



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



PHMSA's Damage Prevention Assistance Program



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Know what's below.
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Presentation Overview

- PHMSA's perspective on damage prevention
- Variability in state damage prevention programs
 - The damage prevention landscape
 - Characterizing state damage prevention programs
- PHMSA's damage prevention initiatives
- State Damage Prevention and Technical Assistance Grants
- PHMSA Role in the Virginia Pilot Project





Damage Prevention --PHMSA's Perspective--

- PHMSA's focus is pipelines, but...
- Damage prevention for pipelines is damage prevention for all utilities – damage prevention takes place on our common ground
- All stakeholders must be involved
- The elements of effective damage prevention program are spelled out in the PIPES Act of 2006 – “The 9 Elements”
- Effective, comprehensive state damage prevention programs, *including effective enforcement*, improve public safety, environmental protection, and the integrity of the nation's pipeline network
- Virginia's damage prevention program is strong





Why Does PHMSA Care?

- Excavation damage is the leading cause of “significant” pipeline incidents (causing injury or fatality)
 - In 2007, excavation damages caused 20% of pipeline incidents
 - These incidents resulted in 4 fatalities, 10 injuries, and \$19.8M in damages*
- Excavation damage impacts all other underground utilities, causing service outages, affecting lives, and costing untold millions of dollars

* Source: PHMSA Significant Incidents Files April 14, 2008



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Pipelines in the United States

- **Over two million miles of pipelines in the U.S. (enough to circle the earth 83 times)**
 - 170,000 miles of hazardous liquid pipelines
 - 295,220 miles of gas transmission pipelines
 - 1,900,000 miles of natural gas distribution pipelines
 - 109 LNG plants connected to our natural gas transmission and distribution systems
 - Propane distribution pipelines
- **These pipelines are operated by more than 3,000 companies, large and small**
- **Natural gas provides 24% of U.S. total energy consumption; petroleum provides another 39%**





Variability in State Damage Prevention Programs

- **Damage prevention is a shared responsibility, but damage prevention is largely executed at state and local levels**
- **There is considerable variability between the provisions of state damage prevention laws...**





OCSI One-Call Laws Summary

One Call Laws Summary/State One Calls Laws & Provisions

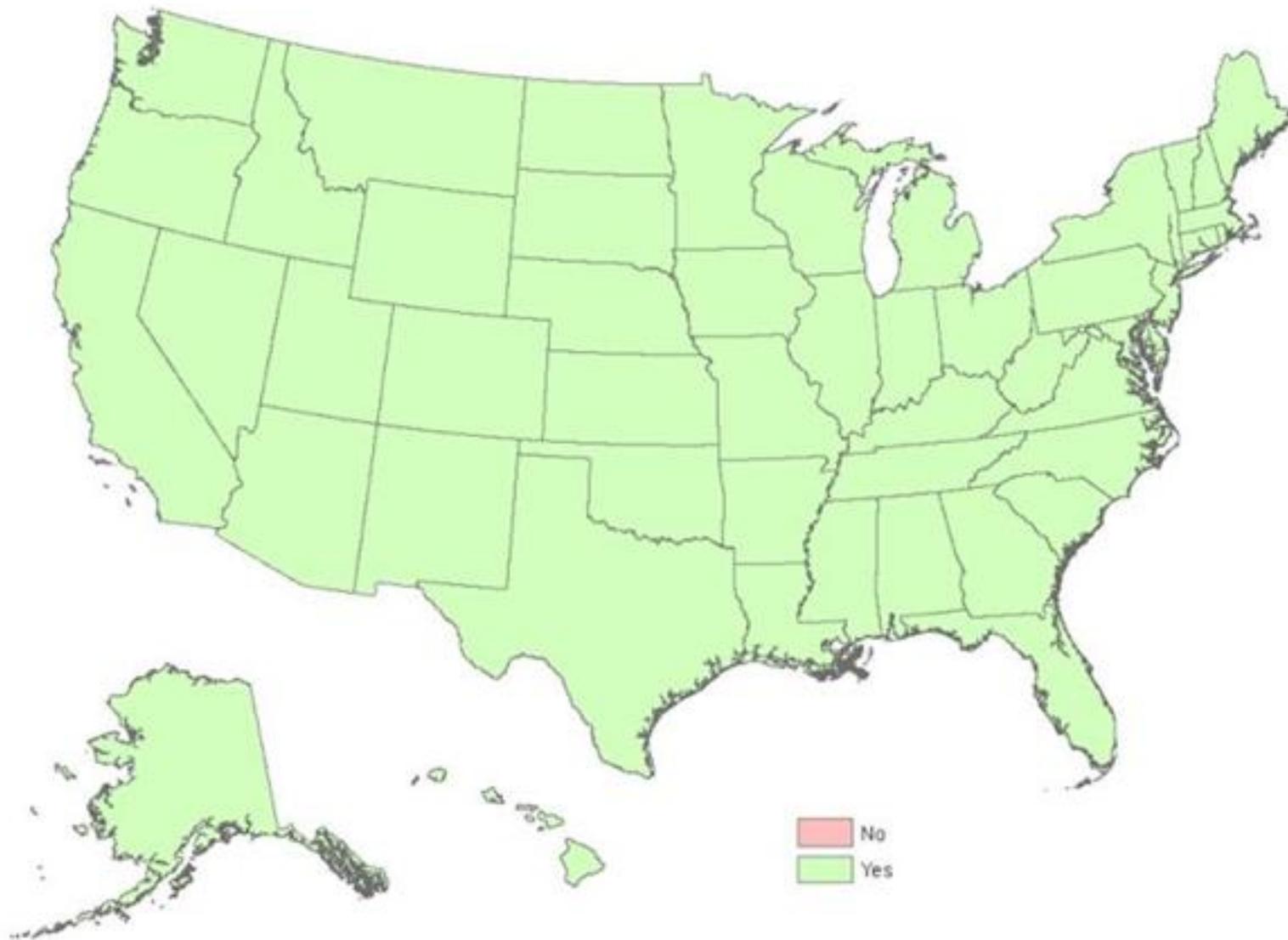
State	State Legislation	Coverage / Statewide	Mandatory Membership	Civil Penalties	Tolerance Zone	Hand Dig Clause	Mandatory Premark	Emergency Clause	Positive Response	Excavator Permit Issued	Damage Reporting	Definitions of Exemptions:				
	DOT	Dpth	H/O	R/R	AGR											
Alabama	✓	✓	●	✓	18"	✓	●	✓	✓	●	●	✓	12"	✓	✓	✓
Alaska	✓	✓	●	✓	24"	●	●	✓	●	●	●	●	●	●	●	●
Arizona	✓	✓	✓	✓	24"	✓	●	✓	✓	●	●	●	●	●	●	✓
Arkansas	✓	✓	✓	●	18"	✓	●	✓	✓	●	●	✓	●	●	●	✓
California	✓	●	✓	✓	24"	✓	✓	✓	✓	✓	●	✓	●	✓	●	●
Colorado	✓	✓	✓	✓	18"	●	●	✓	✓	●	✓	✓	●	●	✓	✓
Connecticut	✓	✓	✓	✓	18"	✓	✓	✓	✓	●	✓	●	●	●	●	✓
Delaware	✓	✓	✓	✓	24"	✓	●	✓	✓	●	●	●	●	✓	●	●
Dist. of Columbia	✓	✓	✓	✓	18"	✓	●	✓	✓	●	●	●	●	●	●	●

Source: 2009-2010 OCSI Resource Guide (p. 19)



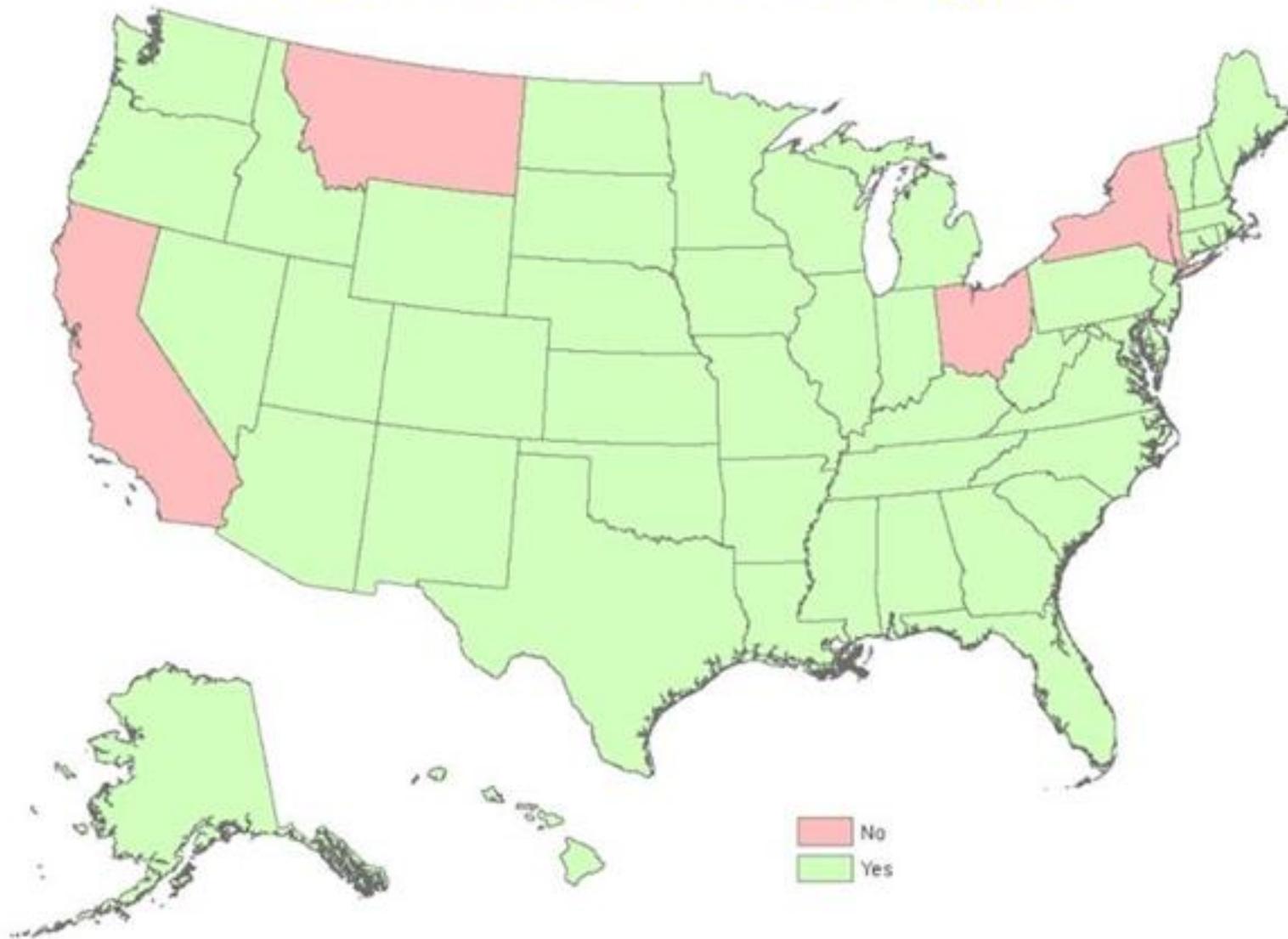
Know what's below.
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All States Have a DP Law



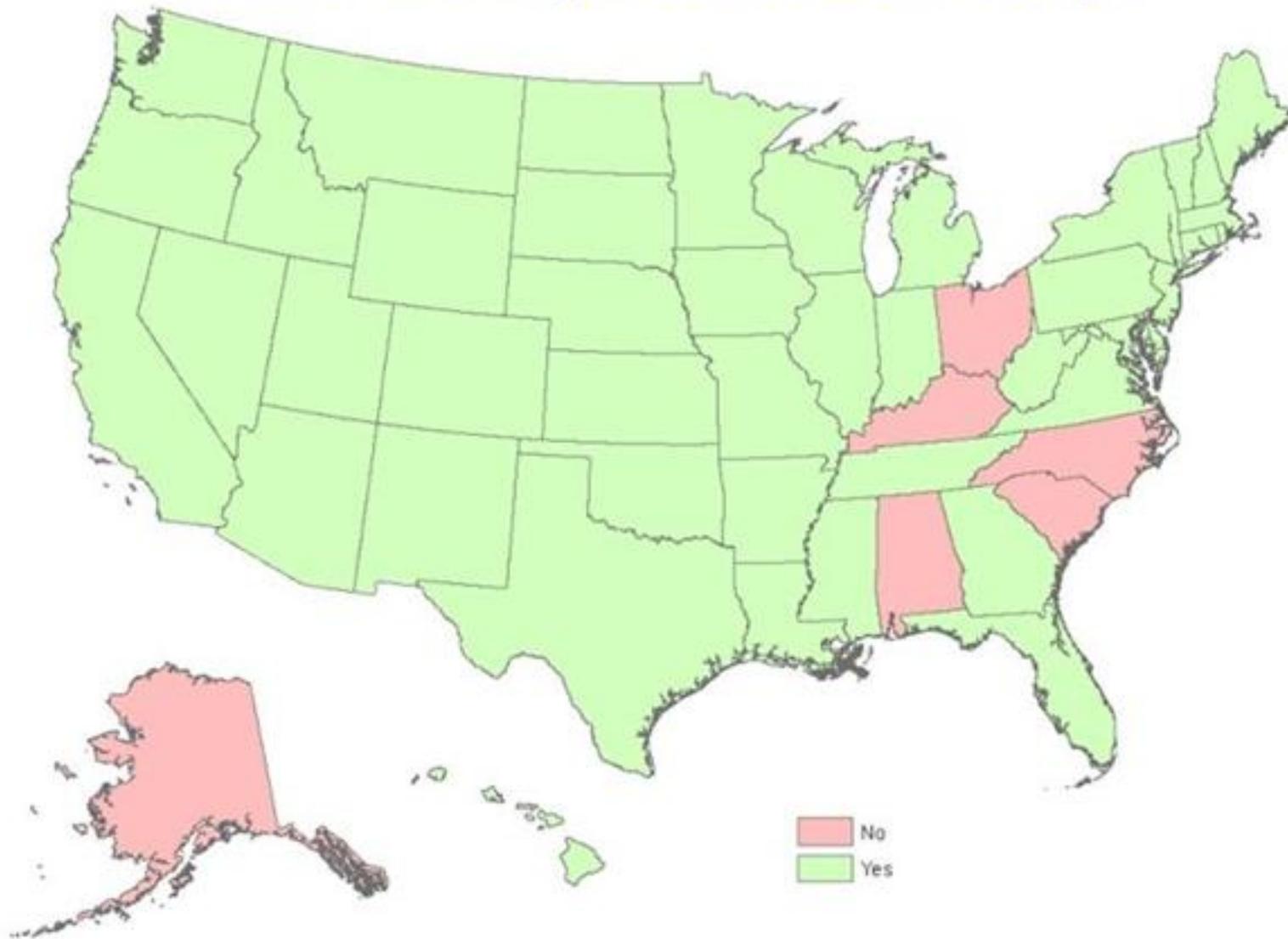
Source: One-Call Systems International Committee of the Common Ground Alliance

Statewide Coverage?



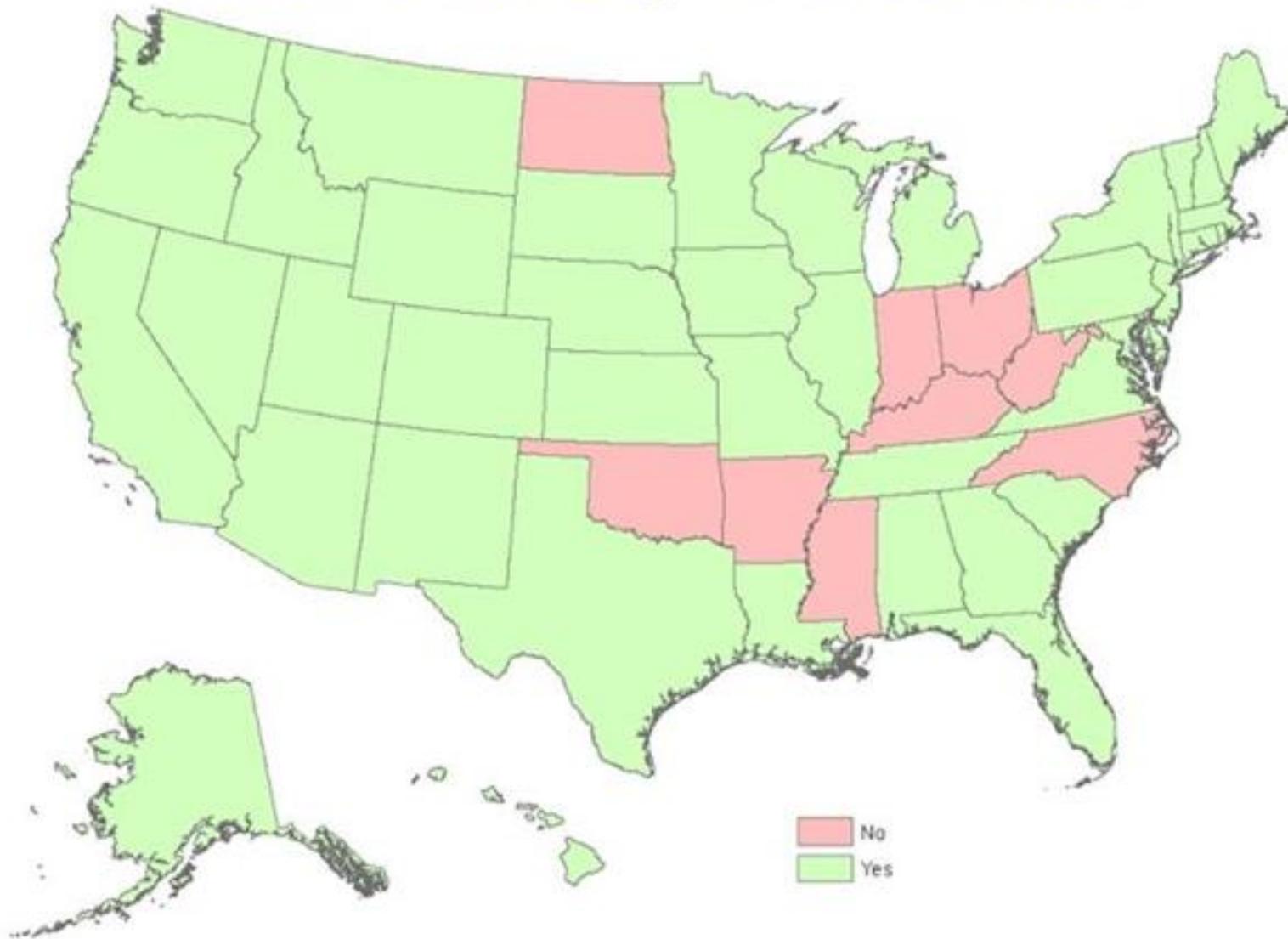
Source: One-Call Systems International Committee of the Common Ground Alliance

Mandatory Membership?



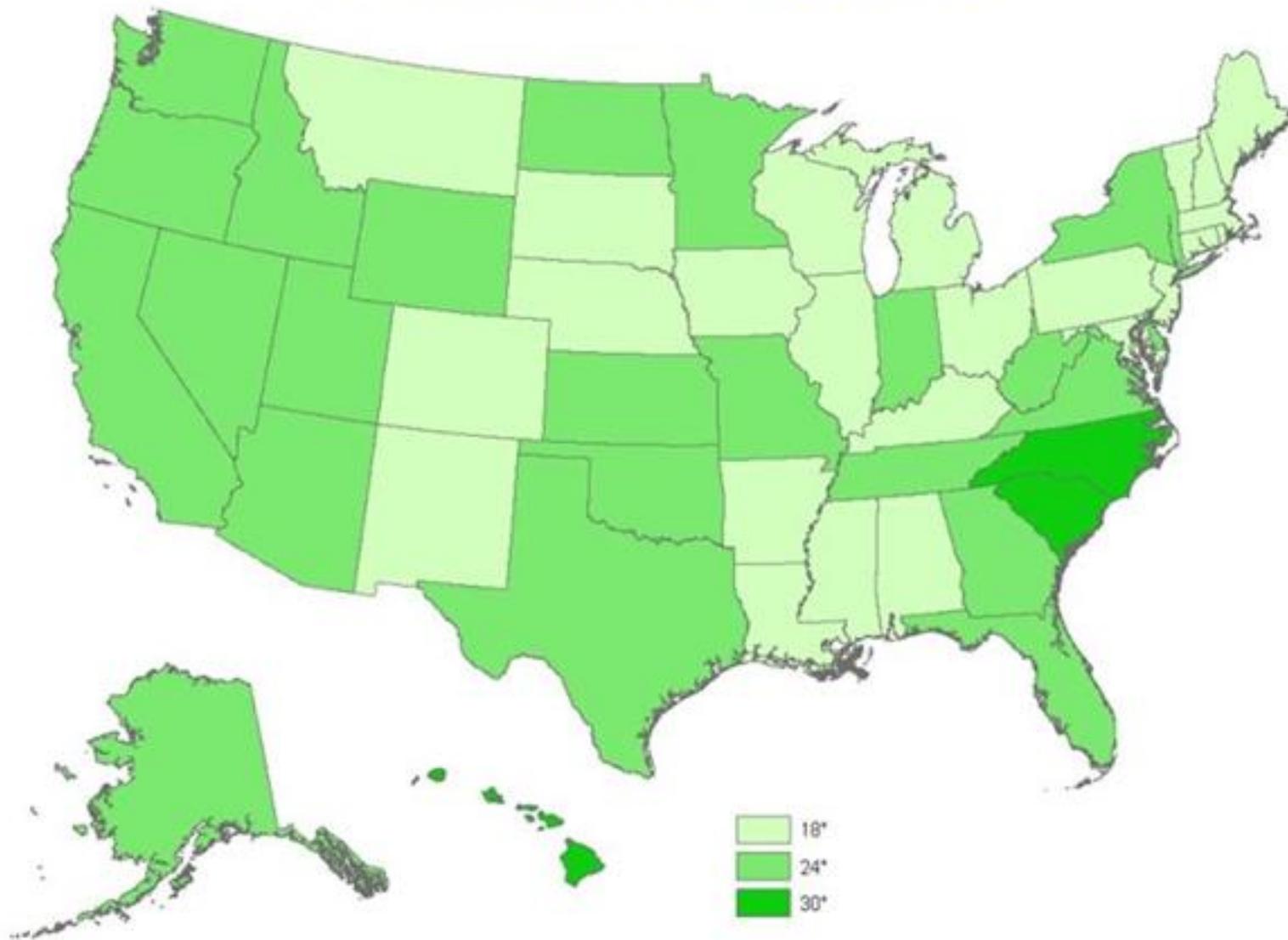
Source: One-Call Systems International Committee of the Common Ground Alliance

Civil Penalty Provision?



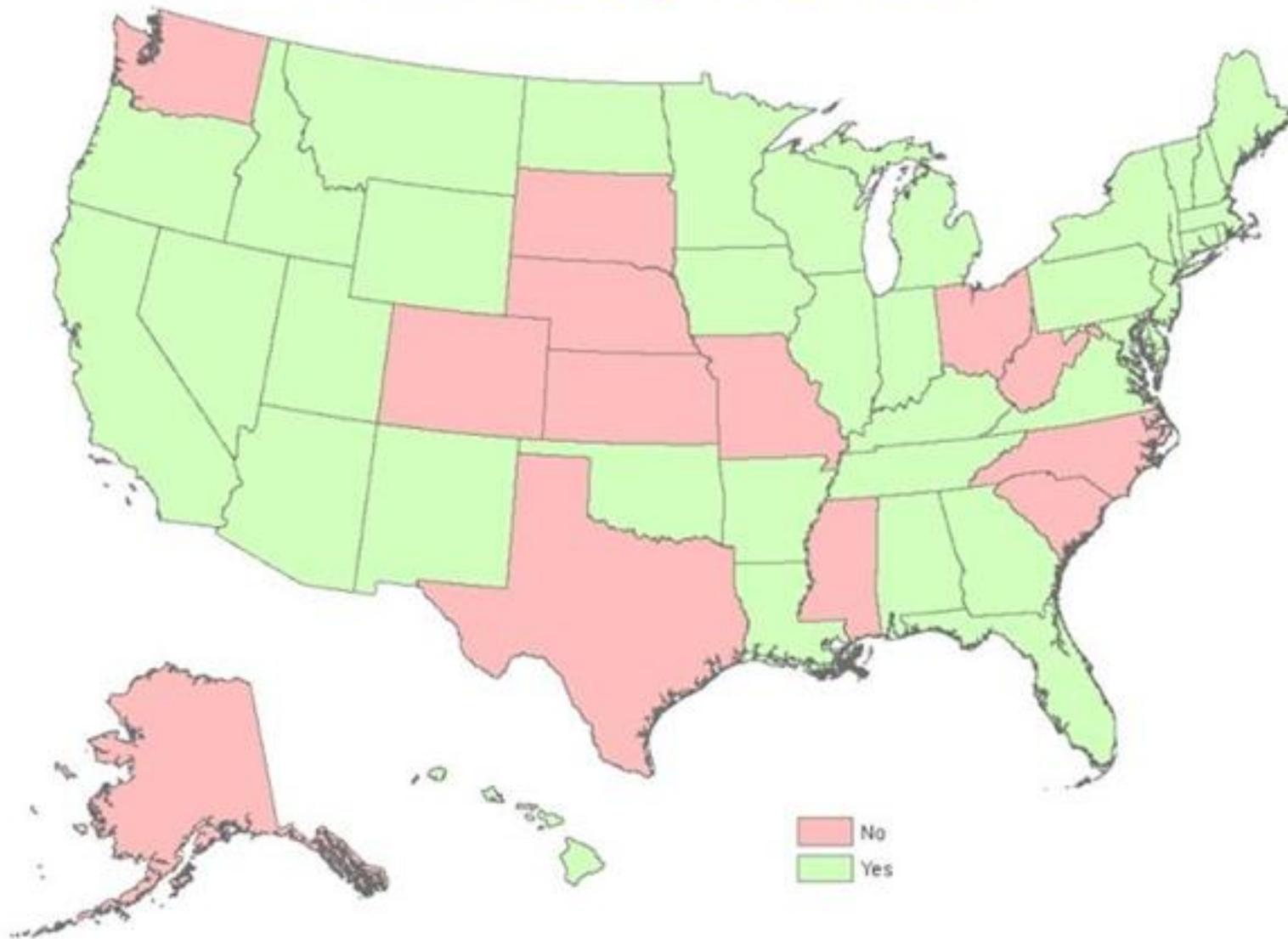
Source: One-Call Systems International Committee of the Common Ground Alliance

Tolerance Zones



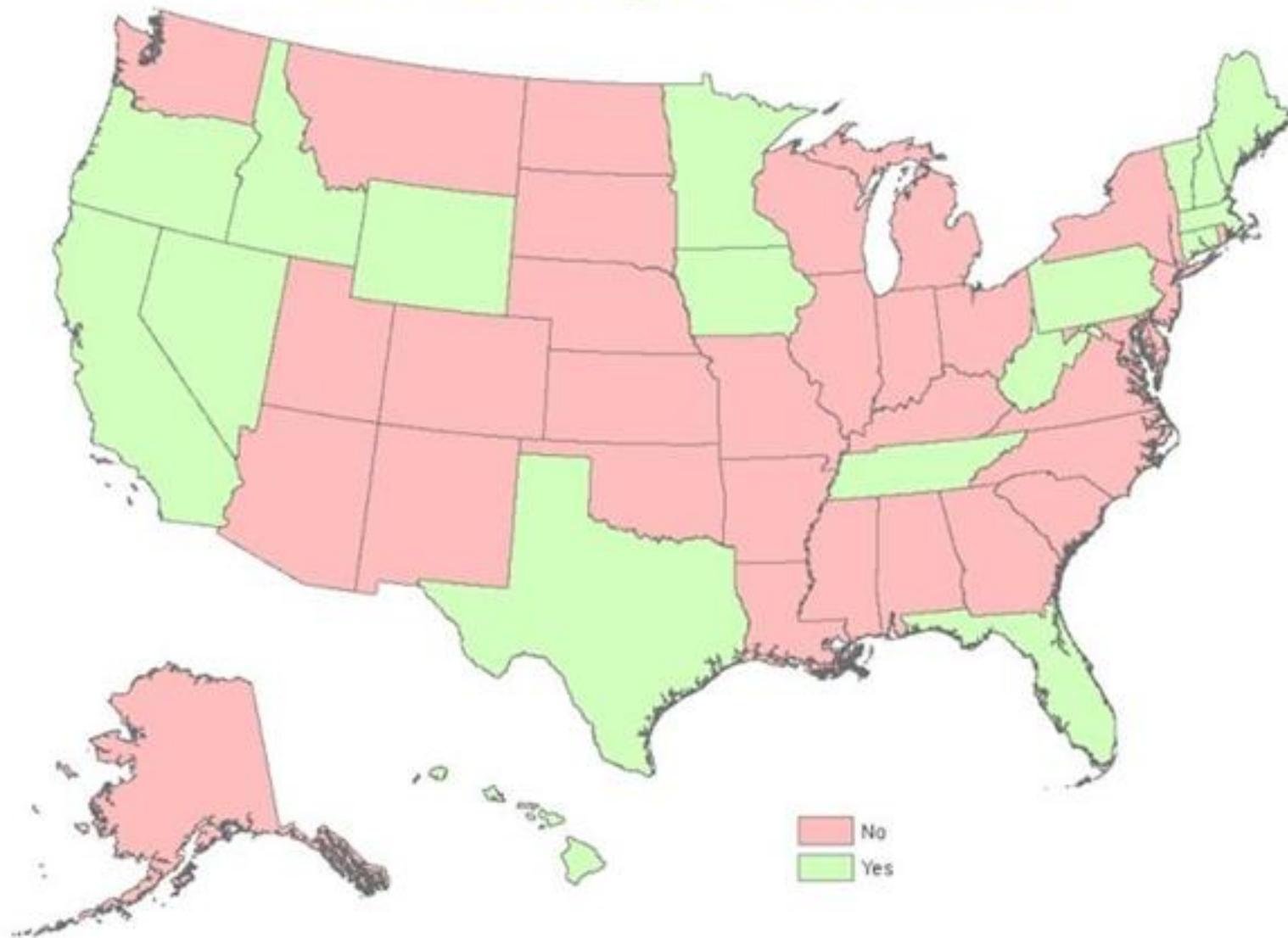
Source: One-Call Systems International Committee of the Common Ground Alliance

Hand Dig Clause?



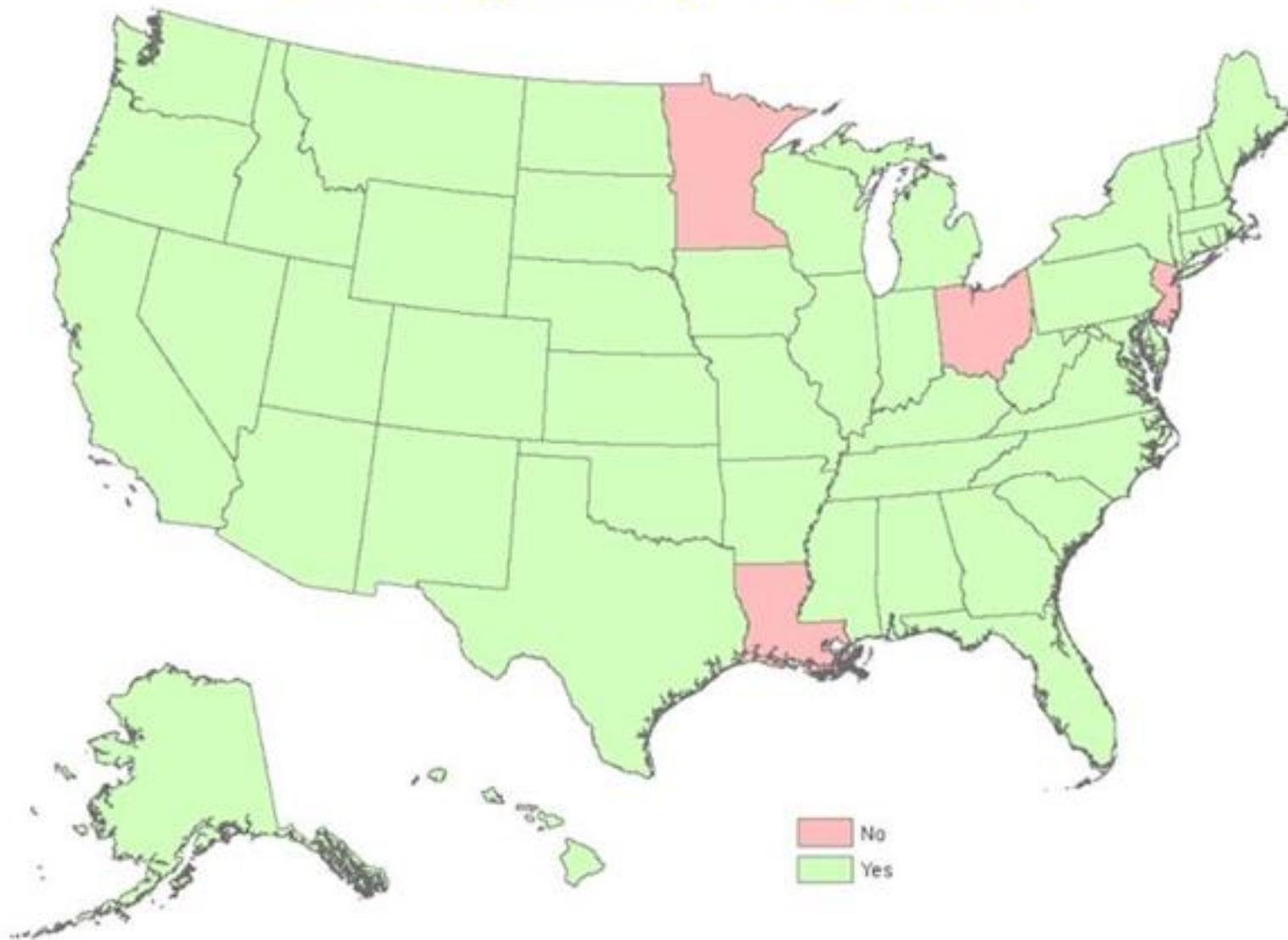
Source: One-Call Systems International Committee of the Common Ground Alliance

Mandatory Premark?



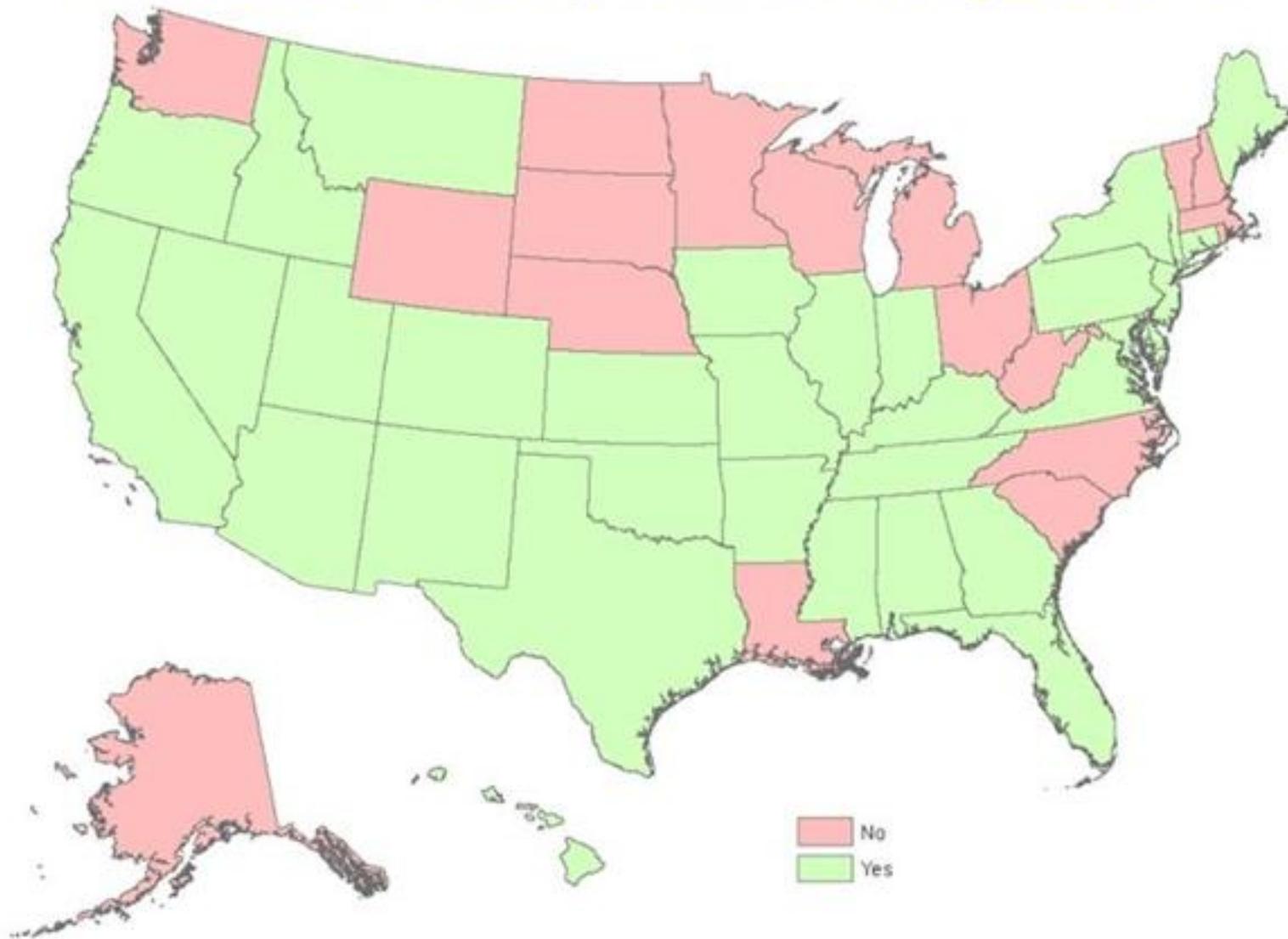
Source: One-Call Systems International Committee of the Common Ground Alliance

Emergency Clause?



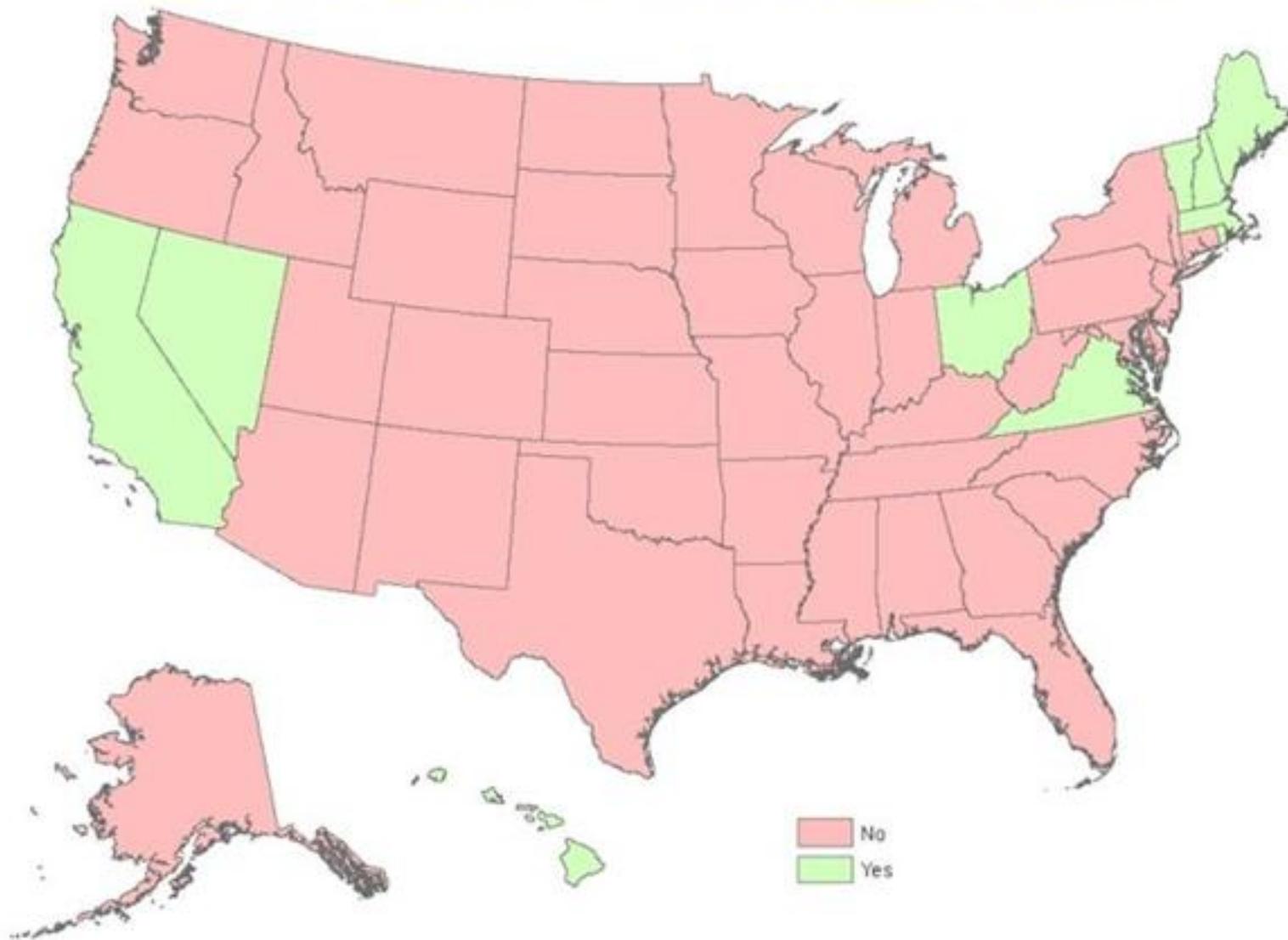
Source: One-Call Systems International Committee of the Common Ground Alliance

Positive Response Required?



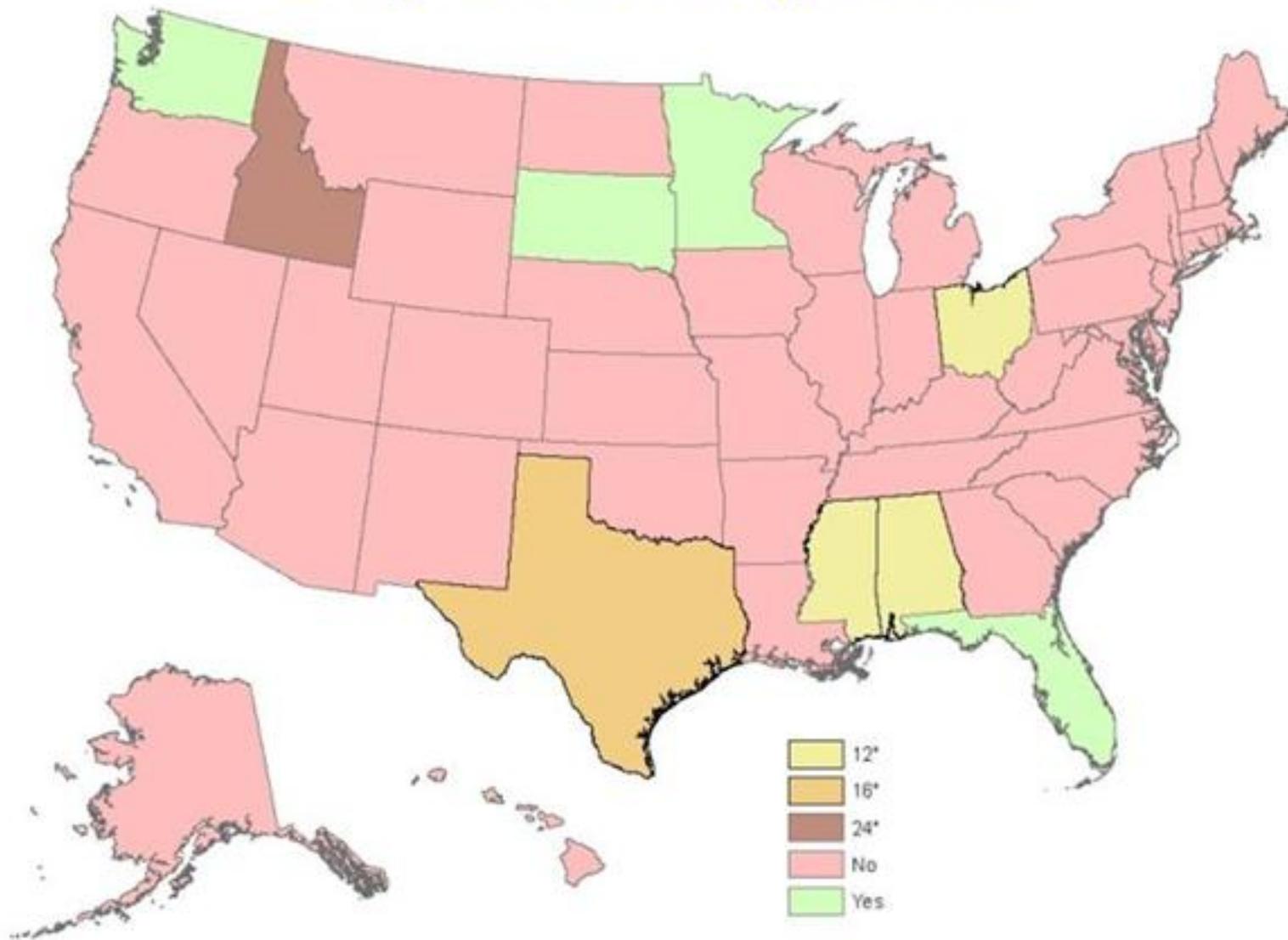
Source: One-Call Systems International Committee of the Common Ground Alliance

Excavator Permit Issued?



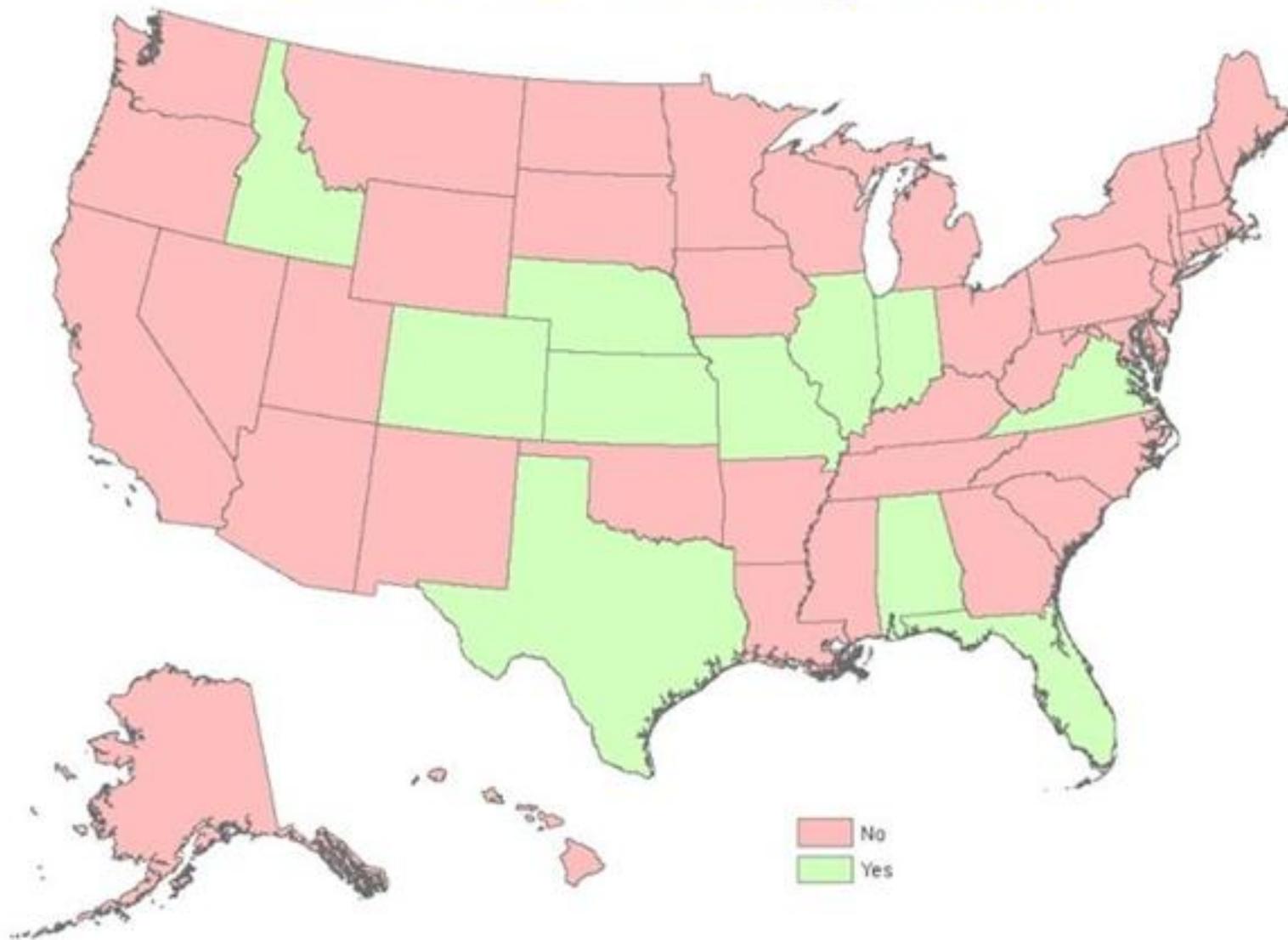
Source: One-Call Systems International Committee of the Common Ground Alliance

Depth Exemption?



Source: One-Call Systems International Committee of the Common Ground Alliance

Railroad Exemption?



Source: One-Call Systems International Committee of the Common Ground Alliance



Damage Prevention Landscape: The Next Step

- OCSI data/maps demonstrate the variability that exists in state damage prevention laws
- PHMSA is further documenting state damage prevention programs
- PHMSA's goal is to characterize state damage prevention programs compared to the 9 elements of effective damage prevention programs
 - Document degree of implementation of nine elements within state programs
 - Identify areas where PHMSA can help
 - Show results from PHMSA's Damage Prevention Assistance Program





Guiding Principles of the DPAP: The 9 Elements

Defined in the PIPES Act of 2006

1. **Effective communication between operators and excavators from excavation notification to completion of excavation**
2. **Fostering support and partnership of all stakeholders**
3. **Operators' use of 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 to improve the locating process**
9. **Data analysis to continually improve program effectiveness**



Know what's below.
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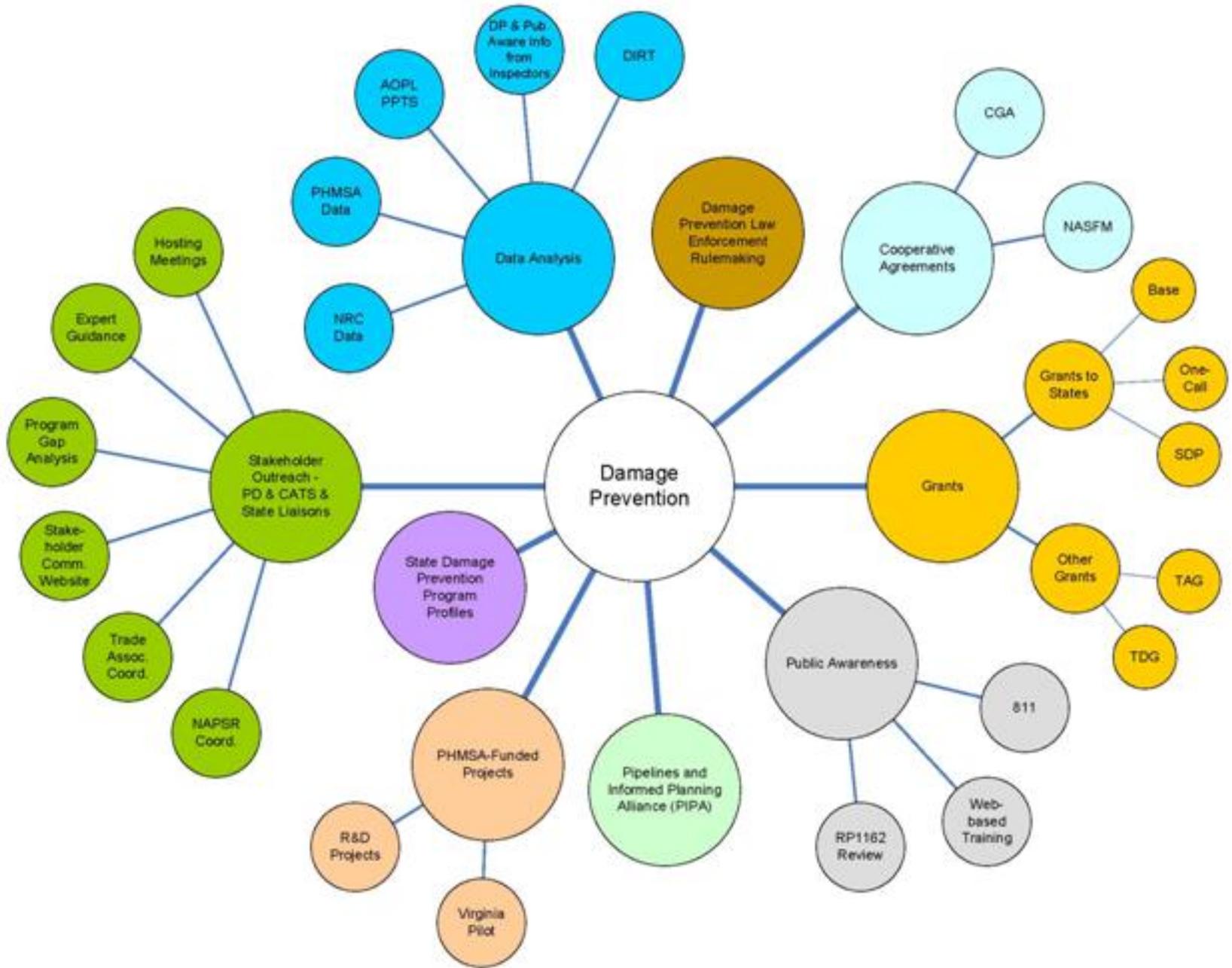
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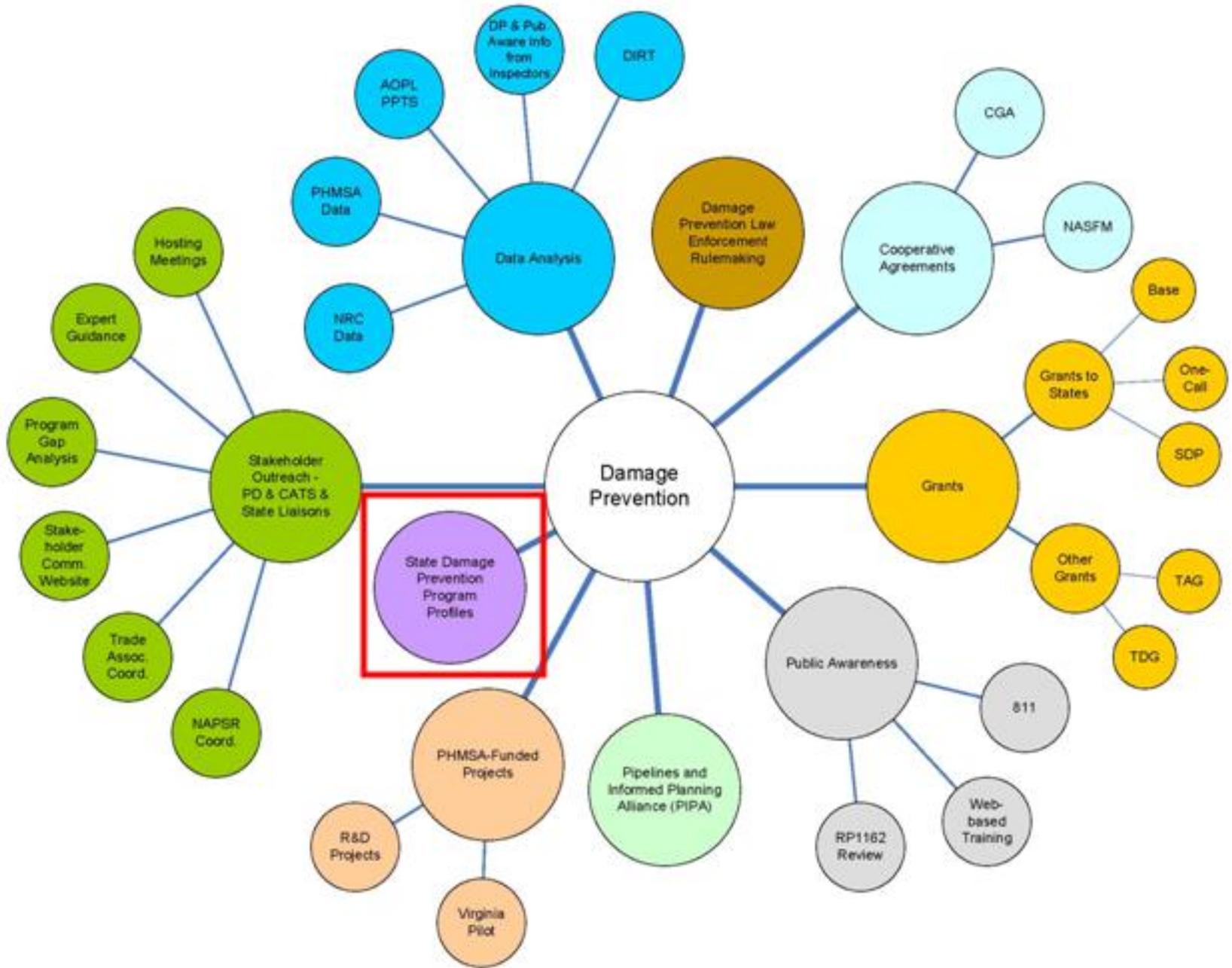
PHMSA's Damage Prevention Initiatives

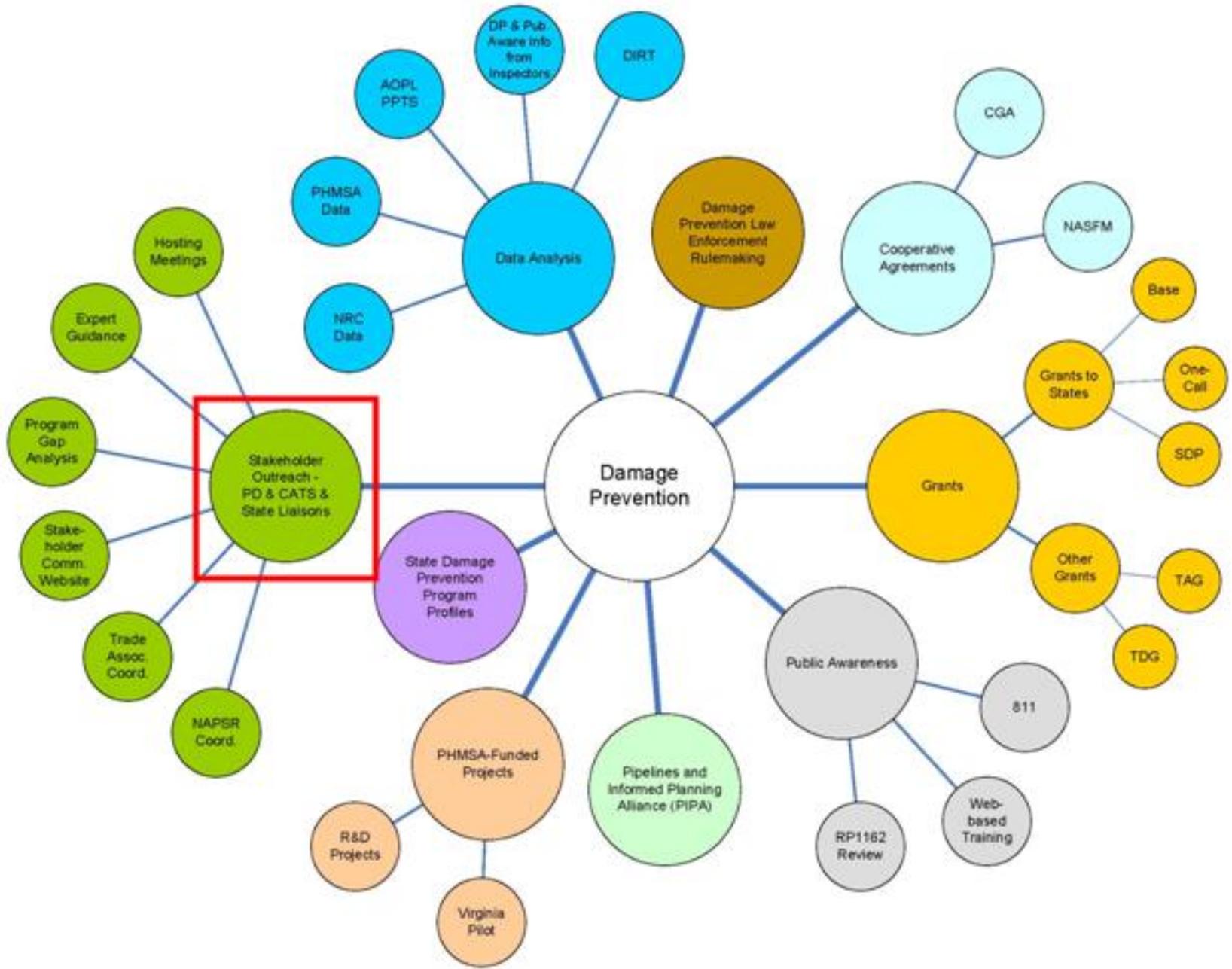


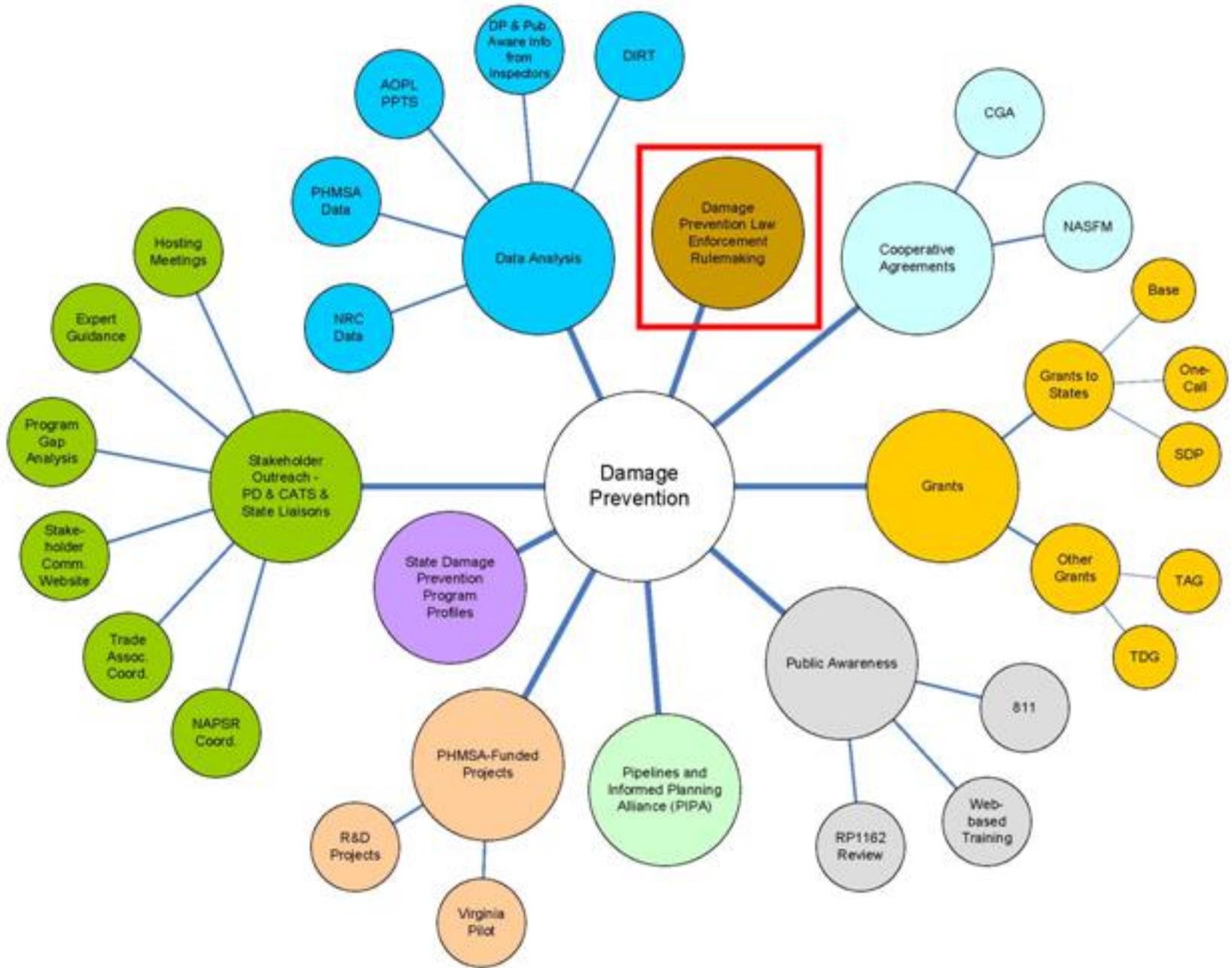
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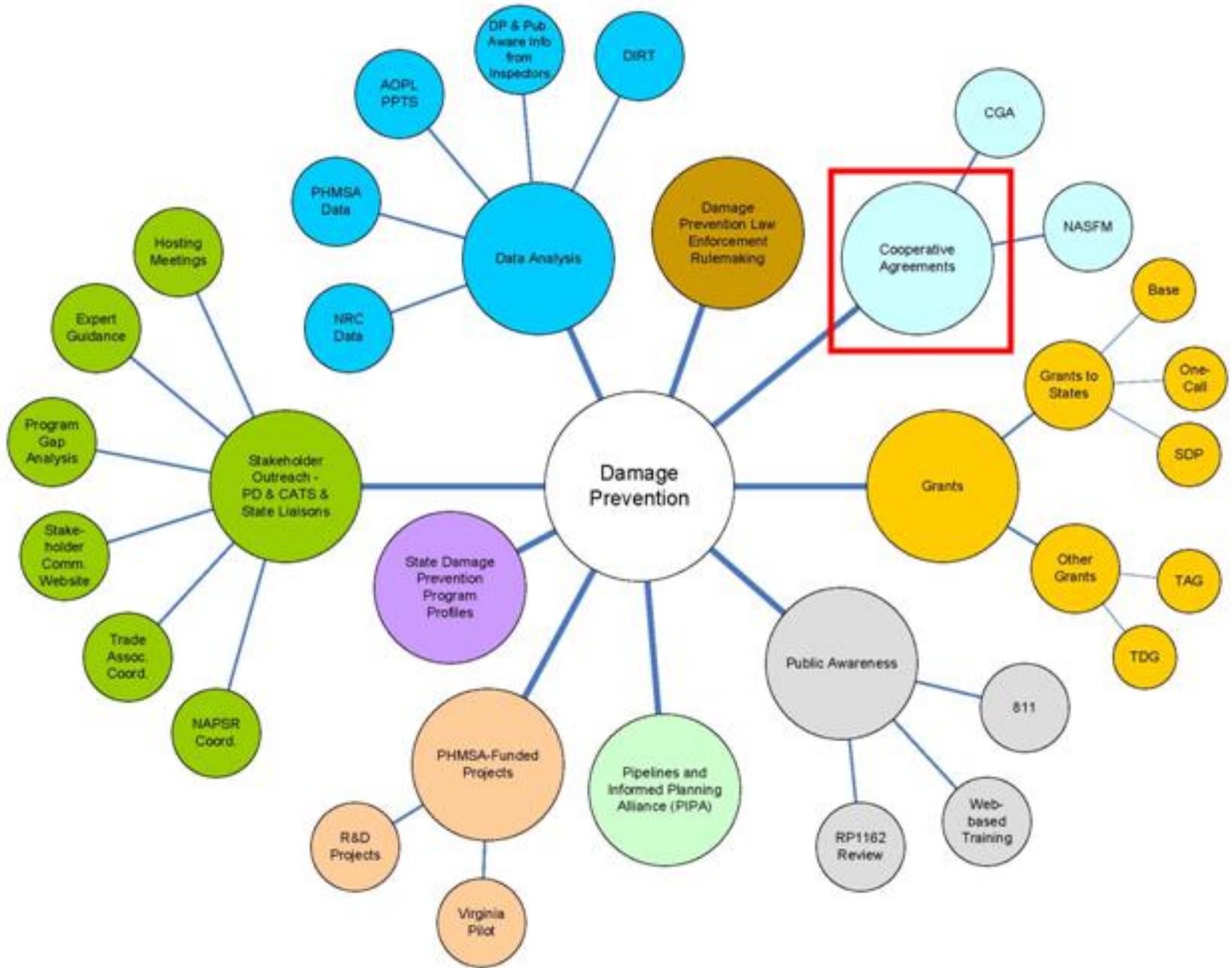


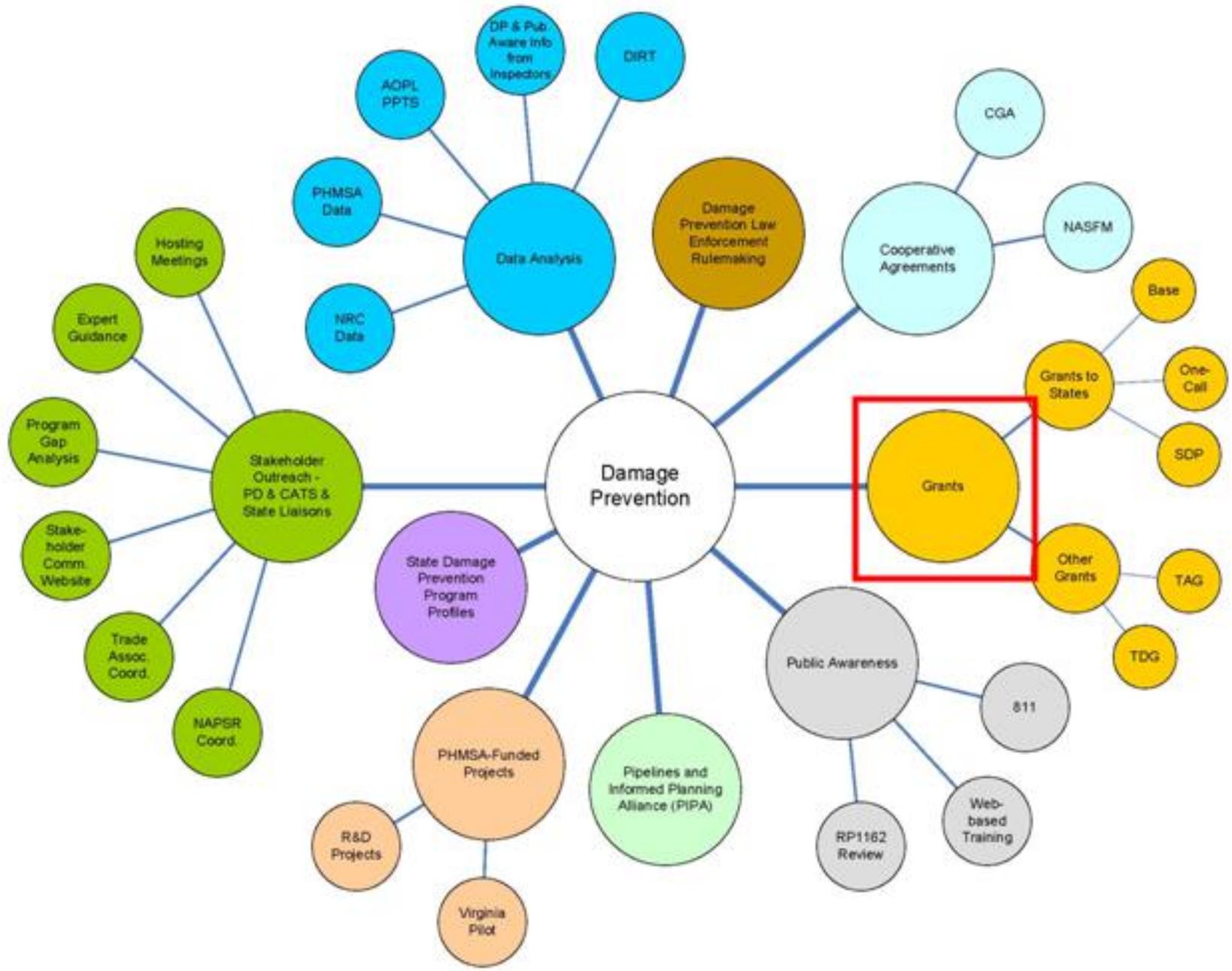
<http://primis.phmsa.dot.gov/comm/DamagePrevention.htm>



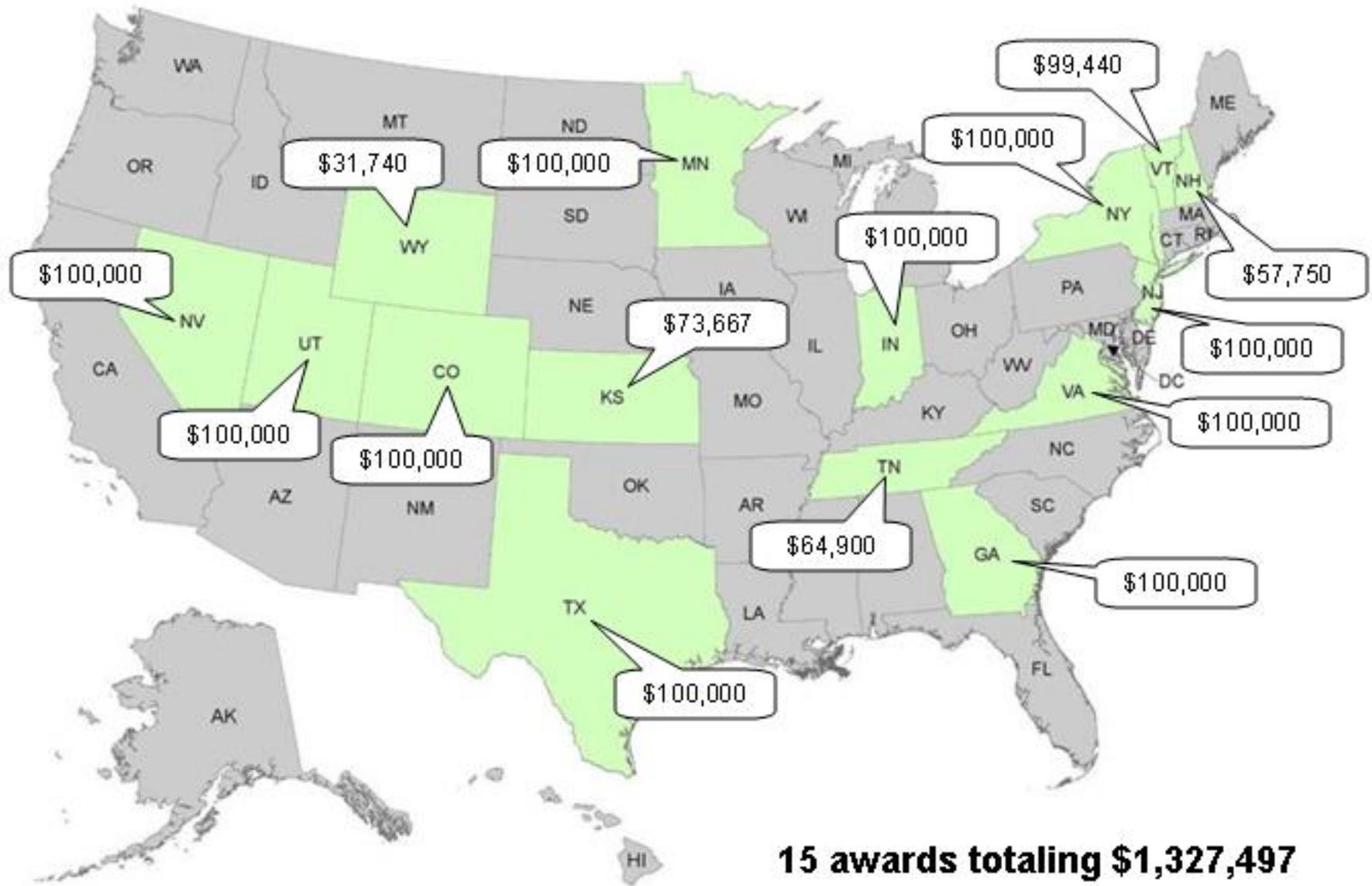




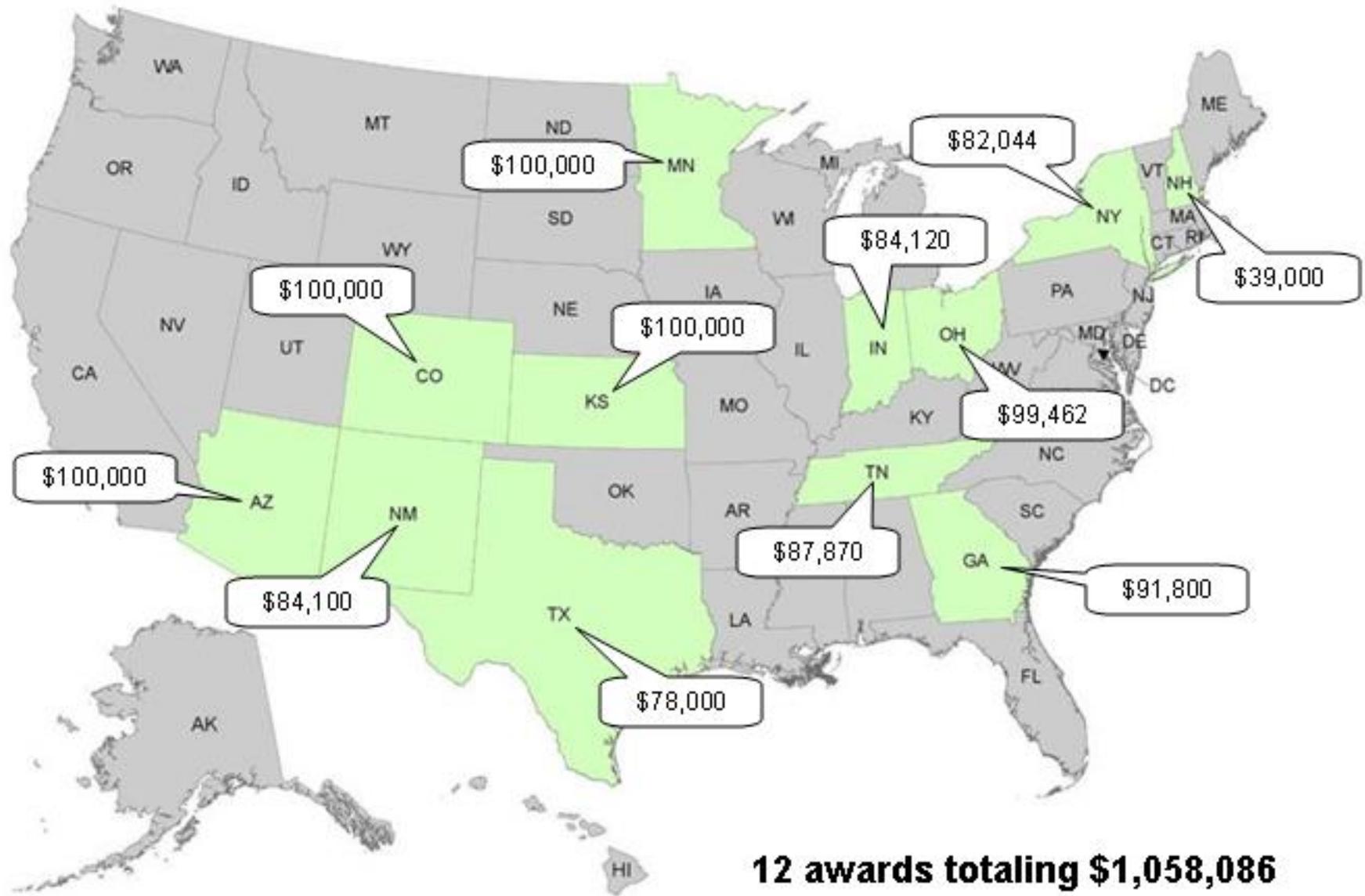




CY 2008 SDP Grant Recipients



CY 2009 SDP Grant Recipients





Pipeline Safety Information Grants to Communities; AKA Technical Assistance Grants (TAGs)



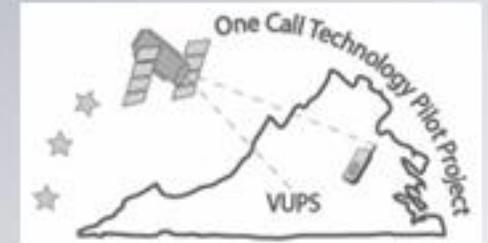
- Authorized by PIPES Act (49 U.S.C. § 60130)
- \$1M budgeted for 2009; \$50,000 maximum award to a community or pipeline safety non-profit
- First three grants must be “demonstration” grants
- Goal is to fund exploration of engineering and other scientific analysis of pipeline safety issues, including the promotion of public participation in official proceedings
- Awardees must make findings available to relevant operators and foster open communication between interested parties
- Solicitation closes May 29, 2009





PHMSA's Role in the Virginia Pilot Project

- Using GPS to enhance whitelining, locating, and excavation processes
- PHMSA has provided \$100,000 through 2008 State Damage Prevention grant and \$150,000 through CGA
- PHMSA participates on project steering committee and technical project team
- Partnership with Williams Gas Pipeline
- PHMSA is encouraged by the results of the project and is very interested in seeing the use of the technology expand to other state programs





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Thank You

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

Questions?



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