

Pipelines and Informed Planning Alliance (PIPA)
Recommended Practice Evaluation Worksheet
For Pipeline Operators



Version 2/14/2012

Pipelines and Informed Planning Alliance (PIPA)

PIPA is a stakeholder initiative led and supported by the US Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). PIPA's goal is to reduce risks and improve the safety of affected communities and transmission pipelines through implementation of recommended practices related to risk-informed land use and development near transmission pipelines. The PIPA recommended practices are not mandated by any public or private entity. However, they were developed by task teams of representative stakeholders using a consensus agreement process and the PIPA participants recommend that all stakeholders become aware of and implement the PIPA recommended practices where appropriate.

The PIPA recommended practices describe actions for key stakeholders, including local government, transmission pipeline operators, property developers/owners, and real estate commissions, to improve pipeline safety. Pipeline operators are encouraged to become familiar with each of the recommended practices. Even though the operator may not be taking action under a practice, the operator may be affected by other stakeholders implementing the practice. This document is to assist pipeline operators in evaluating their own current practices in comparison with PIPA recommended practices.

Within the PIPA Report, each recommended practice includes the practice title, a brief practice statement, the stakeholder audience intended to take action to implement the practice, practice details, and references if applicable. The recommended practices are grouped into one of two scenarios:

- **Baseline (BL) Recommended Practices** – These practices should be implemented by stakeholders in preparation for future land use and development.
- **New Development (ND) Recommended Practices** – These practices should be implemented by stakeholders when specific new land use and development projects are proposed.

The following table shows each PIPA recommended practice statement, actions a pipeline operator might consider to implement the practice, and a column for use in describing the operator's current relevant practices and the actions needed or that are being considered to address the recommended practice. The practices are grouped in functional categories which include: Land Planning and Development, Pipeline Maintenance & Damage Prevention, Maps & Records, and Communication. Practices for which pipeline operators have a primary action are presented first. Practices for which other stakeholders have the primary action are shaded.

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

Here is an example of how an operator might complete practice BL-03:

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
BL-03	<p>Utilize Information Regarding Development around Transmission Pipelines</p> <p>Transmission pipeline operators should provide information about their pipelines to local governments and property developers/owners who are planning development around their pipelines. Local government authorities regulating development should use this information to establish requirements regarding land use and development around transmission pipelines.</p>	<p>Primary Action: Local Government, Pipeline Operator</p> <p>Pipeline operators should provide developer handbooks to developers and local officials by personal delivery, e-mail, or website.</p>	<p>Company does not have a Developer’s Handbook.</p> <hr/> <p>Create a Developer’s Handbook by end of FY. Identify target audience and a communication plan to provide developer handbook on an ongoing basis.</p>

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
Recommended Practices: Primary Action for Pipeline Operator			
Land Planning and Development			
BL-03	<p>Utilize Information Regarding Development around Transmission Pipelines</p> <p>Transmission pipeline operators should provide information about their pipelines to local governments and property developers/owners who are planning development around their pipelines. Local government authorities regulating development should use this information to establish requirements regarding land use and development around transmission pipelines.</p>	<p>Primary Action: Local Government, Pipeline Operator</p> <p>Pipeline operators should provide developer handbooks to developers and local officials by personal delivery, e-mail, or website.</p>	
ND-02	<p>Gather Information for Design of Property Development near Transmission Pipelines</p> <p>In designing a proposed property development the property developer/owner should use all reasonable means to obtain information about transmission pipeline facilities in the area of the proposed development.</p>	<p>Primary Action: Property Developer/Owner, Pipeline Operators</p> <p>Upon request for information from property developers planning developments near transmission pipelines, pipeline operators should locate and mark the pipeline facilities and provide pipeline facility information by other means such as marking up design drawings, and providing maps. Pipeline operators may also provide developers with company-developed guidance.</p>	
ND-04	<p>Coordinate Property Development Design and Construction with Transmission Pipeline Operator</p>	<p>Primary Action: Property Developer/Owner, Pipeline Operators</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	When property development is planned within the consultation zone (reference PIPA Recommended Practice BL05), the property developer/owner and the transmission pipeline operator should communicate to ensure possible impacts of pipeline incidents and maintenance needs are considered during development design and construction.	Pipeline operators should communicate with property developers/owners early in the development planning process. This will enable developers to make informed planning decisions, including the siting and layout of development to limit the impacts on pipeline operations and maintenance and to reduce the impacts of potential incidents to communities.	
ND-08	<p>Collaborate on Alternate Use and Development of Transmission Pipeline Right-of-Way</p> <p>Property developers/owners, local governments and transmission pipeline operators may collaborate on alternative use of the transmission pipeline right-of-way and related maintenance.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should develop lists of acceptable alternate uses of pipeline rights-of-way and identify who would maintain the rights-of-way under these circumstances. Pipeline operators should review plans for alternate uses of pipeline rights-of-way as early as possible.</p>	
ND-18	<p>Consider Transmission Pipeline Operation Noise and Odor in Design and Location of Residential, Mixed-Use, and Commercial Land Use Development</p> <p>Consider noise, odor and other issues when planning and locating developments near above-ground transmission pipeline facilities, such as compressor stations, pumping stations, odorant equipment, regulator stations and other pipeline appurtenances.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>In the early planning stages of developments, pipeline operators should consider measures they may be requested to take to reduce noise and appearances. Pipeline operators should also advise local governments to ensure they understand the impact of development to the pipeline’s operation.</p>	
Pipeline Maintenance and Damage Prevention			

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
BL-12	<p>Notify Stakeholders of Right-of-Way Maintenance Activities</p> <p>Transmission pipeline operators should notify affected stakeholders of right-of-way maintenance activities, including vegetation management.</p>	<p>Primary Action: Pipeline Operators</p> <p>Pipeline operators should make reasonable and timely efforts to notify effected stakeholders of maintenance activities, such as vegetation management.</p>	
BL-13	<p>Prevent and Manage Right-of-Way Encroachment</p> <p>Transmission pipeline operators should communicate in a documented and timely manner with property developers/owners to prevent or rectify unacceptable encroachments or inappropriate human activity within the transmission pipeline right-of-way.</p>	<p>Primary Action: Pipeline Operators</p> <p>Pipeline operators should have written encroachment policies in place to ensure consistent application. These policies should addresses educating stakeholders, patrolling and inspecting the ROW, documenting the results of inspections and patrols, and communicating with stakeholders regarding encroachments.</p>	
BL-14	<p>Participate to Improve State Excavation Damage Prevention Programs</p> <p>All pipeline safety stakeholders should participate in the work of organizations seeking to make improvements to state excavation damage prevention programs, especially efforts to reduce exemptions from participation in one-call systems.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should participate in one-call programs and other damage prevention organizations to encourage improvements to state damage prevention programs, such as eliminating exemptions from the laws and regulations.</p>	
BL-15	<p>Enhance Damage Prevention Practices near High-Priority Subsurface Facilities</p> <p>Transmission pipeline operators should implement enhanced damage prevention practices within the transmission pipeline right-of-way to ensure that pipeline operators and excavators meet on-site prior to excavation activity near high-priority</p>	<p>Primary Action: Pipeline Operators</p> <p>Pipeline operators should require face-to-face and onsite meetings with excavators when excavations are planned within 10 feet of transmission pipelines, to exchange information about the pipelines and details about the planned excavations. A pipeline operator should provide written notification</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	subsurface facilities. High-priority facilities include transmission pipelines, high-voltage electric supply lines, fiber optic lines, and pressurized sewer pipelines.	to the excavator, approving the excavation and identifying precautions, prior to excavation commencing.	
BL-16	<p>Halt Dangerous Excavation Activities near Transmission Pipelines</p> <p>Transmission pipeline operators should have procedures and established contacts with local enforcement personnel in order to act appropriately to halt dangerous excavation activities that may damage their pipelines and potentially cause an immediate threat to life or property.</p>	<p>Primary Action: Local Government, Pipeline Operators</p> <p>Pipeline operators should have written procedures in place and should have established contacts/relationships with local enforcement personnel for halting dangerous excavation activity. Operators should implement outreach programs to local enforcement personnel, providing them with information describing potential dangers to public safety resulting from unsafe excavation.</p>	
ND-25	<p>Contact Transmission Pipeline Operator Prior to Excavating or Blasting</p> <p>Anyone planning to conduct excavating, blasting and/or seismic activities should consult with affected transmission pipeline operators well in advance of commencing these activities. Excavating and blasting have the potential to affect soil stability or lead to movement or settling of the soil surrounding the transmission pipeline.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should coordinate excavation activities with developers. If blasting is anticipated the pipeline operator should determine what size charge may be used without adversely affecting the pipeline.</p>	
Maps and Records			
BL-17	<p>Map Abandoned Pipelines</p> <p>When a transmission pipeline operator abandons a transmission</p>	<p>Primary Action: Pipeline Operators</p> <p>Pipeline operators should maintain the locations of abandoned</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	pipeline, information regarding the abandoned pipeline should be maintained and included in the information provided to the one-call center.	facilities in the notification maps/data provided to one-call centers. (Many one-call centers do not differentiate between active and abandoned facilities.) Operators should locate and mark abandoned facilities when receiving notices of proposed excavations.	
BL-08	<p>Manage Land Records</p> <p>Land use agreements between pipeline operators and property owners should be documented and managed and, when necessary, recorded.</p>	<p>Primary Action: Local Government, Pipeline Operator</p> <p>Pipeline operators should know their rights to property easements, record the property easements as soon as practical, and have written procedures for managing ROW easements.</p>	
BL-09	<p>Document and Record Easement Amendments</p> <p>Easement amendments should be documented, managed and recorded.</p>	<p>Primary Action: Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should record amendments to easement agreements. The operator’s procedures for managing ROW easements should address handling amendments to easement agreements.</p>	
ND-07	<p>Define Blanket Easement Agreements When Necessary</p> <p>Upon request by the landowner, a transmission pipeline easement agreement may be defined to an acceptable, reasonable, and safe width and explicit location. State statutes or local government regulations may require easements to be defined prior to the approval of rezoning, subdivision plats and development permits.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should define blanket easements (specify size) prior to rezoning or development. The operator’s procedures for managing ROW easements should address defining blanket easements when such easements are identified.</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
ND-26	<p>Use, Document, Record and Retain Encroachment Agreements or Permits</p> <p>Encroachment agreements should be used, documented, recorded and retained when a transmission pipeline operator agrees to allow a property developer/owner or local government to encroach on the pipeline right-of-way for a long or perpetual duration in a manner that conflicts with the activities allowed on the easement.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators should document, record, and retain encroachment agreements for as long as the agreement is valid. The operator’s procedures for managing ROW easements should address the handling of encroachment agreements.</p>	
ND-27	<p>Use, Document and Retain Letters of No Objection and Conditional Approval Letters</p> <p>Transmission pipeline operators may use, document and retain "letters of no objection" in agreeing to land use activities on or near a transmission pipeline right-of-way. Such land uses may or may not be temporary.</p>	<p>Primary Action: Local Government, Property Developer/Owner, Pipeline Operators</p> <p>If the pipeline operator has no objection to certain proposed land uses, the operator should create and retain “letters of no objection” to document the details of such land use and the communication between the operator and the developer and/or local government.</p>	
ND-28	<p>Document, Record and Retain Partial Releases</p> <p>Partial releases may be used to allow some part of the transmission pipeline right-of-way to be released from certain easement conditions, and should be documented, recorded and retained.</p>	<p>Primary Action: Property Developer/Owner, Pipeline Operators</p> <p>Pipeline operators may provide, document, record, and retain partial releases of easements when part of an easement is not needed for pipeline purposes.</p>	
Communication			
BL-10	<p>Implement Communications Plan</p> <p>Transmission pipeline operators should develop and implement</p>	<p>Primary Action: Property Developer/Owner, Pipeline Operators</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	effective communications plans when communicating acceptable transmission pipeline right-of-way uses and activities to property developers/owners and other stakeholders.	Pipeline operators should develop and implement effective communication plans for communicating acceptable pipeline right-of-way uses. (Refer to the PIPA Seven-Step Communication Model found in Appendix E of the PIPA Report.)	
BL-11	<p>Effectively Communicate Pipeline Risk and Risk Management Information</p> <p>Transmission pipeline operators should identify barriers to effectively communicating with stakeholders and use communication techniques designed to overcome those barriers and effectively engage stakeholders to communicate with them regarding pipeline risks and how the operator manages such risks.</p>	<p>Primary Action: Pipeline Operators</p> <p>Pipeline operators should identify communication barriers for the different stakeholder groups along its pipeline ROW. Operators should develop and employ communication techniques designed to overcome those barriers. (Refer to Appendix F of the PIPA Report for suggested tools to address these barriers).</p>	
Recommended Practices: Primary Action for Stakeholder Other Than Pipeline Operator			
Land Planning and Development			
BL-04	<p>Adopt Transmission Pipeline Consultation Zone Ordinance</p> <p>Local governments should adopt land development procedures requiring property developers/owners to consult with transmission pipeline operators early in the development process, so that development designs minimize risks to the populace living or working nearby and are consistent with the needs and legal rights of the operators.</p>	<p>Primary Action: Local Government</p> <p>Pipeline operators should develop through liaison with local governments a method of discovery that land development procedures are being considered. Operators should offer to participate in the development of related ordinances when they are being considered by local government officials.</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
BL-05	<p>Define Transmission Pipeline Consultation Zone</p> <p>Local governments should define "consultation zones" to provide mechanisms for communication between property developers/owners and operators of nearby transmission pipelines when new land uses and property developments are being planned.</p>	<p>Primary Action: Local Government</p> <p>Pipeline operators should develop guidelines for discussing pipeline safety within consultation zones with property developers. (Practice BL05 includes a reference to API RP 1162.) The expectation is that developers will consult with pipeline operators to exchange information with respect to the land use planning and permitting process and pipeline safety.</p>	
BL-06	<p>Implement New Development Planning Areas around Transmission Pipelines</p> <p>Local governments should consider implementing "planning areas" to enhance safety when new land use and property development is planned near transmission pipelines.</p>	<p>Primary Action: Local Government</p> <p>Pipeline operators should develop guidelines for discussing planning areas with local government officials and for discussing pipeline safety within planning areas with property developers.</p>	
ND-03	<p>Review Acceptability of Proposed Land Use of Transmission Pipeline Right-of-Way Prior to Design</p> <p>The property developer/owner should review preliminary information about acceptable land uses on a transmission pipeline right-of-way prior to the design of a property development.</p>	<p>Primary Action: Property Developer/Owner</p> <p>Pipeline operators should provide property developers/owners with guidelines for acceptable use of transmission pipeline rights-of-way. (Refer to Appendix D of the PIPA Report for general information about acceptable uses of pipeline rights-of-way, which does not necessarily reflect company-specific acceptable uses.)</p>	
ND-06	<p>Require Consideration of Transmission Pipeline Facilities in</p>	<p>Primary Action: Local Government, Property Developer/Owner</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	<p>Land Development Design</p> <p>Whenever development is proposed on property containing transmission pipeline facilities, local governments should require that the submitted land development plans address in detail the steps necessary to safely integrate the transmission pipeline facilities into the design of the project.</p>	<p>Pipeline operators should develop a list of types of development that can be safely integrated with their pipeline operations.</p>	
ND-09	<p>Provide Flexibility for Developing Open Space along Transmission Pipeline Rights-of-Way</p> <p>Local governments should consider allowing site planning flexibility in the development of commercial, industrial or residential property whenever a transmission pipeline is located in, or in close proximity to, the proposed development.</p>	<p>Primary Action: Local Government</p> <p>Pipeline operators should develop guidelines for discussing pipeline safety within consultation zones with property developers.</p>	
ND-11	<p>Reduce Transmission Pipeline Risk through Design and Location of New Parking Lots and Parking Structures</p> <p>Parking lots and parking structures should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce potential interference with transmission pipeline maintenance and inspections.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>If a pipeline operator provides a property developer/owner permission to install parking facilities over an existing pipeline, the operator should remind the developer of the pipeline operator's easement rights which typically do not compensate the developer/owner for required pipeline activities such as maintenance and repairs. The pipeline operator should place pipeline markers in these parking facilities where it is appropriate.</p>	
ND-12	<p>Reduce Transmission Pipeline Risk through Design and Location of New</p>	<p>Primary Action: Local Government, Property Developer/Owner</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	<p>Roads</p> <p>Roads and associated appurtenances should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and reduce the potential of interference with pipeline operations and maintenance.</p>	<p>Pipeline operators should provide property developers guidance material for constructing roads over pipelines. An operator should also advise the developer if pipeline modifications are required prior to a road construction and if the developer will be required to compensate the operator for these modifications.</p>	
ND-13	<p>Reduce Transmission Pipeline Risk through Design and Location of New Utilities and Related Infrastructure</p> <p>Utilities (both above and below ground) and related infrastructure should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce the potential of interference with transmission pipeline maintenance and inspections.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should provide property developers with guidance material relating to pipeline safety when installing new utilities and related infrastructure in the vicinity of existing pipelines.</p>	
ND-14	<p>Reduce Transmission Pipeline Risk through Design and Location of Aboveground Water Management Infrastructure</p> <p>Storm water and irrigation water management facilities, retention ponds, and other above-ground water management infrastructure should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce the potential of interference with transmission pipeline operations and maintenance.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should provide property developers with guidance material related to pipeline safety when constructing water management infrastructure in the vicinity of pipelines.</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
ND-16	<p>Locate and Design Water Supply and Sanitary Systems to Prevent Contamination and Excavation Damage</p> <p>Individual water supplies (water wells), small public/private water systems and sanitary disposal systems (septic tanks, leach or drain fields) should be designed and located to prevent excavation damage to transmission pipelines, interference with transmission pipeline maintenance and inspections, and environmental contamination in the event of a transmission pipeline incident.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should provide property developers with guidance material related to pipeline safety when locating and installing individual water supplies, small water supply systems, and sanitary disposal systems in the vicinity of pipelines</p>	
ND-17	<p>Reduce Transmission Pipeline Risk in New Development for Residential, Mixed-Use, and Commercial Land Use</p> <p>New development within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and buildings located to reduce the consequences that could result from a transmission pipeline incident and to provide adequate access to the pipeline for operations and maintenance.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should provide property developers with guidance material related to pipeline safety when designing for various structures and land uses in the vicinity pipelines. Such guidance should discuss ingress and egress options. The pipeline operator may not have pre-existing guidance for all possible land uses, such as ball parks and golf courses, but should relate such guidance as the situation calls for.</p>	
ND-19	<p>Reduce Transmission Pipeline Risk through Design and Location of New Industrial Land Use Development</p> <p>New industrial land use development within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and buildings located to reduce the consequences that could</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>During consultations, pipeline operator should initiate discussions about emergency coordination with developers and local government and emergency response officials in the early stages of design and planning for new industrial land</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	result from a transmission pipeline incident and reduce the potential of interference with transmission pipeline operations and maintenance.	developments. This will help minimize unnecessary risks in the design and construction of the facilities.	
ND-20	<p>Reduce Transmission Pipeline Risk through Location, Design, and Construction of New Institutional Land Use Developments</p> <p>New development of institutional facilities that may be difficult to evacuate within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences that could result from a transmission pipeline incident. Such facilities should also be located to reduce the potential of interference with transmission pipeline operations and maintenance activities. Emergency plans for these facilities should consider potential transmission pipeline incidents.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>During consultations, pipeline operators should initiate discussions about emergency coordination with developers, institutions, and local government and emergency response officials in the early stages of design and planning for new institutional developments. This will help to minimize unnecessary risks in the design and construction of the facilities. Discussions should also address reducing impact to the operation of the pipeline.</p>	
ND-21	<p>Reduce Transmission Pipeline Risk through Design and Location of New Public Safety and Enforcement Facilities</p> <p>New development of emergency responder facilities within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences that could result from a transmission pipeline incident. Such facilities should also be designed and located to avoid the potential of interference with pipeline operations and</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>During consultations, pipeline operators should initiate discussions about emergency coordination with developers and local government and emergency response officials in the early stages of design and planning for new emergency responder and critical emergency response communication facilities. This will help to minimize unnecessary risks in the design and construction of the facilities. Discussions should also address reducing impact to the</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
	<p>maintenance. Planning for these facilities should include emergency plans that consider the effects of a transmission pipeline incident.</p>	<p>operation of the pipeline.</p>	
ND-22	<p>Reduce Transmission Pipeline Risk through Design and Location of New Places of Mass Public Assembly (Future Identified Sites)</p> <p>New development of places of potential mass public assembly within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences of a potential transmission pipeline incident, the risk of excavation damage to the pipeline, and the potential of interference with transmission pipeline operations and maintenance. Planning for these facilities should include emergency plans that consider the effects of a potential pipeline incident.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should initiate discussions about emergency coordination with developers and local government and emergency response officials in the early stages of design and planning for new places of large public assembly. This will help to minimize unnecessary risks in the design and construction of the facilities. Discussions should also address reducing impact to the operation of the pipeline.</p>	
ND-23	<p>Consider Site Emergency Response Plans in Land Use Development</p> <p>Emergency response plan requirements should be considered in new land use development within a planning area (see PIPA Recommended Practice BL06) to reduce the risks of a transmission pipeline incident.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should work with local governments and developers to produce effective emergency response plans. Advanced coordination should ensure quick access to pipeline isolation/shutoff valves and access to incident sites by emergency response personnel.</p>	
Maps and Records			

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
BL-01	<p>Obtain Transmission Pipeline Mapping Data</p> <p>Local government agencies responsible for land use and development planning or the issuance of development permits should obtain mapping data for all transmission pipelines within their areas of jurisdiction from PHMSA's National Pipeline Mapping System or from the transmission pipeline operators and show these pipelines on maps used for development planning.</p>	<p>Primary Action: Local Government</p> <p>Pipeline operators are responsible for reviewing and updating their maps on NPMS annually. Operators should also consider providing more detailed mapping to local officials when deemed appropriate.</p>	
BL-07	<p>Understand the Elements of a Transmission Pipeline Easement</p> <p>Property developers/owners should have an understanding of the elements of and rights conveyed in a transmission pipeline easement.</p>	<p>Primary Action: Property Developer/Owner</p> <p>Pipeline operators should direct property developers and owners to operator websites and to county records departments for pipeline easement records.</p>	
BL-18	<p>Disclose Transmission Pipeline Easements in Real Estate Transactions</p> <p>As part of all real estate sales contracts, each state should require the disclosure of known transmission pipeline easements on the property.</p>	<p>Primary Action: Real Estate Commission</p> <p>Pipeline operators may want to provide real estate commissions with information about pipeline locations and general public awareness materials.</p>	
ND-10	<p>Record Transmission Pipeline Easements on Development Plans and Final Plats</p> <p>Local governments should require all recorded development plans and final plats to clearly show the location of transmission pipeline easements and identify the pipeline operators.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should maintain accurate recorded easements, with particular emphasis in areas that are strong candidates for land development.</p>	

Checklist for Pipeline Operator PIPA Recommended Practice Evaluation

<i>PIPA RP #</i>	<i>Practice Title and Description</i>	<i>Pipeline Operator Practice</i>	<i>Current Practice</i>
			<i>Action(s) Needed or Considered</i>
Pipeline Maintenance and Damage Prevention			
ND-24	<p>Install Temporary Markers on Edge of Transmission Pipeline Right-of-Way Prior to Construction Adjacent to Right-of-Way</p> <p>The property developer/owner should install temporary right-of-way (ROW) survey markers or fencing on the edge of the transmission pipeline ROW or buffer zone, as determined by the transmission pipeline operator, prior to construction to provide a clearly defined boundary. The property developer/owner should ensure that the temporary markers or fencing are maintained throughout the course of construction.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should ensure that property developers place appropriate temporary markers at the correct locations prior to construction, to identify the edges of pipeline rights-of-way.</p>	
ND-15	<p>Plan and Locate Vegetation to Prevent Interference with Transmission Pipeline Activities</p> <p>Trees and other vegetation should be planned and located to reduce the potential of interference with transmission pipeline operations, maintenance, and inspections.</p>	<p>Primary Action: Local Government, Property Developer/Owner</p> <p>Pipeline operators should provide property developers with guidance materials describing acceptable tree and vegetation planting in the vicinity of pipeline rights-of-way.</p>	