

# Liquids Pipeline Operators Perspective on Key R&D Challenges Facing Government & Industry

**Trevor Grams**

**Director of Research, Development & Innovation – Enbridge**

**Government / Industry Pipeline R&D Forum**

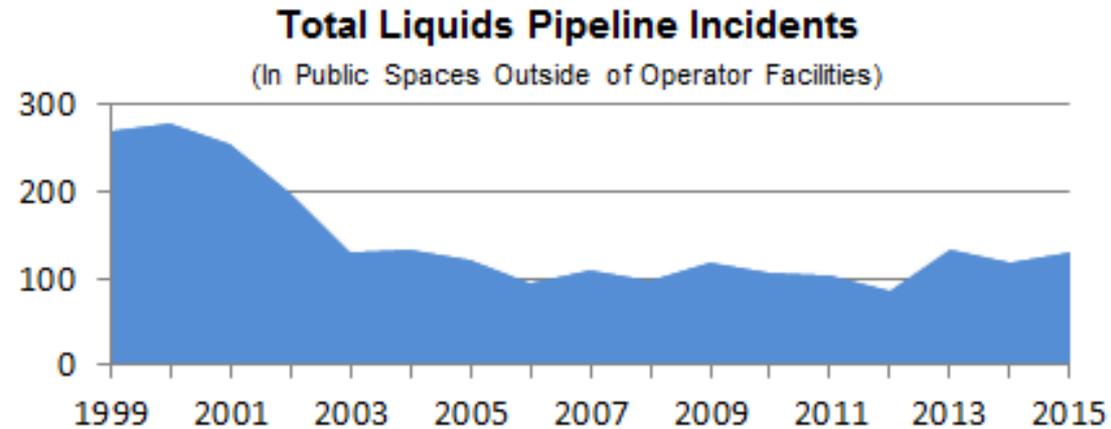
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# Outline

- Goal of Zero & The Pipeline Safety Excellence Initiative
  - Industry-Wide Safety Efforts
  - Strategic Priorities
- Current Focus of Research & Development
  - Gaps and Challenges
- Call to Action

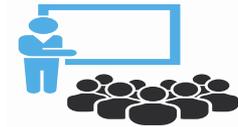
# Goal of Zero Pipeline Incidents Drive our Priorities

- Launched the Pipeline Safety Excellence Initiative in 2014
  - Reflects the shared values and commitment of operators
  - Promotes continuous improvement
  - Promotes excellence in safety performance
  - 8 foundational shared pipeline safety principles



# Industry-Wide Safety Efforts

- Driven by:
  - Safety Improvement Teams
  - Safety Information Sharing
  - Standards, Recommended Practices and Technical Reports
  - **Research and Development**



# API-AOPL Strategic Priorities

- Annually set to guide industry wide efforts.
- 2016 set four goals:
  1. Improve Inspection Technology Capabilities
  2. Enhance Threat Identification and Response
  3. Expand Safety Culture & Management Practices
  4. Boost Response Capabilities



# Current Focus of Liquids Pipeline R&D



1. Advancing ILI Technologies
2. Improving Threat Assessment & Identification
3. Leak Detection Technology Advancement
4. Hydrostatic Pressure Testing

# Improvements to Liquids Pipeline Industry R&D

- Governance 'Upgrades' at PRCI
- \$17 million of in-flight research, with \$11.7 million in 2016 contributions
- Increased Focus and Investment by Individual Companies
- R&D and Innovation is a Strategic Opportunity



# Key Industry & Government Challenges

- ILI Detection Capabilities
- Anomaly Detection/Characterization
- Interacting Threats
- Small Leak Detection
- Damage Prevention



# Call to Action

- Remove Barriers
- Be Open About Our Challenges
- Don't Be Satisfied With The Status Quo
- Develop Culture Of Innovation – Make It The Norm!

## GOAL OF ZERO