



PHMSA Outreach



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



PHMSA's role: Perspective

- PHMSA's mission is to protect people and the environment from the risks inherent in transportation of hazardous materials – by pipeline and other modes of transportation.
- The Office of Pipeline Safety (within PHMSA) is the Federal safety authority for ensuring the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system.
- Pipeline safety awareness is a shared responsibility and is a PHMSA priority.





How PHMSA reaches out to stakeholders: Some Program Categories

- **Damage Prevention**
- **Public Awareness requirements**
- **Emergency Responder Outreach**
- **Pipeline and Informed Planning Alliance (PIPA)**
- **National Pipeline Mapping System (NPMS)**

Programs are interrelated





General outreach: Multi-faceted approach

- Regulatory requirements/enforcement/evaluation of program requirements
 - Inspection-related information is publicly available, including guidance
- Funding: Grants (Base, SDP, One Call, TAG), Cooperative Agreements (CGA and NASFM)
- Research and Development projects (Goals: Technology development, sharing knowledge, improving consensus standards). As a result – new technology available for use, reports, papers as reference material, etc.)
- Data
- Community Assistance and Technical Support (CATS) program



PHMSA outreach - general

- Public Meetings (today's meeting, PHMSA One Call exemption meeting, DIMP, Emergency Response Forum, Integrity verification....many more)
- Websites (PHMSA, Stakeholder Communications, and Pipeline Safety Awareness)
- Social Media (Twitter)
- Written material (Articles, Brochures, letters, etc.)
- Speaking engagements (meetings, conferences, etc.)
- Advisory Bulletins





Damage Prevention Outreach: understanding the landscape

- State laws
- States' alignment with Nine Elements
- Damage Prevention Data
 - Incidents
 - Leaks
 - Damages
- Grass Root Activities/Stakeholder working groups/ Regional CGAs





PHMSA Damage Prevention: Focus Areas

- 811
 - Public Service Announcement
 - Social Media
 - Support of NSDM, 8-11 Day, ongoing
- Enforcement
 - Rulemaking underway: Potential federal enforcement of one call requirements for excavators
- Exemptions
 - Grant eligibility
 - Study





Other Damage Prevention Initiatives

Nine Element Analysis



State Law Analysis



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

	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	●	●	●	●	●	●	●	●	●

Select a Category:

Excavator

Operator

Other

--- Select a State ---

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

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"



Know what's below.
Call before you dig.



The National Pipeline Mapping System (NPMS)

- A GIS dataset of gas transmission and hazardous liquid pipelines, LNG facilities, and breakout tanks
- Operators are required to submit geospatial data for the pipelines and LNGs annually; tank submission is optional
- NPMS data can be viewed online through
 - PIMMA, the password-protected viewer for government officials and pipeline operators
 - The Public Viewer, which lets citizens view one county's NPMS data per session
- The NPMS website (www.npms.phmsa.dot.gov) receives an average of 6,000 unique visitors per month





National Pipeline Mapping System (cont.)

- Pipeline **attributes** in the NPMS:
 - Operator name, system name, subsystem name
 - Diameter (voluntary data element)
 - General commodities transported
 - Interstate/intrastate designation
 - Operating status (in service, abandoned, retired)
- Does not currently include interconnects, compressor/pump stations, flow direction/throughput, gathering or distribution.

**NEVER use the NPMS
as a substitute for
calling 811 before
digging.**





NPMS Public Map Viewer

Public Viewer Layer List

- Gas Transmission Pipelines (s
 - GAS
- Hazardous Liquid Pipelines (s
 - 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 Place Names
- Shaded Relief
 - World Shaded Relief
- Aerial
 - World Imagery
- Low-Resolution (15m) Imagery
- Street Map

Please refer to the User Manual which is accessible via the Help link for guidance on this map application. If you need additional assistance, please contact the NPMS National Repository staff at NPMS-NR@mbakercorp.com or 703-317-6294.

Screenshot from the Public Viewer



NPMS: Current projects

- Mapping tabular data that can be integrated with pipeline data
 - Incidents/accidents, Inspection Units, Special Permits, Facility Response Plan numbers
- Building history for pipelines as they change operators, with 2011 as baseline year
- Notice of Proposed Rulemaking in progress:
 - Mandates that operators align NPMS and AR submission dates and data “as of” dates
 - Makes NPMS submission part of the regs instead of a statutory requirement
- IC draft to publish in 2013: expand attributes collected, improve positional accuracy, diameter mandatory





PHMSA Emergency Responder Outreach

- 2012 Emergency Response Guide includes a new focus on pipelines:
 - Pipelines 101 (types of pipelines, associated structures, and markers), indications of pipeline leak/rupture, fundamentals of pipeline emergency response
- Pipeline Emergencies Training Curriculum
 - “How To” training for responding to pipeline emergencies
 - Includes e-book, apps for Apple and Android products, training instructor’s guide, interactive training scenarios
 - www.pipelineemergencies.com





Coming Soon: A Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines

- PHMSA's Hazardous Materials Cooperative Research Program is funding the development of the guide
- Work is facilitated by the Transportation Research Board
- Researcher is the City College of New York, Dr. Charles Jennings is the principle investigator
- Final product should be ready this summer





PHMSA's Strategy for Improving Pipeline Emergency Response

- Strengthen the capabilities of local emergency responders to safely and effectively respond to pipeline emergencies by **institutionalizing** pipeline safety and awareness in the emergency response community.
- Use existing Standards, processes, training requirements, regulations, etc.
- Examples: NFPA 472, continuing education credits for training, partnerships...more to come



Local Land Planning Authority

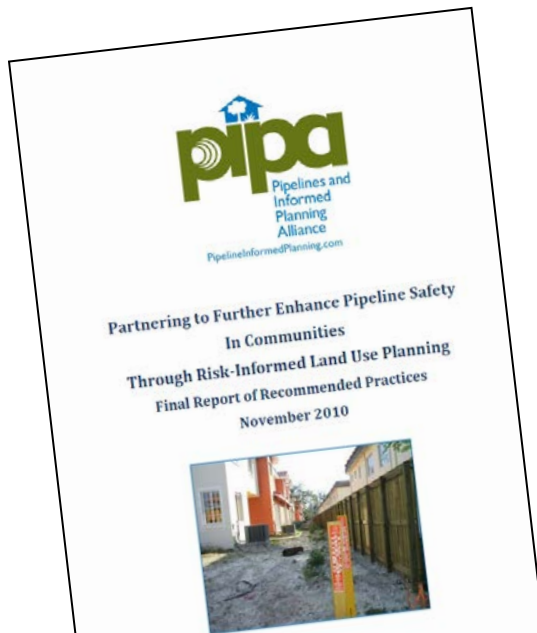
Development near transmission pipelines may:

- Increase the likelihood of excavation damage to the pipeline
- Impede access for emergency response & maintenance/operation of the pipeline
- Increase the community's vulnerability and the impact of a pipeline emergency

Pipeline and Informed Planning Alliance (PIPA) report provides:

- Recommended practices for planners, developers and pipeline operators
- Land planning mitigation tools

PIPA Communication Team: Promoting PIPA Recommended Practices



Hazard Mitigation Planning for Pipelines

What is a Hazard Mitigation Plan?

State and local governments create hazard mitigation plans (HMP) to identify ways they can protect the health, safety and economic interests of their communities by reducing the impacts of both natural and man-made hazards. Hazard mitigation is any action taken to permanently eliminate or reduce the long-term risk to human life and property from hazards. It is an essential element of emergency management, along with preparedness, response and recovery.

PHMSA and Virginia Department of Emergency Management Pilot Project

In 2012, PHMSA and the Virginia Department of Emergency Management (VDEM) undertook a pilot project to determine an approach to encourage state and local governments to incorporate gas and hazardous liquid pipelines into their emergency management hazard mitigation plans. The focus of this effort is toward the inclusion of the PIPA Recommended Practices as mitigative solutions to identified pipeline hazards. The pilot initiative is supported by the ad hoc PIPA Communication Team and several pipeline operator representatives.

Pipelines are Manmade Hazards

Gas and hazardous liquid pipelines are constructed by and for pipeline companies for the transportation of gas and hazardous liquids. By the nature of the potentially hazardous products they carry, pipelines should be included in the lists of hazards that communities consider when developing hazard mitigation plans. Knowledge of pipeline hazards can enable informed decisions to be made about how to manage the risks and develop mitigation strategies.



Pipeline manifold impacted by flooding

Natural Hazards Present Risk to Pipelines

While pipelines are often thought of as presenting risks to communities, natural hazards can impact the integrity of pipelines. Although natural hazards are cited as the cause in fewer than ten percent (10%) of pipeline incidents, the failure of a large-diameter, high-pressure natural gas or hazardous liquid transmission pipeline during an earthquake or hurricane event can significantly complicate a communities' ability to respond and recover from the event.

Pipelines are Critical Infrastructure

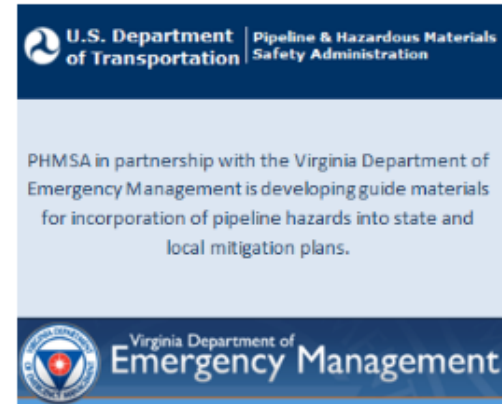
Our gas and hazardous liquid transmission pipeline systems are a vital part of the U.S. transportation and energy supply infrastructure. Airports, power generating stations, and major industries, as well as commercial businesses and residents depend on the energy and raw manufacturing products delivered via pipelines. Pipeline disruptions impact our economy, public health, and even national security.

Pipeline Hazard Mitigation Strategies

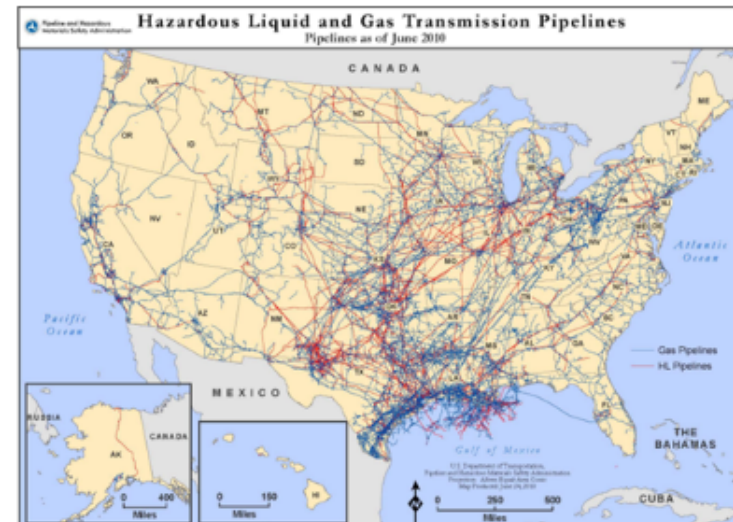
PHMSA has identified four mitigation strategies wherein state and local governments have the authority to reduce the risk of pipeline hazards:

- Pipeline awareness - education and outreach,
- Excavation damage prevention,
- Land use and development planning near transmission pipelines, and
- Emergency response planning for pipeline emergencies.

PIPA is currently developing additional information that will help communities incorporate gas and hazardous liquid pipelines into their emergency management hazard mitigation plans.



PHMSA in partnership with the Virginia Department of Emergency Management is developing guide materials for incorporation of pipeline hazards into state and local mitigation plans.



PIPA Online Resources

PIPA-info.com

U.S. Department of Transportation Pipeline & Hazardous Materials Safety Administration

Pipeline Safety Stakeholder Communications
Pipeline Safety Connects Us All

Home General Public Emergency Officials Local Officials Excavators Property Developer/Owner Pipeline Safety Advocates State Regulators Federal Agencies Industry Contact Us

Land Use Planning and Transmission Pipelines

- ▶ PIPA General
- ▶ PIPA Audiences
- ▶ PIPA Downloads

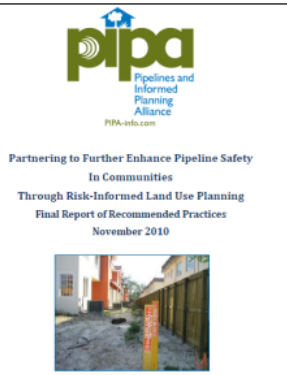
Site Pages

- ▶ About Pipelines
- ▶ Regulatory Oversight
- ▶ Safety Programs
- ▶ Public Outreach

State Pipeline Profiles:

Choose One... ▾

Print



Developing or building near a transmission pipeline?

The decisions you make can impact the safety of the community surrounding the pipeline.

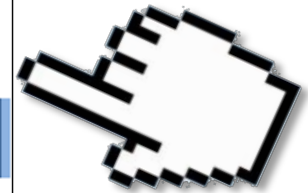
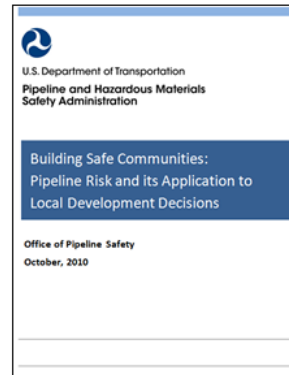
Have you consulted with the pipeline operator?

Have you considered access for pipeline maintenance and emergency response?

Is enhanced fire protection needed?

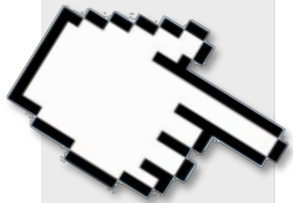
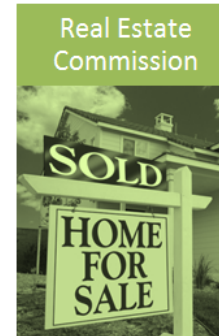
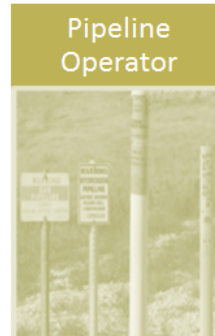
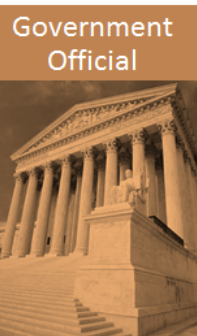
How will excavation damage to the pipeline be prevented?

The Pipelines and Informed Planning Alliance (PIPA) has developed recommended practices to help in making decisions about what, where and how to build safely near transmission pipelines.



Information about National Pipeline Risk

Select your toolbox below to learn more.



Stakeholder Toolboxes



PHMSA Web Sites

- 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 PHMSA-wide, HazMat and Pipeline information, forms, regulatory actions, etc.
 - Sites are linked





PHMSA Outreach: Who is involved? Everyone.

- DOT/PHMSA Leadership
- PHMSA HQ Staff
- PHMSA Regions: CATS Representatives
 - Liaisons between public and pipeline operators
 - Represent PHMSA as cooperating agency on some FERC projects
 - Drills, HazMat conferences
 - Pipeline Safety presentations
- This does not include State outreach efforts – also key supporters





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Thank You!



Know what's below.
Call before you dig.