



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

## PHMSA Resources / Information – Updated June 2014

*The following slides include publicly available information. The information has been summarized or referenced, and links to source materials are available below for your convenience.*

## FROM PHMSA NPRM – APR 2, 2012

- Three Texas pipeline associations suggested that standards consistent with key aspects of the Common Ground Alliance Best Practices should be adopted by states to ensure the scope of their enforcement programs are adequate.
- PHMSA strongly believes that individual states should retain the primary responsibility to enforce their excavation damage prevention laws effectively. The proposed regulations do not conflict with the best practices established by the Common Ground Alliance.

# WORDS FROM PHMSA NPRM – APR 2, 2012

NUCA commented that “participation” in excavation damage prevention includes calling the one-call center before excavating. However, NUCA also commented that underground facility operators being members of the appropriate one-call center is fundamental to the excavation damage prevention process and that exemptions only increase the likelihood of facility damages. NUCA cites the Common Ground Study of One-Call Systems and Damage Prevention Best Practices, for which “the underlying premise for prevention of damage to underground facilities, and the foundation for this study, is that all underground facility owners/operators are members of one-call centers, and that it is always best to call before excavation.

# WORDS FROM PHMSA NPRM – APR 2, 2012

- AGC commented that PHMSA must consider education as an alternative or supplement to civil or other penalties, and in cases where financial penalties are assessed revenues generated must be reserved to finance excavation damage prevention education and technologies used in support of excavation damage prevention activities.
- AGC suggested that PHMSA should refer to the CGA Best Practices as a template for guidance standards in the absence of appropriate state standards until a determination of the adequacy of the state excavation damage prevention program is made.

# GAO REPORT TO CONGRESS – PIPELINE SAFETY

- As to the effectiveness of One – Call programs, the CGA has reported that, in 2010, when an excavator notified a call center before digging, damage occurred less than 1 percent of the time.
- The Common Ground Alliance has reported on the importance of outreach, including the use of structured education programs, targeted mailings, and paid advertising.

# Characterizing State Damage Prevention Programs

- Characterization tool
  - Documented implementation of the nine elements of an effective damage prevention program by state
- State damage prevention laws and regulations
  - Documented state damage prevention laws and regulations by state



# Nine Elements of an Effective Damage Prevention Program <sup>7</sup>

*Follow each link to see a map of how the element is implemented among the states.*

[Element 1 - Enhanced Communication between Operators and Excavators](#)

[Element 2 – Fostering Support and Partnership of all Stakeholders](#)

[Element 3 – Operator’s Use of Performance Measures for Locators](#)

[Element 4 – Partnership in Employee Training](#)

[Element 5 – Partnership in Public Education](#)

[Element 6 – Enforcement Agencies’ Role to Help Resolve Issues](#)

[Element 7 – Fair and Consistent Enforcement of the Law](#)

[Element 8 – Use of Technology to Improve the Locating Process](#)

[Element 9 – Data Analysis to Continually Improve Program Effectiveness](#)

# Characterization Tool Results

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

## Symbol Legend:



Program element implemented



Element partially implemented/marginally effective program element needs improvement; no actions underway/planned for improvement



Program element is not implemented and needs to be addressed



No information available or not applicable

**P**

Pending

	Element								
	1	2	3	4	5	6	7	8	9
AL									
AK	P	P	P	P	P	P	P	P	P
AR									
AZ									
CA									
CO									
CT									
DE									
DC	P	P	P	P	P	P	P	P	P



# State DP Law Summary

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

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

Select a Category:

☒ Excavator

☐ Operator

☐ Other

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

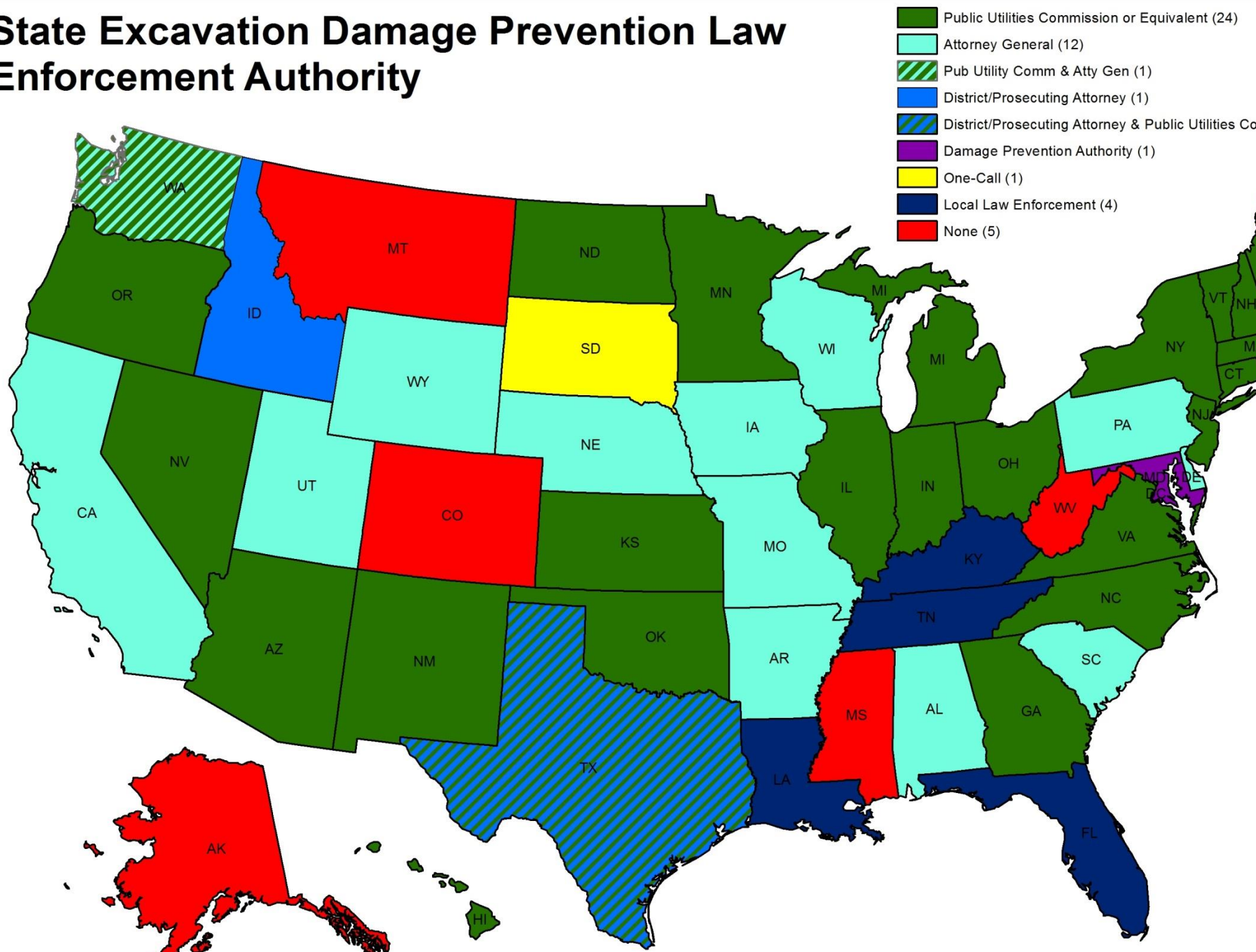
# 3<sup>rd</sup> Party Enforcement Rulemaking

- Title: “Pipeline Damage Prevention Programs”
- Docket No. PHMSA-2009-0192  
[www.regulations.gov](http://www.regulations.gov)
- PHMSA video on the NPRM:
  - <http://www.phmsa.dot.gov/pipeline/regs>
- Comment period closed July 9, 2012
- Final rule pending

# History

- Pipeline Inspection, Protection, Enforcement and Safety (PIPES) Act of 2006
  - Heavy focus on preventing excavation damage to pipelines (a leading cause of serious pipeline incidents)
  - New **limited** enforcement authority for PHMSA
    - Excavators who damage pipelines in states with inadequate damage prevention enforcement programs
- Advance Notice of Proposed Rulemaking (ANPRM) published October 29, 2009  
<http://www.regulations.gov> Docket ID PHMSA-2009-0192

# State Excavation Damage Prevention Law Enforcement Authority



# Intent of the NPRM

- Every state has an excavation damage prevention law, but no two laws are identical  
<http://primis.phmsa.dot.gov/comm/DamagePrevention.htm>
- Some states do not adequately enforce their damage prevention laws
- Effective enforcement reduces excavation damage rates

The proposed rule is intended to accomplish the following:

- Improve public and contractor safety
- Reduce excavation damage to pipelines
- Encourage states to adopt effective, balanced damage prevention law enforcement programs
- Provide “backstop” Federal enforcement authority in states that lack adequate enforcement programs

# Intent of the NPRM

NPRM seeks to revise Pipeline Safety Regulations to:

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 adjudication process for administrative enforcement proceedings against excavators where Federal authority is exercised

# Criteria for Adequate Enforcement

(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

(see NPRM for complete language)

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 makes contact with a pipeline:
    - i. Must report the contact to the 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?



# Federal Requirements for Excavators

(see NPRM for complete language)

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.
  5. An excavator who makes contact with a pipeline:
    - i. Must report the contact to the operator of the pipeline, and;
    - ii. Must call 911 or another emergency telephone number if the damage results in a release.
- ✓ *Homeowners using only hand tools, as opposed to mechanized excavating equipment, on their own property are **exempt** from these requirements.*

# Other Damage Prevention Efforts

- Improving state damage prevention programs
  - PHMSA/Industry Stakeholder Advocacy
  - CGA Advocacy Committee
- Presentations at events, participation in stakeholder meetings, provide letters, serve as a resource to the states
- Reauthorization – 2011 Pipeline Safety Authorization
  - Exemption study completed and submitted to Congress, October, 2014
    - Key findings: More data needed to understand the impact of exemptions on pipeline safety. State-level data is essential.
  - Eliminates grant funding for states with certain exemptions

**Limit the negative impacts of  
land development near pipelines...**



# About the PIPA Report

Created by a stakeholder group of ~130 participants representing a wide range of interests, organizations, and viewpoints on pipelines and community planning.

**Scope:** Existing Gas Transmission & Hazardous Liquid Pipelines

**Stakeholders:** Local Government, Property Developer/Owner, Pipeline Operator, Real Estate Commission

**Scenarios:** Baseline (implement in preparation for future) and New Development (Implement when use/development is proposed)

**43 Recommended Practices**



Partnering to Further Enhance Pipeline Safety  
In Communities  
Through Risk-Informed Land Use Planning  
Final Report of Recommended Practices  
November 2010



[www.PIPA-Info.com](http://www.PIPA-Info.com)

# Population Encroachment

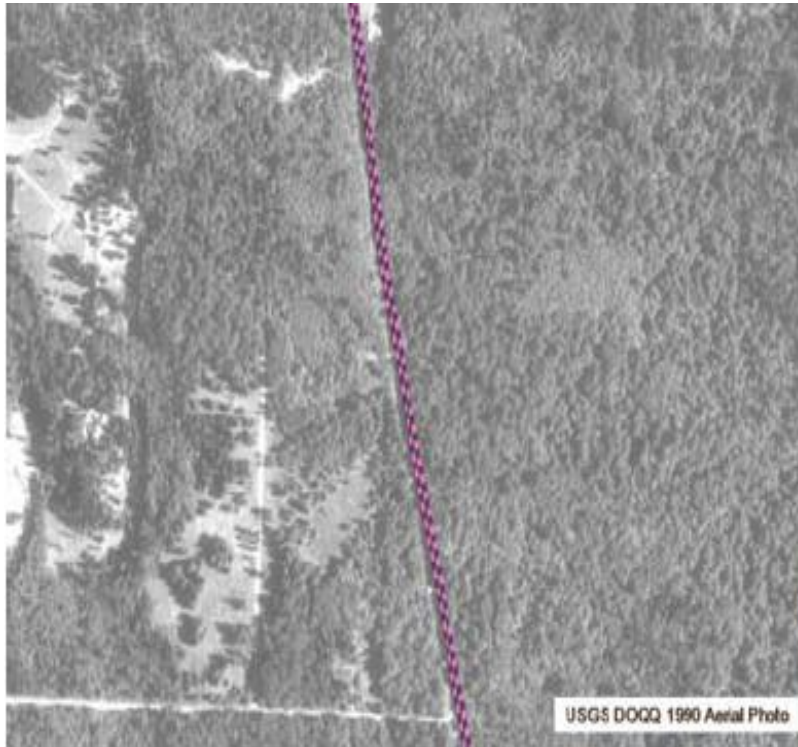


Figure 1 - 1990

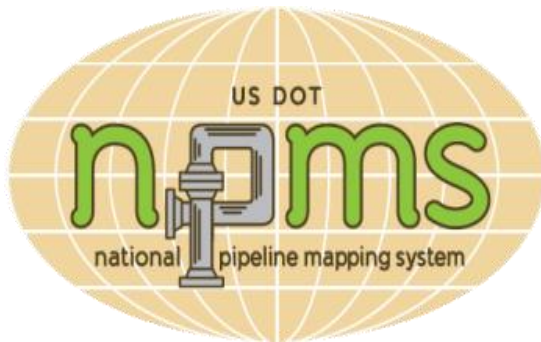


Figure 2 - 2002

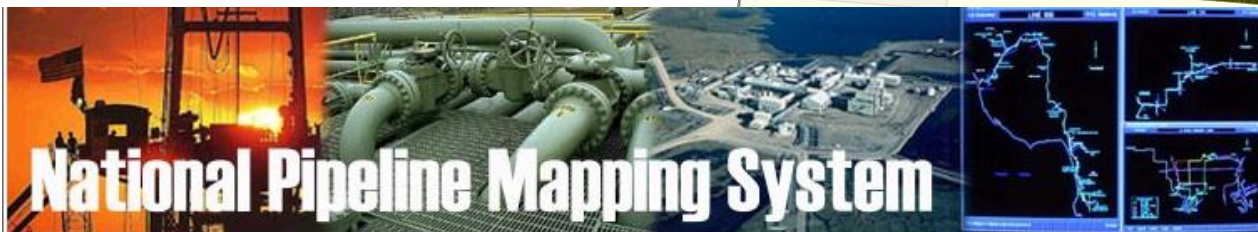
Encroachment on Pipeline in Washington State



# BL01 Obtain Transmission Pipeline Mapping Data



## Obtain Transmission Pipeline Mapping Data



Welcome to the NPMS Public Map Viewer





# NPMS Public Map Viewer

24

Log Out | NPMS H

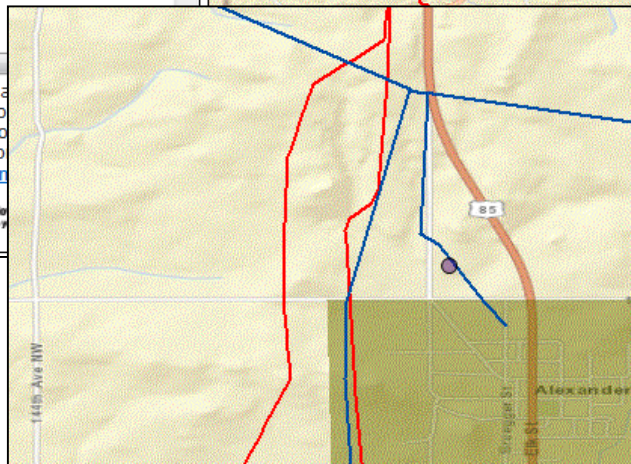
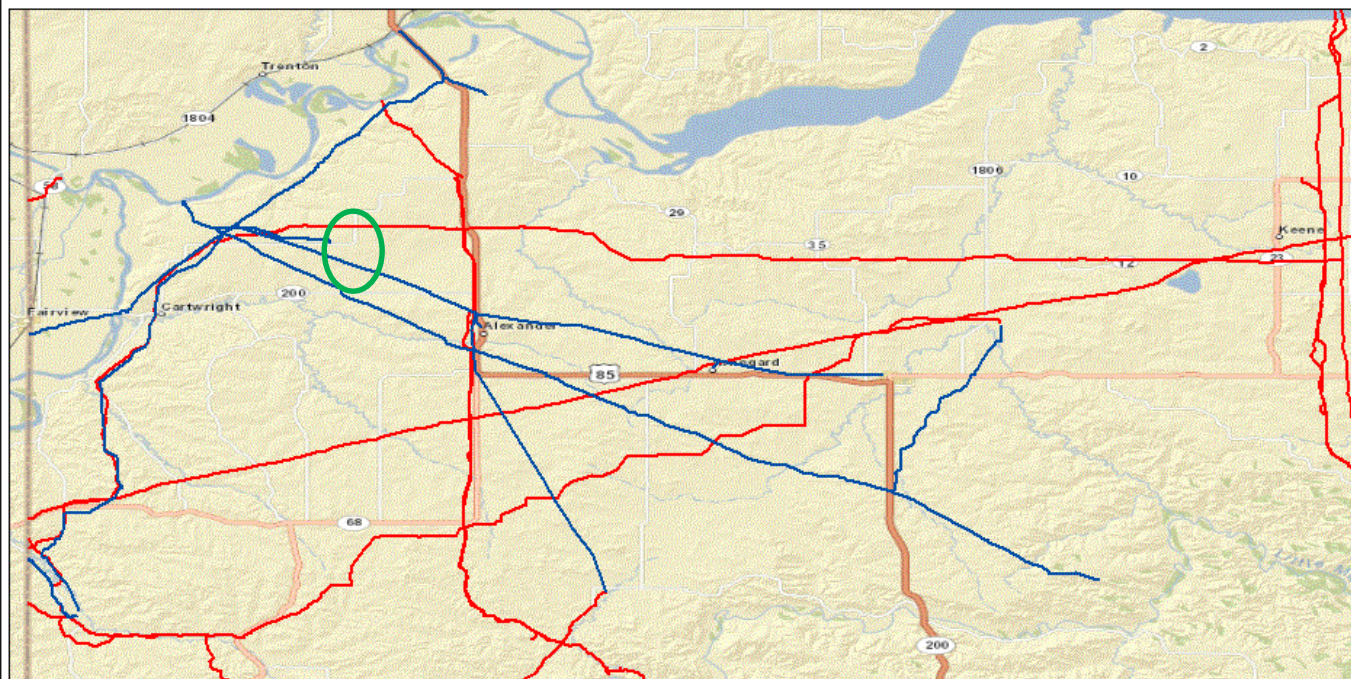
## Public Viewer Layer List

- ☒ Gas Transmission Pipelines (scale dependent)
  - GAS
- ☒ Hazardous Liquid Pipelines (scale dependent)
  - LIQUID
- ☐ LNG Plants (scale dependent)
  -
- ☐ Breakout Tanks (scale dependent)
  -
- ☐ Other Populated Areas (scale dependent)
  -
- ☐ Highly Populated Areas (scale dependent)
  -
- ☐ Roads, Railroads & Airports
  - ☒ World Transportation
- ☐ Boundary Lines & Names
  - ☒ World Boundaries and Places
- ☐ Shaded Relief
  - ☒ World Shaded Relief
- ☐ Aerial
  - ☒ World Imagery



View pipelines by

...



1 Record(s) found

OPERATOR ID	OPERATOR NAME	SYSTEM NAME	COMMODITY CATEGORY	COMMODITY DESCRIPTION	INTERSTATE DESIGNATION	PIPELINE STATUS CODE	PERSON TO CONTACT
22655	WILLISTON BASIN INTERSTATE PIPELINE CO	CABIN CREEK_WILLISTON SYSTEM	Natural Gas	NATURAL GAS	Y	In Service	Keith Seifert (Pipeline Engineering Manager)

Please refer to the User Manual via the Help link for guidance on application. If you need additional assistance please contact the NPMS National Support Center at [NPMS-NR@mbakercorp.com](mailto:NPMS-NR@mbakercorp.com)



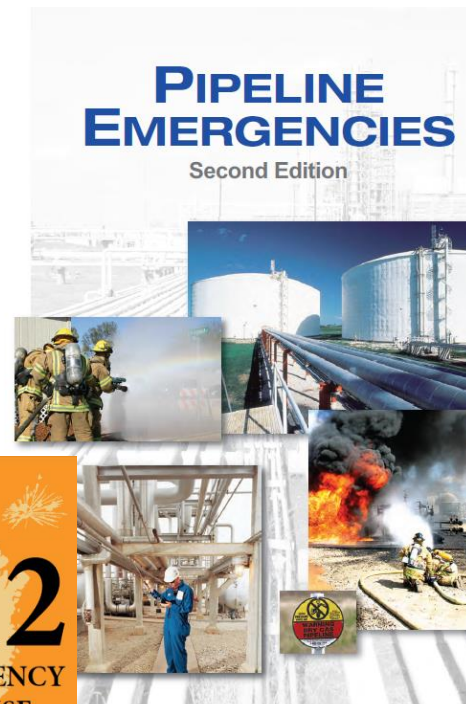
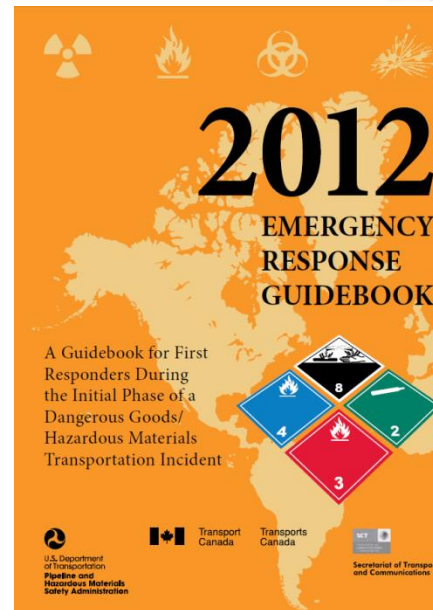


# Emergency Response

- Early communication, planning and preparedness with local emergency responders is critical
- Communities and their emergency responders are not always aware of pipeline safety concerns.  
Some reasons include:
  - Catastrophic pipeline incidents are low-frequency, high-consequence events
  - Pipelines are out of sight, out of mind
- PHMSA requires pipeline operators to communicate directly with the emergency responders regarding safe and effective pipeline emergency response
  - This communication is essential and part of a larger approach to preparing emergency responders for pipeline emergencies

# PHMSA Pipeline Emergency Response Resources

- **Pipeline Emergencies** training curriculum – [www.pipelineemergencies.com](http://www.pipelineemergencies.com)
- **Emergency Response Guidebook (ERG)** – updated and expanded pipeline pages
- **Hazardous Materials Cooperative Research Program – HM15**



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[www.pipelineemergencies.com](http://www.pipelineemergencies.com)



TRANSPORTATION RESEARCH BOARD  
OF THE NATIONAL ACADEMIES

# Additional Resources

PHMSA web sites:

- <http://primis.phmsa.dot.gov/comm/>
  - Stakeholder Communications Toolbox - Includes damage prevention initiatives, info on grants, incident information and more – resource links based on audience
- <http://www.phmsa.dot.gov/pipeline>
  - PHMSA/OPS Homepage - Includes PHMSA-wide and Pipeline information, forms, regulatory actions, meeting notices and registration