

Arizona Corporation Commission Winter Preparedness Workshop: Pipeline Safety

November 1, 2011
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Our Purpose



Provide natural gas and related energy products in a safe, efficient, and dependable manner



➤ Vision & Values

the **place** to work

Employees
Safety

the **neighbor** to have

Compliance
Facility integrity

the **company** to own

Reliability
Profitability
Customer Service

OPERATIONAL EXCELLENCE



Safety is a Core Value



➤ Safety is a Core Value

- Organized with pipeline safety in mind
 - Standing Board Level Health, Safety and Environmental (“HSE”) Committee
 - Today, only 4 of 19 corporate peer companies have similar committees
 - Senior Vice President solely focused on Pipeline Safety
 - Subject Matter Experts support operations
- Actively involved in Industry organizations
 - Founding member of Common Ground Alliance
 - Research Organizations (Northeast Gas Association, PRCI)
 - INGAA, SGA, WEI
 - Board member on state “Call Before You Dig” programs
- Actively involved in and contribute annually to industry research & development
- Culture of Continuous Improvement

Pipeline Safety Today in Arizona



EPNG in Arizona

- Pipeline Infrastructure

- 4,887 miles

- 4,155 miles capable of being inspected by ILI

- 190 mi < 6"

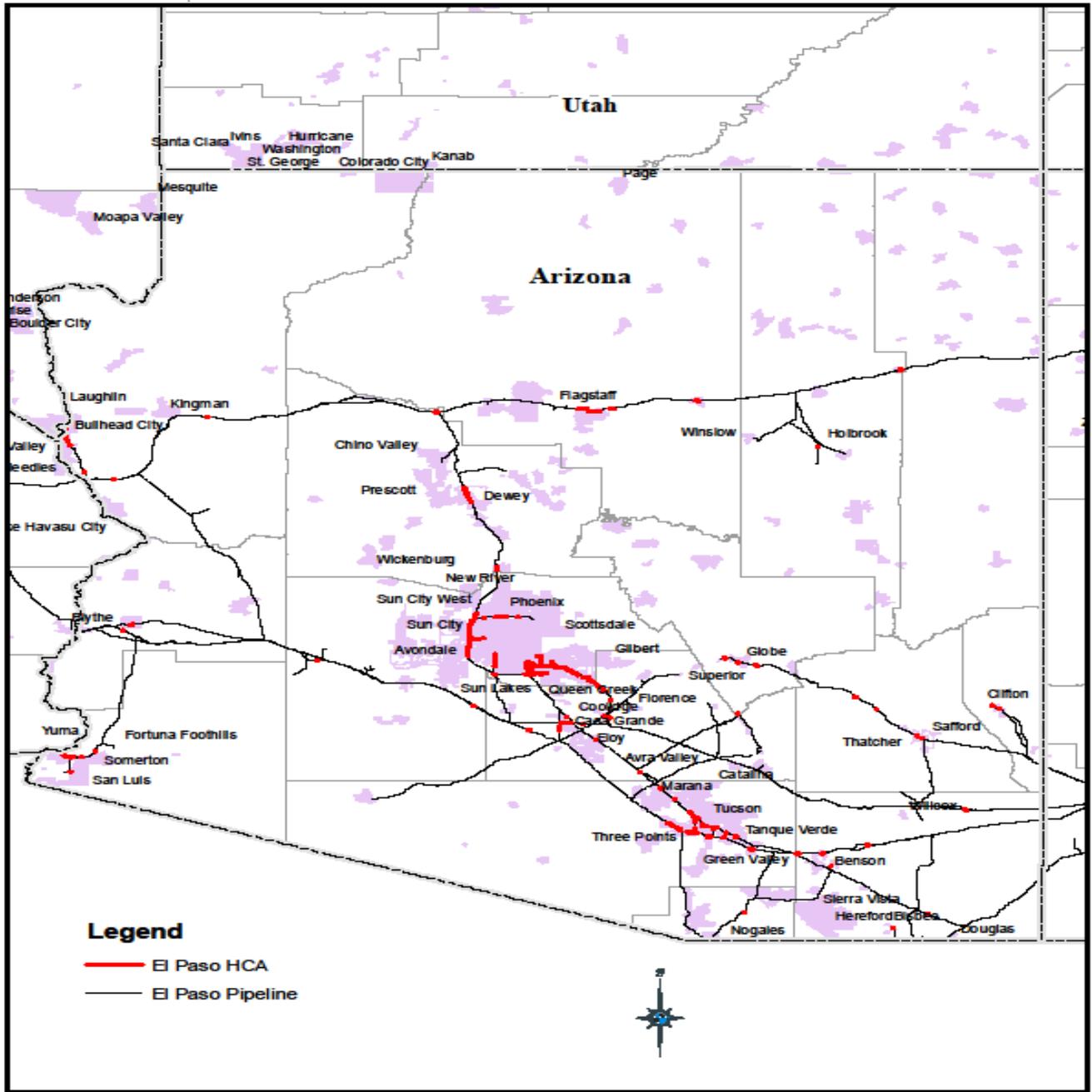
- 542 mi impractical to inspect using traditional In line Inspection (ILI) tools

- Protected by other assessment methods to manage integrity

- Working on technologies to inspect

- 181 miles of HCAs

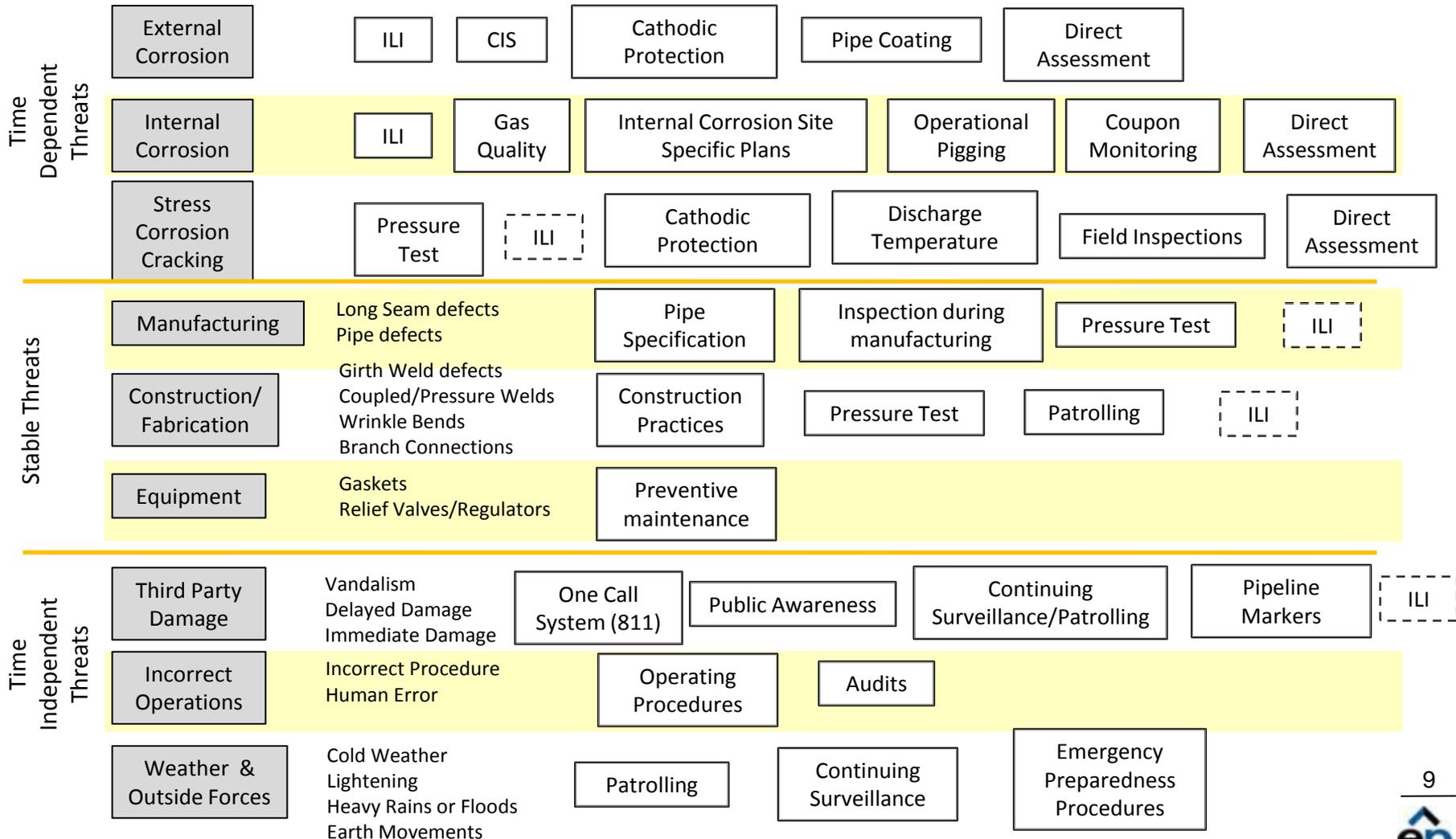
- Most around Phoenix (46%), Tucson (14%), and Flagstaff (8%)



EPNG has 181.1 miles within HCAs

Managing Pipeline Safety Risks

Primary Causes of Failures and Mitigation Measures



Pipeline Safety Program

AZ ILI Program

● EPNG System

- EPNG completed its Make Piggable Work in June 2010 to be able to perform In-Line Inspections
 - Ten Year Program
 - Cost approximately \$422 million
- As of today, 96% of piggable miles across the EPNG system have been inspected

● In Arizona

- 4,155 miles of lines made piggable
 - Exceeds DOT requirements
 - 738 miles not piggable
 - Protected by other assessment methods to manage integrity
- As of today, 100% of AZ piggable miles have been inspected
- And, 23% of AZ piggable miles have had a second inspection

El Paso's Commitment to Pipeline Safety

Additional Incident Prevention and Mitigation Measures

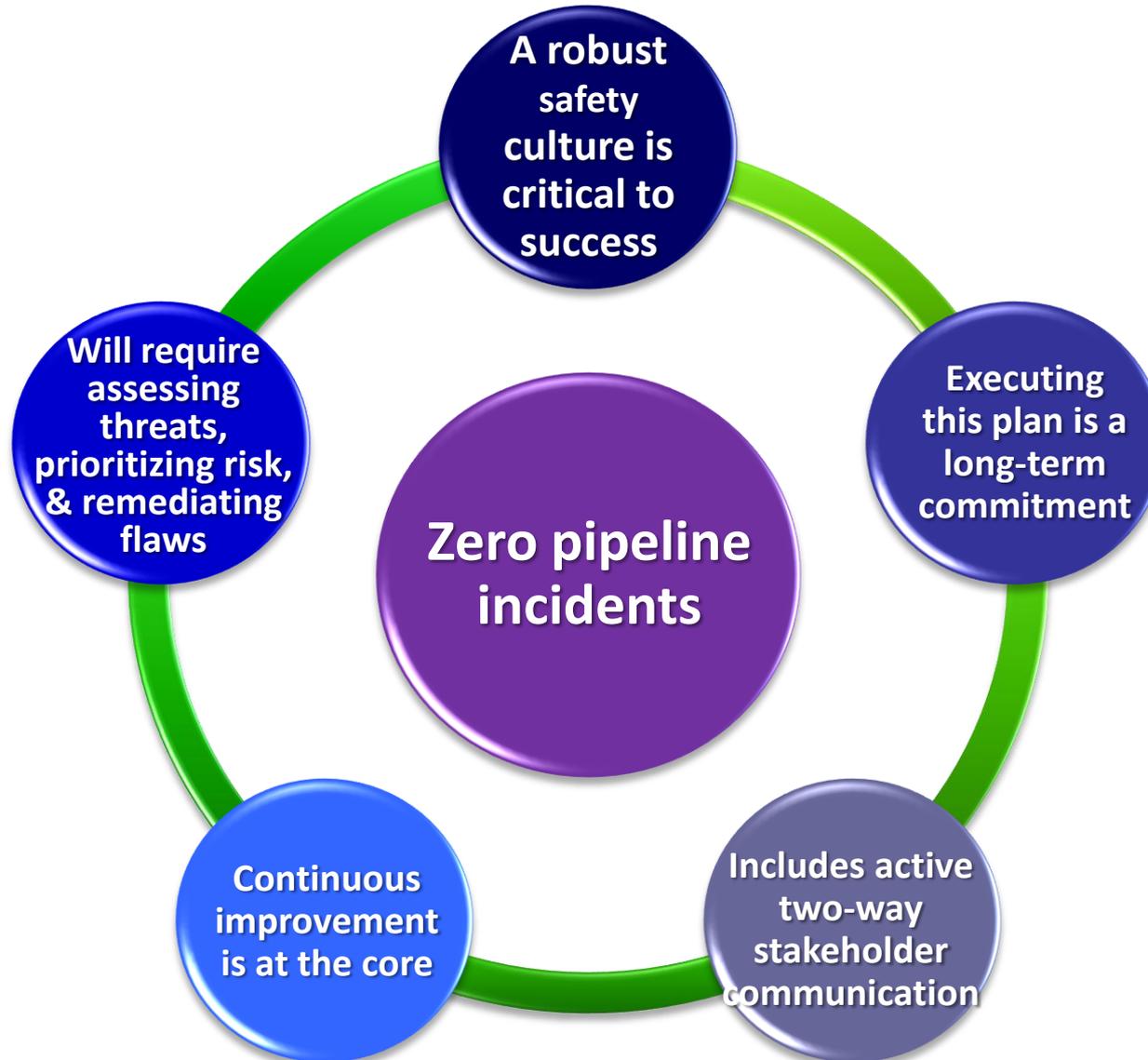
- Aerial patrols and leak surveys
 - Own and operate fixed wing aircraft
 - Patrol every (5) weeks;
 - Phoenix (20X) per year
 - Encroachments, unexpected construction activity & condition of terrain
- Manage gas quality
- Electronic monitoring of system by Gas Control Center (24/7; 365)



Continuous Improvements in Pipeline Safety at El Paso

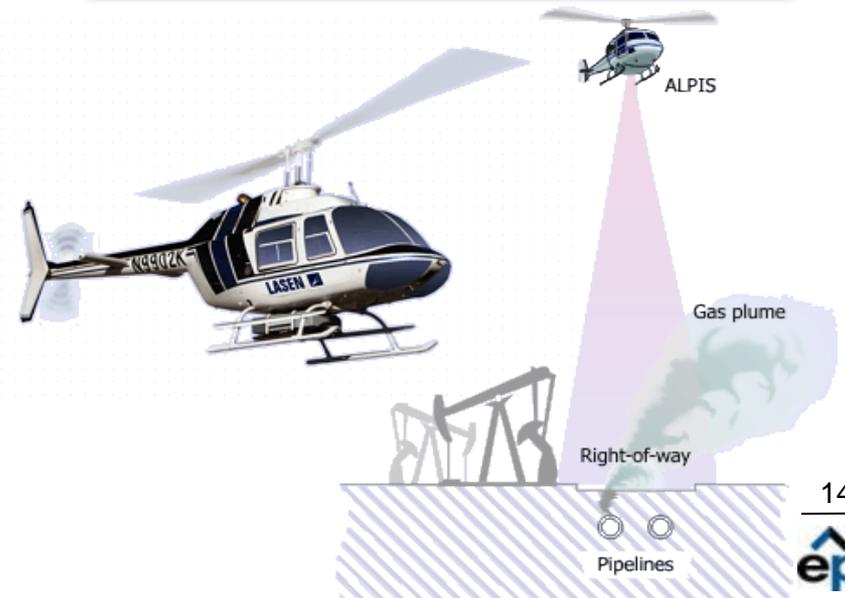


El Paso Pipeline Safety Continuous Improvement Goal



El Paso Pipeline Safety Continuous Improvements

- R&D: Advance In Line Inspection (ILI) Tools
 - Developing new technology
 - Working to detect various manufacturing & Construction defects as well as stress Corrosion Cracking
- Expanded anomaly repair program
- Enhancing Damage Prevention and Emergency Response Programs
- Increased use of Aerial Leak Detection
- Program to Install more flow isolation (valve automation)
- Improved Data Management & Integration



Regulatory Changes Ahead for Pipeline Safety



Industry Activities Related to Pipeline Integrity – Regulatory Activity

- San Bruno NTSB Findings published
- Secretary of Transportation LaHood's Call to Action:
 - Engaging state partners, technical experts, and pipeline operators in identifying pipeline risks and repairing, rehabilitating, and replacing the highest risk infrastructure.
 - Meetings with Executives
 - PHMSA Pipeline Safety Forum
 - Report Distribution by Year-End
- Pipeline and Hazardous Materials Safety Administration (PHMSA)
 - Advance Notice of Proposed Rulemaking (ANPRM) – 8/25/2011

Industry Activities Related to Pipeline Integrity – Regulatory Activity

- Advanced Notice of Proposed Rulemaking 8/25/2011
 - Should Integrity Management (IM) requirements be revised to bring more pipeline miles under the rules and should the existing rules be modified?
 - HCA definition
 - Repair Criteria
 - Requirements for data collections, validation, and integration
 - Selection and use of assessment methods
 - Should non-IM requirements be strengthened or expanded related to pipeline integrity?
 - Valve spacing and automated valves
 - Pipeline long seam integrity
 - Corrosion control
 - Review Exemptions
- PHMSA is in process of soliciting comments

➤ In Summary

- Industry leader in pipeline safety
 - Staying well ahead of pipeline safety legislation and new regulations
- Inspection, monitoring and data programs that exceed regulatory requirements
- Qualified and experienced personnel

Discussion

- Questions?