

# NEW HAMPSHIRE

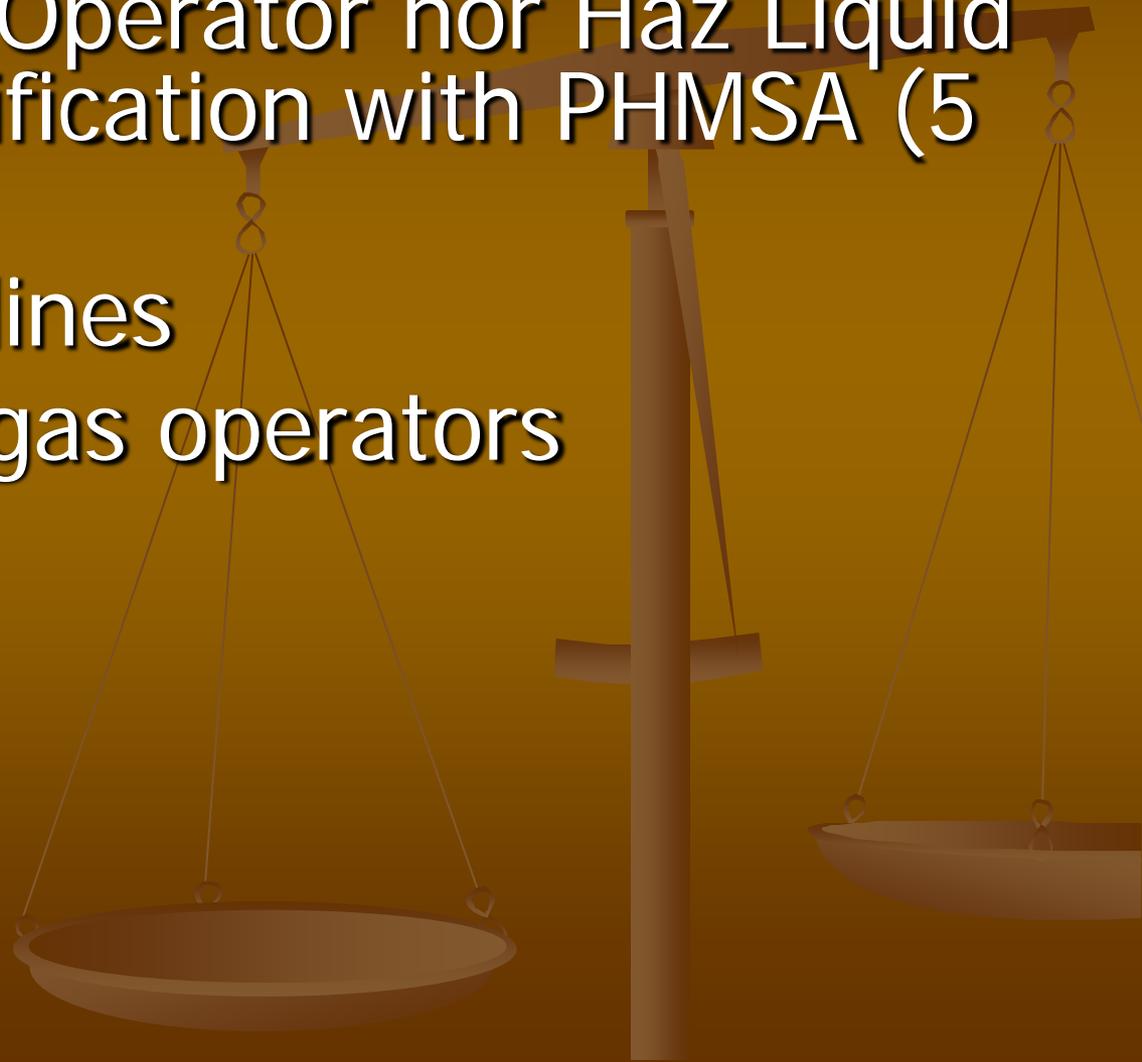
**October 22, 2014  
Annual Seminar New England  
Pipeline Safety Representatives  
Portsmouth, New Hampshire**



**Randy Knepper  
Director of Safety, NHPUC**

# Basic New Hampshire Stats

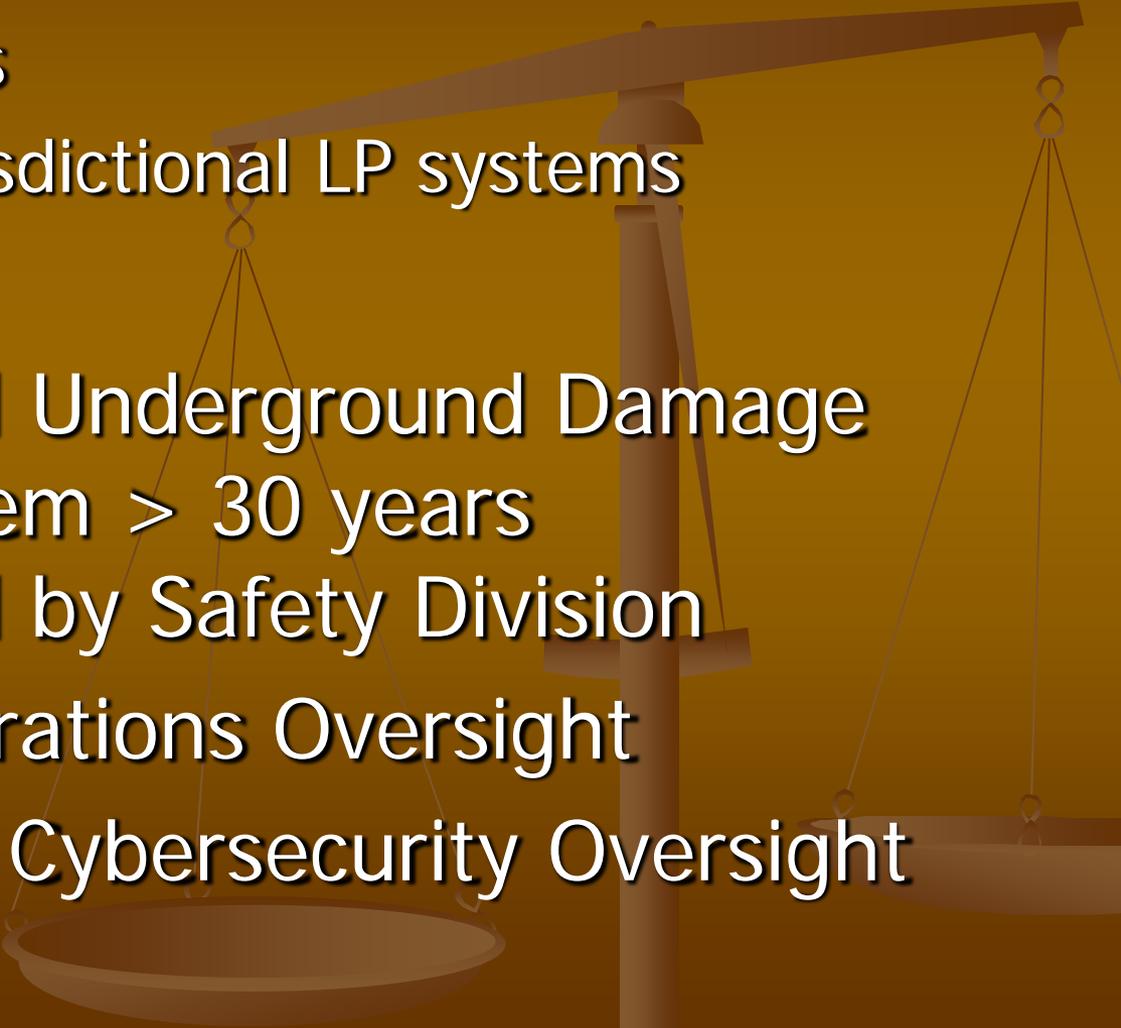
- No Interstate Operator nor Haz Liquid Operator Certification with PHMSA (5 operators)
- No gathering lines
- No municipal gas operators



# Basic New Hampshire Stats

- 3 gas LDCs
  - 5 Intrastate Transmission Operators (including Landfill)
  - 1 LNG Plant Operator (3 plants)
  - 1 LP Plant Operator (3 plants)
  - 1 Master Meter Operator (eliminated 1 in 2013)
- 

# Key New Hampshire Stats

- Propane Systems:
    - 40 LP Operators
    - Approx 800 jurisdictional LP systems
  - 2 inspectors
  - Well Established Underground Damage Prevention System > 30 years  
Administered by Safety Division
  - Emergency Operations Oversight
  - Initial Stages of Cybersecurity Oversight
- 

# NH Safety Division Personnel

Randy Knepper, Director

Robert Wyatt, Asst. Director

David Burnell, Inspector

William Ruoff, Dmg Prv Spect

Joseph Vercellotti, Inspector

Jason List, GIS Spect

Carolyn Stiles, Prog Asst

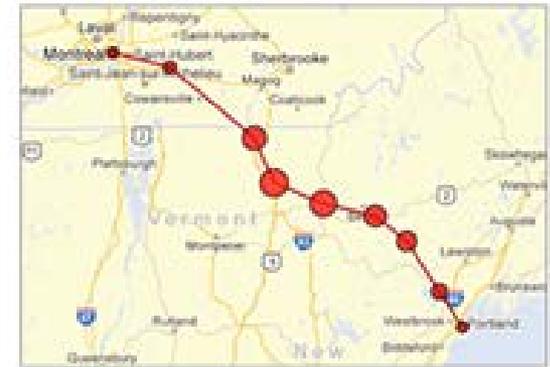
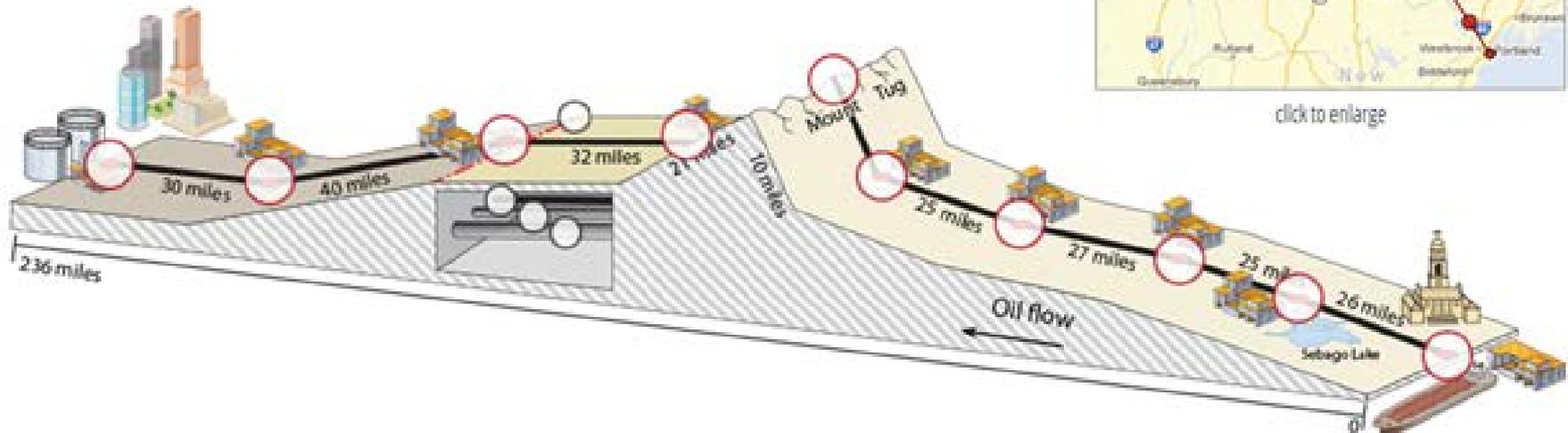
Lynn Hanson, Prog Asst

# What's New?

- Regional nexus of Keystone

## The Portland/Montreal Pipe Line System

Started in 1941 as an emergency project to move crude oil during World War II, the Portland-Montreal Pipe Line system pumps oil 236 miles from Portland Harbor to refineries in Canada. Five pump stations lift the oil from sea level to an elevation of 1,960 feet in Vermont; three more send it downhill to Montreal. A gallon of oil will complete the underground ride in roughly two days.



click to enlarge

# What's New?

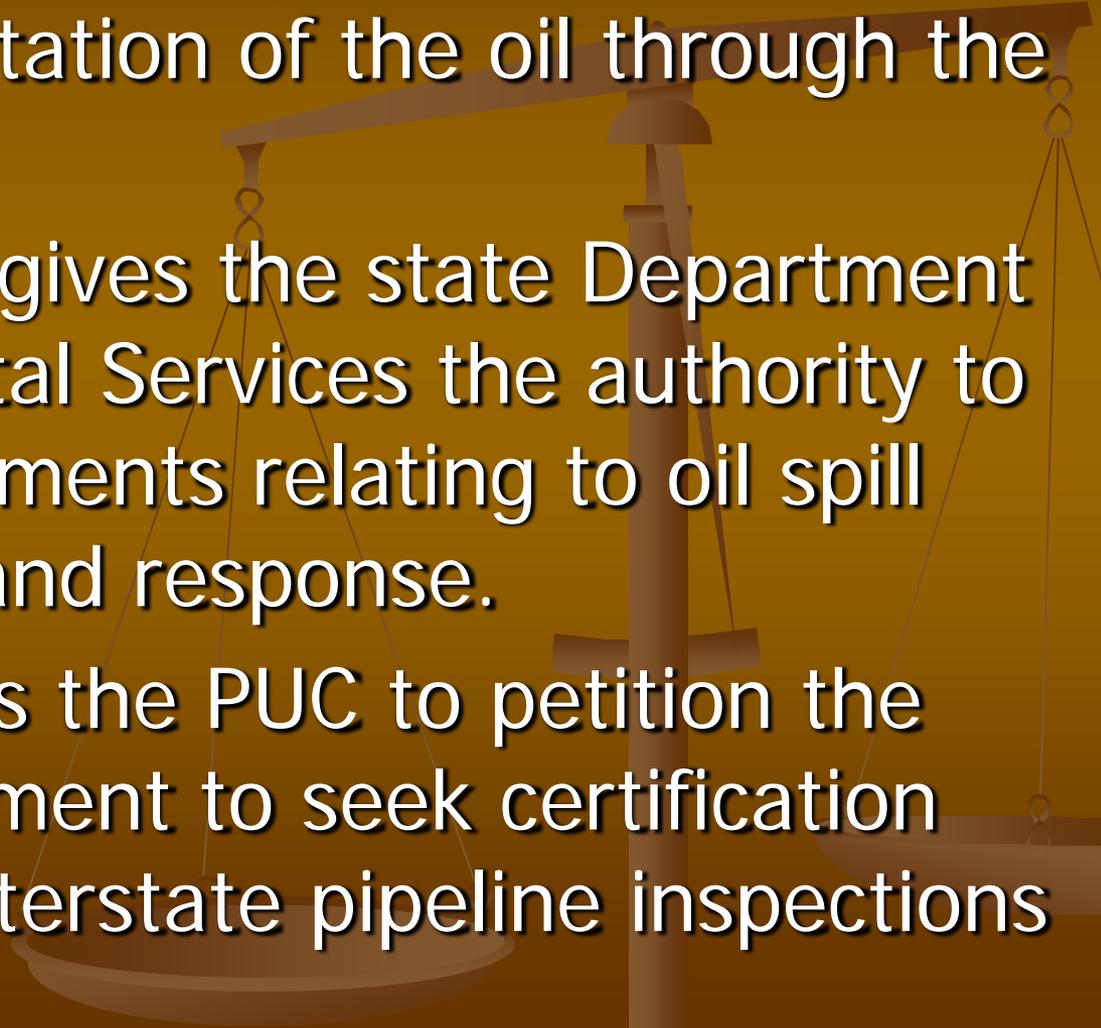


# What's New?

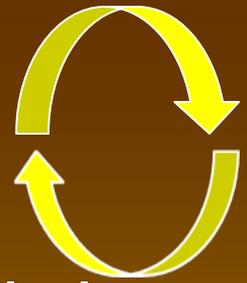
- 3 New Bills were enacted centered on the single Oil pipeline in New Hampshire owned by Portland Pipeline



# What's New?

- HB 1376 forms a study committee to look at the transportation of the oil through the state
  - House Bill 325 gives the state Department of Environmental Services the authority to impose requirements relating to oil spill preparedness and response.
  - HB 1224 directs the PUC to petition the federal government to seek certification and perform interstate pipeline inspections
- 

# What's New?



- Requested Interstate Inspection Status
- Awaiting PHMSA response
- Will report to State Legislature Committee
- State Legislature will react and determine what future steps may be necessary

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COMMISSIONERS  
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Debra A. Howland

THE STATE OF NEW HAMPSHIRE



PUBLIC UTILITIES COMMISSION  
21 S. Fruit Street, Suite 10  
Concord, N.H. 03301-2429

TDD Access: Relay NH  
1-800-735-2864

Tel. (603) 271-2431

FAX (603) 271-3878

Website:  
www.puc.nh.gov

September 15, 2014

Zachary Barrett  
Director of State Programs  
Office of Pipeline Safety  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
3700 South McArthur Boulevard  
Suite B  
Oklahoma City, OK 73169

RE: New Hampshire CY 2015 State Application for Interstate Agent Status:

Dear Mr. Barrett:

This letter is intended to inform you of a recently enacted New Hampshire State Law regarding pipeline safety. New Hampshire statute RSA 363:22 was amended by House Bill 1224, effective January 1, 2015, and requires the New Hampshire Public Utilities Commission (through its Safety Division) to apply annually for interstate agent status to inspect pipeline safety of interstate natural gas pipelines and interstate hazardous liquid pipelines located within New Hampshire. It also includes provisions to report back to the New Hampshire legislature the results of such application.

**Interstate Systems Involved:**

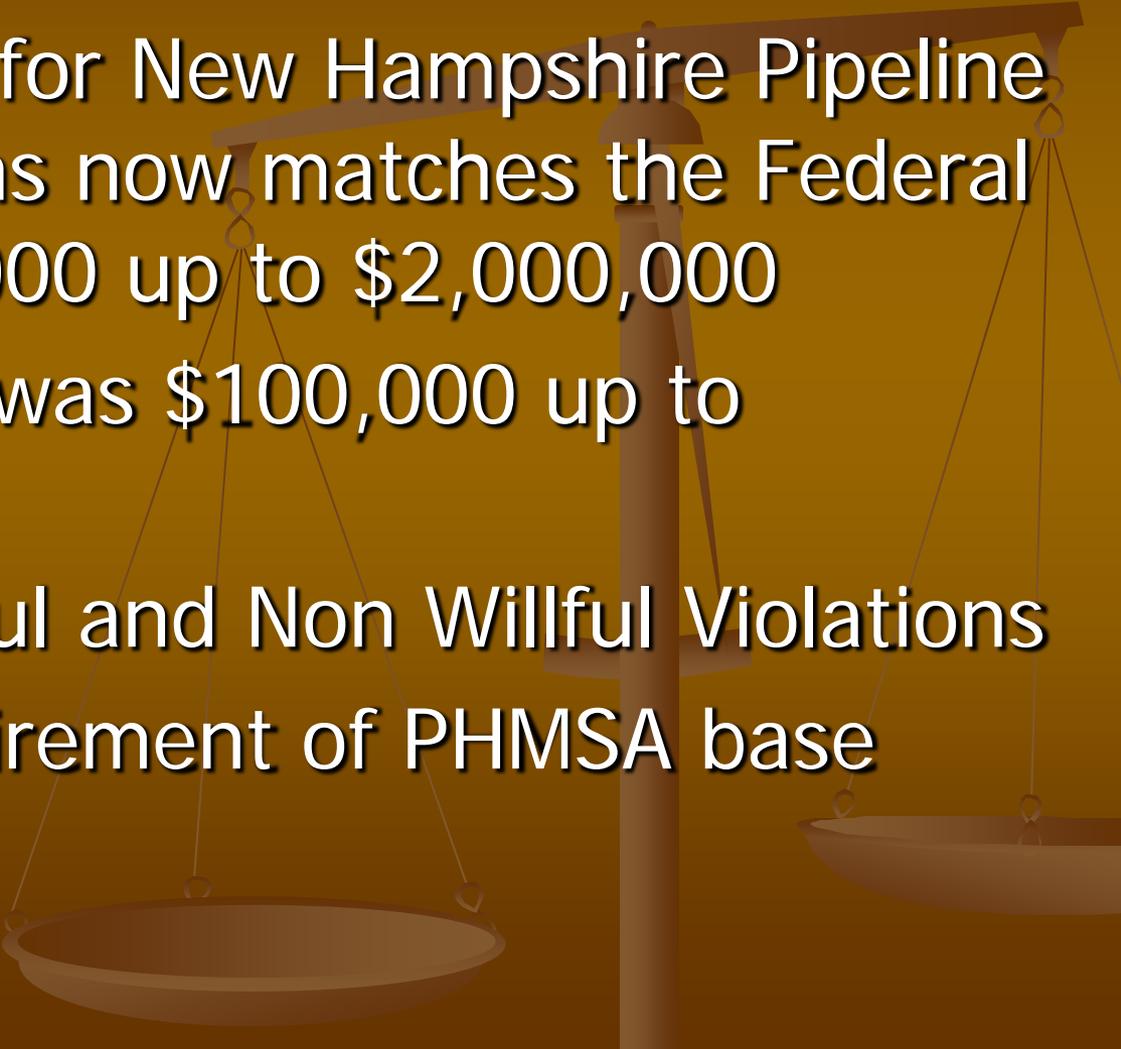
**Natural Gas:**

New Hampshire interstate gas pipeline systems contain transmission pipelines owned and operated by 4 interstate natural gas pipeline operators:

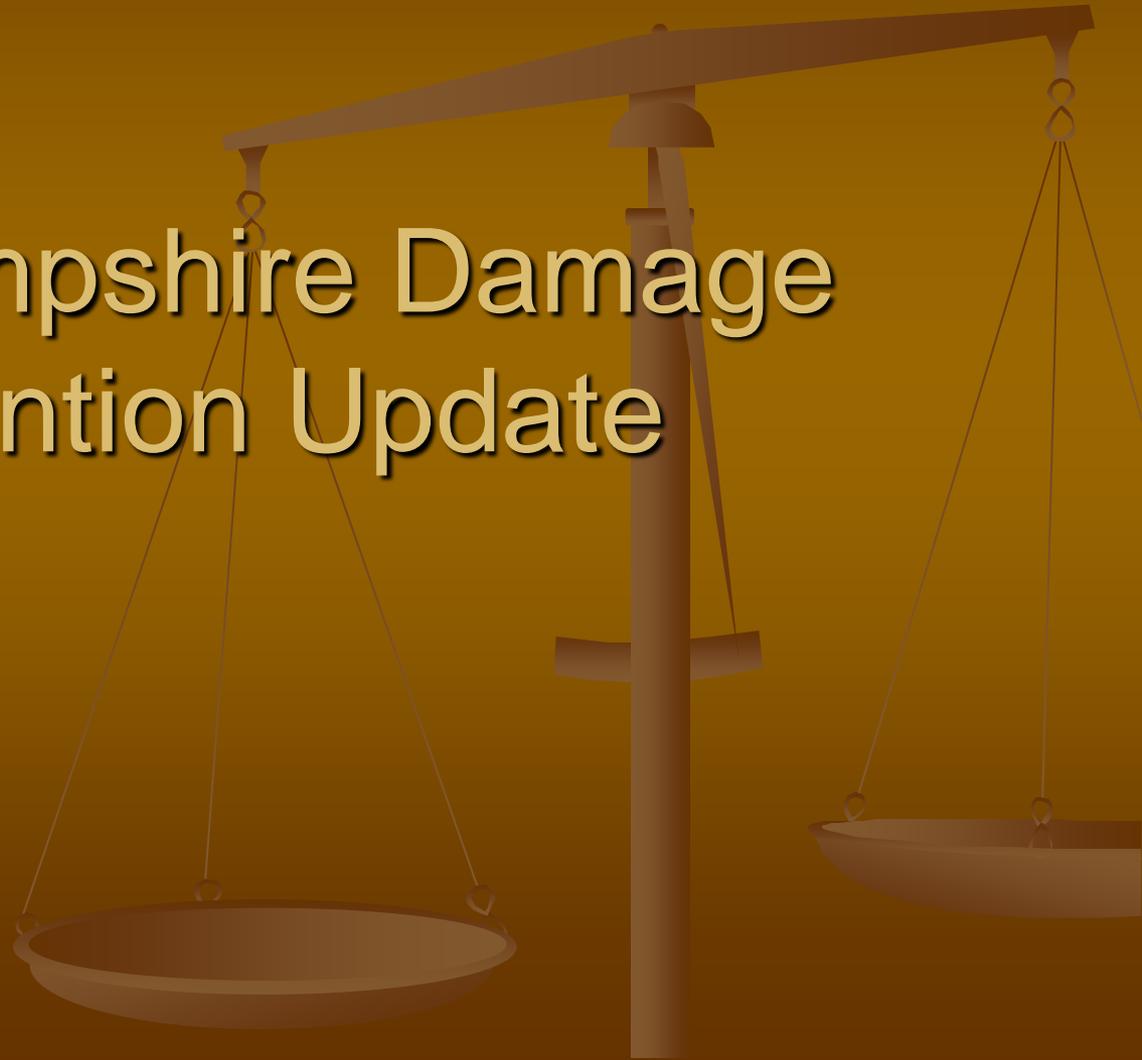
- 1) Granite State Gas Transmission System (Operator ID #6580) owned by Unitil Corporation headquartered in Hampton, New Hampshire.
- 2) Tennessee Gas Pipeline (Operator ID #19160) owned by Kinder Morgan of Houston, Texas.
- 3) Portland Natural Gas Transmission System (Operator ID #31145) owned by TransCanada with local headquarters in Portsmouth, New Hampshire.
- 4) Maritimes and Northeast Pipeline, LLC (Operator ID #31335) owned by Spectra Energy Transmission, LLC Corp of Houston, Texas.

In total, this comprises 232 miles of interstate transmission natural gas pipeline through 31 communities within New Hampshire.

# What's New?

- June 2014
  - Maximum Fine for New Hampshire Pipeline Safety Violations now matches the Federal Level of \$200,000 up to \$2,000,000
  - Previous Level was \$100,000 up to \$1,000,000.
  - Applies to Willful and Non Willful Violations
  - Phased in requirement of PHMSA base grant
- 

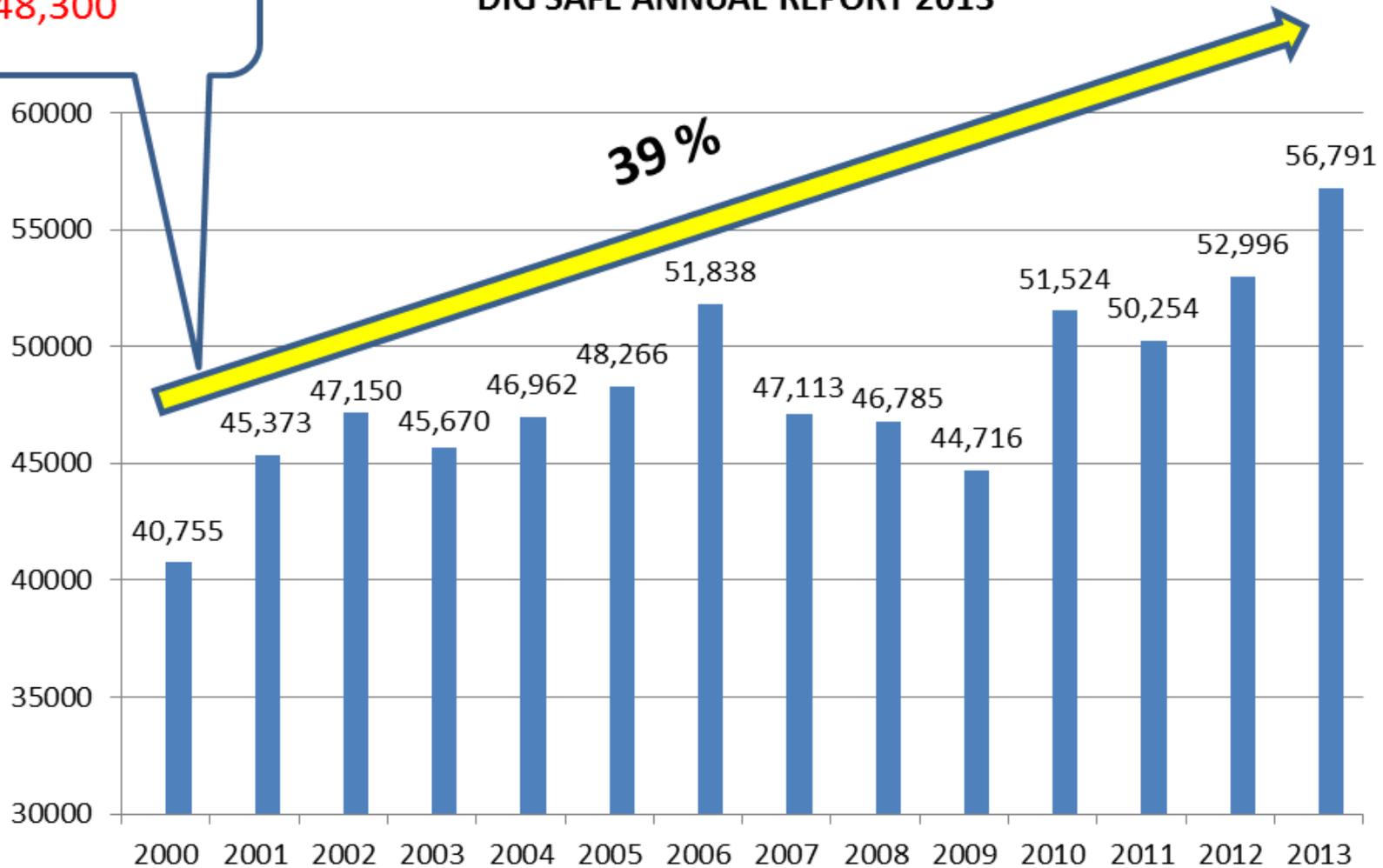
# New Hampshire Damage Prevention Update



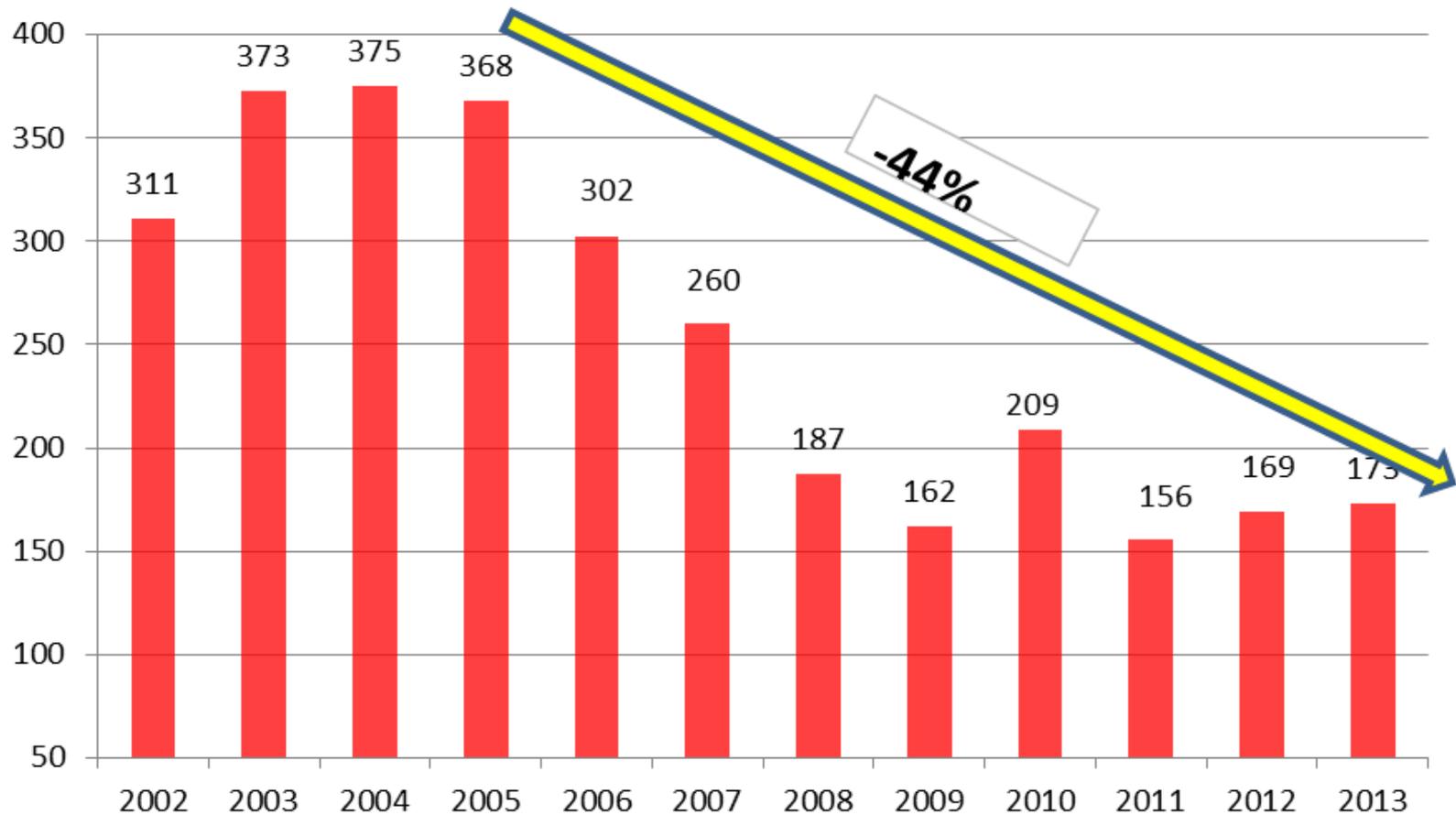
14 year  
average

48,300

**CALLS TO DIG SAFE SYSTEMS, INC. FOR NH LOCATES**  
**2000 - 2013**  
**DIG SAFE ANNUAL REPORT 2013**

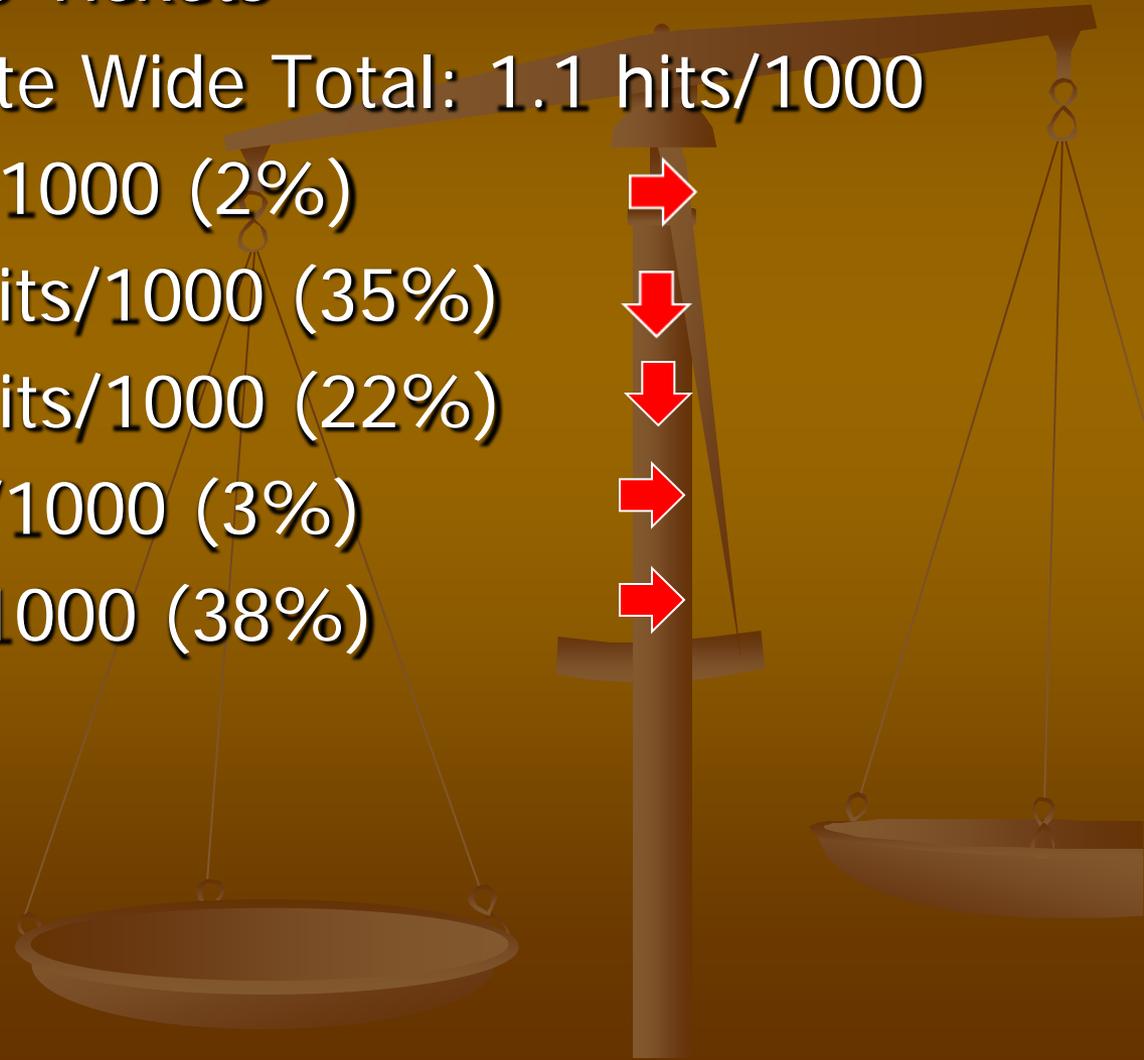


**REPORTED DIG SAFE DAMAGES or PROCEDURAL VIOLATIONS  
2002-2013  
to THE NEW HAMPSHIRE PUC SAFETY DIVISION**



# 2013 Dig Safe Statistics

- Gas Hits Per 1,000 Tickets
- Weighted Gas State Wide Total: 1.1 hits/1000
- Operator A 0 hits/1000 (2%)
- Operator B 1.68 hits/1000 (35%)
- Operator C 2.16 hits/1000 (22%)
- Operator D 0 hits/1000 (3%)
- All Other: 0 hits/1000 (38%)



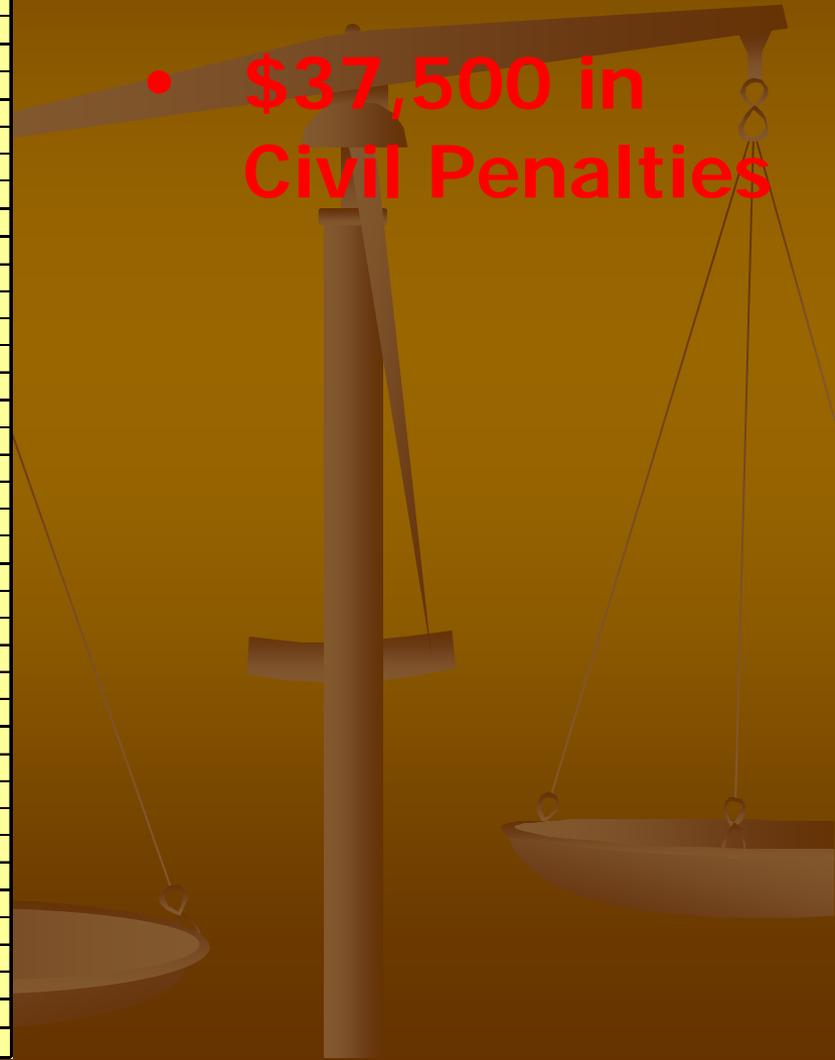
## 2013 One Call Progress Report - Final

Underground Damage Enforcement Proceedings involving **gas facilities** in **New Hampshire** that were **closed by Underground Damage Prevention Specialist (William Ruoff)** in CY 2013 and Q1 2014

Year of Violation/ Incident	# of Gas Enforcement Actions	Type of Enforcement	at Fault	Gas	Collected Fines and Equivalent Training Value	
2013 & Q1 2014	38	Fine (Civil Penalty)	Excavator	19	\$10,000	
		Fine (Civil Penalty)	Operator	19	\$10,500	
2012	9	Fine (Civil Penalty)	Excavator	4	\$2,000	
		Fine (Civil Penalty)	Operator	5	\$2,500	
2011	2	Fine (Civil Penalty)	Excavator	2	\$1,000	
		Fine (Civil Penalty)	Operator	0	\$0	
2010 and older	1	Fine (Civil Penalty)	Excavator	1	\$500	
		Fine (Civil Penalty)	Operator	0	\$0	
SubTotal	50	Fine (Civil Penalty)	Excavator	26	\$13,500	
		Fine (Civil Penalty)	Operator	24	\$13,000	
2013 + Q1 '14	9	Equivalent Training (Civil Penalty)	Excavator	9	\$4,500	
2012	12	Equivalent Training (Civil Penalty)	Excavator	12	\$6,000	
2011	1	Equivalent Training (Civil Penalty)	Excavator	1	\$500	
2010 & Older	0	Equivalent Training (Civil Penalty)	Excavator	0	\$0	
SubTotal	22	Equivalent Training (Civil Penalty)	Excavator	22	\$11,000	
2013 & Q1 2014	12	Dismissal	Dismissed	Either	3	NA
			Homeowner	Excavator	3	NA
			Reasonable Care	Excavator	6	NA
			No Violation	Either	0	NA
			Non-Jurisdictional	Either	0	NA
2012	21	Dismissal	Unknown	Excavator	0	NA
			Dismissed	Either	7	NA
			Homeowner	Excavator	4	NA
			Reasonable Care	Excavator	6	NA
			No Violation	Either	3	NA
2011	2	Dismissal	Non-Jurisdictional	Either	0	NA
			Unknown	Excavator	0	NA
			Dismissed	Either	0	NA
			Homeowner	Excavator	0	NA
			Reasonable Care	Excavator	2	NA
2010 and Older	4	Dismissal	No Violation	Either	0	NA
			Non-Jurisdictional	Either	0	NA
			Unknown	Excavator	0	NA
			Dismissed	Either	3	NA
			Homeowner	Excavator	0	NA
2013	59	Total 2013 Gas Enforcement Actions		59	\$25,000	
2012	42	Total 2012 Gas Enforcement Actions		42	\$10,500	
2011	5	Total 2011 Gas Enforcement Actions		5	\$1,500	
2010	5	Total 2010 Gas Enforcement Actions		5	\$500	
<b>Total</b>	<b>111</b>	<b>Grand Total</b>		<b>111</b>	<b>\$37,500</b>	
				<b>Actual Fines Collected</b>	<b>\$26,500</b>	

- **111 Gas Investigations**

- **\$37,500 in Civil Penalties**



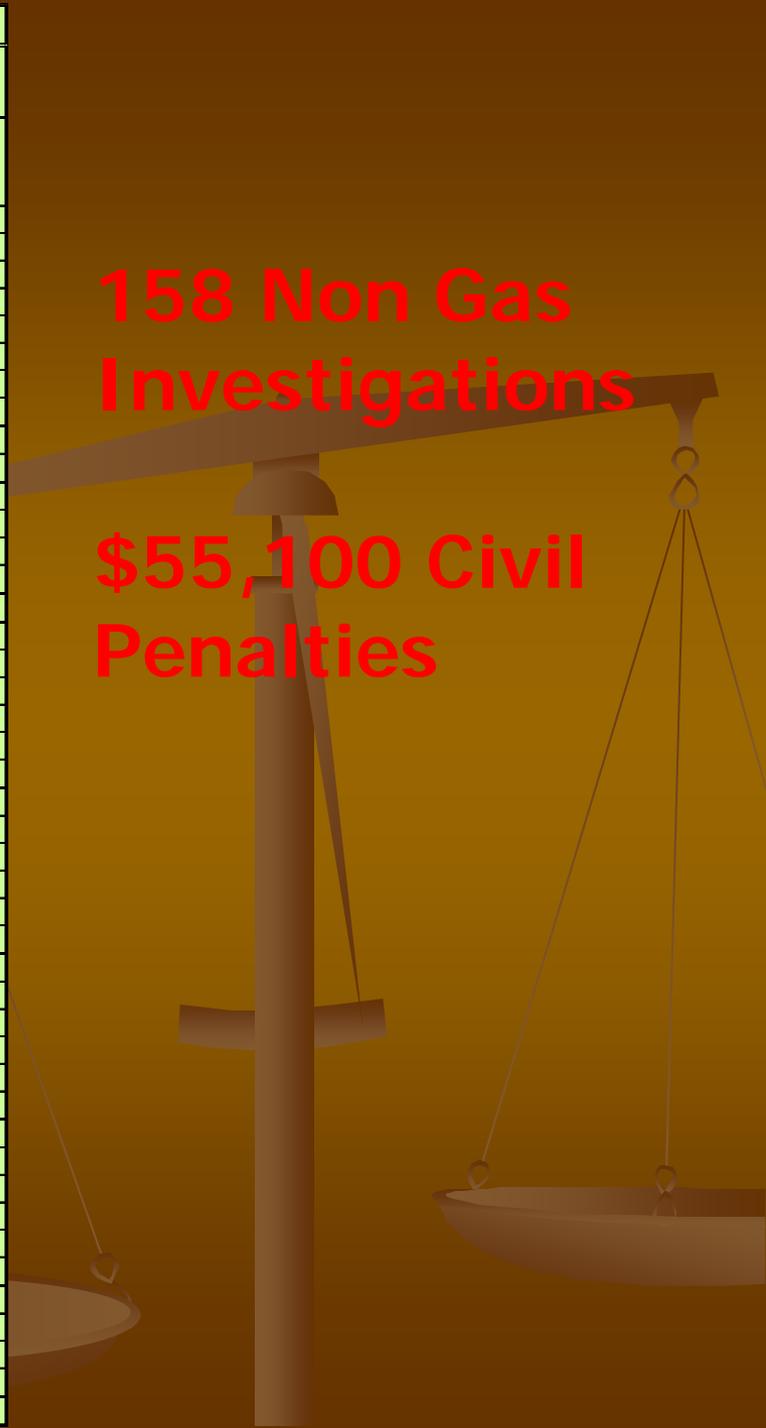
## 2013 One Call Progress Report - Final

**Underground Damage Enforcement Proceedings involving non-gas facilities in New Hampshire that were closed by Underground Damage Prevention Specialist (William Ruoff) in CY 2013 and Q1 2014**

Year of Violation/ Incident	Non-Gas Enforcement Actions	Type of Enforcement	at Fault	Electric	Phone	Cable	Water	Other	Total	Collected Fines and Equivalent Training Value	
2013+ Q1	46	Fine (Civil Penalty)	Excavator	11	5	5	0	0	21	\$10,700	
		Fine (Civil Penalty)	Operator	10	10	4	1	0	25	\$12,500	
2012	7	Fine (Civil Penalty)	Excavator	2	0	0	0	0	2	\$1,000	
		Fine (Civil Penalty)	Operator	3	2	0	0	0	5	\$2,500	
2011	4	Fine (Civil Penalty)	Excavator	2	1	0	0	0	3	\$1,395	
		Fine (Civil Penalty)	Operator	0	1	0	0	0	1	\$500	
2010	1	Fine (Civil Penalty)	Excavator	0	1	0	0	0	1	\$500	
		Fine (Civil Penalty)	Operator	0	0	0	0	0	0	\$0	
SubTotal	58	Fine (Civil Penalty)	Excavator	15	7	5	0	0	27	\$13,595	
		Fine (Civil Penalty)	Operator	13	13	4	1	0	31	\$15,500	
2013+ Q1	19	Equiv. Training (Civ. Penalty)	Excavator	13	5	0	0	1	19	\$9,500	
2012	22	Equiv. Training (Civ. Penalty)	Excavator	14	8	0	0	0	22	\$11,000	
2011	1	Equiv. Training (Civ. Penalty)	Excavator	1	0	0	0	0	1	\$500	
2010	10	Equiv. Training (Civ. Penalty)	Excavator	2	2	6	0	0	10	\$5,000	
SubTotal	52	Equiv. Training (Civ. Penalty)	Excavator	30	15	6	0	1	52	\$26,000	
2013 & Q1 2014	24	Dismissal	Dismissed	Either	4	3	0	1	0	8	NA
			Homeowner	Excavator	6	0	0	0	0	6	NA
			Reasonable Care	Excavator	2	2	0	0	0	4	NA
			No Violation	Either	0	0	0	0	1	1	NA
			Non-Jurisdictional	Either	0	0	0	0	0	0	NA
2012	15	Dismissal	Unknown	Excavator	5	0	0	0	0	5	NA
			Dismissed	Either	2	1	1	0	0	4	NA
			Homeowner	Excavator	5	0	0	0	0	5	NA
			Reasonable Care	Excavator	0	1	0	0	0	1	NA
			No Violation	Either	2	0	0	0	0	2	NA
			Non-Jurisdictional	Either	2	0	0	0	0	2	NA
2011	3	Dismissal	Unknown	Excavator	0	1	0	0	0	1	NA
			Dismissed	Either	0	2	0	0	0	2	NA
			Homeowner	Excavator	0	0	0	0	0	0	NA
			Reasonable Care	Excavator	0	1	0	0	0	1	NA
			No Violation	Either	0	0	0	0	0	0	NA
			Non-Jurisdictional	Either	0	0	0	0	0	0	NA
2010 and Older	6	Dismissal	Unknown	Excavator	0	0	0	0	0	0	NA
			Dismissed	Either	0	4	0	0	0	4	NA
			Homeowner	Excavator	0	0	0	0	0	0	NA
			Reasonable Care	Excavator	0	0	1	0	0	1	NA
			No Violation	Either	0	1	0	0	0	1	NA
			Non-Jurisdictional	Either	0	0	0	0	0	0	NA
2013	89	Total 2013 Non-Gas Enforcement Actions		51	25	9	2	2	89	\$32,700	
2012	44	Total 2012 Non-Gas Enforcement Actions		30	13	1	0	0	44	\$14,500	
2011	8	Total 2011 Non-Gas Enforcement Actions		3	5	0	0	0	8	\$2,395	
2010	17	Total 2010 Non-Gas Enforcement Actions		2	8	7	0	0	17	\$5,500	
<b>Total</b>	<b>158</b>	<b>Grand Total</b>		<b>86</b>	<b>51</b>	<b>17</b>	<b>2</b>	<b>2</b>	<b>158</b>	<b>\$55,095</b>	

158 Non Gas Investigations

\$55,100 Civil Penalties



# New Hampshire Excavator Manual

- Last published January 2013
- Amendments on Puc website through Aug 2013
- <http://www.puc.nh.gov/Safety/educationandtraining.htm>
- Reorganized Sections
- Added Franchise Territory Maps
- Added LPG and Water Systems for Town listings
- Updated Utility Names resulting from Mergers/Acquisitions

## NEW HAMPSHIRE

### EXCAVATOR MANUAL



**Remember to Contact**



**before you  
Blast, Demo, Drill or  
Excavate**

What you don't know CAN hurt you

**It's easy... It's free...**

**It's the Law**

**INTERNET:**

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

24 Hours a day, 7 days a week  
NO EMERGENCY CONTACTS

**PHONE:**

811

888-DIG-SAFE (888-344-7233)  
Monday thru Friday, 6:00 am to 6:00 pm

**AFTER 6:00 PM:  
EMERGENCY CALLS ONLY**

# New Hampshire Excavator Manual Projected Updates

- Publish Feb 2015, updates of Jan 2015
- Will add language for new mobile application
- Will add links to national resource materials
- Will update Operator Names/Towns
  - NH Gas?
  - Dixville Telephone?
  - Time Warner/Comcast?
  - Multiple LPG changes
  - Small water systems changes

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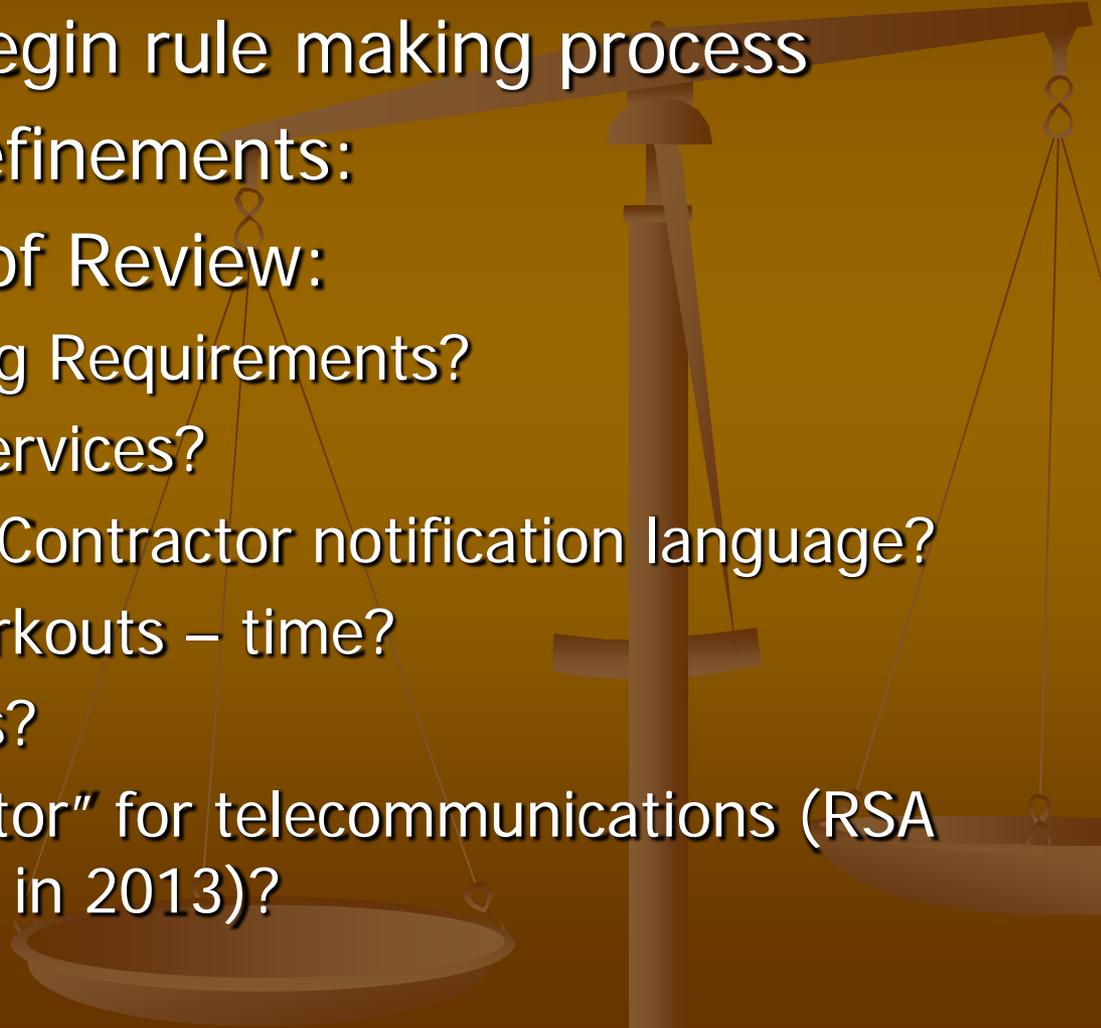
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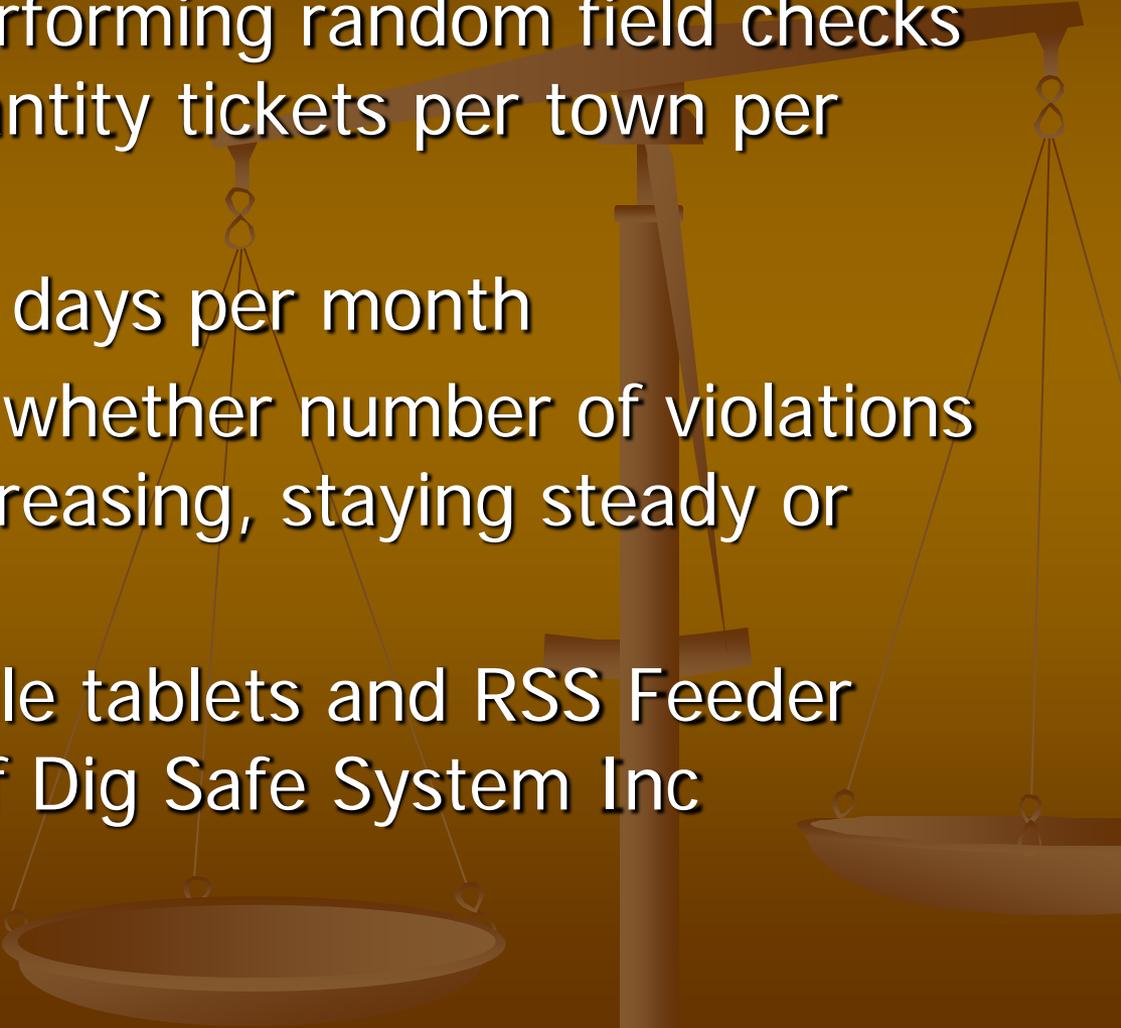
## UTILITIES BY CITY/TOWN

CITY/TOWN	TELEPHONE	CABLE	ELECTRIC	WATER	SEWER	GAS	LPG
CHICHESTER	<ul style="list-style-type: none"> <li>FAIRPOINT</li> <li>TDS</li> </ul>	<ul style="list-style-type: none"> <li>COMCAST</li> </ul>	<ul style="list-style-type: none"> <li>PSNH</li> <li>UNITIL</li> </ul>				<ul style="list-style-type: none"> <li>EASTERN PROPANE</li> </ul>
CLAREMONT	<ul style="list-style-type: none"> <li>FAIRPOINT</li> </ul>	<ul style="list-style-type: none"> <li>COMCAST C/P</li> </ul>	<ul style="list-style-type: none"> <li>NHEC</li> </ul>	<ul style="list-style-type: none"> <li>MUNICIPAL</li> </ul>	<ul style="list-style-type: none"> <li>MUNICIPAL</li> </ul>		<ul style="list-style-type: none"> <li>AMERIGAS PROPANE</li> <li>EASTERN PROPANE</li> <li>SUBURBAN PROPANE</li> <li>YOUNG'S PROPANE</li> </ul>
CLARKSVILLE	<ul style="list-style-type: none"> <li>FAIRPOINT</li> </ul>		<ul style="list-style-type: none"> <li>NHEC</li> <li>PSNH</li> </ul>				
COLEBROOK	<ul style="list-style-type: none"> <li>DIXVILLE</li> <li>FAIRPOINT</li> </ul>	<ul style="list-style-type: none"> <li>WHITE MTN</li> </ul>	<ul style="list-style-type: none"> <li>NHEC</li> <li>PSNH</li> </ul>	<ul style="list-style-type: none"> <li>MUNICIPAL</li> </ul>	<ul style="list-style-type: none"> <li>MUNICIPAL</li> </ul>		<ul style="list-style-type: none"> <li>RYMES</li> </ul>
COLUMBIA	<ul style="list-style-type: none"> <li>FAIRPOINT</li> </ul>	<ul style="list-style-type: none"> <li>WHITE MTN</li> </ul>	<ul style="list-style-type: none"> <li>NHEC</li> <li>PSNH</li> </ul>				
CONCORD	<ul style="list-style-type: none"> <li>FAIRPOINT</li> </ul>	<ul style="list-style-type: none"> <li>COMCAST C/P</li> </ul>	<ul style="list-style-type: none"> <li>PSNH</li> <li>UNITIL</li> </ul>	<ul style="list-style-type: none"> <li>CONCORD</li> </ul>	<ul style="list-style-type: none"> <li>CONCORD</li> </ul>	<ul style="list-style-type: none"> <li>LIBERTY</li> </ul>	<ul style="list-style-type: none"> <li>RYMES</li> </ul>
CONWAY	<ul style="list-style-type: none"> <li>FAIRPOINT</li> </ul>	<ul style="list-style-type: none"> <li>TIME WARNER C/P</li> </ul>	<ul style="list-style-type: none"> <li>PSNH</li> <li>NHEC</li> </ul>	<ul style="list-style-type: none"> <li>FOREST EDGE</li> <li>FRYEBURG</li> <li>LAKES REGION WATER CO.</li> <li>MUNICIPAL</li> <li>NORTH CONWAY WATER PRECINCT</li> <li>PENNICHUCK EAST</li> </ul>	<ul style="list-style-type: none"> <li>MUNICIPAL</li> </ul>		<ul style="list-style-type: none"> <li>AMERIGAS PROPANE</li> <li>EASTERN PROPANE</li> <li>RYMES</li> </ul>

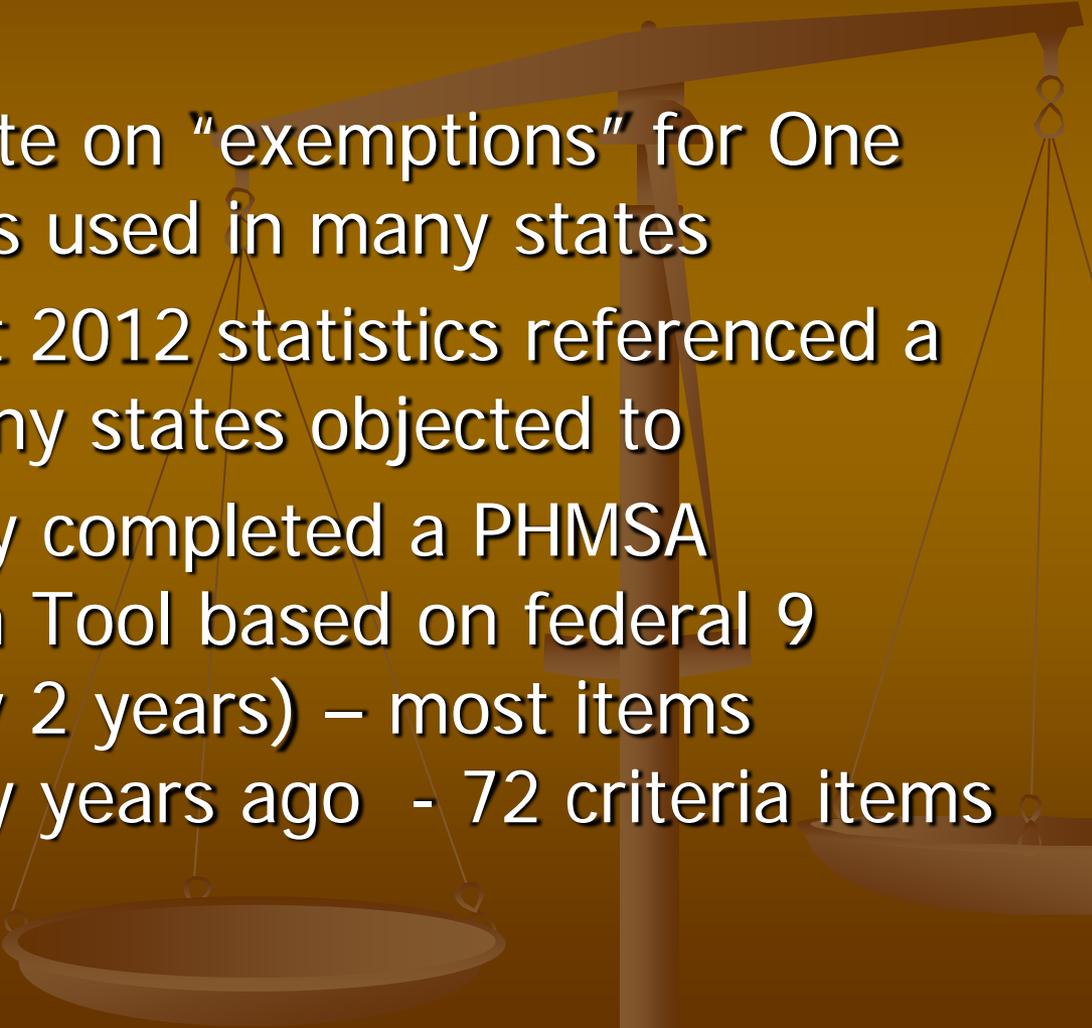
# Puc 800 Administrative Rules

- sunset in Nov 2016
  - Mid 2015 will begin rule making process
  - Expect minor refinements:
  - Possible Areas of Review:
    - Locator Training Requirements?
    - Insertions of Services?
    - Contractor/SubContractor notification language?
    - Emergency markouts – time?
    - abandonments?
    - update “operator” for telecommunications (RSA 362:7 modified in 2013)?
- 

# NH Damage Prevention Items

- will begin performing random field checks based on quantity tickets per town per county.
  - estimating 2 days per month
  - Will evaluate whether number of violations found are increasing, staying steady or decreasing
  - Will use mobile tablets and RSS Feeder Application of Dig Safe System Inc
- 

# National Damage Prevention Items

- Continued debate on “exemptions” for One Call Notifications used in many states
  - CGA in DIRT rpt 2012 statistics referenced a section that many states objected to
  - NH PUC recently completed a PHMSA Characterization Tool based on federal 9 elements (every 2 years) – most items addressed many years ago - 72 criteria items
- 

# NH Pipeline Safety State Program Metrics

## Site Pages

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

## State Pipeline Profiles:

Choose One...

Print

## New Hampshire State Program Metrics

As part of its annual grant evaluation process, PHMSA performs thorough evaluations of each state pipeline safety regulatory program. To support this evaluation PHMSA and the National Association of Pipeline Safety Representatives (NAPSR) have developed a set of performance metrics. These metrics look at state program performance in six areas:

- Damage Prevention Program
- Inspection Activity
- Inspector Qualification
- Leak Management
- Enforcement
- Incident Investigation

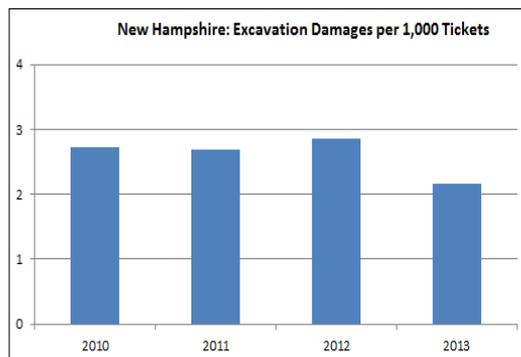
These metrics for New Hampshire are provided below.<sup>(1)</sup> The New Hampshire Public Utilities Commission provides oversight of intrastate gas pipelines in New Hampshire through [certification](#) by PHMSA.

### Damage Prevention Program

Excavation damage is the leading cause of natural gas distribution pipeline incidents, and a leading cause of other pipeline incidents, nationwide. A critical step in preventing excavation damage is for the excavator to notify pipeline operators of intent to excavate at a specific location. This is normally done by the excavator calling a one-call center. The one-call center then issues a locate ticket to inform pipeline operators and other underground utility operators with facilities located near the planned excavation activity. The pipeline operators can then locate and mark the location of their pipelines and otherwise communicate with the excavator as necessary to prevent damage to the pipelines.

The number of excavation damage occurrences per 1,000 locate tickets is an established benchmark within the damage prevention industry and an important indicator of damage prevention program performance. However, note that variations among state laws regarding locate ticket size and scope, along with the length of time a locate ticket is valid, will limit any state to state comparison of this metric.

The excavation damages metric illustrated below includes data for natural gas distribution system operators only. It does not include data from gas transmission or hazardous liquid pipeline operators as there is insufficient data available for those types of pipelines.



# NH Pipeline Safety State Program Metrics

## Site Pages

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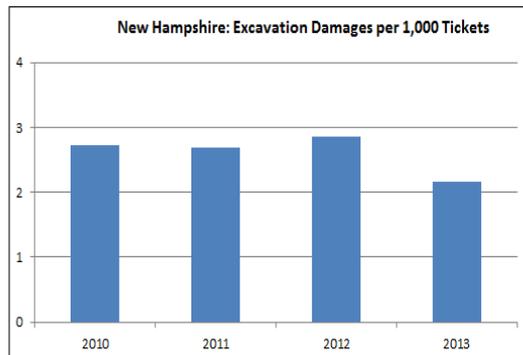
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### Damage Prevention Program

Excavation damage is the leading cause of natural gas distribution pipeline incidents, and a leading cause of other pipeline incidents, nationwide. A critical step in preventing excavation damage is for the excavator to notify pipeline operators of intent to excavate at a specific location. This is normally done by the excavator calling a one-call center. The one-call center then issues a locate ticket to inform pipeline operators and other underground utility operators with facilities located near the planned excavation activity. The pipeline operators can then locate and mark the location of their pipelines and otherwise communicate with the excavator as necessary to prevent damage to the pipelines.

The number of excavation damage occurrences per 1,000 locate tickets is an established benchmark within the damage prevention industry and an important indicator of damage prevention program performance. However, note that variations among state laws regarding locate ticket size and scope, along with the length of time a locate ticket is valid, will limit any state to state comparison of this metric.

The excavation damages metric illustrated below includes data for natural gas distribution system operators only. It does not include data from gas transmission or hazardous liquid pipeline operators as there is insufficient data available for those types of pipelines.



**Ignores  
40% of  
Data**

**READ THE  
FINE  
PRINT**

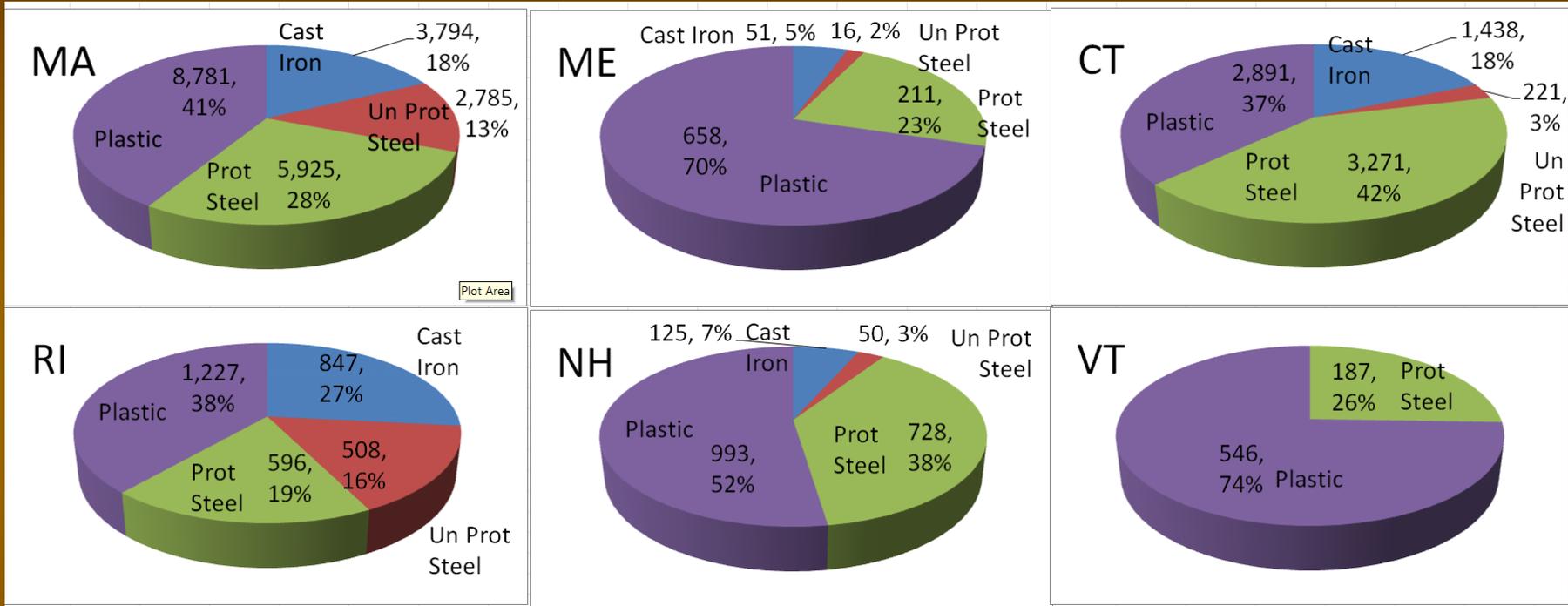




# New England Pipeline Safety Statistics



# Amount of Leak Prone Pipe (Mains) in New England



MA has more than 6,300 miles of leak prone main (30%)

CT has more than 1,600 miles of leak prone main (21%)

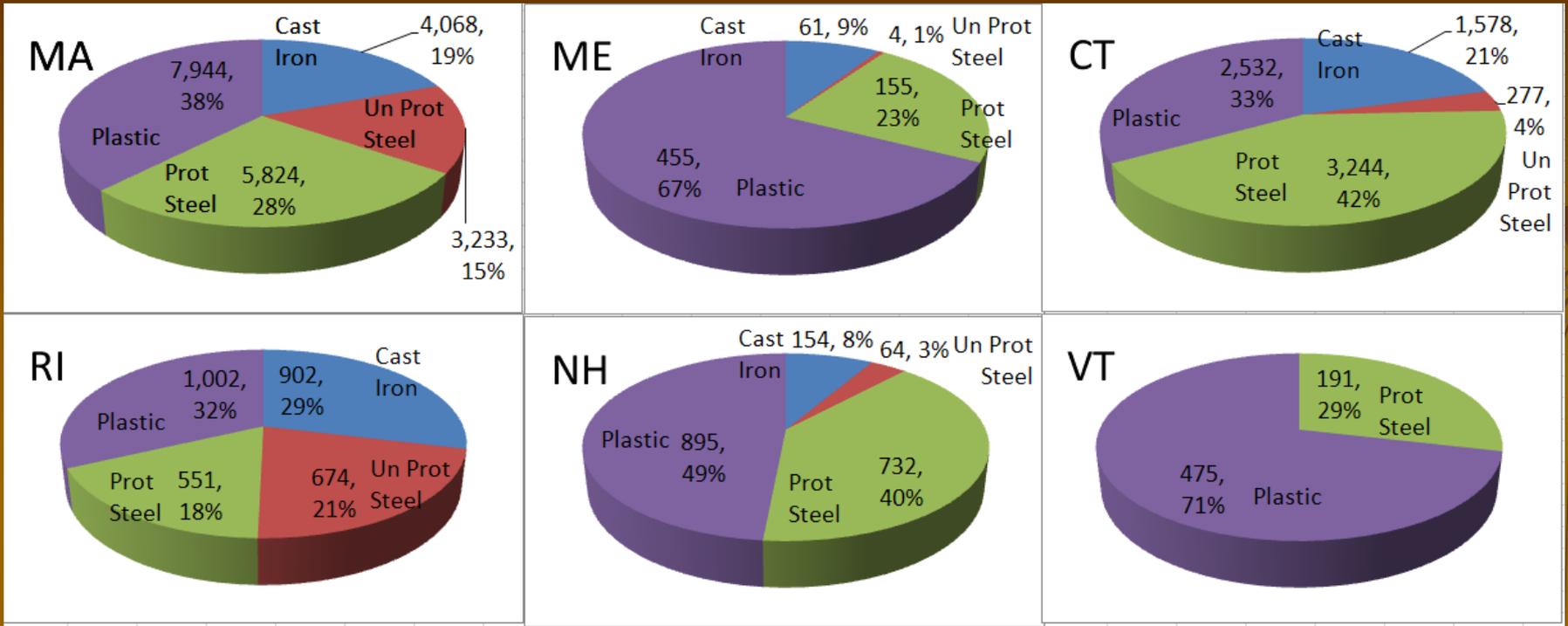
RI has more than 1,300 miles of leak prone main (42%)

NH has more than 170 miles of leak prone main (9%)

ME has more than 60 miles of leak prone main (7%)

**2014  
DATA**

# Amount of Leak Prone Pipe (Mains) in New England



MA has more than 7,300 miles of leak prone main (34%)

CT has more than 1,750 miles of leak prone main (25%)

RI has more than 1,500 miles of leak prone main (50%)

NH has more than 200 miles of leak prone main (11%)

ME has more than 60 miles of leak prone main (10%)

**2009  
DATA**

# Positive Trends in New England

	2009 (Base)	2012	2013	2012 Increase/ Decrease	2013 Increase/ Decrease
<b>Overall Infrastructure is Increasing</b>					
% Increase in Dist Pipelines New England (Miles)	58,972	60,281	61,514	2.2%	4.3%
% Increase in Gas Mains New England (Miles)	35,015	35,593	35,948	1.6%	2.7%
% Increase in Gas Services New England (Miles)	23,957	24,689	25,565	3.1%	6.7%
<b>Aged Infrastructure is Decreasing</b>					
% Decrease in Cast Iron Gas Mains New England (Miles)	6,763	6,338	6,153	-6.3%	-9.0%
% Decrease in Bare Steel & Unprotected Steel Mains (Miles)	4,252	3,626	3,484	-14.7%	-18.1%
% Decrease in Bare Steel & Unprotected Steel Services (Miles)	5,107	4,516	4,454	-11.6%	-12.8%

*4 year period 2009 to 2013*

# Leak Prone Pipe Statistics in New England – as of Jan 2014

	2009 (Base)	2012	2013	2012 Increase/ Decrease	2013 Increase/ Decrease
<b>Biggest Decreases in Aged Infrastructure Mains</b>					
CT	1,855	1,716	1,659	-7.5%	-10.5%
MA	7,301	6,579	6,381	-9.9%	-12.6%
RI	1,576	1,409	1,355	-10.6%	-14.0%
NH	218	189	174	-13.3%	-20.0%
ME	65	72	67	10.9%	3.7%
VT	0	0	0	0%	0%
<b>Biggest Decreases in Aged Infrastructure Services</b>					
CT	1,008	872	891	-13.5%	-11.7%
MA	3,178	2,865	2,814	-9.8%	-11.5%
RI	808	673	648	-16.7%	-19.8%
NH	125	118	114	-5.9%	-9.0%
ME	9	7	6	-17.8%	-35.6%
VT	0	0	0	0.0%	0.0%

# This just in . . . 2013

## State

### 2012 Gas Distribution Annual Report Mileage and Leaks

Data as of 4/26/2013

2012 Gas Distribution Annual report is preliminary data

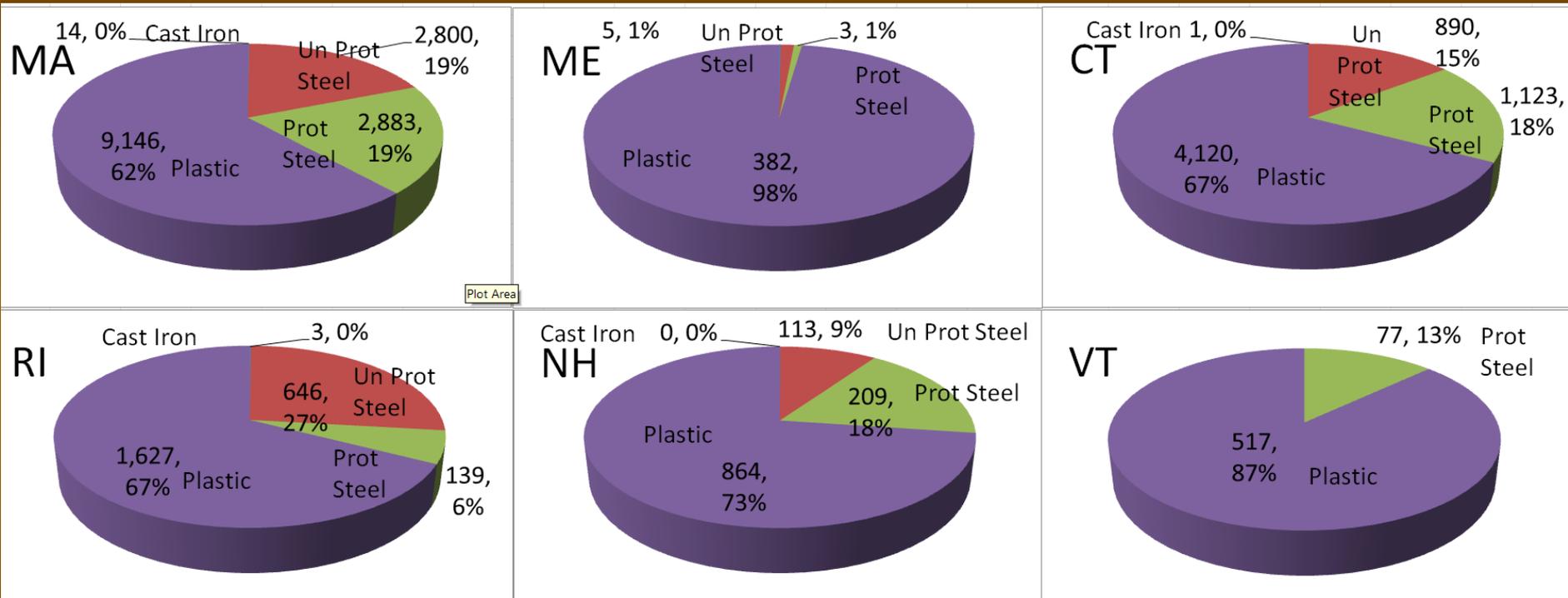
	Miles of Main				
PHMSA F 7100.1-1 / REPORT YEAR 2012	Unprotected Steel	Cast/Wrought Iron	Total Miles leak prone pipe	% of Total Miles leak prone pipe	Total Main Mileage
Rhode Island	534	859	1,393	43.9%	3,174
District of Columbia	95	419	514	42.9%	1,197
Massachusetts	2,785	3,792	6,577	30.9%	21,285
West Virginia	3,009	14	3,022	28.3%	10,674
New York	7,885	4,417	12,301	25.7%	47,800
Pennsylvania	8,972	3,221	12,193	25.6%	47,211
Connecticut	236	1,467	1,703	22.0%	7,751
New Jersey	2,403	5,044	7,447	22.0%	33,919
Maryland	449	1,399	1,847	12.8%	14,477
New Hampshire	75	134	189	10.1%	1,875
	16	56	72	9.0%	803
Virginia	817	406	1,223	5.9%	20,847
Delaware	39	91	130	4.5%	2,872
<b>PHMSA EASTERN REGION TOTALS</b>	<b>27,294</b>	<b>21,318</b>	<b>48,612</b>		<b>214,316</b>



# *While Congress, PHMSA, Environmentalists and Media focus **only on Aging Mains...***

- NE Regulators realize Leak Prone Piping Programs must also address the smaller **Service** piping
- **Leak Prone Services** constitute an additional **32%** of Leak Prone Piping in NE
- **Leak Prone Services** are equally important as a result of closer proximity to people and property
- **Leak Prone Services** have thinner walls
- **Leak Prone Services** have less cover and more susceptible to 3<sup>rd</sup> party excavation Damage

# Amount of Leak Prone Pipe (Services) in New England



MA has more than 2,800 miles of leak prone service (19%)

CT has more than 890 miles of leak prone service (14%)

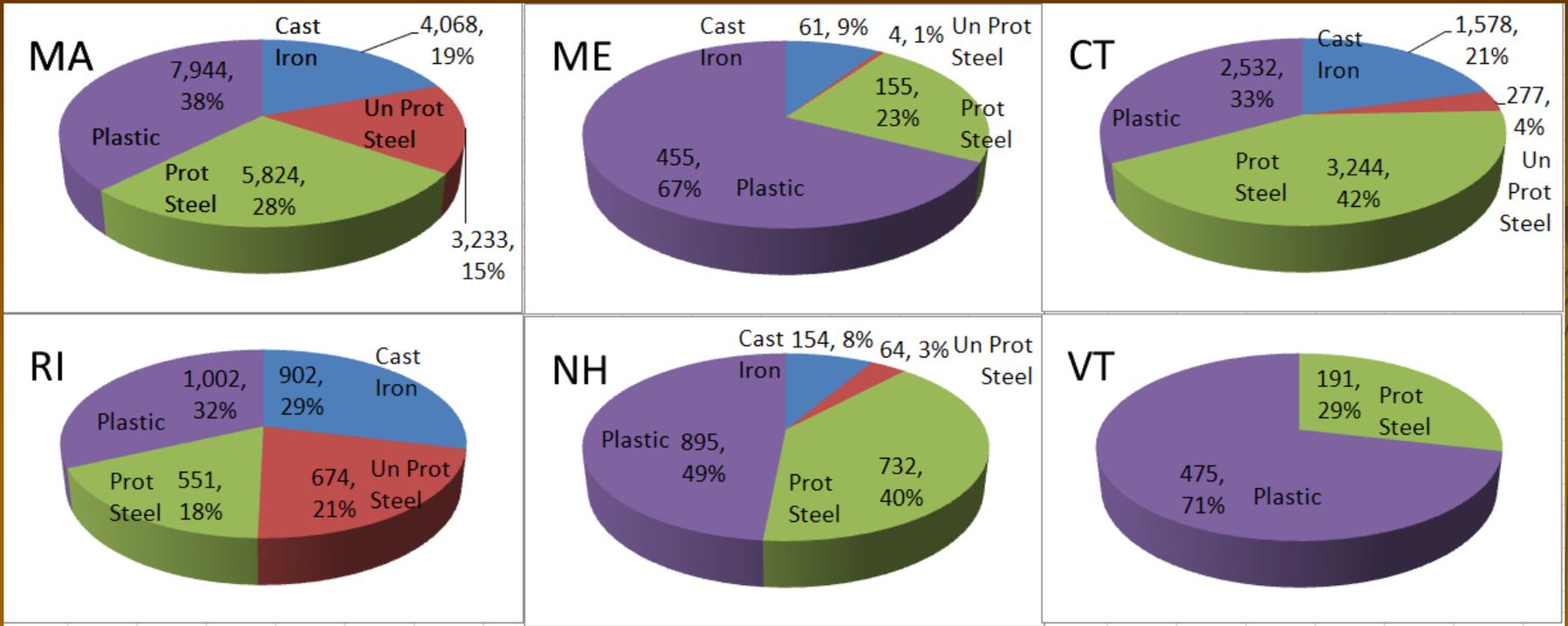
RI has more than 640 miles of leak prone service (27%)

NH has more than 110 miles of leak prone service (9%)

ME has more than 5 miles of leak prone service (1%)

2014  
DATA

# Amount of Leak Prone Pipe (Service) in New England



MA has more than 3,100 miles of leak prone service (22%)

CT has more than 1,000 miles of leak prone service (19%)

RI has more than 800 miles of leak prone service (33%)

NH has more than 120 miles of leak prone service (12%)

ME has more than 9 miles of leak prone service (3%)

**2009  
DATA**

# Pipeline Safety of Aging Pipelines is not just about Trackers (*there are other tools*)

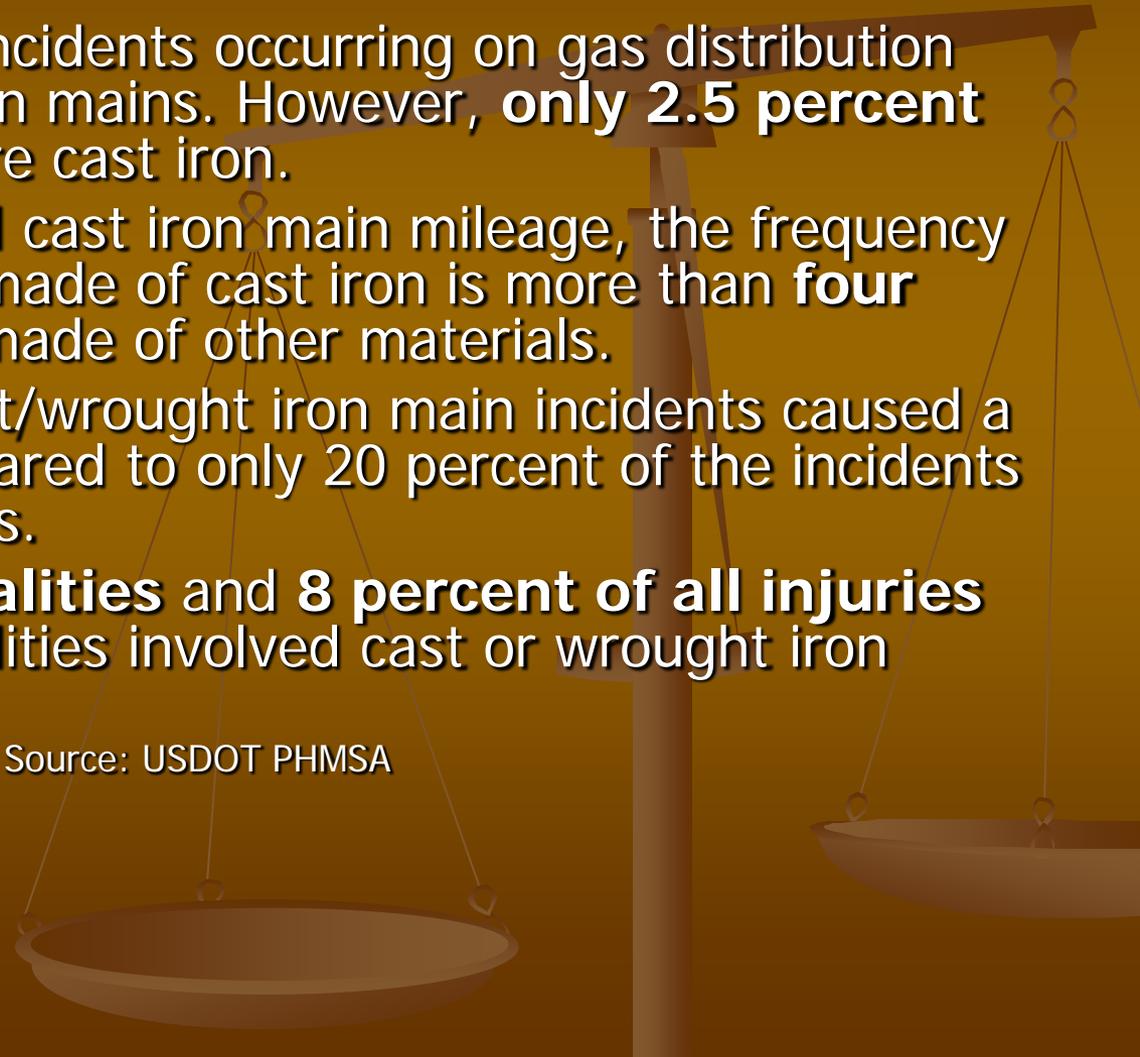
- **All six** NE states have aggressive and well established underground damage prevention programs and have damages less than 2 hits per 1000 locates (**RI, CT, NH and ME** are at 1 hit per 1000)
- **RI, NH, CT and ME** have specific emergency response standards that need to be met and reported (1 hour and less)
- **NH** limits Cast Iron pressures to 0.25 psig, (PHMSA allows up to 20 psig).
- **CT, ME, NH and MA** have additional leak surveys required for Public Buildings of Assembly
- **CT, MA and NH** have additional winter leak survey patrols required for cast iron during periods where frost is present

*Source: Compendium of State Pipeline Safety Requirements & Initiatives  
Providing Increased Public Safety Levels compared to Code of Federal  
Regulations Sept 2013*

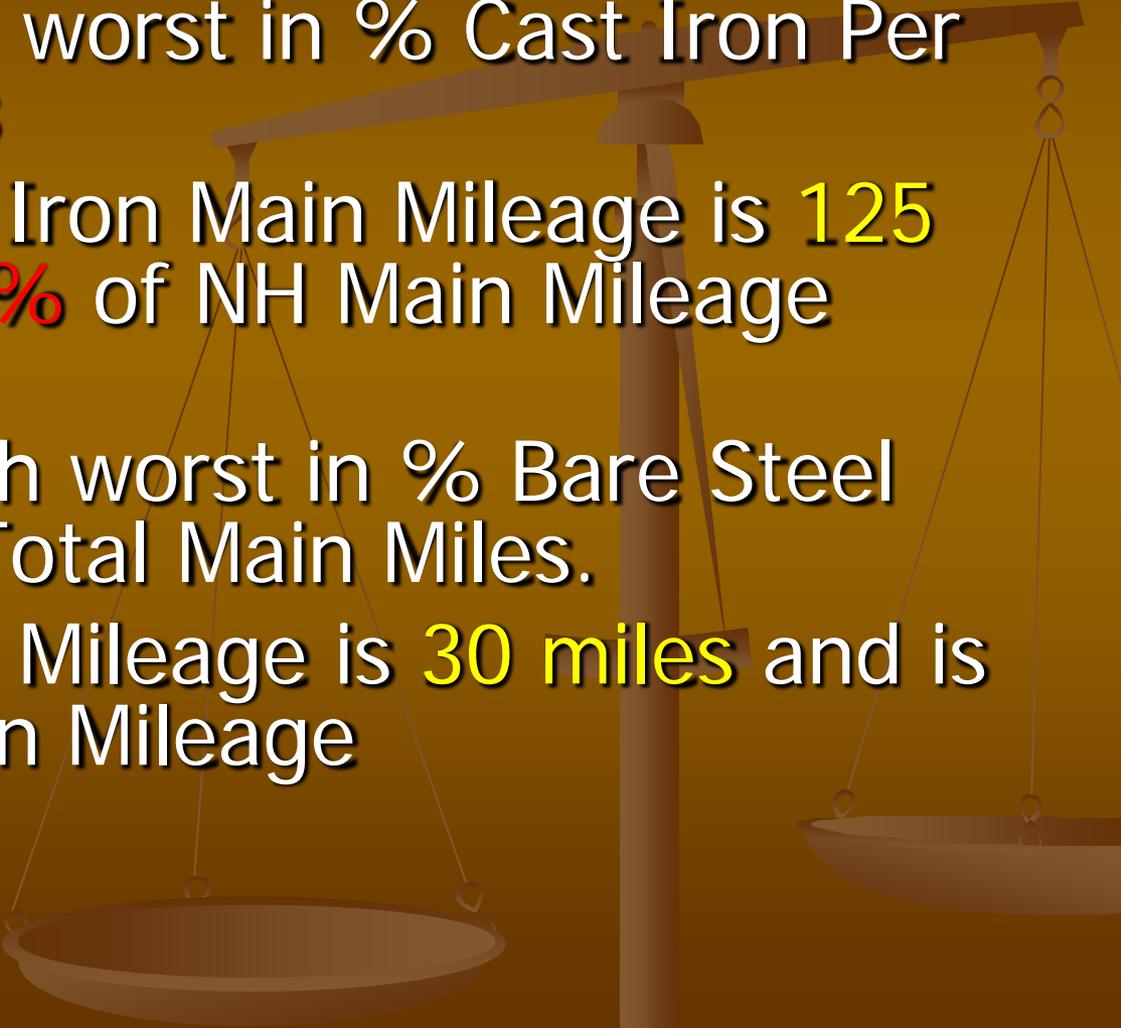
# CAST IRON REMAINS ON PHMSA'S "WATCH LIST"

- **10.5 percent** of the incidents occurring on gas distribution mains involved cast iron mains. However, **only 2.5 percent** of distribution mains are cast iron.
- In proportion to overall cast iron main mileage, the frequency of incidents on mains made of cast iron is more than **four times that of** mains made of other materials.
- **38 percent** of the cast/wrought iron main incidents caused a fatality or injury, compared to only 20 percent of the incidents on other types of mains.
- **12 percent of all fatalities** and **8 percent of all injuries** on gas distribution facilities involved cast or wrought iron pipelines

Source: USDOT PHMSA

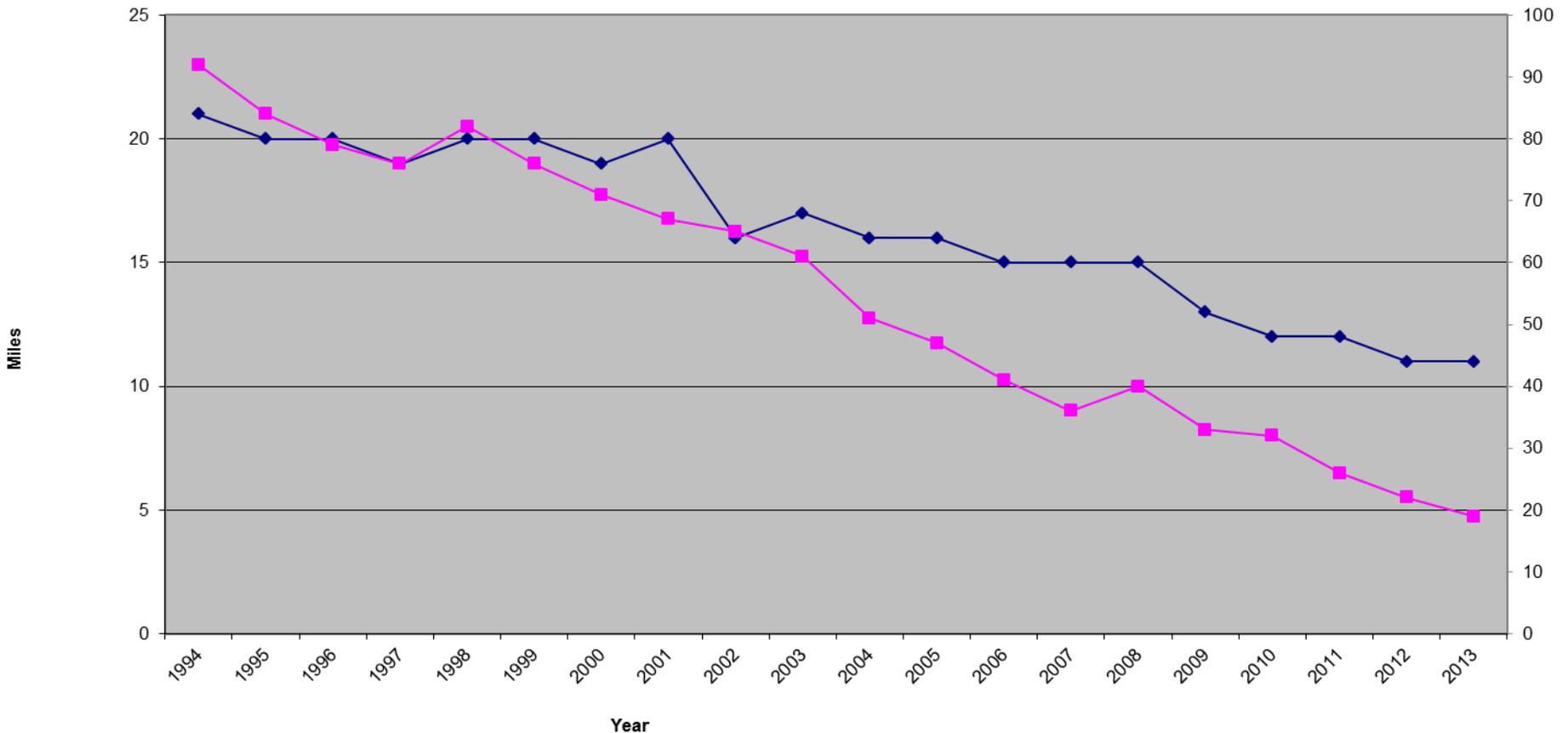


# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

- NH ranks as 8th worst in % Cast Iron Per Total Main Miles
  - Remaining Cast Iron Main Mileage is **125 miles** and is **6.6%** of NH Main Mileage
  - NH ranks as 28th worst in % Bare Steel Main Miles per Total Main Miles.
  - Remaining Main Mileage is **30 miles** and is **1.6%** of NH Main Mileage
- 

# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

Bare Steel Gas Mains in NH

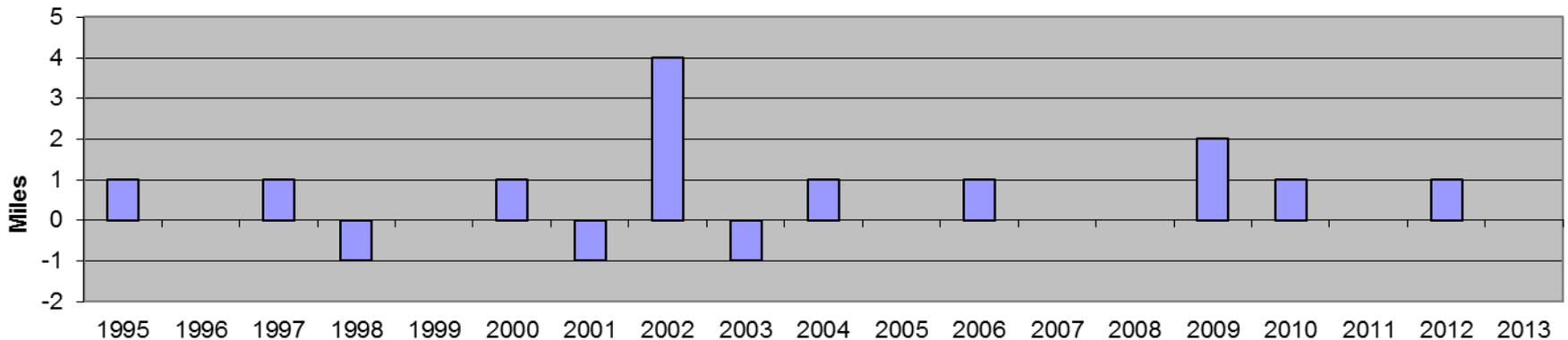


◆ Liberty Left Axis

■ Until Right Axis

# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

Liberty Bare Steel Replacement from DOT Annual Reports



*Amount Remaining as of 2013 is 11 miles*

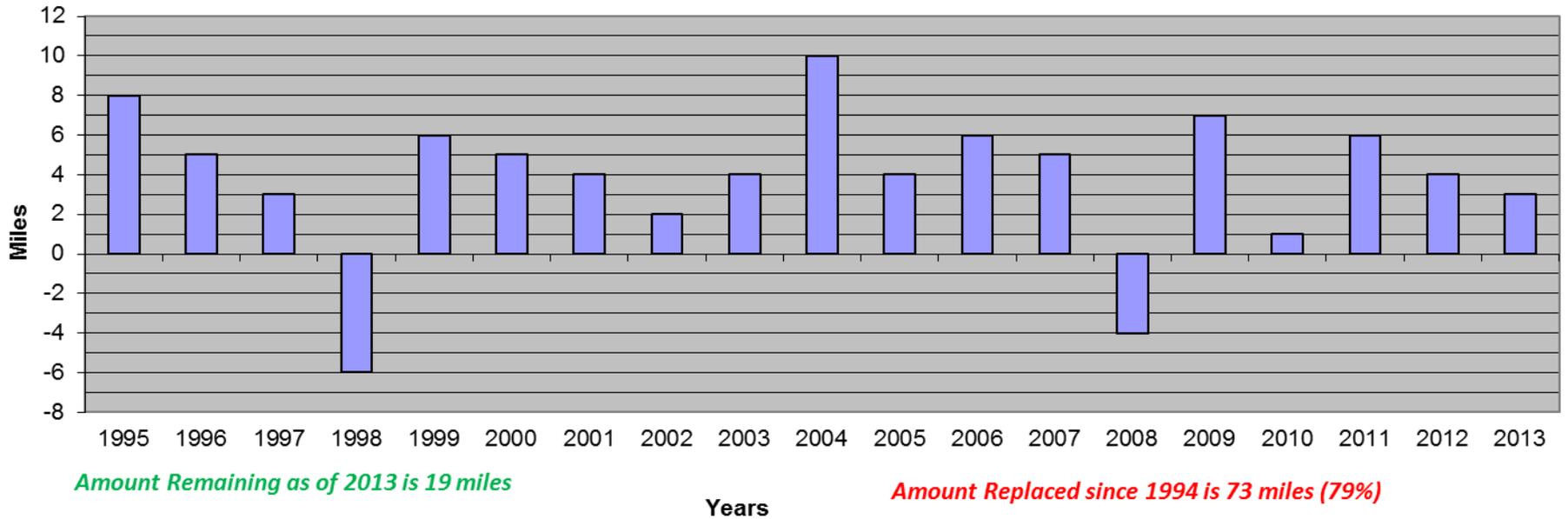
Years

*Amount Replaced since 1994 is 10 miles (48%)*

LIBERTY has committed to a **10 year** replacement program to eliminate Leak Prone Pipe (May 2014)

# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

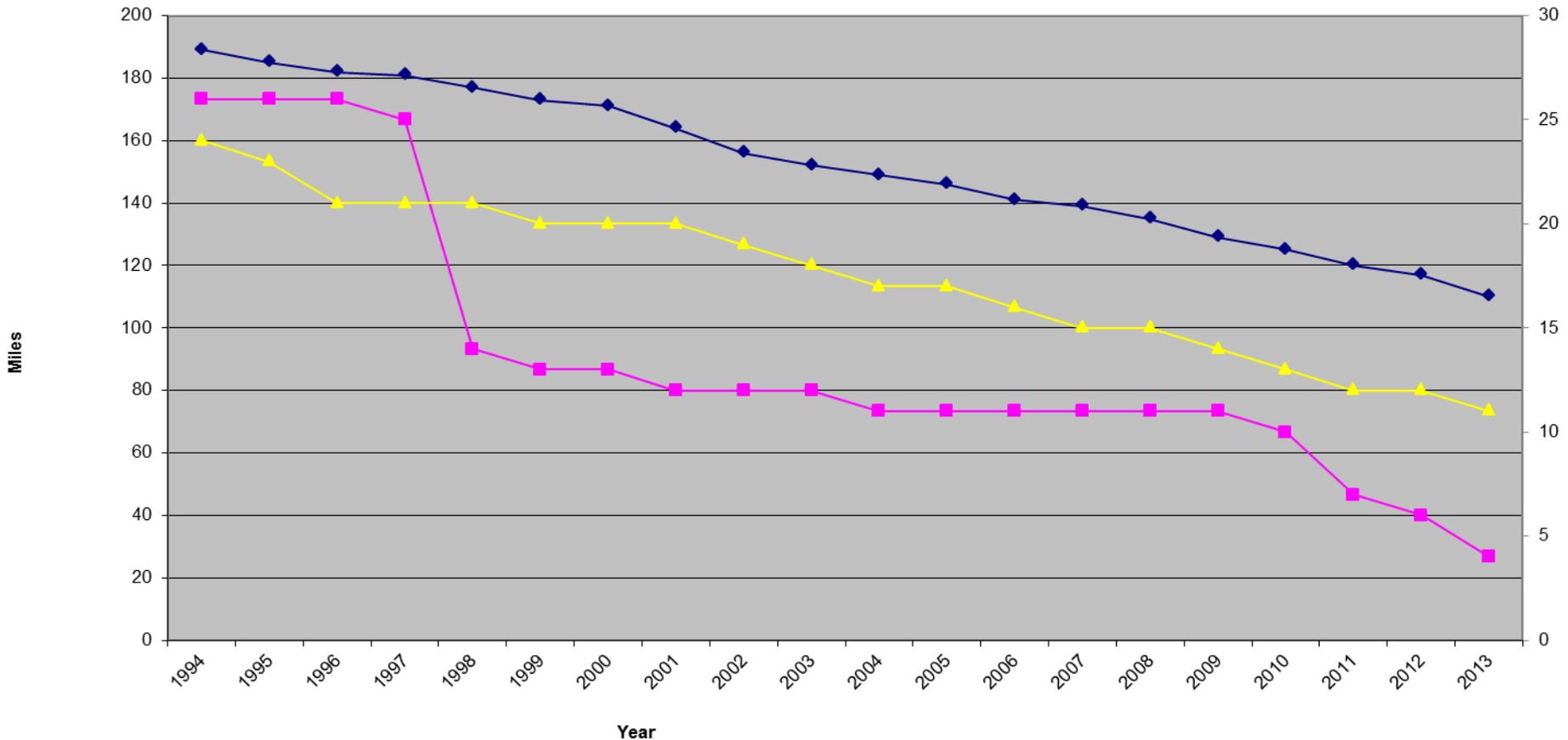
Unitil Bare Steel Replacement from DOT Annual Reports



Unitil has committed to a **2017 end** date replacement program to eliminate Bare Steel Mains (Dec 2008)

# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

Cast Iron Gas Mains in NH



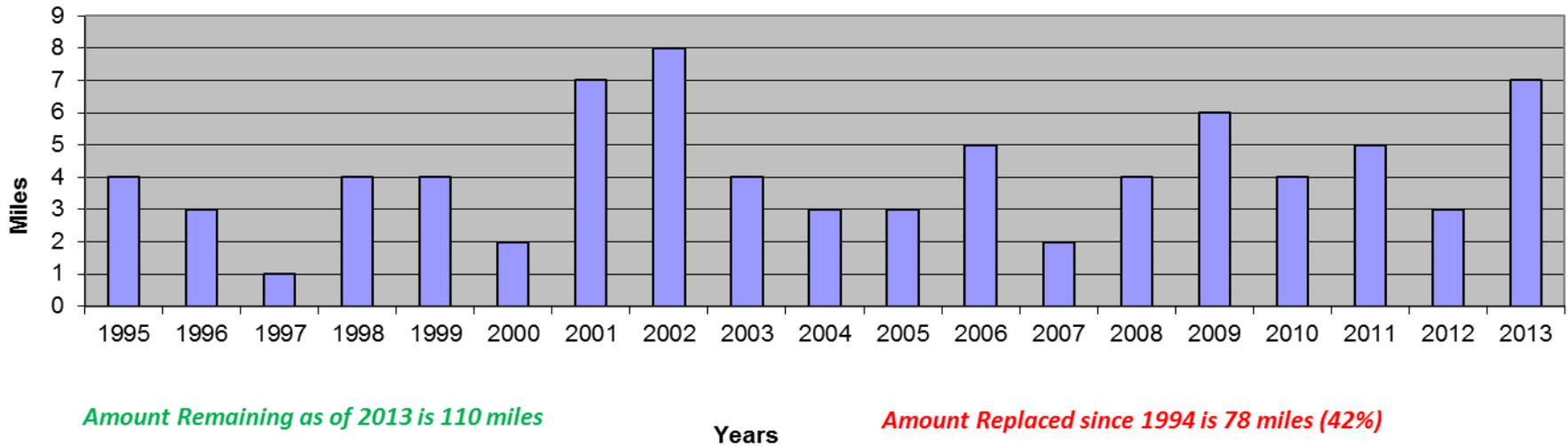
Liberty Left Axis

Unital Right Axis

NH Gas Right Axis

# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

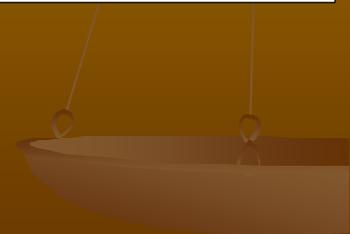
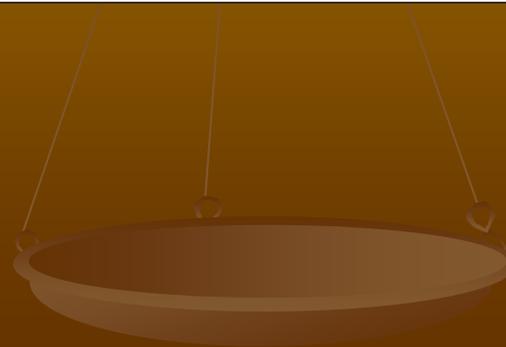
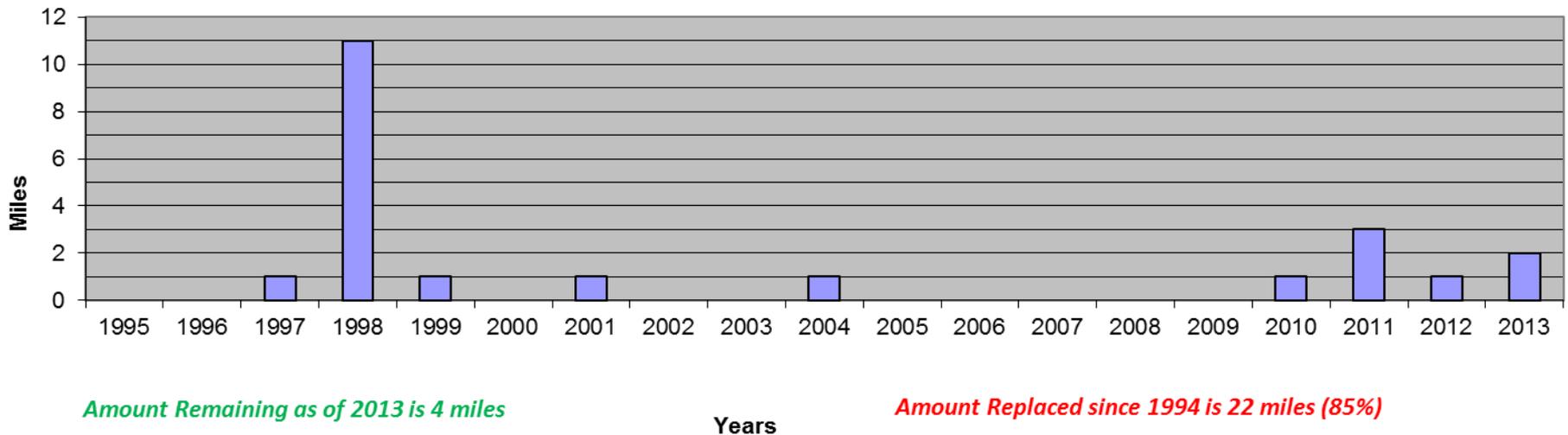
Liberty Cast Iron Replacement from DOT Annual Reports



LIBERTY has committed to a **10 year** replacement program to eliminate Leak Prone Pipe (May 2014)

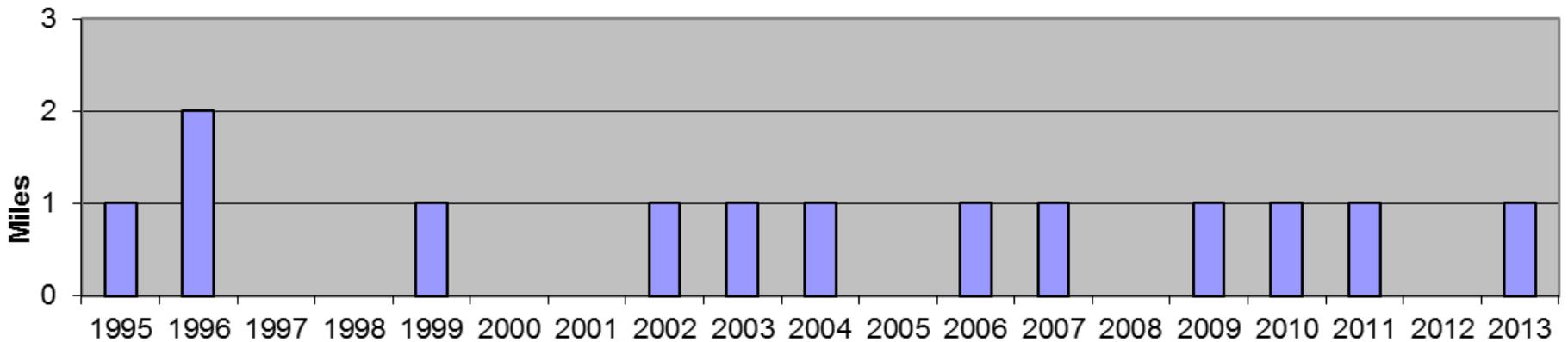
# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

Unitil Cast Iron Replacement from DOT Annual Reports



# NH Pipeline Safety Accelerated Replacement of Leak Prone Pipe

NH Gas Cast Iron Replacement from DOT Annual Reports



*Amount Remaining as of 2013 is 11 miles*

Years

*Amount Replaced since 1994 is 13 miles (54%)*

# NH Pipeline Safety INSPECTIONS PLANS – PLANS - PLANS

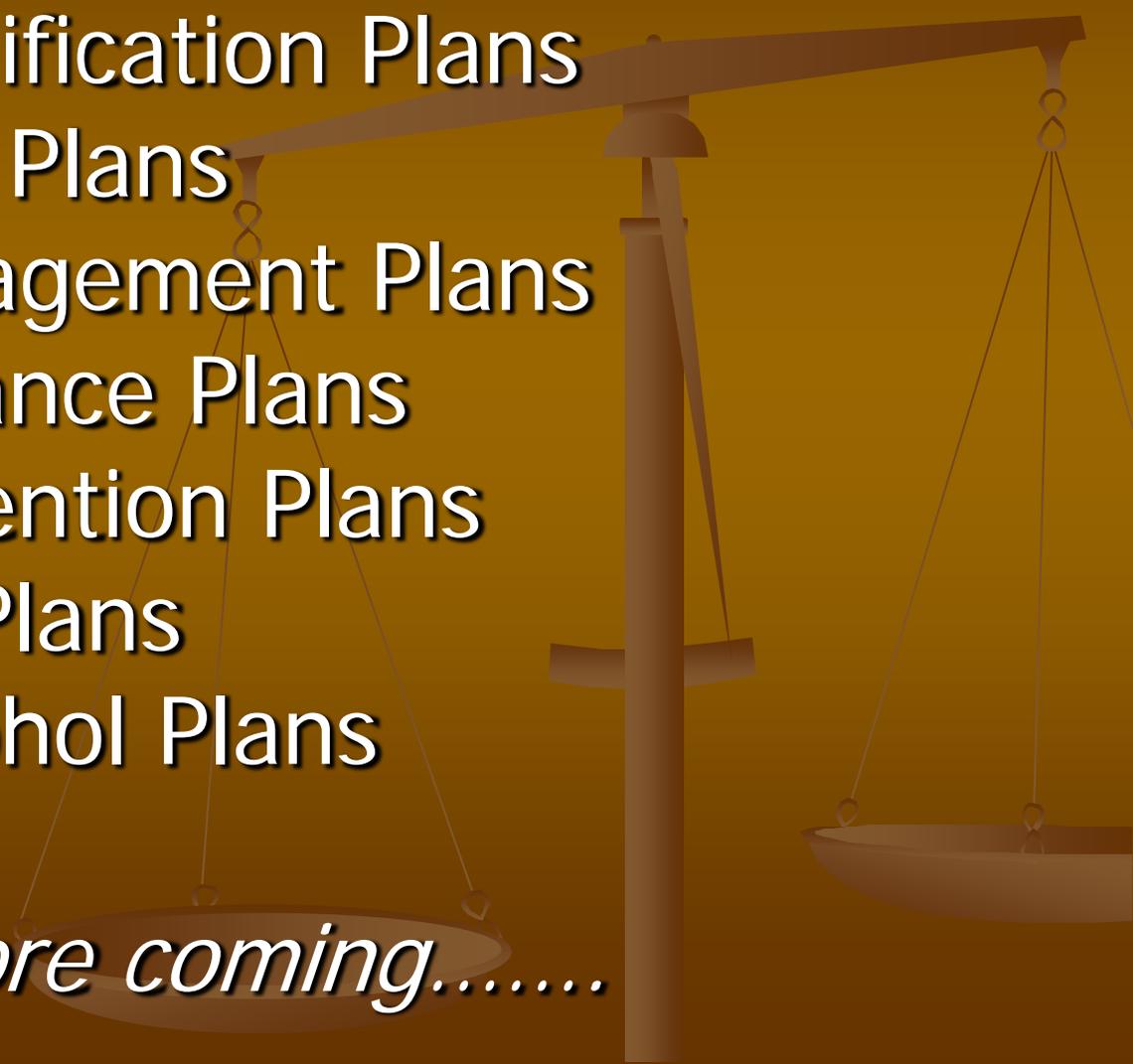
- Security Plans
- Cybersecurity Plans
- Public Awareness Plans
- Operation and Maintenance Plans
- Emergency Plans
- Distribution Integrity Management Plans



# NH Pipeline Safety INSPECTIONS PLANS – PLANS - PLANS

- Operator Qualification Plans
- Control Room Plans
- Integrity Management Plans
- Quality Assurance Plans
- Damage Prevention Plans
- Construction Plans
- Drug and Alcohol Plans

*And there is more coming.....*



# Thank you for your efforts towards Pipeline Safety



- Zero Incidents is Achievable