Statement of Confidentiality and Ownership

All of the analyses, findings and recommendations contained within this report are the exclusive property of Northeast Gas Association.

As required by the Code of Ethics of the National Council on Public Polls and the United States Privacy Act of 1974, GreatBlue Research, Inc. maintains the anonymity of respondents to surveys the firm conducts. No information will be released that might, in any way, reveal the identity of the respondent.

Moreover, no information regarding these findings will be released without the written consent of an authorized representative of Northeast Gas Association.

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1 INTRODUCTION

GreatBlue Research, Inc. (GB) is pleased to present the results of a *2014 Pipeline Public Awareness Program Evaluations Study* conducted within **Region Five (New York, Southeast)** on behalf of the Northeast Gas Association. The study included four comprehensive surveys of 512 residents, 102 Public Officials, 103 Emergency Management (EMS) Officials and 102 Excavators within **Region Five** towns served by **Central Hudson Gas & Electric, Consolidated Edison, National Grid (DS NY), New York State Electric & Gas and Orange & Rockland Utilities.**

The survey was designed to provide resident, Public Official, EMS Official and Excavator input on gas pipeline safety, including overall gas pipeline awareness, perceptions, attitudes, knowledge, understanding, behavior and gas safety program awareness.

Interviews were conducted among residents (customers and non-customers) within the towns served by **Central Hudson Gas & Electric, Consolidated Edison, National Grid (DS NY), New York State Electric & Gas and Orange & Rockland Utilities**. GB, working together with NGA officials, designed the survey instruments to be used when calling respondents within each of the eight total regions surveyed in this Association-wide study.

The survey instruments employed in the *2014 Pipeline Public Awareness Program Evaluations Study* included the following areas of investigation:

- Overall awareness of natural gas pipelines;
- Perceptions of, and concerns over pipeline safety;
- Knowledge and understanding of pipeline leaks;
- Behavior in reaction to detected gas leaks;
- Awareness of the NGA natural gas pipeline safety campaign;
- Sources for information regarding pipeline safety; and
- Demographics.

Section II of this report discusses the Methodology used in the study, while Section III includes highlights based on an analysis of the findings. Section IV is a Summary of Findings for the telephone surveys - a narrative account of the data.

Section V is an Appendix to the report containing a crosstabulation table, copies of each survey instrument utilized and the composite aggregate data for each market segment surveyed.

2 METHODOLOGY

Using a quantitative research design, GB completed 512 interviews among **Region Five (New York, Southeast)** residents. Residents were both customers and non-customers residing within the towns served by **Central Hudson Gas & Electric, Consolidated Edison, National Grid (DS NY), New York State Electric & Gas and Orange & Rockland Utilities.** Public Officials included Mayors, Councilmen and Council Members. Emergency Management Officials included Police Chiefs, Ambulance Chiefs, Fire Chiefs, Fire or Police Commissioners, Local Emergency Officials and EMS Officials.

Survey input was provided by NGA officials. Survey design at GB is a careful, deliberative process to ensure fair, objective and balanced surveys. Staff members, with years of survey design experience, edit out any bias. Further, all scales used by GB (either numeric, such as one through ten, or wording such as strongly agree, somewhat agree, somewhat disagree or strongly disagree) are balanced evenly. And, placement of questions is carefully accomplished so that order has minimal impact.

All population-based surveys conducted by GB are proportional to population contributions within states, towns, and known census tract, group blocks and blocks. This distribution ensures truly representative results without significant under or over representation of various geographic or demographic groups within a sampling frame.

GB utilized a "super random digit" sampling procedure for residential interviews, which derives a working telephone sample of both listed and unlisted telephone and cell phone numbers. This method of sample selection eliminates any bias towards only listed telephone numbers. Additionally, this process allows randomization of numbers, which equalizes the probability of qualified respondents being included in the sampling frame.

Four survey instruments were used to elicit information from all respondents. Residents qualified for the survey if they confirmed they were heads of household, at least eighteen years of age and were current residents of the service territory included. Telephone researchers were trained on all survey instruments and a pre-test was conducted before full fielding began.

All facets of the study were completed by GB's senior staff and researchers. These aspects include: survey design, pre-test, computer programming, fielding, coding, editing, data analysis, verification, validation and logic checks, analysis and report writing.

Statistically, a sample of 512 surveys represents a margin for error of +/- 4.5% at a 95% confidence level.

In theory, a sample of **Region Five** residents will differ no more than +/-4.5% than if all **Region Five** residents were contacted and included in the survey. That is, if random probability sampling procedures were reiterated over and over again, sample results may be expected to approximate the larger population values within plus or minus 4.5% -- 95 out of 100 times.

Readers of this report should note that any survey is analogous to a snapshot in time and results are only reflective of the time period in which the survey was undertaken. Should concerted public relations or information campaigns be undertaken during or shortly after the fielding of the survey, the results contained herein may be expected to change and should be, therefore, carefully interpreted and extrapolated.

Furthermore, it is important to note that all surveys contain some component of "sampling error." Error that is attributed to systematic bias has been significantly reduced by utilizing strict random probability procedures. This sample was strictly random in that selection of each potential respondent was an independent event, based on known probabilities.

Each qualified household within **Region Five** had an equal chance for participating in the study. Statistical random error, however, can never be eliminated but may be significantly reduced by increasing sample size.

Throughout a twelve week time frame, GB surveyed within eight regions for the Northeast Gas Association. The table below presents an overview of the regions.

Region	State(s)	Gas Utilities Represented
Region One	Connecticut	Connecticut Natural Gas Norwich Public Utilities Southern Connecticut Gas Yankee Gas
Region Two	Maine New Hampshire Vermont	Bangor Gas Liberty Utilities Maine Natural Gas Unitil Vermont Gas Systems, Inc.
Region Three	New York (Northeast)	National Grid (US NY) New York State Electric & Gas St. Lawrence Gas
Region Four	New York (West)	Corning Natural Gas National Fuel Gas Company New York State Electric & Gas Rochester Gas & Electric
Region Five	**New York (Southeast)**	**Central Hudson Gas & Electric Consolidated Edison National Grid (DS NY) New York State Electric & Gas Orange & Rockland Utilities**
Region Six	Massachusetts Rhode Island (Northwest)	Berkshire Gas Company Columbia Gas of Massachusetts (Merrimack & Western) Holyoke Gas & Electric Department National Grid (NE) NSTAR Electric & Gas Unitil Wakefield Municipal Gas & Light Department Westfield Gas & Electric Light Department
Region Seven	Massachusetts Rhode Island (Southeast)	Columbia Gas of Massachusetts (Southeast) Middleboro Gas & Electric Department National Grid (RI/Cape Cod) NSTAR Electric & Gas Liberty Utilities
Region Eight	New Jersey	New Jersey Natural Gas Public Service Electric & Gas Company South Jersey Gas

STATISTICAL ANALYSIS

A Z test was performed to determine if statistically significant differences occurred between two population proportions. In this survey analysis, the two population proportions were the responses to key questions from the 2010 NGA survey and 2014 NGA survey. Even though it appears that differences were evident from the 2010 data to the 2014 data, statistical testing was performed to determine if these differences were due to chance alone or were due to some underlying issues or factors present.

One of the many assumptions in performing the Z test relies on the following fact: the questions to be statistically compared from one study to the next data have to be identical with absolutely no variation or modification in wording or format from 2010 to 2014. Any variation or modification in the wording or format of the question will violate this underlying assumption and will greatly affect the statistical reliability and validity. Statistical testing, therefore, should not be done.

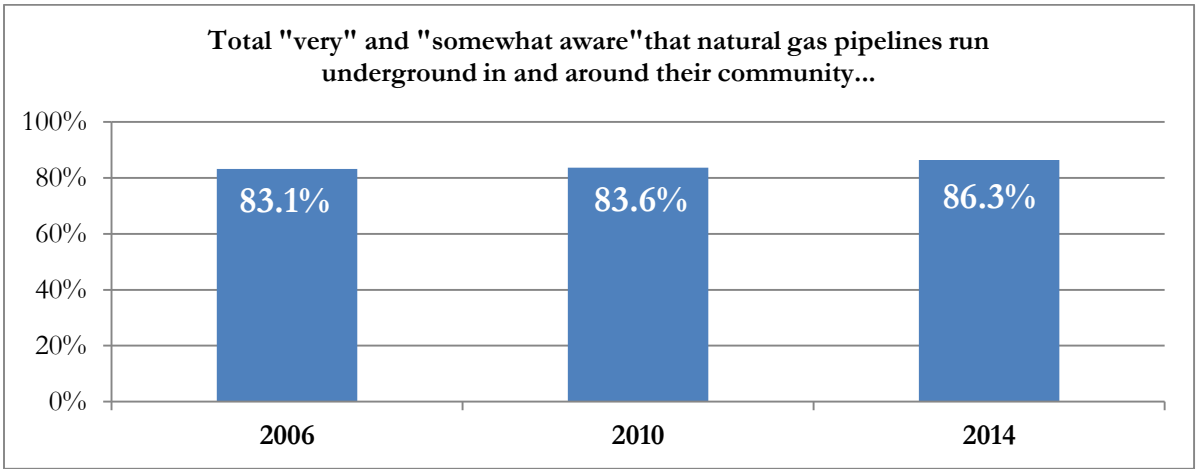
Thus, only the questions that did not violate the underlying assumptions were tested using the Z test. Statistically significant changes at the error rate of 0.05 were reported with one star (*). This star indicates that the change from 2010 to 2014 was a statistically significant increase or a statistically significant decrease as appropriate, and not due to chance alone.

Further analysis might assist in determining what factors were primary contributors or determinants for this statistically significant increase or decrease between the 2010 data and the 2014 data. *(Readers should note that the following sentence represents an example to demonstrate the statistical analysis and is not reflective of actual data within this report).* For example, if it was determined that general public's awareness of natural gas pipelines running underground in their neighborhood statistically significantly decreased from 82.8% in 2010 to 74.5% in 2014, some of the key contributory factors involved might include the gender, education, or ethnicity of the respondent. The list of key contributors leading to this statistically significant increase or decrease between the 2010 data and the 2014 would be region specific, depending upon the region's own unique demographic make-up of its sample.

GENERAL PUBLIC

AWARENESS

- More than four-fifths of General Public respondents (customers and non-customers) within NGA's Region 5 service territory, 86.3%, suggested they were either "very aware" (63.3%) or "somewhat aware" (23.0%) that natural gas pipelines run underground in many areas in and around their community, including directly to the homes of natural gas customers. This remains consistent with the percentage of respondents reporting the same in both 2006 (83.1%) and 2010 (83.6%).



- More than four-fifths of respondents, 82.4% (from 84.9% in 2006 and 79.3% in 2010), indicated they were either "very familiar" (58.8%) or "somewhat familiar" (23.6%) with the smell of natural gas. The remaining 17.7% of respondents reported to be either "somewhat unfamiliar" (5.7%), "not at all familiar" (10.0%) or "unsure" (2.0%).

- Over two-thirds of respondents, 68.8%, reported believing a natural gas pipeline did run through their town. While this marked a slight decrease from the 74.4% of respondents reporting the same in 2010, it remains up from the benchmark of 43.8% recorded in 2006.

PERCEPTIONS/ATTITUDES

- Nearly two-thirds all respondents, 63.1%, indicated they "always" (32.2%) or "sometimes" (30.9%) wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community. This marks a statistical significant increase from the 42.5% in 2010 and 32.0% in 2006.

- In addition, a similar amount of respondents, 64.5%, reported to be "very" or "somewhat concerned" about natural gas pipeline safety in their area. This, too, marks a statistical significant increase from the 34.7% of respondents reporting the same in 2010 and 30.3% reporting the same in 2006.

- Those respondents who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" about pipeline safety in their area were asked to indicate why. The top three reasons reported were "just don't think about it/other priorities" (32.4%), "faith in companies/trust what they're doing/taking safety precautions" (31.9%) and "no issues in the past/all has been good" (17.6%).

KNOWLEDGE/UNDERSTANDING

- When asked how they might detect a natural gas leak, 86.5% (from 88.6% in 2010 and 86.5% in 2006) of respondents reported "smell gas leak." Another 16.0% reported "see damaged gas pipe or line" and 13.3% said "hear gas leak."

BEHAVIOR

- If a natural gas leak were detected, respondents reported the actions they would take would be as follows: "call local natural gas company or pipeline operator" (54.7% from 48.4% in 2010 and 48.3% in 2006), "call 911" (50.6% from 45.9% in 2010 and 25.5% in 2006), "move to a safe area" (34.2% from 21.3% in 2010 and 25.3% in 2006) or "leave house" (28.9% from 10.7% in 2010).

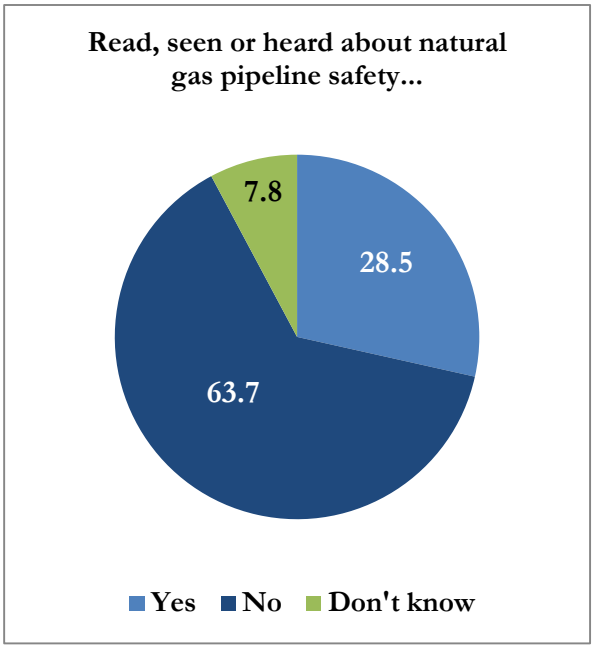
- When asked what key words they may search for in a phone book or on the internet to find a contact number to report a gas leak, top responses included the following: "(local gas company)" (33.4%), "gas utility" (14.6%), and "gas company" (12.9%).

- When all respondents were asked if they talked to their families about natural gas pipeline safety precautions, a statistically significant increase was found in 2014 (23.0%) from 2010 (14.9%).

THE SAFETY CAMPAIGN

- More than one-quarter of all respondents, 28.5% (from 23.8% in 2010 and 21.0% in 2006), indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year.

- A slight increase was found in respondents who reported to be either "very" or "somewhat aware" of the education efforts of their local gas company and the Northeast Gas Association in 2014 (31.5%) from both 2010 (26.3%) and 2006 (22.8%).



- **Among aware respondents, 55.1% (from 63.4% in 2010 and 45.2% in 2006), recalled the "Call before you dig" message. This was followed by "Safety is priority number one" (20.0% from 8.0% 2010 and 7.3% in 2006) and "Dig safely or Dig Safe" (19.5% from 54.5% in 2010 and 42.7% in 2006).**

- **Almost one-third of respondents (30.0%) who recalled key messages in the pipeline safety education information indicated these efforts prompted them to "speak with a family member or neighbor about pipeline safety," and another 26.5% reported these efforts prompted them to "think about what steps they might take in the event of a natural gas emergency."**

- **A large majority of all respondents, 93.6% (from 95.8% in 2010 and 96.3% in 2006), noted that the Pipeline safety public education is either "very important" (70.1%) or "somewhat important" (23.4%).**

- **While 53.3% (from 55.1% in 2010 and 32.8% in 2006) of General Public respondents reported being "very" or "somewhat familiar" with the term "Dig Safe;" a statistically significant increase was found in respondents reported to be "very" or "somewhat familiar" with the term "811 – Call Before You Dig" (44.5% in 2014 from 35.5% in 2010).**

- **When asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics, the overall positive rating (when "don't know" responses were removed from the data) was 49.0% in 2014 (from 61.9% in 2010 and 50.3% in 2006).**

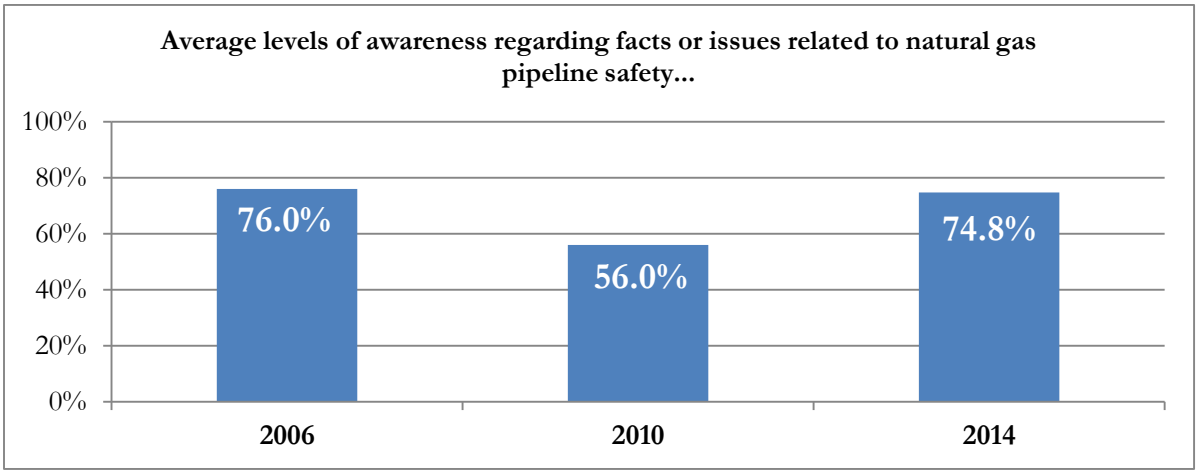
SOURCES FOR INFORMATION

- **Almost two-fifths of respondents, 39.5%, indicated preferring "TV news" as the way they would most like to receive their Pipeline Safety Information. This was followed by "mailings/direct mail" (29.5%), "TV advertising" (26.4%) and "utility company – direct mail" (24.4%) when multiple answers were accepted. As presented in the chart below, it's important to note the shifts in preferred sources of information from 2010 to 2014.**

Sources for Pipeline Safety Information...	*2006 General Public*	*2010 General Public*	*2014 General Public*
TV news	19.8%	49.1	39.5
Mailings/direct mail	41.0	18.4	29.5
TV advertising	24.0	18.9	26.4
Utility company – direct mail	2.0	5.7	24.4
Bill inserts	20.3	15.6	19.9

AWARENESS

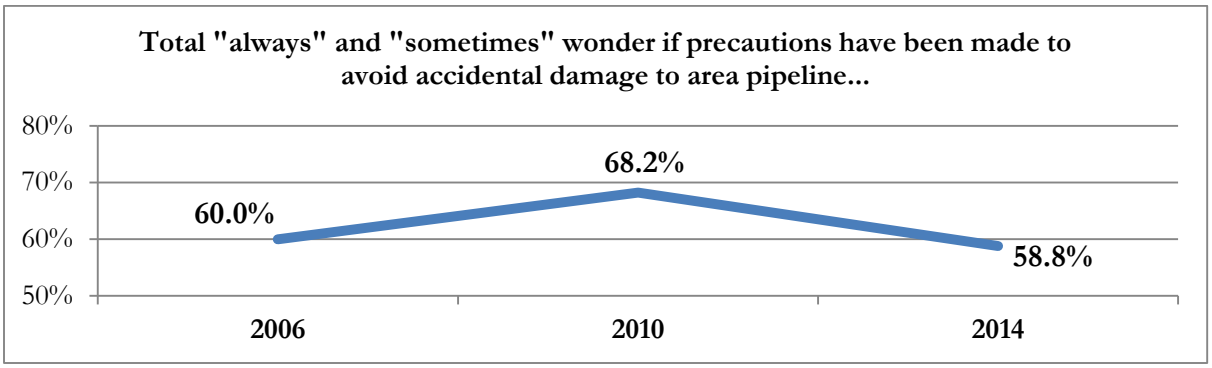
- **Overall average levels of awareness in 2014 regarding facts or issues related to natural gas pipeline safety among Region 5 Public Officials increased to 74.8% from 56.0% in 2010, previously 76.0% in 2006.**



- **It is also important that two of the four areas measured showed statistically significant increases in awareness in 2014 from 2010:**
  - **"The precautions excavators should take to avoid damage to natural gas pipelines" (81.4% from 56.6% in 2010)**
  - **"The 'One Call Line' to receive free markouts of buried natural gas pipelines/systems" (70.6% from 39.8% in 2010)**

PERCEPTIONS/ATTITUDES

- **Slightly less than three-fifths of Public Officials, 58.8% (from 68.2% in 2010 and 60.0% in 2006) reported they "always" (41.2%) or "sometimes" (17.6%) wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community.**



- **Concern regarding natural gas pipeline safety in 2014 increased among Public Officials with 58.8% (from 52.2% in 2010) reporting to be "very concerned" (33.3%) or "somewhat concerned" (25.5%) about pipeline safety in their area.**

- **The percentage of Public Officials who reported they believe excavators and construction professionals are either very or somewhat concerned about pipeline safety increased significantly in 2014 (89.2% from 77.9% in 2010).**

- **Those respondents who reported to be "somewhat unconcerned" or "not at all concerned" about pipeline safety in their area were asked to indicate why. The top reasons for their lack of concern included: "don't know much about it" (54.5%), "don't have natural gas" (18.2%) and "faith in the companies/trust what they're doing/taking safety precautions" (9.1%).**

KNOWLEDGE/UNDERSTANDING

- **The large majority of Public Official respondents, 91.2% (from 90.3% in 2010 and 84.0% in 2006), reported they might detect a natural gas leak by smelling it. This was followed by "hear gas leak" (4.9%) and "see damaged gas pipe or line" (3.9%).**

BEHAVIOR

- **More than half of Region 5 Public Officials in 2014 (54.9%) reported that calling their local natural gas company or pipeline operator would be the first course of action they would take upon detecting a natural gas leak. This was followed by "call 911" (43.1%) and "move to a safe area" (23.5%).**

- **Almost three-quarters of Public Officials, 71.6% (an increase from 60.2% in 2010), stated they would have the number handy to call a local gas company or pipeline operator with regard to natural gas leaks or pipeline damage.**

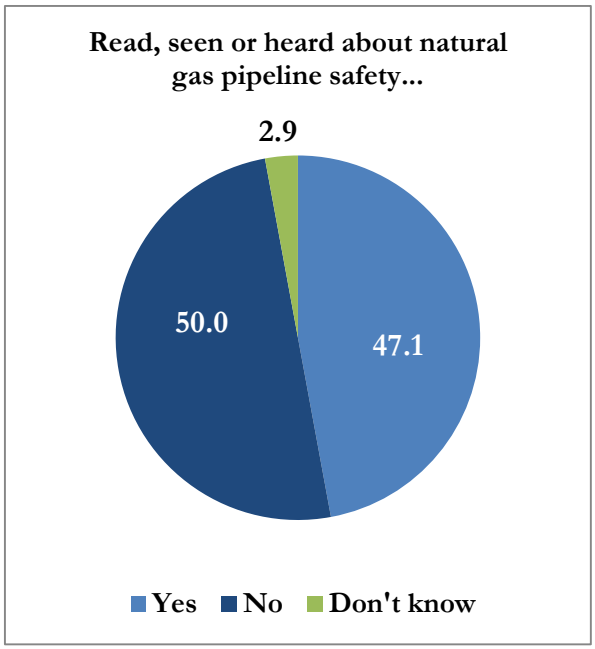
- **A statistically significant increase was found in 2014 from 2010 among the following actions:**
  - **"Received natural gas pipeline safety information from (Local Company)" (47.1% from 30.1%)**
  - **"Received natural gas pipeline safety information from northeast Gas Association" (15.7% from 2.7%)**
  - **"Received natural gas pipeline safety information from a source other than (Local Company)" (19.6% from 7.1% in 2010)**

- **When asked how well prepared they felt their community was in four areas related to a natural gas leak, Public Officials reported the following:**

How well prepared is your community? (Very well & Somewhat prepared)	*2006 Public Officials*	*2010 Public Officials*	*2014 Public Officials*
Knowledge about inherent dangers	80.0%	69.9	74.5
Natural gas leak emergency training	64.0	65.5	74.5
Knowledge about leaks	76.0	69.9	71.6
Special equipment required	56.0	61.9	57.8

THE SAFETY CAMPAIGN

- More than two-fifths of all Public Officials surveyed, 47.1%, indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year. This marks a statistically significant increase from the 32.7% of respondents who reported the same in 2010.



- Awareness of safety education efforts, however, decreased slightly among Public Officials in 2014 with 41.2% (from 45.1% in 2010), reporting to be "very aware" or "somewhat aware" of safety education efforts.

- Of those who were "very aware," "somewhat aware" or "somewhat unaware" of safety education efforts, the majority of respondents recalled the "Call Before You Dig" message (61.2%), followed by "Dig safely or Dig Safe" (30.6%).

- The clear majority of Public Officials, 97.1% (92.9% in 2010 and 100.0% in 2006), noted that pipeline safety public education is either "very important" (80.4%) or "somewhat important" (16.7%).

- Importantly, slight increases were found in 2014 from 2010 in familiarity with the following terms:
  - "Dig Safe/Dig Safely" (79.4% in 2014 from 73.5% in 2010)
  - "811 – Call Before You Dig" (76.5% in 2014 from 67.3% in 2010).

- When asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics, the overall positive rating (when "don't know" responses were removed from the data) increased to 69.8% in 2014 (from 59.1% in 2010 and 60.8% in 2006).

SOURCES FOR INFORMATION

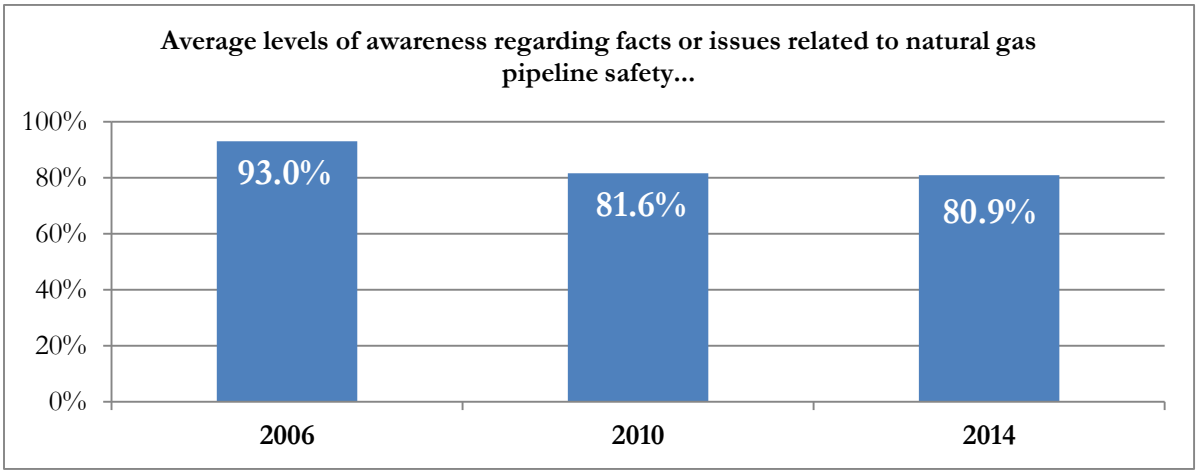
- **Over one-third of respondents, 38.2%, indicated preferring "Mailings/direct mail" as the way they would most like to receive their Pipeline Safety Information. This was followed by "TV news" (26.5%) and "Email" (22.5%) when multiple answers were accepted. As presented in the chart below, it's important to note the shifts in preferred sources of information from 2010 to 2014.**

Sources for Pipeline Safety Information…	*2006 Public Officials*	*2010 Public Officials*	*2014 Public Officials*
Mailings/direct mail	64.0	32.7	38.2
TV news	8.0	30.1	26.5
Email	---	10.6	22.5
TV advertising	4.0	31.0	16.7

EMERGENCY MANAGEMENT SERVICE OFFICIALS

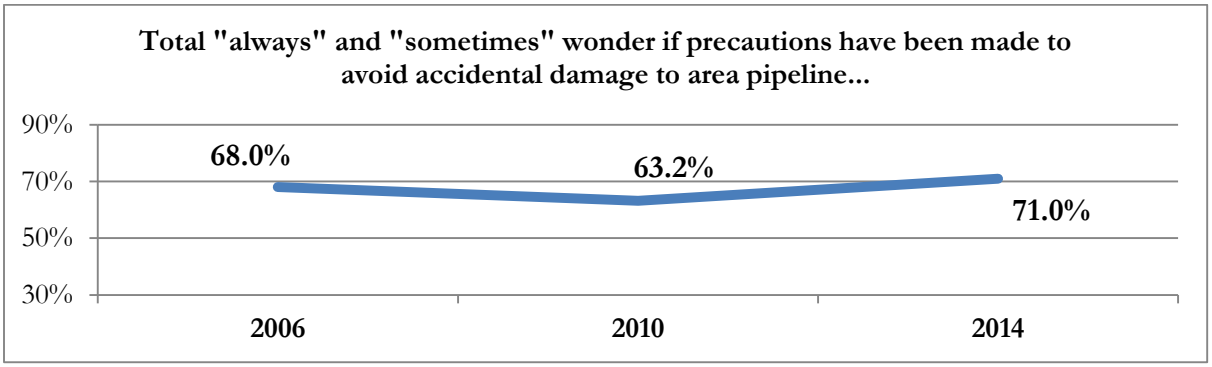
AWARENESS

- **Average levels of awareness in 2014 regarding facts or issues related to natural gas pipeline safety among Region 5 Emergency Management Service Officials remained consistent at 80.9% from 81.6% in 2010, previously 93.0% in 2006.**



PERCEPTIONS/ATTITUDES

- **Less than three-quarters of EMS Officials, 71.0% (from 63.2% in 2010 and 68.0% in 2006) reported they "always" (40.2%) or "sometimes" (30.8%) wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or other are digging in their community.**



- **Concern regarding natural gas pipeline safety in 2014 increased among EMS Officials with 62.6% (from 53.4% in 2010, previously 60.0% in 2006) reporting to be "very concerned" (29.9%) or "somewhat concerned" (32.7%) about pipeline safety in their area.**

- **The percentage of EMS Officials who reported they believe excavators and construction professionals are either "very" or "somewhat concerned" about pipeline safety also increased slightly to 88.8% in 2014 (from 84.5% in 2010 and 92.0% in 2006).**

- **Those EMS Officials who reported excavators and construction professionals are "somewhat unconcerned," "not at all concerned" or "unsure" were asked to explain the reason why. The top reasons reported included: "carelessness/cutting corners" (41.7%), "none/no reason" (33.3%), "don't know/unsure" (16.7%) and "faith in companies/assume precautions are taken" (8.3%).**

KNOWLEDGE/UNDERSTANDING

- **More than three-quarters of EMS respondents, 79.4% (from 81.6% in 2010 and 84.0% in 2006), reported they might detect a natural gas leak by smelling it. This was followed by "see damaged gas pipe or line" (15.9%) and "hear gas leak" (14.0%).**

BEHAVIOR

- **Almost three-fifths of Region 5 Emergency Management Officials in 2014, 58.9% (from 60.2% in 2010 and 56.0% in 2006), reported calling their local natural gas company or pipeline operator would be the first course of action they would take upon detecting a natural gas leak. This was followed by "move to a safe area" (43.9%), "call 911" (30.8%) and "call local phone number for police/fire/emergency services" (28.0%), when multiple responses were accepted.**

- **New to 2014, when EMS respondents were asked what they would do if they detected a natural gas fire; the top three responses were "call local natural gas company or pipeline operator" (48.6%), "move to a safe area" (32.7%), and "call local phone number for police/fire/emergency services" (29.0%) when multiple responses were accepted.**

- **A statistically significant decrease was found in the percentage of EMS Officials reporting to have the number handy if they needed to reach the local natural gas company or pipeline operator with regard to natural gas leaks or pipeline damage (71.0% from 89.3% in 2010 and 88.0% in 2006).**

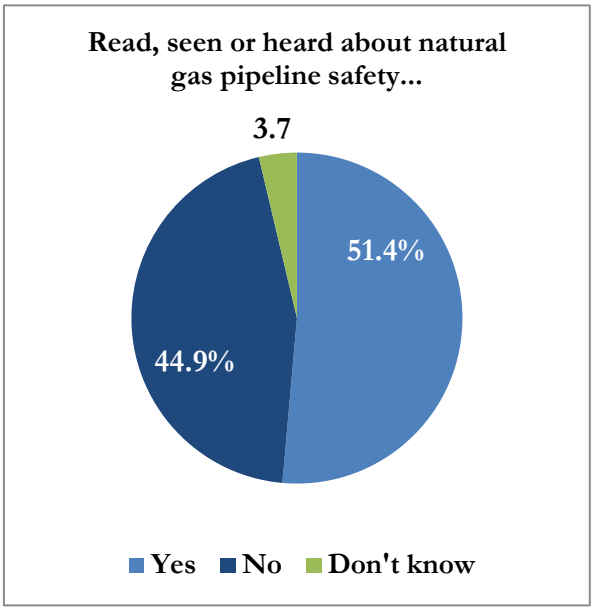
- **Statistically significant decreases were also found in 2014 from 2010 among the following actions:**
  - **"Passed natural gas pipeline safety information on to residents" (17.8% from 30.1% in 2010)**
  - **"Talked to residents/professionals about natural gas pipeline safety precautions" (22.4% from 39.8% in 2010)**
  - **"Responded to a natural gas pipeline break" (34.6% from 50.5% in 2010)**
  - **"Contacted (Local Company) related to a pipeline safety issue" (36.4% from 53.4% in 2010)**

- **When asked how well prepared they felt their community was in four areas related to a natural gas leak, Emergency Management Officials reported the following:**

How well prepared is your community? (Very well & Somewhat prepared)	*2006 Emergency Officials*	*2010 Emergency Officials*	*2014 Emergency Officials*
Knowledge about inherent dangers	92.0%	90.3	75.7
Knowledge about leaks	84.0	88.3	75.7
Natural gas leak emergency training	84.0	82.5	74.8
Special equipment required	80.0	76.7	69.2

THE SAFETY CAMPAIGN

- **Two-thirds of all Emergency Management Service Officials surveyed (51.4%) indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year (from 47.6% in 2010 and 56.0% in 2006).**



- **Awareness of safety education efforts decreased statistically significantly among EMS Officials in 2014 with 34.6% (from 58.3% in 2010 and 48.0% in 2006), reporting to be "very aware" or "somewhat aware" of safety education efforts.**

- **Of those who were "very aware," "somewhat aware" or "somewhat unaware" of safety education efforts, a strong majority recalled the "Call before you dig" message (87.2%). This was followed by "Safety is priority number one" (28.2%) and "If you smell rotten eggs, take precautions and call the gas leak hotline from a neighbor's home" (28.2%).**

- **Almost all EMS Officials interviewed, 96.3% (97.1% in 2010 and 100.0% in 2006), noted that pipeline safety public education is either "very important" (83.2%) or "somewhat important" (13.1%).**

- **Importantly, a statistically significant decrease was found in 2014 from 2010 in familiarity with the term "811 – Call Before You Dig" (70.1% in 2014 from 85.4% in 2010).**

- **When asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics, the overall positive rating (when "don't know" responses were removed from the data) was 68.0% in 2014 (from 74.4% in 2010 and 65.7% in 2006).**

SOURCES FOR INFORMATION

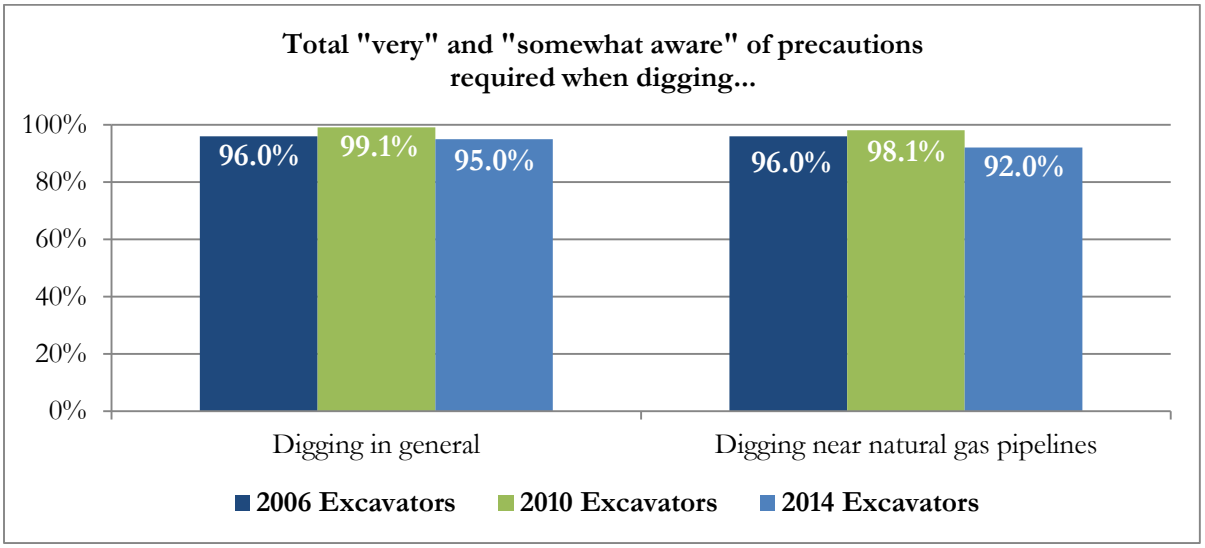
- **Close to two-fifths of respondents, 37.4%, indicated preferring "Mailings/direct mail" as the way they would most like to receive their Pipeline Safety Information. This was followed by "TV news" (30.8%) and "Email" (25.2%) when multiple answers were accepted. As presented in the chart below, it's important to note the shifts in preferred sources of information from 2010 to 2014.**

Sources for Pipeline Safety Information…	*2006 Emergency Officials*	*2010 Emergency Officials*	*2014 Emergency Officials*
Mailings/direct mail	64.0%	38.8	37.4
TV news	12.0	35.9	30.8
Email	---	10.7	25.2
TV advertising	8.0	22.3	23.4

EXCAVATORS

AWARENESS

- **Importantly, the large majority of Excavators surveyed in 2014 suggested they were either "very aware" or "somewhat aware" of precautions required when digging in general (95.0% from 99.1% in 2010 and 96.0% in 2006) or digging near natural gas pipelines (92.0% from 98.1% in 2010 and 96.0% in 2006).**

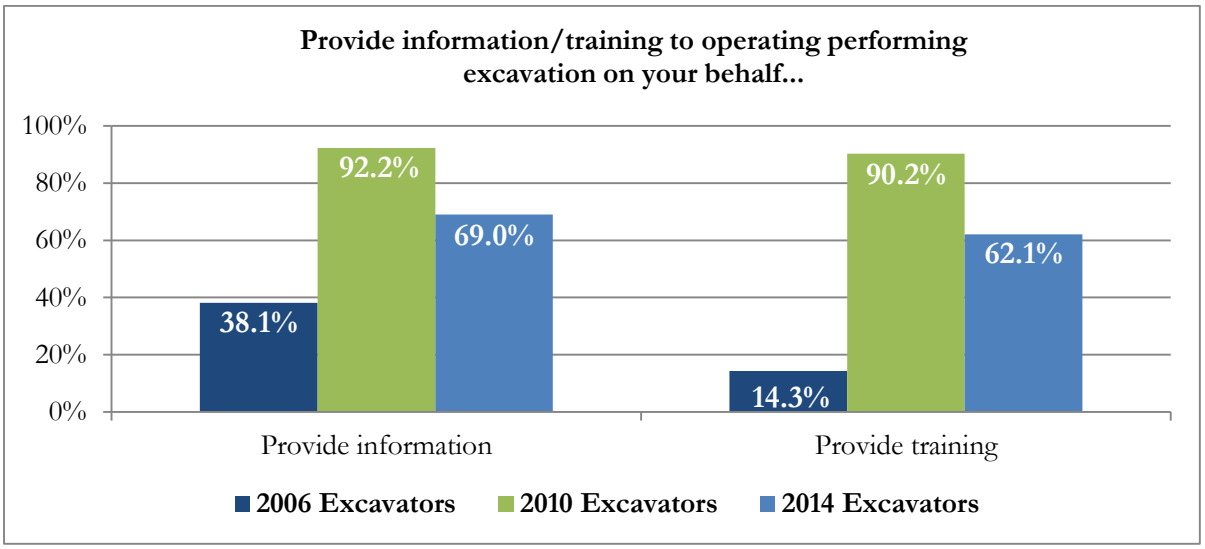


- **While not statistically significant, strong increases were recorded regarding the following sources of information received by Excavators:**
  - **"The One Call Center" (46.0% from 36.5% in 2010)**
  - **"Northeast Gas Association or other gas industry associations" (14.0% from 9.6% in 2010)**

JOB PREPARATIONS

- **A decrease was found in the frequency of contacting the One Call Center regarding pipeline locations (84.0% reporting to contact "always" or "most of the time" from 92.3% in 2010).**

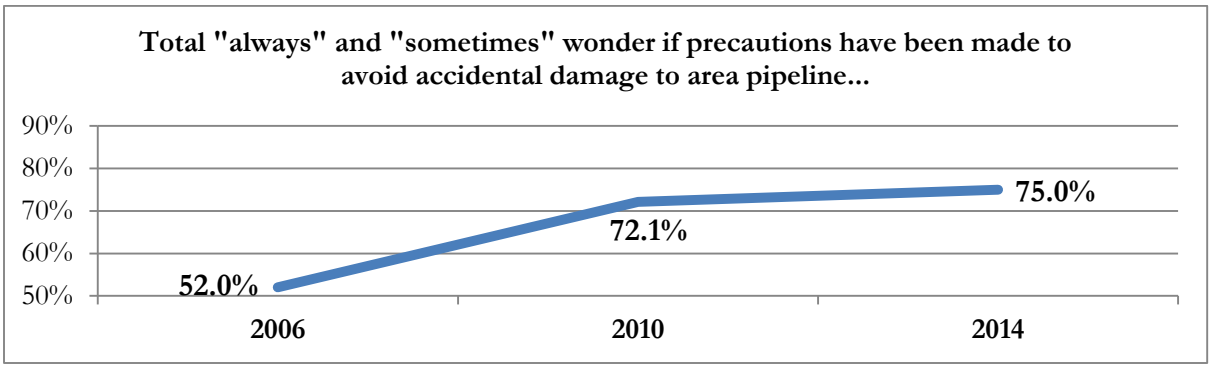
- **More than a quarter of Excavators, 29.0%, reported that besides themselves, they have other operators or subcontractors performing excavation work. As presented in the following chart, among those Excavators, statistically significant decreases were found in both the provision of information (69.0% from 92.2% in 2010) and training (62.1% from 90.2% in 2010) of operators performing excavation the behalf of the Excavators interviewed.**



- **Almost all of Excavators, 96.6%, reported other employee operators or subcontractors call the One Call Center "always" (93.1%) or "most of the time" (3.4%). This marks a statistically significant increase from the percent of Excavators reporting the same in 2010 (82.4%).**

PERCEPTIONS/ATTITUDES

- **Three-quarters of Excavators, 75.0%, reported they wonder "always" (57.0%) or "sometimes" (18.0%) if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community. As presented in the following chart, this remains consistent with the Excavators who reported the same in 2010 (72.1%) but remains up from 2006 (52.0%).**



- **Concern regarding natural gas pipeline safety in 2014 however, showed a slight decrease among Excavators reporting to be "very" or "somewhat concerned" (82.0%) about natural gas pipeline safety than in 2010 (90.4%).**

- **Those respondents who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" about natural gas pipeline safety were asked to provide a reason. Half of these Excavators reported it is because they believe "just don't think about it" (50.0%) followed by "proper safety precautions are always taken" (33.3%), "always call to double check" (11.1%) and "always hand dig" (5.6%).**

KNOWLEDGE/UNDERSTANDING

- **More than four-fifths of Excavator respondents, 89.0% (from 92.2% in 2010 and 88.0% in 2006), reported they might detect a natural gas leak by smelling it. This was followed by "hear gas leak" (13.0%) and "see damaged gas pipe" (8.0%) when multiple answers were accepted.**

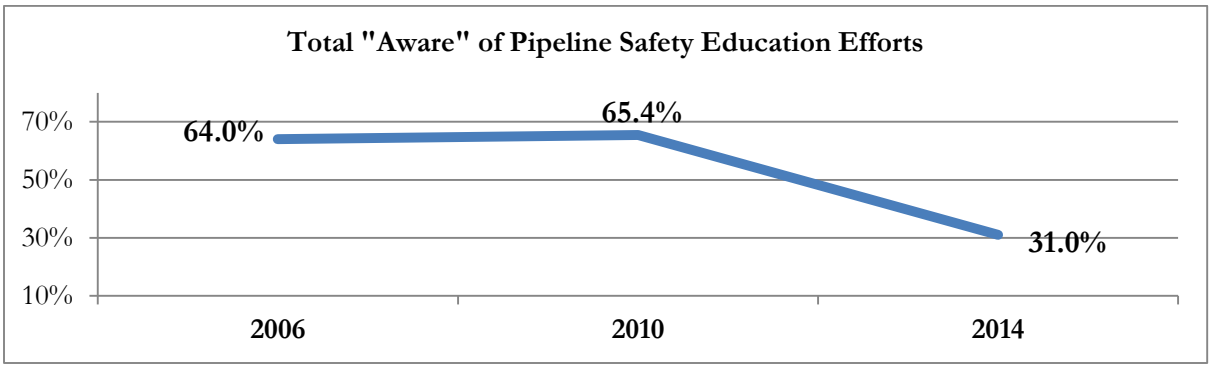
BEHAVIOR

- **If Excavator respondents detected a natural gas leak, the top three reported actions they would take were "call local natural gas company or pipeline operator" (66.0% from 74.0% in 2010 and 64.0% in 2010), "call 911" (30.0% from 32.7% in 2010 and 32.0% in 2006) and "move to a safe area" (20.0% from 7.7% in 2010 and 12.0% in 2006) when multiple answers were accepted.**

- **A statistically significant decrease was found in 2014 from 2010 among the following actions:**
  - **"Attempted to obtain natural gas pipeline safety information over the last year" (11.0% from 31.7% in 2010)**
  - **"Talked to employees about natural gas pipeline safety precautions" (39.0% from 57.7% in 2010)**

THE SAFETY CAMPAIGN

- **Slightly less than one-third of all respondents, 31.0%, indicated they were either "very aware" (17.0%) or "somewhat aware" (14.0%) of the education efforts of their local gas company and Northeast Gas Association this marks a statistically significant decrease from respondents who reported the same in both 2010 (65.4%) and 2006 (64.0%).**



- **Of those who were "very aware," "somewhat aware" or "somewhat unaware" of safety education efforts, more than three-quarts of respondents recalled the "Call Before You Dig" message (78.8%). This was followed by "Dig safely or Dig Safe" (51.5%) and "Call 811" (39.4%).**

- **The clear majority of Excavators, 97.0% (98.1% in 2010 and 96.0% in 2006), noted that pipeline safety public education is either "very important" (81.0% from 89.4% in 2010 and 80.0% in 2006) or "somewhat important" (16.0% from 8.7% in 2010 and 16.0% in 2006).**

- **A consistently strong percentage of Excavators reported familiarity with the terms "Dig Safe/Dig Safely" (96.0% from 97.1% in 2010) and "811 – Call Before You Dig" (93.0% from 96.2% in 2010).**

- **When asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics, the overall positive rating (when "don't know" responses were removed from the data) was 73.8% in 2014 (from 80.7% in 2010 and 62.2% in 2006).**

SOURCES FOR INFORMATION

- **Almost two-fifths of Excavators, 38.0%, indicated preferring "Mailings/direct mail" as the way they would most like to receive their Pipeline Safety Information. This was followed by "Email" (36.0%) and "TV news" (11.0%) when multiple answers were accepted. As presented in the chart below, it's important to note the shifts in preferred sources of information from 2010 to 2014.**

Sources for Pipeline Safety Information…	*2006 Excavators*	*2010 Excavators*	*2014 Excavators*
Mailings/direct mail	68.0%	51.0	38.0
Email	---	17.3	36.0
TV news	---	17.3	11.0
Internet/web	8.0	3.8	10.0

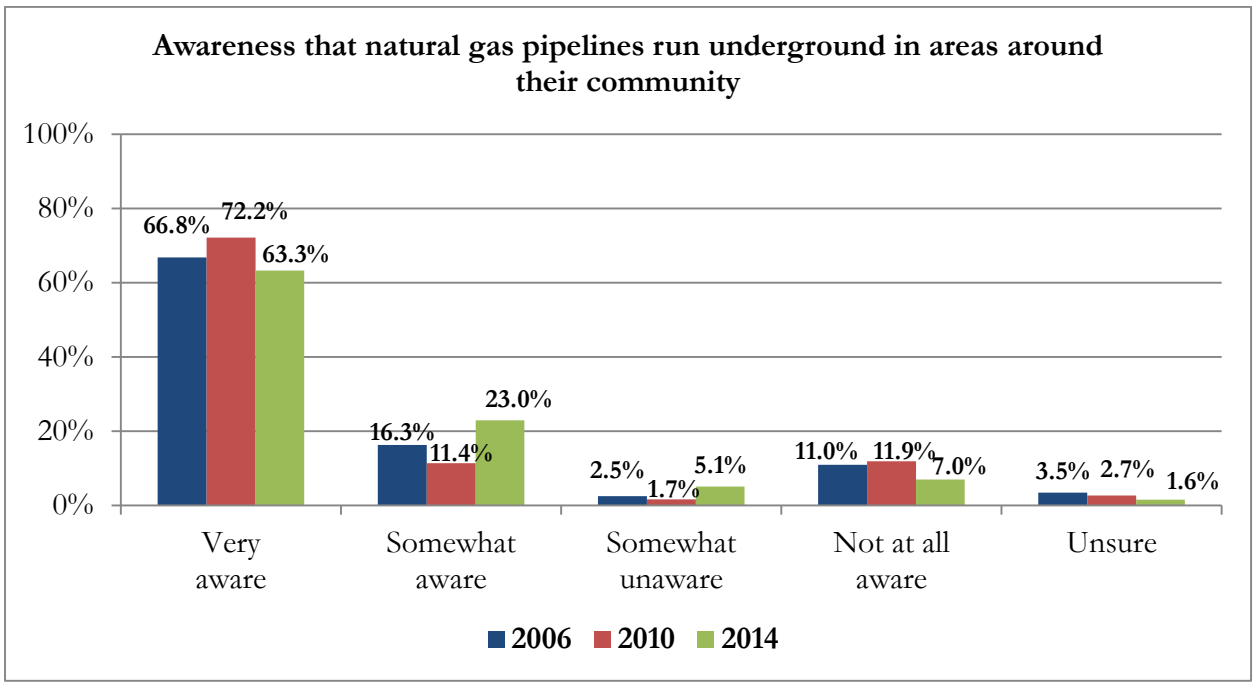
GENERAL PUBLIC

Readers are reminded that the following section summarizes statistics collected from surveys conducted among 512 **Region Five (New York, Southeast)** residents.

AWARENESS

For purposes of the study, respondents were first read a statement indicating that the term "pipeline" referred to a transmission line, a main line running down a street or a service line to a home.

More than four-fifths of residents (customers and non-customers) within NGA's **Region Five** service territory, 86.3%, suggested they were either "very aware" (63.3%) or "somewhat aware" (23.0%) that natural gas pipelines run underground in many areas in and around their community, including directly to the homes of natural gas customers. Others reported they were either "somewhat unaware" (5.1%), "not at all aware" (7.0%) or "unsure" (1.6%).

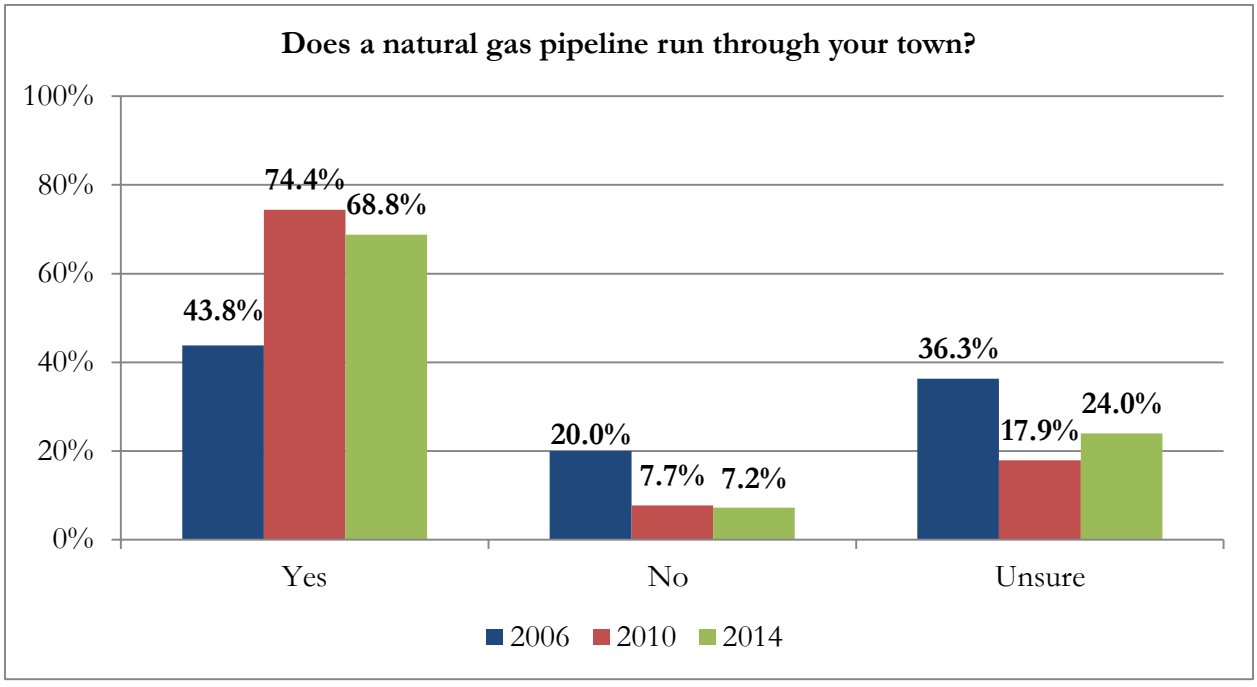


Four-fifths of residents, 82.4%, indicated they were either "very familiar" (58.8%) or "somewhat familiar" (23.6%) with the smell of natural gas, while remaining respondents reported to be either "somewhat unfamiliar" (5.7%), "not at all familiar" (10.0%) or "unsure" (2.0%).

How familiar with the smell of natural gas?	***2006 General Public***	***2010 General Public***	***2014 General Public***
Very familiar	56.8%	67.0	58.8
Somewhat familiar	22.5	17.9	23.6
Somewhat unfamiliar	5.5	1.7	5.7
Not at all familiar	13.8	11.9	10.0
Don't know/unsure	1.5	1.5	2.0
Total familiar	***79.3***	***84.9***	***82.4***
Total unfamiliar	***19.3***	***13.6***	***15.7***

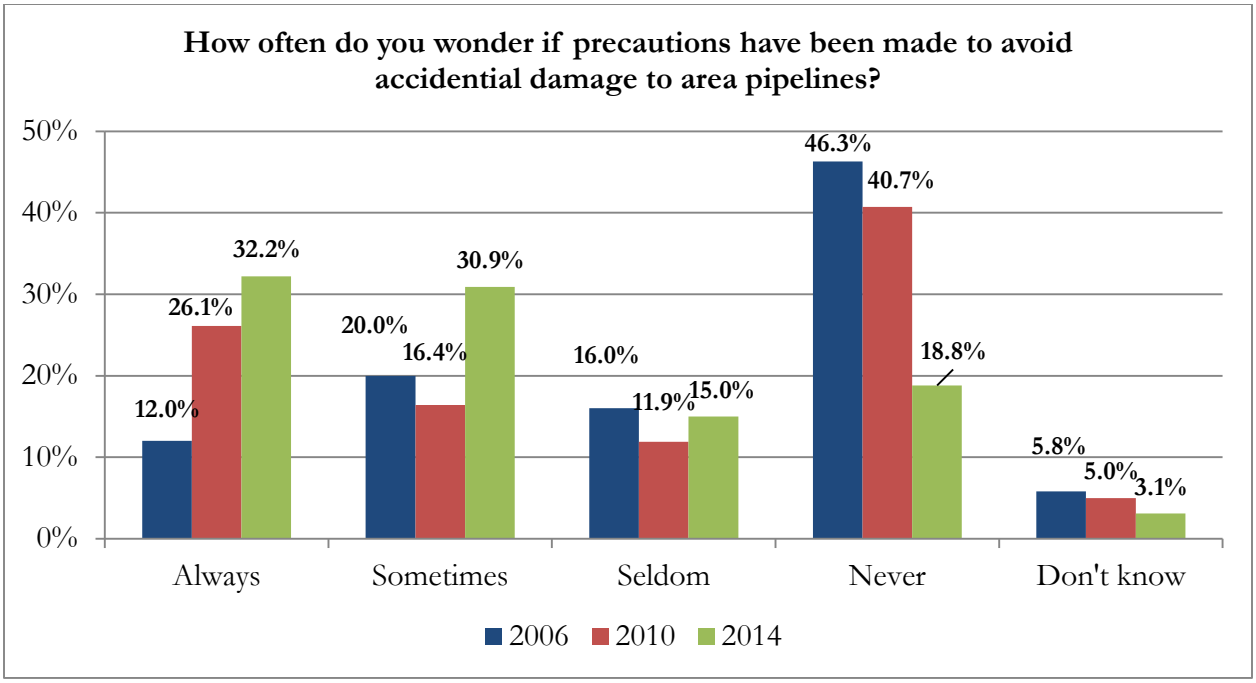
In 2006, respondents were asked if they lived near or within a half mile of a natural gas pipeline. In 2010 and again in 2014, however, respondents were simply asked if a natural gas pipeline runs through their town.

Two-thirds of respondents, 68.8%, reported "yes" when asked if they believed a natural gas pipeline runs through their town. Another 7.2% said "no" and the remaining 24.0% were unsure if a natural gas pipeline ran through their town.



PERCEPTIONS/ATTITUDES

As presented in the chart below, nearly two-thirds of all respondents, 63.1%*, suggested they "always" (32.2%) or "sometimes" (30.9%) wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community.



Two-thirds of all General Public respondents, 64.5%*, reported to be either "very concerned" (24.2%) or "somewhat concerned" (40.2%) about natural gas pipeline safety in their area.

The table below presents detailed findings.

How concerned about pipeline safety in your area?	***2006 General Public***	***2010 General Public***	***2014 General Public***
Very concerned	12.5%	19.9	24.2
Somewhat concerned	17.8	14.9	40.2
Somewhat unconcerned	11.8	5.5	13.9
Not at all concerned	53.3	58.3	20.7
Don't know/unsure	4.8	1.5	1.0
Total concerned	***30.3***	***34.7***	***64.5****
Total unconcerned	***65.1***	***63.8***	***34.6***

* Denotes statistically significant change, at alpha < or = 0.05.

Those respondents who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" about pipeline safety in their area (182 or 35.5% of respondents) were asked to provide a reason.

The following table presents the results.

Reasons why unconcerned about pipeline safety in your area…	***2014 General Public***
Just don't think about it/other priorities	32.4%
Faith in companies/trust what they're doing/taking safety precautions	31.9
No issues in the past/all has been good	17.6
Don't have natural gas	14.3
Don't know much about it	2.2
Pipelines in area are new	1.1
Not much digging in the area	0.5

Further, those respondents were also asked to indicate what the Northeast Gas Association and their local company can do to increase the level of concern or pay greater attention to pipeline safety efforts in the future.

The table below presents the detailed findings.

What might the Northeast Gas Association and [Local Company] do in order for you to be more concerned or pay greater attention to pipeline safety efforts in the future?	***2014 General Public***
None/nothing	39.6%
Increase advertisements/education/communication efforts	37.4
Don't know/unsure	11.0
Take proper precautions/markings	6.0
Doing a good job/no improvements	4.9
Doesn't apply to me/don't have or live in an area with natural gas	1.1

KNOWLEDGE/UNDERSTANDING

Researchers asked respondents, in an open-ended format question, how they might detect a natural gas leak.

The following table presents the results as collected. Multiple responses were collected.

How might you detect a natural gas leak?	***2006 General Public***	***2010 General Public***	***2014 General Public***
Correct: Smell gas leak	86.5%	88.6	86.5
Correct: See damaged gas pipe or line	1.3	3.2	16.0
Correct: Hear gas leak	2.3	2.5	13.3
Don't know/unsure	10.8	9.2	8.6
Correct: See discolored brown, or dead vegetation	**	**	6.8
Correct: See effects of a natural gas leak	---	1.7	6.4
Other	1.5	1.5	2.2
Incorrect: See natural gas (no description)	---	0.2	1.6

*** Indicates a question not asked in a particular year.*

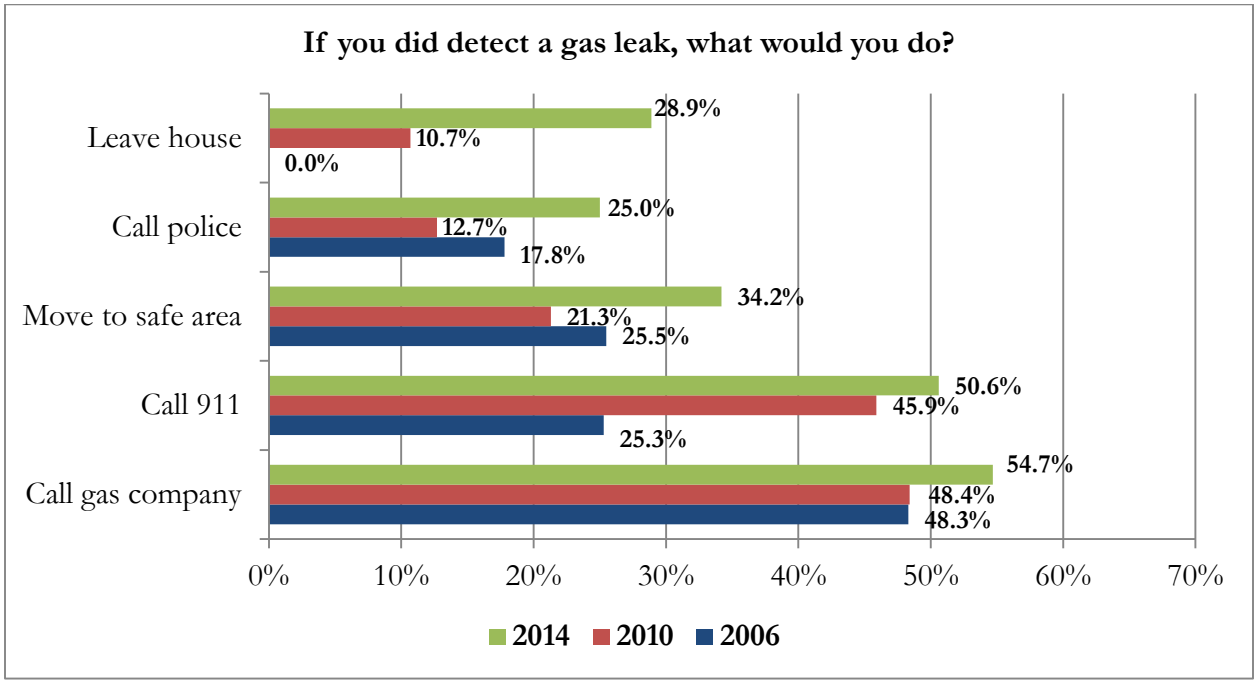
"Other" responses included: "sensor/detector" (1.6%) and "fire/explosion/bang" (0.6%).

BEHAVIOR

If respondents detected a natural gas leak, the following table depicts the actions they would take. Readers should note that multiple responses were collected.

If you did detect a natural gas leak, what would you do?	*2006 General Public*	*2010 General Public*	*2014 General Public*
Call local natural gas company or pipeline operator	48.3%	48.4	54.7
Call 911	25.3	45.9	50.6
Move to a safe area	25.5	21.3	34.2
Leave house	---	10.7	28.9
Call local phone number for police/fire/emergency services	17.8	12.7	25.0
Other	1.3	4.7	3.6
Don't know/unsure	4.8	3.2	2.7
Look on web/internet for phone number	---	0.2	2.5

"Other" responses provided included the following: "Turn off gas" (1.6%), "open windows" (1.6%), and "call landlord" (0.4%).



In an effort to find the phone number for the local natural gas company using the internet or the phone book to report a gas leak, respondents reported they would look for or type in the following:

Would look for or type in…	***2006 General Public***	***2010 General Public***	***2014 General Public***
(Local gas company) *specific name used*	34.8%	34.0	33.4
Gas utility	7.5	6.0	14.6
Gas company	11.5	15.4	12.9
Utilities	7.5	3.9	10.5
Gas emergencies	4.0	5.7	9.6
Natural gas	13.5	24.3	8.2
Other	---	---	5.7
Don't know/unsure	21.8	10.7	5.1

"Other" responses included the following: "Look at bill" (2.1%), "call 911/emergency number" (2.0%), "not applicable/already have number handy" (1.2%), and "call 411/information" (0.4%).

Researchers asked respondents if they had ever taken part in any of the following actions related to gas pipe safety.

The following table and chart presents the results collected for each action.

Actions	***2006 General Public (Yes)***	***2010 General Public (Yes)***	***2014 General Public (Yes)***
Noticed suspicious or unusual activity near a natural gas pipeline near your home or in your community	**%	**	9.2
Called to report suspicious or unusual activity near a natural gas pipeline near your home or in your community***(N=47)	3.8	10.7	83.0
Attempted to obtain natural gas pipeline safety information over the last year	4.0	4.7	8.6
Came upon or encountered a damaged natural gas pipeline	6.3	9.4	8.8
Called to report a damaged natural gas pipeline***(N=45)	**	**	84.4
Shared or forwarded natural gas pipeline safety information on to others	7.8	6.5	12.9*
Talked to family about natural gas pipeline safety precautions	10.8	14.9	23.0*

*** Indicates a question not asked in a particular year.*
****In 2014 question was only asked to those who reported "yes" in the previous question*

* Denotes statistically significant change, at alpha < or = 0.05.

THE SAFETY CAMPAIGN

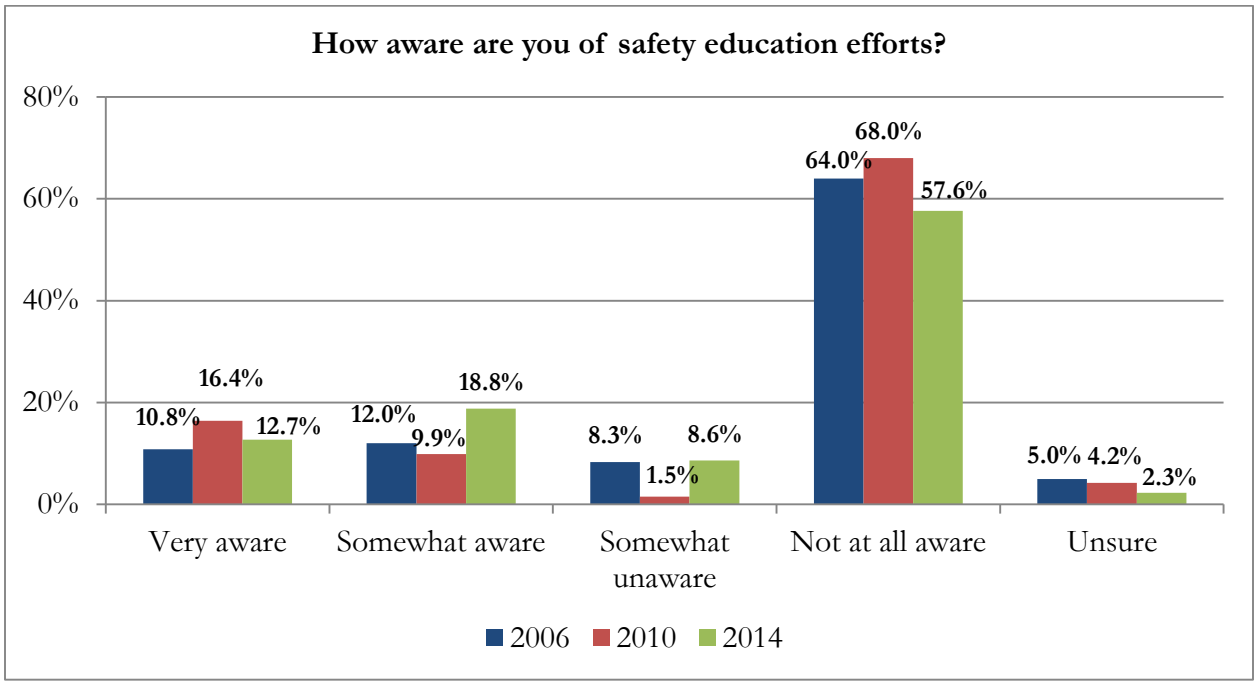
More than one-quarter of all respondents, 28.5%, indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year. Another 63.7% said they had not and 7.8% reported to be unsure.

Read, seen or heard any natural gas pipeline safety information over the last year?	***2006 General Public***	***2010 General Public***	***2014 General Public***
Yes	21.0%	23.8	28.5
No	76.8	73.7	63.7
Don't know/unsure	2.3	2.5	7.8

Researchers read all respondents the following: *"(Local Gas Company) and the Northeast Gas Association have efforts underway to increase awareness of pipeline safety issues. Prior to my call today, how aware of these safety education efforts were you? Would you say…"*

While one-third of respondents, 31.5%, indicated they were either "very aware" (12.7%) or "somewhat aware" (18.8%), remaining respondents reported to be "somewhat unaware" (8.6%), "not at all aware" (57.6%), or "unsure" (2.3%) of the education efforts of their local gas company and Northeast Gas Association.

The chart below also presents the results collected.



Those respondents reporting to be either "very aware," "somewhat aware" or "somewhat unaware" of efforts made by the local gas utility and the Northeast Gas Association to increase awareness of pipeline safety issues were asked to name one or more of the key education messages.

The table below presents the results as collects and readers should note that multiple responses were accepted.

Messages recalled	***2006 General Public***	***2010 General Public***	***2014 General Public***
Call before you dig	45.2%	63.4	55.1
Safety is priority number one	7.3	8.0	20.0
Dig safely or Dig Safe	42.7	54.5	19.5
If you smell rotten eggs, take precautions and call the gas leak hotline from a neighbor's home	8.1	5.4	19.0
It's illegal to dig on your property without markout	0.8	1.8	18.5
Maintain access to gas meters	0.8	1.8	18.0
Don't know/unsure	32.3	16.1	17.1
Do not strike a match/turn lights on or off	3.2	2.7	17.1
Property owners should report suspicious activity	1.6	0.9	15.6
Move to a safe environment	4.0	5.4	15.1
Excavators cause damage by digging	---	2.7	13.2
Call the police if you see anyone damaging pipelines	3.2	2.7	12.2
Wait for "markout"	1.6	8.0	9.3
Pipeline markers indicate pipe locations	0.8	6.3	8.8
Remain in a safe area but nearby while waiting for help	1.6	0.9	8.3
Markouts are done by (Local Gas Company) at no cost	---	0.9	7.8
Call 811	---	13.4	6.8
Mercaptan, a special odorant is added to natural gas	1.6	2.7	5.9
National Pipeline Mapping System	**	**	1.5

*** Indicates a question not asked in a particular year.*

Respondents who recalled key messages in the pipeline safety education information were asked to indicate which actions, if any, these efforts prompted them to make.

Actions	***2014 General Public (Yes)***
Speaking with a family member or neighbor about pipeline safety	30.0%
Thinking about what steps you might take in the event of a natural gas emergency	26.5
The messages did not prompt any actions	23.5
Don't know/unsure	12.4
Seeking out additional information or follow-up	7.6

A majority of all respondents, 93.6%, noted that pipeline safety public education to be either "very important" (70.1%) or "somewhat important" (23.4%). Remaining respondents reported pipeline safety public education to be "somewhat unimportant" (2.7%), "not at all important" (1.2%) or "unsure" (2.5%).

How important is pipeline public education?	***2006 General Public***	***2010 General Public***	***2014 General Public***
Very important	75.0%	77.7	70.1
Somewhat important	21.3	18.1	23.4
Somewhat unimportant	1.0	1.0	2.7
Not at all important	0.8	1.5	1.2
Don't know/unsure	2.0	1.7	2.5
Total important	***96.3***	***95.8***	***93.6***
Total unimportant	***1.8***	***2.5***	***3.9***

All respondents were asked how familiar they were with the following terms or actions related to pipeline safety.

The table below presents each of the terms measured, as well as the cumulative total for those providing a "very familiar" or "somewhat familiar" response.

How familiar with the following terms?	***2006 Very & Somewhat Familiar***	***2010 Very & Somewhat Familiar***	***2014 Very & Somewhat Familiar***
Dig Safe/Dig Safely	32.8%	55.1	53.3
811 – Call Before You Dig	**	35.5	44.5*
One Call	17.5	**	**

***Indicates a questions was not asked in a particular year*

* Denotes statistically significant change, at alpha < or = 0.05.

All respondents were asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics. Respondents were asked to use a scale of one to ten where one meant very good and ten meant very poor.

The following table presents the cumulative total of those providing a 1 - 4 rating (positive) on the ten-point scale side-by-side with the same ratings when those providing "don't know" responses were removed from the data.

Public Safety Education characteristics	***2006 General Public***		***2010 General Public***		***2014 General Public***	
	w/ DKs	***w/o DKs***	***w/ DKs***	***w/o DKs***	***w/ DKs***	***w/o DKs***
Informative	26.0	52.5	26.8	63.2	35.9	52.4
Providing specific instructions for natural gas emergencies	24.5	51.6	27.5	67.7	33.8	50.4
Having memorable messages	22.5	47.9	23.3	58.4	32.4	48.3
Increasing your knowledge about pipeline safety	23.0	48.9	25.1	62.0	31.8	47.2
Attention grabbing	23.8	50.5	23.8	58.2	31.8	46.8
Average	***24.0***	***50.3***	***25.3***	***61.9***	***33.1***	***49.0***

SOURCES FOR INFORMATION

All respondents were asked to indicate their preference for seeing, hearing or receiving information about gas pipeline safety issues and precautions.

Multiple responses were accepted. Each preferred source for information, along with frequency of mention, is presented in the table below.

Sources for Pipeline Safety Information	*2006 General Public Preference*	*2010 General Public Preference*	*2014 General Public Preference*
TV news	19.8%	49.1	39.5
Mailings/direct mail	41.0	18.4	29.5
TV advertising	24.0	18.9	26.4
Utility company – direct mail	2.0	5.7	24.4
Bill inserts	20.3	15.6	19.9
Email	---	6.7	18.6
Newspaper stories	10.3	12.4	16.0
Radio news	7.0	11.7	14.1
Internet/web	7.3	4.2	10.5
Newspaper ads	9.0	8.7	9.8
Radio advertising	3.0	3.7	9.2
Brochures	7.3	4.2	9.0
Billboards	1.0	1.2	7.2
Utility company – website	---	1.5	6.8
Newspaper inserts	1.3	4.5	5.3
Government agency	0.3	0.2	4.3
Friends/neighbors/relatives	0.3	0.2	3.3
Utility company – phone	---	2.2	3.3
Facebook/Twitter	---	---	3.1
None/don't look for information	7.3	4.2	2.7
Fairs and events	0.3	0.2	2.5
Utility company – in-person contact	---	1.0	2.1
Employer/school	0.3	0.7	2.0
Co-workers	---	---	0.4
Text message	---	---	---
Don't know/unsure	---	4.0	---
Town hall	---	1.0	---
Spanish translator	---	0.5	---

Finally, all respondents were read a list of statements and asked to indicate whether they were true or false.

The table below presents the results.

Statement	***2014 General Public (True)***	
	w/ DKs	***w/o DKs***
Your response action should be the same for a natural gas leak as it is for detected carbon monoxide.	72.7%	85.1
A Carbon Monoxide detector will alert you to a natural gas problem	34.8	43.7
When you smell natural gas, you also have a carbon monoxide problem.	29.3	40.5
Carbon Monoxide and natural gas are recognized the same way.	23.2	31.1

DEMOGRAPHICS

Children under 18	*2006*	*2010*	*2014*
None	69.3%	69.7	75.0
One	22.8	4.2	10.5
Two	0.3	6.9	8.4
Three	---	1.5	2.9
Four or more	---	0.9	0.4
Refused	7.8	16.6	2.7

Own or Rent	*2006*	*2010*	*2014*
Own	80.0%	71.5	75.6
Rent	12.5	13.6	21.1
Don't know/unsure	0.3	0.2	0.2
Refused	7.3	14.6	3.1

Access to the internet at home, at work or both?	*2006*	*2010*	*2014*
Yes, at home	32.5%	30.0	41.4
Yes, at work	2.0	1.2	0.8
Yes, both home and work	33.3	32.0	42.4
No access	30.5	28.5	11.9
Don't know/unsure	1.8	8.2	3.5

Age	*2006*	*2010*	*2014*
18 to 25	1.0%	3.0	2.0
26 to 35	4.0	3.2	7.2
36 to 45	13.0	8.7	15.2
46 to 55	19.5	16.9	19.9
56 to 65	19.0	12.9	19.1
66 to 75	18.8	17.1	18.2
76 or older	13.5	13.2	11.7
Refused	11.3	25.1	6.6

Hispanic	*2006*	*2010*	*2014*
Yes	4.0%	7.7	12.1
No	87.8	65.5	83.4
Don't know/Refused	8.3	26.8	4.5

Race	*2006*	*2010*	*2014*
White	80.5%	59.9	83.8
African-American	4.9	6.7	6.4
Asian	2.6	1.1	2.2
Aleutian, Eskimo or American Indian	0.5	---	0.9
Other	1.0	---	---
Pacific Islander	---	---	0.2
Refused	10.4	32.3	6.4

Education	*2006*	*2010*	*2014*
Eighth grade or less	0.5%	0.7	0.6
Some high school	1.3	2.0	1.2
High school graduate	25.0	17.4	16.8
Some technical school	1.0	0.2	0.6
Technical school graduate	0.8	0.5	1.6
Some college	15.5	7.9	17.0
College graduate	28.3	31.0	37.7
Post graduate	16.5	12.2	16.6
Refused	11.3	28.0	8.0

Income	*2006*	*2010*	*2014*
Less than $35,000	7.3%	2.0	11.5
$35,000 to less than $65,000	11.8	1.5	20.3
$65,000 to less than $95,000	11.5	1.7	12.7
$95,000 or more	12.8	2.7	23.6
Don't know/unsure	1.5	2.2	2.3
Refused	55.3	89.8	29.5

Gender	*2006*	*2010*	*2014*
Male	38.0%	40.7	41.8
Female	62.0	59.3	58.2

Utility	*2006*	*2010*	*2014*
National Grid DS NY (KeySpan Energy)	55.3%	55.6	49.0
Consolidated Edison	35.8	35.5	30.5
Orange & Rockland Utilities	4.5	4.5	6.8
Central Hudson Gas & Electric	3.3	3.5	7.2
New York State Electric & Gas	1.3	1.0	6.4

Readers are reminded the following section summarizes statistics from surveys conducted among 102 **Public Officials**. Readers should note that comparison data from 2006 was made up of 25 **Public Official** respondents.

AWARENESS

For purposes of the study, respondents were first read a statement indicating that the term "pipeline" referred to a transmission line, a main line running down a street or a service line to a home.

Researchers asked **Public Officials** if they were aware of a number of facts or issues related to natural gas pipeline safety.

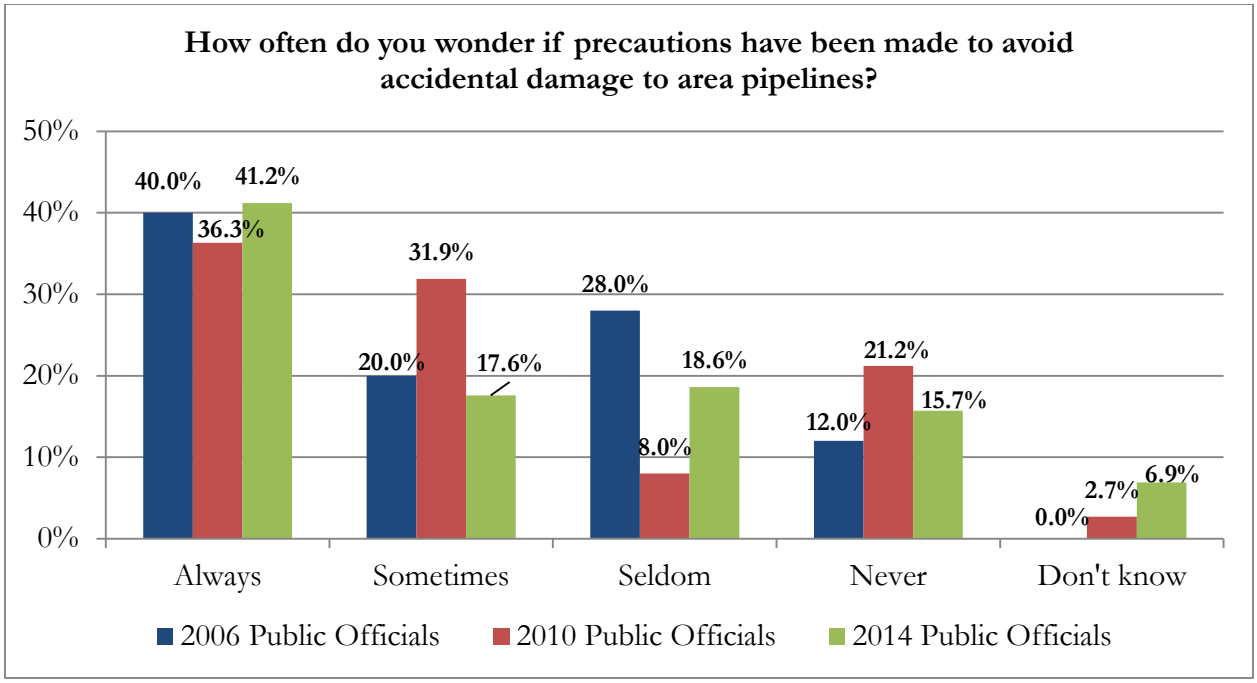
The following table presents the cumulative totals for those reporting to be "very aware" or "somewhat aware" of each fact.

Awareness	***2006 Public Officials (N=25)***	***2010 Public Officials (N=113)***	***2014 Public Officials (N=102)***
Natural gas pipelines run underground in many areas in and around your community	84.0%	79.6	86.3
The precautions excavators should take to avoid damage to natural gas pipelines	76.0	56.6	81.4*
The "One Call Line" to receive free markouts of buried natural gas pipelines/systems	80.0	39.8	70.6*
Your own community's Emergency Response Plan for natural gas pipeline breaks	64.0	47.8	60.8
Average	***76.0***	***56.0***	***74.8***

* Denotes statistically significant change, at alpha < or = 0.05.

PERCEPTIONS/ATTITUDES

As presented in the chart below, almost three-fifths of **Public Officials** surveyed, 58.8% (from 68.2% in 2010 and 60.0% in 2006), suggested they either "always" or "sometimes" wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community.



Additionally, on their list of concerns, **Public Officials** were asked how concerned they had been about natural gas pipeline safety in their area.

The table below presents detailed findings.

How concerned about pipeline safety in your area?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Very concerned	32.0%	27.4	33.3
Somewhat concerned	28.0	24.8	25.5
Somewhat unconcerned	12.0	16.8	9.8
Not at all concerned	24.0	28.3	31.4
Don't know/unsure	4.0	2.7	---
Total concerned	***60.0***	***52.2***	***58.8***
Total unconcerned	***36.0***	***45.1***	***41.2***

In a similar question, **Public Officials** were asked how concerned they believe excavators and construction professionals are about natural gas pipeline safety in their area.

The table below presents detailed findings.

How concerned are excavators and construction professionals about pipeline safety in your area?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Very concerned	60.0%	59.3	71.6
Somewhat concerned	36.0	18.6	17.6
Somewhat unconcerned	4.0	5.3	1.0
Not at all concerned	---	10.6	3.9
Don't know/unsure	---	6.2	5.9
Total concerned	***96.0***	***77.9***	***89.2****
Total unconcerned	***4.0***	***15.9***	***4.9***

Respondents (10.8% or 11 respondents) who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" about pipeline safety were asked to explain the reason.

The table below presents the results.

Reasons why unconcerned about pipeline safety in your area...	***2014 Public Officials***
Don't know much about it	54.5%
Don't have natural gas	18.2
Faith in companies/trust what they're doing/taking safety precautions	9.1
No issues in the past/all has been good	9.1
Just don't think about it/other priorities	9.1

Further, those same respondents were also asked to indicate what the Northeast Gas Association and their local company can do to increase the level of concern or pay greater attention to pipeline safety efforts in the future.

The table below presents the detailed findings.

What might the Northeast Gas Association and [Local Company] do in order for you to be more concerned or pay greater attention to pipeline safety efforts in the future?	***2014 Public Officials***
None/nothing	36.4%
Doing a good job/no improvements	27.3
Increase advertisements/education/communication efforts	27.3
Take proper precautions/markings	9.1

* Denotes statistically significant change, at alpha < or = 0.05.

KNOWLEDGE/UNDERSTANDING

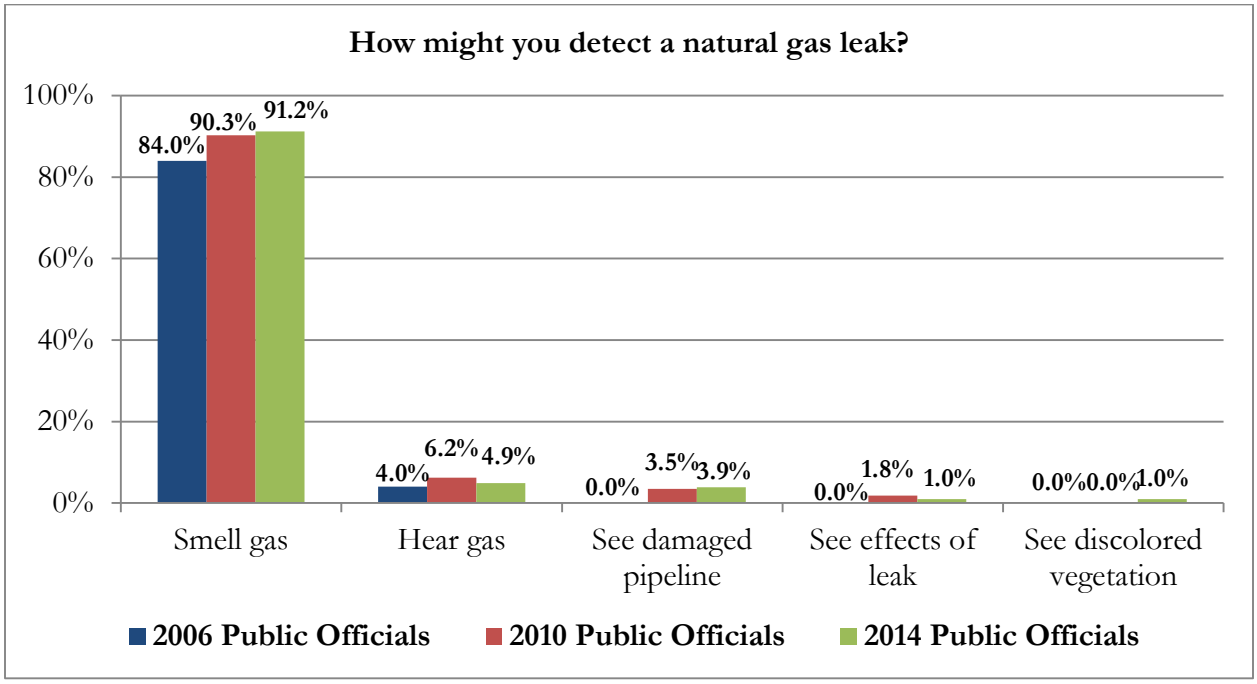
In an open-ended format question, researchers asked all **Public Officials** how they might detect a natural gas leak.

The following table presents the results as collected. Multiple responses were accepted.

How might you detect a natural gas leak?	*2006 Public Officials*	*2010 Public Officials*	*2014 Public Officials*
Correct: Smell gas leak	84.0%	90.3	91.2
Don't know/unsure	16.0	6.2	6.9
Correct: Hear gas leak	4.0	6.2	4.9
Correct: See damaged gas pipe or line	---	3.5	3.9
Other	---	1.8	2.0
Correct: See effects of gas leak	---	1.8	1.0
Correct: See discolored, brown or dead vegetation	**	**	1.0
Incorrect: See gas (no description)	---	---	---

*** Indicates a question not asked in a particular year.*

"Other" responses included the following: "detector sensor" (2.0%).

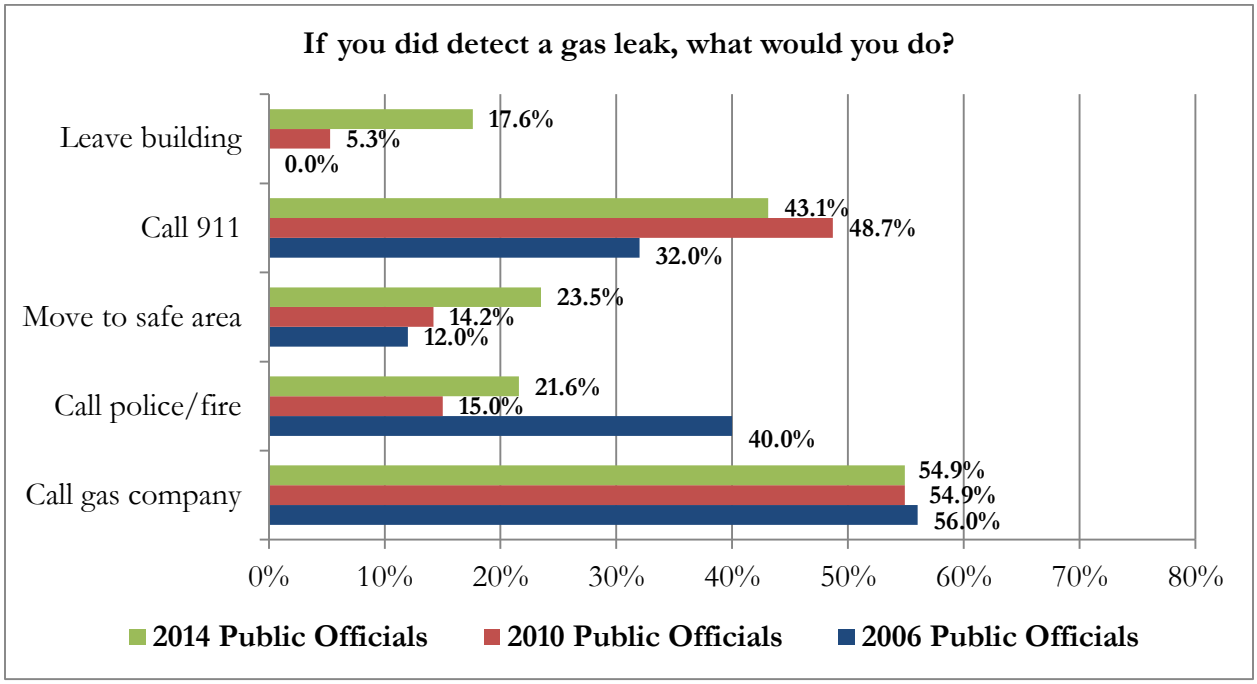


BEHAVIOR

If a natural gas leak was detected, **Public Officials** were asked to report what actions they would take.

The table below presents the results as collected and readers should note that multiple responses were accepted.

If you did detect a natural gas leak, what would you do?	*2006 Public Officials*	*2010 Public Officials*	*2014 Public Officials*
Call local natural gas company or pipeline operator	56.0%	54.9	54.9
Call 911	32.0	48.7	43.1
Move to a safe area	12.0	14.2	23.5
Call local phone number for police/fire/emergency services	40.0	15.0	21.6
Leave your office/building	---	5.3	17.6
Don't know/unsure	---	---	2.0
Other	---	---	---



Researchers asked all **Public Officials** if they would have the number handy if they needed to reach the local natural gas company or pipeline operator with regard to natural gas leaks or pipeline damage.

The table below presents the results as collected.

Would have number handy…	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Yes	76.0%	60.2	71.6
No	24.0	36.3	28.4
Don't know/unsure	---	3.5	---

Researchers continued and asked all officials if they had ever taken or had been a part of the following different types of actions. The percentages reported below represent those officials suggesting they had been a part in the action being measured.

Ever taken the following actions?	***2006 Public Officials (Yes)***	***2010 Public Officials (Yes)***	***2014 Public Officials (Yes)***
Discovered suspicious or unusual activity near a natural gas pipeline	4.0%	1.8	2.9
Called to report suspicious or unusual activity near a natural gas pipeline near your home or in your community***(N=3)	**	**	---
Attempted to obtain natural gas pipeline safety information to share with residents	8.0	11.5	18.6
Came upon or encountered a damaged natural gas pipeline	4.0	8.0	10.8
Called to report a damaged natural gas pipeline***(N=11)	**	**	100.0
Passed natural gas pipeline safety information on to residents	28.0	12.4	20.6
Talked to residents/professionals about natural gas pipeline safety precautions	20.0	18.6	20.6
Responded to a natural gas pipeline break	12.0	8.0	13.7
Contacted **(Local Company)** related to a pipeline safety issue	16.0	18.6	29.4
Received natural gas pipeline safety information from **(Local Company)**	40.0	30.1	47.1*
Received natural gas pipeline safety information from Northeast Gas Association	20.0	2.7	15.7*
Received natural gas pipeline safety information from a source other than **(Local Company)**	24.0	7.1	19.6*

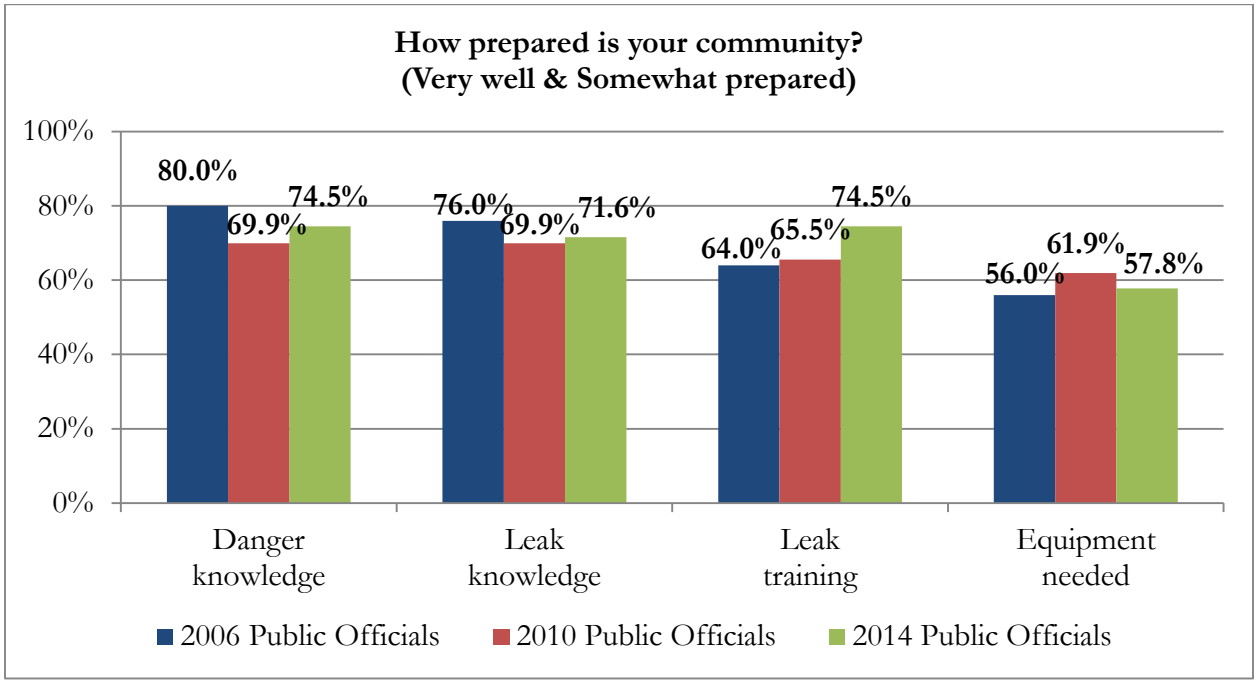
***Indicates a question not asked in a particular year.*
****In 2014 question was only asked to those who reported "yes" in the previous question.*

* Denotes statistically significant change, at alpha < or = 0.05.

Researchers asked all **Public Officials** how well prepared they felt their community was in four areas related to a natural gas leak. Researchers asked each respondent if their community was "very well prepared," "somewhat prepared," "somewhat unprepared" or "not at all prepared" for a natural gas leak in their community.

The following table presents the cumulative totals for those reporting either "very well" or "somewhat prepared."

How well prepared is your community? **(Very well & Somewhat prepared)**	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Knowledge about inherent dangers	80.0%	69.9	74.5
Natural gas leak emergency training	64.0	65.5	74.5
Knowledge about leaks	76.0	69.9	71.6
Special equipment required	56.0	61.9	57.8



THE SAFETY CAMPAIGN

Almost half of all **Public Officials** surveyed, 47.1%, indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year.

Detailed findings may be found in the table below.

Read, seen or heard any natural gas pipeline safety information over the last year?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Yes	56.0%	32.7	47.1*
No	36.0	62.8	50.0
Don't know/unsure	8.0	4.4	2.9

Researchers read all officials the following: *"(Local Gas Company) and the Northeast Gas Association have efforts underway to increase awareness of pipeline safety issues. Prior to my call today, how aware of these safety education efforts were you? Would you say…"*

Detailed findings are presented in the table located below.

How aware of safety education efforts?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Very aware	8.0%	24.8	28.4
Somewhat aware	24.0	20.4	12.7
Somewhat unaware	12.0	8.0	6.9
Not at all aware	56.0	45.1	49.0
Don't know/unsure	---	1.8	2.9
Total aware	***32.0***	***45.1***	***41.2***
Total unaware	***68.0***	***53.1***	***55.9***

* Denotes statistically significant change, at alpha < or = 0.05.

Those **Public Officials** reporting to be either "very aware," "somewhat aware" or "somewhat unaware" of efforts by the local gas utility and the Northeast Gas Association to increase awareness of pipeline safety issues were asked to name one or more of the key education messages.

Multiple responses were accepted by researchers and each message recalled, along with frequency of mention, is presented in the table below.

Messages recalled	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Call before you dig	63.6%	76.7	61.2
Dig safely or Dig Safe	36.4	43.3	30.6
Don't know/unsure	---	21.7	22.4
Call 811	---	31.7	14.3
Safety is priority number one	18.2	---	8.2
If you smell rotten eggs, take precautions and call the gas leak hotline from a neighbor's home	18.2	1.7	4.1
It's illegal to dig on your property without markout	9.1	13.3	4.1
Markouts are done by (Local Gas Company) at no cost	---	---	4.1
Maintain access to gas meters	9.1	1.7	2.0
Wait for "markout"	9.1	3.3	2.0
Call the police if you see anyone damaging pipelines	9.1	1.7	---
Property owners should report suspicious activity	9.1	---	---
Do not strike a match/turn lights on or off	9.1	---	---
Excavators cause damage by digging	---	---	---
Move to a safe environment	---	---	---
Remain in a safe area but nearby while waiting for help	---	---	---
Pipeline markers indicate pipe locations	---	---	---
Mercaptan, a special odorant is added to natural gas	---	1.7	---

Respondents who recalled key messages in the pipeline safety education information were asked to indicate which actions, if any, these efforts prompted them to make.

Actions	***2014 Public Officials (Yes)***
The messages did not prompt any actions	39.5%
Speaking with community members about pipeline safety	21.1
Don't know/unsure	18.4
Thinking about what steps you might take in the event of a natural gas emergency	13.2
Seeking out additional information or follow-up	7.9

When asked, the clear majority of **Public Officials**, 97.1%, noted that pipeline safety public education is either "very important" (80.4%) or "somewhat important" (16.7%).

How important is pipeline safety public education?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Very important	80.0%	82.3	80.4
Somewhat important	20.0	10.6	16.7
Somewhat unimportant	---	2.7	1.0
Not at all important	---	2.7	---
Don't know/unsure	---	1.8	2.0
Total important	***100.0***	***92.9***	***97.1***
Total unimportant	***---***	***5.4***	***1.0***

All officials were asked by researchers how familiar they were with the following terms or actions related to pipeline safety.

The table below presents each of the terms measured as well as the cumulative total for those providing a "very familiar" or "somewhat familiar" response.

How familiar with the following terms?	***2006 Public Officials***	***2010 Public Officials***	***2014 Public Officials***
Dig Safe/Dig Safely	88.0%	73.5	79.4
811 – Call Before You Dig	**	67.3	76.5
One Call	80.0	**	**

***Indicates a questions was not asked in a particular year*

All officials were asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics. Respondents were asked to use a scale of one to ten where one meant very good and ten meant very poor.

The following table presents the cumulative total of those providing a 1 - 4 rating (positive) on the ten-point scale side-by-side with the same ratings when those providing "don't know" responses were removed from the data.

Public Safety Education characteristics	***2006 Public Officials***		***2010 Public Officials***		***2014 Public Officials***	
	w/ DKs	***w/o DKs***	***w/ DKs***	***w/o DKs***	***w/ DKs***	***w/o DKs***
Providing specific instructions for natural gas emergencies	44.0%	73.3	34.5	61.9	52.0	73.6
Providing enough information	40.0	62.5	33.6	56.7	51.0	71.2
Informative	36.0	60.0	37.2	61.8	52.9	71.1
Attention grabbing	32.0	50.0	37.2	61.8	51.0	69.3
Having memorable messages	36.0	56.3	34.5	57.4	50.0	67.1
Increasing your knowledge about pipeline safety	40.0	62.5	32.7	55.2	47.1	66.7
Average	***38.0***	***60.8***	***35.0***	***59.1***	***50.7***	***69.8***

SOURCES FOR INFORMATION

Finally, all officials were asked to indicate their preference for seeing, hearing or receiving information about gas pipeline safety issues and precautions.

Multiple responses were accepted by researchers and each preferred source for information, along with frequency of mention, is presented in the table below.

Sources for Pipeline Safety Information	*2006 Public Officials*	*2010 Public Officials*	*2014 Public Officials*
Mailings/direct mail	64.0%	32.7	38.2
TV news	8.0	30.1	26.5
Email	---	10.6	22.5
TV advertising	4.0	31.0	16.7
Radio advertising	---	8.0	9.8
Internet/web	12.0	10.6	8.8
Radio news	---	6.2	8.8
Bill inserts	16.0	5.3	7.8
Billboards	---	2.7	6.9
Brochures	24.0	3.5	5.9
Newspaper ads	8.0	8.8	5.9
Newspaper stories	---	10.6	4.9
Utility company – direct mail	12.0	4.4	2.0
Newspaper inserts	---	2.7	2.0
Utility company – website	---	---	2.0
Government agency	4.0	---	1.0
Natural gas training	---	---	1.0
Utility company – phone	---	5.3	1.0
Friends/neighbors/relatives	---	---	1.0
Facebook/Twitter	---	---	1.0
Fairs and events	---	---	1.0
Co-workers	4.0	---	---
Utility company – in-person contact	---	0.9	---
None/don't want to receive information	---	---	---
Don't know/unsure	---	0.9	---
Fax	---	---	---
Other	---	3.6	---

DEMOGRAPHICS

Utility	*2006 (N=25)*	*2010 (N=113)*	*2014 (N=102)*
National Grid Down State NY (KeySpan Energy)	52.0%	55.8	53.9
Consolidated Edison	32.0	34.5	34.3
Central Hudson Gas & Electric	8.0	3.5	4.9
Orange & Rockland Utilities	8.0	4.4	5.9
New York State Electric & Gas	---	1.8	1.0

EMERGENCY MANAGEMENT SERVICE OFFICIALS

Readers are reminded that the following section summarizes statistics from surveys conducted among 107 **Emergency Management Service Officials**. Readers should note that comparison data from 2006 was made up of 25 **EMS Official** respondents.

AWARENESS

For purposes of the study, respondents were first read a statement indicating that the term "pipeline" referred to a transmission line, a main line running down a street or a service line to a home.

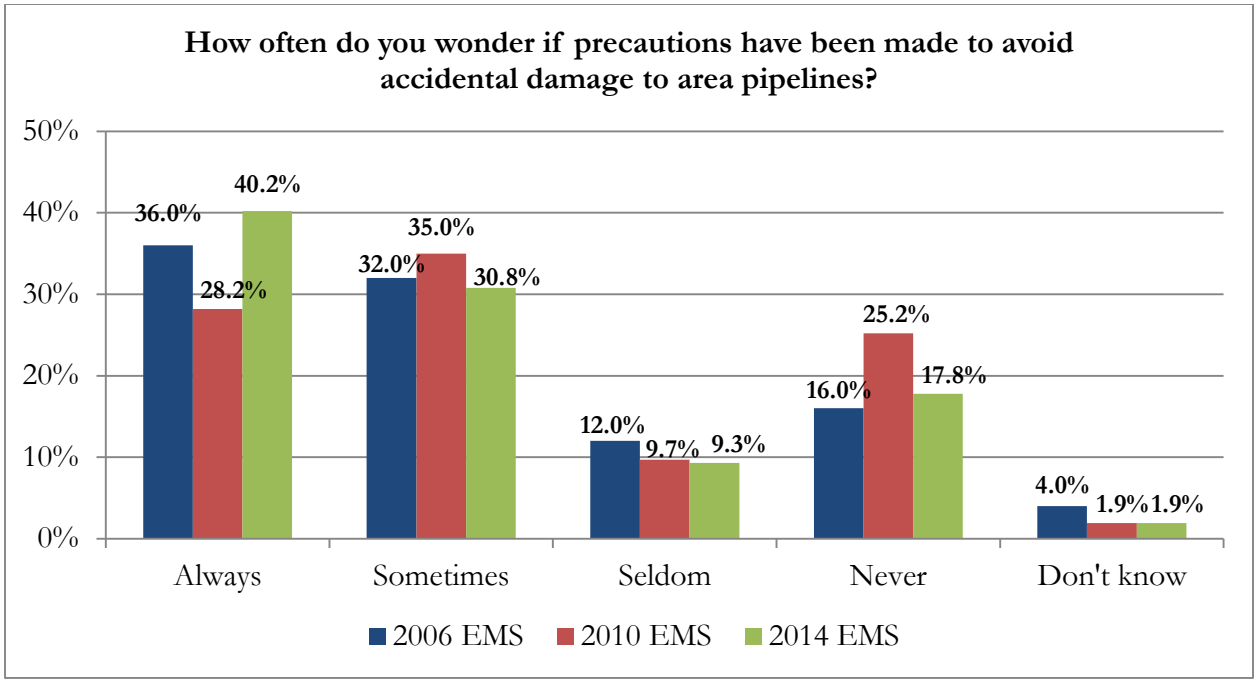
Researchers asked **Emergency Management Officials** if they were aware of a number of facts or issues related to natural gas pipeline safety.

The following table presents the cumulative totals for those reporting to be "very aware" or "somewhat aware" of each fact.

Awareness	***2006 Emergency Officials (N=25)***	***2010 Emergency Officials (N=103)***	***2014 Emergency Officials (N=107)***
Natural gas pipelines run underground in many areas in and around your community	96.0%	92.2	90.7
The precautions excavators should take to avoid damage to natural gas pipelines	96.0	84.5	84.1
Your own community's Emergency Response Plan for gas pipeline breaks	92.0	80.6	76.6
The "One Call Line" to receive free markouts of buried natural gas pipelines/systems	88.0	68.9	72.0
Average	***93.0***	***81.6***	***80.9***

PERCEPTIONS/ATTITUDES

As presented in the chart below, almost three-quarters of **Emergency Management Service Officials**, 71.0% (from 63.2% in 2010 and 68.0% in 2006), suggest they either "always" or "sometimes" wonder if precautions have been made to avoid accidental damage to area pipelines when construction crews, neighbors or others are digging in their community.



Additionally, on their list of concerns, **EMS Officials** were asked how concerned they had been about natural gas pipeline safety in their area.

The table below presents detailed findings.

How concerned about pipeline safety in your area?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Very concerned	40.0%	27.2	29.9
Somewhat concerned	20.0	26.2	32.7
Somewhat unconcerned	8.0	20.4	9.3
Not at all concerned	32.0	26.2	28.0
Don't know/unsure	---	---	---
Total concerned	***60.0***	***53.4***	***62.6***
Total unconcerned	***40.0***	***46.6***	***37.3***

In a similar question, **Emergency Officials** were asked how concerned they believe excavators and construction professionals are about natural gas pipeline safety in their area.

The table below presents detailed findings.

How concerned are excavators and construction professionals about pipeline safety in your area?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Very concerned	56.0%	60.2	59.8
Somewhat concerned	36.0	24.3	29.0
Somewhat unconcerned	---	5.8	2.8
Not at all concerned	---	5.8	3.7
Don't know/unsure	8.0	3.9	4.7
Total concerned	***92.0***	***84.5***	***88.8***
Total unconcerned	***---***	***11.6***	***6.5***

Respondents (11.2% or 12 respondents) who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" with pipeline safety were asked to explain the reason.

The table below presents the results.

Reasons	***2014 Emergency Officials***
Carelessness/cutting corners	41.7%
None/no reason	33.3
Don't know/unsure	16.7
Faith in companies/assume precautions are taken	8.3

Further, those same respondents were also asked to indicate what the Northeast Gas Association and their local company can do to increase the level of concern or pay greater attention to pipeline safety efforts in the future.

The table below presents the detailed findings.

What might the Northeast Gas Association and [Local Company] do in order for you to be more concerned or pay greater attention to pipeline safety efforts in the future?	***2014 Emergency Officials***
No concerns	41.7%
Don't know/unsure	33.3
More frequent training/information	25.0

KNOWLEDGE/UNDERSTANDING

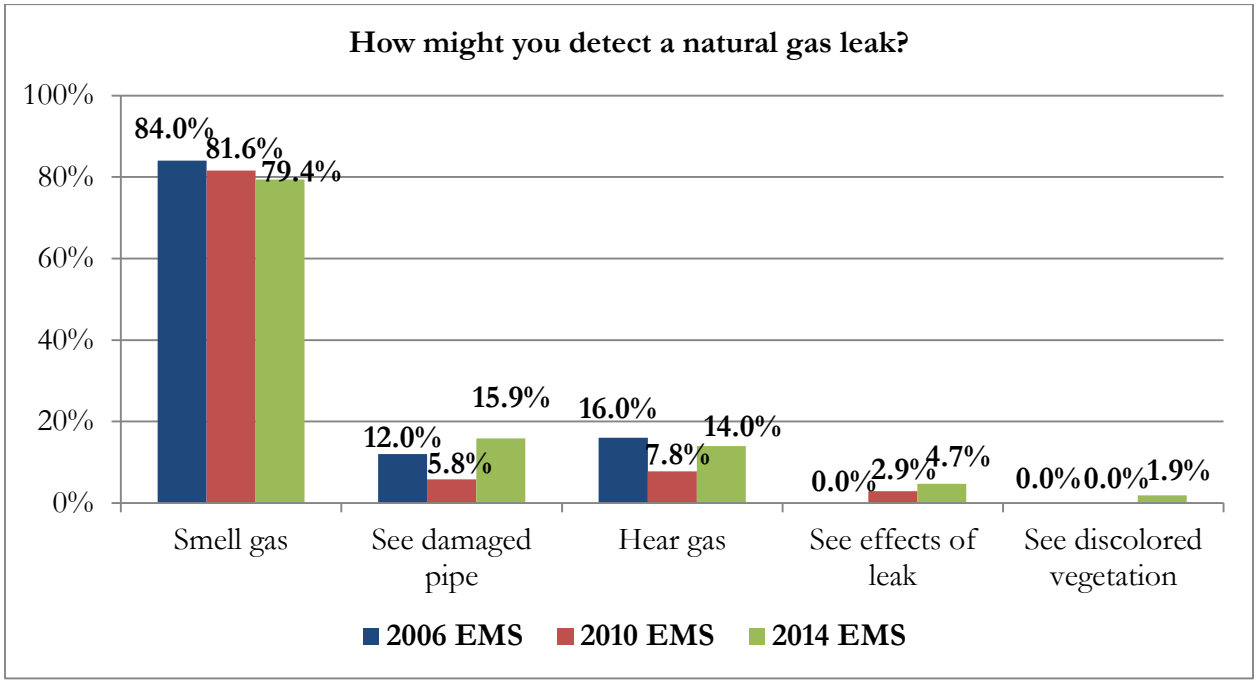
In an open-ended format question, researchers asked all **Emergency Management Officials** how they might detect a natural gas leak.

The following table presents the results as collected. Multiple responses were accepted.

How might you detect a natural gas leak?	*2006 Emergency Officials*	*2010 Emergency Officials*	*2014 Emergency Officials*
Correct: Smell gas leak	84.0%	81.6	79.4
Other	8.0	31.1	21.5
Correct: See damaged gas pipe or line	12.0	5.8	15.9
Correct: Hear gas leak	16.0	7.8	14.0
Correct: See effects of natural gas leak	---	2.9	4.7
Don't know/unsure	---	1.0	3.7
Correct: See discolored, brown or dead vegetation	**	**	1.9
Incorrect: See gas leak (no description)	---	---	---

***Indicates a question not asked in a particular year.*

"Other" responses included the following: "Meters" (21.5%).

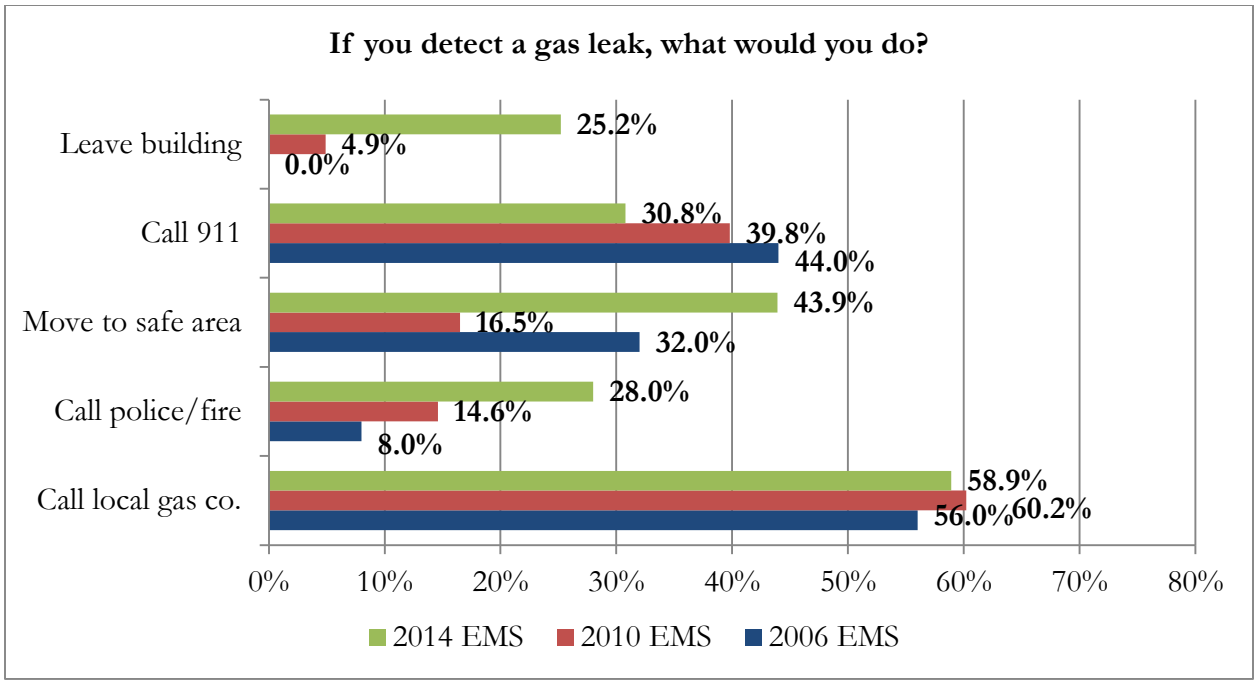


BEHAVIOR

If a natural gas leak was detected, **Emergency Management Officials** were asked to report what actions they would take. The table below presents the results as collected. Readers should note that multiple responses were accepted.

If you did detect a natural gas leak, what would you do?	*2006 Emergency Officials*	*2010 Emergency Officials*	*2014 Emergency Officials*
Call local natural gas company or pipeline operator	56.0%	60.2	58.9
Move to a safe area	32.0	16.5	43.9
Call 911	44.0	39.8	30.8
Call local phone number police/fire/emergency services	8.0	14.6	28.0
Leave office/building	---	4.9	25.2
Other	---	2.9	3.7
Don't know/unsure	4.0	1.0	0.9

"Other" responses included the following: "Shut off source" (3.7%).



If a natural gas fire was detected, **Emergency Management Officials** were asked to report what actions they would take. The table below presents the results as collected. Readers should also note that multiple responses were accepted.

If you did detect a natural gas fire, what would you do?	***2014 Emergency Officials***
Call local natural gas company or pipeline operator	48.6%
Move to a safe area	32.7
Call local phone number for police/fire/emergency services	29.0
Call 911	27.1
Evacuate nearby structures	27.1
Set up barricades (protection perimeter to keep public away)	23.4
Stop traffic	12.1
Move upwind	11.2
Don't know/unsure	11.2
Remove the ignition source from area	10.3
Let it burn/don't put out	1.9
Shut off gas	0.9
Extinguish	---

Researchers asked all **Emergency Management Officials** if they would have the number handy if they needed to reach the local natural gas company or pipeline operator with regard to natural gas leaks or pipeline damage.

The table below presents the results as collected.

Have number handy?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Yes	88.0%	89.3	71.0*
No	12.0	7.8	29.0
Don't know/unsure	---	2.9	---

* Denotes statistically significant change, at alpha < or = 0.05.\

Researchers continued and asked all officials if they had ever taken or had been a part of the following different types of actions. The percentages reported below represent those officials suggesting they had been a part in the action being measured.

Ever taken the following actions?	***2006 Emergency Officials (Yes)***	***2010 Emergency Officials (Yes)***	***2014 Emergency Officials (Yes)***
Discovered suspicious or unusual activity near a natural gas pipeline	4.0%	5.8	2.8
Called to report suspicious or unusual activity near a natural gas pipeline near your home or in your community***(N=3)	**	**	100.0
Attempted to obtain natural gas pipeline safety information to share with residents	12.0	20.4	16.8
Came upon or encountered a damaged natural gas pipeline	48.0	38.8	26.2
Called to report a damaged natural gas pipeline***(N=28)	**	**	89.3
Passed natural gas pipeline safety information on to residents	24.0	30.1	17.8*
Talked to residents/professionals about natural gas pipeline safety precautions	40.0	39.8	22.4*
Responded to a natural gas pipeline break	64.0	50.5	34.6*
Contacted **(Local Company)** related to a pipeline safety issue	64.0	53.4	36.4*
Received natural gas pipeline safety information from **(Local Company)**	56.0	51.5	44.9
Received natural gas pipeline safety information from Northeast Gas Association	8.0	8.7	13.1
Received natural gas pipeline safety information from a source other than **(Local Company)**	16.0	13.6	20.6
Attended a Utility or Industry pipeline safety training	32.0	44.7	43.0

***Indicates a question not asked in a particular year.*

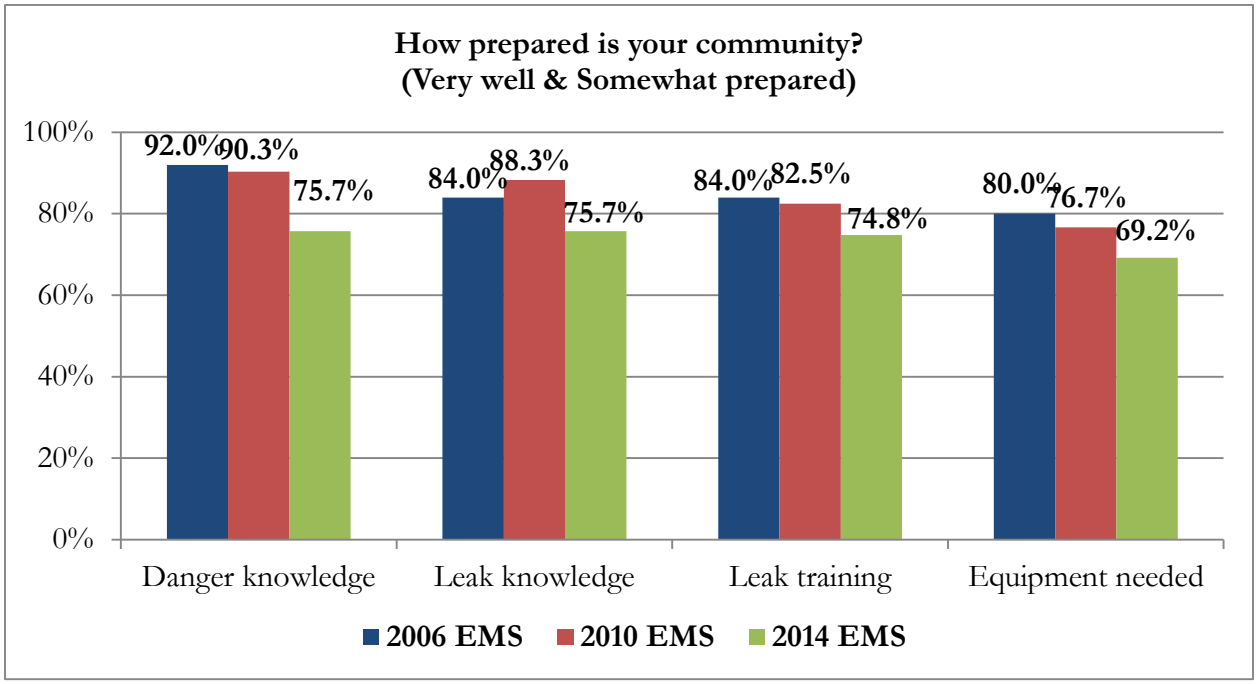
****In 2014 question was only asked to those who reported "yes" in the previous question.*

* Denotes statistically significant change, at alpha < or = 0.05.

Researchers asked all **Emergency Management Service Officials** how well prepared they felt their community was in four areas related to a natural gas leak. Researchers asked each respondent if their community was "very well prepared," "somewhat prepared," "somewhat unprepared" or "not at all prepared" for a natural gas leak in their community.

The following table presents the cumulative totals for those reporting either "very well prepared" or "somewhat prepared."

How well prepared is your community? **(Very well & Somewhat prepared)**	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Knowledge about inherent dangers	92.0%	90.3	75.7*
Knowledge about leaks	84.0	88.3	75.7*
Natural gas leak emergency training	84.0	82.5	74.8
Special equipment required	80.0	76.7	69.2



THE SAFETY CAMPAIGN

Half of all **Emergency Management Officials** surveyed, 51.4%, indicated having read, seen or heard something, in general, about natural gas pipeline safety over the last year.

Detailed findings may be found in the table below.

Read, seen or heard any info about pipeline safety?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Yes	56.0%	47.6	51.4
No	44.0	51.5	44.9
Don't know/unsure	---	1.0	3.7

Researchers read all officials the following: *"(Local Gas Company) and the Northeast Gas Association have efforts underway to increase awareness of pipeline safety issues. Prior to my call today, how aware of these safety education efforts were you? Would you say…"*

Detailed findings are presented in the table located below.

How aware of safety education efforts?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Very aware	20.0%	32.0	18.7
Somewhat aware	28.0	26.2	15.9
Somewhat unaware	---	6.8	1.9
Not at all aware	52.0	35.0	60.7
Don't know/unsure	---	---	2.8
Total aware	***48.0***	***58.3***	***34.6****
Total unaware	***52.0***	***41.8***	***62.6***

* Denotes statistically significant change, at alpha < or = 0.05.

Those **Emergency Management Officials** reporting to be either "very aware," "somewhat aware" or "somewhat unaware" of efforts by the local gas utility and the Northeast Gas Association to increase awareness of pipeline safety issues were asked to name one or more of the key education messages.

Multiple responses were accepted by researchers and each message recalled, along with frequency of mention, is presented in the table below.

Messages recalled	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Call before you dig	83.3%	92.5	87.2
Safety is priority number one	---	10.4	28.2
If you smell rotten eggs, take precautions and call the gas leak hotline from a neighbor's home	8.3	6.0	28.2
Dig safely or Dig Safe	16.7	68.7	23.1
Call 811	---	17.9	17.9
Maintain access to gas meters	---	4.5	15.4
Excavators cause damage by digging	8.3	6.0	15.4
Call the police if you see anyone damaging pipelines	---	1.5	15.4
Move to a safe environment	8.3	---	15.4
Do not strike a match/turn lights on or off	---	---	15.4
Mercaptan, a special odorant is added to natural gas	---	1.5	15.4
It's illegal to dig on your property without markout	25.0	13.4	12.8
Property owners should report suspicious activity	---	1.5	12.8
Wait for "markout"	25.0	3.0	10.3
Pipeline markers indicate pipe locations	---	1.5	10.3
Don't know/unsure	8.3	6.0	7.7
Markouts are done by **(Local Company)** at no cost	8.3	---	7.7
Remain in a safe area but nearby while waiting for help	---	---	7.7
Protocol (evacuation, let it burn, etc.)	---	---	---
National Pipeline Mapping System	---	---	---
Contact information	---	---	---
Identify pipeline itself	---	---	---

Respondents who recalled key messages in the pipeline safety education information were asked to indicate which actions, if any, these efforts prompted them to make.

Actions	***2014 Emergency Officials (Yes)***
The messages did not prompt any actions	44.4%
Thinking about what steps you might take in the event of a natural gas emergency	27.8
Seeking out additional information or follow-up	19.4
Speaking with community members about pipeline safety	5.6
Don't know/unsure	2.8

When asked, the majority of **Emergency Management Officials**, 96.3%, noted that pipeline safety public education is either "very important" (83.2%) or "somewhat important" (13.1%).

How important is pipeline safety public education?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Very important	76.0%	89.3	83.2
Somewhat important	24.0	7.8	13.1
Somewhat unimportant	---	---	---
Not at all important	---	1.9	1.9
Don't know/unsure	---	1.0	1.9
Total important	***100.0***	***97.1***	***96.3***
Total unimportant	***---***	***1.9***	***1.9***

All officials were asked by researchers how familiar they were with the following terms or actions related to pipeline safety.

The table below presents each of the terms measured as well as the cumulative total for those providing a "very familiar" or "somewhat familiar" response.

How familiar with the following terms?	***2006 Emergency Officials***	***2010 Emergency Officials***	***2014 Emergency Officials***
Dig Safe/Dig Safely	84.0%	85.4	74.8
811 – Call Before You Dig	**	85.4	70.1*
One Call	84.0	**	**

***Indicates a questions was not asked in a particular year*

* Denotes statistically significant change, at alpha < or = 0.05.

All officials were asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics. Respondents were asked to use a scale of one to ten where one meant very good and ten meant very poor.

The following table presents the cumulative total of those providing a 1 - 4 rating (positive) on the ten-point scale side-by-side with the same ratings when those providing "don't know" responses were removed from the data.

Public Safety Education characteristics	***2006 Emergency Officials***		***2010 Emergency Officials***		***2014 Emergency Officials***	
	w/ DKs	***w/o DKs***	***w/ DKs***	***w/o DKs***	***w/ DKs***	***w/o DKs***
Informative	64.0	88.9	50.5	78.8	51.4	71.4
Providing specific instructions for gas emergencies	48.0	70.6	54.3	84.8	48.6	68.4
Increasing your knowledge about pipeline safety	36.0	56.3	47.5	74.2	48.6	68.4
Attention grabbing	36.0	52.9	43.7	70.3	45.8	66.2
Having memorable messages	36.0	60.0	39.7	64.1	44.9	65.8
Average	***44.0***	***65.7***	***47.1***	***74.4***	***47.9***	***68.0***

SOURCES FOR INFORMATION

Finally, all officials were asked to indicate their preference for seeing, hearing or receiving information about gas pipeline safety issues and precautions.

Multiple responses were accepted by researchers and each preferred source for information, along with frequency of mention, is presented in the table below.

Sources for Pipeline Safety Information	*2006 Emergency Officials*	*2010 Emergency Officials*	*2014 Emergency Officials*
Mailings/direct mail	64.0%	38.8	37.4
TV news	12.0	35.9	30.8
Email	---	10.7	25.2
TV advertising	8.0	22.3	23.4
Utility company – direct mail	24.0	4.9	11.2
Bill inserts	8.0	6.8	11.2
Newspaper ads	4.0	5.8	10.3
Radio news	8.0	2.9	8.4
Internet/web	16.0	7.8	7.5
Radio advertising	4.0	8.7	7.5
Newspaper stories	4.0	6.8	7.5
Utility company – in-person contact	---	2.9	6.5
Brochures	24.0	6.8	5.6
Utility company – website	---	---	5.6
Natural gas training	---	9.7	5.6
Billboards	---	5.8	3.7
Employer/school	---	---	3.7
None/don't want to receive information	---	---	2.8
Fairs and events	---	---	2.8
Government agency	4.0	---	1.9
Co-workers	4.0	---	1.9
Facebook/Twitter	---	---	1.9
Utility company – phone	---	1.0	1.9
Newspaper inserts	---	2.9	0.9
Don't know/unsure	---	---	0.9
Friends/neighbors/relatives	---	---	---
Fax	---	---	---

DEMOGRAPHICS

Utility	*2006 (N=25)*	*2010 (N=103)*	*2014 (N=107)*
National Grid DS NY (KeySpan Energy)	52.0%	53.4	51.4
Consolidated Edison	32.0	34.0	39.3
Central Hudson Gas & Electric	8.0	4.9	3.7
Orange & Rockland Utilities	8.0	6.8	4.7
New York State Electric & Gas	---	1.0	0.9

Official within	*2006*	*2010*	*2014*
Fire, Police, Sheriff Departments	68.0%	97.1	72.9
Emergency Management Services	---	---	26.2
Enforcement departments	---	---	0.9
Local Emergency Planning	8.0	1.0	---
Governing Councils	---	---	---
Engineering Department/DPW	4.0	1.0	---
Planning, Zoning, Licensing, Permitting, Building Departments	16.0	---	---
Emergency Management Officials	4.0	1.0	---

EXCAVATORS

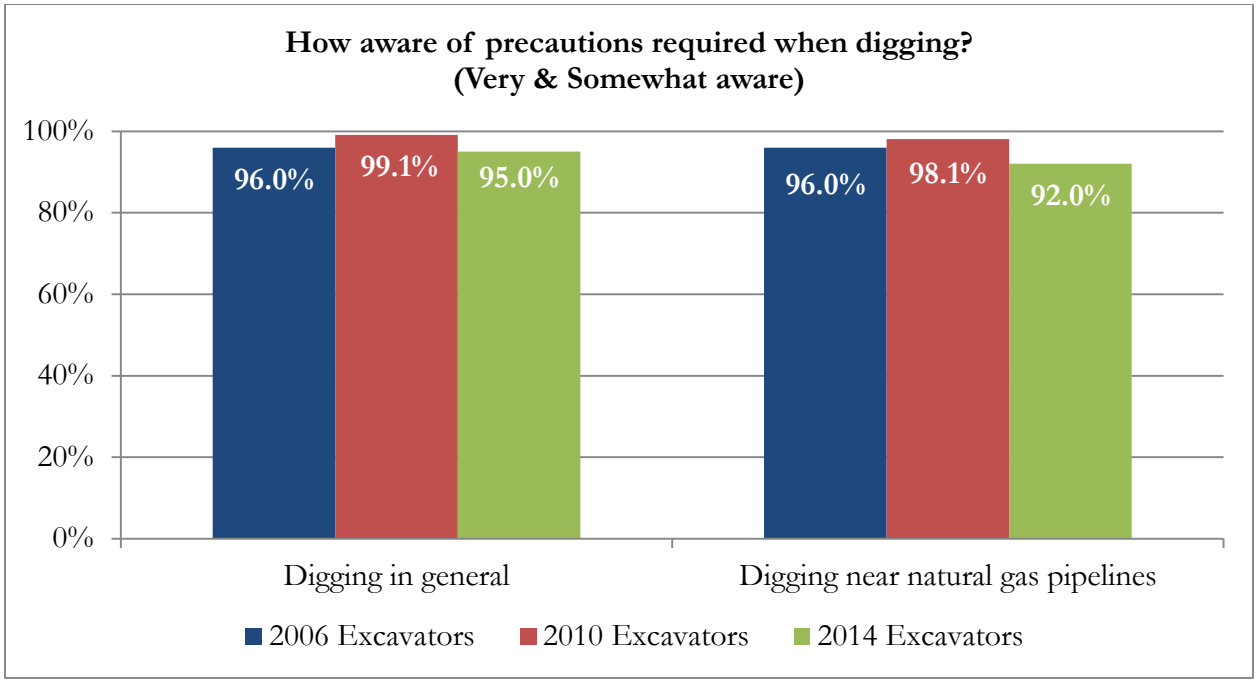
Readers are reminded that the following section summarizes statistics collected from surveys conducted among 100 **Excavators**. Readers should note that comparison data from 2006 was made up of 25 **Excavator** respondents.

AWARENESS

For purposes of the study, respondents were first read a statement indicating that the term "pipeline" referred to a transmission line, a main line running down a street or a service line to a home.

The majority of all **Excavator** respondents surveyed, 95.0%, suggested they were "very aware" (91.0%) or "somewhat aware" (4.0%) of precautions required when digging in general.

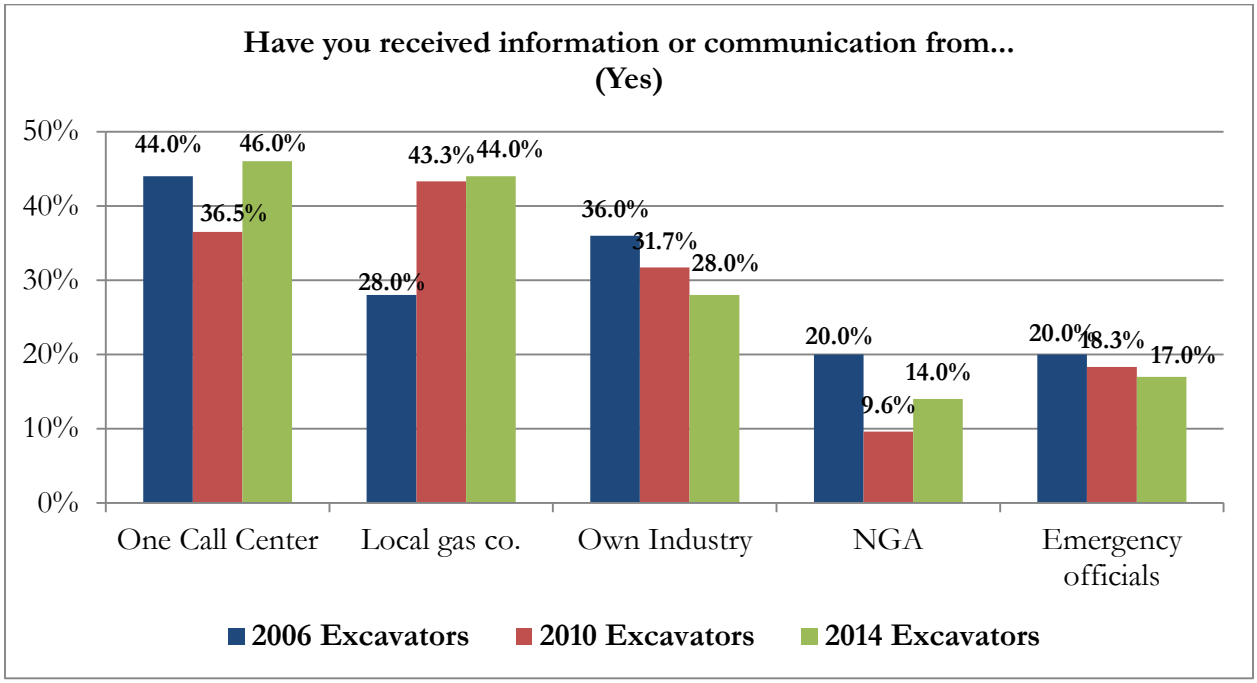
Similar percentages of respondents, 92.0%, reported to be "very aware" (88.0%), "somewhat aware" (4.0%) of precautions required when digging near natural gas pipelines.



Excavators were asked if, over the last twelve months, they had received any information or communication on natural gas pipeline safety from five different sources.

The following table presents the source and the percent for each.

Information or communication from…	*2006 Excavators (Yes)*	*2010 Excavators (Yes)*	*2014 Excavators (Yes)*
The One Call Center	44.0%	36.5	46.0
Local natural gas company or pipeline operator	28.0	43.3	44.0
Your own construction industry groups or associations	36.0	31.7	28.0
State or municipal emergency management officials	20.0	18.3	17.0
Northeast Gas Association or other gas industry associations	20.0	9.6	14.0



Excavators were then asked how aware they are about precautions required when digging near natural gas pipelines. A strong majority of Excavators, 92.0%, reported to be either "very aware" (88.0%) or "somewhat aware" (4.0%) about the precaution required when digging near gas pipelines.

Awareness of precautions required…	***2010 Excavators***	***2014 Excavators***
Very aware	91.3%	88.0
Somewhat aware	6.7	4.0
Somewhat unaware	---	2.0
Not at all aware	1.0	1.0
Don't know/unsure	1.0	5.0
Total aware	***98.0***	***92.0***
Total unaware	***1.0***	***3.0***

JOB PREPARATIONS

All **Excavators** were asked to indicate approximately how many excavation jobs or projects they have started over the last twelve months.

The table below presents the results as collected.

How many excavation jobs or projects started over last twelve months?	*2006 Excavators*	*2010 Excavators*	*2014 Excavators*
5 or fewer	28.0%	35.6	33.0
6 to 10	4.0	18.2	13.0
11 to 15	8.0	4.9	8.0
16 to 20	8.0	5.7	3.0
21 to 25	8.0	1.9	4.0
26 to 30	8.0	2.0	3.0
31 to 35	---	0.9	---
36 or more	12.0	12.5	19.0
Don't know/unsure	24.0	18.3	17.0

Excavators were asked to report, in general, how frequently they contact the One Call Center regarding pipeline locations.

While the majority of respondents, 84.0%, reported they "always" (78.0%) or "most of the time" (6.0%) contact the One Call Center regarding pipeline locations; remaining respondents, 16.0%, reported they "seldom" (2.0%), "never" (11.0%) or were "unsure" (3.0%) how frequently they call the center regarding pipeline locations.

How frequently do you contact the One Call Center regarding pipeline locations?	*2006 Excavators*	*2010 Excavators*	*2014 Excavators*
Always	60.0%	89.4	78.0
Most of the time	16.0	2.9	6.0
Seldom	12.0	2.9	2.0
Never	12.0	1.9	11.0
Don't know/unsure	---	2.9	3.0
Total always & most of the time	***76.0***	***92.3***	***84.0***
Total seldom & never	***24.0***	***4.8***	***13.0***

Those respondents (13.0% or 13 respondents) who reported to "seldom" or "never" contact the One Call Center regarding pipeline locations were asked why they don't contact the One Call Center more often.

Why not call more often?	***2014 Excavators***
Not applicable	53.8%
Don't know/unsure	30.8
No need	7.7
Someone else calls	7.7

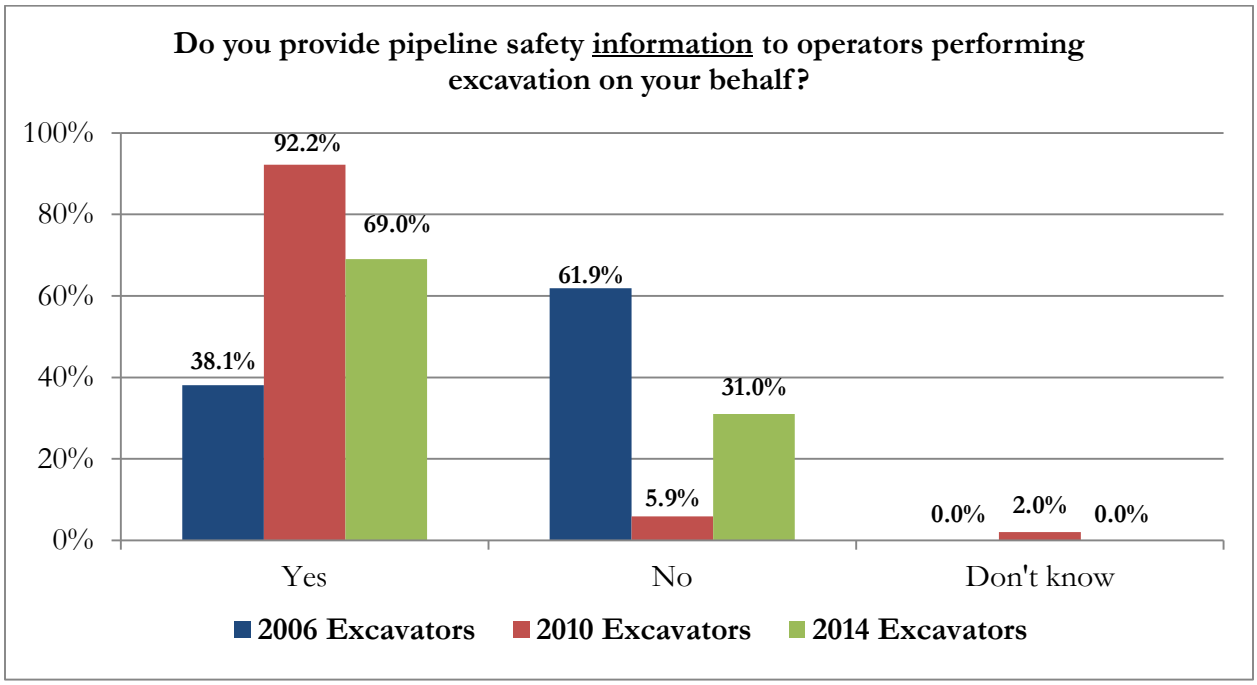
All respondents were asked, besides themselves, if they had other employee operators or other subcontractors performing excavation work.

Almost one-third of all respondents, 29.0%, did report having others performing excavation work, while 67.0% reported to researchers they did not.

Besides yourself, do you have other operators or subcontractors performing excavation work?	***2006 Excavators***	***2010 Excavators***	***2014 Excavators***
Yes	84.0%	49.0	29.0
No	16.0	51.0	67.0
Don't know/unsure	---	---	4.0

Those respondents (29.0% or 29 respondents) who reported having other employee operators or subcontractors performing excavation work were asked if they provide utility damage prevention and natural gas pipeline safety information to these other operators.

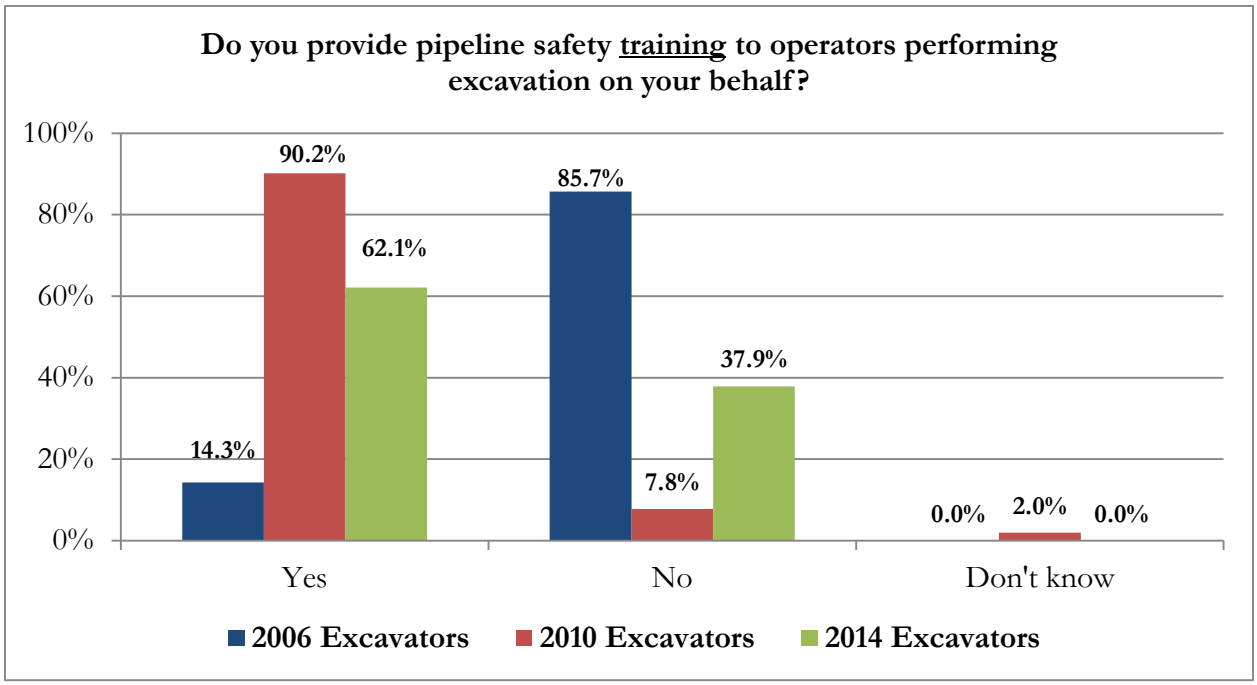
More than two-thirds of respondents, 69.0%*, did report providing pipeline safety information to operators, another 31.0% said they did not provide pipeline safety information to the people performing excavation work on their behalf.



* Denotes statistically significant change, at alpha < or = 0.05.

Those respondents (29.0%) who reported having other employee operators or subcontractors performing excavation work were also asked if they provide utility damage prevention and natural gas pipeline safety training to these other operators.

Three-fifths of respondents, 62.1%*, did report providing pipeline safety training to operators, the remaining 37.9% said they do not provide pipeline safety training to the people performing excavation work on their behalf.



Further, those **Excavators** (29.0%) were asked to report the frequency in which other employee operators or subcontractors contact the One Call Center regarding pipeline locations.

The table below presents detailed findings.

How frequently do other employee operators or subcontractors contact the One Call Center?	***2006 Excavators***	***2010 Excavators***	***2014 Excavators***
Always	36.0%	66.7	93.1
Most of the time	12.0	15.7	3.4
Seldom	---	5.9	---
Never	36.0	7.8	3.4
Don't know/unsure	16.0	3.9	---
Total always & most of the time	***48.0***	***82.4***	***96.6****
Total seldom & never	***36.0***	***13.7***	***3.4***

* Denotes statistically significant change, at alpha < or = 0.05.

Those (1.0% or 1 respondents) reporting employee operators or subcontractors "seldom" or "never" contact the One Call Center regarding pipeline locations were asked to report the reason why.

Why don't other employee operators or subcontractors contact the One Call Center?	***2006 Excavators (N=9)***	***2010 Excavators (N=7)***	***2014 Excavators (N=1)***
Owner contacts the Center for them	100.0%	85.7	100.0
No reason	---	---	---
Not applicable	---	14.3	---

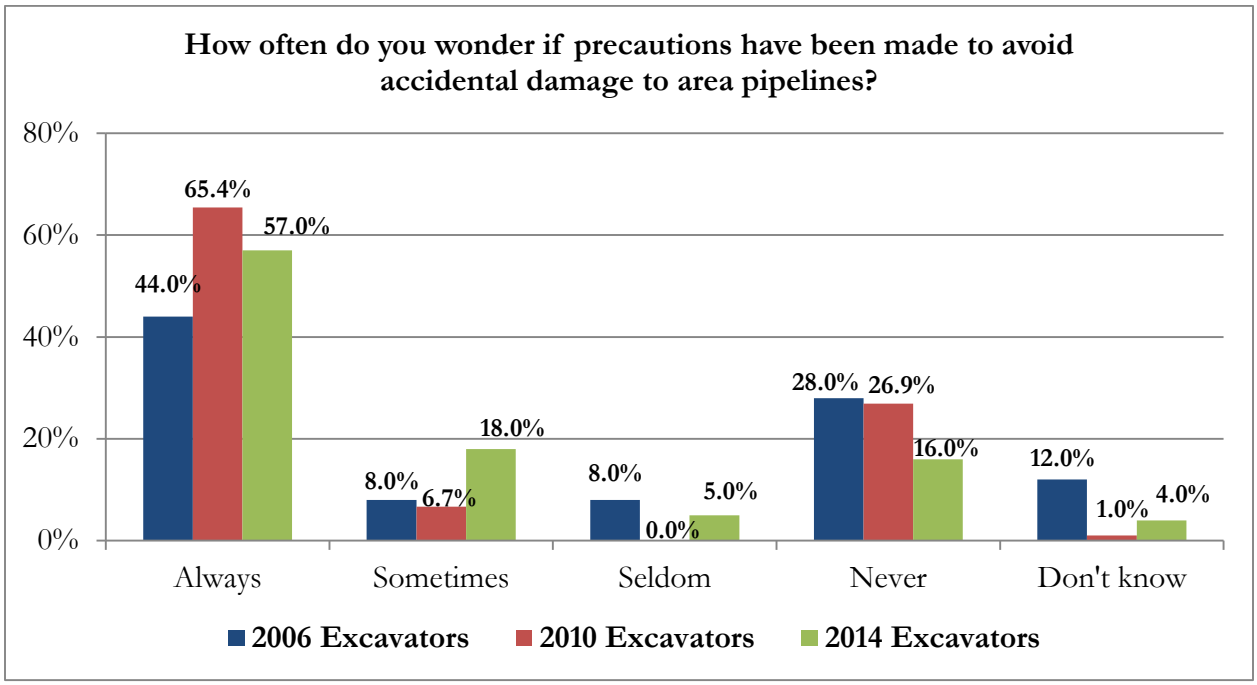
All **Excavators** were asked, on an annual basis, how frequently they run into a number of different situations.

The following table presents the types of situations and the number of times they encounter each per year.

How often, each year, do you run into these situations?	***Unexpectedly uncover a natural gas pipeline***			***Close calls with gas pipelines when digging***			***Damage natural gas pipelines***		
	2006	***2010***	***2014***	***2006***	***2010***	***2014***	***2006***	***2010***	***2014***
0 times each year	48.0	64.4	81.0	56.0	68.3	80.0	68.0	78.8	85.0
1 time each year	12.0	12.5	8.0	4.0	10.6	8.0	12.0	9.6	6.0
2 times each year	8.0	4.8	1.0	---	5.8	2.0	---	---	---
3 times each year	8.0	1.9	---	4.0	2.9	---	---	---	---
4 or more times each year	---	3.0	1.0	4.0	1.0	1.0	---	---	1.0
Don't know/unsure	24.0	13.5	9.0	32.0	11.5	9.0	20.0	11.5	8.0

PERCEPTIONS/ATTITUDES

As presented in the chart below, three-quarters of all respondents, 75.0%, suggested they "always" (57.0%) or "sometimes" (18.0%), wonder if precautions have been made to avoid accidental damage to area pipelines when they or their excavation crews are digging.



When asked about their list of concerns, four-fifths of all **Excavators** surveyed, 82.0%, reported to be either "very concerned" (60.0%) or "somewhat concerned" (22.0%) about natural gas pipeline safety.

The table below also presents detailed findings.

How concerned about pipeline safety?	***2006 Excavators***	***2010 Excavators***	***2014 Excavators***
Very concerned	56.0%	73.1	60.0
Somewhat concerned	16.0	17.3	22.0
Somewhat unconcerned	8.0	1.0	3.0
Not at all concerned	20.0	7.7	15.0
Don't know/unsure	---	1.0	---
Total concerned	***72.0***	***90.4***	***82.0***
Total unconcerned	***28.0***	***8.7***	***18.0***

Those respondents (18.0% or 18 respondents) who reported to be "somewhat unconcerned," "not at all concerned" or "unsure" about natural gas pipeline safety were asked to provide a reason.

The table below presents the results.

Reasons why not concerned…	***2014 Excavators***
Just don't think about it	50.0%
Proper safety precautions are always taken	33.3
Always call to double check	11.1
Always hand dig	5.6

Further, those same respondents were also asked to indicate what the Northeast Gas Association and their local company can do to increase the level of concern or pay greater attention to pipeline safety efforts in the future.

The table below presents the detailed findings.

What might the Northeast Gas Association and [Local Company] do in order for you to be more concerned or pay greater attention to pipeline safety efforts in the future?	***2014 Excavators***
None/nothing	61.1%
Don't know/unsure	27.8
Reading materials/mailings	11.1

KNOWLEDGE/UNDERSTANDING

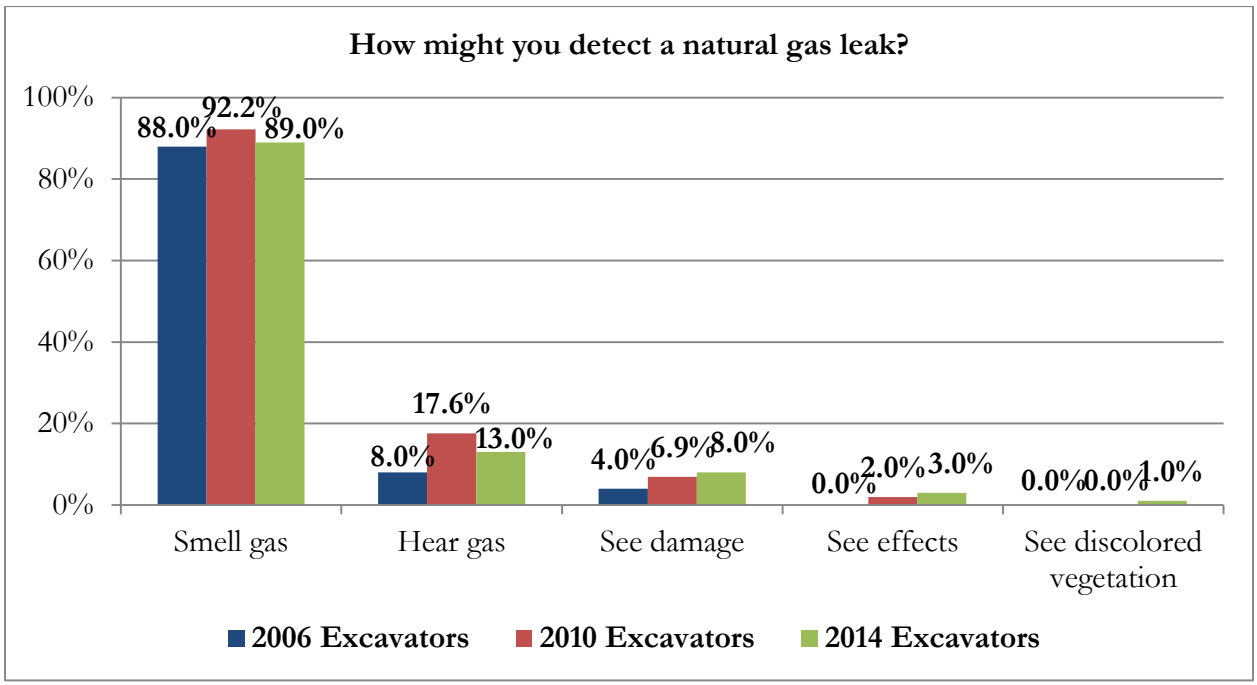
Researchers asked **Excavators** how they might detect a natural gas leak.

The following table presents the results as collected. Readers should note that multiple responses were accepted.

How might you detect a natural gas leak?	*2006 Excavators*	*2010 Excavators*	*2014 Excavators*
Correct: Smell gas leak	88.0%	92.2	89.0
Correct: Hear gas leak	8.0	17.6	13.0
Correct: See damaged gas pipe or line	4.0	6.9	8.0
Don't know/unsure	12.0	2.0	5.0
Correct: See effects of natural gas leak	---	2.0	3.0
Other	---	2.9	3.0
Correct: See discolored, brown or dead vegetation	**	**	1.0
Incorrect: See gas (no description)	---	---	---

***Indicates a questions was not asked in a particular year*

"Other" responses provided included the following: "Sensor/detector" (3.0%).



BEHAVIOR

If respondents detected a natural gas leak, the following table depicts the reported actions they would take.

Readers should note multiple responses were accepted from respondents.

If you did detect a natural gas leak, what would you do?	*2006 Excavators*	*2010 Excavators*	*2014 Excavators*
Call local natural gas company or pipeline operator	64.0%	74.0	66.0
Call 911	32.0	32.7	30.0
Move to a safe area	12.0	7.7	20.0
Call local number for police/fire/emergency services	8.0	9.6	18.0
Leave work site/building	---	1.0	5.0
Don't know/unsure	---	1.9	1.0
Shut off gas	---	---	1.0
Secure the area	---	---	1.0
Look on web/internet for phone number	---	---	---
Mark out	---	---	---
Isolate area	---	---	---

Researchers asked all **Excavators** if they had ever taken, or had been a part of the actions presented in the following table.

Ever taken the following actions?	*2006 Excavators (Yes)*	*2010 Excavators (Yes)*	*2014 Excavators (Yes)*
Discovered suspicious or unusual activity near a natural gas pipeline near your home or in your community	**	**	1.0
Called to report suspicious or unusual activity near a natural gas pipeline***(N=1)	4.0%	13.5	---
Attempted to obtain natural gas pipeline safety information over the last year	12.0	31.7	11.0*
Passed natural gas pipeline safety information on to others besides employees	12.0	24.0	21.0
Talked to employees about natural gas pipeline safety precautions	28.0	57.7	39.0*

***Indicates a questions was not asked in a particular year*

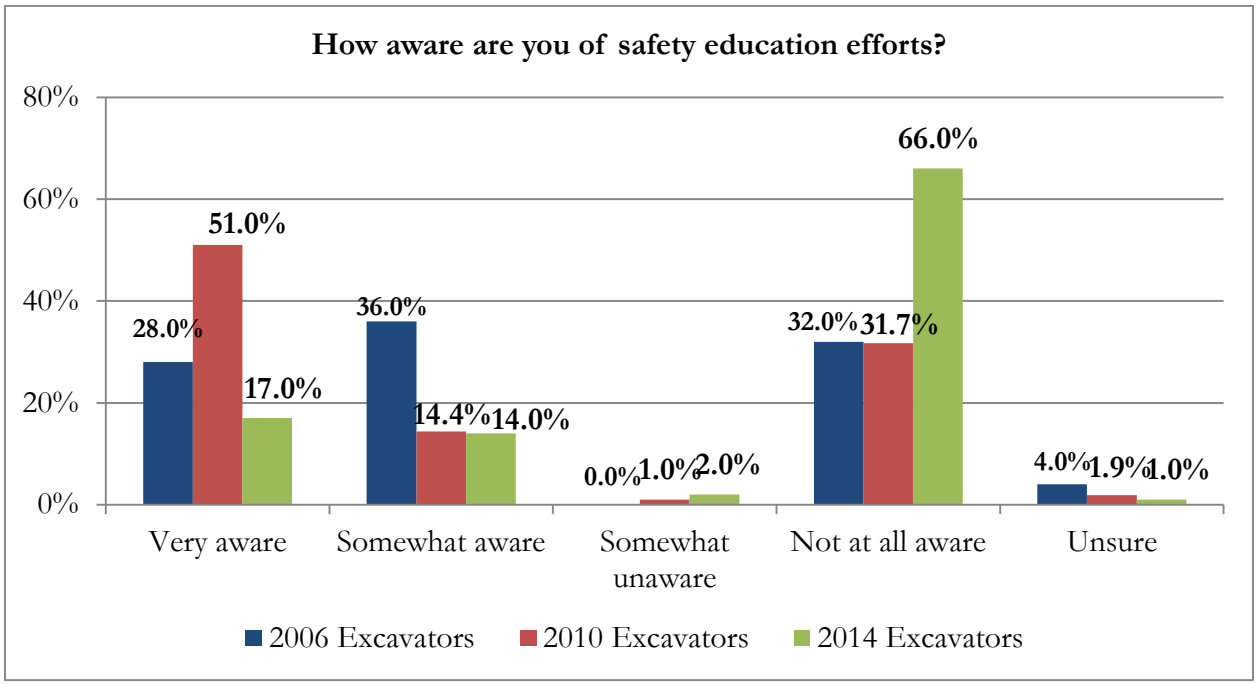
****In 2014 question was only asked to those who reported "yes" in the previous question*

THE SAFETY CAMPAIGN

Researchers read respondents the following: *"(Local Gas Company) and the Northeast Gas Association have efforts underway to increase awareness of pipeline safety issues. Prior to my call today, how aware of these safety education efforts were you? Would you say…"*

While one-third of all respondents, 31.0%*, indicated they were either "very aware" (17.0%) or "somewhat aware" (14.0%), another 69.0% reported to be "somewhat unaware" (2.0%), "not at all aware" (66.0%) or "unsure" (1.0%) of the education efforts of the local gas company and Northeast Gas Association.

The chart below also presents the results collected.



Those respondents reporting to be "very aware," "somewhat aware" or "somewhat unaware" of efforts by the local gas utility and the Northeast Gas Association to increase awareness of pipeline safety issues were asked to name one or more of the key education messages.

Multiple responses were accepted by researchers and each message recalled, along with frequency of mention, is presented in the table below.

Messages recalled	***2006 Excavators***	***2010 Excavators***	***2014 Excavators***
Call before you dig	50.0%	81.2	78.8
Dig safely or Dig Safe	31.3	88.4	51.5
Call 811	---	21.7	39.4
Don't know/do not recall	6.3	1.4	21.2
Wait for "markout"	12.5	5.8	15.2
If you smell rotten eggs, take precautions and call the gas leak hotline from a neighbor's home	18.8	1.4	6.1
Markouts are done by Local Company at no cost	---	---	6.1
Safety is priority number one	18.8	1.4	3.0
Pipeline markers indicate pipe locations	6.3	---	3.0
Mercaptan, a special odorant is added to natural gas	---	4.3	3.0
It's illegal to dig on your property without markout	12.5	7.2	---
Move to a safe environment	12.5	---	---
Do not strike a match/turn lights on or off	6.3	---	---
Excavators cause damage by digging	---	---	---
Call the police if you see anyone damaging pipelines	---	---	---
Property owners should report suspicious activity	---	---	---
Maintain access to gas meters	---	1.4	---
"One Call"	---	---	---
Remain in a safe area but nearby while waiting for help	---	---	---

Respondents who recalled key messages in the pipeline safety education information were asked to indicate which actions, if any, these efforts prompted them to make.

Actions	***2014 Excavators (Yes)***
The messages did not prompt any actions	76.9%
Thinking about what steps you might take in the event of a natural gas emergency	7.7
Seeking out additional information or follow-up	7.7
Speaking with community members about pipeline safety	3.8
Don't know/unsure	3.8

The vast majority of respondents surveyed, 97.0%, reported believing that pipeline safety public education is either "very important" (81.0%) or "somewhat important" (16.0%); while a smaller number, 2.0%, reported pipeline safety public education to be "somewhat unimportant."

How important is of pipeline safety public education?	***2006 Excavators***	***2010 Excavators***	***2014 Excavators***
Very important	80.0%	89.4	81.0
Somewhat important	16.0	8.7	16.0
Somewhat unimportant	---	---	2.0
Not at all important	4.0	---	---
Don't know/unsure	---	1.9	1.0
Total important	***96.0***	***98.1***	***97.0***
Total unimportant	***4.0***	***---***	***2.0***

All respondents were asked by researchers how familiar they were with the following terms or actions related to pipeline safety (prior to the call).

The table below presents each of the terms measured as well as the cumulative total for those providing a "very familiar" or "somewhat familiar" response.

How familiar with the following terms?	***2006 Very & Somewhat Familiar***	***2010 Very & Somewhat Familiar***	***2014 Very & Somewhat Familiar***
Dig Safe/Dig Safely	88.0%	97.1	96.0
811 – Call Before You Dig	**	96.2	93.0
One Call	84.0	**	**

***Indicates a questions was not asked in a particular year*

All respondents were asked to rate their local gas utility's pipeline safety public education, including its advertising and communication, on several important characteristics. Respondents were asked to use a scale of one to ten where one meant very good and ten meant very poor.

The following table presents the cumulative total of those providing a 1 - 4 rating (positive) on the ten-point scale side-by-side with the same ratings when those providing "don't know" responses were removed from the data.

Public Safety Education characteristics	***2006 Excavators***		***2010 Excavators***		***2014 Excavators***	
	w/ DKs	***w/o DKs***	***w/ DKs***	***w/o DKs***	***w/ DKs***	***w/o DKs***
Informative	32.0	61.5	45.2	85.5	38.0	84.4
Providing specific instructions for natural gas emergencies	36.0	69.2	42.3	81.5	34.0	73.9
Increasing your knowledge about pipeline safety	32.0	57.1	42.3	83.0	33.0	71.7
Attention grabbing	28.0	53.8	39.4	75.9	32.0	69.6
Having memorable messages	36.0	69.2	39.4	77.4	32.0	69.6
Average	***32.8***	***62.2***	***41.2***	***80.7***	***33.8***	***73.8***

SOURCES FOR INFORMATION

All respondents were asked to indicate their preference for seeing, hearing or receiving information about gas pipeline safety issues and precautions.

Multiple responses were accepted by researchers, and each preferred source for information, along with frequency of mention, is presented in the table below.

Sources for Pipeline Safety Information	*2006 Excavators Preference*	*2010 Excavators Preference*	*2014 Excavators Preference*
Mailings/direct mail	68.0%	51.0	38.0
Email	---	17.3	36.0
TV news	---	17.3	11.0
Internet/web	8.0	3.8	10.0
TV advertising	4.0	4.8	9.0
Brochures	28.0	4.8	5.0
Newspaper ads	12.0	1.9	4.0
Billboards	4.0	2.9	4.0
Bill inserts	28.0	6.7	3.0
Nothing/don't want to receive information	---	---	3.0
Radio advertising	8.0	4.8	2.0
Utility company – phone	---	---	2.0
Utility company – direct mail	12.0	---	1.0
Newspaper stories	12.0	5.8	1.0
Newspaper inserts	8.0	---	1.0
Government agency	4.0	---	1.0
Don't know/unsure	---	---	1.0
Utility company – in-person contact	---	1.0	1.0
Natural gas training	---	1.0	1.0
Facebook/Twitter	---	---	1.0
Fair and events	4.0	---	---
Employer/school	4.0	---	---
Radio news	---	4.8	---
Friends/neighbors/relatives	---	---	---
Co-workers	---	---	---
Utility company – website	---	---	---
Fax	---	---	---
Not applicable	---	---	---
Refused/none/not applicable	---	3.0	---

DEMOGRAPHICS

How many employees at your company?	*2006*	*2010*	*2014*
5 or fewer	20.0%	51.9	37.0
6 to 10	32.0	20.2	16.0
11 to 15	12.0	8.7	13.0
16 or more	20.0	13.4	22.0
Don't know/unsure/refused	16.0	5.8	12.0

Please tell me if you are an…	*2006*	*2010*	*2014*
Owner	**	59.6%	47.0
Partner/part owner	**	12.5	8.0
Employee/operator	**	27.9	45.0

*** Indicates a question not asked in a particular year.*

Utility (Excavators)	*2006 (N=25)*	*2010 (N=104)*	*2014 (N=100)*
National Grid (DS NY)	52.0%	52.9	55.0
Consolidated Edison	32.0	34.6	35.0
Central Hudson Gas & Electric	8.0	3.8	4.0
Orange & Rockland Utilities	8.0	4.8	5.0
New York State Electric & Gas	---	3.9	1.0

INTERPRETATION OF AGGREGATE RESULTS

The computer processed data for this survey is presented in the following frequency distributions. It is important to note that the wordings of the variable labels and value labels in the computer-processed data are largely abbreviated descriptions of the Questionnaire items and available response categories.

The frequency distributions include the category or response for the question items. Responses deemed not appropriate for classification have been grouped together under the "Other" code.

The "NA" category label refers to "No Answer" or "Not Applicable." This code is also used to classify ambiguous responses. In addition, the "DK/RF" category includes those respondents who did not know their answer to a question or declined to answer it. In many of the tables, a group of responses may be tagged as "Missing" – occasionally, certain individual's responses may not be required to specific questions and thus are excluded. Although when this category of response is used, the computations of percentages are presented in two (2) ways in the frequency distributions: 1) with their inclusion (as a proportion of the total sample), and 2) their exclusion (as a proportion of a sample sub-group).

Each frequency distribution includes the absolute observed occurrence of each response (i.e. the total number of cases in each category). Immediately adjacent to the right of the column of absolute frequencies is the column of relative frequencies. These are the percentages of cases falling in each category response, including those cases designated as missing data. To the right of the relative frequency column is the adjusted frequency distribution column that contains the relative frequencies based on the legitimate (i.e. non-missing) cases. That is, the total base for the adjusted frequency distribution excludes the missing data. For many Questionnaire items, the relative frequencies and the adjusted frequencies will be nearly the same. However, some items that elicit a sizable number of missing data will produce quite substantial percentage differences between the two columns of frequencies. The meticulous analyst will cautiously consider both distributions.

The last column of data within the frequency distribution is the cumulative frequency distribution (Cum Freq.). This column is simply an adjusted frequency distribution of the sum of all previous categories of response and the current category of response. Its primary usefulness is to gauge some ordered or ranked meaning.