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Pipeline and Hazardous Materials Safety Administration

Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES) & Rule Update

Kansas Corporation Commission

Pipeline Safety Seminar

October 23-25, 2007

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Pipeline and Hazardous Materials Safety Administration

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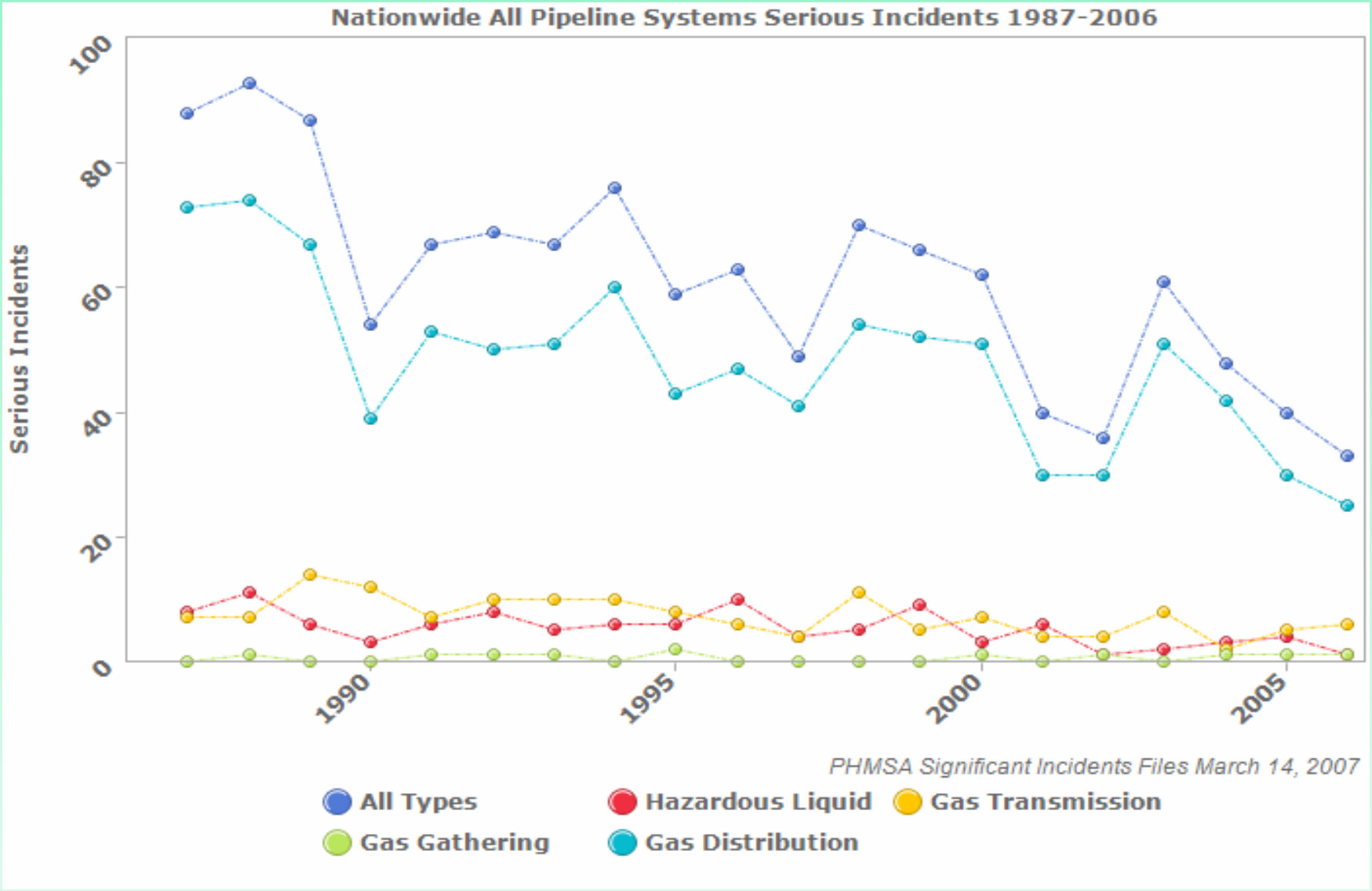
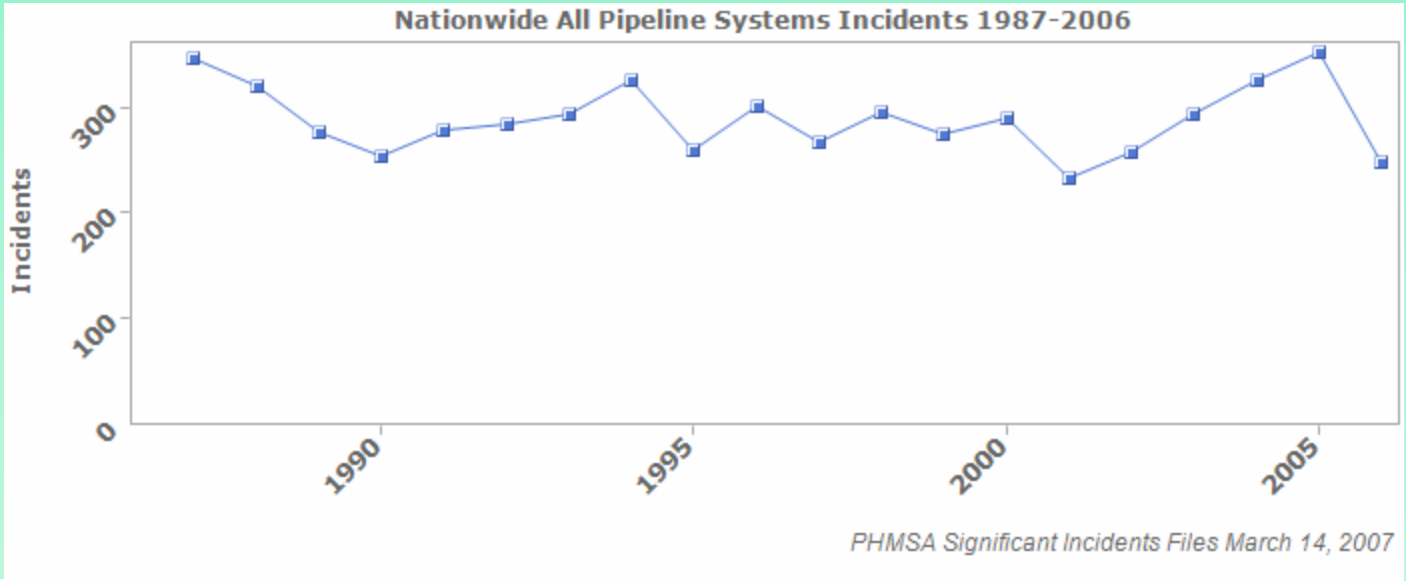
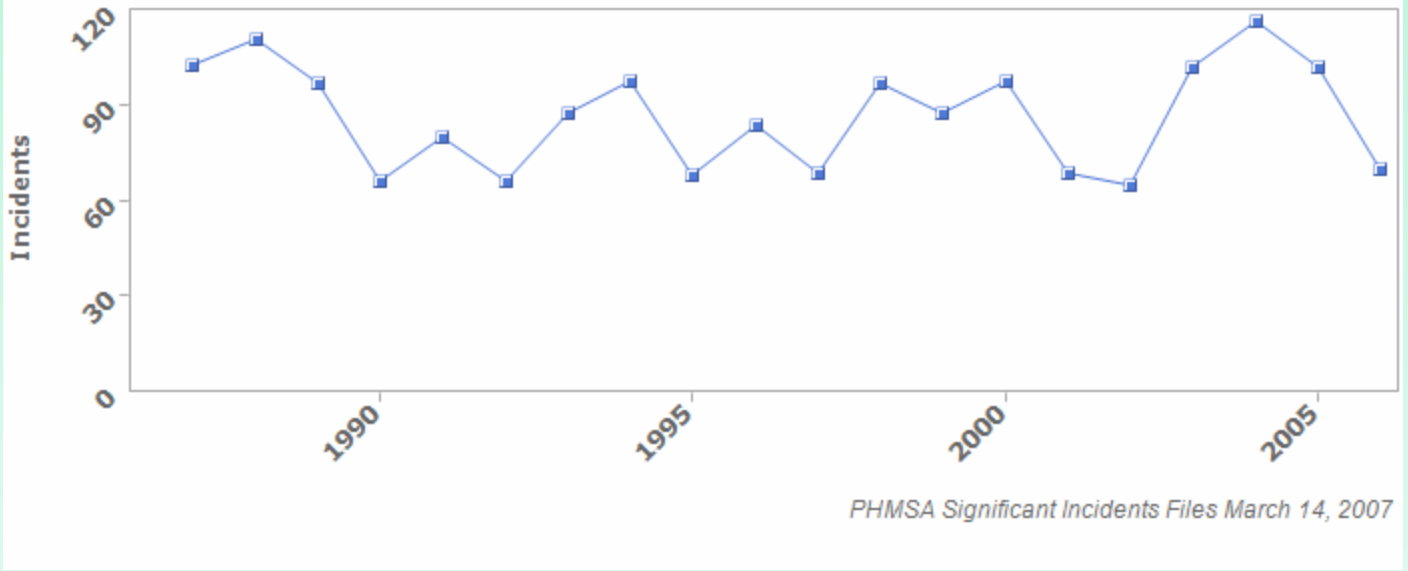
Good News on Serious Incidents

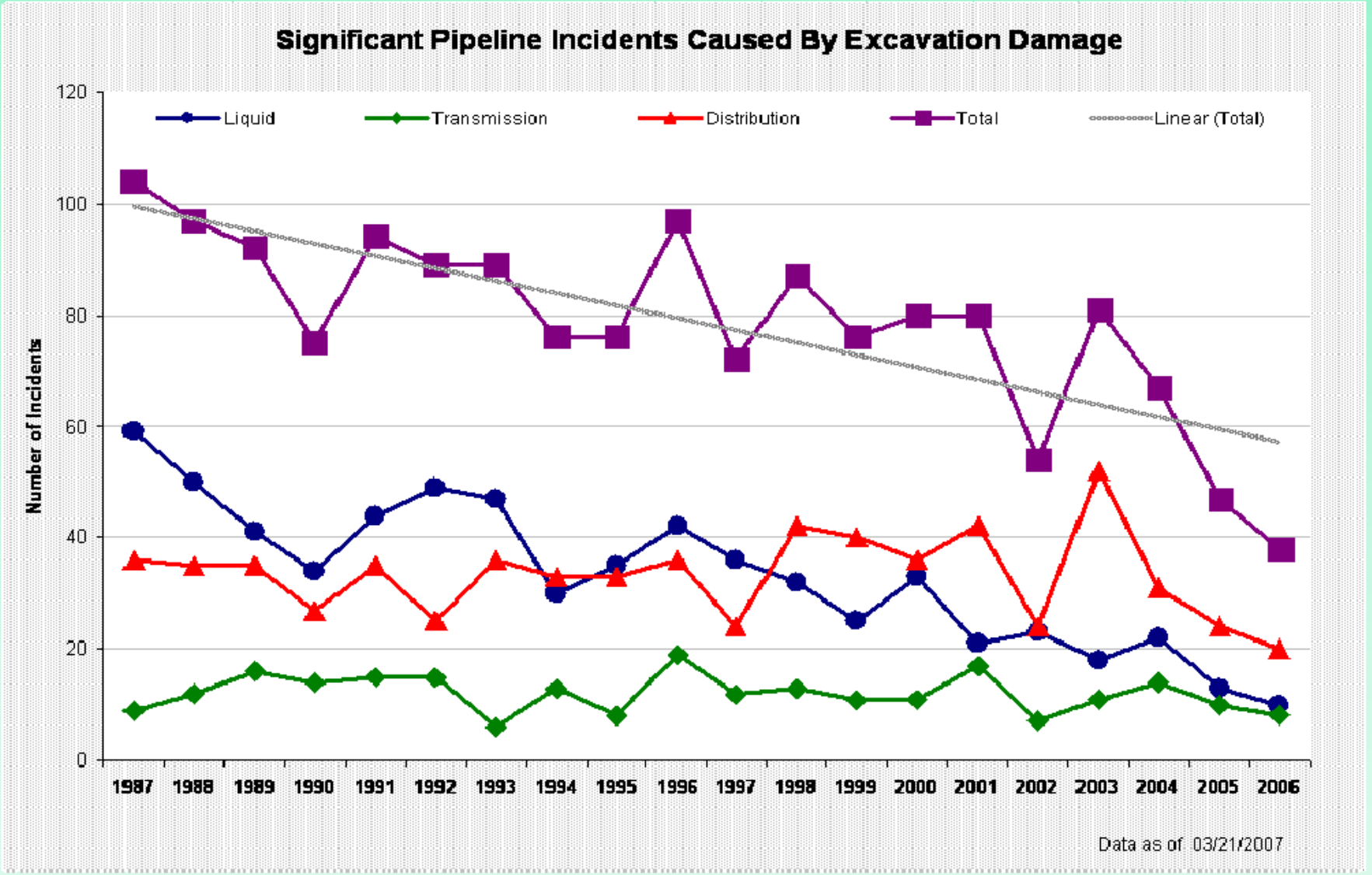


Significant Incidents Rather Flat





Excavation Caused Damages Declining



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Significant Incidents caused by Excavation Damage **2002 thru 2006**

- Liquid Pipelines
  - 14% of Significant Incidents
  - 63% of Fatalities and 16% Injuries
- Gas Transmission Pipelines
  - 13% of Significant Incidents
  - 80% of Fatalities and 23% Injuries
- Gas Distribution Pipelines
  - 37% of Significant Incidents
  - 28% of Fatalities and 32% Injuries

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The PIPES Agenda

- Create a national focus on the importance of Damage Prevention Programs
- “Aspirational Model” of federal one-call enforcement to encourage States to develop adequate enforcement
- Foster damage prevention improvements in States through new grant program & identifying essential elements
- Increased support for our State Partners

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What is an Enterprise Approach?

- CGA is the Model - gather all Stakeholders
- At the conceptual stage all views sought
- Everyone has an Equal Voice
- Solution is Consensus
- We’re not done till all Needs are met
- PHMSA uses Enterprise Approach as Central Value

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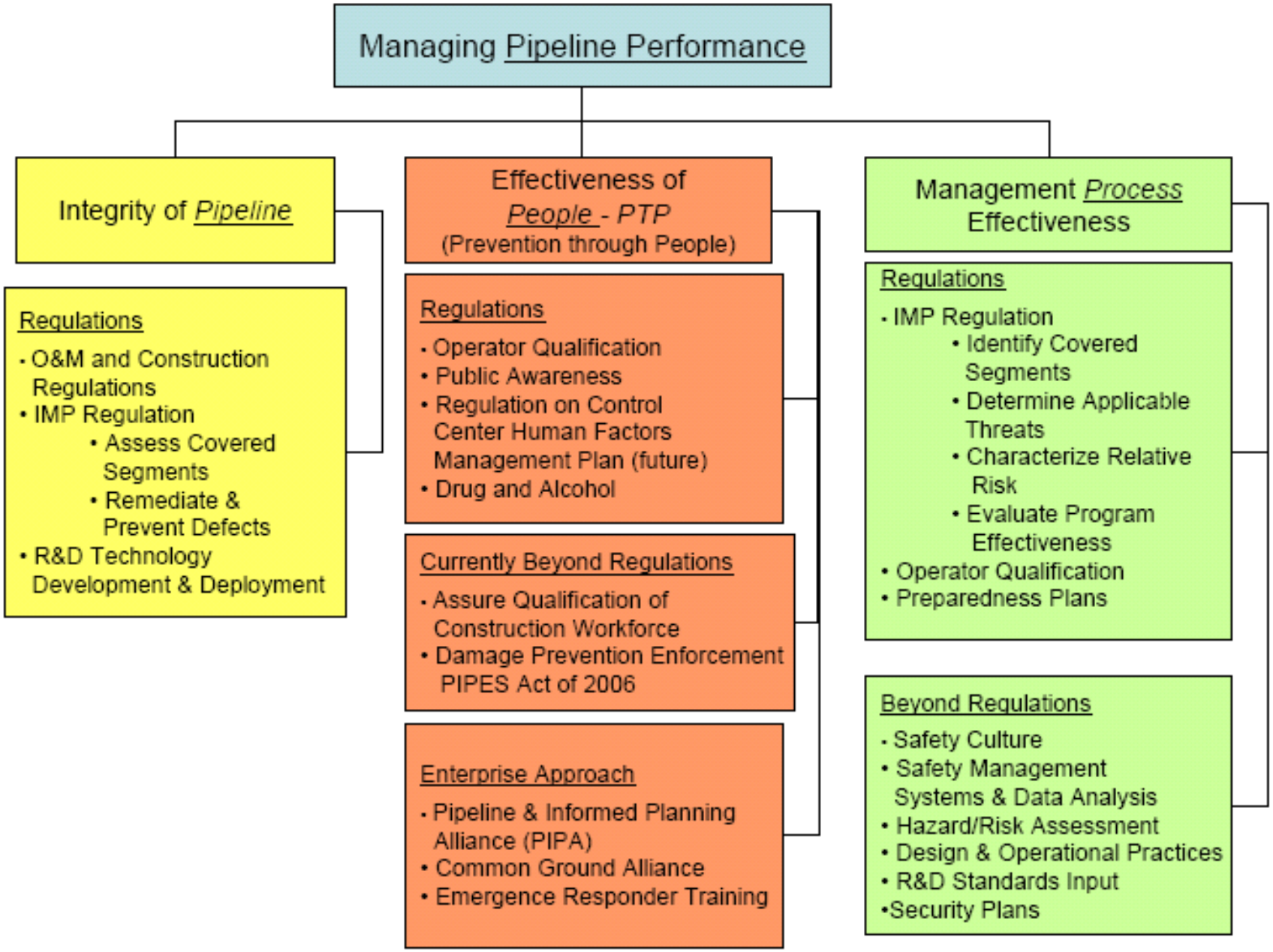
PIPES Themes

- Damage Prevention
- Managing System Risk – Integrity Management
- Infrastructure, People, and Procedures integrated to attain performance
- “Prevention through People” Control Room Management / Fatigue, Operator Qualification for damage prevention tasks

Elements Supporting Management of Pipeline Performance



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Civil One-Call Enforcement Authority

- PHMSA can only exercise enforcement authority if the State's enforcement program is "inadequate to protect safety"
- Criteria to determine that a State's enforcement is "inadequate" must be established by Rulemaking
- OPS will start with ANPRM that asks questions to solicit input from the Enterprise
- Criteria will show States what to aspire to – PHMSA does not want to wade into States with a "big stick"

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Possible Criteria for One-Call Enforcement Adequacy

- Process for receiving reports of potential violations from all stakeholders
- Jurisdiction over all damage prevention stakeholders
- Personnel resources for investigating reports
- Tiered financial penalty structure with enhanced education alternatives
- Metrics and Transparency

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Damage Prevention Grants

- To the agency designated by State Governor
- Must have an effective damage prevention program **OR** be making substantial progress toward an effective program
- Criteria are the 9 Essential Elements of an effective damage prevention program from DIMP Phase 1 report
- Enforcement effect on damages per thousand tickets clearly demonstrated in DIMP report

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Key Words in 9 Essential Elements

- Communication
- Partnership
- Training
- Education
- Performance Measures
- Fair and Consistent Enforcement
- Technology
- Data Analysis

CGA
Common Ground Alliance

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Damage Prevention Technology Grants

- Solicit creative ideas from universities
- Develop new technologies for preventing pipeline damage
- Focus on notification systems and underground facility locating and marking
- “Job Site of the Future” – enhance image of contractor career in universities
- Working with National Utility Contractor Association on criteria for awards

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Increased State Grant Funding

- Authorized funding from 50% up to 80%
- Continuing Resolution limits funding for FY 2007
- Plan for 5% Incremental Increase Per year
- Working with NAPSR on Criteria for Eligibility
- Focus on Meeting Statutory Mandates & Harmonizing Risk Based Approach with State Partners

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Gas IM Reassessment Interval

- PHMSA will urge Congress to allow risk-based reassessment interval, rather than 7-year interval in statute
- AGA, INGAA, and GAO Report all support risk-based interval
- Until statute is changed, PHMSA has authority to issue Special Permits (Waivers)
- Prepared to streamline process by bundling Special Permits by topic
- PHMSA planning public workshop to gather input from the Enterprise

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Enforcement Transparency

- New Website will display Enforcement data
- Statistical summaries starting in 2002
- Enforcement documents from 2007 onward
  - Initial OPS Letter
  - Operator Response (optional)
  - Final OPS Letter
- Meeting with Stakeholders to review and make adjustments before launching Website

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Technical Assistance Grants to Communities

- Readying criteria for three $25K demonstration grants
- Discussing pilots with AGA & AOPL
- 1 Project in Alaska
- Promote partnerships between operators and communities to improve understanding of operator performance
- Focus on broad-based metrics using data that is close to real-time

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Low Stress Liquid Regulation

- Phase I for 8-inch diameter & higher
  - PHMSA issued NPRM in September 2006 focused on unusually sensitive areas
  - SNPRM will extend applicability of regulations regardless of environment
- Phase II for less than 8-inch diameter
  - Requires significant data gathering
  - Assessment of corrosion control regulations

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Liquid Internal Corrosion Regulations

- Report to Congress on adequacy of Liquid Internal Corrosion Regulations
- Aspects to be considered include
  - Periodic Cleaning
  - Continuous Monitoring
- Precursor to Phase II Low Stress Liquid Regulations

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DIMP Final Rule

- Distribution Integrity Management Program (DIMP) rulemaking largely based on DIMP Phase 1 Report
- Risk Mitigation & Performance Measurement
  - Damages per Thousand Tickets
  - Hazardous Leaks by Cause
- EFV installation mandatory on 10 psig and over service lines with good gas quality to single family residences
- Expect NPRM to be published Summer 2007

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Control Room Management

- Operator develops human factors management plan, including maximum hours of service limits for controllers
- Workshop held in 2006. OPS planning another on May 23, 2007.
- Considering appending this newly required plan to the IMP plan
- Prevention Through People

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SCADA Standards

- Operator implementation of NTSB Recommendations related to Supervisory Controls and Data Acquisition (SCADA) systems
  - Use of Graphics
  - Review and audit of alarms on monitoring equipment
  - Pipeline controller training

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Executive Signature on Gas IM Performance Reports

- Ensure Senior Management in touch with results of IMP
- Rulemaking is not required
- PHMSA proceeding with Advisory Bulletin

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Liquid Leak Detection Technology

- Report to Congress on effectiveness of liquid leak detection systems currently in use
- Report will be fed by results of:
  - IMP inspections
  - Research & Development projects

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Hits and 911

- If excavator damages pipeline and product released, the excavator must call 911
- CGA BP 5-25 – call 911 and pipeline operator
- Operators who hit their own pipeline and cause a leak are required to call 911
- Driven by need for improved incident perimeter control for public safety

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811 Campaign Funding

- Recognition of the 811 campaign in federal law
- Single donation directly to the Common Ground Alliance
- Not multiple grants to State or Regional groups
- National campaign kick-off May 1, 2007 in Washington DC includes DOT Secretary Peters

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Liquid Pipeline Market Study

- Joint PHMSA & DOE analysis
- Budget constraints limit PHMSA's ability to participate
- Limited to low level planning and discussions with DOE

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Transmission Pipeline and Land Use Planning

- Assembling Enterprise of Stakeholders representing:
  - Property Developers
  - Local Governments
  - Pipeline Industry
- Identify Best Practices for property development adjacent to Gas Transmission and Liquid pipelines
- Make these practices available to local government planners to guide property development

Final Rule issued April 23, 2007
Amendment 192-103

Design and Construction Standards To Reduce Internal Corrosion in Gas Transmission Pipelines

- § 192.143 General requirements.
- * * * * *
- (b) The design and installation of pipeline components and facilities must meet applicable requirements for corrosion control found in subpart I of this part.

Final Rule issued April 23, 2007
Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (a) Design and construction. Except as provided in paragraph (b) of this section, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must have features incorporated into its design and construction to reduce the risk of internal corrosion.

Final Rule issued April 23, 2007
Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (a) (continued)
- At a minimum, unless it is impracticable or unnecessary to do so, each new transmission line or replacement of line pipe, valve, fitting, or other line component in a transmission line must:

Final Rule issued April 23, 2007 Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (a) (continued)
- (1) Be configured to reduce the risk that liquids will collect in the line;
- (2) Have effective liquid removal features whenever the configuration would allow liquids to collect; and

Final Rule issued April 23, 2007
Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (a) (continued)
- (3) Allow use of devices for monitoring internal corrosion at locations with significant potential for internal corrosion.

Final Rule issued April 23, 2007
Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (b) Exceptions to applicability. The design and construction requirements of paragraph (a) of this section do not apply to the following:

Final Rule issued April 23, 2007 Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (b) Exceptions to applicability (continued)
- (1) Offshore pipeline; and
- (2) Pipeline installed or line pipe, valve, fitting or other line component replaced before May 23, 2007.

Final Rule issued April 23, 2007 Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (c) Change to existing transmission line. When an operator changes the configuration of a transmission line, the operator must evaluate the impact of the change on internal corrosion risk to the downstream portion of an existing onshore transmission line and provide for removal of liquids and monitoring of internal corrosion as appropriate.

Final Rule issued April 23, 2007
Continued -

- § 192.476 Internal corrosion control: Design and construction of transmission line.
- (d) Records. An operator must maintain records demonstrating compliance with this section. Provided the records show why incorporating design features addressing paragraph (a)(1), (a)(2), or (a)(3) of this section is impracticable or unnecessary, an operator may fulfill this requirement through written procedures supported by as-built drawings or other construction records.

Final Rule issued June 9, 2006 & February 2, 2007 (corrections) Amendment 192-103

Update of Regulatory References to Technical Standards

- Revised §192.7 to update to latest editions on many industry and association technical standards

- Mainly PRCI, ASTM, ASME, MSS, NFPA, PPI, NACE, GTI

Docket No. PHMSA-05-21253

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Docket No. PHMSA-05-21253

PHMSA Accomplishments in Pipeline Safety

- Improved Public Confidence
- Positive reviews from Congress, NTSB, GAO, & Inspector General during recent Congressional Hearings
- Better informed public and stakeholder community

Challenges for PHMSA in Pipeline Safety

- Rebuilding Public Confidence after Bellingham and Carlsbad Accidents
- Public Perception of Unresponsiveness
- Pressures to Perform (Congress, NTSB, IG)
- Perception of Being “Too Close” to Industry
- Growing Economy – Strain to Meet Energy Demand/Pipeline Capacity
- “Zero-Risk Society”
- Growing Stakeholder Community (Agencies, Advocates, Local Communities, Citizen Groups)

Pipeline Safety Websites

ops.dot.gov

primis.phmsa.dot.gov