

## Analysis of 2014 State Damage Prevention Program Characterization

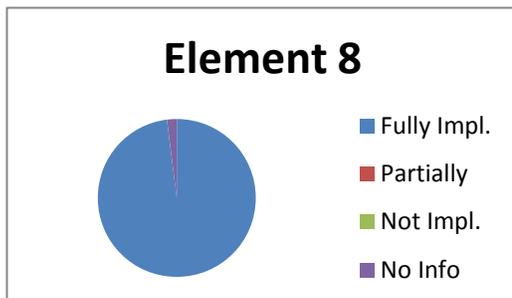
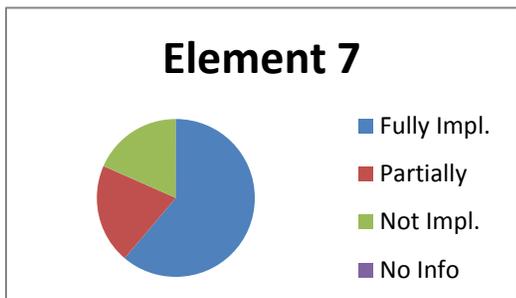
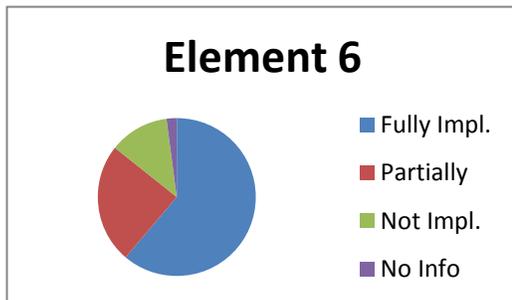
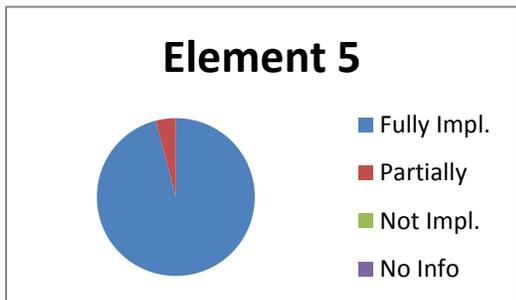
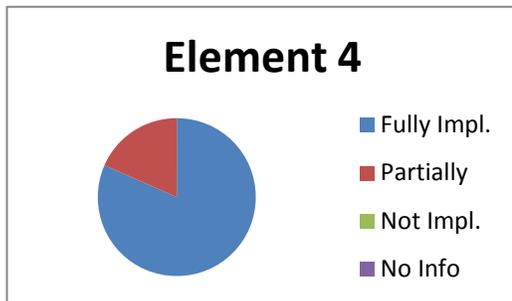
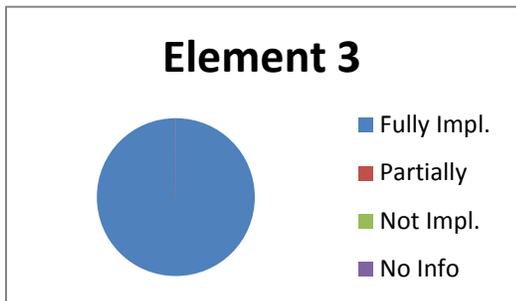
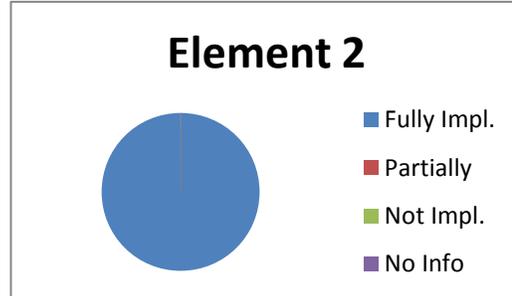
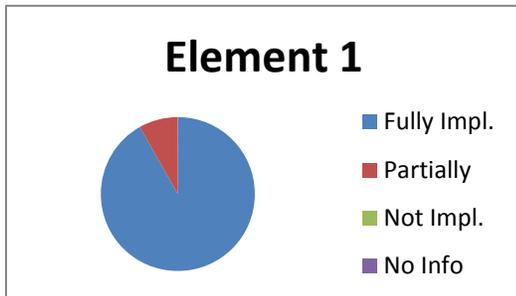
In 2014, PHMSA and State participants updated the State damage prevention program characterizations (SDPPC), and PHMSA conducted a comprehensive analysis of the results, as provided herein. The SDPPC exercise is informal in nature and the results should not be considered indicators of compliance with any PHMSA requirements. The results are based solely on State stakeholder views regarding the characterization tool criteria.

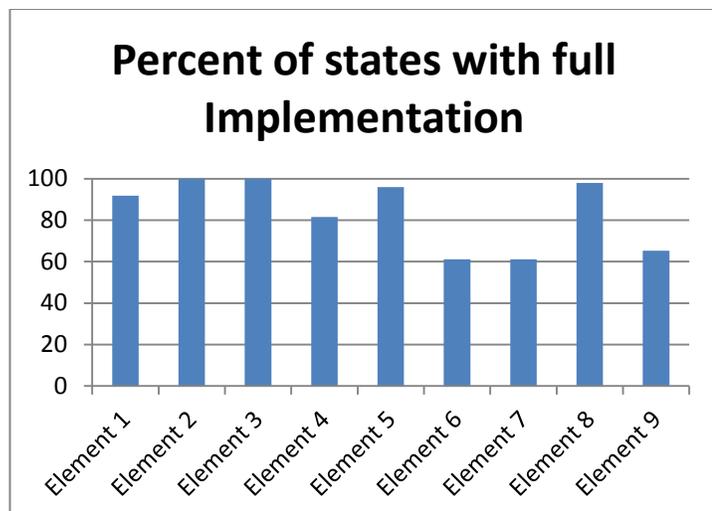
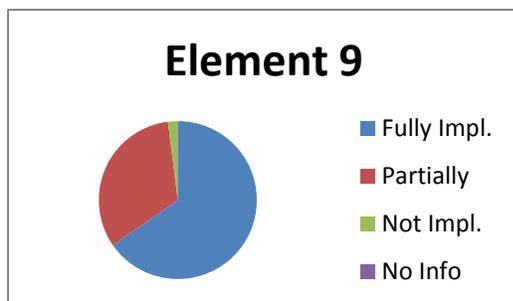
**Note:** The following analysis applies only to the State programs for which updated characterizations are available. 2014 State characterizations for Alaska, Illinois and Puerto Rico were not available at the time of this analysis, but will be incorporated into the analysis as those characterizations are completed. For simplicity of use in this analysis, District of Columbia and Puerto Rico are considered “States”.

### Individual Program Element Characterizations

- **Element 1** – Forty-five (45) of forty-nine (49) State programs (91.8%) were characterized as fully implemented. Four (4) State programs (8.2%) were characterized as partially implemented or not fully developed.
- **Element 2** – Forty-nine (49) of forty-nine (49) State programs (100%) were characterized as fully implemented.
- **Element 3** – Forty-nine (49) of forty-nine (49) State programs (100%) were characterized as fully implemented.
- **Element 4** – Forty (40) of forty-nine (49) State programs (81.6%) were characterized as fully implemented. Nine (9) State programs (18.4%) were characterized as partially implemented or not fully developed.
- **Element 5** – Forty-seven (47) of forty-nine (49) State programs (95.9%) were characterized as fully implemented. Two (2) State programs (4.1%) were characterized as partially implemented or not fully developed.
- **Element 6** – Thirty (30) of forty-nine (49) State programs (61.2%) were characterized as fully implemented. Twelve (12) State programs (24.5%) were characterized as partially implemented or not fully developed. Six (6) State programs (12.2%) were characterized as having not implemented the program element. No information was available for the remaining one (1) program.
- **Element 7** – Thirty (30) of forty-nine (49) State programs (61.2%) were characterized as fully implemented. Ten (10) State programs (20.4%) were characterized as partially implemented or not fully developed. Nine (9) State programs (18.4%) were characterized as having not implemented the program element.

- **Element 8** – Forty-eight (48) of forty-nine (49) State programs (98%) were characterized as fully implemented. No information was available for the remaining one (1) program.
- **Element 9** – Thirty-two (32) of forty-nine (49) State programs (65.3%) were characterized as fully implemented. Sixteen (16) State programs (32.7%) were characterized as partially implemented or not fully developed. One (1) State program (2%) was characterized as having not implemented the program element.





One can see that Elements 4, 6, 7, and 9 are the areas that more States have not fully implemented. This may indicate where PHMSA and the States can focus more of their efforts to further enhance their damage prevention programs.

Variations in the levels of implementation can be attributed to many factors, including the subjective nature of the nine elements and many of the characterization tool (CT) criteria.

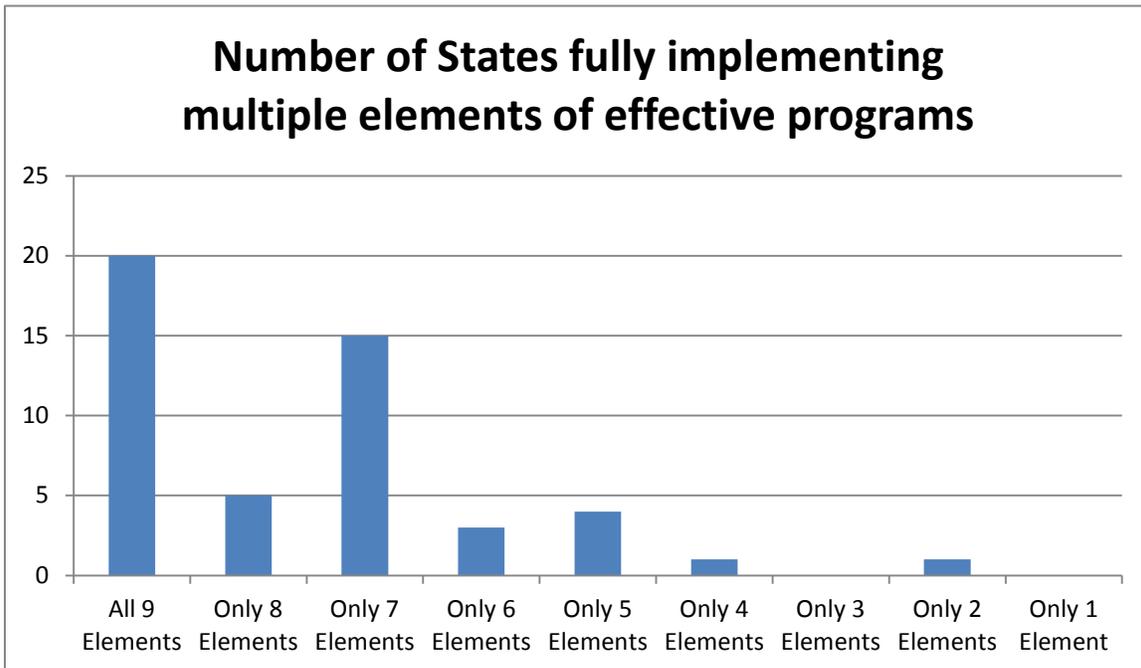
With a few exceptions, the stakeholders involved in the characterization discussions generally represented only the one-call centers covering the states and the State pipeline safety offices. The extent to which those representatives could respond for other stakeholder segments varied. The level of comfort of the participants in discussing the challenges to and the successes of their respective State damage prevention programs also varied somewhat, but generally the participants felt they could address the overall characterization of their respective State's damage prevention program.

In the 2014 CT, some criteria reflect the extent to which certain program element criteria are required by State law or regulation. In some cases, the stakeholder participants reported that some of these criteria were implemented, although not specifically addressed and required in State law or regulation. Before the next nine-element characterization exercise, PHMSA will thoroughly review the history and intent of the nine elements, and will review and make revisions to the CT as appropriate. If criteria are to be based on specific requirements in State law or regulations, those criteria may be better addressed by an analysis of State laws/regulations in advance of characterization discussions with stakeholders.

### Fully Implemented Programs

The following table and chart illustrate the numbers of States characterized as fully implementing multiple elements of the nine elements of effective programs.

Number of Elements Fully Implemented	Number of States Fully Implementing
9	20
8	5
7	15
6	3
5	4
4	1
2	1



### Element Criteria Analysis

PHMSA analyzed the results for the individual characterization criteria for each element. Many criteria were commonly considered implemented by the stakeholders. These include the identification of a statewide damage prevention champion and the establishment of regional damage prevention alliances, which are critical to successful statewide damage prevention programs, and are consistent with the concept that damage prevention is a shared responsibility among stakeholders. Criteria also commonly considered as implemented were those related to strong state pipeline safety damage prevention inspection programs pertaining to locator qualifications. Locator qualification and accurate locates are important in preventing underground facility damages. Other criteria showing strong implementation address statewide damage prevention public education programs that include key messages, and one-

call centers offering electronic ticket entry for excavators and secure internet web service for facility owners.

Conversely, some criteria were commonly considered least implemented by the participating stakeholders. Required reporting of damages or near misses by facility owners, excavators and locators to the Common Ground Alliance Damage Information Reporting Tool (DIRT) or equivalent was not widely reported as implemented. This is notable, because data collection that includes root causes of damages and near-miss events is essential to understanding the damage prevention landscape and addressing gaps. PHMSA strongly encourages stakeholders to consider the incorporation of data collection and analysis into all State damage prevention programs. Also commonly considered as not fully implemented are criteria related to clearly defined dispute resolution processes within the States, and State enforcement programs that incorporate both civil penalties and alternative incentives (such as training) to achieve compliance. [Under docket PHMSA–2009–0192, PHMSA is proposing a rule](#) to encourage State stakeholders to implement damage prevention law enforcement programs. Other criteria most commonly not implemented address the requirement for excavators to notify the facility operator directly or through the one-call center if an underground facility is not found where one has been marked, and the requirement for excavators discovering or causing damage to a pipeline facility to notify the one-call center.

### **Element 1: Effective Communications.**

Forty-five states were characterized as “fully implemented”, with the remainder characterized as “partially implemented/not fully developed”. Nineteen criteria were included in the characterization tool (CT) for this element. Of those:

- Criteria most implemented
  - Excavators must observe a tolerance zone comprised of the width of the underground facility plus a minimum of 18 inches on either side of the outside edge of the facility on a horizontal plane. When excavation is to take place within the specified tolerance zone, the excavator must exercise such reasonable care as may be necessary
  - The one-call center requires that member facility operators provide the one-call center with mapping data to allow proper notification of planned excavation activities near each facility operator’s infrastructure.
  - The one-call center can accept excavation notifications / locate requests any time of the day or night, every day of the year.
- Criteria least implemented
  - State law/regulation requires that an excavator discovering or causing damage to a pipeline facility notify the *one-call center*.

- State law/regulation requires excavators to notify the facility operator directly or through the one-call center if an underground facility is not found where one has been marked.
- State law/regulation requires the use of a uniform set of marking symbols.

**Element 2: Comprehensive Stakeholder Support.**

All states were characterized as “fully implemented”. Five criteria were included in the CT for this element. Of those:

- Criteria most implemented
  - There is a prominent and recognizable damage prevention program champion (organization or person) leading an effort to improve the damage prevention program in the state.
  - There is at least one Regional Common Ground Alliance (or equivalent organization) active in the state.
- Criteria least implemented
  - State law/regulation exempts few facility operators at most from one-call membership. One-call membership exemptions are justified with documented data.

**Element 3: Operator Internal Performance Measures.**

All states were characterized as “fully implemented”. Seven criteria were included in the CT for this element. Of those:

- Criteria most implemented
  - During inspections of jurisdictional pipeline operators, the State pipeline safety agency reviews each operator’s locating and excavating procedures for compliance with Federal and State laws/regulations.
  - During inspections of jurisdictional pipeline operators, the State pipeline safety agency examines samples of records to determine if facility locates are being made accurately and within the timeframes required by Federal and State laws/regulations.
  - The State pipeline safety agency promptly addresses deficiencies in pipeline operators’ performance monitoring programs for locators.
- Criteria least implemented
  - Gas distribution service lines are located and marked in response to locate requests to operators that use the service lines in business to derive revenue by providing a product or service to an end-use customer via the service line.

**Element 4: Effective Employee Training.**

Forty states were characterized as “fully implemented”, with the remainder characterized as “partially implemented/not fully developed”. Five criteria were included in the characterization tool for this element. Of those:

- Criteria most implemented
  - Damage prevention training programs, whether through a statewide collaborate effort or independently for operators, excavators, and locators, are open to enable and receive input from other stakeholders into the design, development and implementation of those training programs.
- Criteria least implemented
  - Damage prevention training programs for operators, excavators, and locators are tailored to consider available data trends relative to performance, complaints, near misses, or damage incidents, and if necessary, in response to specific incidents.

#### **Element 5: Public Education.**

Forty-seven states were characterized as “fully implemented”, with the remainder characterized as “partially implemented/not fully developed”. Five criteria were included in the CT for this element. Of those:

- Criteria most implemented
  - Statewide damage prevention education efforts include at a minimum the following key messages: Call 811 before you dig; Wait the required time; locate accurately; and, Dig with care.
- Criteria least implemented
  - Statewide damage prevention education efforts include structured annual or biennial (every two years) measurement(s) to gauge success and/or needed improvements.

#### **Element 6: Dispute Resolution.**

Thirty states were characterized as “fully implemented”; twelve states as “partially implemented/not fully developed”; and six states as “not implemented”. Four criteria were included in the CT for this element. Of those:

- Criteria most implemented
  - A designated State authority has a clearly defined role as a partner and facilitator in addressing damage prevention policy and programmatic issues.
- Criteria least implemented
  - The State damage prevention program has a clearly defined dispute resolution process.

### **Element 7: Enforcement.**

Thirty states were characterized as “fully implemented”; ten states as “partially implemented/not fully developed”; and nine states as “not implemented”. Thirteen criteria were included in the CT for this element. Of those:

- **Criteria most implemented**
  - The State enforcement program includes provisions for civil penalties for violations of the State damage prevention law/regulations
  - The civil penalty system is structured so that pipeline operators and excavators are held equally accountable
- **Criteria least implemented**
  - The State enforcement authority uses other incentives, such as performance and education credits, in addition to civil penalties to encourage compliance to the State damage prevention
  - Anytime pipeline damage is reported, the State enforcement authority is required to perform an investigation, which may include on-site work or submission of documentation by the affected parties. This is to determine not only the responsible party but also the root cause of the damage.
  - The State enforcement authority has the resources to respond to notifications of alleged violations in a timely manner.
  - The State enforcement authority collects and makes available to interested parties annual statistics on the numbers of incidents, investigations, enforcement actions, proposed penalties, and collected penalties.

### **Element 8: Technology.**

Forty-eight states were characterized as “fully implemented” and one state as “no information/not applicable”. Seven criteria were included in the CT for this element. Of those:

- **Criteria most implemented**
  - The one-call center provides users a means of direct, electronic ticket entry for a locate request that maintains comparable ticket quality to an operator-assisted entry.
  - The one-call center provides a method by which a member operator can receive excavation notifications through a secure internet web service that uses an accepted standard for its ticket format, such as Extensible Markup Language (XML) 1.0.
- **Criteria least implemented**

- Implementation and use of improved technology is generally tailored to data trends relative to performance, complaints, near misses or damage incidents and, if necessary, in response to specific incidents.

**Element 9: Enforcement.**

Thirty-two states were characterized as “fully implemented”; sixteen states as “partially implemented/not fully developed”; and one state as “not implemented”. Seven criteria were included in the characterization tool for this element. Of those:

- Question most implemented
  - Performance standards are established and monitored for the operation of the one-call center, including average speed of answer, abandoned call rate, busy signal rate, customer satisfaction, locate request quality, and notification delivery and other appropriate metrics.
- Questions least implemented
  - State law/regulation requires facility operators, locators, and excavators to report to the CGA Damage Information Reporting Tool (DIRT) or equivalent, information on incidents that could have or did lead to a damaged pipeline facility.