



# PHMSA Damage Prevention Update



**U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration**



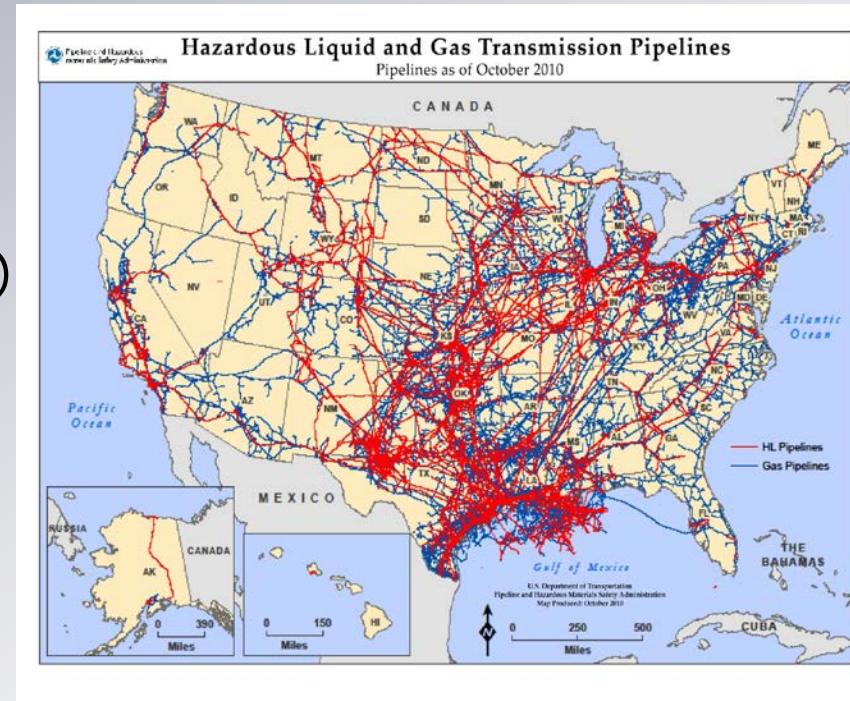
# For Discussion Today

- Brief who we are
- Brief what we do
- What we're doing to improve damage prevention
  - 811
  - Enforcement
  - Elimination of exemptions
  - Data collection and analysis
- Related programs



# Overview - PHMSA

- Oversight role includes...
  - Inspection and Enforcement
  - Federal/State Partnership
  - Incident investigation
    - (with NTSB, state/local officials)
  - Data Analysis
  - Outreach/Education
  - Grant Programs
  - Research and Development
- Program Reauthorized at four-year intervals
  - New regulations, new initiatives





# What We Regulate

Pipeline Miles by System Types – as-of 3/7/2014			
System Type	Miles	%Total	# Operators
Hazardous Liquid	185,629	7%	410
Gas Transmission	303,308	11%	953
Gas Gathering	16,728	1%	342
Gas Distribution (Mains & Services )	2,138,676	81%	1,356
Total	2,644,341		Some Operators have multiple System Types
Liquefied Natural Gas	130 Plants	203 Tanks	82





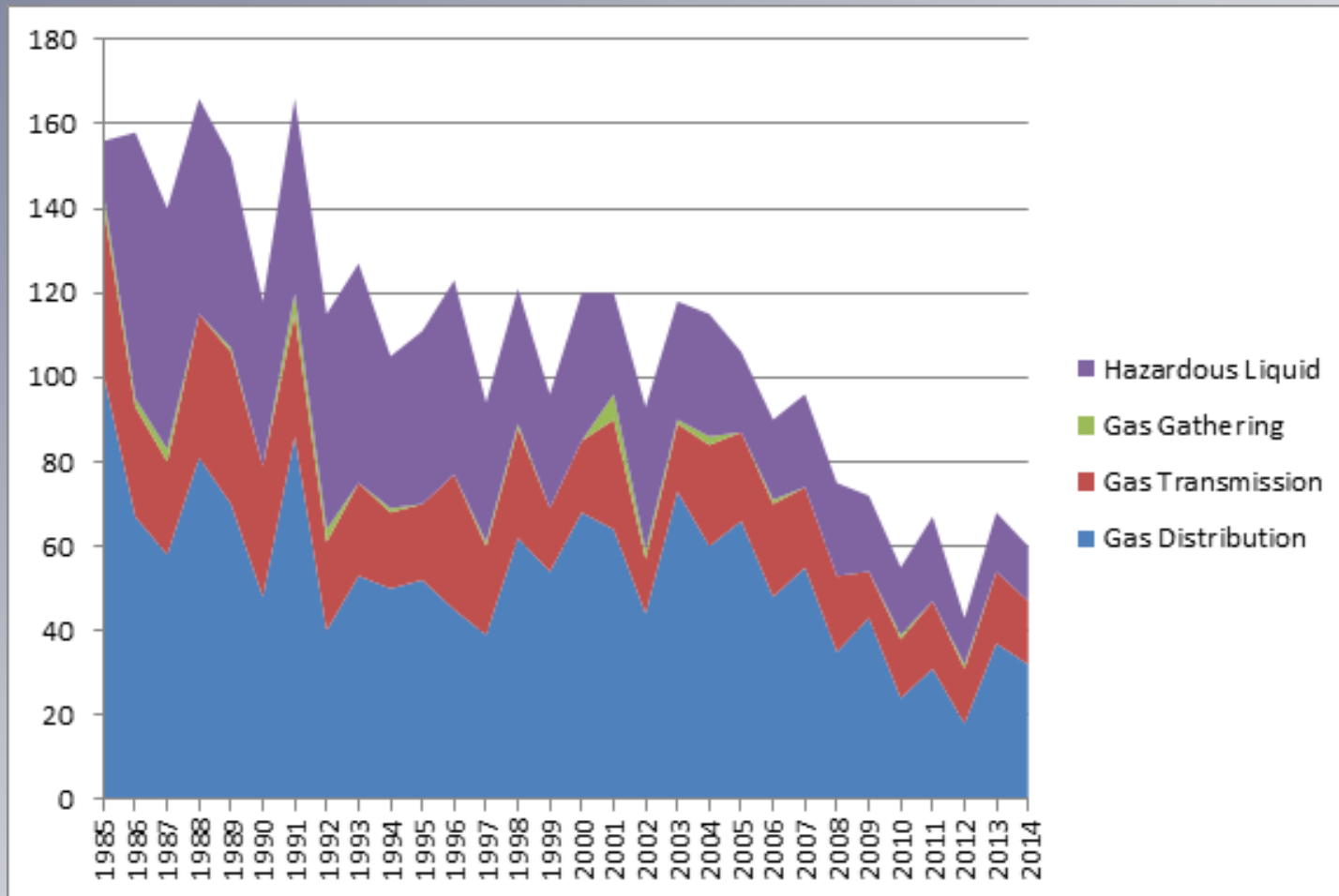
# Some Drivers for PHMSA DP Activity

- Safety – Priority #1
- Perceived gaps in DP – based on data
- Congressional mandates, Administration priorities
- Significant pipeline events, NTSB recommendations
- Support of Common Ground Alliance and State/Regional efforts





# All Reported Pipeline Incidents Caused by Excavation Damage 1985-2014





# Serious Incidents, 2010 - 2014

- Serious = fatality, injury with hospitalization, high release/property damage amounts
- Gas Transmission: 23% caused by excavation damage (#2)
- Hazardous Liquids: 10% caused by excavation damage (#4)
- Gas Distribution: 24% caused by excavation damage (#2)
- More work to do.....





# PHMSA DP Efforts


## Understanding and publicizing state DP laws

Select a Category:

☐ Excavator

☐ Operator

☐ Other

Mouseover  for additional information

☒ Excavator Notice to One Call Required

☒ White-Line Required

☒ Hand Dig / Vacuum Excavate within Tolerance Zone

☒ Preserve / Maintain Marks Required

☒ Call Again if no Response from Operator or Signs of Unmarked Facilities

☒ Re-Notification Required

☒ Special Language Re Trenchless Technology

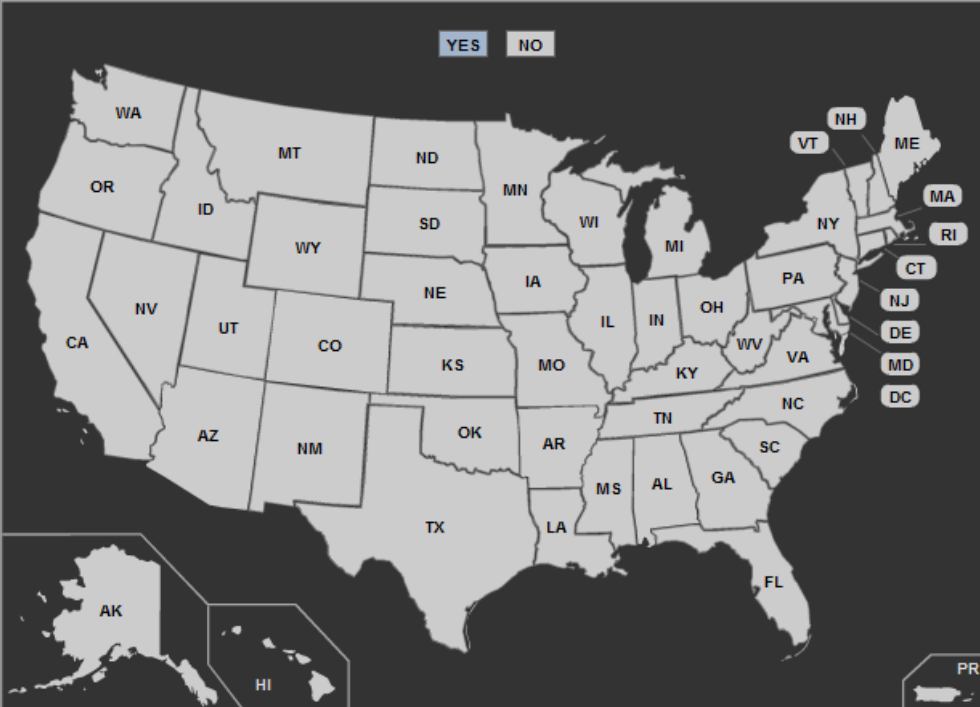
☒ Non-Delegable Duty

☒ Notify Operator of Damage Required

--- Select a State ---

YES

NO



Alabama

[Link to State Law](#)

Excavator Notice to One Call Required

No

Excavator Notice

"[E]ach person responsible for such excavation or demolition shall give written, telephonic, or electronic notice of such intent to excavate or demolish to the underground facility operator or a 'One-Call Notification System' acting on behalf of the operator at least two but not more than ten working days prior to the start of the proposed excavation . . ."

Ticket Life(# of days)

14

White-Line Required

No

Tolerance Zone

18"

Special Digging Requirements within Tolerance Zone

"Employ detection equipment or non-invasive methods to determine the precise location of an operator's underground facilities when excavation





# Alignment with Nine Elements

1. Effective communication throughout excavation process
2. Partnership of all stakeholders
3. Performance measures for locators
4. Partnership in employee training
5. Partnership in public education
6. A dispute resolution process that defines the enforcement agency as a partner and facilitator
7. Fair and consistent enforcement of the law
8. Use of technology
9. Data analysis and continual improvement

Nine Elements cited by Congress in 2006 PIPES Act

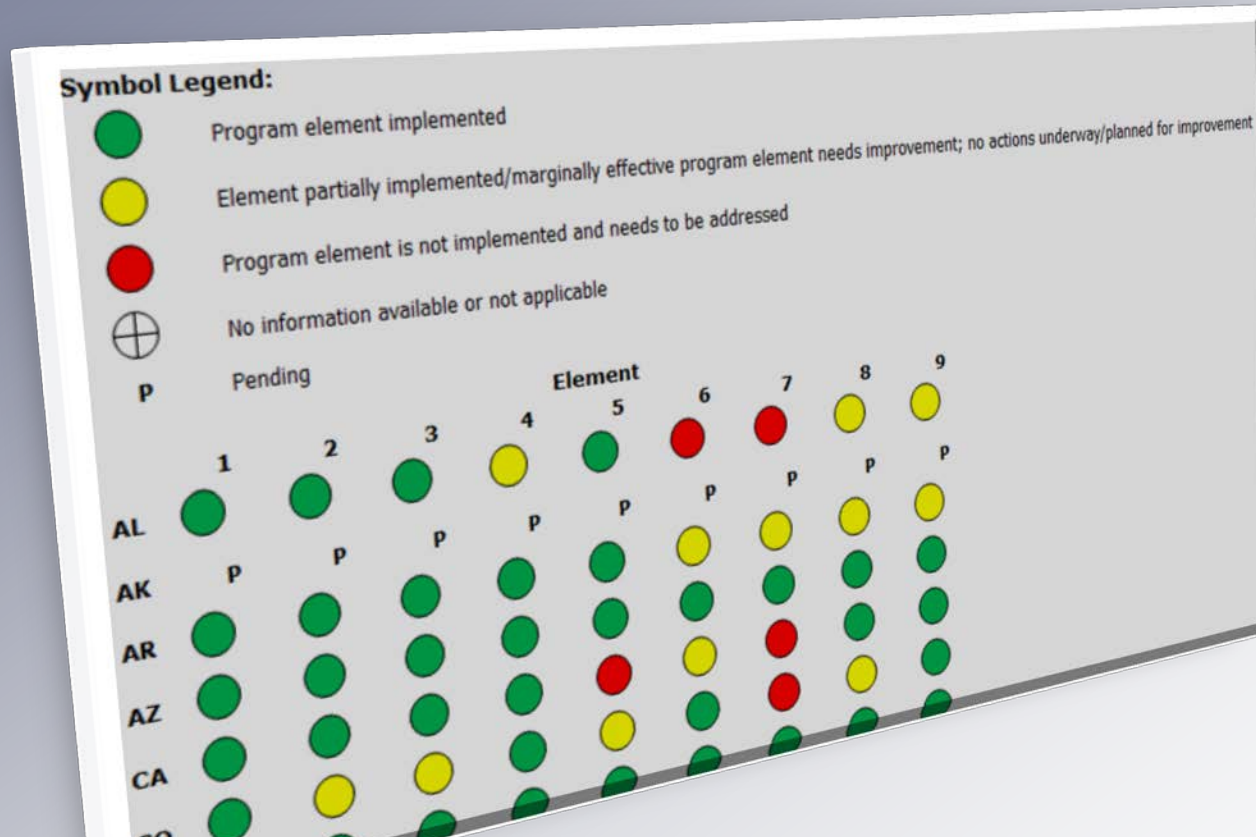
**Stakeholder collaboration/partnership is essential.**



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# Damage Prevention and 9 Elements



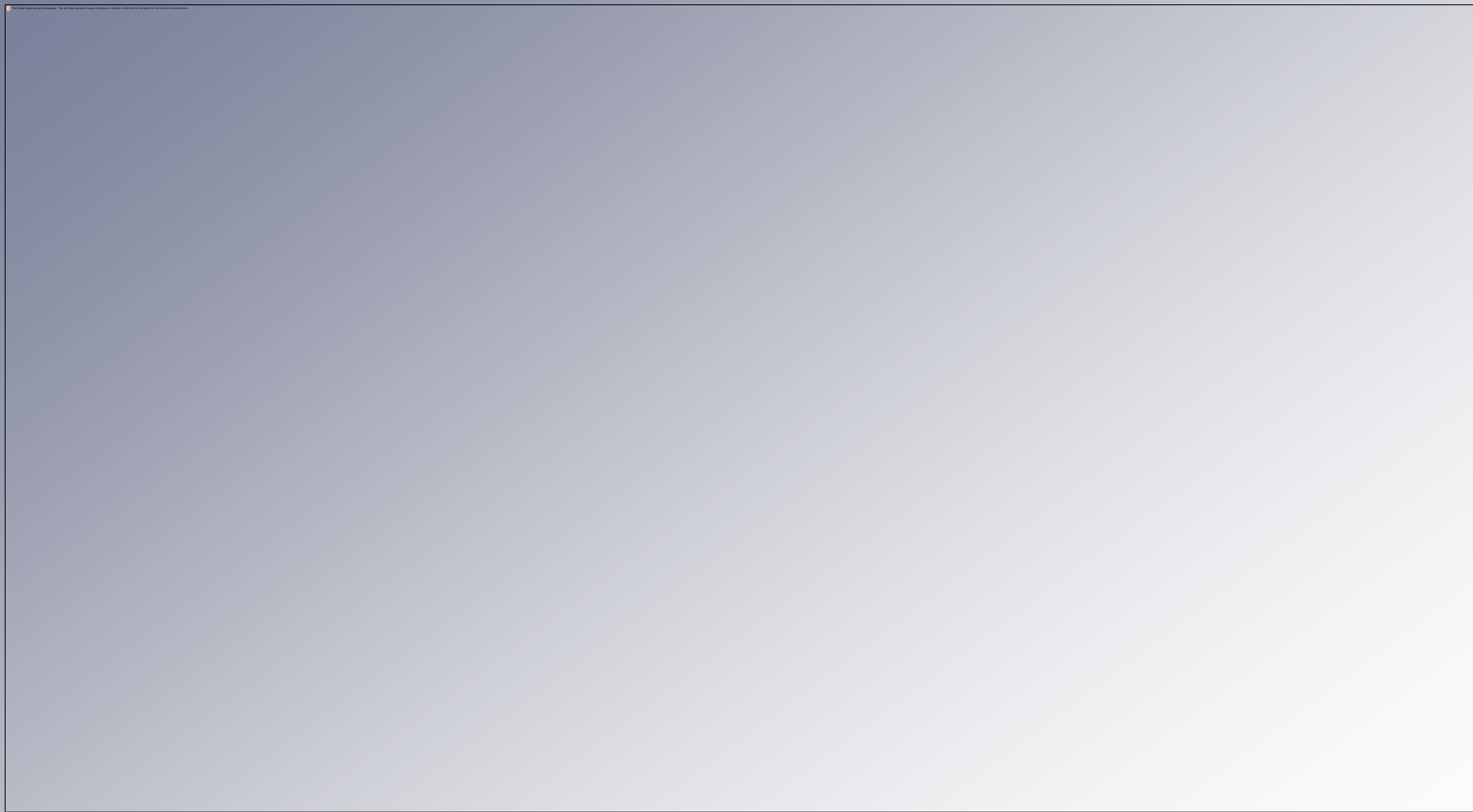
2014 Update at <http://primis.phmsa.dot.gov/comm/DamagePrevention.htm>



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# 2014 9-Element Refresh

- Most commonly implemented elements
  - Element 1 - communications
  - Element 2 – stakeholder support
  - Element 3 – locator performance standards
  - Element 8 - technology
- Least commonly implemented elements
  - Element 6 – dispute resolution
  - Element 7 – enforcement
- Elements 4,5,9 – varied





## 9-element refresh

- Specific questions most commonly reported as fully implemented:
  - State damage prevention champion serving as leading organization
  - Public education effort include key safety messages
  - Locator performance/state oversight
- Specific questions less commonly reported as fully implemented
  - Required damage reporting to statewide database
  - Clearly define dispute resolution
  - Enforcement, especially including alternatives to civil penalties, such as training





# PHMSA DP efforts : Related Data

- New to PHMSA's web sites: state-specific damage prevention web pages:
  - Incident data
  - Leak data
  - Damage data
- Grant information
- Links to State Regional CGA's

<http://primis.phmsa.dot.gov/comm/states.htm>



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# PHMSA Damage Prevention – General Outreach

- Federal
  - Briefs/reports to Congress, testimony at hearings, responses to inquiries, other federal agencies
- State
  - Letters/calls to Governors, legislators, other stakeholders, PHMSA/State Legal Forums
- Grants (State Damage Prevention, One Call, Technical Assistance Grants)
- Meetings of working groups focused on legislation
  - PHMSA-initiated; State-initiated; CGA Advocacy
- Public Outreach –articles, web, social media





# PHMSA 811 specific initiatives - ongoing

- 811 and Secretary Foxx:
  - Partner with CGA/stakeholders
  - Video testimonials, PSA “Avoid a Grimm Situation” available for download
  - <https://www.youtube.com/user/PHMSADOT>
  - Annual radio campaign
- Letters – state/issue specific
  - State lawmakers, governors, PUCs, trade associations, safety organizations
- Events for leadership, web and social media, etc.



# PHMSA 811 Efforts – new for 2015

- Expanded poster contest
- All DOT contracts to have safe digging clause in the T & C
- Electronic Highway Message Boards: Safe Digging Message on 811 Day (working with FHWA)
- Seeking out media/public events for DOT leadership participation
- National Conference of State Legislatures – exhibit
- Washington Metro Transit Authority
- Expanded PHMSA Regional Outreach





# 811 Poster Contest – 2014 Pilot

[www.energysafekids.org/call-811-contest](http://www.energysafekids.org/call-811-contest)



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# PHMSA 2015 811 poster contest

- Open to all students in grades 4 -6, 1<sup>st</sup> 811 entries receive t-shirt
- Contest deadline is March 13, winners to be announced in June
- Grand Prize:
  - a trip to Washington D.C. (student accompanied by a parent) to attend the Washington Nationals baseball game in August 2015 supporting 811 Day
  - a Kindle Fire HDX 7" tablet
  - \$811 classroom grant plus Kindle Fire HDX for teacher
- 2 Honorable Mention students and teachers – Kindle Fire HDX





# PHMSA 811 Day Plans

- Washington Nationals game: August 6, 2015, 4:05 PM
  - 2014: ~ 85 attendees. 2015: hoping to increase to over 100. External participation welcome
  - Pre-game remarks by Secretary Foxx, poster winner recognition
- 811 Run in Washington D.C. metropolitan area
- Washington Metro advertising
- Central Region





# Pipeline Damage Prevention Programs - Enforcement Rule

- Title: "Pipeline Damage Prevention Programs"
- Docket No. PHMSA-2009-0192, [www.regulations.gov](http://www.regulations.gov)
- PHMSA video on the Notice of Proposed Rulemaking:
  - <http://www.phmsa.dot.gov/pipeline/regs>
- Comment period closed July 9, 2012
- Final rule: Drafted and routing through approval process.





# Purpose of the NPRM

NPRM seeks to revise Pipeline Safety Regulations to comply with Congressional directive. The rule will:

1. Establish criteria and procedures for determining adequacy of state pipeline excavation damage prevention law enforcement programs
2. Establish the administrative process for making adequacy determinations
3. Establish the Federal requirements PHMSA will enforce in states with inadequate enforcement programs
4. Establish the process for enforcement proceedings against excavators where Federal authority is exercised





# Criteria for Adequate Enforcement

(**PROPOSED.** See NPRM for complete language)

1. Does the state have enforcement authority with civil penalties?
2. Has the state designated an agency or other body as the responsible enforcement authority?
3. Is the state using its enforcement authority and making information publicly available that demonstrates the effectiveness of enforcement?
4. Does the state have a reliable mechanism for learning about excavation damage?
5. Does the state use damage investigation practices that are adequate to determine the at-fault party?







# Criteria for Adequate Enforcement

## (Proposed)

6. Does the state's damage prevention law require:
  - a) Excavators must call the one-call before excavating;
  - b) Excavators may not excavate in disregard of the marked location of pipelines;
  - c) An excavator who causes damage to a pipeline:
    - i. Must report the damage to the owner/operator of the pipeline, and;
    - ii. Must call 911 or another emergency telephone number if the damage results in a release.
7. Does the state limit exemptions for excavators from its excavation damage prevention law?





# Procedures for Evaluating States

## (Proposed)

- Annual review using proposed criteria summarized on previous slides
- Review will encompass information from any state agency or office with a role in the enforcement program
- PHMSA may take **immediate enforcement action** against excavators in a state upon a finding of inadequacy
  - Will be public and excavators may face significant fines
- States have five years from a finding of inadequacy to implement an adequate program, after which state is subject to a reduction in “base grant” funding established under 49 U.S.C. 60107







# Federal Requirements for Excavators

(**Proposed** in Rulemaking)

Before commencing excavation activity, excavators must:

1. Call an available one-call system to notify pipeline operators of the timing and location of intended excavation;
2. If pipelines exist in the area, wait for the operator(s) to arrive at the excavation site and mark the location of the pipeline(s);
3. Excavate with proper regard for the marked location of the pipeline(s) and take all practicable steps to prevent excavation damage to the pipeline, and;
4. Make additional use of the one-call as necessary.





# Federal Requirements for Excavators

## (Proposed)

- If a pipeline is damaged in any way by excavation activity, excavator must report the damage to the pipeline operator, whether or not a leak occurs
- If a damage causes release of flammable, toxic, or corrosive gas or liquid that may endanger life or cause serious bodily harm or damage to property or the environment, excavator must call 911
- Homeowners using only hand tools, as opposed to mechanized excavating equipment, on their own property are exempt from these requirements.







# Requirements for Pipeline Operators

(see NPRM for complete language)

- PHMSA may enforce existing damage prevention requirements applicable to pipeline operators if a pipeline operator fails to respond to a locate request or fails to accurately locate and mark its pipeline.
  - 49 CFR 192.614
  - 49 CFR 195.442
  - 49 U.S.C. § 60114



# PHMSA's Enforcement Process

(**Proposed** - see NPRM for complete language)

- To conduct enforcement proceedings for alleged violations of excavation damage prevention requirements, PHMSA proposes to use the existing process for alleged pipeline safety violations:
  - Notice of probable violation;
  - 30-day period to respond, including the opportunity to request an administrative hearing;
  - Issuance of final order;
  - Opportunity to petition for reconsideration.
  - Penalty levels will match PHMSA's for operators



# PHMSA Enforcement Rule - status

- Currently awaiting publication
- Planning to implement soon after publication
- Evaluation of states using a risk-based approach
- Working with PHMSA Office of State Programs to coordinate
- Working with PHMSA Enforcement Office to develop plan for enforcement actions in states deemed to have ineffective enforcement





# Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011: Damage Prevention Components

- Two major directives – both aimed at **exemptions**
  - Exemptions and grant eligibility (effective January 2014)
  - DOT to study impact of all exemptions involving mechanical equipment





# Two Grant Programs – Similar Purposes

- One Call Grants:
  - State pipeline safety offices are eligible applicants
  - Maximum award = \$45,000 per year
  - Funding available to assist in improving damage prevention programs
- State Damage Prevention Grants:
  - State Authority designated by Governor of state is eligible applicant
  - Maximum award = \$100,000 per year
  - Funding to assist states in aligned with one or more of the 9 Elements of Effective Damage Prevention







# Exemptions and Grant Eligibility

- EXEMPTIONS PROHIBITED.—In order to qualify for a grant, a State one-call notification program may not exempt municipalities, State agencies, or their contractors from the one-call notification system requirements of the program.
- This applies to both One Call Grants and State Damage Prevention Grants.
- PHMSA analyzed state one call laws and developed list of affected states.
- Affected states notified via letters, working with states on a case-by-case basis





# Exemption Study

Section 3 requires a study of the impact of excavation damage on pipeline safety. The study shall include:

- An analysis of the frequency and severity of different types of excavation damage incidents;
- An analysis of exemptions to the one-call notification system requirements in each State;
- A comparison of exemptions to the one-call notification system requirements in each State to the types of excavation damage incidents in that State; and
- An analysis of the potential safety benefits and adverse consequences of eliminating all exemptions for mechanized excavation from State one-call notification systems.
- Study is complete, submitted to Congress in October.

<http://phmsa.dot.gov/media-congress>



# Approach to Study

- Analyze available PHMSA data
- Limited to reportable incidents, 1993 - 2012
  - Report details vary widely, narratives insufficient to provide insight about damages
  - 3<sup>rd</sup>-party damage info available, but not exemption-specific
  - State laws at time of incidents
- Seek stakeholder input
  - Public Meeting
  - Open Docket





# PHMSA Exemption Study – Some Key Take-Aways

- To truly address the questions posed by Congress, more data, and more detailed data is needed.
  - State-level, include questions relating to exemptions, root cause
  - How should this data be collected? Federal process is lengthy.
- Exemptions should be validated with data, narrow in scope – blanket exemptions for entities inappropriate
- Targeted education is needed
  - Agricultural
  - Road work
- External sources (CGA DIRT and USIC analysis) point to significantly lower damage rates in states with fewer exemptions



# Why we do this

[https://www.youtube.com/watch?v=\\_VaT0g-76bl&list=PL4wHDsuQ-uKIT8ZWakbm-vpoQ-KzBuY7K&index=2](https://www.youtube.com/watch?v=_VaT0g-76bl&list=PL4wHDsuQ-uKIT8ZWakbm-vpoQ-KzBuY7K&index=2)



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# Summary

- Damage Prevention is a DOT/PHMSA Priority
- The Nine Elements are considered guiding principles.
- Current areas of focus: effective enforcement, minimal exemptions, 811 outreach and education, encouraging data collection and analysis, as well as data transparency.
- Encouraging strong STATE, LOCAL and REGIONAL efforts
  - Effective, risk-based approaches using data
- Stakeholder input is welcome – what more can PHMSA do?





# Resources

- PHMSA web sites:
  - <http://primis.phmsa.dot.gov/comm/>
    - Includes damage prevention initiatives, info on grants, incident information and more – resource links based on audience
  - <http://www.phmsa.dot.gov/pipeline>
    - Includes pipeline information, forms, regulatory actions, etc.
  - Sites are linked





U.S. Department of Transportation  
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# Thank You

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