Summer)

- Risk Assessment Workshop (DONE)
- Pipe Seam Workshop and Report (DONE)
- International Regulators Conference (DONE)
- State Survey of Funding Mechanisms (DONE)
- National Infrastructure Bank (DONE)
- Reauthorization Legislation (DONE)



Action Items

Mid Term (Summer-Fall)

- **Publication of Pipeline Safety: Report To The Nation**
- Public Safety/First Responder Forum
- State Enforcement Training – Patchwork of different approaches. Orders not the same as civil penalties. Need more uniform approach, etc.



Action Items

Long Term (Winter – Spring)

- Technical Workshop regarding Leak Detection & Valves
- Roll out Vehicular Damage Public Awareness Campaign



Creating the Report to America

- We established a subcommittee of the TPSSC and THLPSSC to help OPS develop the Pipeline Safety Report to America.
 - We wanted balanced sector input (public, regulator and industry) and a neutrally written report (as much as possible.)
 - Solicited input via April 18 Forum and website
 - June 15 TAC Subcommittee – Public meeting (Docket number: PHMSA-2011-0127)
 - July 13-14 TAC Subcommittee Prep meeting
 - This is PHMSA's report and the Secretary will be issuing it.



Creating the Report to America

- This is a DRAFT report. We aren't done.
- It isn't perfect and not everyone is perfectly happy with it (yet?)
- We are asking for your general impressions.
- We will be sending a final draft into the DOT review process on or before August 15.
 - No telling what it will look like when it emerges from the review process!



Creating the Report to America

- We have asked the subcommittee to talk to you about different chapters of the report.
- They will provide you with the context and intent of the chapter. They are speaking on behalf of the whole – this is not their individual or personal endorsement.
- We will have scheduled time today to discuss the intent of the report and your reaction to it.



Presentation of the DRAFT Report to America on Pipeline Safety

TACs Subcommittee

Sue Fleck, National Grid

Colette Honorable, Arkansas Public Utility
Commission

Richard Pevarski, Virginia Utility Protection Service

Craig Pierson, Marathon Pipeline LLC

Massoud Tahamtani, VA State Corporation
Commission

Carl Weimer, Pipeline Safety Trust



How is the Report Structured?

Introductory Message from the Secretary (Carl)

Executive Summary (Carl)

1. The U.S. Depends on the Safe Operation of Pipelines (Craig)
2. Roles of Key Stakeholders (Rick)
3. Safety & Environmental Record (Massoud)
4. Challenges & Ongoing Initiatives (Sue)
5. Ideas for New Initiatives (Colette)

Acronyms/Glossary/Annotated Bibliography

Eleven Appendices



What do the Appendices Address?

1. Pipeline Rate Regulations
2. Responses from March 9, 2011 Survey of States on Cast Iron Replacement Programs
3. Fitness for Service
4. Pipeline Operator Compliance Programs
5. Eliminating Excavation Damage
6. How are Cross-Country Pipelines Sited?
7. How Regulators are Funded
8. State Requirements beyond the Minimum Federal Standards (N/A)
9. Roles of Select Stakeholders in Pipeline Safety
10. Additional Challenges and Ongoing Initiatives
11. Summary of State Responses to Survey on Staff Size Changes (N/A)



Introduction & Summary

- Introductory Message is a personal statement by the Secretary of Transportation to the American People describing the origins of the Report & what it's about
 - Why is this important?
- Executive Summary identifies the main messages contained in the Report – to be addressed as we discuss each section



Section 1 The U.S. Depends on the Safe Operation of Pipelines

- **Major Message** - Everyone in the U.S. has a stake in improving the safe operations of pipelines. The vast majority of petroleum products and natural gas - materials which are fundamental to our way of life - are transported by pipelines over great distances from where they are produced to our homes and to the businesses on which we depend.



Section 1 Major Sub-Sections

- Pipelines move petroleum products and natural gas to end users
- Materials transported by pipelines are integral to our daily lives
- Pipelines are increasing in importance as transporters of the energy materials in the U.S
- A large number of companies of varying size operate the nation's pipeline systems
- Pipelines are located near many of us
- Changes in energy material production and use may lead to changes in our pipeline infrastructure



Section 2 Roles of Key Stakeholders

Major Messages

- A wide spectrum of stakeholders have important roles:
 - pipeline operators,
 - regulators,
 - state & local officials,
 - people living and working near pipelines,
 - siting agencies, developers,
 - excavators, 811 and 911 call centers, and
 - the public.



Section 2 Roles of Key Stakeholders

Major Messages

- Improving pipeline safety sometimes requires significant expenditures by pipeline operators.
- In addition to substantial efforts expended in operating and maintaining the pipelines in compliance with the regulations, typical operator efforts involve:
 - risk assessment and management of pipeline assets,
 - replacing and repairing pipelines,
 - applying new technologies to better control operations, and
 - understanding the fitness for service of pipelines.



Section 2 Roles of Key Stakeholders

Major Messages, cont.

- Pipeline operators charge for transportation services via rates that are typically regulated in some way by various government entities.
- Expenditures are often difficult for pipeline operators to recover in a competitive and financially regulated environment.
 - Most costs to improve safety are ultimately passed along to the consumers through rate cases or other special cost transfer mechanisms.



Stakeholders - Who are They?



Pipeline Operators

- Hazardous liquid - cross country
- Gas transmission - cross country
- Gas distribution - local

Safety Regulators

- Office of Pipeline Safety
 - State Pipeline Safety Regulators
- Nat'l Assoc Pipeline Safety Reps
 - US Coast Guard
- Bureau of Ocean Energy Mgmt, Reg. and Enforcement
- Env'l Protection Agency

Trade Associations

- American Gas Association
- Association of Oil Pipelines
 - American Public Gas Association
 - American Petroleum Institute
- Interstate Natural Gas Association of America
 - Nat'l Propane Gas Association

Federal Government Agencies

- Bureau of Land Mgmt
- Fed Energy Regulatory Commission
- Nat'l Transportation Safety Board
- Office of Management & Budget
- Department of Homeland Security
- Department of Energy

Local and State Government

- Local & City (e.g., Zoning Boards, Permitting Agencies)
- State (e.g., Fire Marshal)
 - Fire Department
- Emergency Responders

Rate Regulators

- Federal Energy Regulatory Commission (FERC)
- State Public Utility Commission

Representatives of the Public Interest

- Pipeline Safety Trust
- Common Ground Alliance
- Natural Resources Defense Council (NRDC)
- 811 & 911 Organizations

**Assuring
Pipeline
Safety**

The Public



Stakeholders - What do They Do?



Pipeline Operators

- Safely operating & maintaining
- Expanding system to meet needs
 - Recognizing & managing risks

Federal Government Agencies

- Evaluate incident causes
 - Communicate implications of incidents
- Permit pipelines on federal lands
 - Evaluate security
 - Evaluate proposed regulations

Local and State Government

- Establish land use restrictions
- Promote effective rate regulation
- Provide emergency management services

Safety Regulators

- Establish safety standards
- Inspect & enforce compliance
- Recognize & address risks (communication, change standards, conduct R&D)

Assuring Pipeline Safety

Rate Regulators

- Evaluate rate proposals
- Implement innovative cost recovery processes to address serious risks
 - Balance safety, reliability and cost

Trade Associations

- Recognize safety issues
- Organize members to determine how best to resolve safety issues
- Communicate safety perspective
- Assemble & evaluate safety performance data

The Public

- Call 811 before digging
- Call 911 in case of gas leak or emergency
- Evacuate building if necessary
- Advocate in safety rate cases
- Understand risks

Representatives of the Public Interest

- Provide forum for responsible debate
- Communicate with stakeholders
- Advocate statutory changes
 - Assemble & communicate best practices
- Service the public



Section 3 Safety & Environmental Record

Major Messages - While there is clearly room for continued improvement, pipeline safety has generally been improving over more than the past twenty years; the damaging incidents that continue to occur must be prevented.



Section 3 Major Sub-Sections

- While energy demand and pipeline mileage have increased, pipeline safety has improved
- Safety Performance and Trends
- How do pipeline risks compare with those associated with competing transportation technologies?
- Comparative Environmental Performance



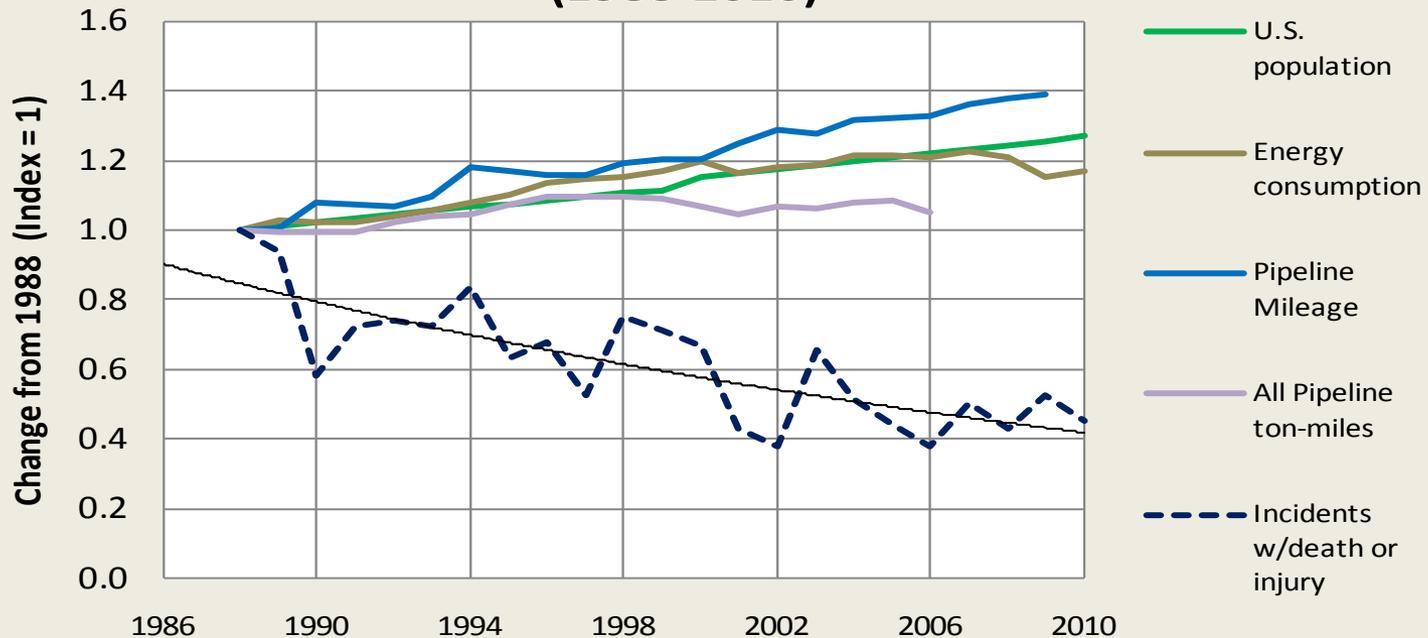
Section 3 Major Sub-Sections

- Factors Affecting Pipeline Safety
- How old is the nation's pipeline infrastructure?
- Is pipeline age a factor in its safety?
- What standards were used for older pipelines?
- How safe are older pipelines?



While Energy Demand has increased; Pipeline Incidents that Harm People have decreased

Pipeline Safety: Context Measures (1988-2010)

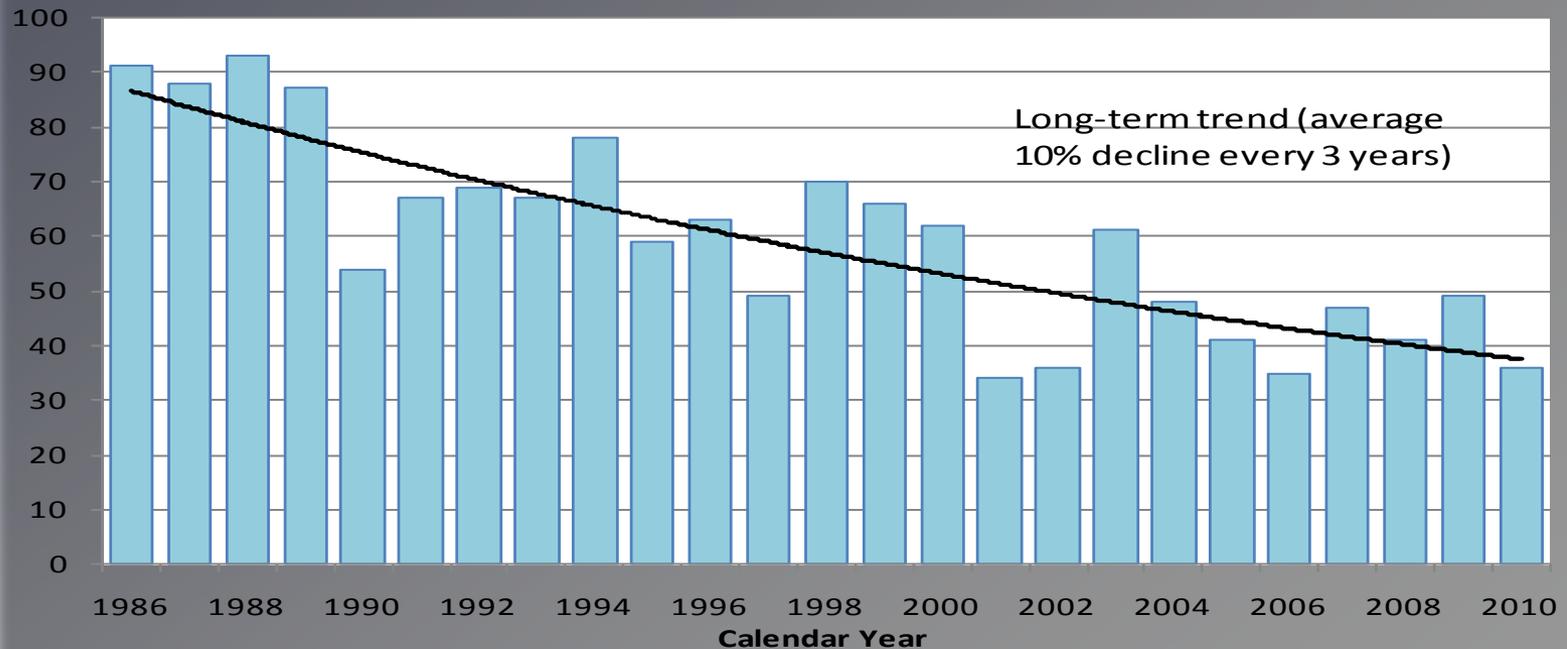


Data Sources: Census Bureau, Energy Information Administration, PHMSA Annual Report Data, BTS ton-mile estimates, PHMSA Incident Data - as of May 2, 2011



Pipeline Incidents Causing Death or Major Injury Have Trended Downward

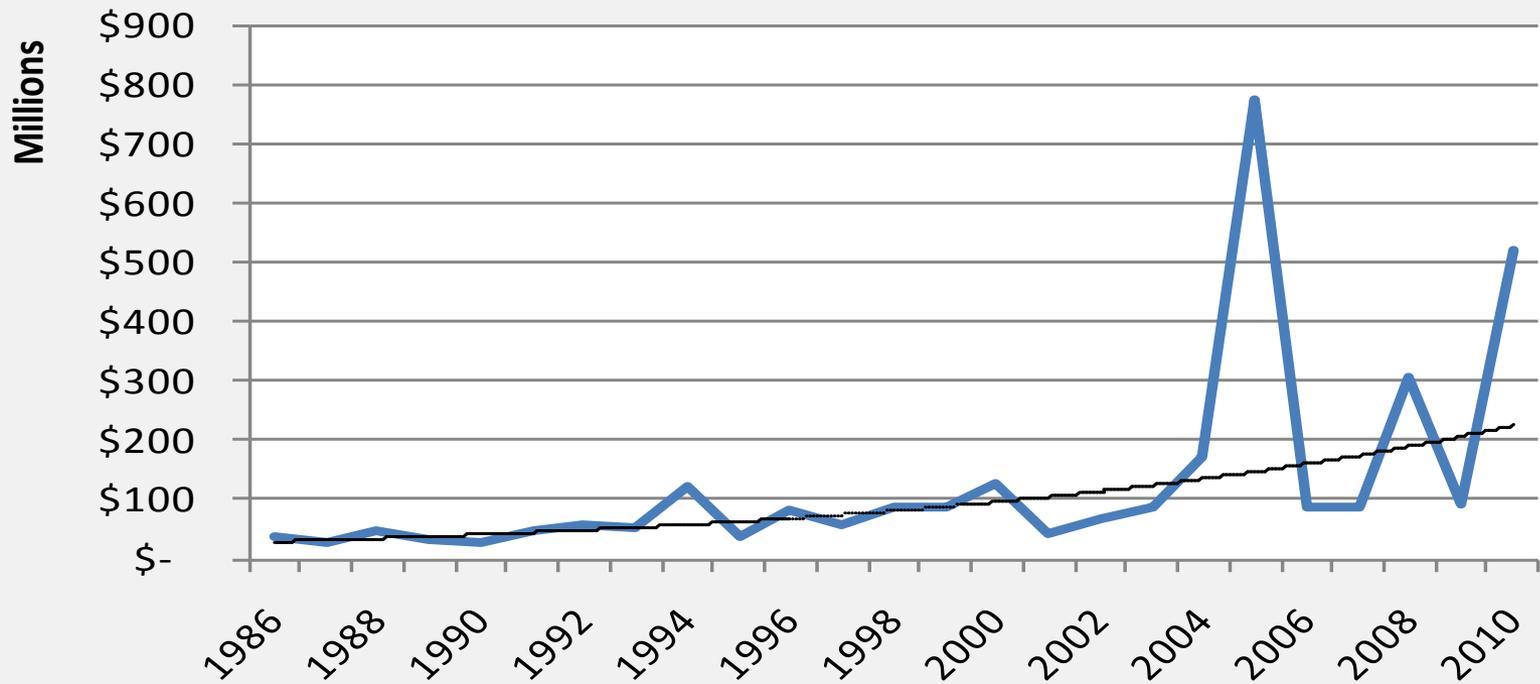
Pipeline Incidents w/Death or Major Injury (1986-2010)



Data: DOT/PHMSA Pipeline Incident Data (as of Jan. 19, 2011)



Property Damage from Pipeline Incidents, 1986-2010 (1985 dollars)



Data: DOT/PHMSA Incident data (May 2, 2011)



Section 4 Challenges & Ongoing Initiatives

Major Messages

- Improving pipeline safety requires that industry and regulators focus their energy and resources on understanding and managing a set of known risks.
- To drive accidents and safety impacts to zero, pipeline operators and regulators must address a broad array of factors that contribute to current incidents.
- Lessons from operating experience across the industry are one of the best sources of information to improve safety performance.



Section 4 Challenges & Ongoing Initiatives

Major Messages

- Many recognized key safety issues are already being addressed through established programs such as integrity management regulations and high-risk pipe replacement programs;
- Programmatic improvements and accelerated pipe replacement actions may be required to meaningfully improve pipeline safety.
- Much is currently being done to improve pipeline safety. Many new programs and requirements are not yet mature, so the benefits have yet to be fully realized.



Section 4

- Section 4 – Major Subsections
 - What is integrity management?
 - Safety is Expected to Improve as Existing Initiatives Mature



Section 4 is complemented by Appendix 10

- Appendix 10
 - Controlling Threats by Managing Pipeline Integrity
 - Managing Safety through Compliance with Regulations
 - Managing Safety beyond Compliance with the Regulations
 - Managing the Business while Ensuring Safety
 - Managing the Regulatory Process



Pipeline Safety Challenges and Ongoing Initiatives

Controlling Threats by Managing Pipeline Integrity

What are the challenges & ongoing initiatives in managing pipeline integrity?

- Understanding an Aging infrastructure
- Managing Pipeline Integrity
- Improving Human Reliability
- Eliminating excavation damage
- Managing Grandfathered Assets

Managing Safety through Compliance with Regulations

- Recognizing and Dealing with Technology Limitations
- Recognizing & managing the challenges of new construction
- Improving Public Awareness
- Minimizing Incident Consequences

Managing Safety beyond Compliance with the Regulation

- Overall Focus on Performance Improvement
- Learning from Experience & Identifying Areas for Improvement
- Developing and Sharing Best Practices
- Improving & Maintaining a Positive Safety Culture

Managing the Business while Ensuring Safety

Adequacy and Focus of Resources

- Effectively applying limited resources
 - Retaining expertise while losing experienced people – aging industry and regulatory workforce
- Pipeline Safety research and development (RD&D)

Managing the Regulatory Process

- Choosing the Best Regulatory Approach and Regulations
- Adequate Number of Qualified Inspectors
- Adequacy of Enforcement



Section 5 Ideas for New Initiatives

Major Messages

- Continued improvement of regulations, oversight, management practices, safety technology and vigilance, both by the operators and by other key stakeholders, will be needed to drive accidents and injuries to zero.
- There are important roles for all key stakeholders in continuing to improve pipeline safety. Private/Public partnerships should play an increasingly important role.



Purpose of Section on “Ideas for New Initiatives”

- To describe potentially promising ideas;
- To identify which stakeholder groups should take the lead in considering their merits and determining how to proceed (see stakeholder matrix – later slide); and
- To ask each stakeholder group to commit to report back on their decisions, plans and actions to address the most promising ideas one year after release of the report.



Candidate New Initiatives

- Overall Safety Improvement Initiatives
 - *Fitness for Service*
 - *Safety Strategic Planning*
 - *Joint Industry-Regulator Data Evaluation*
 - *Broadening the Reach of Operator-Led Safety Initiatives*



Candidate New Initiatives

- Monitor the Effectiveness of and Strengthen Recent Regulatory & Other Initiatives
 - *Evaluate the Effectiveness of Key Regulations*
 - *Strengthen Excavation Damage Prevention Programs*
 - *Act on New Legislative Authority*
 - *Consider the Need for Expanded Regulation*



Candidate New Initiatives

- Increase the Effectiveness of Lessons Learned Processes
 - *Continue and Expand Incident Cause Analysis and Communication of Implications*
 - *Evaluate What More can be done with Information Sharing*
- Strengthen Public Communications
 - *Expand upon Existing Information Sharing Processes*



Candidate New Initiatives

- Continue and Expand Research, Development and Demonstration
 - *Expand Funding and Focus of RD&D Programs*
- Evaluate the Effectiveness of Agency & Inter-Agency Regulatory Oversight
 - *Reevaluate the Effectiveness of Enforcement Practices*
 - *Strengthening the Relationship Among Regulators*



Candidate New Initiatives

- Identify Means to Strengthen People Resources
 - *Ensure Strong Pipeline Staff and Managers*



Example Idea Assignment Matrix



Improvement Idea	OPS	State Safety Regulator (or NAPSR)	State Rate Regulator (or NARUC)	Operators	Technical Advisory Committees (TAC)
Overall Safety Improvement Initiatives	<ul style="list-style-type: none"> ➤ <i>Fitness for Service</i> 			<ul style="list-style-type: none"> ➤ <i>Joint Industry-Regulator Data Evaluation</i> ➤ <i>Broadening the Reach of Trade Association Safety Initiative</i> 	<ul style="list-style-type: none"> ➤ <i>Safety Strategic Planning</i>
Monitor the Effectiveness of and Strengthen Recent Regulatory & Other Initiatives	<ul style="list-style-type: none"> ➤ <i>Evaluate the Effectiveness of Key Regulations</i> ➤ <i>Act on New Legislative Authority</i> ➤ <i>Consider the Need for Expanded Regulation</i> 	<ul style="list-style-type: none"> ➤ <i>Strengthen Excavation Damage Prevention Programs</i> 			



Next Steps

- Committee Comments
- Public Comments
- Any comments from the TAC must be submitted by Aug. 5 to be considered.
- Draft Final Report will enter DOT formal review process on or before August 15.