

**2008 State Damage Prevention Program Grants Progress Report**  
**Funding Opportunity Number: DTPH56-08-SN-0001**  
**CFDA Number: 20.720**

**Award Number:** DTPH56-08-G-PHPS08  
**Project Title:** Utah 2008 Damage Prevention Improvement  
**Date Submitted:** April 14, 2009  
**Submitted by:** Al Zadeh / W. Gary Hansen

**Specific Objective(s) of the Agreement**

Under this grant award the Department of Commerce, DPU-Pipeline Safety, Utah will: 1) Assess the needs to improve the communication between stakeholders from receipt of an excavation notification thru the successful completion; 2) Conduct damage prevention awareness seminars; 3) Work on proposed legislation to establish a dispute board, and conduct meetings statewide to inform and educate stakeholders of new legislation, if passed; and 4) Expand its role as a reporting agency within the state of Utah relating to the CGA's Damage Information Reporting Tool (D.I.R.T.).

**Workscope**

Under the agreement, the Grantee will address the following elements listed in 49 USC 60134 through the actions it has specified in its Application.

- *Element (1):* Participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.
- *Element (5):* A process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.
- *Element (6):* A process for resolving disputes that defines the State authority's role as a partner and facilitator to resolve issues.
- *Element (7):* Enforcement of State damage prevention laws and regulations for all aspects of violations assessable by the appropriate State authority.
- *Element (8):* A process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, underground pipeline locating capability, and gathering and analyzing information about the accuracy and effectiveness of locating programs.

**Accomplishments for this period (Item 1 under Agreement Section 9.01 Progress Report: "A comparison of actual accomplishments to the objectives established for the period.")**

**OBJECTIVES**

- 1) Assess the needs to improve the communication between stakeholders from receipt of an excavation notification thru the successful completion.

WORKSCOPE – *Element (1):* Participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.

MODIFICATION PLAN FOR IMPROVEMENT – Conduct Customer Satisfaction Surveys with Excavators & Facility Operators in an effort to assess what needs exist to improve the communications between stakeholders from receipt of an excavation notification until the successful completions of the excavation. Possible outcomes may include the recommendation to implement an Automated Positive Response application benefiting excavators and the implementation of a Ticket Management Software application benefiting facility operators.

ACTUAL ACCOMPLISHMENTS (June 1, 2008 – April 14, 2009)

- 1) Proposal accepted between Blue Stakes of Utah and Dan Jones & Associates dated June 23, 2008 to have Dan Jones & Associates conduct Customer Satisfaction Surveys (Customer Telephone Surveys, Remote Customer (RTE/QTE User) Telephone Survey, and Association Member Mail / Telephone Survey). (**see attachment #1 / Dan Jones & Associates Agreement**)
  - 2) Customer Telephone Surveys conducted (8/26/08-9/6/08 – 1<sup>st</sup> Wave, 12/19/08-12/30/08 – 2<sup>nd</sup> Wave, & 3/13/09-3/16/09 – 3<sup>rd</sup> Wave) and results compiled. Awaiting analysis on completion of all 3 Waves. (**see attachment #2 / Customer Telephone Survey Results**)
  - 3) Remote Customer (RTE/QTE User) Telephone Survey conducted (October 2008) and analysis compiled. (**see attachment #3 / RTE – QTE Survey Analysis – October 2008**)
  - 4) Member Mail / Telephone Survey conducted (December 2008) and analysis compiled. (**see attachment #4 / Member Survey Analysis – December 2008**)
- 2) Conduct damage prevention awareness seminars.

WORKSCOPE - *Element (5)*: A process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.

MODIFICATION PLAN FOR IMPROVEMENT – Attendance at the Damage Prevention Awareness Seminars conducted by Blue Stakes of Utah include on average over 50% first time attendees. Damage Prevention Awareness Seminars will continue to be held annually throughout the state of Utah. In addition to the seminars, the one-call center will also conduct the following additional damage prevention training:

- Safety meetings will be conducted as requested by the one-call center tailored to fit the needs of excavators, locators, and facility operators;
- In cooperation with the Associated General Contractors Association of Utah, the one-call center will provide 1 core credit hour of continuing education training to contractors required to obtain 6 hours of continuing education every 2 years for re-licensing; and
- In cooperation with various Pipeline Damage Prevention Groups in Utah, the one-call center will provide damage prevention awareness training during the RP1162 compliance training for operators.

ACTUAL ACCOMPLISHMENTS (June 1, 2008 – April 14, 2009)

- 1) Blue Stakes of Utah conducted 8 Damage Prevention Awareness Seminars in 2009 as follows:
  - a. Provo, Utah Area – January 13 & 14, 2009
  - b. Logan, Utah Area – January 15, 2009
  - c. Salt Lake City, Utah Area – January 20 & 21, 2009
  - d. Ogden, Utah Area – January 22, 2009

- e. St. George, Utah Area – February 3, 2009
- f. Cedar City, Utah Area – February 4, 2009

Seminars included presentations by Questar Gas on excavation safety around natural gas pipelines; Rocky Mountain Power on excavation safety around overhead and underground utility lines, and Blue Stakes of Utah on the national “Dig Safely” campaign, national “811 – Call Before You Dig” 3 digit phone number, and amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities. **(see attachment #5 / 2009 Blue Stakes of Utah Damage Prevention Awareness Seminars Summary)**

- 2) 62 individual meetings were conducted between June 1, 2008 and April 14, 2009. Meetings included safety meetings and educational training for Contractors and Operators on the following topics: **(see attachment #6 / 2008 Damage Prevention Grant Expenses)**
  - a. Blue Stakes of Utah Association Overview
  - b. National “Dig Safely” Campaign
  - c. National “811 – Call Before You Dig” 3 digit phone number
  - d. 2008 Amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities
  - e. Legal responsibilities of Contractors and Operators in the state of Utah
- 3) Work on proposed legislation to establish a dispute board, and conduct meetings statewide to inform and educate stakeholders of new legislation, if passed.

#### WORKSCOPE –

*Element (6):* A process for resolving disputes that defines the State authority’s role as a partner and facilitator to resolve issues.

*Element (7):* Enforcement of State damage prevention laws and regulations for all aspects of violations assessable by the appropriate State authority.

**MODIFICATION PLAN FOR IMPROVEMENT** – Proposed legislation includes an amendment that will establish an Underground Facilities Damage Dispute Board that will be established under the authority of the State of Utah Public Service Commission comprising of five members representing Facility Operators, Associated General Contractors, One-Call Center, Home Builders Association, and the Division of Public Utilities. The review board will be established to arbitrate a dispute regarding damages, not including personal injury damages, arising between an operator, an excavator, a property owner or any other interested party. One-Call Center to conduct meetings statewide to inform and educate stakeholders of new legislation if passed.

#### ACTUAL ACCOMPLISHMENTS (June 1, 2008 – April 14, 2008)

- 1) Proposed legislation passed and became law on May 5, 2008. **(see attachment #7 – HB341 Enrolled Copy)**
- 2) Included copy of Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities as amended through 2008 in Blue Stakes of Utah Excavators’ Guide printed in May 2008. **(see attachment #8 – Excavators’ Guide)**
- 3) Incorporated educating Excavators & Operators of new amendments during meetings conducted by Blue Stakes of Utah throughout the state of Utah. **(see attachment #6 / 2008 Damage Prevention Grant Expenses)**

- 4) As of April 14, 2009, members of the 5 member Underground Facilities Damage Dispute Board have been identified including and representing; W. Gary Hansen / Blue Stakes of Utah, Al Zadeh / Division of Public Utilities, Vaughn Shosted / Operators, B. J. Holdaway / Associated General Contractors, & Gordon Bangerter / Utah Home Builders Association. The Public Service Commission is awaiting finalization of Board member appointment by the Governor.
- 4) Expand its role as a reporting agency within the state of Utah relating to the CGA's Damage Information Reporting Tool (D.I.R.T.).

WORKSCOPE – *Element (8)*: A process for fostering and promoting the use, by all appropriate stakeholders, of improving technologies that may enhance communications, underground pipeline locating capability, and gathering and analyzing information about the accuracy and effectiveness of locating programs.

MODIFICATION PLAN FOR IMPROVEMENT – One Call Center to expand its role as a reporting agency within the state of Utah relating to the CGA's Damage Information Reporting Tool (D.I.R.T.) to include the acquisition of a Virtual D.I.R.T. application for Blue Stakes of Utah. Increased data reporting from excavators and facility operators in Utah into the D.I.R.T. report can become a valuable asset in determining the root causes of damages in Utah and addressing the deficiencies with damage prevention training.

ACTUAL ACCOMPLISHMENTS (June 1, 2008 – April 14, 2009)

- 1) Acquired and deployed Virtual Private D.I.R.T. application in September 2008 on Blue Stakes of Utah's WEB site [www.bluestakes.org](http://www.bluestakes.org) link "Damage Information Reporting Tool – DIRT". (see attachment #6 / 2008 Damage Prevention Grant Expenses)
- 2) Printed and distributed Blue Stakes Newsletter in November 2008 promoting Blue Stakes Virtual D.I.R.T. application. (see attachment #6 / 2008 Damage Prevention Grant Expenses)

**Quantifiable Metrics/Measures of Effectiveness (Item 2 under Agreement Section 9.01 Project Report: "Where the output of the project can be quantified, a computation of the cost per unit of output.")**

#### OBJECTIVES

- 1) Assess the needs to improve the communication between stakeholders from receipt of an excavation notification thru the successful completion.

#### METRICS/MEASURES OF EFFECTIVENESS

- 1) Reference **attachment #2 / Customer Telephone Survey Results** for measurement outcome for the Customer Telephone Surveys that targeted Excavators who call Blue Stakes of Utah to submit locate requests.
- 2) Outcome for the Customer Telephone Surveys resulted in Blue Stakes of Utah implementing an Internet Ticket Entry (ITE) application for Homeowners as well as Contractors that is an easy to use on-line application to submit locate requests for single addresses. Reference Blue Stakes of Utah's WEB site at [www.bluestakes.org](http://www.bluestakes.org) to view application. During the first month the ITE application was implemented, 0.71% of all locate requests were submitted using this new process. In March 2009, 6.25% of all locate requests were submitted using the ITE application.

- 3) Reference **attachment #3 / RTE – QTE Survey Analysis – October 2008** for measurement outcome for the Remote Customer (RTE/QTE User) Telephone Survey that targeted Excavators using Blue Stakes of Utah’s Internet applications to submit locate requests.
  - 4) Reference **attachment #4 / Member Survey Analysis – December 2008** for measurement outcome for the Member Mail / Telephone Survey that targeted Operators who are members of one-call notification center in Utah – Blue Stakes of Utah.
- 2) Conduct damage prevention awareness seminars.

#### METRICS/MEASURES OF EFFECTIVENESS

- 1) 5,966 invitations were mailed to Contractors and Operators throughout Utah in the month of December 2008 to attend one of Blue Stakes of Utah’s Damage Prevention Awareness Seminars that were conducted in January & February 2009. 1,348 individuals attended the Seminars including over 50% first time attendees. **(see attachment #5 / 2009 Blue Stakes of Utah Damage Prevention Awareness Seminars Summary)**
  - 2) 1,169 Excavators and Operators have been trained by Blue Stakes of Utah during 62 individual training meetings conducted throughout the state of Utah. **(see attachment #6 / 2008 Damage Prevention Grant Expenses)**
  - 3) Meetings have resulted in 27 new or potential Operators becoming members of Blue Stakes of Utah to receive notifications from Excavators requesting they locate and mark their underground facilities. Blue Stakes of Utah currently has 497 Operators participating in the one-call Association.
- 3) Work on proposed legislation to establish a dispute board, and conduct meetings statewide to inform and educate stakeholders of new legislation, if passed.

#### METRICS/MEASURES OF EFFECTIVENESS

- 1) Proposed legislative amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities were passed and became effective on May 5, 2008. **(see attachment #7 – HB341 Enrolled Copy)**
  - 2) Underground Facilities Damage Dispute Board to be established within the Public Service Commission comprising of 5 members representing; Operators, Associated General Contractors, Blue Stakes of Utah, Utah Home Builders, and the Division of Public Utilities.
  - 3) As of April 14, 2009, members of the 5 member Underground Facilities Damage Dispute Board have been identified including and representing; W. Gary Hansen / Blue Stakes of Utah, Al Zadeh / Division of Public Utilities, Vaughn Shosted / Operators, B. J. Holdaway / Associated General Contractors, & Gordon Bangerter / Utah Home Builders Association. The Public Service Commission is awaiting finalization of Board member appointment by the Governor.
  - 4) Educating Excavators and Operators of the new amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities have been incorporated into the training / education meetings conducted by Blue Stakes of Utah. **(see attachment #6 / 2008 Damage Prevention Grant Expenses)**
- 4) Expand its role as a reporting agency within the state of Utah relating to the CGA’s Damage Information Reporting Tool (D.I.R.T.).

#### METRICS/MEASURES OF EFFECTIVENESS

- 1) The Virtual Private D.I.R.T. application for Blue Stakes of Utah has been deployed on its WEB site at [www.bluestakes.org](http://www.bluestakes.org). Reference link titled "Damage Information Reporting Tool-DIRT on Blue Stakes WEB site to view.
- 2) Information Blue Stakes of Utah has available as a reporting organization for the D.I.R.T. application provides pertinent data relating to the root causes of damages occurring in Utah to underground utilities that are reported by Excavators and Operators inputting data into the D.I.R.T. application.

Based upon data available for calendar years 2006, 2007, and 2008 (as of April 14, 2009) there appears to be a significant decline in damages caused to natural gas distribution lines attributable to Excavators not calling for a locate request before digging. In 2006, 48% of the damages caused were attributable to no call being made. In 2007, 44% were attributable to no call being made, and thus far in 2008, 37% are attributable to no call being made.

This measurement alone indicates a positive trend taking place as more and more Excavators are calling before they dig to get underground utilities located and marked and reflects a positive impact the added advertising and education efforts are having in getting the word out to "Call Before You Dig" and "Dig Safely". (see **attachment #9 / D.I.R.T. Report**)

#### **Issues, Problems or Challenges (Item 3 under Agreement Section 9.01 Project Report: "The reasons for slippage if established objectives were not met. ")**

The only issue currently needing to be resolved relates Objective #3 regarding the establishment of the Underground Facilities Damage Dispute Board and getting all members of the Board appointed by the Governor to enable the Board to begin functioning and to be of value to Excavators and Operators needing a forum to address disputes.

#### **Other pertinent information including, when appropriate, actions taken to address the recommendations PHMSA provided in correspondence dated April 4, 2008 (Item 4 under Agreement Section 9.01).**

##### **Recommendation 1**

Solicitation, Section 6.01, Criteria (6) states, "A commitment to quality controls in timing, personnel, and costs for deliverables offered in exchange for the grant." We would like to see more detail on your commitment to this criterion.

Response addressing the Specific Objective(s) of the Grant Agreement

**#1 – Conducting Customer Satisfaction Surveys** – Upon establishing an agreement with Dan Jones & Associates including the deliverables and time table, the 3 Customer Satisfaction Surveys were performed and completed within the specified time frames. The cost of the surveys totaled \$32,575, \$2,575 above the estimated \$30,000 originally submitted. The difference of \$2,575 was attributable to far more Member Survey participants than what had been projected. It was estimated that 300 out of the 517 population would respond when in fact 375 participated in the survey.

**#2 – Conduct damage prevention awareness seminars** – 8 Damage Prevention Awareness Seminars were conducted versus the 7 originally projected. Additionally, Damage Prevention training meetings and safety meetings have been conducted as projected.

**#3 – Work on proposed legislation to establish a dispute board, and conduct meetings statewide to inform and educate stakeholders of new legislation, if passed** – Legislation did pass and became effective in May of 2008. Training on the new amendments was included in the Damage Prevention Awareness Seminars and safety meetings conducted to educate all stakeholder groups on the changes made to the law. Significant effort has been put forward to establish the Underground Facilities Damage Dispute Board that was included as one of the amendments in the legislation. Individual names for each Board member position have been submitted and awaiting appointment by the Governor.

**#4 – Expand its role as a reporting agency within the state of Utah relating to the CGA’s Damage Information Reporting Tool (D.I.R.T.)** – Blue Stakes implemented a Virtual Private D.I.R.T. application specific for Utah as projected and has included training on this application in the Damage Prevention Awareness Seminars and safety meetings conducted throughout the state of Utah.

Additional information will be provided with the submission of the final grant report.

### **Recommendation 2**

Many, if not all, of the effectiveness measures are through One-Call, with little attention to some of the other stakeholders. We would like to see more detail clarifying if a plan will be put in place to involve other stakeholders.

Response – All stakeholder groups (one-call, operators, excavators, locators, & governmental agencies) have been included in the Damage Prevention Awareness Seminars and safety meetings conducted throughout the state of Utah. Changes in legislation also involved the various stakeholder groups for consensus and a variety of stakeholder groups will be included in the new Underground Facilities Damage Dispute Board. Additional information will be provided with the submission of the final grant report.

### **Recommendation 3**

Overall, it appears enforcement only takes place when damages occur (i.e. reactive vs. proactive). We would like to see more detail clarifying the rationale for this decision. Also, we would like to know if there are plans to shift to a more proactive approach.

Response – Provisions of enforcement available through Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities Act is only applicable in cases of damages. Unless future legislation is made to address the reactive vs. proactive approach, how enforcement will be addressed in Utah will remain the same.

There are many other actions taking place in Utah outside of legislation on a proactive approach to educate stakeholders on the need to “Call Before You Dig”, the national “Dig Safely” campaign, the new “811” number, and the best practices from the CGA. Utah has seen a significant decrease of damages occurring specifically to natural gas

facilities due to educating stakeholders in the state of Utah on these programs and information. Additional information will be provided with the submission of the final grant report.

*[This section alludes to your initial notification, typically listed as “Recommendations” under 3b where we asked “Please acknowledge these recommendations, above, and carefully consider them as areas for program improvement. Although a detailed response addressing these areas is not necessary at this time, PHMSA would like to see these recommendations, and any actions taken addressing them, discussed in the Grant Progress Report.”*

*Please list each and describe whether or not you have been able to address them, and/or if you plan to address but haven’t yet. Note the amount and types of recommendation differ slightly for each grantee, but at a minimum all should have received the recommendation “Solicitation, Section 6.01, Criteria (6) states, “A commitment to quality controls in timing, personnel, and costs for deliverables offered in exchange for the grant.” We would like to see more detail on your commitment to this criterion.” As most did not clearly describe this in their application, it may not have been clear enough in the solicitation. What we’re looking for here is some description on how you perform with regards to timing, personnel, and costs associated with deliverables (basically delivering on what you say you will). We are most interested in timeliness as it’s related to this grant, but you can also describe your generally performance on completing other grants of this nature.]*

### **Mid-term Financial Status Report**

The mid-term financial report has been sent as a separate attachment to the AA.

*[Per the instructions in Section 9.03 of your agreement (included below), this should go to the AA as a separate form and all you put here is something to the effect of “The mid-term financial report has been sent as a separate attachment sent to the AA.”. However, if there are any issues with the Financial Status Report, or additional explanation is needed please put that here. If there are any delays for whatever reasons, these should be communicated to the AA and AOTR in advance.*

*“During the performance of the grant, the Grantee will submit a mid-term Financial Status Report, Standard Form 269 (SF-269), to report the status of funds. In addition to SF-269, the Grantee should provide the break down of costs for each object class category as stated in SF-424A. This report must be submitted to the AA in electronic form via e-mail no later than [refer to your agreement for date, but should be same as this progress report].”]*

### **Plans for next period (remainder of grant)**

#### **OBJECTIVES**

- 1) Assess the needs to improve the communication between stakeholders from receipt of an excavation notification thru the successful completion.

#### **PLANS FOR NEXT PERIOD (reminder of grant)**



- 1) Analysis of the Customer Telephone Surveys to be compiled.
- 2) Conduct damage prevention awareness seminars.

PLANS FOR NEXT PERIOD (reminder of grant)

- 1) Training / Education meetings will continue to be held and documented through the end of the grant period focusing on educating Excavators and Operators of:
  - a. Blue Stakes of Utah Association Overview
  - b. National “Dig Safely” Campaign
  - c. National “811 – Call Before You Dig” 3 digit telephone number
  - d. 2008 Amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities
  - e. Legal responsibilities of Contractors and Operators in the state of Utah
- 3) Work on proposed legislation to establish a dispute board, and conduct meetings statewide to inform and educate stakeholders of new legislation, if passed.

PLANS FOR NEXT PERIOD (reminder of grant)

- 1) Establish Underground Facilities Damage Dispute Board by getting all 5 members of Board appointed by Governor.
- 2) Continue to Educate Excavators and Operators of the new amendments to Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities in conjunction with training / education meetings conducted by Blue Stakes of Utah throughout the state of Utah.
- 4) Expand its role as a reporting agency within the state of Utah relating to the CGA’s Damage Information Reporting Tool (D.I.R.T.).

PLANS FOR NEXT PERIOD (reminder of grant)

- 1) Continue to educate Excavators and Operators encouraging them to input damages to underground utility facilities into Blue Stakes of Utah’s Virtual Private D.I.R.T. application.
- 2) Continue to evaluate data to address areas of concern in an effort to educate the Public, Contractors, and Operators of the need to “Call Before You Dig” and to “Dig Safely”.

**Requests of the AOTR and/or PHMSA**

No actions requested at this time.

# **ATTACHMENT 1**

## **DAN JONES & ASSOCIATES AGREEMENT**

**Proposal Submitted to  
Blue Stakes of Utah  
by  
Dan Jones & Associates Inc.  
June, 2008**

**Dan Jones  
& ASSOCIATES**

Dan Jones & Associates · 515 South 700 East · Trolley Corners, Suite 3H · Salt Lake City, UT 84102  
801.322.5722 · Fax: 801.322.5725

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## 1. LETTER OF INTRODUCTION

June 23, 2008

Gary Hansen  
Blue Stakes of Utah  
148 East 13200 So.  
P.O. Box 1517  
Draper, Utah 84020-1517

Dear Gary,

Dan Jones & Associates Inc., an independent, full-service public opinion and marketing research firm, is pleased to submit a proposal to conduct research for Blue Stakes of Utah.

Dan Jones & Associates has been incorporated since 1980 and is located at:

515 S 700 E  
Suite 3H  
Salt Lake City, Utah 84102

Those responsible for the project and the proposal include:

Dan E. Jones - (801) 322-5722 / [danjones@djasurvey.com](mailto:danjones@djasurvey.com)  
(Dr. Jones is responsible for contract negotiations and signing)  
Dianne Meppen - (801) 322-5722 / [diannem@djasurvey.com](mailto:diannem@djasurvey.com)  
Lowe Rudd - (801) 322-5722 / [lowe@djasurvey.com](mailto:lowe@djasurvey.com)

We understand the purpose of this customer satisfaction research and its importance to Blue Stakes of Utah. Our proposal provides options for three customer telephone and/ or mail-in surveys.

Sincerely,

Dr. Dan E. Jones, President  
Dan Jones & Associates Inc.

## **2. COMPANY BACKGROUND AND PHILOSOPHY**

Over the past 25 years, Dan Jones & Associates has conducted thousands of research studies in Utah and the Intermountain region for governmental agencies; state and district boards of education; political candidates; major television, radio stations and newspapers; advertising and public relations agencies; and public utilities. The company has also directed studies for private entities regarding a wide variety of subjects.

Years of providing reliable research in the Utah market have given Dan Jones & Associates high name recognition with residents. This name recognition helps Dan Jones & Associates maintain lower refusal rates than many organizations.

Dan Jones & Associates has a reputation for providing actionable data—reliable, accurate information that helps clients make important public policy, business, and marketing decisions. The company's strengths lie in innovative quantitative and qualitative market research techniques, proven methods of statistical analysis, and state-of-the-art facilities that make it possible for clients to gain an understanding of respondents' attitudes and opinions. Company representatives are available after a project is completed to answer questions about the data or assist the client in drawing appropriate conclusions.

The company recognizes that each client is unique and requires different methods of research. Trained staff members guide clients through the research process and ensure the objectives are met using the best research methods. Dan Jones & Associates has extensive experience using a variety of research techniques, including: face-to-face (in person/ household), telephone, mail-in questionnaires, intercepts (onsite), focus groups, and one-on-one interviews.

Respect for the respondent is a high priority. Dan Jones & Associates will not violate the anonymity rights of respondents and honors promises made to them. No personal information is ever sold or used for any other purpose. Dan Jones & Associates does not influence responses either directly or indirectly during the interviewing process.

The company sets high standards in each step of the research process and expects each staff member to meet these standards. Providing excellent customer service is a priority at Dan Jones & Associates. Client phone calls and e-mails are always returned promptly and frequent updates on project status are regularly provided.

Dan Jones & Associates belongs to the following professional organizations: American Marketing Association (AMA), Marketing Research Association (MRA), American Association of Public Opinion Research (AAPOR), and Qualitative Research Consultants Association (QRCA). Each professional organization has a set of ethical standards that Dan Jones & Associates strictly adheres to.

### **3. OBJECTIVES AND PROPOSED SERVICES**

#### **Objective**

The primary objective of the research, as requested by the client, is to measure the opinions and attitudes of customers (both telephone and RTE/QT) and representatives of member organizations regarding Blue Stakes of Utah and the service it provides.

#### **Proposed Services**

Dan Jones & Associates recommends a total of 1200 interviews of Blue Stake (telephone) customers be conducted by telephone. This could be spread across a year's time, with 400 being collected every three or four months.

Telephone surveys are the most cost effective method of collecting this type of data. Having a larger sample allows the data to be broken down by demographic groupings (area, age, income, etc.) that are still statistically significant. Dan Jones & Associates will work with the client to determine what areas will be included in the research.

For the RTE/QT, Dan Jones & Associates recommends attempting to reach every potential respondent by telephone. Because the population is so limited (300+), a telephone canvass is a better research approach than trying to obtain a representative sample.

Because the member survey is also based on a small population (about 500), Dan Jones & Associates recommends conducting a telephone canvass. Another option would be to mail surveys to all respondents, and then follow up with phone calls to those who do not reply by mail.

## 4. DESCRIPTION OF SERVICES – TELEPHONE SURVEY

Dan Jones & Associates adheres to strict research methods. [These methods are used industry-wide and consistently deliver quality results.] Our office and data collection center are located in Salt Lake City. The following research methods meet industry standards and help gather valid, reliable data.

### Survey Instrument

**Questionnaire** - Carefully worded, unbiased questionnaires are one of the most important aspects of the research process. Dan Jones & Associates is adept in developing objective, thorough survey instruments. Instruments of appropriate length will be developed in cooperation with representatives of Blue Stakes. Questions from any previous Blue Stakes research will be reviewed and used in the new research to provide longitudinal data where appropriate.

Both structured (closed-ended) and unstructured (open-ended) questions will be used to measure the direction and intensity of respondents' attitudes. Probing techniques will be used for unstructured questions to increase the specificity of the data collected.

**Pretests** - Pretests will be conducted before fieldwork begins. The primary purpose of the pretest is to test the survey instrument for clarity, appropriateness, and flow. The second intent of the pretest is to check the CATI programming. All questions will be evaluated by keystroke for accuracy, and the skip patterns will be checked. A monitor/supervisor will help with the pretests and submit comments and suggestions to the project director.

All comments from the pretests will be reviewed and changes will be made. The client will approve all changes made to the questionnaire as a result of the pretests.

### Survey Administration

**Sample** - Dan Jones & Associates will work with Blue Stakes to determine the appropriate sample size for the research. Dan Jones & Associates will also work with Blue Stakes to determine any sample breakdowns that may be needed (i.e., geographical area or high school area).

For research groups with small numbers of potential respondents (500 or less, as in the RTE/QT and member organizations), randomness is not an element of the research design—working from the list provided by Blue Stakes, we will interview as many respondents as possible.

**CATI System** - Dan Jones & Associates utilizes a state-of-the-art CATI (Computer-Aided Telephone Interviewing) system comprised of 33 networked interviewing stations. This system, operating with CI3 CATI software, allows all interviews to be completed onsite through the use of computer terminals, thus increasing the efficiency and accuracy of the interviewing process. Approximately 8 to 10 phone lines will be assigned to this project during the fieldwork period.

**Callback Attempts** - A minimum of four attempts will be made to contact each number randomly selected. The CATI system controls the sample, so that each telephone number is attempted during the callback process at varying times of the day on different days of the week. The CATI system is capable of automatically managing the sample, including recording times and days of busy and no



answer lines. The system can also schedule the callback appointments according to a date entered by the interviewer or supervisor.

**Sample Administration** - Proper management of the telephone sample is important. The telephone sample is administered electronically through the CATI system. The project programmer sets the sample specifications, including the number of callback attempts and the calling schedule. Supervisors monitor the sample and any problems are immediately resolved when identified.

**Interviewers/Training** - Dan Jones & Associates employs a pool of professional, experienced interviewers who have proven to be honest, thorough, and able to develop excellent rapport with respondents.

All interviewers working in the Dan Jones & Associates' data collection center have completed a formal training program prior to conducting interviews. Dan Jones & Associates' staff, primarily phone bank supervisors, conduct training sessions under the direction of Dr. Dan E. Jones.

Interviewers will administer the survey as instructed in training and briefing sessions. Interviewers are instructed to limit all interactions regarding the responses to the questions. All employees are cautioned regarding discussion of surveys, survey results, and conversations with respondents.

**Monitoring/Supervision/Quality Control** - The CATI system allows for both visual monitoring through the networked system and audio monitoring by supervisors. Such monitoring not only serves as a method of validation, but also ensures the precision of the survey process. No interviewing is conducted without supervisory personnel monitoring the calls for quality.

Onsite supervisors will be available at all times during the period of the fieldwork to respond to any unforeseen problems that interviewers might encounter. Supervisors do not conduct interviews. There are a minimum of two supervisors per shift who oversee the phone bank during operating hours.

**Maintaining Interviewer Quality** - As mentioned previously, all interviewers are monitored on a regular basis. Interviewers are aware of the monitoring process, but are not aware of when the monitoring is actually taking place. Interviewers individually meet with the supervisor regularly to discuss areas where improvement is needed, as well as receive praise for work well-done. A file is kept on each interviewer. Those who consistently receive negative reports without improvement are not able to conduct telephone interviews.

## **Data Tabulation and Analysis**

**Open-ended Responses** - All comments on unstructured questions are typed verbatim into the CATI program during the interview. When the project is complete, all verbatim responses are pulled into a word processing program and edited for spelling and punctuation. The responses are then sent to the client with the final data.

Open-end responses can be coded to allow for analysis of the data. The coding process includes a review of all responses by experienced staff members to find common responses. Common responses are then assigned a number so they can be measured and quantified.

**Data Analysis** - Dan Jones & Associates will tabulate the completed interviews. The company utilizes a unique computer program that cross-tabulates all demographic data by question, and prints the results on one page for increased readability. Each question has a response distribution, as well as a series of cross-tabulations or contingency tables.

Dan Jones & Associates will work with Blue Stakes to determine which questions are to be used in cross-tabulations. These cross-tabulations organize the responses by various demographic groupings and allow for the detection of differences that might exist between the opinions of subgroups (i.e., area of residence, gender).

The data is analyzed by a variety of statistical tests. When significant, results of the testing will be included in the written analysis. In-depth statistical testing can be conducted on data where appropriate.

The written report will also include the following:

- Executive summary
- Narrative results for each question
- Graphs and charts
- Statistical findings for each question
- Questionnaire with percentage results
- Typed verbatim comments
- Computer tables or cross-tabulations

Dan Jones & Associates will further interpret the survey results after a final analysis has been delivered, if necessary.

## **Oral Presentations**

A representative of Dan Jones & Associates will be available to present the survey findings at the request of Blue Stakes of Utah. The client may also choose to have Dan Jones & Associates develop a PowerPoint presentation of survey results (additional fee).

## **Recommendations and Advice**

Dan Jones & Associates will provide recommendations based on research findings. Since Dan Jones & Associates does not have all information necessary to make specific recommendations regarding some issues (specific programs), general recommendations from results can be made. Dan Jones & Associates will meet with the Blue Stakes to discuss details and help the client determine the views on any issues addressed in the surveys.

## **References**

Dan Jones & Associates will provide references upon request.

## **5. IMPLEMENTATION PLAN AND TIMELINE**

### **Telephone Survey Option**

There are several steps in the research process. Many of these steps may be done concurrently. From the start-up meeting through pretesting is approximately 2-3 weeks. Field work for 300-400 interviews of individuals who have called Blue Stakes is 5-10 working days. The client will receive preliminary results as soon as the fieldwork is done. A final analysis is completed within 4-6 weeks after the client is given preliminary results.

## 6. RESEARCH COSTS - Customer Satisfaction Telephone Survey, Member Survey (Mail-in with Telephone Follow-up), and RTE/QT

Dan Jones & Associates' telephone research includes the following services, included in the costs described below: questionnaire development (up to four questions may be unstructured), sample design, pretesting, CATI programming, interviewer briefing, fieldwork, supervision and monitoring, coding and editing, preliminary results, statistical testing, and two bound copies of written analysis.

The company will perform mail-in research with telephone follow-up, to include the services listed above, as well as the layout, printing, and postage for all respondents.

### Customers (9 monthly surveys: Aug. 2008 through Apr. 2009)

*Expected cost*

135 completed surveys per month (1215 total)

5-7 minute interview survey remains the same for all months)

Up to four unstructured questions

± 2.7% margin of error, total data

Cost: \$2,000 per month (\$18,000 total project)

**\$18,000**

### Members (517 population)

Conducted Oct. 2008; expect to complete between 200 - 500 interviews

Cost per interview

mail-out surveys

\$23

5-7 min

\$23

8-10 min

\$25

11-13 min

\$28

**\$7,500**

(300 completed;  
8-10 minutes)

### RTE/QT (284 population)

Conducted Aug. - Sept. 2008; expect to complete between 100 - 300 interviews

Cost per interview

5-7 min

\$25

8-10 min

\$28

11-13 min

\$31

**\$4,200**

(150 completed;  
8-10 minutes)

### Total expected cost

**\$29,700**

### Optional additional costs:

additional unstructured questions (\$300 each)

—

PowerPoint Presentation (\$350 for each survey x 3)

**\$1,050**

Customer survey analysis (analysis included with Members & RTE/QT)

**\$1,600**

# **APPENDIX**

## **Dan Jones & Associates Staff**

## STAFF

### Key Personnel Biographies

The research staff at Dan Jones & Associates is headed by Dr. Dan E. Jones and includes employees with specialties in research design, statistics, questionnaire development, fieldwork, data file management, data analysis, and technical writing. Though most staff members will play a role in the project, the following will serve as key staff:

**Dan E. Jones, Ph.D., President** - The president of the organization, Dan E. Jones, has been involved in survey research since 1959 and has conducted numerous polls and surveys. Dan Jones' track record for accuracy has been outstanding. He has a Ph.D. from the University of Utah in Political Science.

**Patricia W. Jones, Vice President/ Market Analyst** – Pat Jones began her career in the public opinion research field as a pollster in 1972. Pat graduated with a bachelor's degree in Communications from the University of Utah. She is experienced in many facets of public opinion research and has extensive training and experience in moderating focus group (qualitative) research.

**Dianne Meppen, Research Specialist** - In 1980, Dianne received a BS in Political Science with an emphasis in survey research from Utah State University. Dianne has 28 years of experience in questionnaire development, sample design, and directing research projects. Dianne will oversee the research design and methodology on this project.

**Lowe Rudd, Project Lead/ Technical Writer** - Lowe has a Master of Public Administration degree from the University of Utah and a bachelor's degree in Humanities from Brigham Young University. He is experienced in marketing, public policy research, and mass communications. He will serve as the project director and will produce the final printed reports.

**Brent Ellis, Programmer/ Research Specialist** - Brent obtained his bachelor's degree in Marketing from Brigham Young University in 1984. He specializes in computer hardware and software applications. Brent programs and maintains Dan Jones & Associates' CATI system and office network. He also manages the sample on the CATI system during projects. Brent will program the questionnaire and oversee the sample administration for the project.

Other staff members who work behind the scenes include data collection center management, accounting, human resource, clerical, and recruiting specialists.

## **ATTACHMENT 2**

# **CUSTOMER TELEPHONE SURVEY RESULTS**

**Blue Stakes Customer Questionnaire with Results**

	1 <sup>st</sup> Wave	2 <sup>nd</sup> Wave	3 <sup>rd</sup> Wave	Total
Sample size:	417	411	412	1240
Dates conducted:	8/26/08-9/6/08	12/19/08-12/30/08	3/13/09-3/16/09	8/26/08-3/16/09
Margin of error:	± 4.85%	± 4.85%	± 4.85%	± 2.75%

Hello, I'm \_\_\_\_\_ calling from Dan Jones & Associates on behalf of Blue Stakes of Utah. Is (name) available? [USE THE FOLLOWING AS NEEDED, IN ANY ORDER].

- We're doing a customer service follow-up call.
- Called Blue Stakes in \_\_\_\_ (month) \_\_\_\_ to arrange the marking of buried utilities (power lines)
- Should take about 6-7 minutes

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
1. Just to confirm, are you the person who called Blue Stakes? (In preparation for some digging?)				
Yes	100%	100%	100%	100%
No, don't remember [THANK AND END CALL]	0%	0%	0%	0%

For the rest of this call, we'd like you to focus **just on the phone call** you made to Blue Stakes. The companies who came later to mark the spot are not part of Blue Stakes, so please just focus on that initial phone call.

[AS NEEDED] Blue Stakes' job is just to identify the site, and then forward that information to the different utility companies who come and do the actual marking.

2. To begin, what is the first thing that comes to your mind when you hear the words "Blue Stakes"?  
[UNAIDED]

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
Utility marking / buried utilities	37%	35%	38%	37%
Call before you dig	10%	11%	10%	10%
Safety	9%	13%	12%	11%
Excavation / digging	7%	9%	9%	8%
Company that marks property	7%	8%	5%	6%
Power lines / electricity / power company	4%	2%	2%	3%
Gas company / gas lines	3%	2%	2%	2%
They are necessary / needed	2%	1%	1%	1%
Blue stakes / blue stake in ground	2%	4%	3%	3%
Service / public service	2%	1%	1%	1%
Professional / easy to work with	2%	2%	1%	2%
Good company / do a good job	1%	2%	<1%	1%
Can be fined / mandatory	--	2%	4%	2%
Miscellaneous	9%	7%	7%	8%
Don't know / nothing	5%	3%	4%	4%



	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
3. How would you rate your overall experience with Blue Stakes on a 1-5 scale, where one means very negative, and five means very positive.				
1 / very negative	1%	1%	<1%	1%
2 / somewhat negative	1%	1%	1%	1%
3 / neutral	4%	4%	6%	5%
4 / somewhat positive	24%	23%	31%	26%
5 / very positive	69%	70%	61%	67%
Don't know	0%	<1%	0%	<1%
Mean score	4.59	4.61	4.52	4.57
4. How would you compare your experience calling Blue Stakes with other utility companies you've called?				
Much better	29%	26%	35%	30%
Somewhat better	25%	26%	19%	23%
About the same	27%	26%	28%	27%
Somewhat worse	1%	1%	1%	1%
Much worse	1%	<1%	1%	1%
Don't know (vol)	17%	21%	15%	18%
5. Is there anything about the phone call that stands out in your mind? [UNAIDED]				
Courteous and helpful	14%	13%	14%	14%
No	12%	19%	3%	11%
Efficient / quick	8%	2%	5%	5%
Professional / good customer rep	5%	6%	8%	6%
Precise / very thorough	3%	3%	2%	2%
Miscellaneous negative comments	3%	4%	3%	3%
Informative / knowledgeable	2%	2%	2%	2%
Easy process / easy to deal with	2%	1%	1%	1%
Confusion-address / coordinates	--	--	2%	1%
Miscellaneous	4%	3%	2%	3%
Don't know	48%	47%	57%	51%
6. Did any of the following affect your decision to "Call Before You Dig?"				
Billboard				
Yes	9%	10%	10%	10%
No	90%	89%	90%	90%
Don't know	1%	1%	1%	1%
Radio/TV				
Yes	29%	27%	19%	25%
No	70%	73%	80%	74%
Don't know	1%	<1%	1%	1%
Print ad				
Yes	11%	12%	14%	13%
No	87%	86%	85%	86%
Don't know	2%	2%	1%	1%
Word of mouth (family, neighbor, etc.)				
Yes	47%	50%	48%	48%
No	52%	49%	51%	51%
Don't know	2%	1%	0%	1%

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
(cont.) Did any of the following affect your decision to "Call Before You Dig?"				
Employer				
Yes	29%	35%	52%	39%
No	70%	60%	44%	58%
Don't know	1%	6%	4%	3%

7. Is there anything else that affected your decision, other than what I've mentioned? (Unaided)				
Yes (see comments)	33%	37%	37%	36%
No	67%	63%	63%	64%
Don't know	0%	<1%	<1%	<1%

8. Are you aware that you can dial "811" to call Blue Stakes?				
Yes	45%	42%	56%	48%
No	54%	57%	43%	51%
Don't know	1%	<1%	1%	1%

On a 1-5 scale, where one means very poor and five means excellent, please rate the person who spoke with you on his or her...

9. Professionalism				
1 / poor	<1%	0%	<1%	<1%
2	1%	<1%	1%	1%
3	4%	3%	2%	3%
4	25%	26%	25%	25%
5 / excellent	68%	69%	70%	69%
Don't know (vol)	2%	2%	1%	2%
Mean score	4.64	4.66	4.67	4.66

10. Interest in helping you				
1 / poor	<1%	<1%	<1%	<1%
2	1%	<1%	0%	<1%
3	5%	3%	5%	4%
4	23%	24%	25%	24%
5 / excellent	70%	69%	69%	70%
Don't know (vol)	1%	3%	1%	2%
Mean score	4.63	4.66	4.64	4.64

11. Subject knowledge				
1 / poor	<1%	<1%	<1%	<1%
2	1%	2%	0%	1%
3	5%	4%	5%	5%
4	21%	22%	25%	23%
5 / excellent	69%	68%	69%	69%
Don't know (vol)	3%	3%	1%	2%
Mean score	4.61	4.62	4.62	4.62

(cont.) Using a 1-5 scale, where one means very poor and five means excellent, please rate the person who spoke with you on his or her...

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
12. Efficiency				
1 / poor	<1%	1%	<1%	1%
2	1%	1%	1%	1%
3	6%	2%	4%	4%
4	19%	23%	24%	22%
5 / excellent	73%	71%	69%	71%
Don't know (vol)	1%	2%	1%	1%
Mean score	4.65	4.66	4.63	4.64
13. Courtesy				
1 / poor	<1%	<1%	<1%	<1%
2	1%	<1%	<1%	<1%
3	4%	3%	2%	3%
4	18%	20%	19%	19%
5 / excellent	77%	74%	77%	76%
Don't know (vol)	<1%	2%	1%	1%
Mean score	4.71	4.72	4.73	4.72
14. Overall demeanor				
1 / poor	<1%	0%	<1%	<1%
2	0%	1%	<1%	<1%
3	5%	2%	2%	3%
4	20%	25%	23%	23%
5 / excellent	74%	70%	73%	72%
Don't know (vol)	1%	2%	1%	1%
Mean score	4.69	4.67	4.70	4.69
15. And how long did you wait on the phone before you spoke with a representative?				
Less than a minute	51%	48%	55%	51%
1-2 minutes	27%	25%	27%	26%
3-4 minutes	5%	6%	8%	6%
5 minutes or longer	4%	3%	3%	3%
Don't know (vol)	14%	18%	7%	13%
16. Was Blue Stakes able to meet the expectations you had when calling?				
Definitely	86%	85%	85%	85%
Probably	10%	11%	13%	11%
Probably not	1%	2%	1%	1%
Definitely not	2%	1%	1%	1%
Don't know (vol)	1%	1%	1%	1%
17. How often do you call Blue Stakes for a locate request?				
A few times a month	16%	20%	44%	27%
About once a month	7%	10%	12%	10%
A few times a year	19%	29%	26%	25%
About once a year	15%	10%	5%	10%
Less than once a year	41%	29%	12%	28%
Don't know (vol)	1%	1%	<1%	1%

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
18. Are Blue Stakes' hours of operation convenient for you? (IF NEEDED: 7:00 a.m. – 5:00 p.m.)				
Yes	93%	95%	96%	95%
No	5%	4%	4%	4%
Don't know	1%	1%	<1%	1%

19. [IF NO] Which hours would be better for you?

	<i>n=</i>	22	17	15	54
Later evening hours		45%	59%	33%	46%
Earlier morning hours		5%	0%	13%	6%
24-hr system		45%	24%	33%	35%
Other (specify)		0%	18%	20%	13%

20. Would you submit a locate request online, if it were available?

Yes, definitely	40%	33%	31%	35%
Yes, probably	23%	25%	22%	23%
Maybe, maybe not	7%	8%	8%	8%
No, probably not	18%	19%	26%	21%
No, definitely not	11%	13%	12%	12%
Don't know (vol)	1%	2%	2%	2%

21. What additional services would you like Blue Stakes to provide? [UNAIDED]

None-it is fine now	16%	22%	6%	15%
Water marks / find water lines	3%	1%	<1%	1%
Depth of wires / depth of lines	2%	1%	<1%	1%
Miscellaneous online comments	2%	3%	2%	3%
Tell me where all utilities are	2%	1%	1%	2%
Miscellaneous marking comments	2%	3%	1%	2%
List of contacts / numbers	1%	1%	1%	1%
Faster response time	1%	2%	2%	2%
Available 24 hrs a day	1%	1%	1%	1%
Better follow-up communication	--	1%	2%	1%
GPS coordinates/ GPS locating	--	--	1%	<1%
More contact with the cities	--	<1%	0%	<1%
Dig for me	--	1%	<1%	<1%
Color chart	--	<1%	0%	<1%
Miscellaneous	6%	5%	6%	5%
Don't know	64%	56%	75%	65%

22. At the end of the phone call, the Blue Stakes representative gave you the following information:

- the locate request number
- specific dates and times
- and repeated the specifics of your request to verify the information was captured correctly

Do you feel that the information you were given was...

Too much	2%	1%	3%	2%
About the right amount	93%	95%	96%	94%
Too little	3%	2%	1%	2%
Don't know (vol)	2%	2%	0%	1%

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
23. Is there any other information you would like to have had?				
Yes	7%	6%	5%	6%
No	91%	93%	94%	93%
Don't know	2%	<1%	<1%	1%

24. [IF YES] What additional information do you feel should be provided?

	<i>n=</i>	31	25	22	78
More accurate show-up times		23%	24%	18%	22%
How deep lines go / depth of wires		19%	4%	0%	9%
Confirmation comments`		13%	4%	18%	12%
Marking comments		13%	36%	9%	19%
What company is responsible for what		6%	8%	14%	9%
Miscellaneous		26%	24%	41%	29%

### Web Site

25. Have you visited the Web site, bluestakes.org?

Yes	12%	14%	17%	15%
No	86%	86%	82%	85%
Don't know (vol)	2%	1%	<1%	1%

[IF YES, PROCEED; IF NO, SKIP TO DEMOGRAPHICS]

How would you rate the site on the following items? Please use a 1/poor to 5/excellent scale.

26. Ease of use

	<i>n=</i>	52	56	72	180
1/poor		0%	2%	6%	3%
2		4%	2%	7%	4%
3		29%	14%	25%	23%
4		33%	32%	46%	38%
5/excellent		27%	34%	7%	21%
Don't know		8%	16%	10%	11%
Mean score		3.90	4.13	3.46	3.79

27. Having the information you were looking for

	<i>n=</i>	52	56	72	180
1/poor		0%	4%	8%	4%
2		4%	5%	3%	4%
3		12%	13%	19%	15%
4		40%	29%	43%	38%
5/excellent		38%	43%	19%	32%
Don't know		6%	7%	7%	7%
Mean score		4.20	4.10	3.67	3.96

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
28. Overall				
<i>n=</i>	52	56	72	180
1/poor	0%	0%	6%	2%
2	2%	2%	6%	3%
3	15%	16%	17%	16%
4	54%	41%	49%	48%
5/excellent	21%	30%	17%	22%
Don't know	8%	11%	7%	8%
Mean score	4.02	4.12	3.70	3.92

29. Did you know the Web address without looking for it, or did you have to search for it?

<i>n=</i>	52	56	72	180
I knew it	23%	20%	49%	32%
I had to search for it	71%	70%	44%	60%
Don't know	6%	11%	7%	8%

30. Once you reached the site, how quickly were you able to find what you were looking for?

<i>n=</i>	52	56	72	180
Very quickly—it was right there	52%	54%	24%	41%
Somewhat quickly—I had to search a bit	40%	32%	58%	45%
It took longer than it should have	2%	5%	3%	3%
I wasn't able to find it	2%	4%	10%	6%
Don't know (vol)	4%	5%	6%	5%

31. Did you get any information from the site that you didn't go there looking for? (What was it?)  
[UNAIDED]

<i>n=</i>	52	56	72	180
No / none	19%	39%	17%	24%
What the rules / laws are	6%	0%	0%	2%
Color-coding different utilities	4%	0%	0%	1%
What the markings mean	4%	0%	0%	1%
Miscellaneous	6%	7%	7%	7%
Don't know	62%	54%	76%	65%

32. What can Blue Stakes do to improve its Web site? [UNAIDED]

<i>n=</i>	52	56	72	180
Able to submit requests online	15%	16%	3%	11%
Nothing / it is good now	13%	18%	4%	11%
Easier to navigate	--	9%	13%	8%
Able to access tickets	--	--	3%	1%
Miscellaneous	13%	2%	10%	8%
Don't know	58%	55%	68%	61%

**Demographics**

Finally, we have a few questions to help us categorize the data...

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
33. Gender [DO NOT ASK; CODE BY OBSERVATION]				
Male	79%	84%	88%	84%
Female	21%	16%	12%	16%
34. Are you a homeowner or a contractor? [CODED FROM SAMPLE]				
Contractor	27%	47%	77%	50%
Homeowner	73%	53%	23%	50%
35. [IF CONTRACTOR IN DATABASE] What type of contractor are you?				
n=	111	192	316	619
General	23%	32%	22%	25%
Electrical	5%	7%	8%	7%
Plumbing	5%	4%	8%	6%
Gas / Oil	2%	2%	2%	2%
Landscaping	18%	14%	10%	12%
Communication	2%	1%	1%	1%
Fencing	2%	1%	4%	3%
Other (specify)	41%	38%	46%	42%
Don't know	1%	1%	0%	<1%
Refuse	1%	2%	1%	1%
36. [IF CONTRACTOR] Approximately how many employees does your company have?				
n=	111	192	316	619
1	13%	19%	9%	13%
2-10	48%	48%	44%	46%
11-20	10%	10%	14%	12%
21-50	11%	6%	12%	10%
51-100	5%	4%	6%	5%
100 or more	10%	11%	14%	12%
Don't know	2%	2%	1%	1%
Refuse	2%	1%	1%	1%
37. What is your age?				
18-25	5%	5%	6%	5%
26-35	25%	25%	33%	28%
36-45	32%	26%	24%	27%
46-55	19%	25%	20%	22%
56-65	13%	13%	11%	12%
65+	4%	4%	4%	4%
Refuse	3%	2%	2%	2%

	<u>Aug</u>	<u>Nov</u>	<u>Feb</u>	<u>Total</u>
38. In which county do you live? [CODED FROM SAMPLE]				
Beaver	<1%	<1%	<1%	<1%
Box Elder	2%	2%	2%	2%
Cache	3%	3%	3%	3%
Carbon	1%	1%	1%	1%
Daggett	<1%	0%	<1%	<1%
Davis	12%	12%	12%	12%
Duchesne	1%	1%	1%	1%
Emery	<1%	<1%	<1%	<1%
Garfield	<1%	<1%	<1%	<1%
Grand	<1%	<1%	<1%	<1%
Iron	2%	2%	2%	2%
Juab	<1%	<1%	<1%	<1%
Kane	<1%	<1%	<1%	<1%
Millard	<1%	<1%	<1%	<1%
Morgan	<1%	1%	1%	1%
Piute	<1%	<1%	<1%	<1%
Rich	1%	<1%	<1%	1%
Salt Lake	31%	31%	31%	31%
San Juan	<1%	<1%	<1%	<1%
Sanpete	1%	1%	1%	1%
Sevier	1%	1%	1%	1%
Summit	3%	3%	3%	3%
Tooele	2%	2%	2%	2%
Uintah	2%	2%	2%	2%
Utah	19%	19%	19%	19%
Wasatch	2%	2%	2%	2%
Washington	5%	4%	5%	5%
Wayne	<1%	<1%	<1%	<1%
Weber	8%	8%	8%	8%
39. Congressional District [CODED FROM SAMPLE]				
1 <sup>st</sup>	34%	34%	37%	35%
2 <sup>nd</sup>	34%	35%	34%	34%
3 <sup>rd</sup>	32%	31%	30%	31%



# **ATTACHMENT 3**

## **RTE / QTE SURVEY ANALYSIS OCTOBER 2008**

*Study conducted for*

## **Blue Stakes**

### **RTE/QT Survey**

October, 2008

*Study conducted by*

**Dan Jones  
& ASSOCIATES**

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## Introduction

Blue Stakes of Utah commissioned Dan Jones & Associates, Inc., a full-service, independent, public opinion and market research firm located in Salt Lake City, Utah, to conduct and compile an opinion survey of about 200 Rapid Ticket Entry/ Quick Ticket users.

## Research Objectives

This research was designed to:

- Assess respondents' overall perceptions of Blue Stakes
- Explore top-of-mind associations with the name "Blue Stakes" and opinions regarding the process of submitting locate requests
- Understand how respondents view working with Blue Stakes, compared with other companies
- Find out how respondents rate specific aspects of Blue Stakes training and support
- Identify how frequently Blue Stakes is able to meet the expectations of RTE/QT users
- Identify how frequently respondents use the Web site to submit locate requests
- Evaluate the ease or difficulty of the online process, and how it could be improved
- Determine for what other needs, if any, the Web site is used
- Evaluate respondent preferences when entering locate requests using the telephone and Internet
- Learn why respondents prefer entering requests online
- Discover where respondents have seen Blue Stakes advertising, and where they think Blue Stakes should advertise.

## Procedures

Dan Jones & Associates developed the questionnaire in conjunction with Gary Hansen of Blue Stakes of Utah. To meet the research objectives, 129 individuals were interviewed by telephone in October 2008, during business hours. All interviews were conducted in the Dan Jones & Associates Data Collection Center, where interviewers are supervised and monitored.

Prior to implementation, the client approved the questionnaire. Before any fieldwork began, the survey instrument was thoroughly pretested on individuals selected at random from

the sample universe. The pretest is designed to detect discrepancies that might exist in the instrument in terms of clarity, completeness, level of shared language, and appropriateness of questions. The client approved all changes made to the questionnaire as a result of the pretest.

## **Sample**

Rather than designing this survey to include a specified percentage of the test population (a random sample), because the population was so small, Dan Jones & Associates attempted to reach as many of the available respondents as possible. The margin of error for this survey is between  $\pm 5.5\%$  and  $\pm 7.5\%$  for total data. The margin of error increases for the responses of subgroups within the data. This study has a 95% confidence level, meaning that no more than one time in twenty should chance variations in the sample cause the results to vary by more than the margin of error from the answers that would be obtained if all people in the survey universe were polled.

## **Fieldwork**

Dan Jones & Associates employs professional, experienced interviewers who have worked on numerous surveys to date and have proven to be reliable, thorough, and able to develop excellent rapport with respondents. Interviewers were cautioned to limit their interaction with respondents concerning individual responses to the questionnaire. To assure consistency in reciting the questions and in recording the responses, the project director carefully briefed each interviewer.

Both structured and unstructured questions were used to measure intensity of opinions and to assess the perceptions of respondents. Demographic questions were asked to provide opinions of subgroups.

## **Data Analysis**

The staff of Dan Jones & Associates prepared statistical results. Each question has a response distribution, as well as a series of demographic cross-tabulations, which organize responses by various groupings and allow for detection of differences that may exist between opinions of subgroups.

Survey results are included in the Executive Summary and in the Charts section. Appendices include the questionnaire with results, respondent comments, and demographic cross-tabulations.

Because of rounding, response distribution on individual question results may not always total 100%.

## Executive Summary

### Overall Impressions

As a group, RTE/QT users have high opinions of Blue Stakes. When asked to rate their overall experience with the company using a scale of 1/ very negative to 5/ very positive, three out of five (60%) give the top response of five. Further, when all answers are combined, responses yield a mean score of 4.51.

A similarly large percentage agrees that the experience of working with Blue Stakes is better than the experience of working with other companies (20% say it is *somewhat better* and 32% say it is *much better*). A third (33%) of respondents say the experience is *about the same*, and one in seven (14%) reports not knowing how they compare.

Early in the survey, a broad, open-ended question was asked in order to reveal the overall, top-of-mind associations respondents have when they think of Blue Stakes. For the largest percentage of RTE/QT users (29%), the first association that comes to mind when they hear the words "Blue Stakes" is *underground utility marker*. The remaining responses, which are mentioned by between 2% to 9% of participants, include: *safety/ protection* (9%), *miscellaneous positive comments* (8%), *miscellaneous comments about the website* (7%), *digging* (6%), *good customer service/ helpful* (6%), *utilities* (5%), *"Call before you dig"* (5%), *work* (3%), and *paint* (2%).

When asked, unaided, whether there is anything about the process of submitting locate requests that stands out in their minds, top responses include: *easy to do online/ user-friendly* (33%), *miscellaneous comments about coordinates* (9%), *miscellaneous negative comments* (8%), *good customer service/ helpful* (5%), and *program takes a long time to load* (4%).

### Training and Support

When asked about the training and support they receive, RTE/QT respondents give mean scores of higher than 4.00 to all statements using a scale of 1/ not at all satisfied to 5/ very satisfied. With a mean score of 4.55, *support you receive* is rated as a 5 by nearly two-thirds (64%) of respondents, while another 28% give it a rating of 4. *Training you received* is also rated highly, with a mean score of 4.37 and a rating of 5 by 55% of all respondents. Interestingly, six percent of respondents give this statement a 1 (two percent) or 2 (four percent), showing that there are at least some who are dissatisfied with their training.

Nearly half (49%) give *user-friendliness of the online application you use* a rating of 5, resulting in a mean score of 4.26. About one-fifth (19%) of respondents are unable to rate the *Blue Stakes mapping application*, presumably because they are unfamiliar with it. However, those who do offer ratings give the service a mean score of 4.05.

All respondents (100%) agree that Blue Stakes was able to meet the expectations they had when completing the locate request. A full 71% state that the company was *definitely* able to meet their expectations, while 29% say that it *probably* was capable of meeting their expectations.

## Web Site

One-fourth (26%) of RTE/QT respondents say they use the Blue Stakes Web site to submit a locate request at least once per day. Forty-three percent report using the site a few times per week, and another 29% say they use it a few times per month. A large majority (94%) of respondents say that using the online system is easy (somewhat easy: 33%; very easy: 61%), while only five percent contend that it is either difficult (3%) or they don't know (2%).

When asked whether they use the Blue Stakes Web site for some other specific purposes, 41% say they use it *to find utility contact information*, 22% say they use the *frequently-asked questions* section, and 12% say they use the Web site *to reference state law*. Nearly a quarter (23%) offer some other reason for using the site. (See the list of Respondent Comments for Question 17 in Appendix B).

Regarding the optional methods of submitting locate requests, five out of six (83%) RTE/QT users say they sometimes submit requests over the phone, rather than online. Of those (n=107), however, 70% say they prefer submitting requests online, while 16% prefer to use the telephone. About 13% of respondents say they don't prefer one method over the other, or that the way in which they prefer submitting a request depends on some other factor.

All respondents were asked, unaided, why they prefer submitting requests online rather than over the phone. Nearly a fourth (23%) say they prefer online submission because it is faster; 18% say it is easier or simpler; 12% enjoy the hours, or being able to submit anytime; and three percent appreciate the ability to review their orders. Ticket search capability is named by only one percent, and 16% offer some other reason why they prefer submitting locate requests online (see Appendix B, Question 28).



Respondents who use both the telephone and Web site to submit requests were asked whether the current phone hours of operation are convenient. Nearly all (92%) say that they are. Among those who say the hours of operation are not convenient (n=9), responses are evenly divided regarding which hours may be better. Two respondents each say that later evening hours, earlier morning hours, or a 24-hour system would be preferable, while three respondents suggest some other solution (see Appendix B, Question 22).

## Advertising

In order to determine the most effective means of communicating with RTE/QT users, respondents were presented with a list of various advertising mediums and asked to indicate whether they recall having seen or heard any Blue Stakes messages. Two of the seven listed are named by more than half: *TV* (67%) and *radio* (57%). The other five include: *billboards* (48%), *promotional items* (30%), *events* (29%), *Internet* (22%), and the *newspaper* (12%).

Half of all respondents (50%) answer that the advertising they saw or heard promoted the phrase, "Call before you dig. It's the law." One in seven (14%) say they recall seeing the *little blue stake guy* or a *blue stake*. Five percent remember seeing or hearing the *phone number, 811*, and two percent each say they saw or heard advertising for a *shovel with a face on it* and *magnets with colors of utilities*.

When asked where they think advertising *should* be placed, in order to reach those who need to hear it, top responses include: *TV* (40%), *radio* (21%), *construction trade magazines* (14%), and *billboards* (13%). All other advertising mediums are mentioned by three percent of respondents or less. These additional avenues include *newspapers*, *promotional items*, *events*, and the *Blue Stakes Web site*. Respondents were prompted to give up to two more responses to this question; in the second and third responses, *radio* and *billboards* score as well as or better than *TV*, indicating that respondents agree that all three methods are important. Advertising in *construction trade magazines* also remains strong in the second and third response lists.

## Conclusion

As a group, RTE/QT users indicate that they have had positive experiences with Blue Stakes, giving the organization a mean score of 4.51 on a scale of 1/ very negative to 5/ very positive. Respondents also give very high marks to Blue Stakes' support and training, but offer

slightly less enthusiasm about the user-friendliness of the online application they use and Blue Stakes mapping application. A different, unaided question produced the same results: when asked what stands out in their mind about the process of submitting locate requests, the largest response was to make it easy to do online or make it user-friendly (33%).

Television, as an advertising medium, is named most frequently as the place where RTE/QT users have seen Blue Stakes ads. Also, according to the respondents in the study, TV is the best way to reach Blue Stakes' audience. In fact, it is named by nearly twice as many respondents as the next-best medium, radio (40% and 21%, respectively).

Among the chief findings in the study, respondents express some frustration with the online mapping application; some users say that the maps are outdated (new streets aren't shown), while others say that having to enter street addresses doesn't apply in remote areas. A review of all of the unaided comments, included in Appendix B, will provide a comprehensive understanding of the types of concerns.

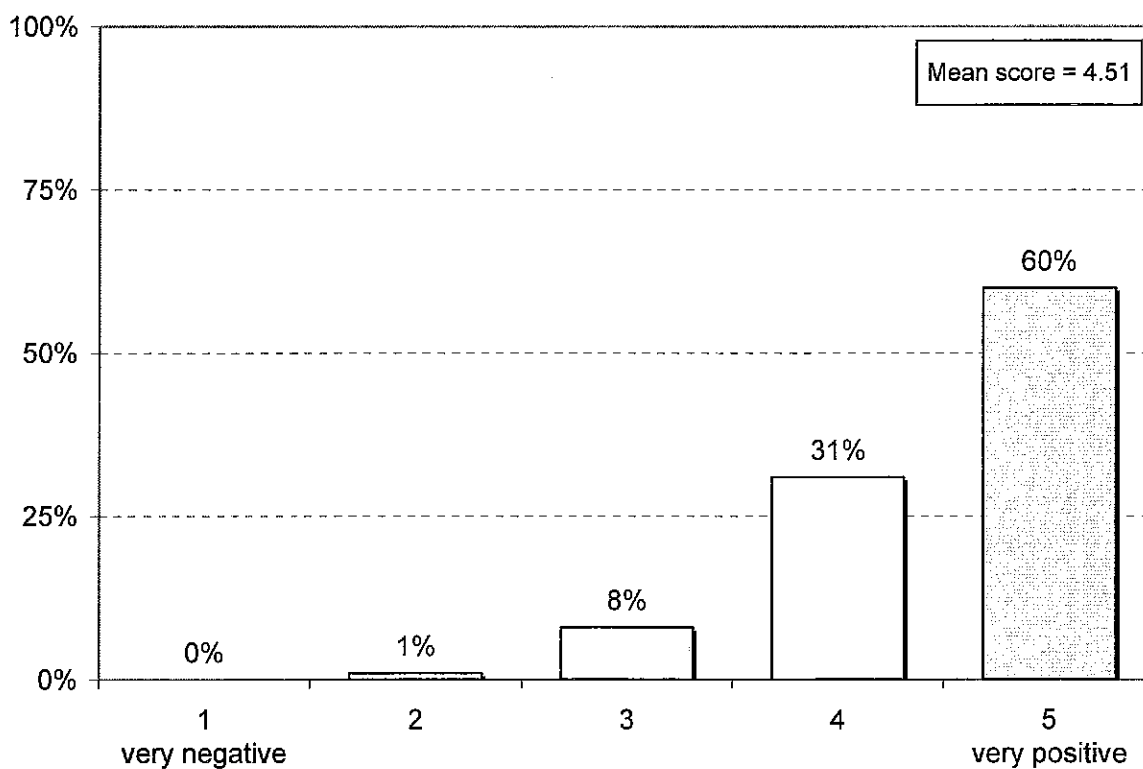
Most respondents (83%) use the telephone as well as the Internet to schedule locate requests, although most of this group (70%) say they prefer the Internet. Combined with respondent feedback that the online application and, in particular, the mapping application needs improvement, this finding illuminates an area where Blue Stakes might focus its attention. It appears that by improving the usability of its Web site, Blue Stakes can capitalize on this area of opportunity.

## Charts

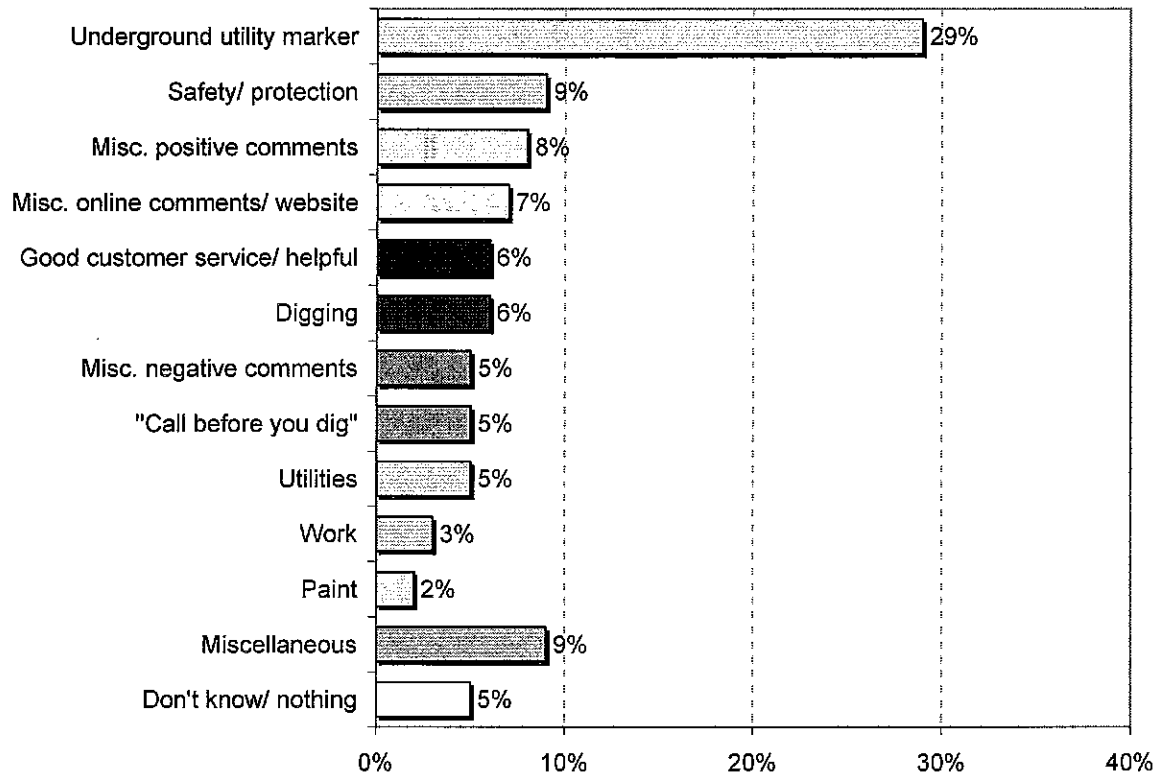
**Q. 1: Our records show that you recently submitted a request on the Blue Stakes Web site to have some underground utility lines marked. Is that right?**

Yes, I visited the site	100%
No, don't remember	0%

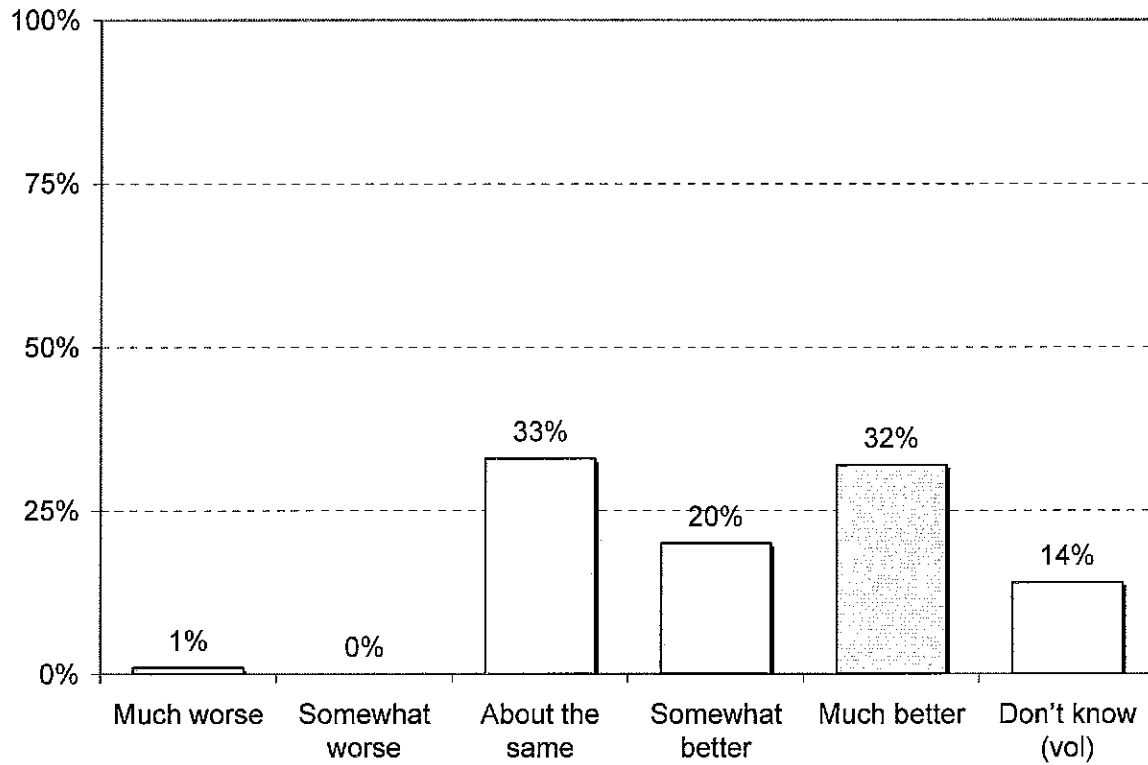
**Q. 2: First, how would you rate your *overall* experience with Blue Stakes? Please use a 1-5 scale, where one means "very negative," and five means "very positive."**



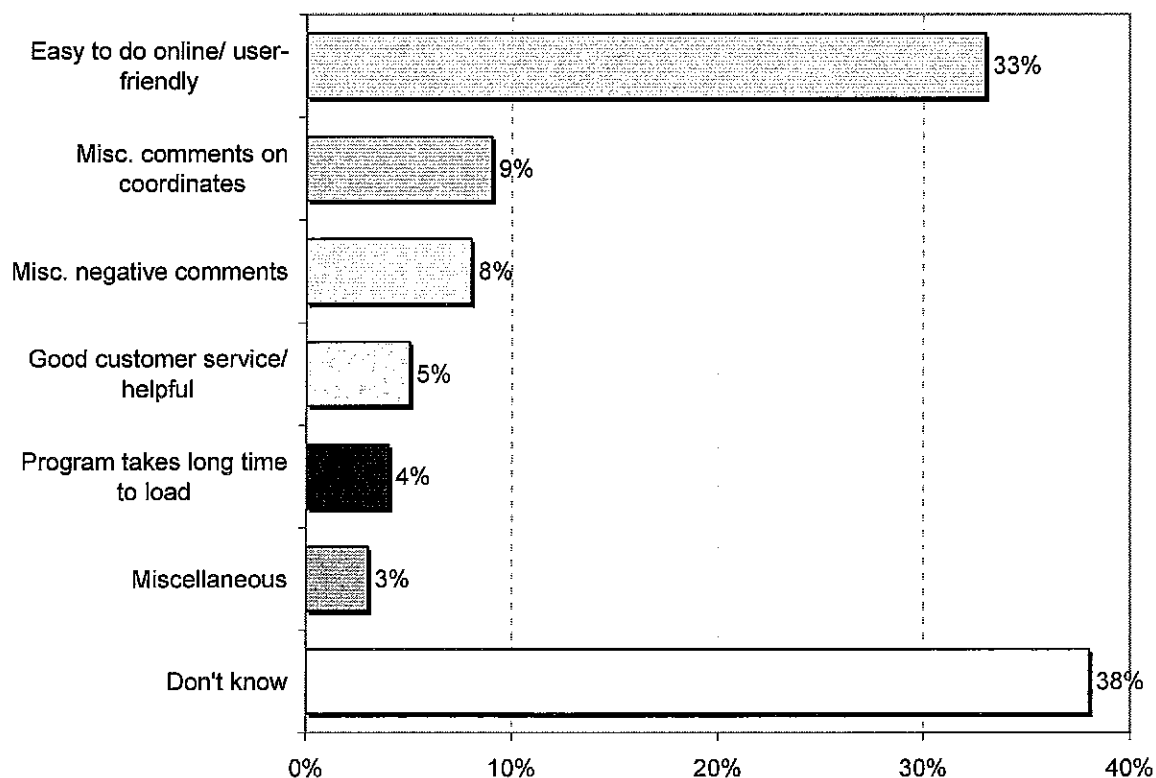
**Q. 3: And what is the first thing that comes to your mind when you hear the words “Blue Stakes”? [UNAIDED]**



**Q. 4: How would you compare your experience working with Blue Stakes to other companies you've worked with?**

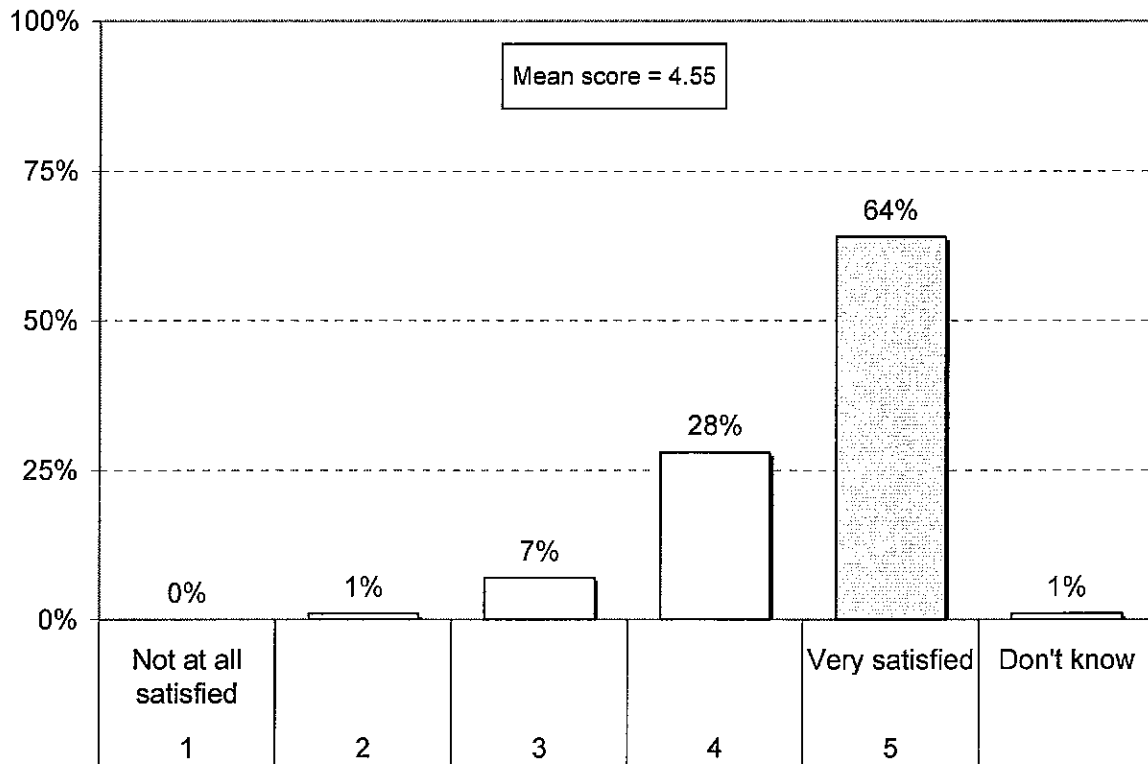


**Q. 5: Is there anything about the process of submitting your locate request that stands out in your mind? [UNAIDED]**



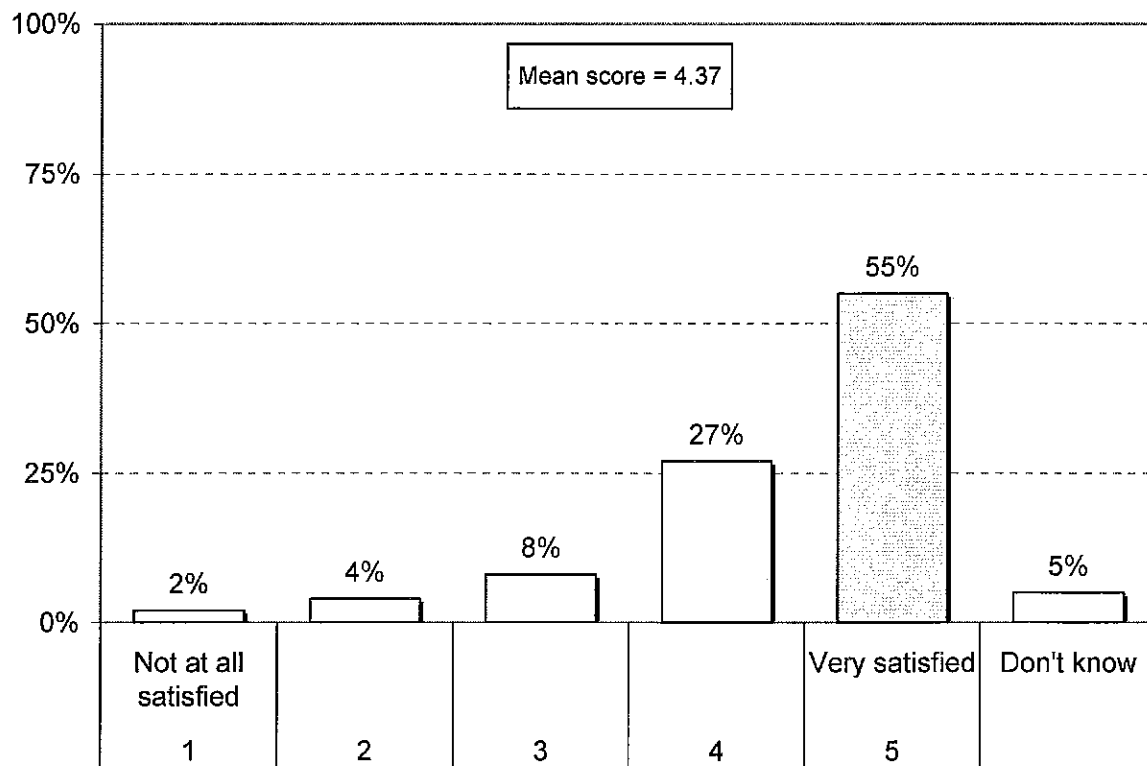
**Q. 6-9: We'd like to get your opinion on some specific aspects of Blue Stakes training and support. Using a 1-5 scale, where one means "not at all satisfied" and five means "very satisfied," please rate the following...**

**Q. 6: Support you receive**



(cont.) Q. 6-9: We'd like to get your opinion on some specific aspects of Blue Stakes training and support. Using a 1-5 scale, where one means "not at all satisfied" and five means "very satisfied," please rate the following...

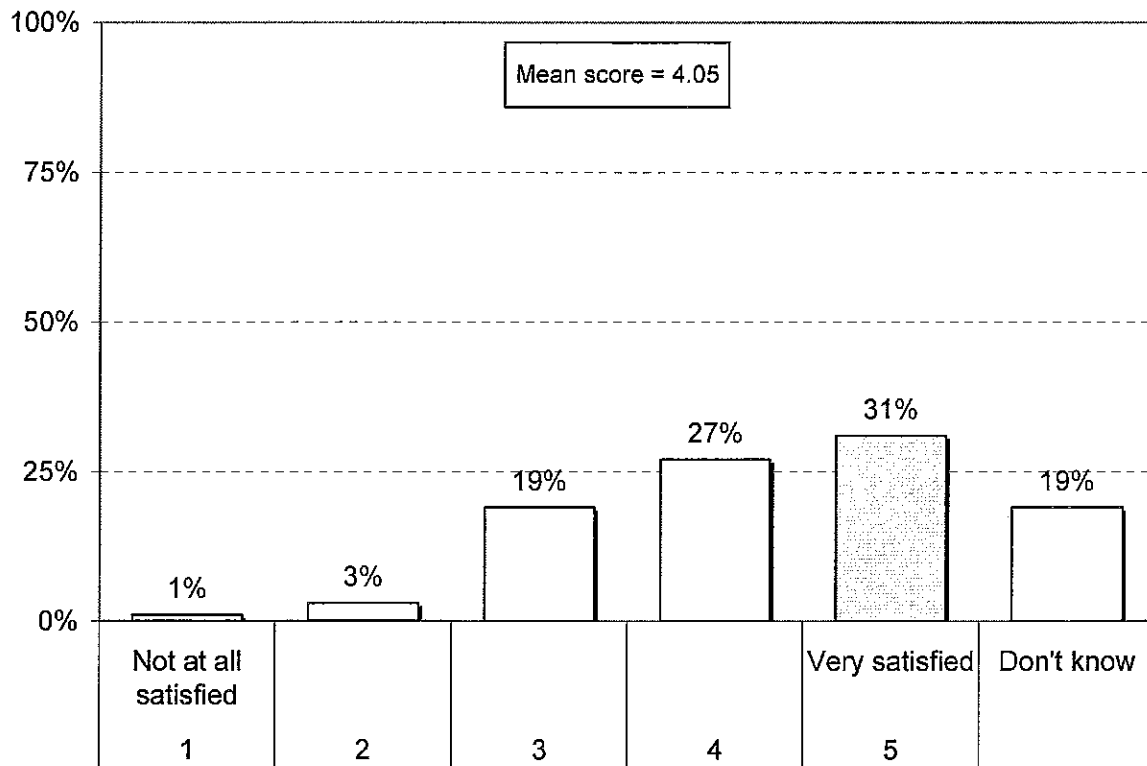
**Q. 7: Training you received**





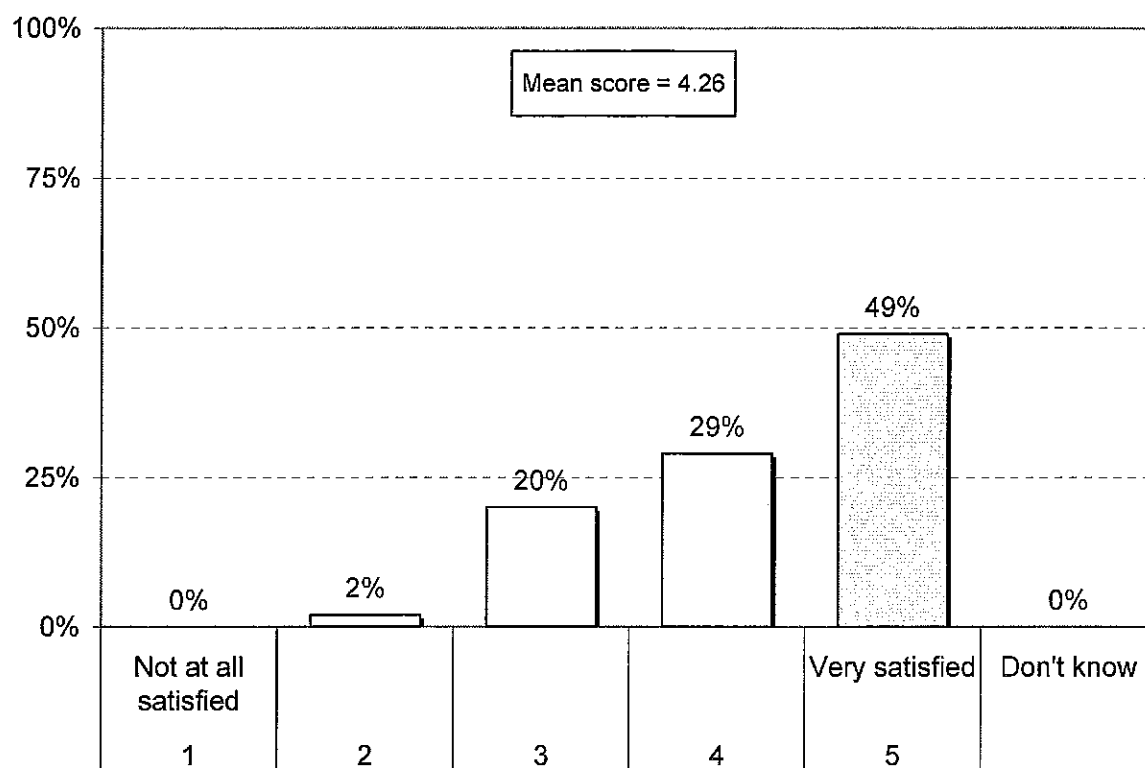
(cont.) Q. 6-9: We'd like to get your opinion on some specific aspects of Blue Stakes training and support. Using a 1-5 scale, where one means "not at all satisfied" and five means "very satisfied," please rate the following...

**Q. 8: Blue Stakes mapping application**

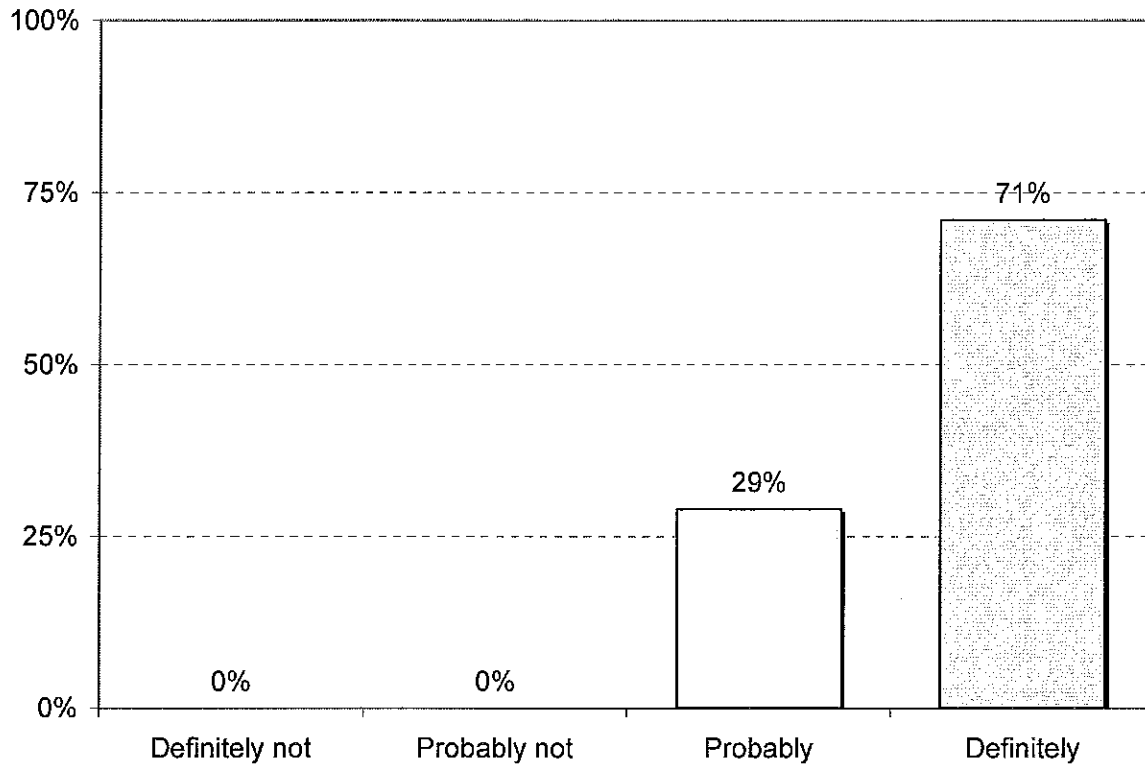


(cont.) Q. 6-9: We'd like to get your opinion on some specific aspects of Blue Stakes training and support. Using a 1-5 scale, where one means "not at all satisfied" and five means "very satisfied," please rate the following...

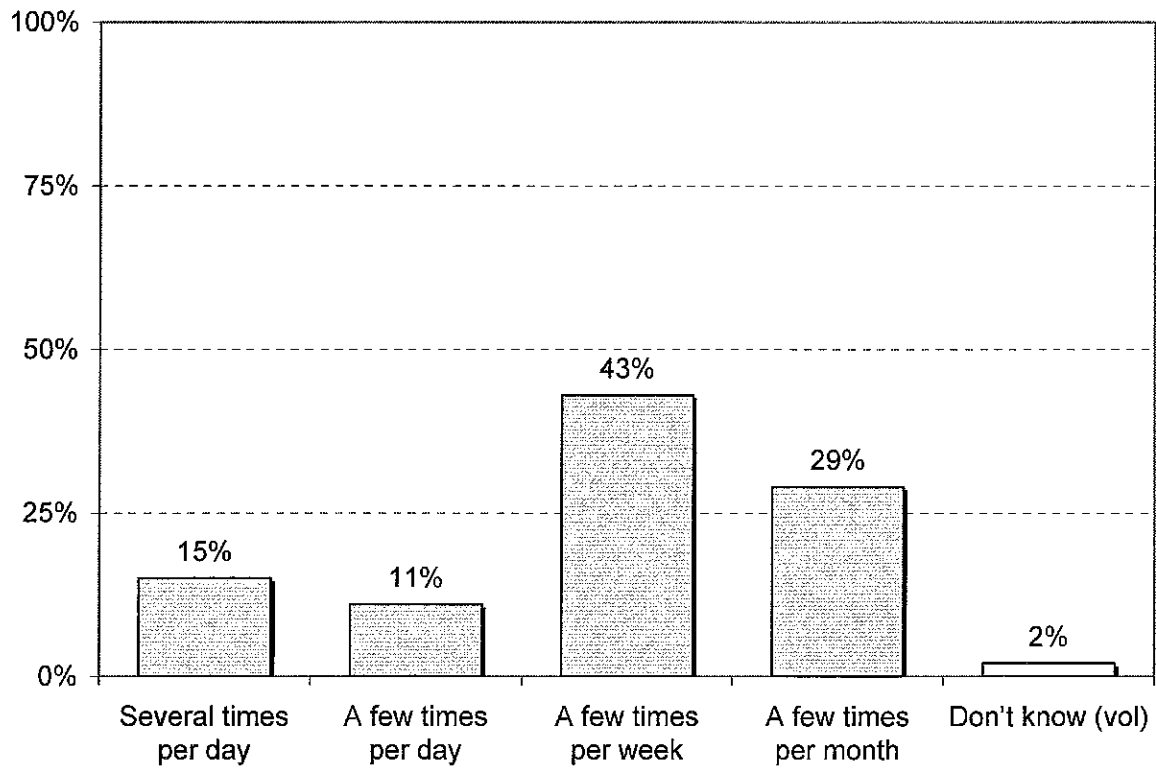
**Q. 9: User-friendliness of the online application you use**



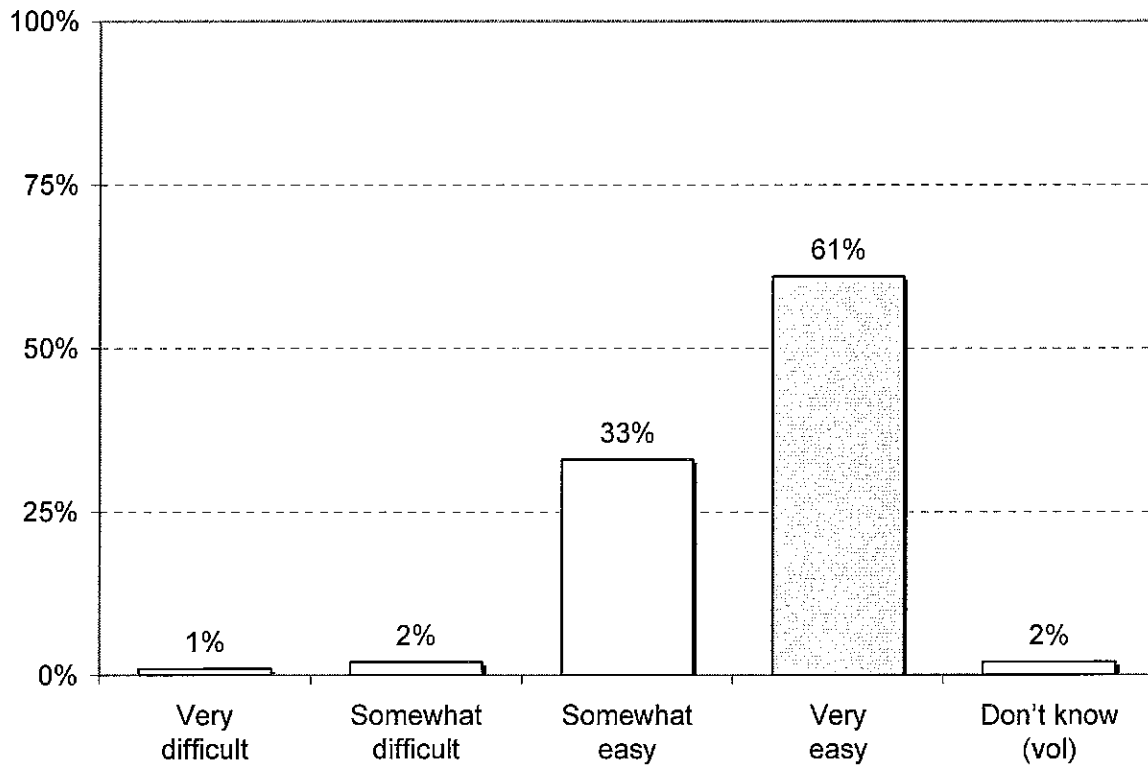
**Q. 10: Was Blue Stakes able to meet the expectations you had when completing the locate request?**



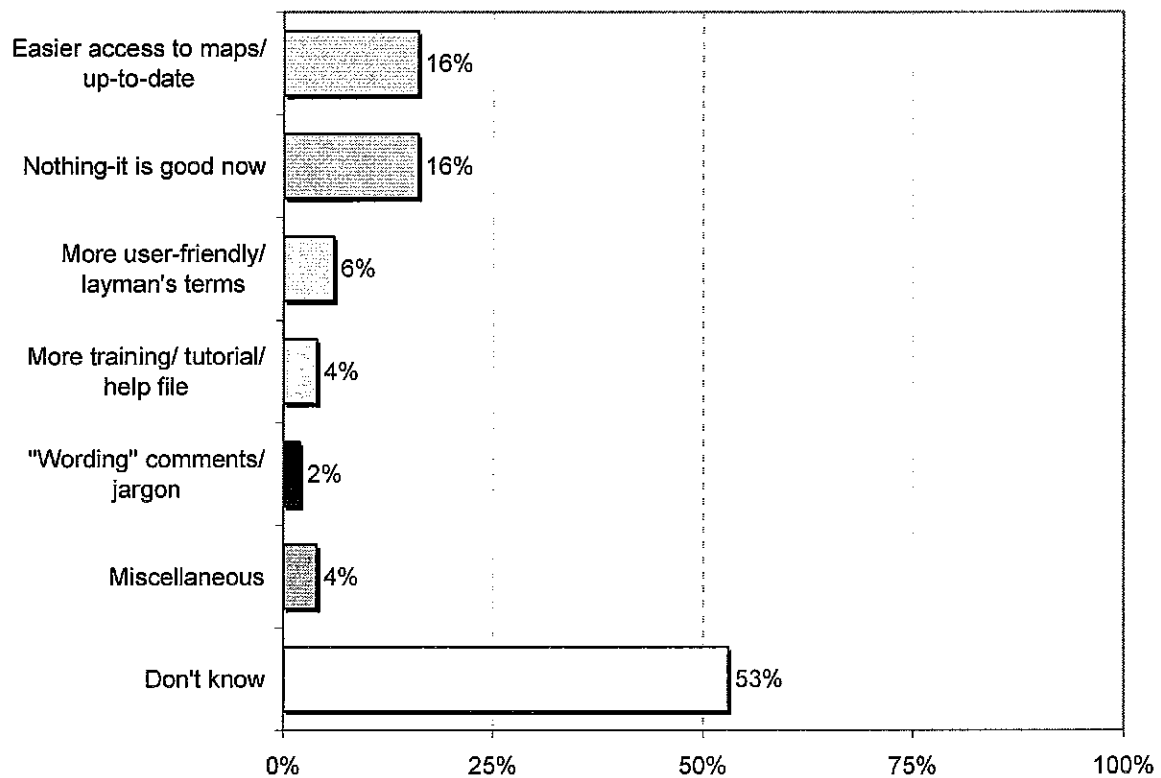
**Q. 11: How often do you use Blue Stakes' Web site to submit a locate request?**



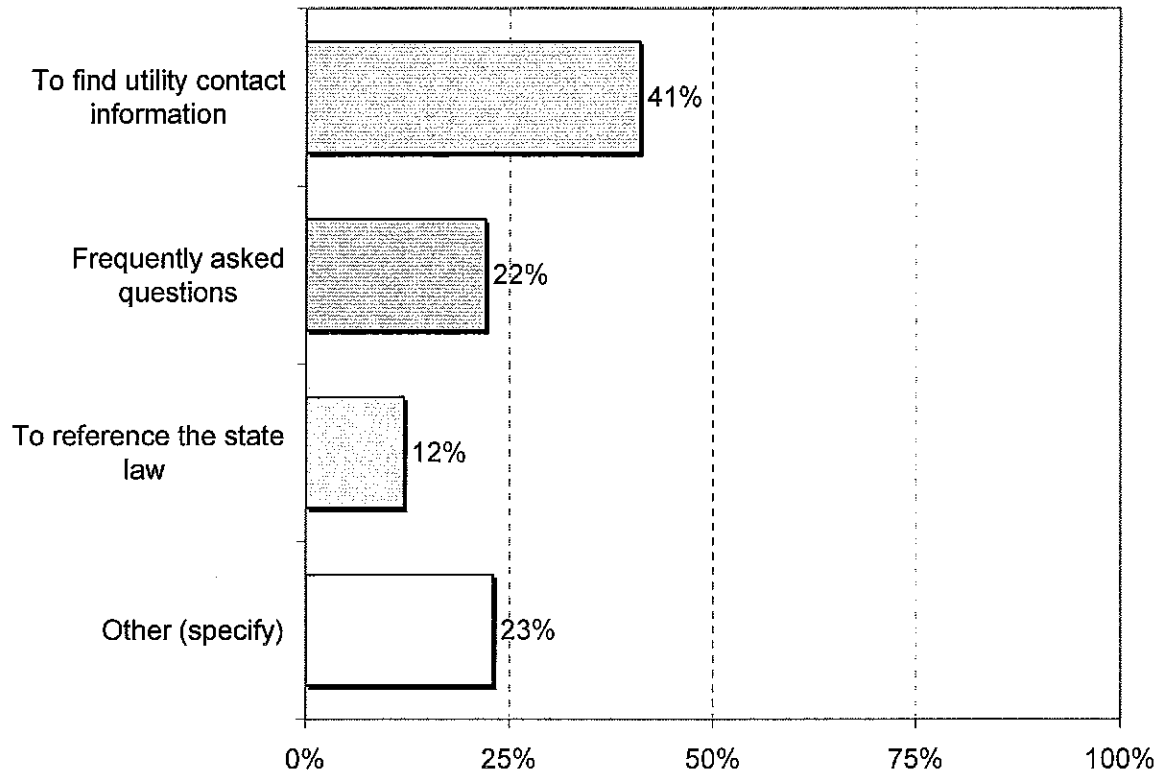
**Q. 12: Generally, how easy is it for you to submit a locate request online?**



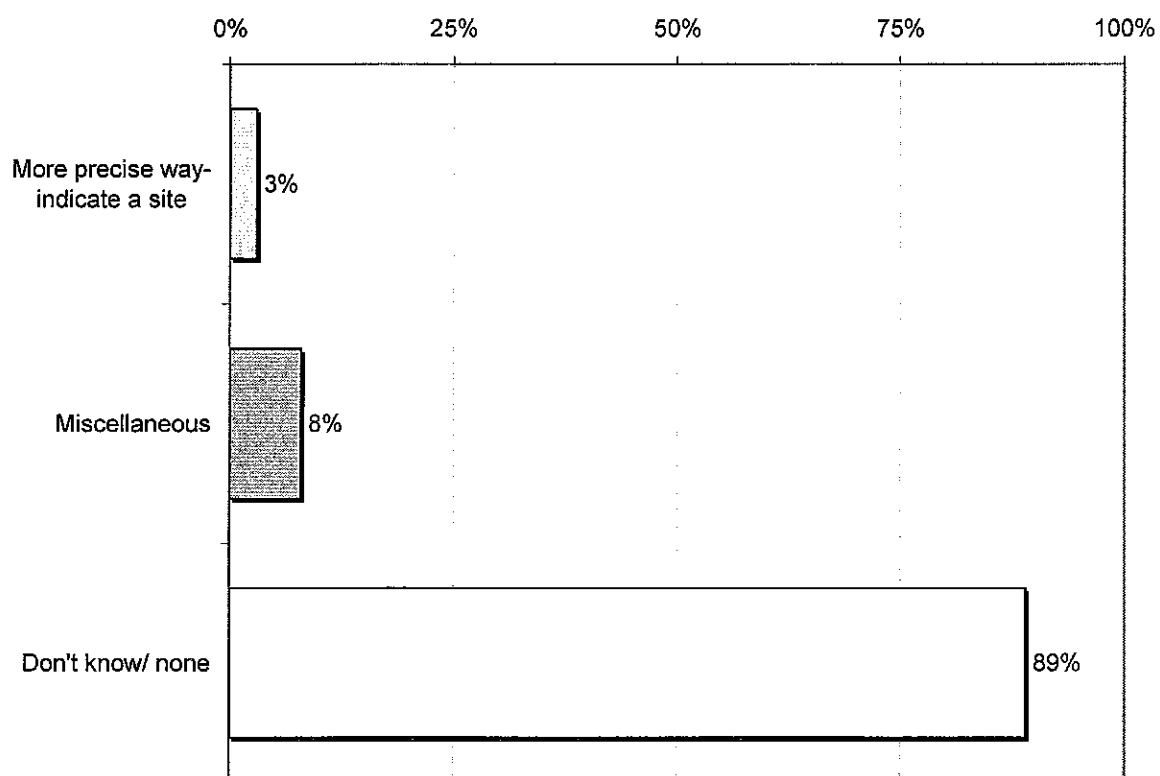
**Q. 13: What would you do to make the online application easier or better? [UNAIDED]**



**Q. 14-17: Have you used the Blue Stakes Web site for any of the following purposes (besides submitting locate requests)?**

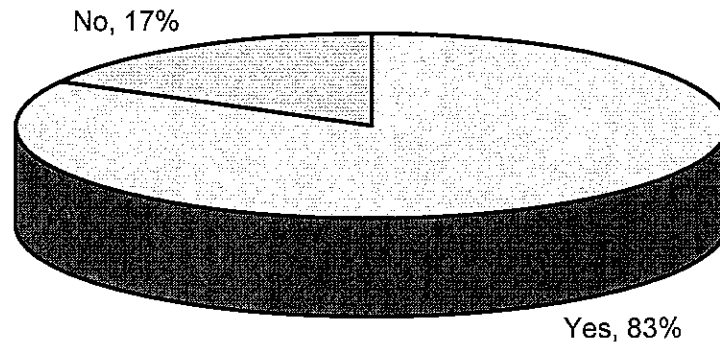


**Q. 18: What additional services would you like Blue Stakes to provide? [UNAIDED]**

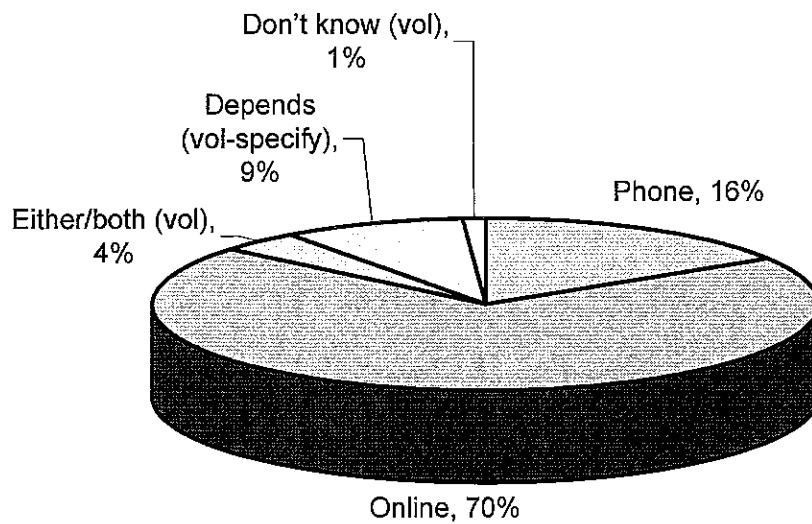




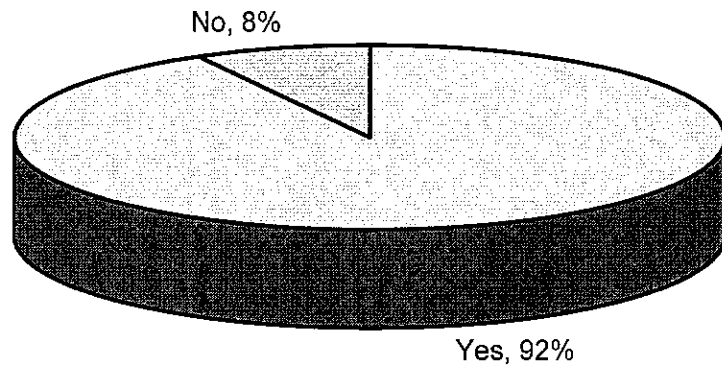
**Q. 19: Do you ever submit locate requests over the phone?**



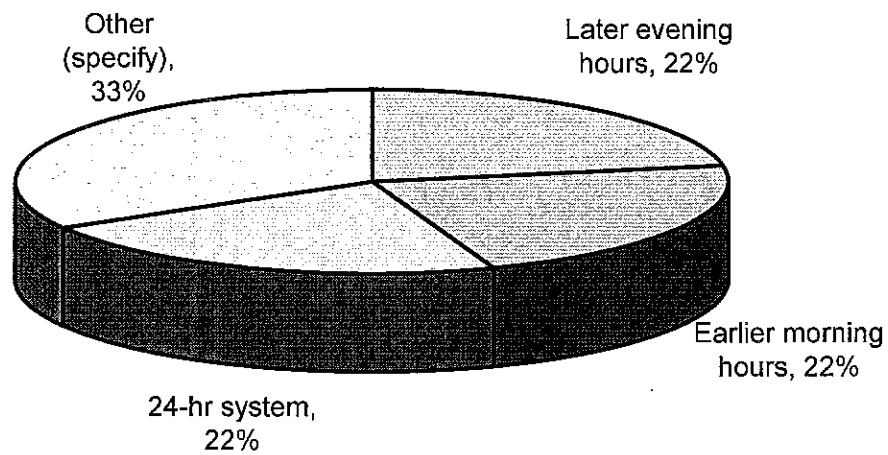
**Q. 20: [IF USE PHONE] Which do you generally prefer—over the phone or online? (n=107)**



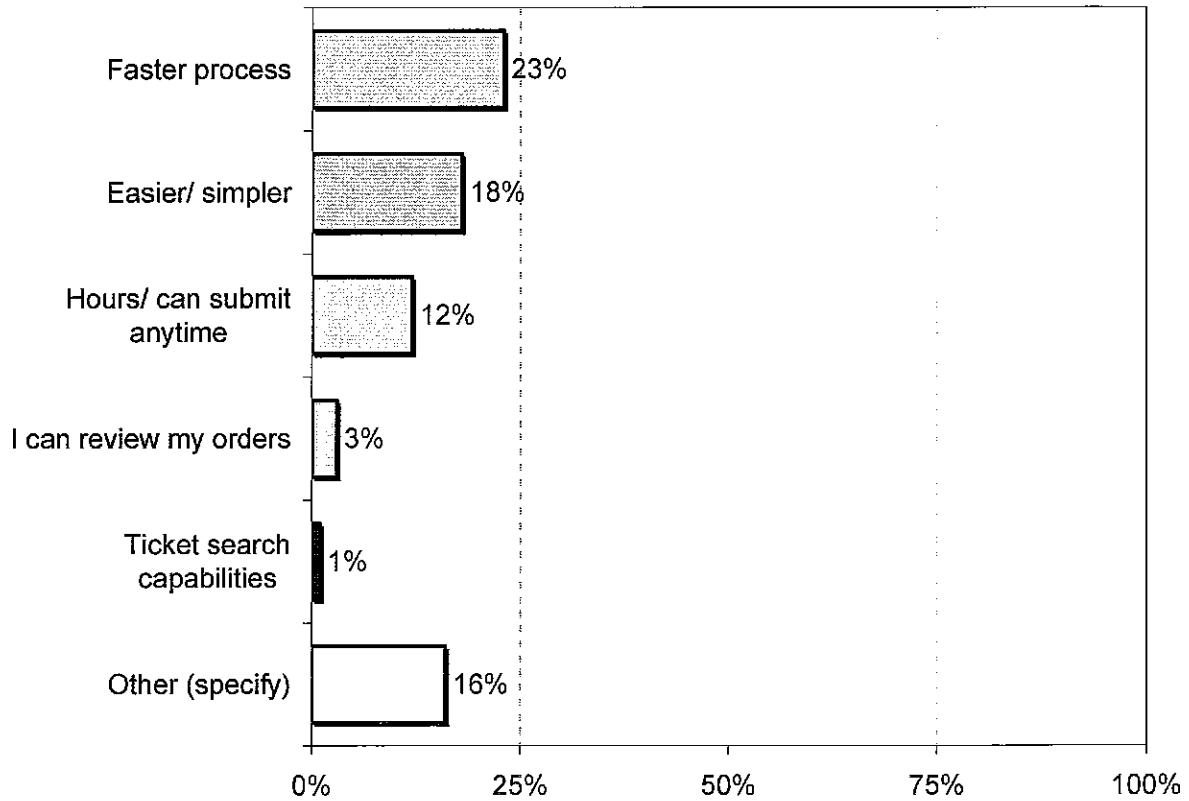
**Q. 21: [IF USE PHONE] Are the hours of operation (7:00 a.m. – 5:00 p.m.) convenient for you? (n=107)**



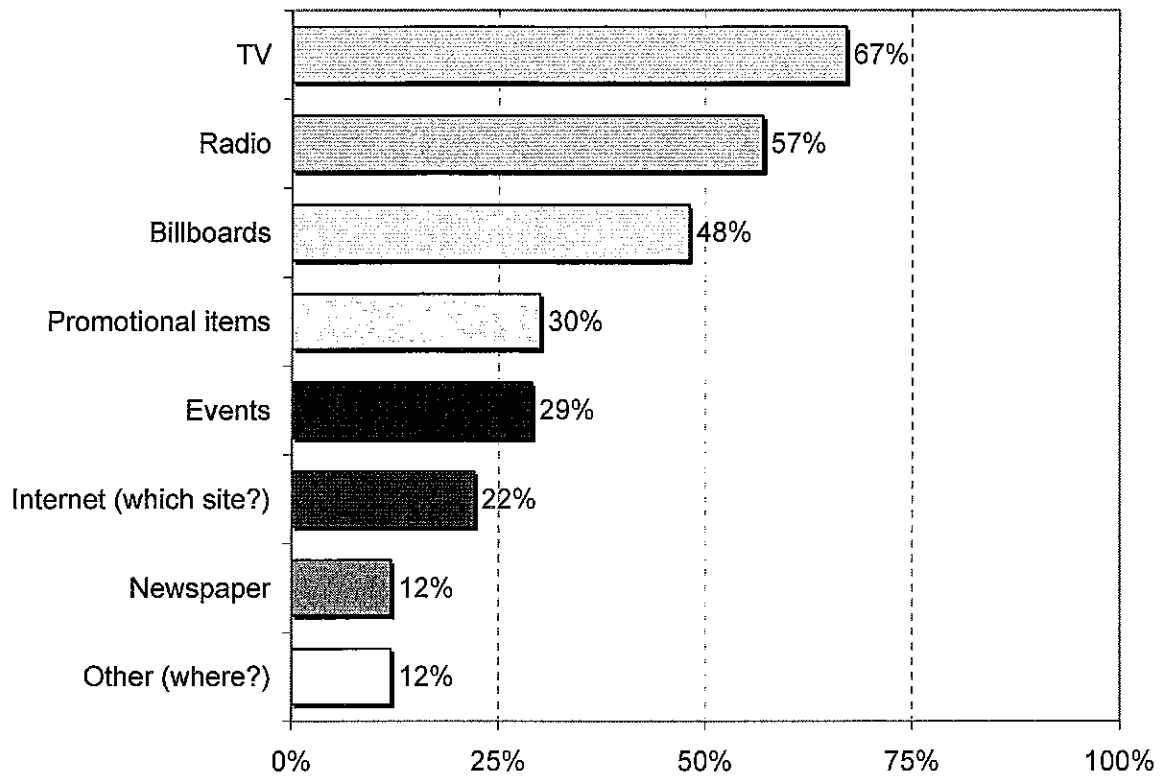
**Q. 22: [IF NO ON PREVIOUS] Which hours would be better for you? (n=9)**



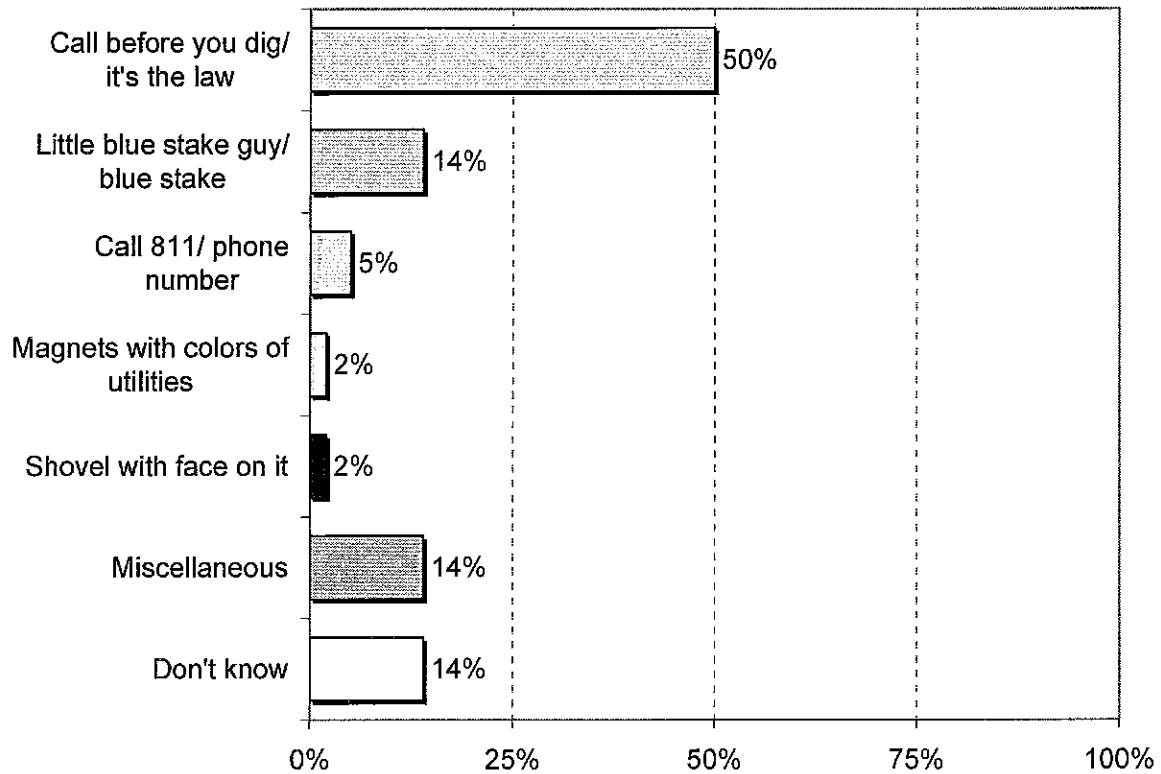
**Q. 23-28: What is it about submitting requests online that makes you prefer that method, rather than submitting them over the phone? [UNAIDED; MARK ALL MENTIONED]**



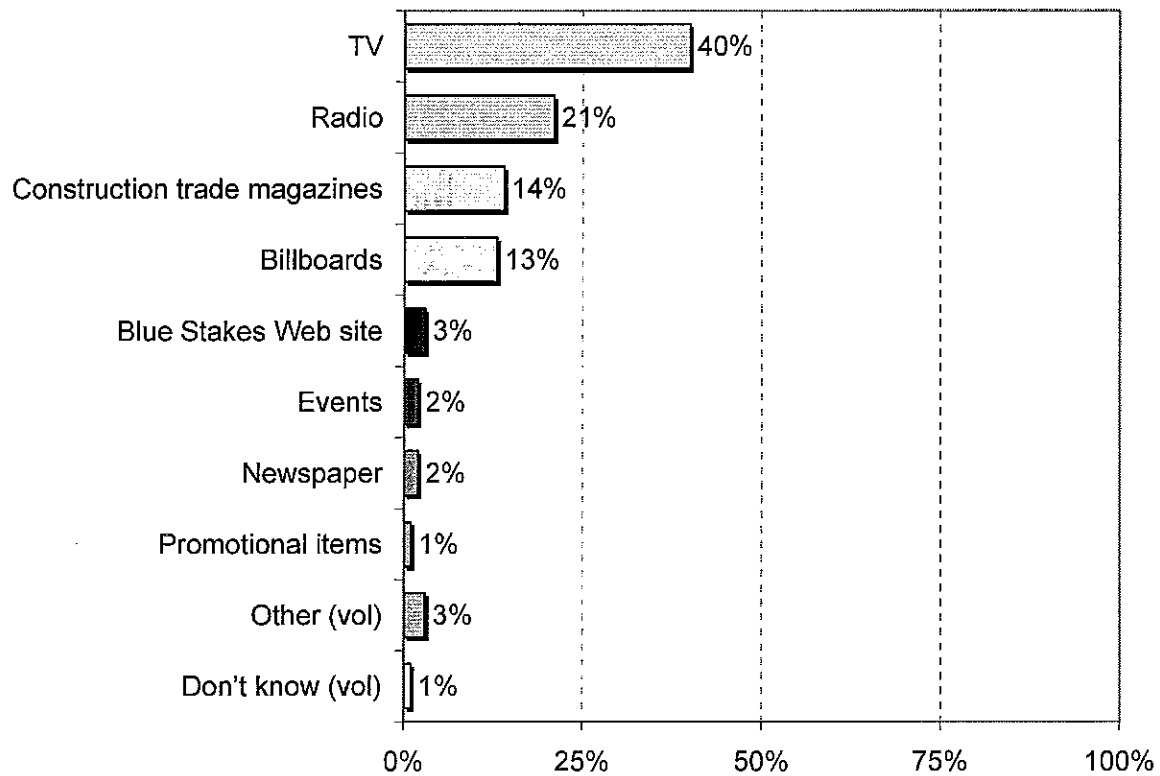
**Q. 29-36: Have you seen or heard Blue Stakes advertising in any of the following?**



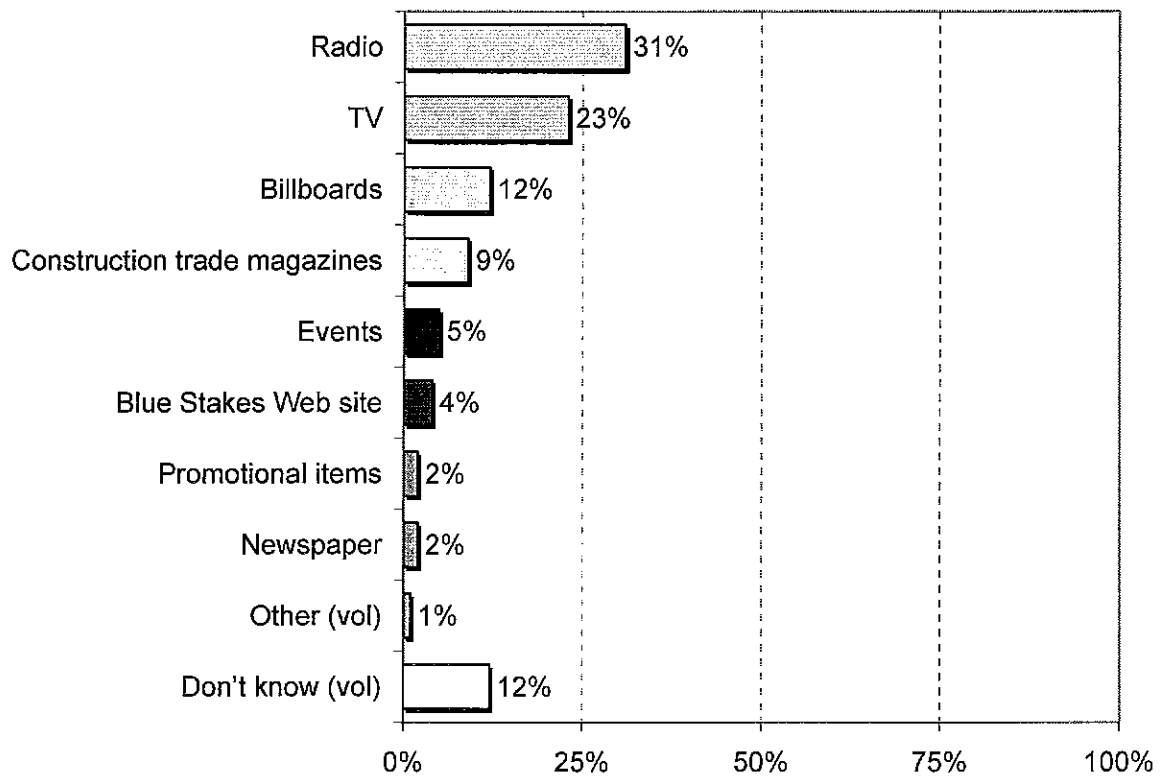
**Q. 37: Please briefly describe the Blue Stakes advertising that you saw or heard. [n=121, UNAIDED]**



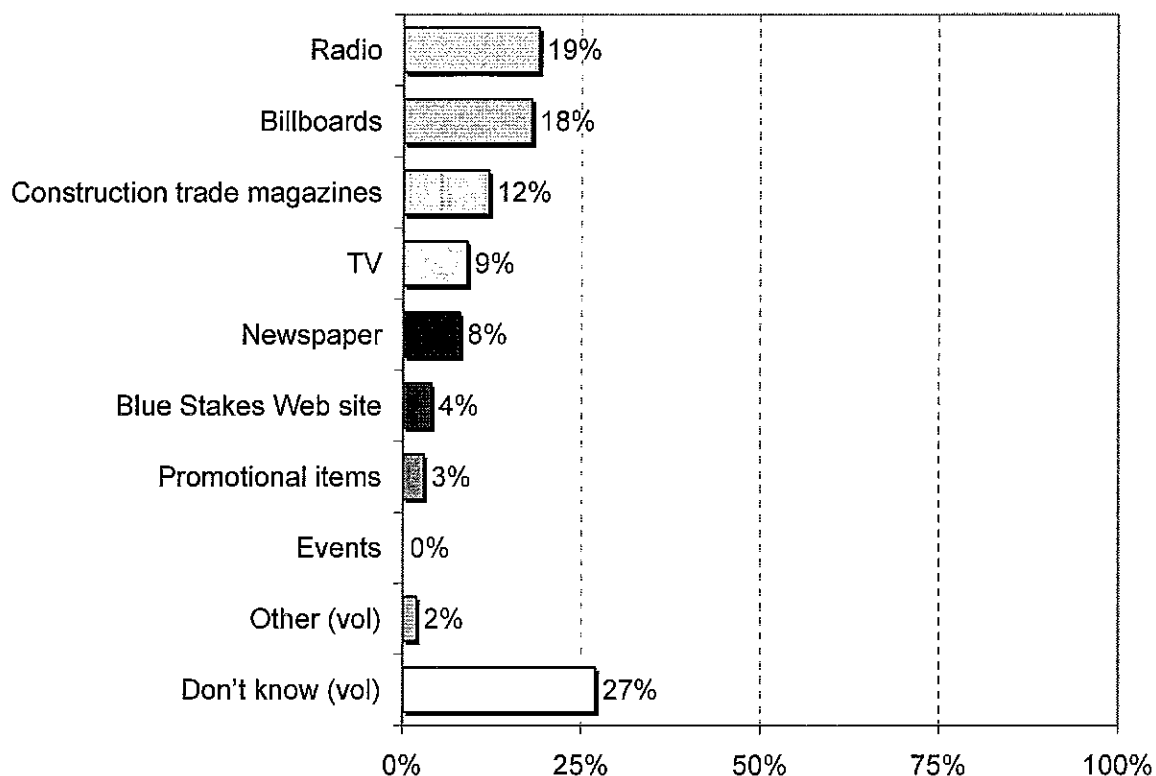
**Q. 38: Which of the following methods do you feel is best for delivering the Blue Stakes message to those who need to hear it? (First response: n=129)**



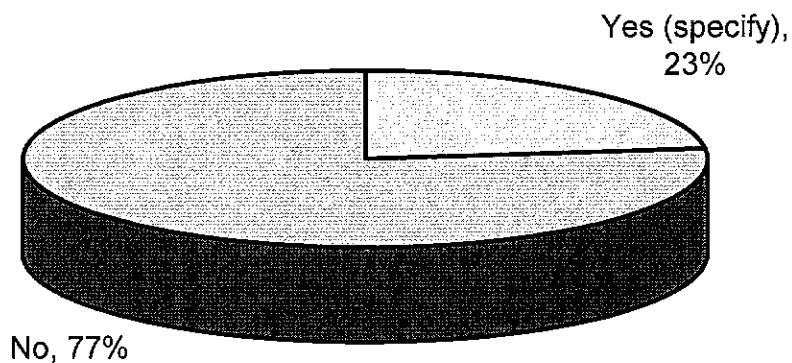
**Q. 39: Which of the following methods do you feel is best for delivering the Blue Stakes message to those who need to hear it? (Second response: n=128)**



**Q. 40: Which of the following methods do you feel is best for delivering the Blue Stakes message to those who need to hear it? (Third response: n=113)**



**Q. 41: Is there any other information or feedback you would like Blue Stakes to have? (What is it?) [UNAIDED]**



Responses are listed in Appendix B.



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# **ATTACHMENT 4**

## **MEMBER SURVEY ANALYSIS DECEMBER 2008**

*Study conducted for*

**Blue Stakes**  
**Member Survey**

December 2008

*Study conducted by*

**Dan Jones**  
**& ASSOCIATES**

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## **Introduction**

Blue Stakes of Utah commissioned Dan Jones & Associates, Inc., a full-service, independent, public opinion and market research firm located in Salt Lake City, Utah, to conduct and compile an opinion survey of Blue Stakes' members.

### **Research Objectives**

This research was designed to:

- Assess members' overall experience with Blue Stakes
- Determine how members feel about the fees they pay for Blue Stakes services
- Assess which extra benefits provided by Blue Stakes are most useful to members
- Establish which modes of communication are most useful
- Gather members' opinions about content, accuracy, and timeliness of notifications
- Measure the competency of telephone representatives
- Ascertain the level of interest in additional services Blue Stakes might provide
- Evaluate the convenience of Blue Stakes' service hours
- Investigate members exposure to Blue Stakes advertising
- Explore awareness of, and opinions about, the Blue Stakes Web site
- Find out how many members use the remote access (RAM) application

### **Procedures**

Dan Jones & Associates developed the questionnaire in conjunction with Gary Hansen of Blue Stakes of Utah. To meet the research objectives, Dan Jones & Associates mailed paper surveys on November 3, 2008 to all 536 Blue Stakes of Utah member organizations. Of these, 273 returned the mailed survey within one month. Dan Jones & Associates then attempted to call each of the remaining 263 by telephone in December, 2008. After four attempts made at varying times during the day and on different days of the week, 102 additional respondents were interviewed, for a total of 375 completed interviews. All telephone interviews were conducted from the Dan Jones & Associates Data Collection Center, where interviewers are supervised and monitored.

Although the results from the two methods are combined herein, and are essentially treated as one data set, it should be remembered that data was obtained using different methodologies, and so are not wholly comparable.

Prior to implementation, the client approved the questionnaire. Before any fieldwork began, the survey instrument was thoroughly pretested. The pretest is designed to detect discrepancies that might exist in the instrument in terms of clarity, completeness, level of shared language, and appropriateness of questions. The client approved all changes made to the questionnaire as a result of the pretest.

## **Sample**

Blue Stakes of Utah provided a list of current members. This list was used for both the mail-out survey and the telephone survey.

Because of the limited sample size (536 member organizations), this was designed as a canvas survey: Dan Jones & Associates attempted to reach every member organization on the list provide by Blue Stakes of Utah.

The margin of error for this survey is  $\pm 2.78\%$  for total data. The margin of error increases for the responses of subgroups within the data. This study has a 95% confidence level, meaning that no more than one time in twenty should chance variations in the sample cause the results to vary by more than the margin of error from the answers that would be obtained if all people in the survey universe were polled.

## **Fieldwork**

Dan Jones & Associates employs professional, experienced interviewers who have worked on numerous surveys to date and have proven to be reliable, thorough, and able to develop excellent rapport with respondents. Interviewers were cautioned to limit their interaction with respondents concerning individual responses to the questionnaire. To ensure consistency in reciting the questions and recording responses, the project director carefully briefed each interviewer.

Both structured and unstructured questions were used to measure intensity of opinions and to assess the perceptions of respondents. Demographic questions were asked to provide opinions of subgroups.

## **Limitations**

Dan Jones & Associates recognizes that there are constraints to all survey research. Some of those limitations include: **Time**—fieldwork or data collection is usually conducted in a restricted time frame. Therefore, potential respondents who may not be available during the data collection period will be excluded from the sample. **Budget**—it is simply too costly to reach everyone within the survey universe or to ask for opinions on every possible option or issue within the budget of the study. **Access**—not all potential respondents have access to landline telephones and others may have moved without notifying the client organization of their change of address.

## **Data Analysis**

The staff of Dan Jones & Associates prepared statistical results. Each question has a response distribution, as well as a series of demographic cross-tabulations, which organize responses by various groupings and allow for detection of differences that may exist between opinions of subgroups.

Survey results are included in the Executive Summary and the Charts sections. Appendices include the questionnaire with results, respondent comments, and demographic cross-tabulations.

Because of rounding, response distribution on individual question results may not always total 100%.

## **Executive Summary**

### **Overview**

Survey research is helpful in two ways: first, it provides data that is useful in identifying current strengths and weaknesses. Respondents are given an opportunity to make it known if there is a problem that is not being handled to their satisfaction; they also evaluate various aspects of the organization. Second, it provides an accurate means for management to determine where efforts to improve organizational processes would best be spent. In this regard, longitudinal (multi-year) research becomes especially useful, as it provides a way to track increases and decreases in performance over time.

Generally, members give positive feedback about their experience with Blue Stakes. There are no issues or areas that are identified as problematic by a sizeable percentage of members. Because of this, Blue Stakes may be confident that it is accomplishing its purpose.

That said, there are many areas where the data suggest improvements could be made. They are outlined over the following pages.

### **Association**

Representatives from member organizations largely rate their overall experience with Blue Stakes as positive, with 81% giving a rating of 4 or 5, using a scale of 1/ very negative to 5/ very positive. The mean score is 4.16. Only 3% give a rating of 1 or 2 and 15% give a neutral rating of 3.

When asked what they first think of when they hear the words, "Blue Stakes," top unaided responses are: utility locator/ utility marking (18%), call before you dig/ call 811 (13%), and digging/ excavation (10%). Other responses, given by fewer than one in ten, include: protection of underground utilities (7%), underground utilities/ lines (5%), and problems/ damaged utilities (4%).

### **Value**

The large majority (73%) of respondents agree that the fees they pay for Blue Stakes services are about right, giving a response of 3 on a scale of 1/ lower than they should be to 5/ higher than they should be. One in six believe that the fees are on the high end (ratings of 4:



12% and 5: 5%), while 2% say they are somewhat low (ratings of 1 and 2). These ratings yield a mean score of 3.44—leaning towards "higher than they should be."

Respondents were asked to rate three specific services provided by Blue Stakes, in light of the overall cost of services. Using a scale of 1/ poor to 5/ excellent, two of the three receive high marks: "providing locate-request notifications" (4.10) and "overall value of your Blue Stakes membership" (4.10). The third, "Blue Stakes' marketing efforts," is just somewhat lower, with a mean score of 3.82.

Two ancillary benefits of membership (along with the main benefit of receiving locate-requests) were presented to respondents, who were then asked to rate how useful they are. Both services receive mean scores near 3.50 on a scale of 1/ not at all useful to 5/ very useful. Collectively, responses lean to the useful side of the scale and could be coined "marginally to somewhat useful." The two are "Call Before You Dig" promotional items (mean score of 3.53) and Damage Prevention Education seminars and safety meetings (mean score of 3.51).

## **Communication**

Half (49%) of the members submit that email is the best way for Blue Stakes to communicate with them. An additional one in five (21%) say they prefer communication by fax; and 13% say the telephone is best. Less than one in ten say the best way is through a mailed newsletter (6%), the Web site (2%), or a broadcast message (1%).

There is a consensus that the information provided by Blue Stakes is accurate. Seven out of eight members say the information contained in the locate-request notifications they receive is usually (76%) or always (11%) correct. However, one in eight state that the information is seldom (2%) or only sometimes (10%) correct. To reiterate, just one in nine members reported that the information was always correct. This represents an area where Blue Stakes might improve its performance.

Concerning the amount of information contained in Blue Stakes' communication, seven out of eight (87%) respondents affirm that it is about right, with the rest being divided between too little (definitely too little: <1%, probably too little: 6%), and too much (definitely too much: 1%, probably too much: 4%).

A very small percentage (<2%) complain that the delivery time of notifications is too slow. A majority (54%) state that it is acceptably prompt, while nearly half (45%) say it is very prompt.

When asked if they would like to be able to submit locate-requests over the Internet instead of the telephone, a larger percentage of members (44%) say they would like to, than say they would not (34%).

## **Service**

Blue Stakes representatives earn high marks by member organizations across six different customer service characteristics. Courtesy (4.38) achieves the highest mean score among the six characteristics, with 52% saying it is excellent (rating of 5 on a 1/poor – 5/ excellent scale). Overall demeanor (4.35), professionalism (4.33), and interest in helping you (4.31) are also given high scores. With mean scores of 4.17 and 4.26, respectively, subject knowledge and efficiency receive the lowest mean scores of the six (although a mean score above 4.00 is still quite high).

Four out of nine members (45%) answered that they waited less than one minute on the phone before speaking with a representative during their most recent call. Another 37% said they waited between one and two minutes. Nine percent waited three to four minutes, and 1% waited five minutes or longer.

Nearly all members feel that Blue Stakes is meeting the needs and expectations they have for it (probably: 42%, definitely: 55%). Three percent, however, state that it is not (probably not: 2%, definitely not: 1%).

One out of four respondents rate their level of interest as a 4 or 5 (on a scale of 1/ not at all interested to 5/ very interested) in the following services that could be offered by Blue Stakes: ticket management software (25%) and automated positive response (29%). Moreover, a higher percentage of members indicate that they have little interest in these two services (ratings of 1 or 2: 40% and 32%, respectively).

When asked what Blue Stakes can do to improve the service it provides, more than half (57%) did not offer a suggestion. One in five (21%) say “nothing—it is good now,” while each of the following are mentioned by 3%: after-hours/ weekends/ emergency service, provide correct/ more accurate addresses, and mapping comments/ better mapping.

Nearly all (94%) of the member organizations surveyed say that Blue Stakes' hours of operation are convenient. Of those who disagree (n=16), the top alternative hours chosen are: later evening hours (19%) and 24-hr system (19%).

## **Advertising**

The majority (63%) of members say they have seen Blue Stakes advertising on TV. Nearly half (46%) report having heard it on the radio, and a third (32%) have been exposed to promotional items. A quarter or fewer have seen advertising for Blue Stakes on billboards (25%), in the newspaper (21%), or at events (20%), while just one in twenty-five acknowledge having seen advertising on the Internet (4%) or elsewhere (5%). Very few members—one in ten, or 10%—report that they don't recall seeing *any* advertising for Blue Stakes.

A plurality of respondents (23%) who recall seeing or hearing Blue Stakes advertising say the message they remember is call before you dig/ it's the law. Another 6% say they recall the 811 telephone number. Commercials (generic), billboards, and public awareness ads are each recalled by 2%. Nearly half (49%) decline describing the Blue Stakes ads.

## **Web Site**

Three out of seven representatives from member organizations (43%) say they have visited the Blue Stakes Web site. This group (n=160) was asked the remaining questions in this section. First, a little more than one-quarter (28%) are able to correctly name the site ([www.bluestakes.org](http://www.bluestakes.org)), although another 3% say they have it on their computer. Two out of three (66%) did not specify a Web address for Blue Stakes. However, that 72% of those who say they have visited the Blue Stakes Web site did not correctly name the URL speaks positively to the ease at which the Web site can be found without having to recall the exact address.

Once they reached the site, 29% report that they were able to find what they needed very quickly—it was right there, while more than half (55%) say they found it somewhat quickly—they had to search a bit. Thirteen percent answer that it either took longer to find than it should have (9%) or they were unable to find it (4%).

When asked to rate three specific aspects about the Web site, all three receive ratings of 4 or 5 (on a scale of 1/ poor to 5/ excellent) from at least three out of five members: ease of use (62%), having the information they were looking for (64%), and overall (67%), while fewer than one in nine (10%, 6%, and 7%, respectively) rate them as a 1 or 2.

Only a handful of respondents (n=14) mention finding something on the site that they weren't looking for. The verbatim comments are included in Appendix B (Question 44), and include: address and contact information, regulations, online ticket entry, and calendar/ events.

Three out of five (61%) respondents say they are familiar with Blue Stakes' remote access for members (RAM).

While seven out of ten members (69%) did not offer any suggestions for improving the Blue Stakes Website and two out of nine (22%) say nothing needs to be done or that they like the way it is now, a few did offer some suggestions, including: keep it simple/ easier searches (3%), training/ tech support (2%), and user-friendly/ user-friendly software (1%).

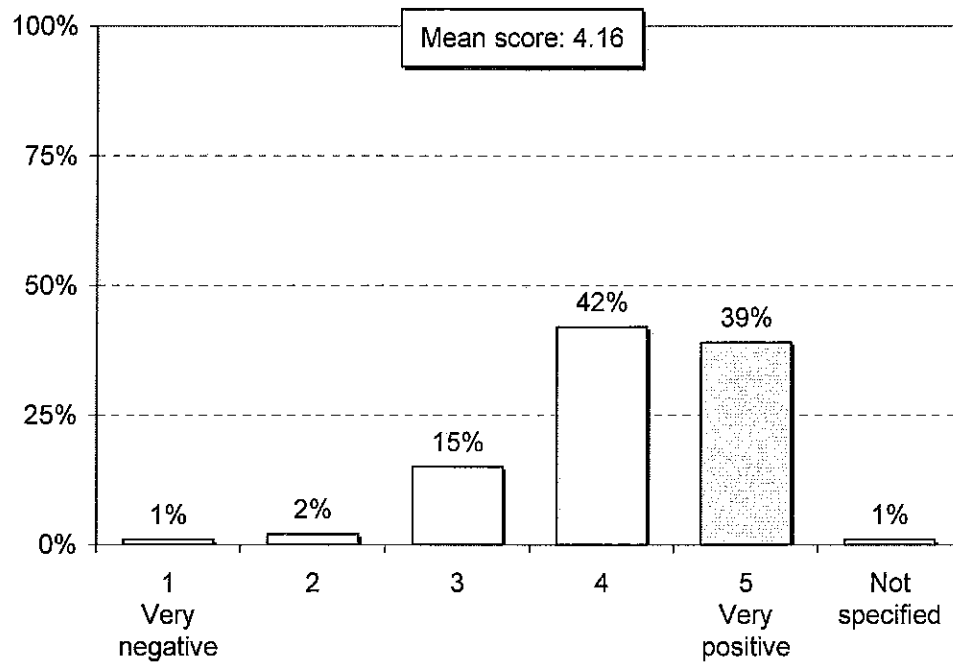
## **Conclusion**

Blue Stakes is doing a good job of providing its member organizations with locate-requests. However, the data suggest that a few key areas could benefit from further attention. These areas include:

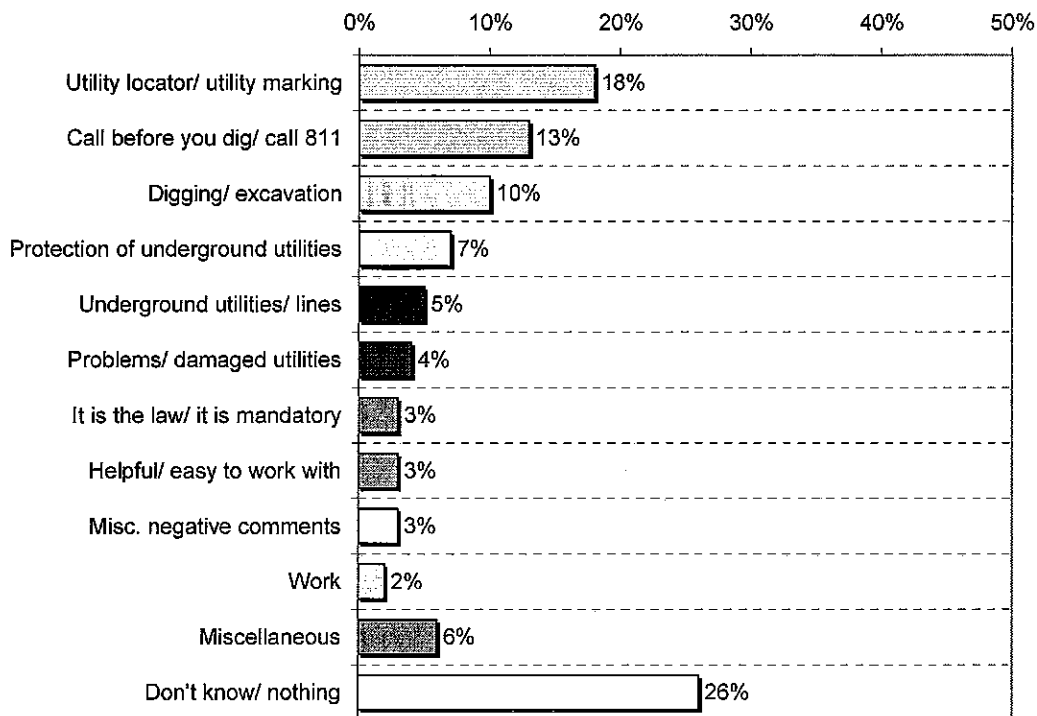
- Increasing the value respondents feel they are getting from Blue Stakes marketing. The mean score of 3.82 on a scale of 1/ poor to 5/ excellent is noticeably lower than that given for the overall value of their membership (4.10). This may mean either educating them more on the efforts already being made or increasing the marketing effort.
- Improving the accuracy of locate-requests. From survey questions and member comments, it is apparent that locate-requests in rural areas, especially, suffer from a lack of precision.
- Finding ways to make the Web site more intuitive, so those who access it can quickly find what they need. One in eight (13%) report that finding the information they were looking for either took longer than it should have or they were unable to find it. More than half (55%) had to "search a bit" to find it.
- Ensuring that all interested members are able to submit locate-requests online.

## Charts

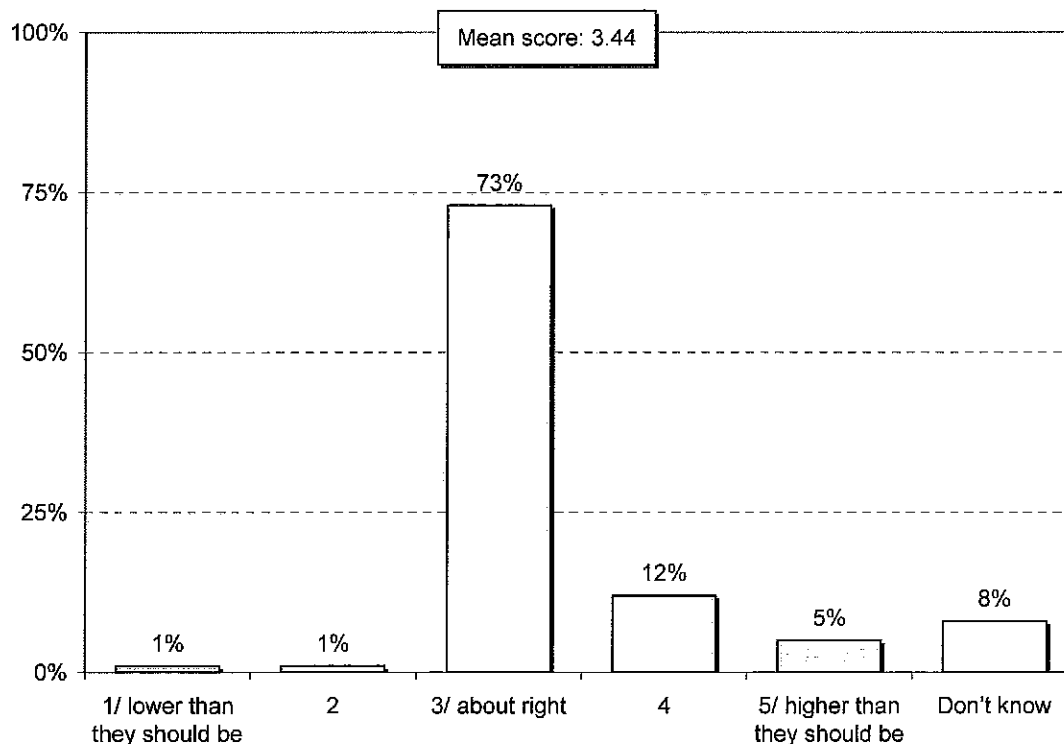
**Q. 1:** How would you rate your overall experience with Blue Stakes?



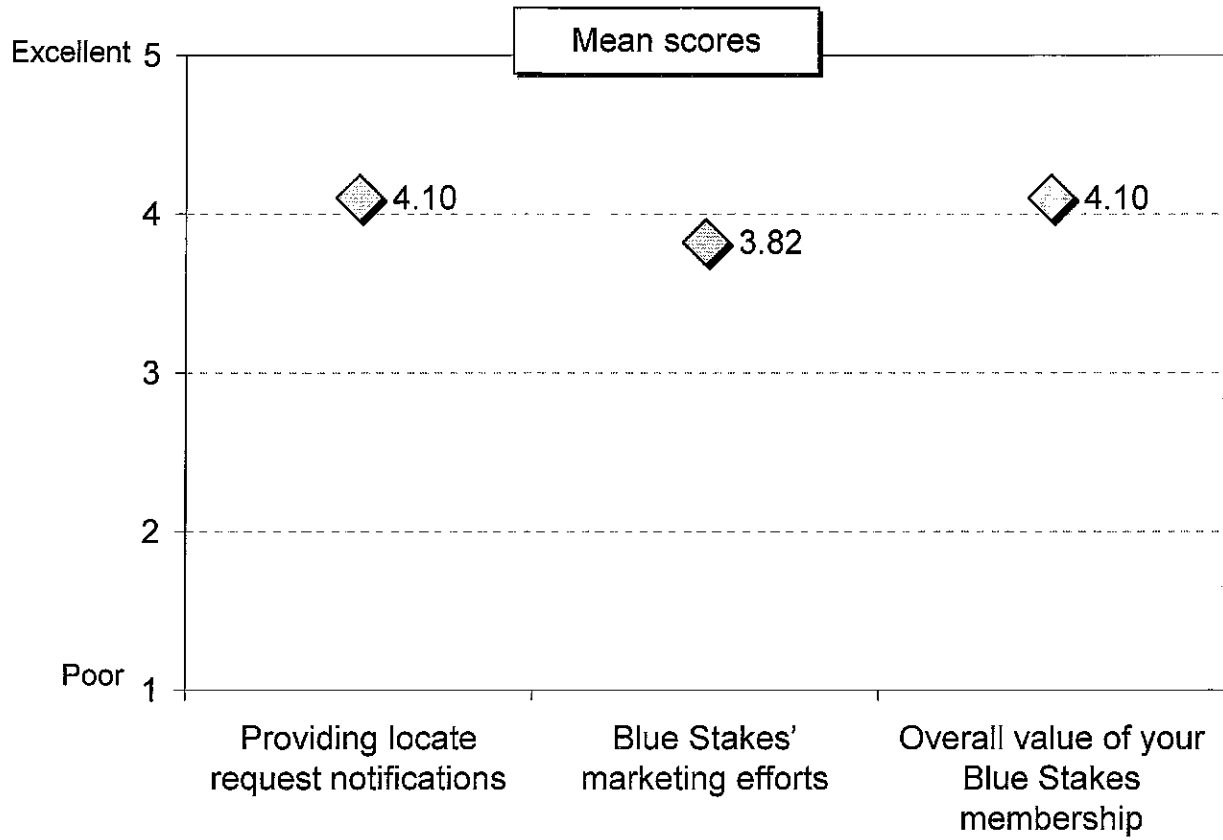
**Q. 2:** What is the first thing that comes to your mind when you hear the words "Blue Stakes"? (UNAIDED)



**Q. 3:** Are the fees you pay for services provided by Blue Stakes lower, higher, or about what they should be?

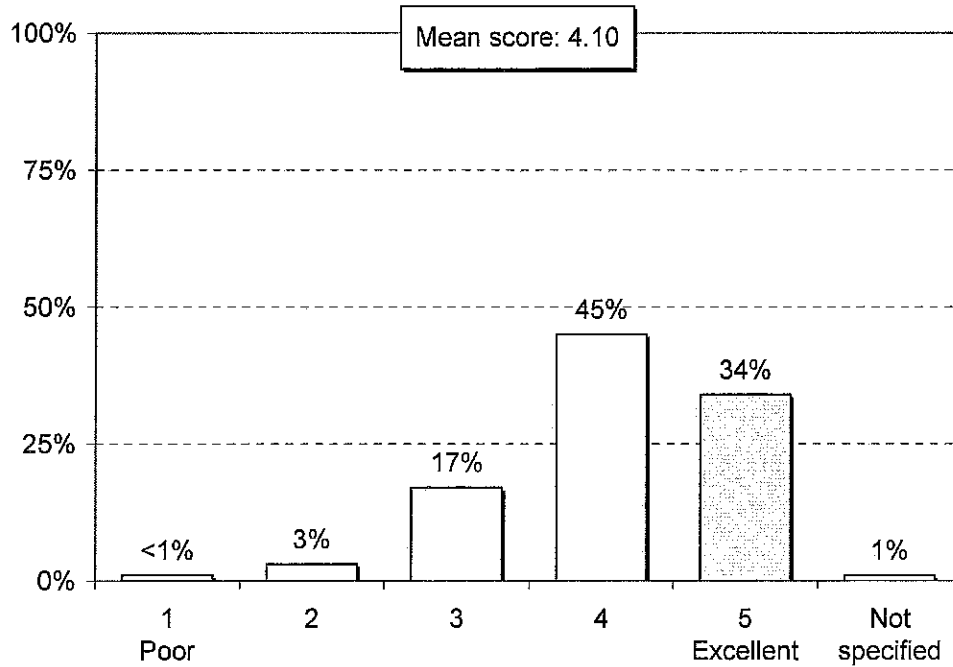


**Q. 4-6:** Considering the cost of the services provided by Blue Stakes, please rate the following:

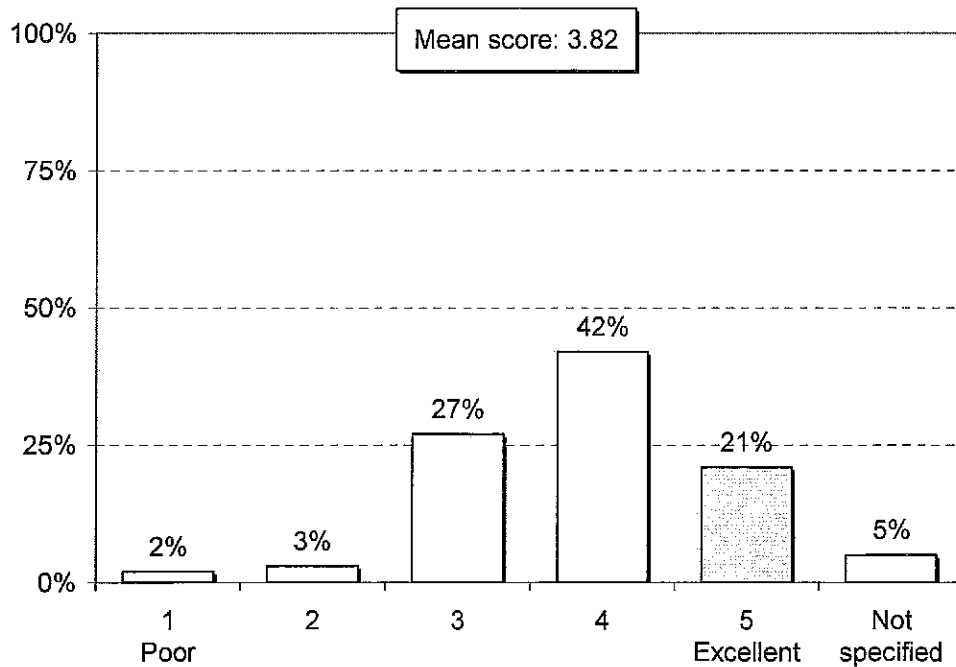


(Continued) Considering the cost of the services provided by Blue Stakes, please rate the following:

**Q. 4: Providing locate-request notifications**



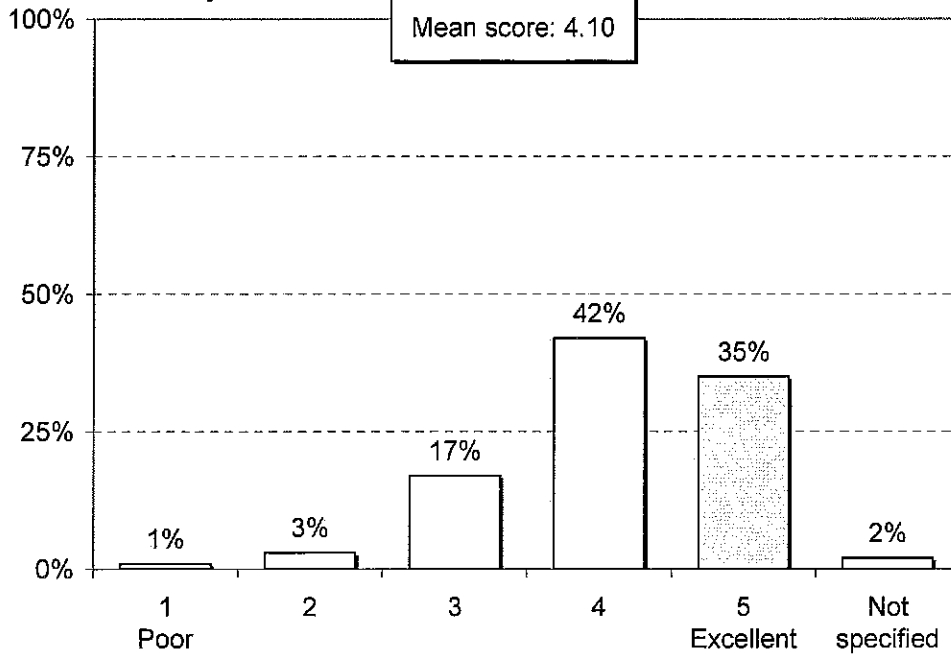
**Q. 5: Blue Stakes' marketing efforts**



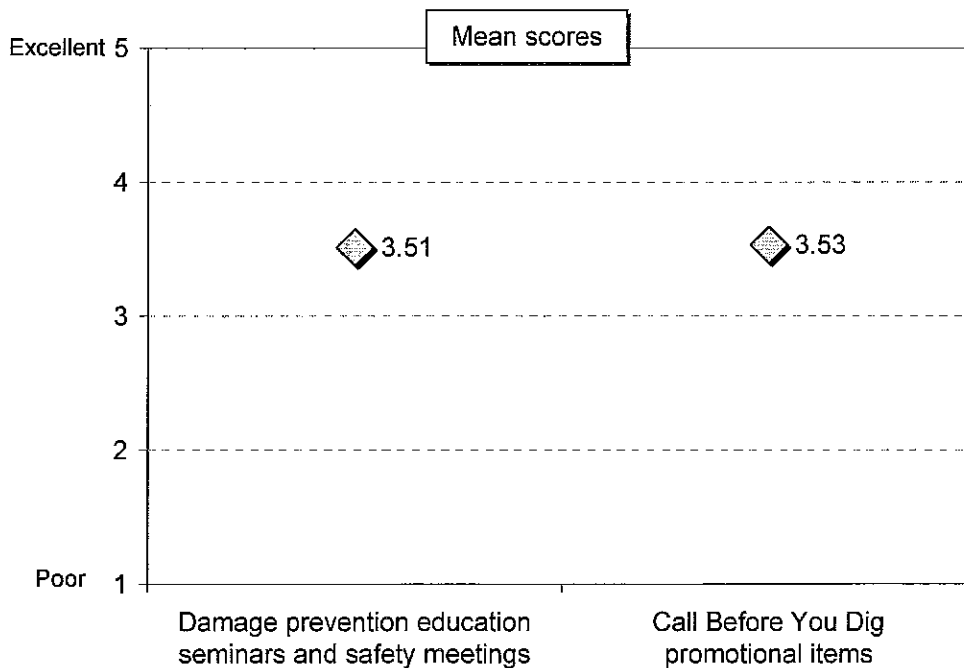


(Continued) Considering the cost of the services provided by Blue Stakes, please rate the following:

**Q. 6: Overall value of your Blue Stakes membership**

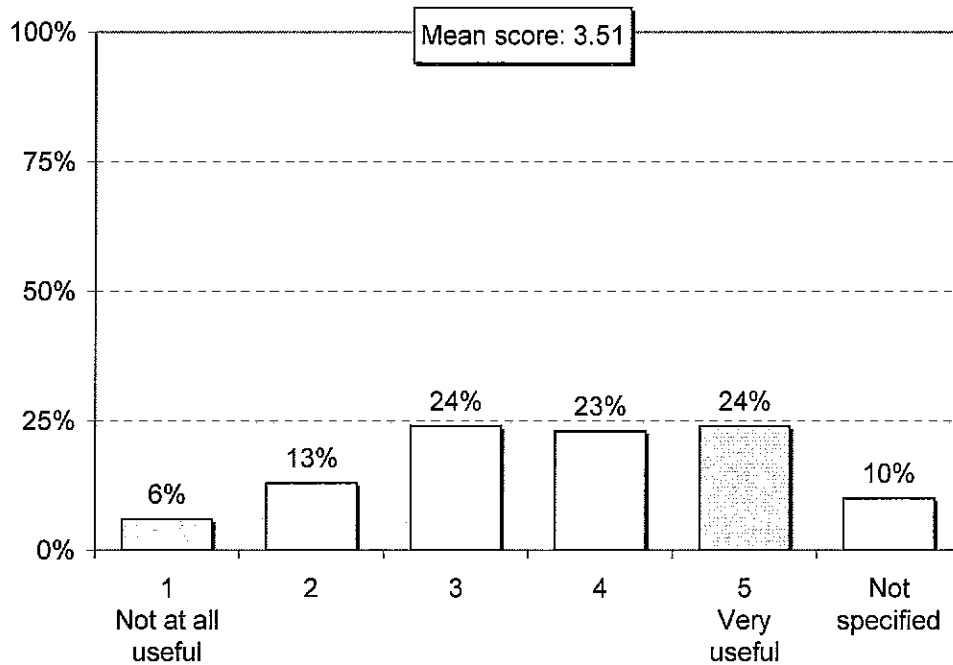


**Q. 7-8: Your membership with Blue Stakes provides several benefits, besides the main service of providing locate-request notifications. Please rate how useful the following benefits are to you.**

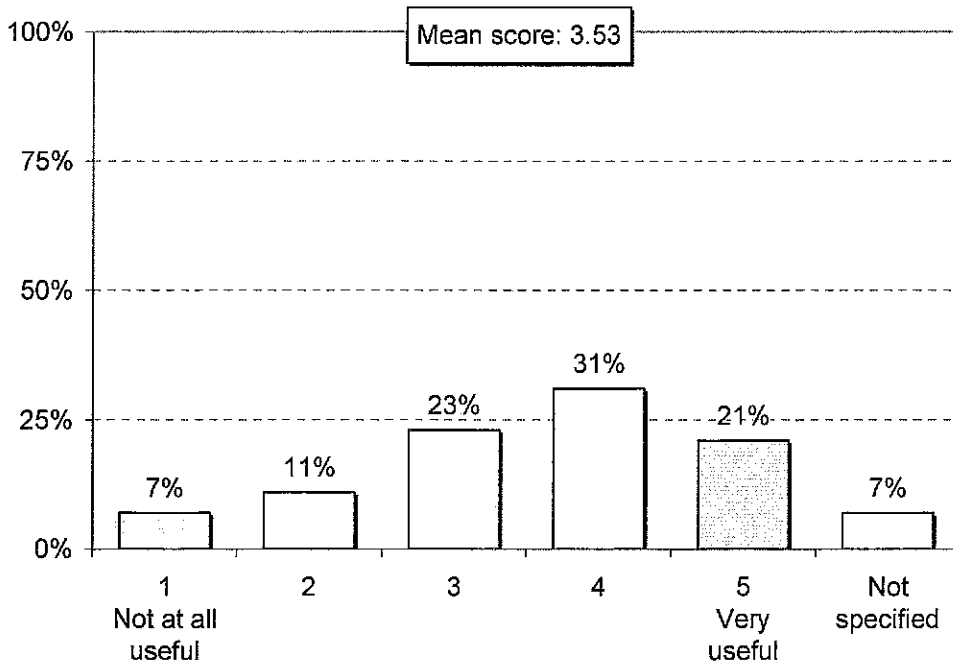


(Continued.) Please rate how useful the following benefits are to you:

**Q. 7: Damage prevention education seminars and safety meetings**

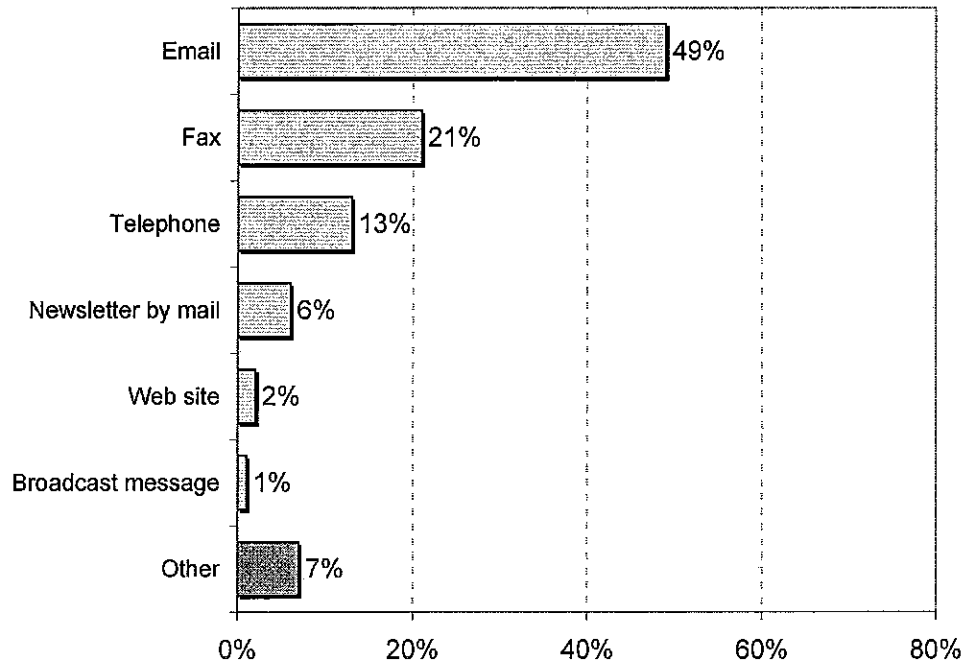


**Q. 8: Call Before You Dig promotional items (such as key chains, color code cards, excavators' guide, magnets, etc.)**

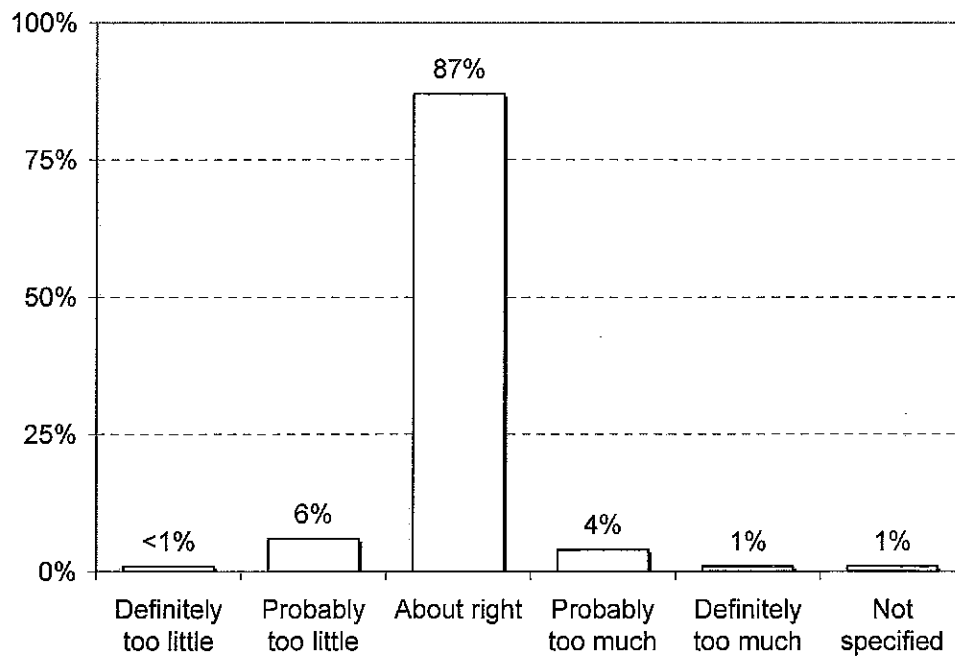


## Communication

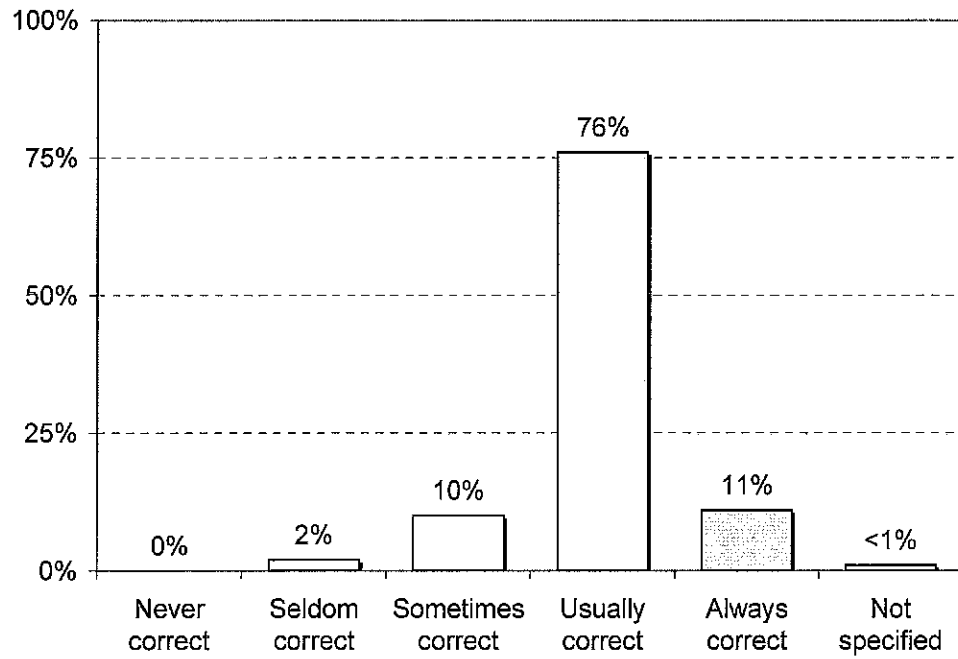
**Q. 9:** What is the best way for Blue Stakes to communicate with you?



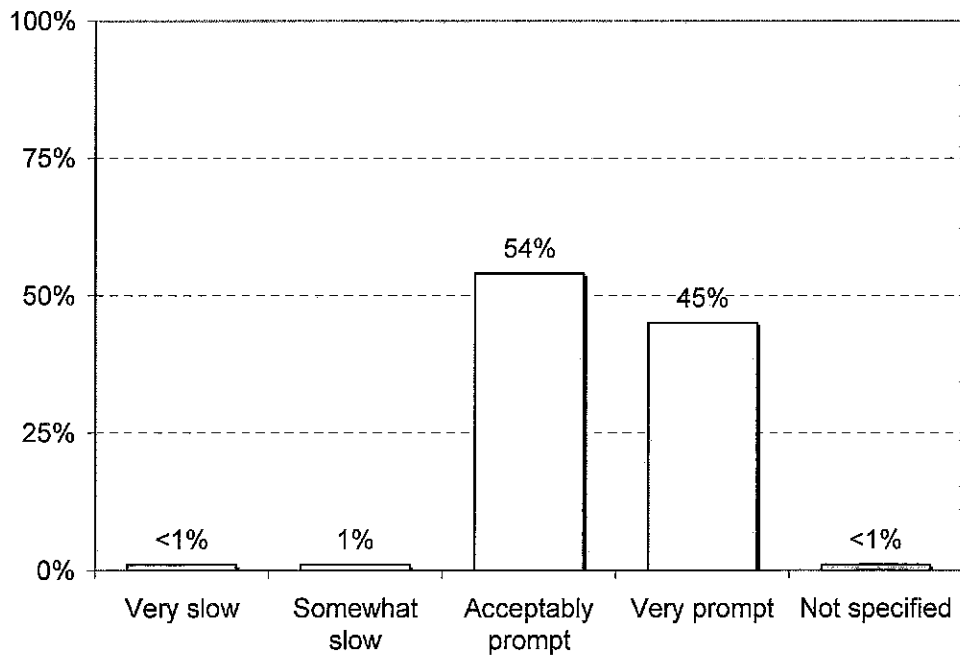
**Q. 10:** How would you rate the amount of information contained in those notifications?



**Q. 11: How would you rate the accuracy, or correctness, of the information?**



**Q. 12: How would you rate the delivery time of the notifications?**

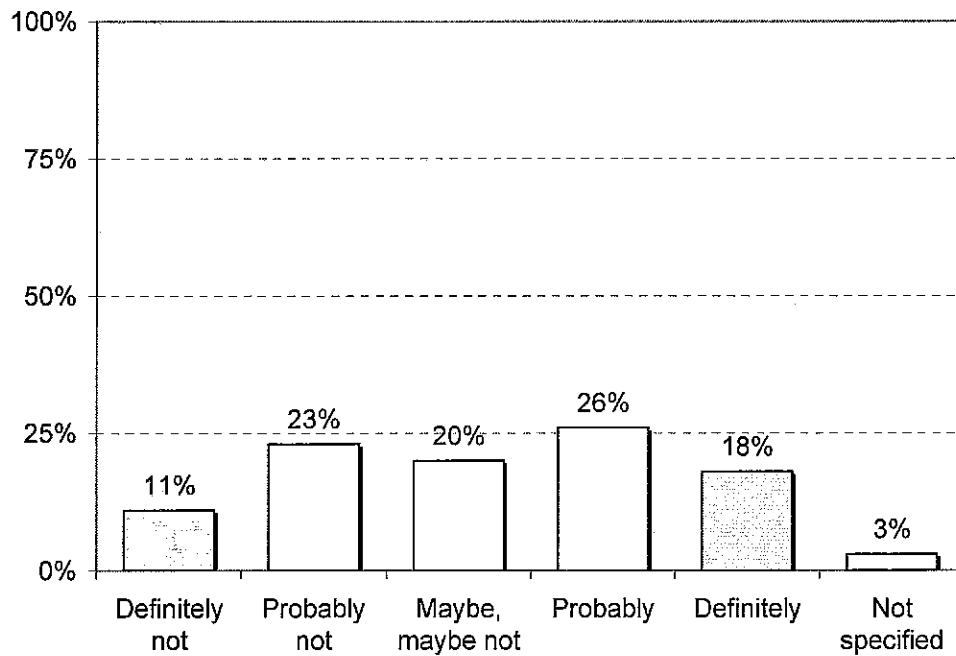


**Q. 13: Is there any other information about the notifications you feel should be provided? (UNAIDED)**

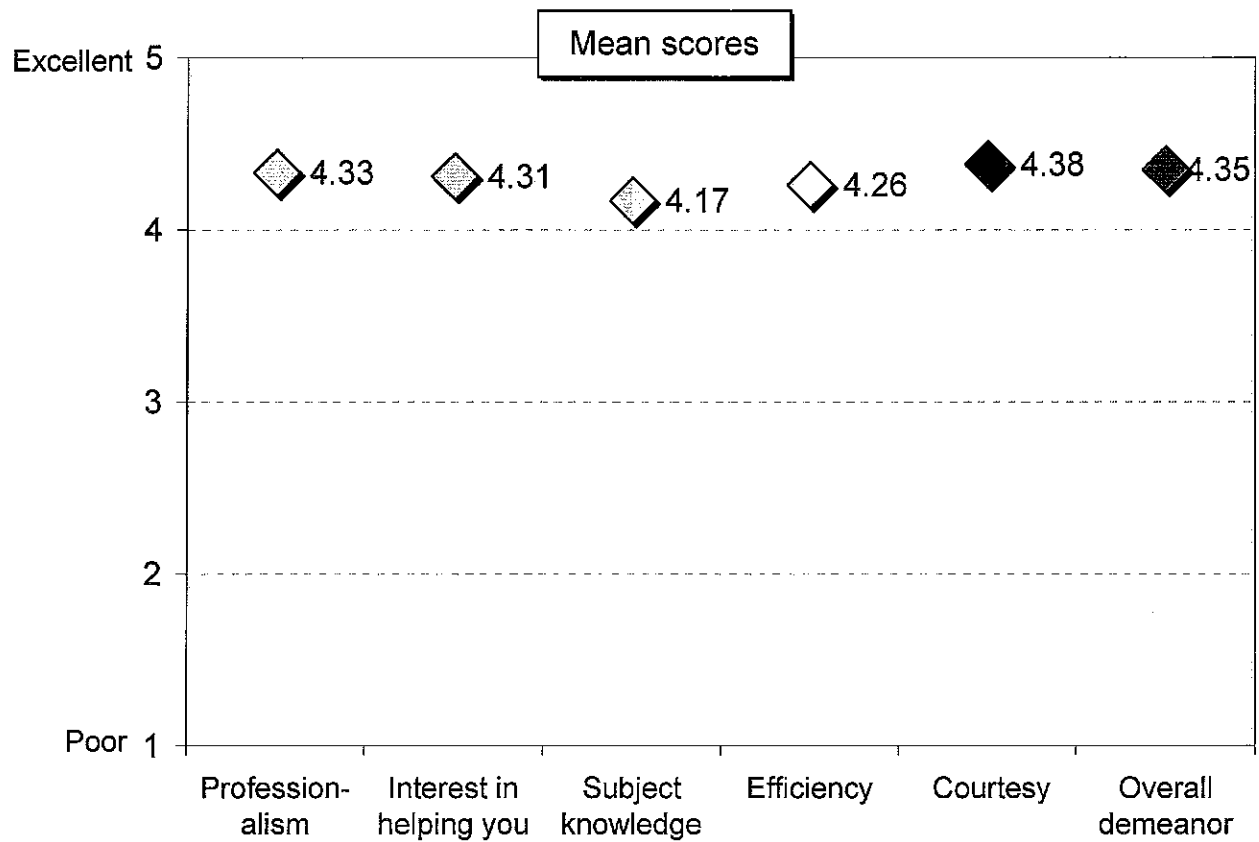
Responses

- Locations need to be exact (3%)
- Should have a contact person (2%)
- Make sure it is inside our grid (1%)
- More detail in rural areas (1%)
- Depth of dig (1%)
- Miscellaneous (4%)
- Not specified (89%)

**Q. 14: Would you like to be able to submit a locate-request over the Internet instead of the telephone?**

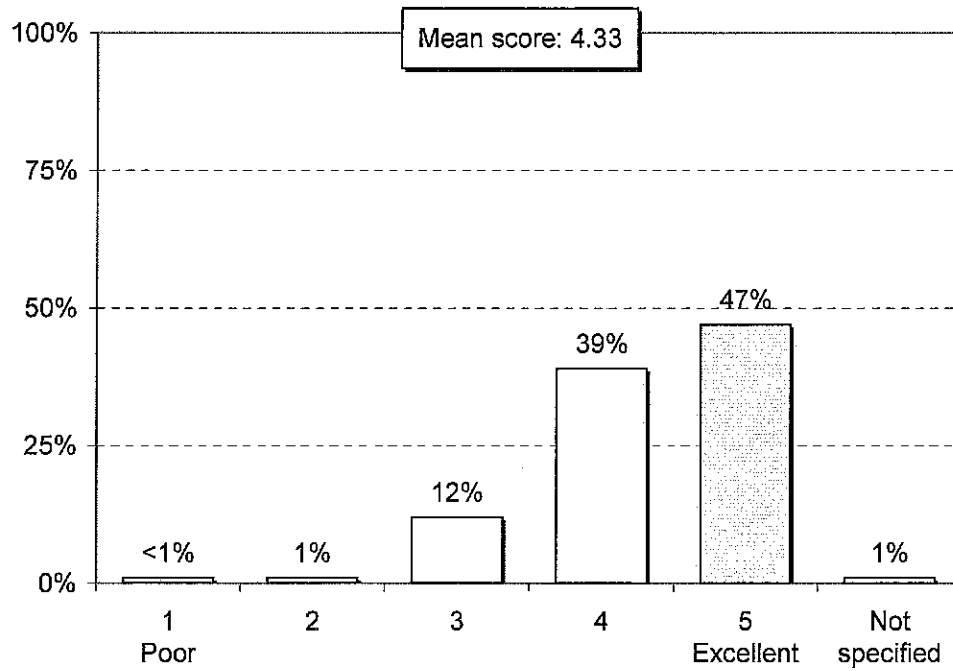


**Q. 15-20: Please give your impressions of Blue Stakes representatives on the following:**

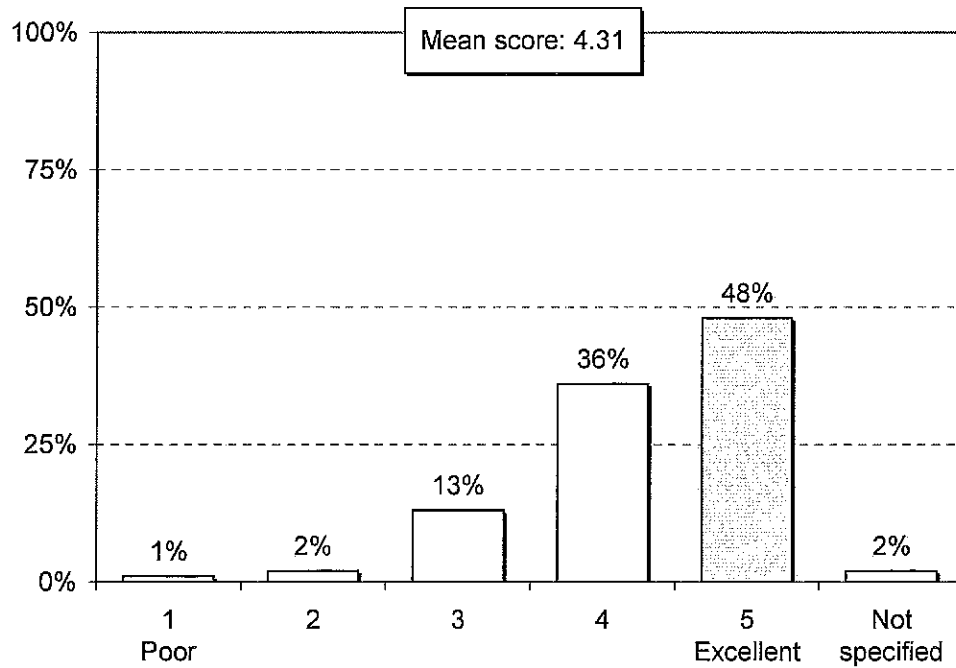


(Continued.) Please give your impressions of Blue Stakes representatives on the following:

**Q. 15: Professionalism**

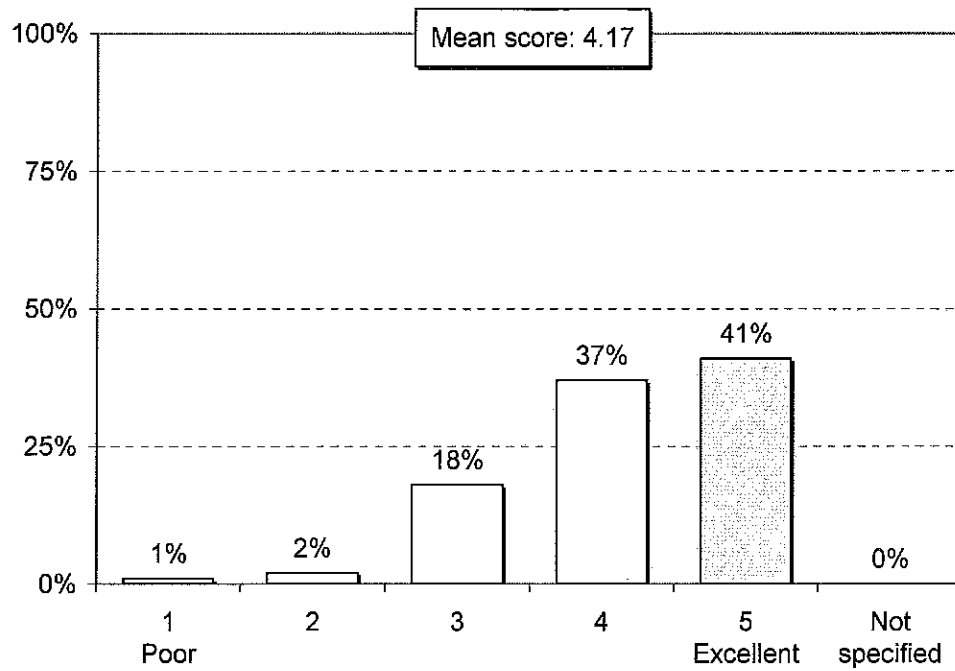


**Q. 16: Interest in helping you**

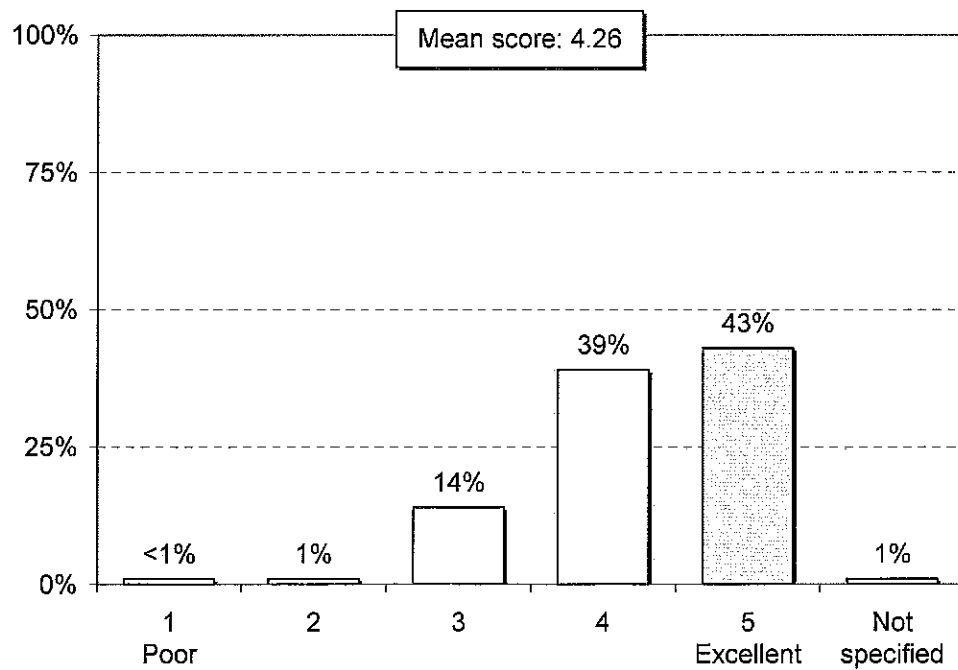


(Continued.) Please give your impressions of Blue Stakes representatives on the following:

**Q. 17: Subject knowledge**



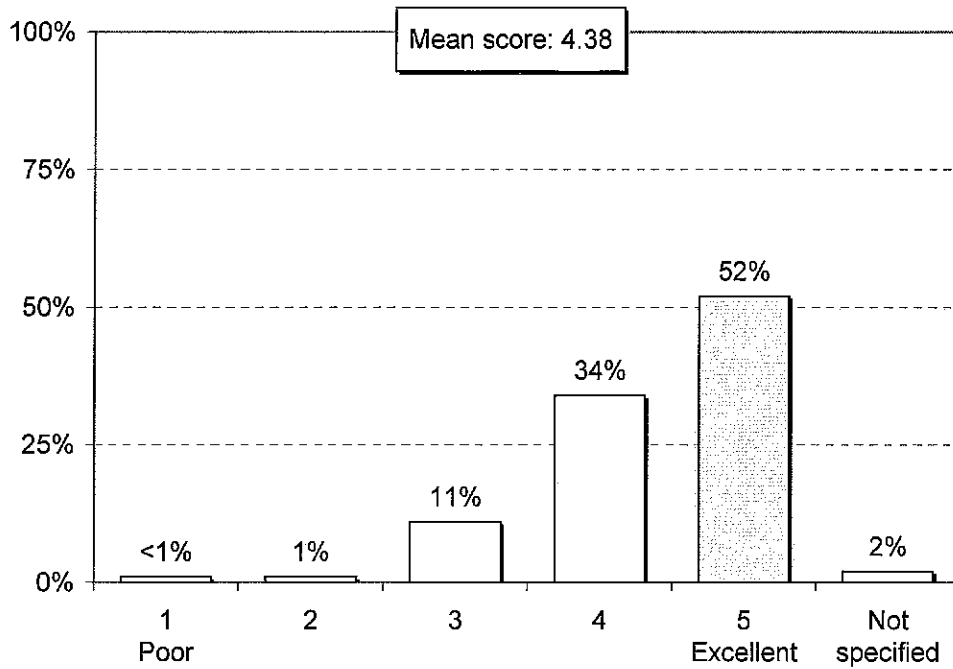
**Q. 18: Efficiency**



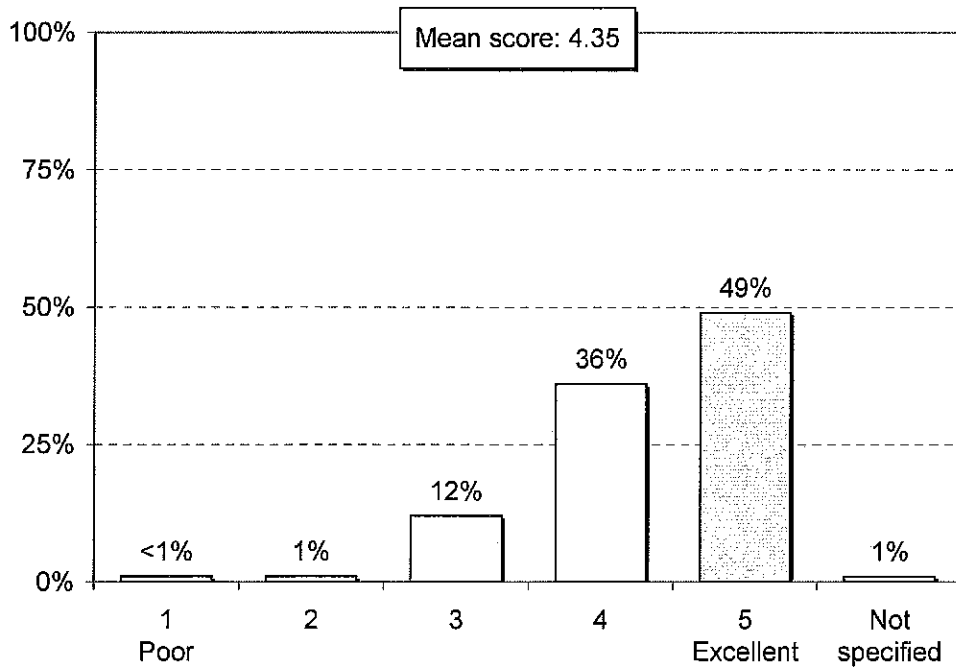


(Continued.) Please give your impressions of Blue Stakes representatives on the following:

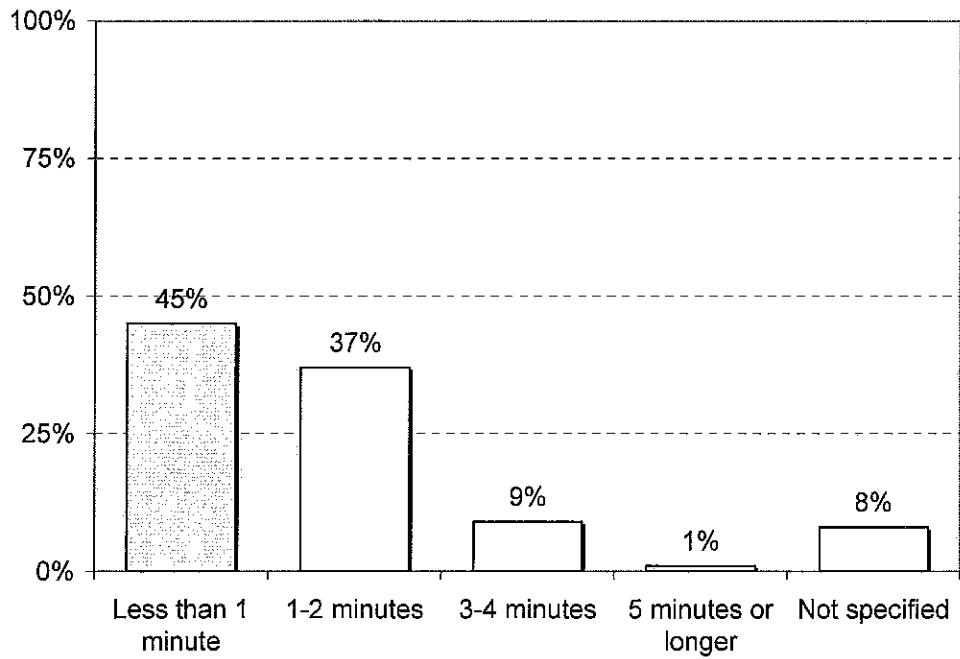
**Q. 19: Courtesy**



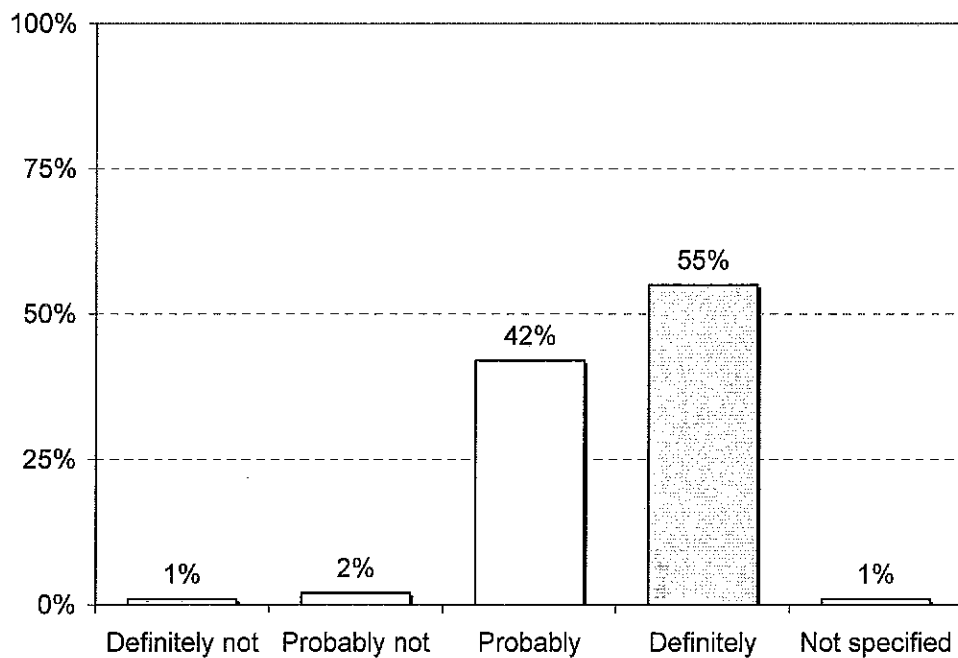
**Q. 20: Overall demeanor**



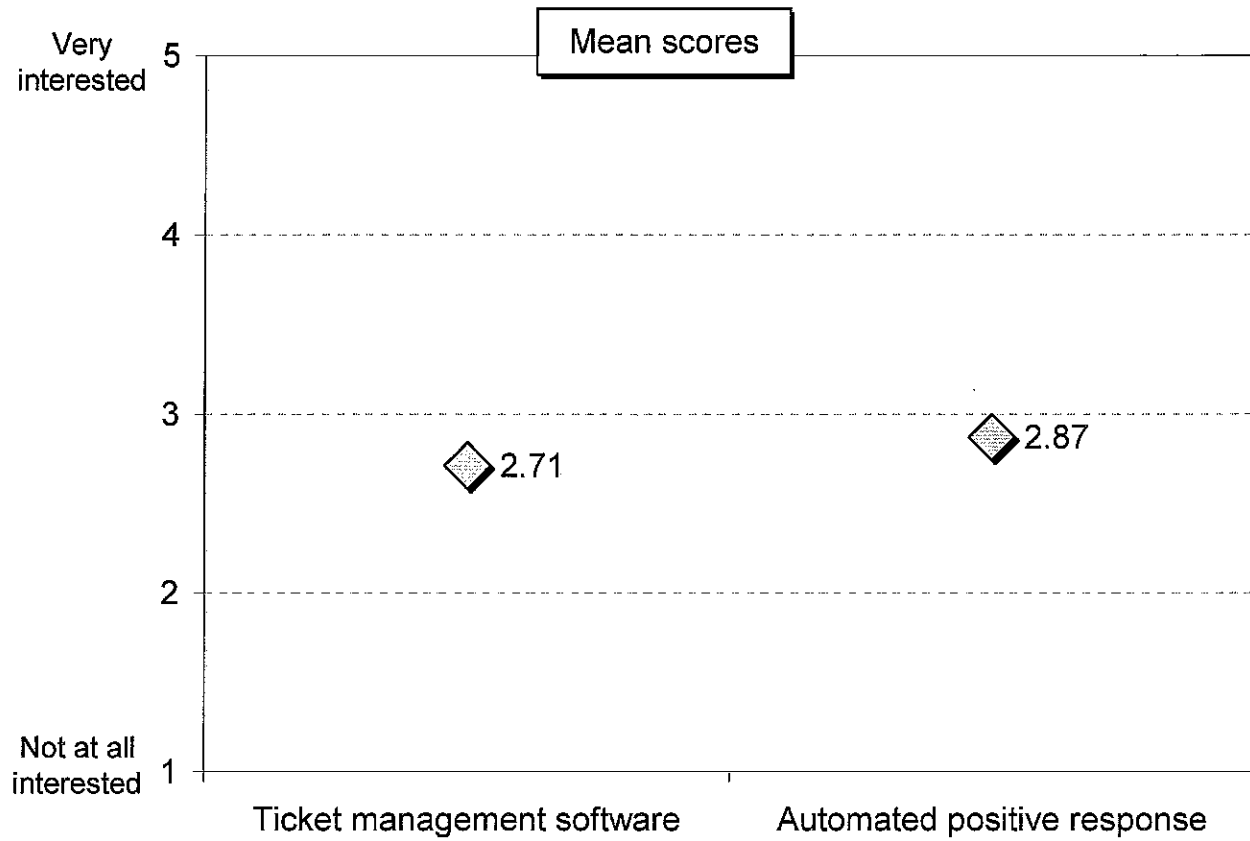
**Q. 21: And how long did you wait on the phone before you spoke with a representative?**



**Q. 22: Is Blue Stakes meeting the needs and expectations you have for it?**

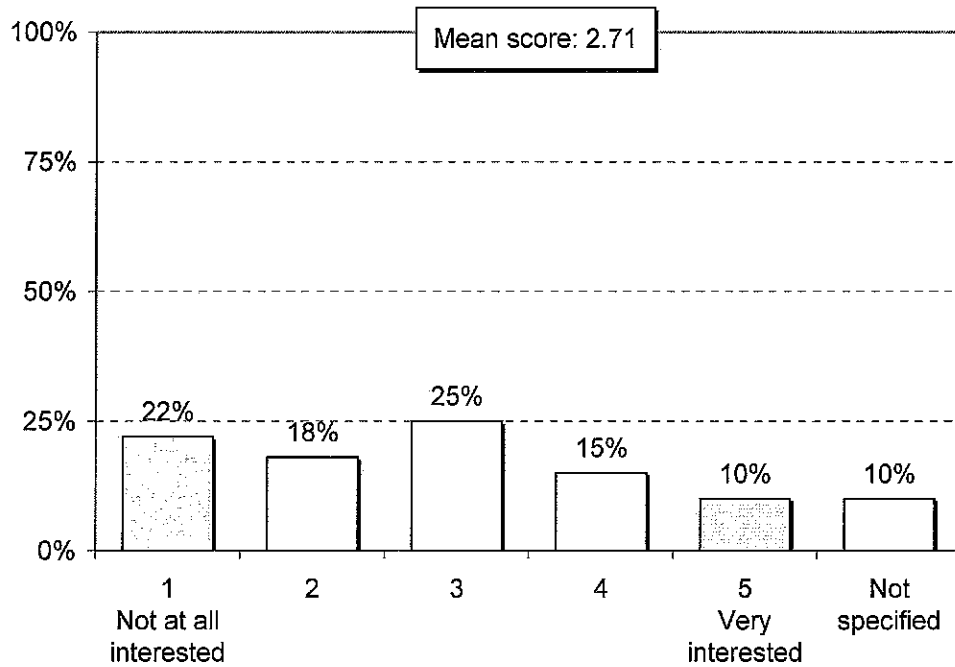


**Q. 23-24: How interested are you in having Blue Stakes provide the following services? Use a 1–5 scale, where one means *not at all interested* and five means *very interested*.**

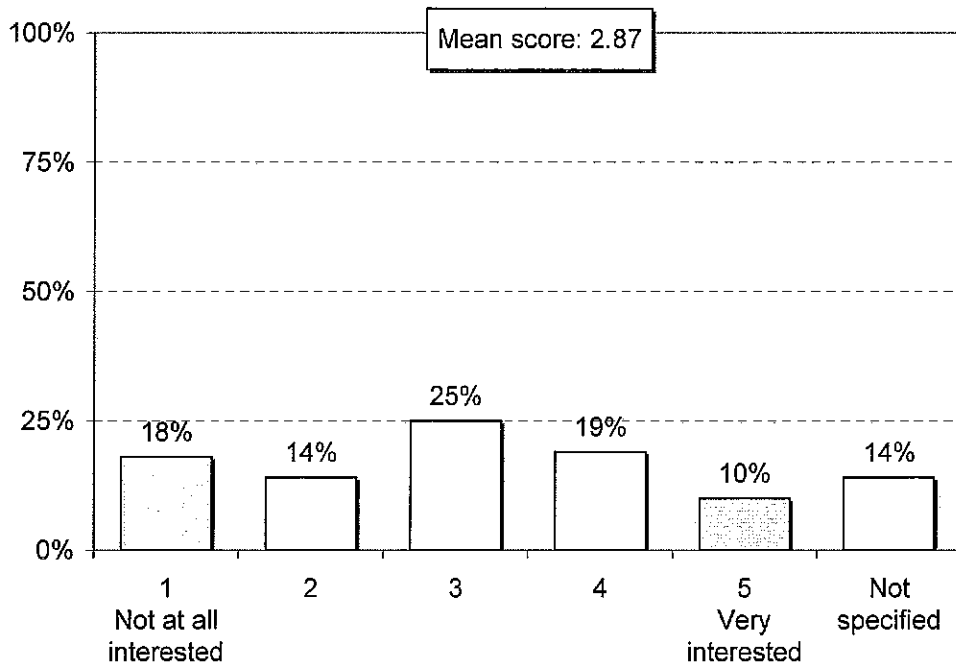


(Continued) How interested are you in having Blue Stakes provide the following services?

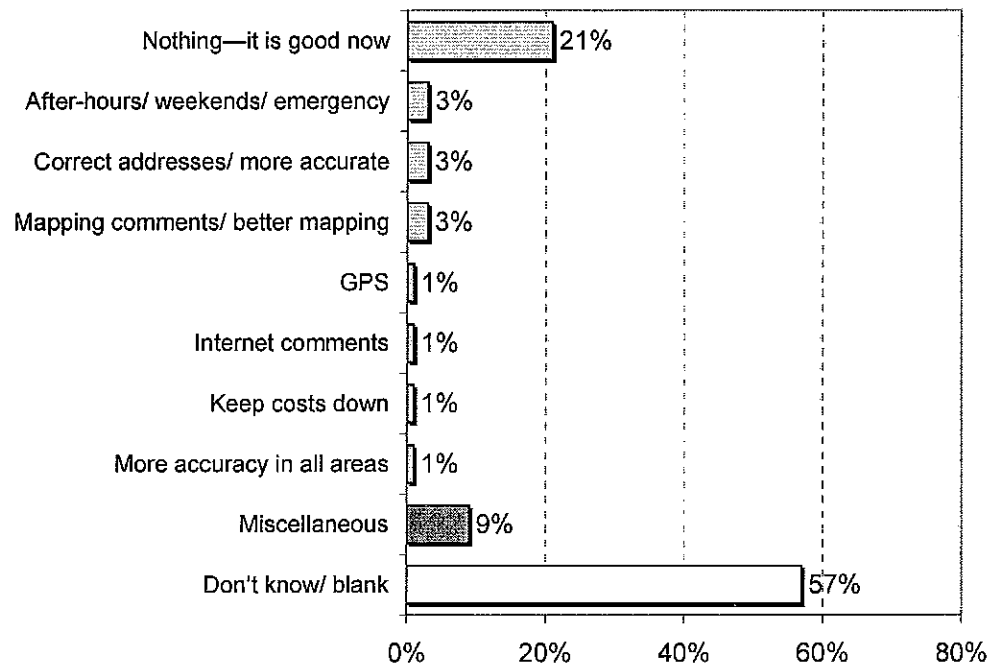
**Q. 23: Ticket management software**



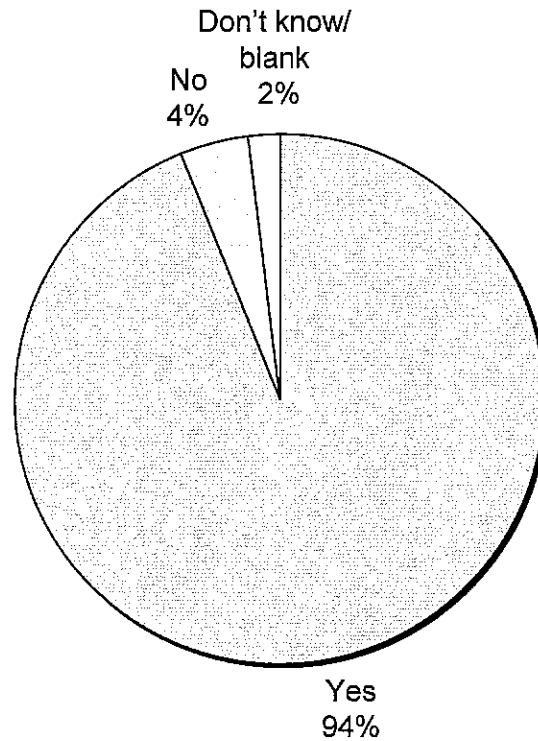
**Q. 24: Automated positive response**



**Q. 25: What can Blue Stakes do to improve the service it provides? (UNAIDED)**



**Q. 26:** Are Blue Stakes' hours of operation (7:00 a.m. – 5:00 p.m.) convenient for you?



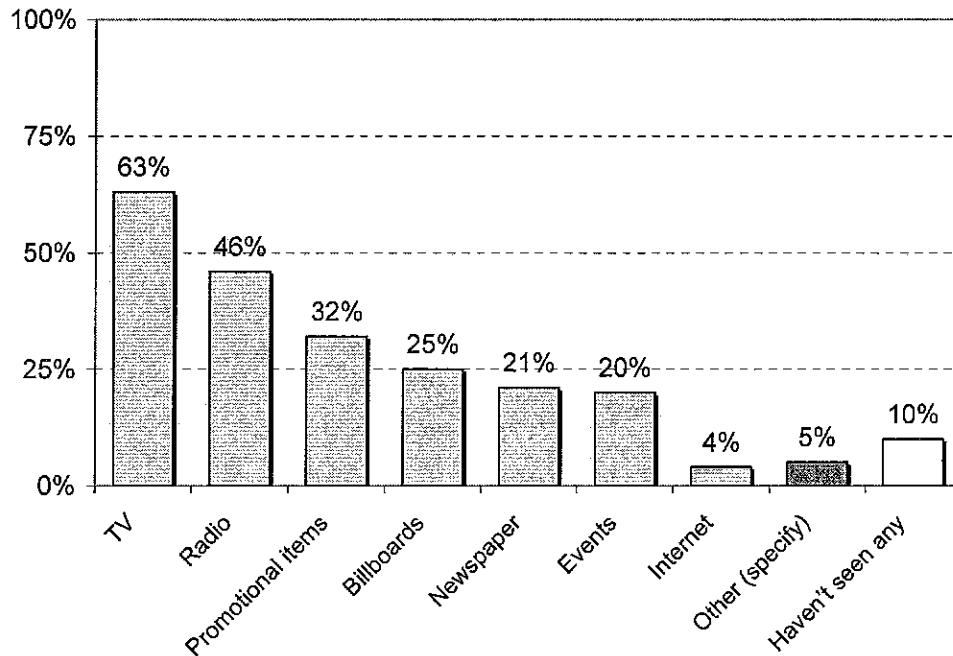
**Q. 27:** [IF NO ON Q. 26] Which hours would be better? (UNAIDED, n=16)

Responses

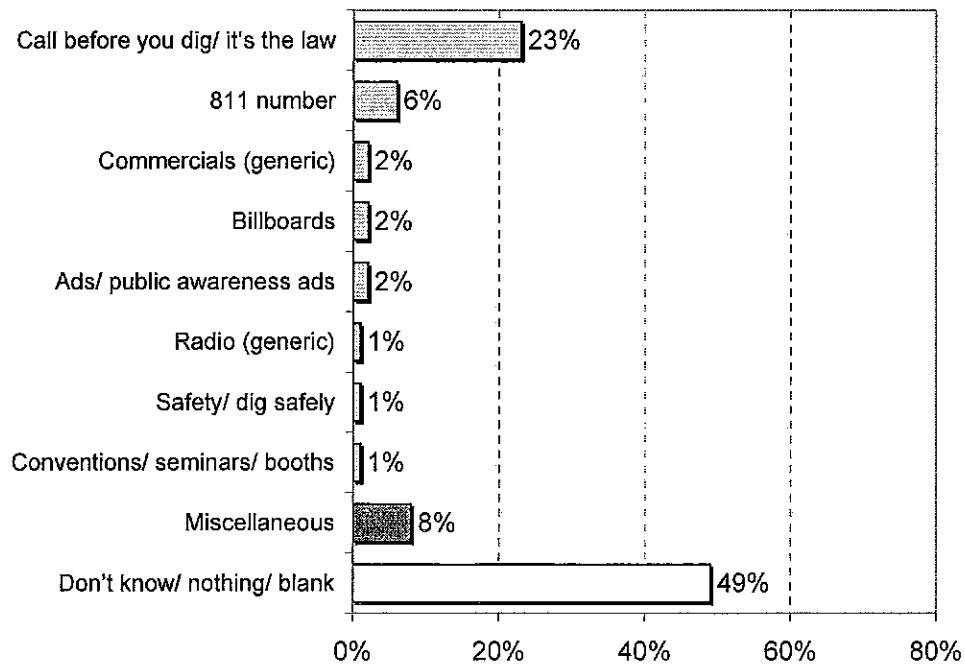
- Later evening hours (19%)
- Earlier morning hours (0%)
- 24-hour system (19%)
- Other—see comments in Appendix B (50%)
- No response (13%)

## Advertising

Q. 28-36: Where have you seen or heard Blue Stakes advertising? (Mark all that apply)

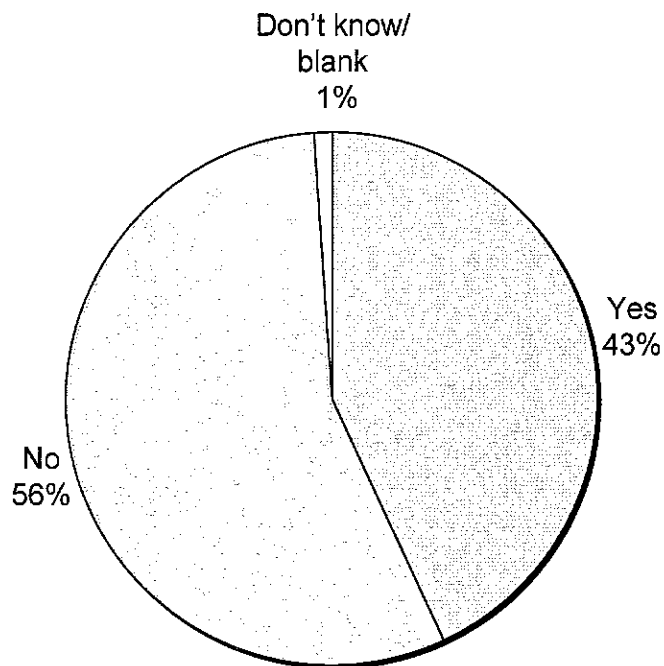


Q. 37: Please briefly describe the advertising that you saw or heard. (UNAIDED)

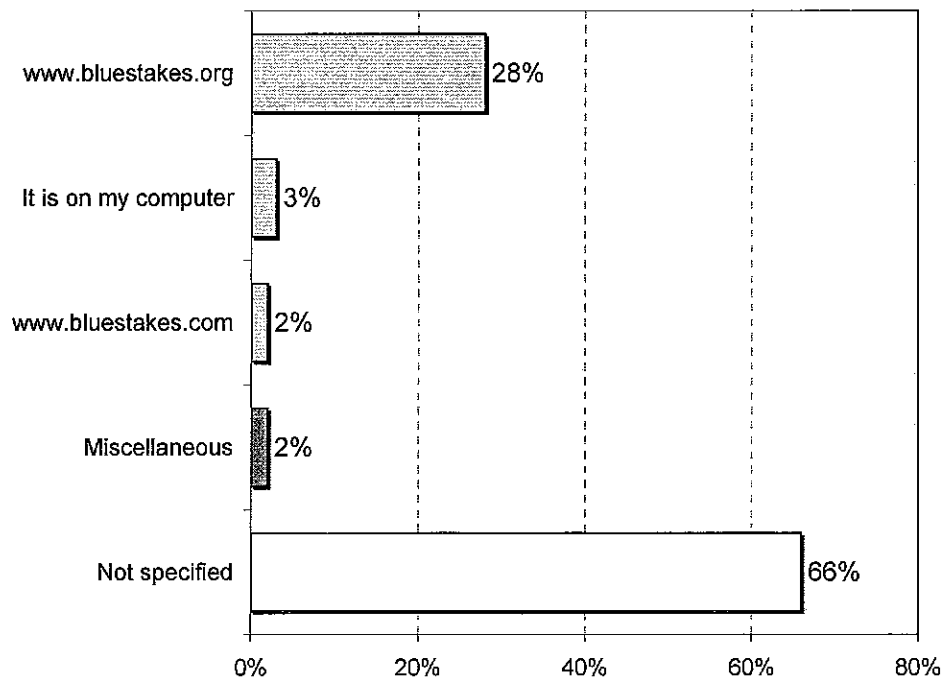


## Web Site

**Q. 38:** Have you visited the Blue Stakes Web site?

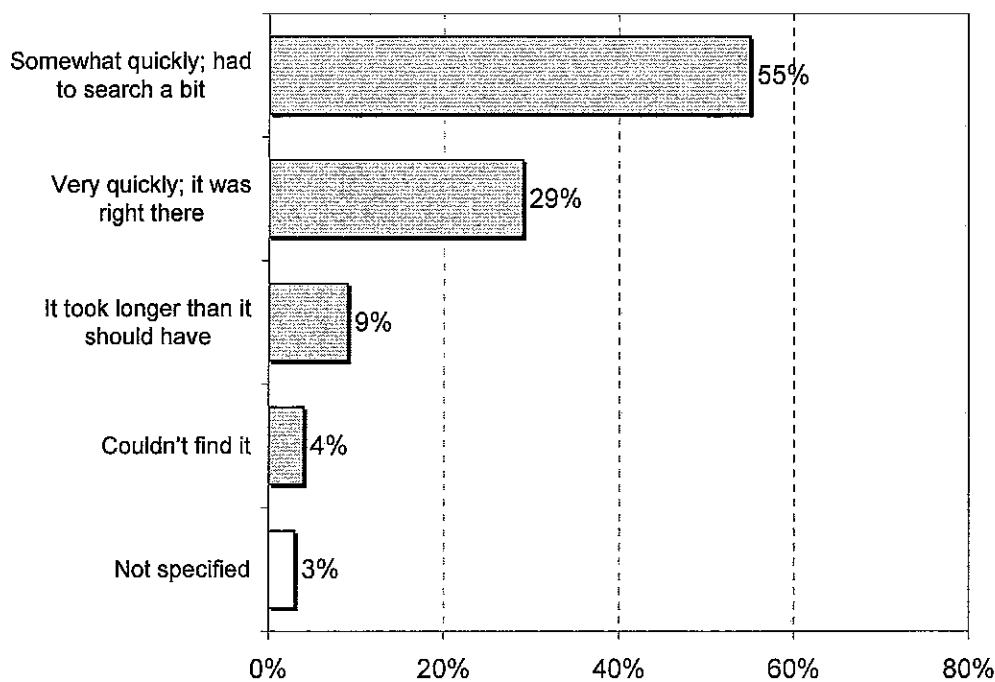


**Q. 39:** [IF YES ON Q. 38] Do you recall the address? (n=160)

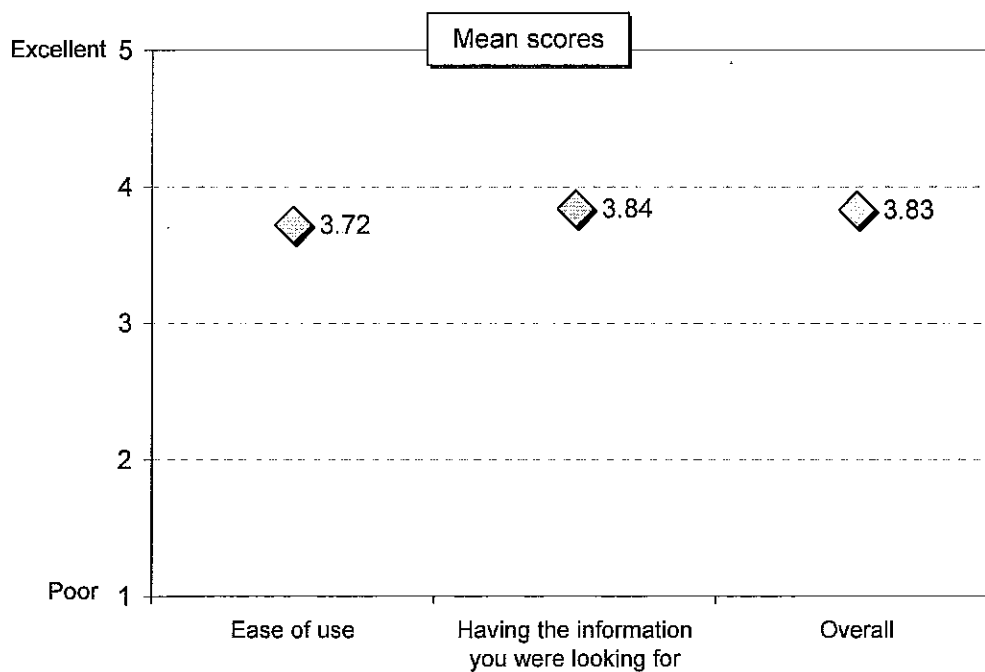




**Q. 40: [IF YES ON Q. 38] Once you reached it, how quickly were you able to find what you were looking for? (n=160)**

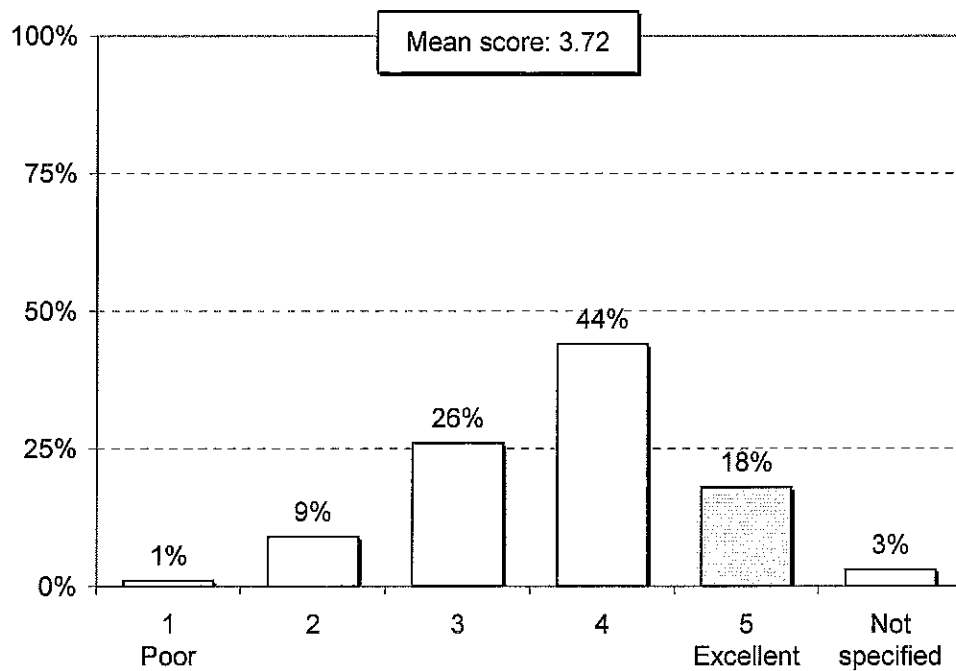


**Q. 41-43: [IF YES ON Q. 38] Please rate the Web site on the following items. (n=160)**

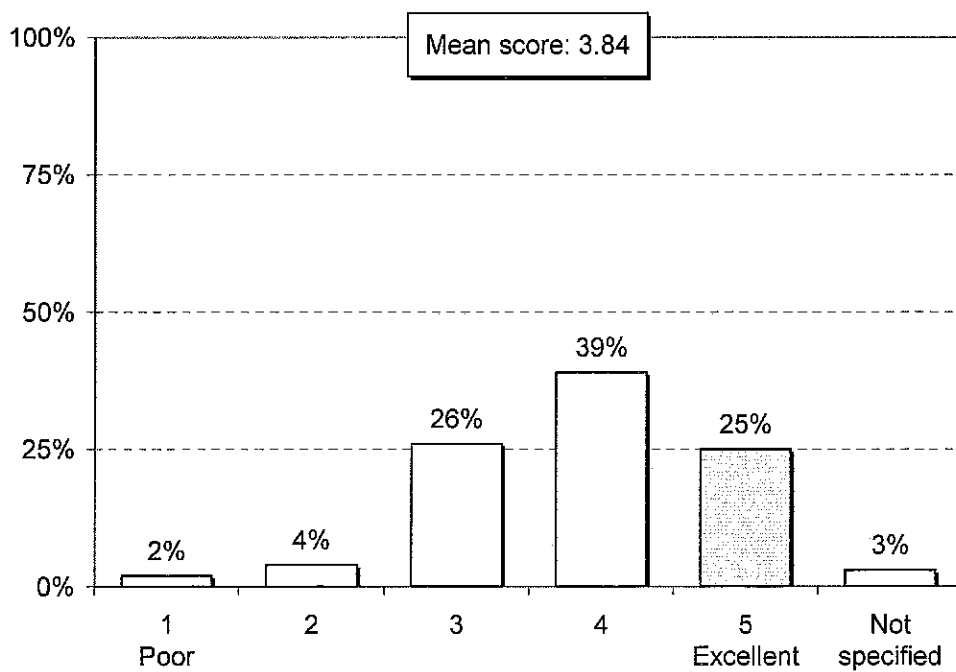


(Continued) Please rate the Web site on the following items:

**Q. 41: Ease of use**

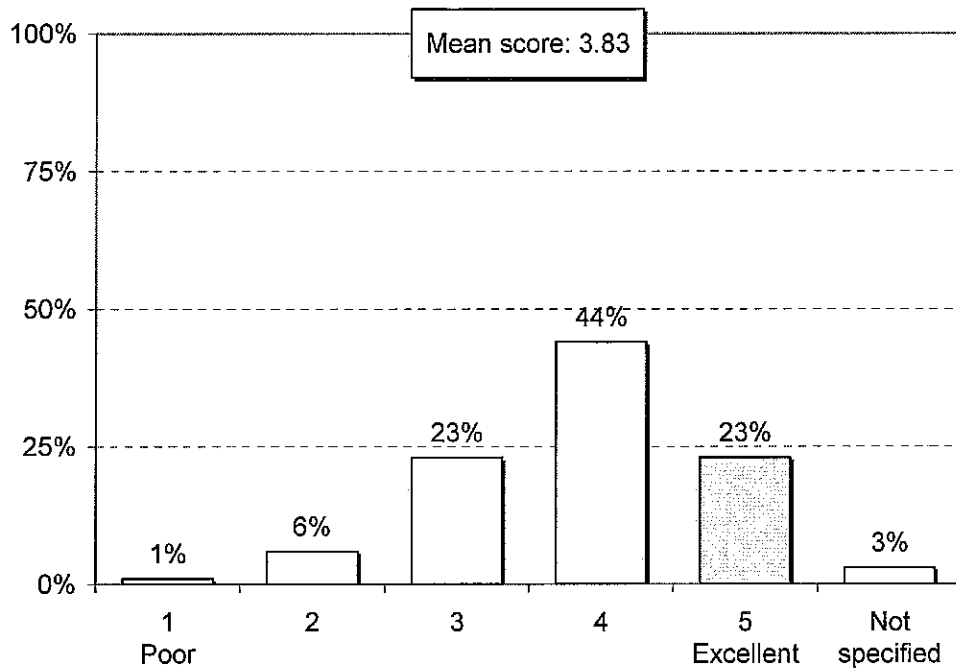


**Q. 42: Having the information you were looking for**

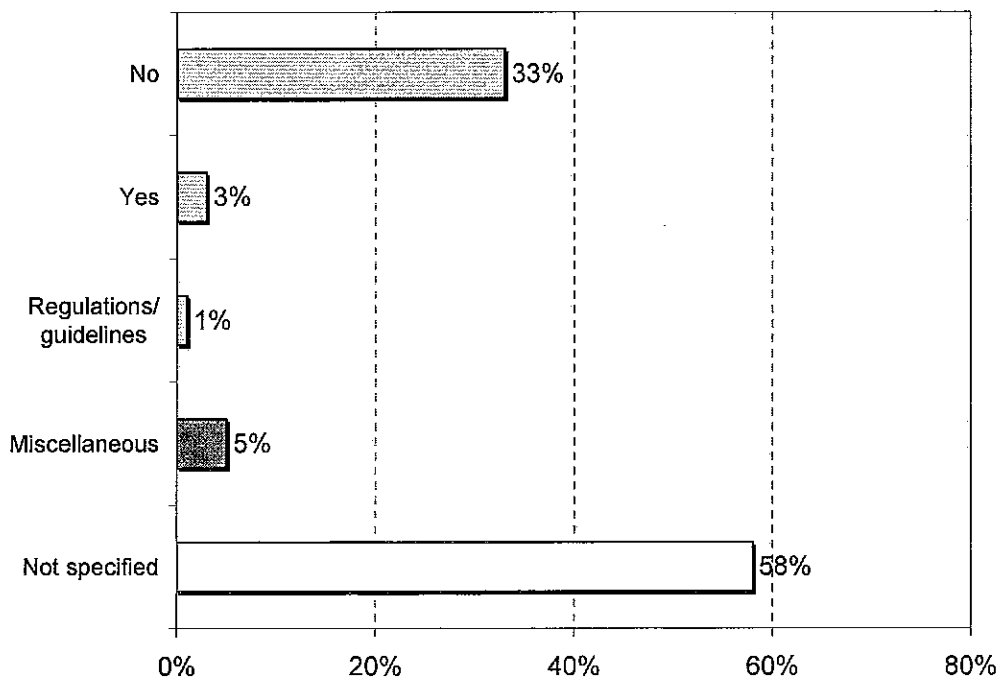


(Continued) Please rate the Web site on the following items:

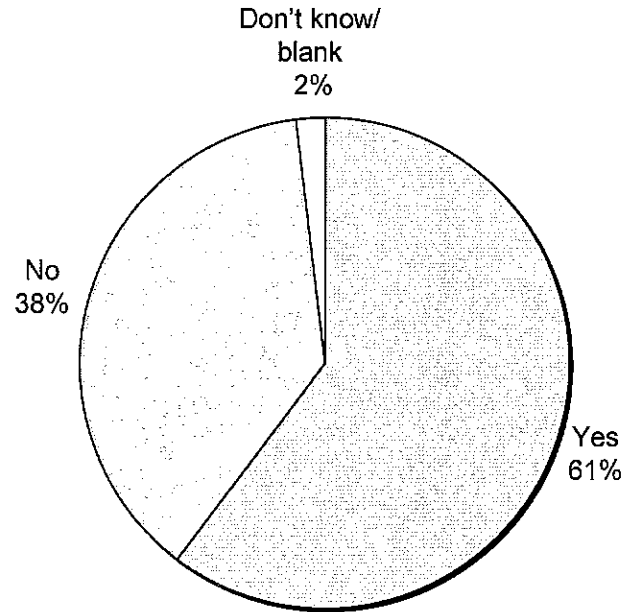
**Q. 43: Overall**



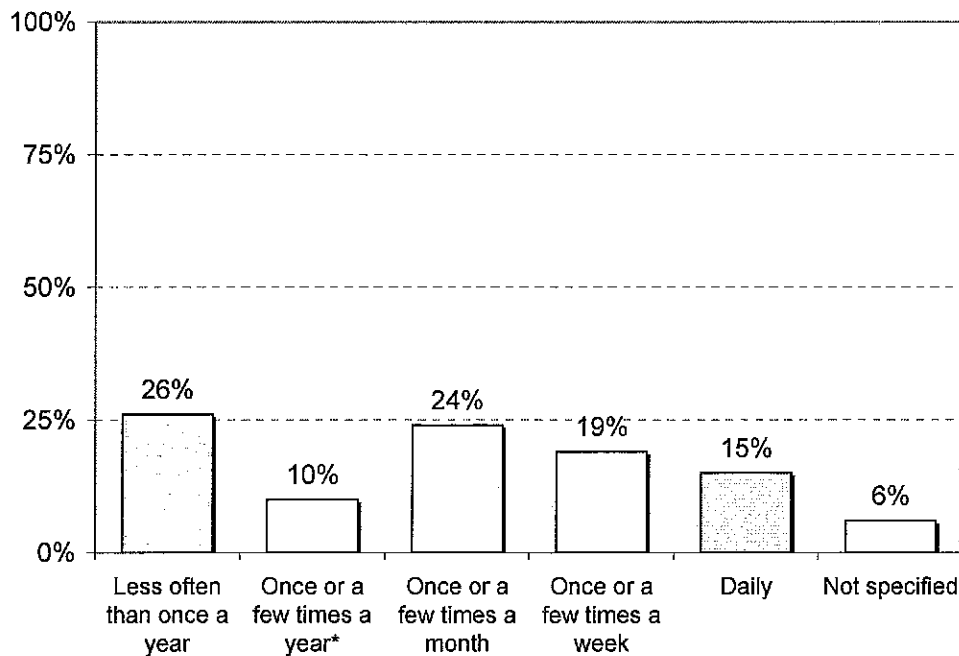
**Q. 44: [IF YES ON Q. 38] Did you get any information from the Web site that you didn't go there looking for? (What was it?) (n=160)**



**Q. 45: [IF YES ON Q.38] Are you familiar with Blue Stakes' remote access for members (RAM) on its Web site? (n=160)**

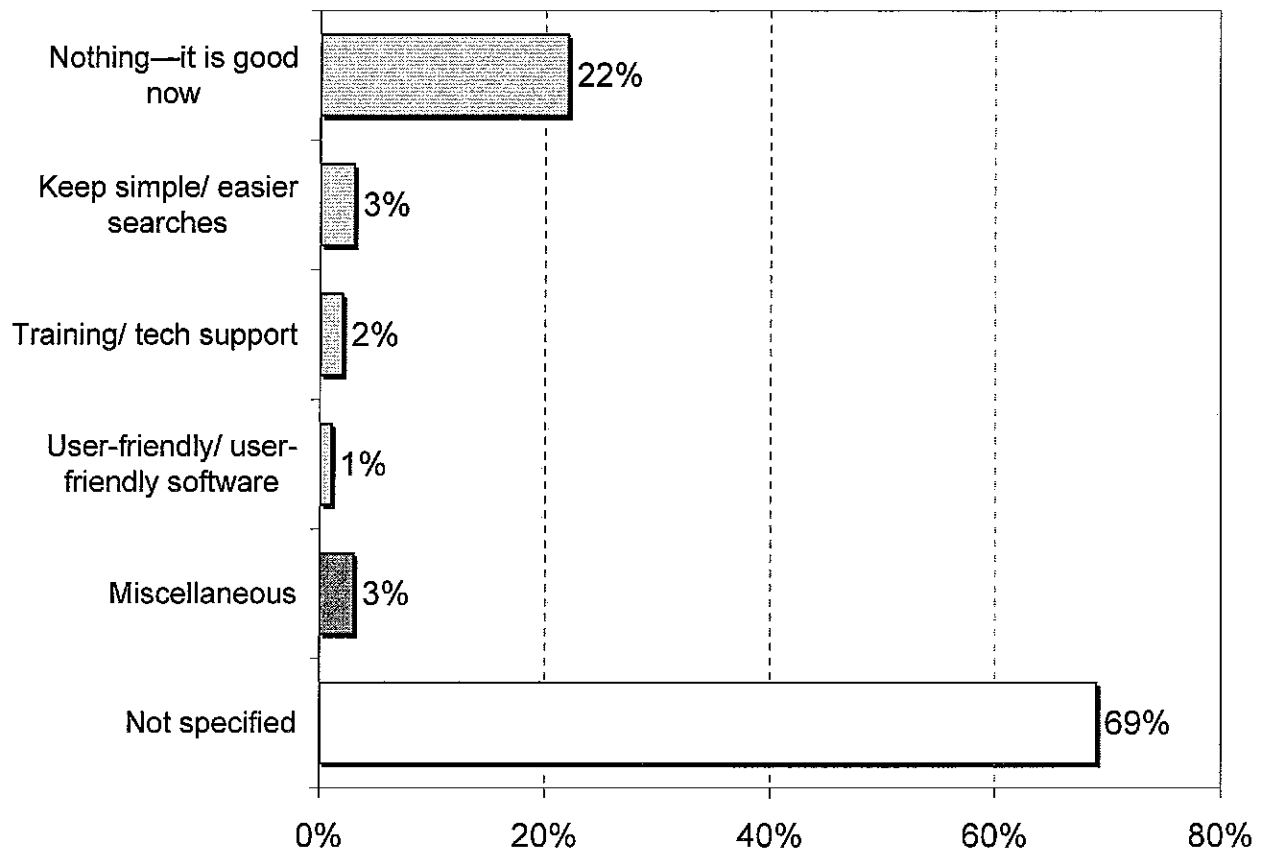


**Q. 46: [IF YES ON Q. 45] How frequently do you access the application? (n=97)**



*\*The responses for this question were not presented in an intuitive order on the survey: "Once or a few times a year" was asked after "Once or a few times a week." Because some respondents may have unintentionally marked a wrong answer, it is recommended that the results from this question not be used.*

**Q. 47: [IF YES ON Q.38] What can Blue Stakes do to improve its Web site? (n=160)**



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## **ATTACHMENT 5**

### **BLUE STAKES OF UTAH 2009 DAMAGE PREVENTION AWARENESS SEMINARS SUMMARY**

# **DAMAGE PREVENTION AWARENESS SEMINARS SUMMARY** 2009

<u>SUMMARY</u>	YEAR					
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Mailed Invitations	4,948	5,314	6,809	4,650	4,874	6,391
RSVP's	935	1,021	924	859	881	1,223
Excavators / Members Attending	470	782	726	641	765	1,007
Staff / Sponsors Attending	78	131	149	119	84	141
No-Shows	465	108	89	99	61	122
Walk-Ins	62	24	33	N/A	30	47
Total Attendance	610	937	875	760	850	1,148
Attendance / RSVP	65.24%	91.77%	94.70%	88.47%	96.48%	93.87%
Survey Response / Attending	54.75%	66.17%	77.60%	61.78%	59.06%	64.46%
First Time Attendees	N/A	N/A	N/A	N/A	51.20%	55.57%
DOPL Continuing Education Certificates	N/A	N/A	N/A	N/A	N/A	477
Companies Represented	189	305	288	258	259	421
						1,157
						93.09%
						67.82%
						47.02%
						393
						443
						1,348
						94.07%
						71.14%
						50.26%
						410
						479

<u>SURVEY RESULTS</u>	YEAR					
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>Meeting Content (Presentations)</b>						
Blue Stakes Presentation	4.25	4.26	4.28	4.30	4.39	4.36
Panel Discussion	4.32					
Common Ground Alliance		3.92				
Excavation Safety		4.08		3.87	4.29	4.36
Electrical Safety		4.29		4.51		
Properties of Natural Gas				4.68		
Natural Gas Excavation Safety						
Utility Locating					4.40	4.20
Ticket Process					4.29	
<b>Facilities</b>						
Breakfast / Dinner	4.29	4.25	4.29	4.23	4.21	4.16
Meeting Room	4.51	4.45	4.34	4.48	4.49	4.41
Sound	4.09	4.26	4.19	4.37	4.58	4.47
						4.35
						4.30
						4.18

**Rating Scale; 1 = very poor, 2 = poor, 3 = good, 4 = very good, & 5 = Excellent**



## **ATTACHMENT 6**

### **2008 DAMAGE PREVENTION GRANT EXPENSES**

# ACTUAL TRAVEL / PROGRAM EXPENSE (June 1, 2008 - April 14, 2009)

## DAMAGE PREVENTION SEMINARS (1,348 Attendees)

ESTIMATED DURATION	MILEAGE	TRANSPORTATION COST	LODGING	MEALS & INCIDENTALS	OTHER PROGRAM COSTS	TOTAL	REFERENCE
January 13, 2009 - Utah County DPA Seminar (193)	33	\$18.15	\$0.00	\$0.00	\$0.00	\$18.15	Check #5487, #5742, #5808
January 14, 2009 - Utah County DPA Seminar (131)	33	\$18.15	\$0.00	\$0.00	\$0.00	\$18.15	Check #5487, #5742, #5808
January 15, 2009 - Logan DPA Seminar (143)	199	\$109.45	\$280.00	\$156.00	\$8,400.00	\$3,164.96	Check #5742 & #5807
January 20, 2009 - South Jordan DPA Seminar (214)	28	\$15.40	\$0.00	\$0.00	\$0.00	\$15.40	Check #5487, #5767, #5821, #5824
January 21, 2009 - South Jordan DPA Seminar (247)	28	\$15.40	\$0.00	\$0.00	\$0.00	\$15.40	Check #5487, #5767, #5821, #5824
January 22, 2009 - Ogden DPA Seminar (219)	112	\$61.60	\$0.00	\$0.00	\$5,832.30	\$10,895.70	Check #5487, #5767, #5822
February 3, 2009 - St. George DPA Seminar (100)	858	\$471.90	\$280.00	\$156.00	\$2,662.63	\$5,893.90	Check #5767, #5822
February 4, 2009 - Cedar City DPA Seminar (101)	858	\$471.90	\$280.00	\$156.00	\$1,699.99	\$3,570.53	Check #5767, #5822
						\$2,607.89	Check #5795, #5836, #5860
<b>SUBTOTAL</b>	<b>2,149</b>	<b>\$1,181.95</b>	<b>\$840.00</b>	<b>\$468.00</b>	<b>\$32,094.73</b>	<b>\$34,584.68</b>	

## DAMAGE PREVENTION MEETINGS (1,249 Attendees) (INCLUDING TRAINING ON LAW CHANGES)

ESTIMATED DURATION	MILEAGE	TRANSPORTATION COST	LODGING	MEALS & INCIDENTALS	OTHER PROGRAM COSTS	TOTAL	REFERENCE
June 17, 2008 - Kearns Improvement District Safety Meeting (28)	31	\$15.66				\$15.66	
June 17, 2008 - AGC Southern Office Safety Committee Meeting (8)	565	\$285.33	\$70.00	\$78.00		\$433.33	
June 24, 2008 - Goosenest Water Company, Inc. Meeting (2)	90	\$45.45				\$45.45	
June 26, 2008 - Bluff Water Works & Abajo Gas Transmission Meeting (2)	633	\$319.67	\$70.00	\$78.00		\$467.67	
July 3, 2008 - Town of Anthony Meeting (4)	424	\$248.04		\$39.00		\$287.04	
July 15, 2008 - Granite Construction Safety Meeting (25)	99	\$57.92				\$57.92	
July 15, 2008 - Granite Construction Safety Meeting (25)	44	\$25.74				\$25.74	
July 23, 2008 - South Weber Irrigation Company Meeting (2)	97	\$56.75				\$56.75	
July 26, 2008 - Eastland SSD Meeting (1)	564	\$329.94		\$39.00		\$368.94	
August 5, 2008 - South Jordan City Public Works Safety Meeting (55)	12	\$7.02				\$7.02	
August 13, 2008 - West Valley City Meeting (3)	32	\$18.72				\$18.72	
August 15, 2008 - Trenton Town Meeting (1)	230	\$134.55				\$134.55	
August 18, 2008 - S.M. Stoller Meeting / Monticello (1)	546	\$319.41		\$39.00		\$358.41	
August 19, 2008 - Grantsville Irrigation Company Meeting (2)	115	\$57.28				\$57.28	
August 27, 2008 - DPU / Office of Pipeline Safety Meeting / Sandy (40)	10	\$5.85				\$5.85	
August 28, 2008 - Mendon City Meeting (3)	193	\$112.91				\$112.91	
September 2, 2008 - West Point City Meeting (1)	99	\$57.92				\$57.92	
September 4, 2008 - Cottonwood Heights Meeting (4)	19	\$11.12				\$11.12	
September 15, 2008 - Town of Amalgia Meeting (1)	219	\$128.12				\$128.12	
September 24, 2008 - Blue Stakes Annual Meeting of Members (78)	19	\$11.12				\$11.12	
October 1-2, 2008 - APWA/ASCE/UEA Workshop (42)	22	\$12.87				\$12.87	
October 6, 2008 - Utah State University Meeting (10)	202	\$118.17				\$118.17	
October 8, 2008 - Jordan Valley Water Conservancy District Safety Meeting (44)	16	\$9.36				\$9.36	
October 8, 2008 - American Fence Association Meeting (9)	19	\$11.12				\$11.12	
October 28, 2008 - ICS of Idaho (1)	386	\$225.81		\$39.00		\$264.81	
November 3, 2008 - Eagle Electric Safety Meeting (30)	17	\$9.95				\$9.95	
November 3, 2008 - SLC Department of Airports (1)	41	\$23.99				\$23.99	
November 4, 2008 - Southern Utah APWA Chapter Meeting (55)	571	\$334.04		\$39.00		\$373.04	
November 6, 2008 - AGC Contractor Continuing Education Training / SLC (51)	35	\$20.48				\$20.48	
November 11, 2008 - Pack Creek Irrigation Company Meeting (2)	446	\$260.91		\$39.00		\$299.91	
November 12, 2008 - West Warren-Warren WID Meeting (1)	99	\$57.92				\$57.92	
November 20, 2008 - Cornish Town Meeting (11)	236	\$138.06		\$39.00		\$177.06	
December 1, 2008 - All West Communications Safety Meeting (20)	107	\$62.60				\$62.60	
December 2, 2008 - Devon Energy Meeting / Neola (1)	310	\$181.35		\$39.00		\$220.35	
December 4, 2008 - LTAP Construction Inspector Training / SLC (34)	34	\$19.89				\$19.89	
December 22, 2009 - Holden Town Meeting (1)	233	\$136.31				\$136.31	
January 6, 2009 - Logan City Safety Meetings (67)	200	\$110.00		\$39.00		\$149.00	
February 5, 2009 - River Heights City Meeting (4)	200	\$110.00				\$110.00	
February 10, 2009 - AGC Contractor Continuing Education Training / Cedar City (22)	468	\$257.40		\$39.00		\$296.40	
February 10, 2009 - Granite Construction Safety Meetings / Layton (65)	87	\$47.85				\$47.85	
February 11, 2009 - Town of Amalgia Meeting (9)	219	\$120.45		\$39.00		\$159.45	
February 13, 2009 - KAPP Construction Safety Meeting / Ogden (28)	107	\$58.85				\$58.85	
February 24-26, 2009 - SLC Public Utilities Safety Meetings / SLC (85)	110	\$60.50				\$60.50	
February 26, 2009 - Barry Petroleum Meeting (2)	0	\$0.00				\$0.00	
March 3, 2009 - Four Corners Damage Prevention Group Mtg. / Blanding (79)	582	\$320.10	\$70.00	\$78.00		\$468.10	

<u>DESTINATION / PROGRAM</u>	<u>ESTIMATED DURATION</u>	<u>MILEAGE</u>	<u>TRANSPORTATION COST</u>	<u>LODGING</u>	<u>MEALS &amp; INCIDENTALS</u>	<u>OTHER PROGRAM COSTS</u>	<u>TOTAL</u>	<u>REFERENCE</u>
March 3-5, 2009 - RWAU Conference / St. George (42)	3 DAYS	572	\$314.60	\$140.00	\$78.00		\$532.60	
March 6, 2009 - ENCE Construction Safety Meeting / St. George (10)	1 DAY	0	\$0.00				\$0.00	
March 12, 2009 - AGC Contractor Continuing Education Training / SLC (52)	1 DAY	35	\$19.25				\$19.25	
March 12, 2009 - Henefer Upper Ditch Company / Henefer (1)	1 DAY	128	\$70.40				\$70.40	
March 18, 2009 - Kennecott Land Safety Meeting / South Jordan (26)	1 DAY	20	\$11.00				\$11.00	
March 19, 2009 - ABC Contractor Continuing Education Training / SLC (62)	1 DAY	35	\$19.25				\$19.25	
April 7, 2009 - ABC Contractor Continuing Education Training / Logan (78)	1 DAY	240	\$132.00				\$132.00	
April 7, 2009 - Huntsville South Bench Canal Company Meeting / Huntsville (2)	1 DAY		\$0.00				\$0.00	
April 8, 2009 - AGC Contractor Continuing Education Training / Richfield (28)	1 DAY	282	\$155.10		\$39.00		\$194.10	
April 13, 2009 - Morgan City Safety Meeting / Morgan (11)	1 DAY	125	\$68.75				\$68.75	
April 14, 2009 - AGC Contractor Continuing Education Training / Cedar City	1 DAY	468	\$257.40		\$39.00		\$296.40	
<b>SUBTOTAL</b>		<b>10,693</b>	<b>\$6,014.16</b>	<b>\$350.00</b>	<b>\$819.00</b>	<b>\$0.00</b>	<b>\$7,183.16</b>	

## DAMAGE PREVENTION BOOTH

<u>DESTINATION / PROGRAM</u>	<u>ESTIMATED DURATION</u>	<u>MILEAGE</u>	<u>TRANSPORTATION COST</u>	<u>LODGING</u>	<u>MEALS &amp; INCIDENTALS</u>	<u>OTHER PROGRAM COSTS</u>	<u>TOTAL</u>	<u>REFERENCE</u>
August 27, 2008 - RWAU Northern Conference / Layton	1 DAY	85	\$49.73	\$0.00	\$0.00	\$250.00	\$299.73	
September 10-12, 2008 - ULCT Annual Conference / SLC	2 DAYS	74	\$43.29	\$0.00	\$0.00	\$760.00	\$803.29	
October 1-2, 2008 - APWASCE/UCEA Annual Conference / WVC	2 DAYS	33	\$19.31	\$0.00	\$0.00	\$415.00	\$434.31	
March 3, 2009 - Four Corners Damage Prevention Group Mtg. / Blanding	2 DAYS	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
March 3-5, 2009 - RWAU Conference / St. George	3 DAYS	0	\$0.00	\$0.00	\$0.00	\$600.00	\$600.00	Check #5640
<b>SUBTOTAL</b>		<b>192</b>	<b>\$112.32</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$2,025.00</b>	<b>\$2,137.32</b>	

## BLUE STAKES VIRTUAL PRIVATE D.I.R.T.

<u>DESTINATION / PROGRAM</u>	<u>ESTIMATED DURATION</u>	<u>MILEAGE</u>	<u>TRANSPORTATION COST</u>	<u>LODGING</u>	<u>MEALS &amp; INCIDENTALS</u>	<u>OTHER PROGRAM COSTS</u>	<u>TOTAL</u>	<u>REFERENCE</u>
September 2008 - Acquisition & Deployment of Blue Stakes Virtual Private D.I.R.T.		0	\$0.00	\$0.00	\$0.00	\$1,000.00	\$1,000.00	Check #5663
November 2008 - Printing & Mailing of Blue Stakes Newsletter Promoting Blue Stakes Virtual Private D.I.R.T. Application		0	\$0.00	\$0.00	\$0.00	\$2,964.33	\$2,964.33	Check #5370, 5780
<b>SUBTOTAL</b>		<b>0</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$3,964.33</b>	<b>\$3,964.33</b>	

## CUSTOMER SATISFACTION SURVEYS

<u>DESTINATION / PROGRAM</u>	<u>ESTIMATED DURATION</u>	<u>MILEAGE</u>	<u>TRANSPORTATION COST</u>	<u>LODGING</u>	<u>MEALS &amp; INCIDENTALS</u>	<u>OTHER PROGRAM COSTS</u>	<u>TOTAL</u>	<u>REFERENCE</u>
Customer Telephone Survey Results - 1st Wave		0	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	Check #3260
Customer Telephone Survey Results - 2nd Wave		0	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	Check #5810
Customer Telephone Survey Results - 3rd Wave & Analysis of all 3 Waves		0	\$0.00	\$0.00	\$0.00	\$7,600.00	\$7,600.00	Invoice Dated 4/13/09
RTE - QTE Survey Analysis Final October 2008		0	\$0.00	\$0.00	\$0.00	\$3,600.00	\$3,600.00	Check #5786
Member Survey Results		0	\$0.00	\$0.00	\$0.00	\$9,375.00	\$9,375.00	Check #3288
<b>SUBTOTAL</b>		<b>0</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$32,575.00</b>	<b>\$32,575.00</b>	
<b>GRAND TOTAL</b>		<b>13,034</b>	<b>\$7,308.43</b>	<b>\$1,190.00</b>	<b>\$1,287.00</b>	<b>\$70,659.06</b>	<b>\$80,444.49</b>	

## ACTUAL LABOR COSTS (June 1, 2008 - April 14, 2009)

### LABOR CATEGORIES

#### PERFORMING CUSTOMER SATISFACTION SURVEYS

June 1, 2008 - April 14, 2009 - Created, Analyzed, & Distributed Results for 3 Customer Satisfaction Surveys  
 July 7-11, 2008 - Prepared Mailing Lists for 3 Separate Customer Satisfaction Surveys  
 October 28, 2008 - Revised Mailing List for Association Member Survey  
 November 25, 2008 - Prepared Mailing List for 2nd Wave of Telephone Customer Survey  
 February 23, 2009 - Prepared Mailing list for 3rd Wave of Telephone Customer Survey

PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
EXECUTIVE DIRECTOR	40	\$43.95	\$1,758.00
MEMBER SERVICES COORDINATOR	24	\$23.09	\$554.16
MEMBER SERVICES COORDINATOR	1	\$23.09	\$23.09
MEMBER SERVICES COORDINATOR	3	\$23.09	\$69.27
MEMBER SERVICES COORDINATOR	3	\$23.09	\$69.27
<b>SUBTOTAL</b>			<b>\$2,473.79</b>

#### PERFORMING EFFECTIVE CONTRACTOR, OPERATOR, & LOCATOR TRAINING DAMAGE PREVENTION SEMINARS

January 13, 2009 - Utah County DPA Seminar, January 14, 2009 - Utah County DPA Seminar,  
 January 15, 2009 - Logan DPA Seminar, January 20, 2009 - South Jordan DPA Seminar,  
 January 21, 2009 - South Jordan DPA Seminar, January 22, 2009 - Ogden DPA Seminar,  
 February 3, 2009 - St. George DPA Seminar, & February 4, 2009 - Cedar City DPA Seminar

PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
EXECUTIVE DIRECTOR	180	\$43.95	\$7,911.00
MEMBER SERVICES COORDINATOR	120	\$23.09	\$2,770.80
CONTACT CENTER MANAGER	60	\$33.42	\$2,005.20
IT MANAGER	60	\$32.60	\$1,956.00
IT / GIS TECHNICIAN	10	\$17.92	\$179.20
ADMINISTRATIVE ASSISTANT	70	\$15.45	\$1,081.50
CUSTOMER SERVICE REPRESENTATIVES	78	\$12.53	\$977.34
<b>SUBTOTAL</b>			<b>\$16,881.04</b>

#### DAMAGE PREVENTION BOOTHS

August 27, 2008 - RWAU Northern Conference  
 September 10-12, 2008 - ULCT Annual Conference  
 October 1-2, 2008 - APWA Fall Conference  
 March 3-5, 2009 - RWAU Conference / St. George  
 March 31-April 2, 2009 - WEAU Conference

PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
EXECUTIVE DIRECTOR	8	\$43.95	\$351.60
EXECUTIVE DIRECTOR	16	\$43.95	\$703.20
CONTACT CENTER MANAGER	8	\$33.42	\$267.36
EXECUTIVE DIRECTOR	8	\$43.95	\$351.60
EXECUTIVE DIRECTOR	N/A	\$45.27	\$0.00
EXECUTIVE DIRECTOR	28	\$45.27	\$1,267.56
<b>SUBTOTAL</b>			<b>\$2,941.32</b>

#### DAMAGE PREVENTION MEETINGS / TRAINING MEETINGS ON LAW CHANGES

June 17, 2008 - Kearns Improvement District Safety Meeting  
 June 17, 2008 - AGC Southern Office Safety Committee Meeting  
 June 24, 2008 - Goosenest Water Company, Inc. Meeting  
 June 26, 2008 - Bluff Water Works & Abajo Gas Transmission Meeting  
 July 3, 2008 - Town of Arimomy Meeting  
 July 15, 2008 - Granite Construction Safety Meeting  
 July 23, 2008 - Vineyard Town Meeting  
 July 25, 2008 - South Weber Irrigation Company Meeting  
 July 28, 2008 - Eastland SSD Meeting  
 August 5, 2008 - South Jordan City Public Works Safety Meeting  
 August 13, 2008 - West Valley City Meeting  
 August 15, 2008 - Trenton Town Meeting  
 August 18, 2008 - S M Stoller Meeting / Monticello  
 August 19, 2008 - Grantsville Irrigation Company Meeting  
 August 27, 2008 - DPU / Office of Pipeline Safety Meeting  
 August 28, 2008 - Mendon City Meeting  
 September 2, 2008 - West Point City Meeting  
 September 4, 2008 - Cottonwood Heights Meeting  
 September 8, 2008 - Broadweave Networks Meeting  
 September 15, 2008 - Town of Amalgia Meeting  
 September 24, 2008 - Blue Stakes Annual Meeting of Members  
 October 1-2, 2008 - APWAVASCE/UCEA Workshop

PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	10	\$43.95	\$439.50
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	14	\$43.95	\$615.30
EXECUTIVE DIRECTOR	9	\$43.95	\$395.55
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	12	\$43.95	\$527.40
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	12	\$43.95	\$527.40
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	2	\$43.95	\$87.90
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	N/A	\$43.95	\$0.00



PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
CONTACT CENTER MANAGER	3	\$33.42	\$100.26
EXECUTIVE DIRECTOR	10	\$43.95	\$439.50
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	2.5	\$43.95	\$109.88
EXECUTIVE DIRECTOR	10	\$43.95	\$439.50
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	10	\$43.95	\$439.50
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	1.5	\$43.95	\$65.93
EXECUTIVE DIRECTOR	4	\$43.95	\$175.80
EXECUTIVE DIRECTOR	7	\$43.95	\$307.65
EXECUTIVE DIRECTOR	3	\$43.95	\$131.85
EXECUTIVE DIRECTOR	6	\$43.95	\$263.70
EXECUTIVE DIRECTOR	10	\$43.95	\$439.50
EXECUTIVE DIRECTOR	6	\$45.27	\$271.62
EXECUTIVE DIRECTOR	10	\$45.27	\$452.70
EXECUTIVE DIRECTOR	6	\$33.42	\$200.52
EXECUTIVE DIRECTOR	6	\$45.27	\$271.62
EXECUTIVE DIRECTOR	5	\$45.27	\$226.35
EXECUTIVE DIRECTOR	10	\$45.27	\$452.70
EXECUTIVE DIRECTOR	2	\$45.27	\$90.54
EXECUTIVE DIRECTOR	8	\$45.27	\$362.16
EXECUTIVE DIRECTOR	16	\$45.27	\$724.32
EXECUTIVE DIRECTOR	8	\$45.27	\$362.16
EXECUTIVE DIRECTOR	3	\$45.27	\$135.81
EXECUTIVE DIRECTOR	5	\$45.27	\$226.35
EXECUTIVE DIRECTOR	3	\$45.27	\$135.81
EXECUTIVE DIRECTOR	3	\$45.27	\$135.81
EXECUTIVE DIRECTOR	6	\$45.27	\$271.62
EXECUTIVE DIRECTOR	4	\$45.27	\$181.08
EXECUTIVE DIRECTOR	8	\$45.27	\$362.16
EXECUTIVE DIRECTOR	5	\$45.27	\$226.35
EXECUTIVE DIRECTOR	10	\$45.27	\$452.70
<b>SUBTOTAL</b>			<b>\$14,784.24</b>

## IMPLEMENTATION OF VIRTUAL DAMAGE INFORMATION REPORTING TOOL (D.I.R.T.)

PERFORMED BY	LABOR HOURS	LABOR RATE	EXPENSE
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
IT MANAGER	1	\$32.60	\$32.60
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
IT MANAGER	1	\$32.60	\$32.60
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
MEMBER SERVICES COORDINATOR	3	\$22.03	\$66.09
ADMINISTRATIVE ASSISTANT	2	\$15.45	\$30.90
MEMBER SERVICES COORDINATOR	2	\$22.03	\$44.06
<b>SUBTOTAL</b>			<b>\$602.79</b>
<b>TOTAL</b>			<b>\$37,683.18</b>
<b>OVERHEAD</b>			<b>\$11,304.95</b>
<b>GRAND TOTAL</b>			<b>\$48,988.13</b>

# **ATTACHMENT 7**

## **LEGISLATION HB341 ENROLLED COPY**

**DAMAGE TO UNDERGROUND UTILITY  
FACILITIES AMENDMENTS**

2008 GENERAL SESSION

STATE OF UTAH

**Chief Sponsor: David Clark**

Senate Sponsor: Sheldon L. Killpack

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**LONG TITLE**

**General Description:**

This bill addresses liability provisions and other provisions concerning the location of an underground utility facility.

**Highlighted Provisions:**

This bill:

- defines terms;
- requires certain information be provided concerning an operators' association;
- provides warning language that may be included with a building permit;
- addresses requirements for and effects of a notice of excavation;
- describes an underground facility that need not be marked;
- outlines a method for determining the precise location of a marked underground utility facility;
- requires an excavator to call 911 if certain damage occurs;
- provides a civil penalty for a violation of the chapter;
- provides for enforcement by the attorney general;
- limits the period for which an operators' association must maintain a record of notices of excavation;
- addresses the installation of a nonmetallic underground facility;
- creates the Underground Facilities Damage Dispute Board to arbitrate disputes arising under the chapter; and
- makes technical changes.

**Monies Appropriated in this Bill:**

None

**Other Special Clauses:**

None

**Utah Code Sections Affected:**

**AMENDS:**

**54-8a-2**, as last amended by Laws of Utah 1998, Chapter 198

**54-8a-3**, as last amended by Laws of Utah 1993, Chapter 87

**54-8a-4**, as last amended by Laws of Utah 2001, Chapter 189

**54-8a-5**, as last amended by Laws of Utah 1998, Chapter 198

**54-8a-5.5**, as enacted by Laws of Utah 1996, Chapter 203

**54-8a-6**, as last amended by Laws of Utah 1998, Chapter 198

**54-8a-7**, as last amended by Laws of Utah 2001, Chapter 189

**54-8a-9**, as last amended by Laws of Utah 1993, Chapter 87

**54-8a-10**, as last amended by Laws of Utah 1993, Chapter 87

**ENACTS:**

**54-8a-3.5**, Utah Code Annotated 1953

**54-8a-12**, Utah Code Annotated 1953

**54-8a-13**, Utah Code Annotated 1953

**REPEALS AND REENACTS:**

**54-8a-8**, as last amended by Laws of Utah 2001, Chapter 189

**REPEALS:**

**54-8a-8.5**, as last amended by Laws of Utah 2004, Chapter 90

**54-13-6**, as enacted by Laws of Utah 1989, Chapter 131

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*Be it enacted by the Legislature of the state of Utah:*

Section 1. Section **54-8a-2** is amended to read:

**54-8a-2. Definitions.**



58 As used in this chapter:

59 (1) "Association" means two or more operators organized to receive notification of  
60 excavation activities in a specified area, as provided by Section 54-8a-9.

61 (2) "Board" means the Underground Facilities Damage Dispute Board created in  
62 Section 54-8a-13.

63 ~~[(2)]~~ (3) "Emergency" means an occurrence or suspected natural gas leak necessitating  
64 immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential  
65 public services.

66 ~~[(3)]~~ (4) "Excavate" or "excavation" means an operation in which earth, rock, or other  
67 material on or below the ground is moved or displaced by tools, equipment, or explosives.

68 ~~[(4)]~~ (5) "Excavator" means any person or entity that excavates or conducts excavation  
69 activities.

70 ~~[(5)]~~ (6) "48 hours" means a 48-hour period occurring during business days which  
71 includes any day except Saturday, Sunday, or a legal holiday.

72 (7) "Hand tool" means an implement:

73 (a) powered by hand; or

74 (b) designed to avoid damaging an underground facility, including a vacuum excavation  
75 tool and air knife.

76 (8) "Location" means the site of a proposed area of excavation described by:

77 (a) (i) street address, if available; and

78 (ii) the area at that street address to be excavated; or

79 (b) if there is no street address available, the area of excavation using any available  
80 designations, including a nearby street or road, an intersection, GPS coordinates, or other  
81 generally accepted methods.

82 ~~[(6)]~~ (9) "Location request assignment" means a number assigned to a proposed  
83 excavation by an association or operator upon receiving notice of the proposed excavation from  
84 the excavator.

85 ~~[(7)]~~ (10) (a) "Operator" means a person ~~[or entity which]~~ who owns, operates, or

86 maintains an underground ~~[facilities]~~ facility.

87 (b) "Operator" does not include an owner of real property where underground facilities  
88 are:

89 (i) located solely within the property;

90 (ii) used exclusively to furnish services on the property; and

91 (iii) maintained under the operation and control of that owner.

92 ~~[(8)] (11)~~ "Person" includes ~~[individuals, government entities, corporations,~~  
93 ~~partnerships, associations, and companies and their trustees, receivers, assignees, and personal~~  
94 ~~representatives.];~~

95 (a) an individual, government entity, corporation, partnership, association, or company;  
96 and

97 (b) the trustee, receiver, assignee, and personal representative of a person listed in  
98 Subsection (11)(a).

99 (12) "24 hours" means a 24-hour period, excluding hours occurring during a Saturday,  
100 Sunday, or a legal holiday.

101 ~~[(9)] (13)~~ "Underground facility" means personal property that is buried or placed  
102 below ground level for use in the storage or conveyance of any of the following:

103 (a) water;

104 (b) sewage;

105 (c) communications, including electronic, photonic, telephonic, or telegraphic  
106 communications;

107 (d) television, cable television, or other telecommunication signals, including  
108 transmission to subscribers of video or other programming;

109 (e) electric power;

110 (f) oil, gas, or other fluid and gaseous substances;

111 (g) steam;

112 (h) slurry; or

113 (i) dangerous materials or products.

Section 2. Section **54-8a-3** is amended to read:

**54-8a-3. Information filed with county clerk.**

(1) An operator shall file with the county clerk of a county in which the operator has an underground [~~facilities~~] facility the following:

(a) the name of each municipality, city, or town in which the operator has an underground [~~facilities~~] facility within that county;

(b) the operator's name; [~~and~~]

(c) the title, telephone number, and address of the operator's representative designated to receive calls regarding excavation[~~-~~]; and

(d) a statement concerning whether the operator is a member of an association and, if the operator is a member of an association, the name of and contact information for the association.

(2) In [~~counties~~] a county where an association is established, the association shall file its telephone number and a list of its members who are operators with the county clerk on behalf of [~~all~~] any participating [operators] operator.

Section 3. Section **54-8a-3.5** is enacted to read:

**54-8a-3.5. Excavation-related information included with construction and building permit.**

An entity issuing a permit for building or construction that may require excavation may, and is encouraged to, include a notice on or with a permit stating, "Attention, Utah law requires any excavator to notify the owner of underground facilities 48 hours before excavating and comply with Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities."

Section 4. Section **54-8a-4** is amended to read:

**54-8a-4. Notice of excavation.**

(1) (a) Before excavating, an excavator shall notify each operator with an underground [~~facilities~~] facility in the area of the proposed excavation.

(b) The requirements of Subsection (1)(a) do not apply:

(i) if there is an emergency;

(ii) while gardening; or

(iii) while tilling private ground.

(2) The notice required by Subsection (1) shall:

(a) be given:

(i) by telephone;

(ii) in person; or

(iii) by other means acceptable to each operator;

(b) be given not:

(i) less than 48 hours before excavation begins; or

(ii) more than ~~[seven]~~ 14 days before excavation begins; and

(c) include the proposed excavation's anticipated:

(i) location, with reasonable specificity;

(ii) dimensions;

(iii) type; and

(iv) duration.

(3) If the proposed excavation's anticipated location and dimensions cannot be described as required under Subsection (2)(c), an excavator shall ~~[mark]~~ outline the proposed excavation site in white paint, stakes, flags, or other industry-accepted manner.

(4) If more than one excavator will operate at the same excavation site, each excavator shall provide the notice required by this section.

~~[(4)]~~ (5) If there is an association in the county, notice to that association constitutes notice to each operator ~~[in the county]~~ that has facilities within the proposed excavation site.

~~[(5) If an excavation on a single project lasts more than 14 days, the excavator shall give notice at least once each additional 14-day period.]~~

(6) (a) Notice given under this section is valid for 14 days from the day on which the notice is given.

(b) If an excavation will continue beyond the 14-day period under Subsection (6)(a), the excavator shall provide notice of that fact at least 48 hours before expiration of the 14-day

170 period.

171 (c) A notice under Subsection (6)(b) is valid for 14 days from the day on which the  
172 previous notice expires.

173 (d) An excavator shall give notice as provided in this Subsection (6) for the duration of  
174 the excavation.

175 ~~[(6)]~~ (7) If markings made by the operator have been disturbed so that the markings no  
176 longer identify the underground ~~[facilities]~~ facility:

177 (a) before excavating the site an excavator shall notify:

178 (i) the association; or

179 (ii) each operator; and

180 (b) the operator shall mark the area again within 48 hours of the renotification.

181 ~~[(7)]~~ (8) An excavator may begin excavation if:

182 (a) (i) all underground facilities have been:

183 (A) located; and

184 (B) marked; or

185 (ii) the operators have indicated that there are no underground facilities within the  
186 proposed excavation site;

187 (b) (i) 48 hours have elapsed from the time of initial notice; and

188 (ii) the excavator has not:

189 (A) been notified by the operator; or

190 (B) received a request for a meeting under Subsection 54-8a-5(2); or

191 (c) 48 hours have elapsed from the time of renotification under Subsection (6).

192 ~~[(8)]~~ (9) Unless an operator remarks an area pursuant to Subsection ~~[(6)]~~ (7), the  
193 excavator shall be responsible for the costs incurred by an operator to remark its underground  
194 facilities following the second or subsequent notice given by an excavator for a proposed  
195 excavation ~~[designated by the same location request assignment]~~.

196 Section 5. Section **54-8a-5** is amended to read:

197 **54-8a-5. Marking of underground facilities.**

(1) (a) Within 48 hours of the receipt of the notice required by Section 54-8a-4, the operator shall:

(i) mark the location of its underground facilities in the area of the proposed excavation;

or

(ii) notify the excavator, by telephonic or electronic message or indication at the excavation site, that the operator does not have any underground ~~[facilities]~~ facility in the area of the proposed excavation.

(b) The underground ~~[facilities]~~ facility shall be marked with stakes, paint, or in some other customary way, indicating, at the option of the operator, either:

(i) the approximate centerline of the underground facility; or

(ii) the approximate outside dimensions of both sides of the underground facility.

(2) (a) The operator is not required to mark the underground facilities within 48 hours if:

(i) the proposed excavation:

(A) is not ~~[clearly described by a street address or description and]~~ identified in accordance with Subsection 54-8a-4(2) or is not marked as provided in Subsection 54-8a-4(3);

(B) is located in a remote area;

(C) is an extensive excavation; or

(D) presents other constraints that make it unreasonably difficult for the operator to comply with the marking requirements of this section; or

(ii) the operator is not able to readily locate the underground facilities from the surface with standard underground detection devices.

(b) If the operator cannot proceed with the marking because of a situation described in Subsection (2)(a), the operator shall contact the excavator within 48 hours after the excavator's notice of excavation or request for a location request assignment made in accordance with Section 54-8a-4 and request a meeting at the proposed excavation site or some other mutually agreed upon location.

(c) For ~~[the situations]~~ a situation described under ~~[Subsections]~~ Subsection

(2)(a)(i)[(A) and (2)(a)(i)(B), the meeting will constitute the beginning of a new 48-hour period within which the operator must mark the underground facilities. (d) For the situations described under Subsections (2)(a)(i)(C) and (2)(a)(i)(D)], the meeting [will constitute] constitutes the beginning of a new 48-hour period within which the operator must begin marking the underground facilities.

~~[(e)]~~ (d) (i) For the situation described under Subsection (2)(a)(ii), the excavator and operator shall agree on a plan of excavation designed to prevent damage to the operator's underground ~~[facilities]~~ facility.

(ii) Notwithstanding the agreement, the excavator shall proceed in a manner that is reasonably calculated to avoid damage to the underground ~~[facilities]~~ facility.

(e) (i) An operator need not mark or locate an underground facility the operator does not own.

(ii) An underground facility under Subsection (2)(e)(i) includes a water or sewer lateral or a facility running from a house to a garage or outbuilding.

(f) (i) An operator may mark the location of a known facility connected to the operator's facilities that is not owned or operated by the operator.

(ii) Marking a known facility under Subsection (2)(f)(i) imposes no liability on the operator for the accuracy of the marking.

(3) The markings required by this section shall conform ~~[to the following color code for each type of installation:]~~ with marking standards established by the American Public Works Association for temporary markings.

~~[(a) - safety red - electric power;]~~

~~[(b) - safety yellow - gas, oil, a dangerous material or product, or steam;]~~

~~[(c) - safety orange - communications or cable television;]~~

~~[(d) - safety blue - water or slurry; and]~~

~~[(e) - safety green - sewer.]~~

(4) Each marking is valid for not more than 14 calendar days from the date notice is given.

(5) If multiple lines exist:

(a) the markings must indicate the number of lines; or

(b) all lines must be marked.

Section 6. Section **54-8a-5.5** is amended to read:

**54-8a-5.5. Determining the precise location of marked underground facilities.**

(1) (a) An excavator may not use any power-operated or power-driven excavating or boring equipment within 24 inches of the markings made in accordance with Section 54-8a-5 ~~[before]~~ unless the excavator ~~[has determined]~~ determines the exact location of the underground ~~[facilities]~~ facility by excavating with hand tools to confirm that the excavation will not damage the underground facilities.

(b) An operator may waive, in writing or electronically, the requirement that the excavator determine the exact location of the underground facilities by excavating with hand tools.

(2) Power-operated or power-driven excavating or boring equipment may be used for the removal of any existing pavement if there ~~[are]~~ is no underground ~~[facilities]~~ facility contained in the pavement, as marked by the operator.

(3) The excavator may use power-operated or power-driven excavating or boring equipment within 24 inches of the markings only:

(a) to a depth agreed upon by the operator; and

(b) if allowed by the operator.

Section 7. Section **54-8a-6** is amended to read:

**54-8a-6. Duties and liabilities of an excavator.**

(1) Damage to an underground facility by an excavator who excavates but fails to comply with Section 54-8a-4, is prima facie evidence that the excavator is liable for any damage caused by the negligence of that excavator.

(2) (a) An excavator is not liable for ~~[damage to an underground facility]~~ a civil penalty under this chapter if ~~[he or she]~~ the excavator has:

(i) given proper notice of the proposed excavation as required in this chapter;



(ii) marked the area of the proposed excavation as required in Section 54-8a-4;

(iii) complied with Section 54-8a-5.5; and

(iv) complied with Section 54-8a-7.

(b) An excavator is ~~[not]~~ liable for damage ~~[to an underground facility if an operator has failed to comply with Section 54-8a-5 or 54-8a-9.]~~ incurred by an operator if:

(i) the operator complies with Section 54-8a-5; and

(ii) the damage occurs within 24 inches of the operator's markings.

Section 8. Section **54-8a-7** is amended to read:

**54-8a-7. Notice of damage -- Repairs.**

(1) If an excavator contacts or damages an underground facility, the excavator shall:

(a) immediately notify the appropriate operator and then proceed in a manner that is reasonably calculated to avoid further damage to the underground facility[-]; and  
(b) immediately call 911 if the excavation may result in an immediate risk to human life.

(2) Upon receipt of notice, the operator shall immediately examine the underground facility, and, if necessary, make repairs.

Section 9. Section **54-8a-8** is repealed and reenacted to read:

**54-8a-8. Civil penalty for damage -- Exceptions -- Other remedies.**

(1) A civil penalty may be imposed for a violation of this chapter as provided in this section.

(2) A civil penalty under this section may be imposed on:

(a) any person who violates this chapter in an amount no greater than \$2,500 for each violation with a maximum civil penalty of \$100,000 per excavation; or

(b) an excavator who fails to provide notice of an excavation in accordance with Section 54-8a-4 in an amount no greater than \$500 in addition to the amount under Subsection (2)(a).

(3) Notwithstanding Subsection (2)(a), a penalty under this chapter may not be imposed on an excavator or operator unless the excavator or operator fails to comply with this chapter and damages an underground facility.

(4) The amount of a civil penalty under this section shall be made taking into consideration the following:

- (a) the excavator's or operator's history of any prior violation or penalty;
- (b) the seriousness of the violation;
- (c) any discharge or pollution resulting from the damage;
- (d) the hazard to the health or safety of the public;
- (e) the degree of culpability and willfulness of the violation;
- (f) any good faith of the excavator or operator; and
- (g) any other factor considered relevant, including the number of past excavations conducted by the excavator, the number of location requests made by the excavator and the number of location markings made for the excavator or by the operator.

(5) "Good faith," as used in Subsection (4)(f) includes actions taken before the filing of an action for civil penalty under this section to:

- (a) remedy, in whole or in part, a violation of this chapter; or
  - (b) mitigate the consequences and damages resulting from a violation of this chapter.
- (6) (a) A civil penalty may not be imposed on an excavator if the damage to an underground facility results from an operator's:
- (i) failure to mark; or
  - (ii) inaccurate marking or locating of the operator's underground facilities.
- (b) In addition to or in lieu of part of or all of a civil penalty, the excavator or operator may be required to undertake actions that are designed to prevent future violations of this chapter, including attending safety and compliance training, improving internal monitoring and compliance processes and procedures, or any other action that may result in compliance with this chapter.

(7) Subsection (1) does not apply to an excavation made:

- (a) during an emergency, if reasonable precautions are taken to protect any underground facility;
- (b) in agricultural operations;

(c) for the purpose of finding or extracting natural resources; or

(d) with hand tools on property owned or occupied by the excavator.

(8) (a) A civil penalty under this section is in addition to any damages that an operator or an excavator may seek to recover.

(b) In an action brought under this section, the prevailing party shall be awarded its costs and attorney fees as determined by the court.

Section 10. Section **54-8a-9** is amended to read:

**54-8a-9. Association for mutual receipt of notice of excavation activities.**

(1) (a) (i) Two or more operators may form and operate a statewide association providing for mutual receipt of notice of excavation activities.

(ii) If an association is operational, notice to the association shall be given pursuant to Section 54-8a-4.

(b) (i) If an association is formed, each operator with an underground ~~[facilities]~~ facility in the area shall become a member of the association ~~[or]~~ and participate in it to:

(A) receive a notice of a proposed excavation submitted to the association;

(B) receive the services furnished by it; and

(C) pay its share of the cost for the service furnished.

(ii) If an operator does not comply with Subsection (1)(b)(i) and Section 54-8a-5, [he] the operator is liable for damages incurred by an excavator who ~~[has complied]~~ complies with ~~[the]~~ this chapter's requirements ~~[under this chapter]~~.

(c) An association whose members or participants have underground facilities within a county shall:

(i) file a description of the geographical area served by the association; and

(ii) file the name and address of every member and participating operator with the county clerk.

(2) An association receiving notice as provided in Subsection 54-8a-4(1) shall:

(a) notify members and participants in the relevant geographic area within 24 hours after receiving notice from the person who proposes to excavate; and

(b) maintain a record of ~~[notices]~~ any notice received for a period of five years to document compliance with the requirements of this chapter.

Section 11. Section **54-8a-10** is amended to read:

**54-8a-10. Installation of nonmetallic facilities.**

Any operator ~~[utilizing a fiberoptic or other]~~ installing a nonmetallic facility, such as a sewer, water, or fiber optic line, shall install the ~~[fiberoptic or other]~~ nonmetallic facility so that it can be located with standard underground facility detection devices or in a concrete conduit system.

Section 12. Section **54-8a-12** is enacted to read:

**54-8a-12. Enforcement -- Attorney general.**

(1) (a) The attorney general may bring an action in the district court located in the county in which the excavation is located to enforce this chapter.

(b) The right of any person to bring a civil action for damage arising from an excavator's or operator's actions or conduct relating to underground facilities is not affected by:

(i) a proceeding commenced by the attorney general under this chapter; or

(ii) the imposition of a civil penalty under this chapter.

(c) If the attorney general does not bring an action under Subsection (1)(a), the operator or excavator may pursue any remedy, including a civil penalty.

(2) Any civil penalty imposed and collected under this chapter shall be deposited into the General Fund.

Section 13. Section **54-8a-13** is enacted to read:

**54-8a-13. Underground Facilities Damage Dispute Board -- Arbitration -- Relationship with Public Service Commission.**

(1) There is created within the commission the Underground Facilities Damage Dispute Board to arbitrate a dispute arising from:

(a) an operator's or excavator's violation of this chapter; and

(b) damage caused by excavation during an emergency.

(2) The board consists of five members appointed by the governor as follows:

(a) one member from a list of names provided to the governor by a group representing operators;

(b) one member from a list of names provided to the governor by the Associated General Contractors;

(c) one member from a list of names provided to the governor by Blue Stakes of Utah;

(d) one member from a list of names provided to the governor by the Utah Home Builders Association; and

(e) one member from the Division of Public Utilities.

(3) (a) A member of the board:

(i) shall be appointed for a three-year term; and

(ii) may continue to serve until the member's successor takes office.

(b) At the time of appointment, the governor shall stagger the terms of the members to ensure that approximately 1/3 of the members of the board are reappointed each year.

(c) A vacancy in the board shall be filled:

(i) for the unexpired term; and

(ii) in the same manner as the board member is initially appointed.

(d) The board shall select an alternate for a specific board member to serve on a specific case if it becomes necessary to replace a member who has a conflict of interest because a dispute involves that member or that member's employer.

(4) Three members of the board constitute a quorum.

(5) The board may, upon agreement of the disputing parties, arbitrate a dispute regarding damages, not including personal injury damages, arising between:

(a) an operator;

(b) an excavator;

(c) a property owner; or

(d) any other interested party.

(6) At least four members of the board shall be present and vote on an arbitration decision.

422 (7) An arbitration before the board shall be consistent with Title 78, Chapter 31a, Utah  
423 Uniform Arbitration Act.

424 (8) The prevailing party in an arbitration conducted under this section shall be awarded  
425 its costs and attorney fees in an amount determined by the board.

426 (9) (a) A member of the board who is not a state officer or employee or local  
427 government officer or employee shall receive no compensation or benefits for the member's  
428 service, but may receive per diem and expenses incurred in the performance of the member's  
429 duties at the rates established by the Division of Finance under Sections 63A-3-106 and  
430 63A-3-107. Members may decline to receive per diem and expenses for their services.

431 (b) A state officer or employee or local government officer or employee member of the  
432 board who does not receive salary, per diem, or expenses from their agency or employer for  
433 their service on the board may receive per diem and expenses incurred in the performance of the  
434 member's duties at the rates established by the Division of Finance under Sections 63A-3-106  
435 and 63A-3-107. State and local government officer or employee members may decline to  
436 receive per diem and expenses for their services.

437 (10) The commission shall provide administrative support to the board.

438 **Section 14. Repealer.**

439 This bill repeals:

440 **Section 54-8a-8.5, Alternative dispute resolution.**

441 **Section 54-13-6, Violation of chapter -- Penalty.**

# **ATTACHMENT 8**

## **EXCAVATORS' GUIDE**

# Excavators' Guide

INCLUDING DAMAGE TO UNDERGROUND UTILITY  
FACILITIES ACT AS AMENDED THROUGH 2008



**Know what's below.  
Call 811 before you dig.**

**BLUE STAKES OF UTAH**  
UTILITY NOTIFICATION CENTER, INC.

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## PREFACE

This excavation guide is an educational document for anyone who plans to excavate, dig, construct or undertake any project that requires disturbing the earth's surface. Please use it as a reference tool when planning your excavation and upon interacting with the one-call notification center at Blue Stakes of Utah Utility Notification Center, Inc. (Blue Stakes). This guide reflects the policy of the Board of Trustees at Blue Stakes. It does not have the force and effect of law. The governing law is Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities.

Every effort has been made to accurately reproduce the applicable sections of Utah State Law contained in this guide, however Blue Stakes, its officers, trustees, employees and agents make no representations or warranties as to the accuracy of this reproduction. This guide is not intended to alter the requirements of Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities or any local ordinance, and it should not be used as a legal reference document. Persons seeking interpretations of the law should contact their own attorneys.

The information in the first section of this guide is designed to help excavators who want to contact Blue Stakes; it is also intended to help facility operators who must respond to information provided to them



by Blue Stakes. The reproduction of the Utah State Law describes the rights of the excavators and facility operators. While familiarity with this guide is recommended for all excavators and facility operators, their responsibilities are as provided by law.

This guide does not have a copyright. Additional copies of this guide may be obtained by calling Blue Stakes or by reproducing them. The contents of this guide are subject to change without notice.

## I. WHAT'S BURIED BELOW THE SURFACE OF THE GROUND

When you dig anything from a posthole to a major excavation, you run the risk of damaging underground utility lines. Various types of utility lines including; electric, gas, telephone, fiber optics, cable television, oil/petroleum, water, and sewer are buried everywhere. These facilities can be located in streets, down alleys, under vacant ground, in farmland, along property boundaries, within railroad rights-of-way, and over mountains. Even the presence of overhead utility lines does not rule out the existence of buried power, cable television, or telephone facilities.

Excavators are liable for damage to underground utilities when they do not call for utility locations before excavating or when excavators are unfamiliar with the proper procedures for safely excavating around buried

facilities. Damages can also occur from improper backfilling around exposed utilities.

## II. EDUCATIONAL OPPORTUNITIES

One of the services Blue Stakes offers free of charge is underground facility damage prevention education classes throughout the state of Utah. If you would like Blue Stakes to provide a damage prevention educational class for your organization, contact Blue Stakes to schedule a safety class or training tailored to fit your needs.

## III. DETERMINING WHO AND WHEN TO CALL

The Utah Damage to Underground Utility Facilities Act requires anyone engaging in any activity which displaces earth, rock or other material on or below the ground to notify Blue Stakes at least two (2) business days but not more than fourteen (14) calendar days prior to excavation.

If more than one excavator will be digging at the same excavation site, each excavator as defined by Utah State Code is required to notify Blue Stakes of proposed excavation.

Blue Stakes was created to provide one central number for excavators and the general public to call to notify member utilities of intended excavation. Although the Utah State Law requires all utilities with underground facilities to participate, there are some utilities that do not receive notice of excavation because they are not members of Blue

Stakes. Please ask the Blue Stakes Customer Service Representative for a list of member utilities notified for your proposed excavation site. Blue Stakes also encourages contractors to notify nonmember facility owners.

Blue Stakes should **NOT** be contacted for any of the following reasons:

- To report any type of service outage.
- To resolve any type of utility billing problem.
- To report any excavation outside the state of Utah.
- To request initiations of any type of utility service.
- To request any type of facility removal or relocation.

## IV. HOURS OF OPERATION

Blue Stakes is open daily from 7:00 a.m. to 5:00 p.m. excluding Saturdays, Sundays, and Holidays. Emergency notification between 5:00 p.m. and 7:00 a.m. and weekends should be reported directly to the utilities. Please contact Blue Stakes or access the Utility Contacts Link on Blue Stakes web page at [www.bluestakes.org](http://www.bluestakes.org) for a list of after-hour emergency numbers for member utilities.

Holidays Include:

- New Year's Day
- Presidents' Day
- Memorial Day
- Independence Day

- Pioneer Day (24th of July)
- Labor Day
- Thanksgiving Day
- Day After Thanksgiving
- Christmas Eve Day
- Christmas Day

## V. BLUE STAKES TELEPHONE NUMBERS

Blue Stakes can be reached at the following numbers during normal hours of operation:

- 811



Know what's below.  
Call before you dig.

- (800) 662-4111 (Toll-Free)
- (801) 208-2100 (Salt Lake City)

## VI. ALTERNATE CONTACT METHODS

Blue Stakes allows participating excavators to submit standard, non-emergency locate requests via the Internet 24 hours a day, seven days a week. However, if a request is received while Blue Stakes is closed, the request may not be processed until the next business day. By using the Internet, excavators can save the time of calling the request in to

Blue Stakes. Blue Stakes recommends that all time-sensitive requests be called in immediately, ensuring they are located by the required time. Blue Stakes allows requests through the Internet by using **REMOTE TICKET ENTRY** and **QUICK TICKET** applications.

**A. REMOTE TICKET ENTRY (RTE)** requests will be processed immediately and sent directly to the member utilities in the specified excavation area without intervention from Blue Stakes. All requests submitted after normal business hours will be time stamped for 7:00 a.m. on the next business day. RTE users can view their requests on-line. It is the user's responsibility to ensure all information is entered as requested and to report any problems or errors immediately to Blue Stakes.

**B. QUICK TICKET (QT)** requests will be queued into the Blue Stakes system for processing. Requests received during hours of operation will be processed within two (2) business hours and sent out to the corresponding member utilities. Requests received after hours will be processed the next business day. QT users will receive a copy of their requests by email. It is the user's responsibility to ensure all information is entered as requested and to report any problems or errors immediately to Blue Stakes.

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expires. An update notice must be given in like manner for each succeeding 14 calendar day period excavation activity continues.

**Note:** According to Utah Code 54-8a-4(9), an excavator may be responsible for the costs incurred by an operator to remark its underground facilities following the second or subsequent notice given by an excavator at the same location.

**C. SECOND NOTICE** – To facilitate safety and damage prevention, Blue Stakes encourages all excavators to contact the center if any member utility(s) has failed to notify or locate their facilities. The second notice request will be dispatched as a priority notification and the member utilities will respond as soon as possible. To ensure the proper member utilities are notified for failure to respond, please provide the Customer Service Representative with the name of only the member utility(s) that has not responded to your request. Before filing a second notice request; please verify all address information to ensure the correct information was sent to the utilities.

**D. EMERGENCY NOTICE** – An emergency is defined by Utah Code 54-8a-2(3), as "an occurrence or suspected natural gas leak necessitating immediate

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## **VII. TYPES OF CALLS HANDLED BY BLUE STAKES**

Blue Stakes handles several types of excavation calls. Each request type is used to handle unique situations or problems. The following is a brief explanation of each:

**A. REGULAR NOTICE** – Utah State Law requires at least two (2) business days notice, but not more than fourteen (14) calendar days before the commencement of excavation. The excavator may begin excavating after all member utilities have responded or two (2) business days have lapsed. However, if any member utility(s) has failed to respond to the original request, it is advised that a second notice be filed with Blue Stakes requesting immediate location of the facilities.

**B. UPDATE NOTICE** – A locate request is valid for 14 calendar days from the date the request is submitted. If excavation on a specific locate request continues beyond the initial 14 calendar day period, an excavator must update the locate request at least 2 business days prior to the expiration date and time of the request being updated to ensure a valid locate request will exist beyond the expiration time frame of the request being updated. Locate requests updated in this manner will be valid for 14 calendar days from the day on which the request being updated

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action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services." Excavators calling in locate requests as emergencies that do not meet the definition of an emergency as described above may be charged the cost of locating and marking underground facilities by member utilities.

Member utilities will attempt to respond as soon as possible but preferably within 2 hours to mark their facilities. However, if a utility does not respond within this time period and you cannot wait the "48 hours" allowed by law for utilities to respond, you may be responsible for any damages caused.

Emergency notification on weekends, holidays, or between 5:00 p.m. and 7:00 a.m. on normal workdays should be reported directly to utility companies. Contact Blue Stakes for a list of after hour emergency numbers for member utilities or access the Utility Contacts Link on Blue Stakes WEB page at [www.bluestakes.org](http://www.bluestakes.org).

**E. REMARK/RETRANSMIT NOTICE** – If the markings locating the underground lines no longer identify the location of the facilities due to fading caused by time, weather, construction or other reasons, the person performing the excavation or demolition is required to notify Blue Stakes before further excavation of the

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site. Member utilities are required to re-mark the area within two (2) business days of re-notification.

**F. MEET REQUEST NOTICE** – Most location requests can be described over the phone. In situations where excavation projects are large, complicated or within a restricted area, a meet can make the filing of the location request much easier. If a meet is requested, the Blue Stakes Customer Service Representative will take a general description of the excavation site. Enough information will be needed for member utilities to furnish necessary maps to their field locator.

A meet should only be set up when it is impossible to explain the project over the phone. Many times, what may seem to be a complicated project can be described easily by phone if it is broken into several pieces and the excavation site is pre-marked using white paint, stakes or flags. For example, instead of trying to describe a major project involving work on four (4) streets, break the project down into four (4) locate requests involving the work on each of the four (4) streets.

If it is absolutely necessary to set up a meet, a Blue Stakes Customer Service Representative can set up an appointment between 9:00 a.m. and 2:00 p.m. at least two (2) business days from the time of the call. The utilities have two (2) business days after the time

of the meet to mark their facilities. If any member utility is unable to attend the meet request, it is the member utility's responsibility to contact the contractor to make other arrangements. The following procedures must be followed when requesting a meet:

- You must be present at the exact time and location given on the request. Member utilities will only wait at the specified location for 15 minutes. If you do not show up at the requested time and place, your request will be void. All meeting sites must be outside.
- You will be required to provide member utilities with either a written description or a map of your excavation area with the exact excavation areas described or marked.
- Meets cannot cover several non-adjointing sites. In situations where there are several sites, a request must be made for each site.

**G. PLANNING & DESIGN NOTICE** – Blue Stakes does not process non-excavation type locate requests for planning and design purposes. Blue Stakes will however provide planning and design contact information for member utilities in one of the following ways:

- Blue Stakes will provide callers with a list of plan & design contacts for member utilities at the location in question upon request, or
- If you would like to obtain plan & design contact information for member utilities on-line, access Blue Stakes' WEB site Utility Contacts link.

### VIII. GUIDELINES FOR CALLING BLUE STAKES

Blue Stakes Customer Service Representatives are professionally trained to obtain specific information concerning locate requests. Because information is entered via computer, the order of the questions you will be asked is preset. Each question is important and provides member utilities with information to locate their facilities in a timely manner. Locate request processing is easy if the caller is prepared to answer all questions. Preparation is the key. The best way to prepare for a call is to ensure all necessary information is available before calling Blue Stakes. Following is a brief explanation of the information required in the order it will be asked:

**NOTE: BLUE STAKES WILL NOT PROCESS THIRD PARTY LOCATE REQUESTS.** Locate requests will be placed in the name of the caller or caller's company only. If someone other than the caller or caller's company, i.e.; subcontractor, is going to be performing the excavation, they also need to contact Blue Stakes and request a ticket be generated in their name.

**A. EXCAVATOR PHONE NUMBER** – To enable Blue

Stakes to easily access contractor information in its database using a phone number, please use the same phone number for you or your organization each time you call. It is important that the number provided is a valid number where you can be reached by member utilities in case additional information is required to process the locate request.

**B. COMPANY INFORMATION** – Company name and mailing address of the excavator is recorded and stored in a database. This database may be used periodically by Blue Stakes and member utilities to notify excavators.

**C. CALLER NAME AND PHONE NUMBER** – The telephone number of the caller is taken in case member utilities require additional information to process an excavation request. Member utilities may also call the excavator to setup appointments for "mark and standby" locations to protect highly sensitive underground facilities.

**D. E-MAIL ADDRESS** – When available, Blue Stakes provides fax and e-mail information to member utilities as an alternate means of contacting the excavating company to clear the dig request. The e-mail address can also be used to send a copy of the request to the excavator.

**E. FIELD CONTACT** – When possible, please provide a name and phone number of a contact person at the excavation site. This will assist member utilities in processing your request if further information is required before locating their facilities.

**F. TYPE OF WORK BEING DONE** – The law requires that excavators list the type of work being done. Please be as specific as possible. For example, "installation of a sanitary sewer lateral" is more helpful than "digging for sewer line".

- **TRENCHLESS** – Information is taken to let member utilities know if trenchless technology will be used to excavate under roads, driveways, sidewalks, etc.
- **BLASTING** – Information is taken to let member utilities know if explosives will be used for excavation.

**G. CITY / COUNTY** – Blue Stakes accepts location requests for the entire state of Utah. In some cases, two separate counties may have an identically named city. If the excavation is in an unincorporated county area, please state that it is in the county along with the approximate mileage and direction of the closest city. It is important that the city and county information be correct to ensure that the proper member utilities are notified.

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- I-15 exit 301 - Exit south onto west frontage road. Proceed south for 0.75 miles. There is a white lathe with flagging on west side of road 10 ft. into property. Please stake a 20 ft. radius around this lathe.

Other information such as latitude / longitude coordinates and township and range quarter section coordinates are helpful for requests taken in remote areas but cannot be accepted as the only form of address.

Because member utilities who are notified vary from location to location, Blue Stakes policies require that a separate locate request be filed for each excavation site. Large projects can be covered by one request provided the work is one continuous job and can be properly described on a single request form.

**I. SUBDIVISION / LOT NUMBER** – In a new development, reference to subdivision and lot number will help member utilities identify the excavation area and prevent costly delays from shut downs due to unmarked facilities. Please note, in a new development where addresses are not posted, it is the excavator's responsibility to post the address or lot number in a visible location. Subdivision and/or lot number cannot be given as the only form of address.

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**H. EXCAVATION SITE ADDRESS** – To ensure that all affected member utilities can find the location of the dig site, Blue Stakes requires specific address information for identifying an excavation site. The given address must be posted.

Please note, when calling in location requests anywhere in Salt Lake County you must also provide both a north / south and an east / west county coordinate with the street address.

The following are two examples of proper information when identifying the location of the excavation site:

- 6990 S Redwood Road (1700 W)
- 621 to 650 S 2050 W

The best information is a street address. However, if a street address is not available, a Blue Stakes Customer Service Representative will ask for the following information:

- Nearest address or intersection and directions.
- Highway, mile post numbers, and directions.
- Freeway, exit number, and directions.

The following is an example of proper information when identifying the location of the excavation site without an address in a rural area:

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**J. SIDE OF STREET** – Side of street is taken to assist field locators in finding the location of the excavation site quickly. Right and left should not be used as directions since they are relative points of view. Use north, south, east or west in providing information pertaining to what side of the street the actual location of the excavation will take place is on.

**K. LOCATION OF EXCAVATION ON PROPERTY** – It is important to narrow the area to be located by member utilities to the precise area of excavation. Many times the entire lot will be called in when excavation is only being done on the south side of the property. Again, right and left should not be used as directions since they are relative points of view. In some cases you may be able to narrow the area to be located further by pre-marking the excavation area with white paint, stakes, flags, or other industry-accepted manner. Please pre-mark the area before notifying Blue Stakes.

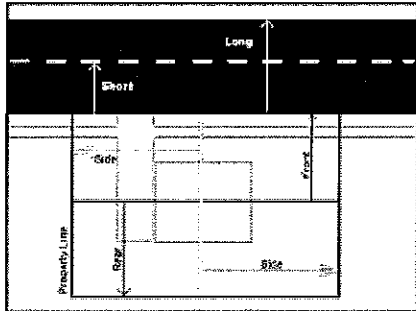
*NOTE: Utah State Law requires excavators to pre-mark the area of proposed excavation with white paint, stakes, or flags if the area of proposed excavation cannot be described.*

**L. ROAD EXCAVATION** – If excavation is in a roadway, marking instructions should include one of the

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following descriptions:

- **SHORT** – from curb to centerline of road.
- **LONG** – from curb to curb.
- **ENTIRE INTERSECTION** – intersecting areas of crossing roads.
- **SHORT / LONG, ENTIRE INTERSECTION WITH PROPERTY DESCRIPTION** – when excavation is proposed in both the street and the property, include the side of road or both sides of the road and how far into the property you will be excavating rather than calling in the entire front of the property.



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- Stake from the north lot line into property 20 feet. Area pre-marked with white paint.
- Stake a 20 foot radius around the perimeter of the house.
- Stake park strip from east property line to west property line.

In all cases, the Customer Service Representatives are looking for a description of area to be marked. Customer Service Representatives will not accept instructions to mark a particular member utility (e.g., "mark the gas line only").

The Customer Service Representative can make a note of any additional information which will be of use to member utilities in fulfilling your locate request. For example, a warning about a dog or information about availability by phone can also be noted.

**N. LATITUDE / LONGITUDE** – This will not be taken as the only form of address. The nearest address or intersection and directions must still be provided. If latitude / longitude coordinates are provided, they should be given in the NAD83 format.

**O. LEGAL DATE / TIME** – The Customer Service Representative will provide you with the exact time

**M. MARKING INSTRUCTIONS** – After identifying the location of the excavation site, the Customer Service Representative handling your call will ask you to identify what portion of the excavation site is to be located by member utilities. The caller must be able to provide as accurately as possible the location of the proposed excavation. Footage and compass direction from the intersecting streets, house numbers or landmarks are all essential in helping member utilities find the excavation location. In identifying this area, the following guidelines should be considered:

- Right and left should not be used since they are relative points of view.
- The area must have boundaries that are defined by footage and / or landmark. A request cannot say, "stake the shoulder of the road" or "stake the right-of-way".

Many lots are very large and are, therefore, difficult to mark. Blue Stakes Customer Service Representatives will try to avoid dispatching locate requests that state, "stake the entire lot". If possible, try to list the specific area to be marked. The following are a few examples of the requested information:

- Stake from the front of the house to the curb.
- Stake the NW corner of the lot (NW quarter of property).

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and date your location request is valid. It is very important not to begin work prior to the legal start date and time. Beginning work before the legal start date and time can result in forfeiture of the excavator's rights and protection provided for under the Damage to Underground Utility Facilities Act.

**P. EXPIRATION / UPDATE DATES** – The Customer Service Representative will also provide you with the expiration date / time of your request and the date / time to update your request should your excavation last longer than 14 calendar days.

**Q. LOCATION REQUEST NUMBER** – Each locate request will be assigned a reference number, which is called the Location Request Assignment (LRA) or ticket number. This number should be used for future questions or problems associated with a locate request. Additionally, this number must be available at all times on excavation sites to prove compliance with the state law requiring that you "call before you dig". Please note that a fee may be charged if the number is lost and Blue Stakes has to research the request.

**R. UTILITIES NOTIFIED** – The Customer Service Representative will inform the caller of the member utilities notified if requested.

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## IX. WHAT HAPPENS AFTER THE CALL IS MADE

Once a location request has been received, it is processed by the Blue Stakes computer system. The computer analyzes the grid and polygon information on the location request to identify which member utilities have elected to receive the information for the specified area. After identifying the proper member utilities, the computer transmits the message via direct dial communication links. In some cases, member utilities receive the information through a direct phone conversation with a Customer Service Representative.

The location request information is received by the member utility mapping or screening department and then screened by trained personnel with their maps and records. It is their job to decide whether or not the location of the work site is close to existing underground utilities. Once it is determined that markings are required, the ticket is dispatched to a field locator who will locate and mark the excavation site with paint, stakes and/or flags. Member utilities mark facilities according to specific guidelines and color codes.

*NOTE: In some cases, the underground facilities belong to the owner of the property rather than to the utility. For example, the utility may own the pipe / conductor up to a meter at the edge of the property. The pipe / conductor from the meter to the house may*

*belong to the homeowner. Member utilities will not mark utilities they do not own.*

## X. RESPONSIBILITIES OF THE FACILITY OWNER

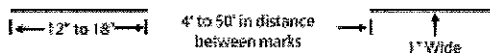
Member utilities are required by law to notify the excavator within two (2) business days by either physically locating the excavation area or by notifying the excavator that the area of excavation is clear of their facilities.

**GUIDELINES FOR MARKING OF UNDERGROUND FACILITIES** – Underground facility operators are encouraged to use the following Recommended Marking Guidelines for Underground Utilities taken from the Common Ground Alliance (CGA) best practices:

**GUIDELINES FOR OPERATOR'S FACILITY FIELD DELINEATION** – Operator markings of facilities include: the appropriate color for their facility type; their company identifier (name, initials, or abbreviation) when other companies are using the same color; the number and width of their facilities; and a description of the facility (HP, FO, STL, etc.). Use paint, flags, stakes, whiskers, or a combination to identify the operator's facility(s) at or near an excavation site.

1. Marks in the appropriate color are to be approximately 12" to 18" in length and 1" in width and separated by approximately 4' to 50' in distance as an example. When marking facilities the operator is to consider the type of facility being located, the terrain

of the land, the type of excavation being done, and the method to adequately mark its facilities for the excavator.



2. The following marking illustrations are examples of how an operator may choose to mark their subsurface installations:

a. **Single Facility Marking:** Used to mark a single facility, marks are placed over the approximate center of the facility. This example indicates an operator's 12" facility. When a facility can be located or toned separately from other facilities of the same type, it is marked as a single facility.



b. **Multiple Facility Marking:** Used to mark multiple facilities of the same type (e.g. electric), where the separation does not allow for a separate tone for each facility but the number and width of the facilities is known. Marks are placed over the approximate center of the facilities and indicate the number

and width of the facilities. This example indicates 4 plastic facilities that are 4" in diameter (4/4" PLA).

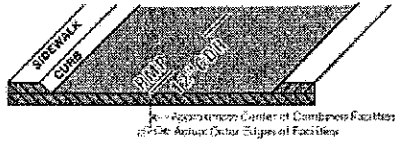


c. **Conduit Marking:** Used for any locatable facility being carried inside conduits or ducts. The marks indicating the outer extremities denote the actual located edges of the facilities being represented. An example would be 4 plastic conduits that are 4" in diameter (4/4" PLA), and the marks are 16" apart indicating the actual left and right edges of the facilities.

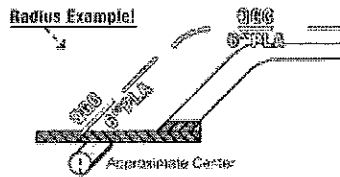


d. **Corridor Marking:** Used to mark multiple facilities of the same type (e.g. electric), in the same trench where the total number of facilities is not readily known (operator has no record on file for

the number facilities) and that are bundled or intertwined. Marks are placed over the approximate center of the facilities and indicate the width of the corridor. The width of the corridor is the distance between the actual located outside edges of the combined facilities. This example indicates a 12" corridor (12" CDR).



3. Changes in direction and lateral connections are to be clearly indicated at the point where the change in direction or connection occurs with an arrow indicating the path of the facility. A radius is indicated with marks describing the arc. When providing offset markings, (paint or stakes), show the direction of the facility and distance to the facility from the markings.



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4. An operator's identifier (name, abbreviation, or initials) is to be placed at the beginning and at the end of the proposed work. In addition to the previous, subsequent operators using the same color will mark their company identifier at all points where their facility crosses another operator's facility using the same color. The maximum separation of identifiers is to be reduced to a length that can be reasonably seen by the excavator when the terrain at the excavation site warrants it.

AT&T      OLN      VERIZON

5. Information as to the size and composition of the facility is to be marked at an appropriate frequency. Examples are: the number of ducts in a multi-duct structure, width of a pipeline, and whether it is steel, plastic, cable, etc.

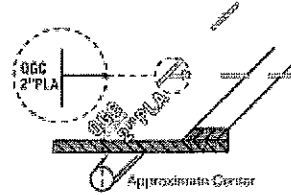
SLC-W      OLN      OGC  
4" PLA      9 PLA      12" STL

6. Facilities installed in a casing should be identified as such. Two examples are: 6" plastic in 12" steel = 6"PLA/12"STL and fiber optic in 4" steel = FO(4"STL).

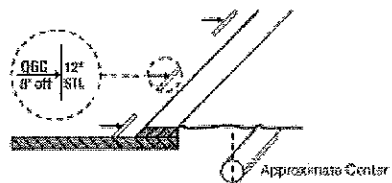
SLC-W      AT&T  
6"PLA/12"STL      FO(4"STL)

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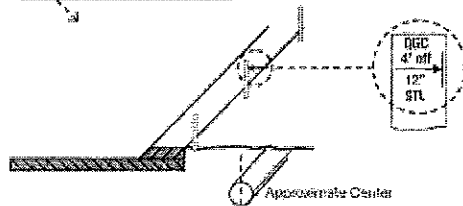
Lateral Connection Example!



Painted Offset (off) Example!



Staked Offset (off) Example!



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7. Structures such as vaults, inlets, and lift stations that are physically larger than obvious surface indications are to be marked so as to define the parameters of the structure.



8. Termination points or dead ends are to be indicated as such.



9. When there is "No Conflict" with the excavation, complete one or more of the following:

- Operators of a single type of facility (e.g. AT&T) would mark the area "NO" followed by the appropriate company identifier in the matching APWA color code for that facility (e.g., "NO AT&T")
- Operators of multiple facilities would mark the area "NO" followed by the appropriate company identifier in the matching APWA color code for that facility with a slash and the abbreviation for

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the type of facility that there is "No Conflict" (e.g., "NO QGC/G/D"). The example illustrates that QGC has no gas distribution facilities at this excavation site. The abbreviation for gas transmission facilities is /G/T, electric distribution is /E/D and electric transmission is E/T. These should be used when appropriate.

- Place a clear plastic (translucent) flag that states "No Conflict" in lettering matching the APWA color code of the facility that is not in conflict. Include on the flag the operator's identifier, phone number, a place to write the locate ticket number and date. Operators of multiple facilities would indicate on the flag which facilities were in "No Conflict" with the excavation as in the previous example.

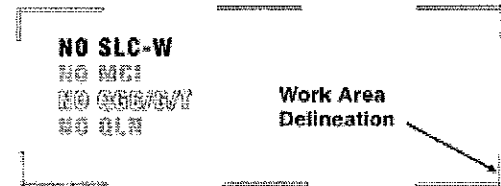
- If it can be determined through maps or records that the proposed excavation is obviously not in conflict with their facility(s) the locator or operator of the facility may notify the excavator of "No Conflict" by phone, fax, or e-mail, or through the One-Call Center, where electronic positive response is used. Operators of multiple facilities would indicate a "No Conflict" for each facility as in the previous examples.

- Place "No Conflict" markings or flags in a location that can be observed by the excavator and/or notify the excavator by phone, fax, or e-mail that there is "No Conflict" with your facilities. When the excava-

tion is delineated by the use of white markings, place "No Conflict" markings or flags in or as near as practicable to the delineated area.

\* Caution – Allow adequate space for all facility mark-outs.

"No Conflict" indicates that the operator providing the "No Conflict" has no facilities within the scope of the delineation, or when there is no delineation, there are no facilities within the work area as described on the locate ticket.



#### Color Code Identifiers

White	Proposed Excavation
Pink	Temporary Survey Markings
Red	Electric Power Lines, Cables, Conduit and Lighting Cables
Yellow	Gas, Oil, Steam, Petroleum or Gaseous Materials
Orange	Communication, Alarm or Signal Lines, Cables or Conduit
Blue	Potable Water
Purple	Reclaimed Water, Irrigation and Slurry Lines
Green	Sewers and Drain Lines

#### Common Abbreviations:

Facility Identifier	
CH	Chemical
E	Electric
FO	Fiber Optic
G	Gas
LPG	Liquefied Petroleum Gas
PP	Petroleum Products
RR	Railroad Signal
S	Sewer
SD	Storm Drain
SS	Storm Sewer
SL	Street Lighting
STM	Steam
SP	Slurry System
TEL	Telephone
TS	Traffic Signal
TV	Television
W	Water
W	Reclaimed Water "Purple"

Infrastructure Material	
ABS	Acrylonitrile - Butadiene - Styrene
ACP	Asbestos Cement Pipe
CI	Cast Iron
CMC	Cement Mortar Coated
CML	Cement Mortar Lined
CPP	Corrugated Plastic Pipe
CMP	Corrugated Metal Pipe
CU	Copper
CWD	Creosote Wood Duct
HDPE	High Density Polyethylene
MTD	Multiple Tile Duct
PLA	Plastic (conduit or pipe)
RCB	Reinforced Concrete Box
RCP	Reinforced Concrete Pipe
RF	Reinforced Fiberglass
SCCP	Steel Cylinder Concrete Pipe
STL	Steel
VCP	Vertrified Clay Pipe

#### Underground Construction Descriptions

C	Conduit
CDR	Corridor
D	Distribution Facility
DB	Direct Buried
DE	Dead End
JT	Joint Trench
HP	High Pressure
HH	Hand Hole
MH	Manhole
PB	Pull Box
R	Radius
STR	Structure (vaults, junction boxes, inlets, lift stations)
T	Transmission Facility

#### Guide for Abbreviation Use

This is a guide for placing the above abbreviations in the field. The Company Identifier is to be placed at the top or at the left of the abbreviations. Place the abbreviations in the following order: Company Identifier / Facility Identifier / Underground Construction Descriptions / Infrastructure Material (e.g. QLN/TEL/FO/PLA). This example indicates that QLN has a Telecommunication Fiber Optic line in a single plastic conduit. The use of the abbreviation /TEL is not necessary, because the orange marking would indicate that the facility was a communication line, but its use is optional. To leave out one or more of the abbreviation types, you would continue to follow the order of the abbreviations above, leaving out



the slash and abbreviation that does not apply (e.g. /TEL). The result would be the following: QLN/FO/PLA.

## **XI. RESPONSIBILITIES OF THE EXCAVATOR – AFTER CALLING BLUE STAKES**

Many people believe that by notifying Blue Stakes of intended excavation they have completed all of their responsibilities with respect to the locating process. This is not the case. Notifying Blue Stakes is only the first step, and there are several other responsibilities, which need to be considered.

**A. AVAILABILITY** – Excavators need to be available to answer questions from facility owners about the excavation project. Provide correct contact information and return calls and messages promptly, especially on projects that are large or in a remote area.

**B. SAFETY ZONE** – After the markings have been made, excavators should maintain a minimum clearance of 24 inches between a marked and unexposed underground facility and the cutting edge or point of any power-operated excavating or earth moving equipment. If excavation is required within 24 inches horizontally of any marking, the excavation should be performed with extreme care utilizing hand tools or vacuum excavation techniques.

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If, after two (2) business days, the member utility has not marked its facilities, Blue Stakes recommends that the excavator call Blue Stakes to have a second notice sent to the utilities which have failed to respond to the original request.

Excavators should plan their work so as to minimize damage to markings.

## **XII. REPORTING PROBLEMS**

There are several problems that the excavator may encounter during the locating process. Blue Stakes may assist in the resolution of these problems. The following are some of the more commonly experienced problems with a brief description of the proper channels to follow:

**A. FAILURE TO LOCATE FACILITIES PRIOR TO START DATE** – If the start date and time arrives and one or more members has failed to mark the facilities or notify you of no conflict, Blue Stakes recommends that you call in a second notice request before commencing excavation.

**B. CORRECTING ERRORS** – At the time of your original call, the Customer Service Representative will verify all information given by the caller. Please listen carefully to this verification and make corrections as necessary. Blue Stakes verifies all information back to caller to ensure all information recorded is correct. If

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**C. EXPOSED / DAMAGED UTILITY** – If, during the course of excavation, a facility has been exposed, it is the excavator's responsibility to inspect and support these facilities prior to backfilling. If damage of any kind is discovered or any suspicion of damage exists, it is the excavator's responsibility to immediately notify the facility operator directly.

Excavators are also responsible by Utah State Law to immediately call 911 if damage may result in an immediate risk to human life.

**D. FACILITY MARKINGS** – Many excavators mistakenly believe Blue Stakes is responsible for the actual marking of facilities. This is not the case. Blue Stakes takes information from the excavator and relays it to member utilities. Each member utility is responsible for ensuring that their facilities are properly marked.

When one member utility indicates that they have no facilities in conflict with specific excavation, the excavator must realize that this does not mean that Blue Stakes has cleared the site nor does it mean that other facilities are not at that location. Excavators are encouraged to not begin excavation until all underground facilities have been marked or they have been notified by the facility operator that they are clear. This should also include facilities operated by utility owners not participating with Blue Stakes.

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the caller verifies incorrect information, the excavator is liable for any damages to unmarked utilities due to the incorrect information dispatched.

If, at any time, it is discovered that incorrect information was provided to Blue Stakes, callers should notify Blue Stakes as soon as possible. Customer Service Representatives will assist you in making corrections. In most cases, a new request will be issued and member utilities will have two (2) business days from the time of the request to mark their facilities. Corrections will only be accepted from the caller or caller's company that originated the ticket.

**C. RESEARCHING LOCATION REQUESTS** – Blue Stakes records all conversations pertaining to location requests and maintains a copy for five (5) years. Blue Stakes can be of assistance in providing copies of these records in the case of a dispute. In some cases, there may be a fee involved for record retrieval.

Blue Stakes has various methods of searching for these records. The quickest method of obtaining a record is through the use of the ticket number assigned to the locate request. Records can also be found by providing other information such as the date, the calling company, and the excavation location. The more information provided, the faster applicable records can be found.

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### XIII. GUIDELINES FOR SAFE DIGGING

It is recommended that excavators follow the national campaign to dig safely listed below:

## Dig Safely.

- A. Call Before You Dig
  - Call two business days before excavation begins
- B. Wait the Required Amount of Time
  - Give utility owners allowed time to mark underground facilities
- C. Respect the Marks
  - Respect and protect markings throughout the duration of the excavation
- D. Dig With Care
  - Hand dig with care within the 24-inch safety zone while exposing underground utilities

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- and air knife.
- (8) "Location" means the site of a proposed area of excavation described by:
  - (a) (i) street address, if available; and
  - (ii) the area at that street address to be excavated; or
  - (b) if there is no street address available, the area of excavation using any available designation, including a nearby street or road, an intersection, GPS coordinates, or other generally accepted methods.
- (9) "Location request assignment" means a number assigned to a proposed excavation by an association or operator upon receiving notice of proposed excavation from the excavator.
- (10) (a) "Operator" means a person who owns, operates, or maintains an underground facility.
  - (b) "Operator" does not include an owner of real property where underground facilities are:
    - (i) located solely within the property;
    - (ii) used exclusively to furnish services on the property; and
    - (iii) maintained under the operation and control of that owner.
- (11) "Person" includes:
  - (a) an individual, government entity, corporation, partnership, association, or company; and
  - (b) the trustee, receiver, assignee, and personal

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## UTAH STATE LAW

### XIV. DAMAGE TO UNDERGROUND UTILITY FACILITIES ACT – AS AMENDED THROUGH 2008

#### 54-8a-2. DEFINITIONS

As used in this chapter:

- (1) "Association" means two or more operators organized to receive notification of excavation activities in a specified area, as provided by section 54-8a-9.
- (2) "Board" means the Underground Facilities Damage Dispute Board created in Section 54-8a-13.
- (3) "Emergency" means an occurrence or suspected natural gas leak necessitating immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.
- (4) "Excavate" or "excavation" means an operation in which earth, rock, or other material on or below the ground is moved or displaced by tools, equipment, or explosives.
- (5) "Excavator" means any person or entity that excavates or conducts excavation activities.
- (6) "48 hours" means a 48-hour period occurring during business days, which includes any day except Saturday, Sunday or a legal holiday.
- (7) "Hand tool" means an implement:
  - (a) powered by hand; or
  - (b) designed to avoid damaging an underground facility, including a vacuum excavation tool

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- representative of a person listed in Subsection (11)(a).
- (12) "24 hours" means a 24-hour period, excluding hours occurring during a Saturday, Sunday, or a legal holiday.
- (13) "Underground facility" means personal property that is buried or placed below ground level for use in the storage or conveyance of any of the following:
  - (a) water;
  - (b) sewage;
  - (c) communications, including electronic, photonic, telephonic, or telegraphic communications;
  - (d) television, cable television, or other telecommunication signals, including transmission to subscribers of video or other programming;
  - (e) electric power;
  - (f) oil, gas, or other fluid and gaseous substances;
  - (g) steam;
  - (h) slurry; or
  - (i) dangerous materials or products.

#### 54-8a-3. INFORMATION FILED WITH COUNTY CLERK.

- (1) An operator shall file with the county clerk of a county in which the operator has an underground facility the following:
  - (a) the name of each municipality, city, or town in which the operator has an underground facility within that county;
  - (b) the operator's name;

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- (c) the title, telephone number, and address of the operator's representative designated to receive calls regarding excavation; and
  - (d) a statement concerning whether the operator is a member of an association and, if the operator is a member of an association, the name of and contact information for the association.
- (2) In a county where an association is established, the association shall file its telephone number and a list of its members who are operators with the county clerk on behalf of any participating operator.

**54-8a-3.5. EXCAVATION-RELATED INFORMATION INCLUDED WITH CONSTRUCTION AND BUILDING PERMIT.**

An entity issuing a permit for building or construction that may require excavation may, and is encouraged to, include a notice on or with a permit stating, "Attention, Utah law requires any excavator to notify the owner of underground facilities 48 hours before excavating and comply with Utah Code Title 54, Chapter 8a, Damage to Underground Utility Facilities."

**54-8a-4. NOTICE OF EXCAVATION.**

- (1) (a) Before excavating, an excavator shall notify each operator with an underground facility in the area of the proposed excavation.
- (b) The requirements of Subsection (1)(a) do not apply:

- (i) if there is an emergency;
  - (ii) while gardening; or
  - (iii) while tilling private ground.
- (2) The notice required by Subsection 1 shall:
- (a) be given:
    - (i) by telephone;
    - (ii) in person; or
    - (iii) by other means acceptable to each operator;
  - (b) be given not:
    - (i) less than 48 hours before excavation begins; or
    - (ii) more than 14 days before excavation begins; and
  - (c) include the proposed excavation's anticipated:
    - (i) location, with reasonable specificity;
    - (ii) dimensions;
    - (iii) type; and
    - (iv) duration.
- (3) If the proposed excavation's anticipated location and dimensions cannot be described as required under subsection (2)(c), an excavator shall outline the proposed excavation site in white paint, stakes, flags, or other industry-accepted manner.
- (4) If more than one excavator will operate at the same excavation site, each excavator shall provide the notice required by this section.
- (5) If there is an association in the county, notice to that association constitutes notice to each operator that has facilities within the proposed excavation site.
- (6) (a) Notice given under this section is valid for 14

- days from the day on which the notice is given.
- (b) If an excavation will continue beyond the 14-day period under Subsection (6)(a), the excavator shall provide notice of that fact at least 48 hours before expiration of the 14-day period.
- (c) A notice under Subsection (6)(b) is valid for 14 days from the day on which the previous notice expires.
- (d) an excavator shall give notice as provided in this Subsection (6) for the duration of the excavation.
- (7) If markings made by the operator have been disturbed so that the markings no longer identify the underground facility:
- (a) before excavating the site an excavator shall notify:
    - (i) the association; or
    - (ii) each operator; and
  - (b) the operator shall mark the area again within 48 hours of the renotification.
- (8) An excavator may begin excavation if:
- (a) (i) all underground facilities have been:
    - (A) located; and
    - (B) marked; or
  - (ii) the operators have indicated that there are no underground facilities within the proposed excavation site;
  - (b) (i) 48 hours have elapsed from the time of initial notice; and

- (ii) the excavator has not:
    - (A) been notified by the operator; or
    - (B) received a request for a meeting under Subsection 54-8a-5(2); or
  - (c) 48 hours have elapsed from the time of re-notification under Subsection (6).
- (9) Unless an operator remarks an area pursuant to Subsection 7, the excavator shall be responsible for the costs incurred by an operator to remark its underground facilities following the second or subsequent notice given by an excavator for a proposed excavation.

**54-8a-5. MARKING OF UNDERGROUND FACILITIES.**

- (1) (a) Within 48 hours of the receipt of the notice required by Section 54-8a-4, the operator shall:
  - (i) mark the location of its underground facilities in the area of the proposed excavation; or
  - (ii) notify the excavator, by telephonic or electronic message or indication at the excavation site, that the operator does not have any underground facility in the area of the proposed excavation.
- (b) The underground facility shall be marked with stakes, paint, or in some other customary way, indicating at the option of the operator, either:
  - (i) the approximate centerline of the underground facility; or
  - (ii) the approximate outside dimensions of

- both sides of the underground facility.
- (2) (a) The operator is not required to mark the underground facilities within 48 hours if:
    - (i) the proposed excavation:
      - (A) is not identified in accordance with Subsection 54-8a-4(2) or is not marked as provided in Subsection 54-8a-4(3);
      - (B) is located in a remote area;
      - (C) is an extensive excavation; or
      - (D) presents other constraints that make it unreasonably difficult for the operator to comply with the marking requirements of this section; or
    - (ii) The operator is not able to readily locate the underground facilities from the surface with standard underground detection devices.
  - (b) If the operator cannot proceed with the marking because of a situation described in Subsection (2)(a), the operator shall contact the excavator within 48 hours after the excavator's notice of excavation or request for a location request assignment made in accordance with Section 54-8a-4 and request a meeting at the proposed excavation site or some other mutually agreed upon location.
  - (c) For a situation described under Subsection (2)(a)(i) the meeting constitutes the beginning of a new 48-hour period within which the

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- days from the date notice is given.
- (5) If multiple lines exist:
    - (a) the markings must indicate the number of lines; or
    - (b) all lines must be marked.

#### **54-8a-5.5. DETERMINING THE PRECISE LOCATION OF MARKED UNDERGROUND FACILITIES.**

- (1) An excavator may not use any power-operated or power-driven excavation or boring equipment within 24 inches of the markings made in accordance with Section 54-8a-5 unless the excavator determines the exact location of the underground facility by excavating with hand tools to confirm that the excavation will not damage the underground facilities.
- (2) Power-operated or power-driven excavation or boring equipment may be used for the removal of any existing pavement if there is no underground facility contained in the pavement, as marked by the operator.
- (3) The excavator may use power-operated or power-driven excavating or boring equipment within 24 inches of the markings only:
  - (a) to a depth agreed upon by the operator; and
  - (b) if allowed by the operator.

#### **54-8a-6. DUTIES AND LIABILITIES OF AN EXCAVATOR.**

- (1) Damage to an underground facility by an excavator

- operator must mark the underground facilities.
- (d) (i) For the situation described under Subsection (2)(a)(ii), the excavator and operator shall agree on a plan of excavation designed to prevent damage to the operator's underground facility.
  - (ii) Notwithstanding the agreement, the excavator shall proceed in a manner that is reasonably calculated to avoid damage to the underground facility.
  - (e) (i) An operator need not mark or locate an underground facility the operator does not own.
  - (ii) An underground facility under Subsection (2)(e)(i) includes a water or sewer lateral or a facility running from a house to a garage or outbuilding.
  - (f) (i) An operator may mark the location of a known facility connected to the operator's facilities that is not owned or operated by the operator.
  - (i) Marking a known facility under Subsection (2)(f)(i) imposes no liability on the operator for the accuracy of the marking.
  - (3) The markings required by this section shall conform with marking standards established by the American Public Works Association for temporary markings.
  - (4) Each marking is valid for not more than 14 calendar

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who excavates but fails to comply with Section 54-8a-4, is prima facie evidence that the excavator is liable for any damage caused by the negligence of that excavator.

- (2) (a) An excavator is not liable for a civil penalty under this chapter if the excavator has:
  - (i) given proper notice of the proposed excavation as required in this chapter;
  - (ii) marked the area of the proposed excavation as required in Section 54-8a-4;
  - (iii) complied with Section 54-8a-5(5) and
  - (iv) complied with Section 54-8a-7.
- (b) An excavator is liable for damage incurred by an operator if:
  - (i) the operator complies with Section 54-8a-5; and
  - (ii) the damage occurs within 24 inches of the operator's markings.

#### **54-8a-7. NOTICE OF DAMAGE - REPAIRS.**

- (1) If an excavator contacts or damages an underground facility, the excavator shall:
  - (a) immediately notify the appropriate operator and then proceed in a manner that is reasonably calculated to avoid further damage to the underground facility; and
  - (b) immediately call 911 if the excavation may result in an immediate risk to human life.
- (2) Upon receipt of notice, the operator shall immediately examine the underground facility, and, if necessary, make repairs.

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**54-8a-8. CIVIL PENALTY FOR DAMAGE - EXCEPTIONS - OTHER REMEDIES.**

- (1) A civil penalty may be imposed for a violation of this chapter as provided in this section.
- (2) A civil penalty under this section may be imposed on:
  - (a) any person who violates this chapter in an amount no greater than \$2,500 for each violation with a maximum civil penalty of \$100,000 per excavation; or
  - (b) an excavator who fails to provide notice of an excavation in accordance with Section 54-8a-4 in an amount no greater than \$500 in addition to the amount under Subsection (2)(a).
- (3) Notwithstanding Subsection (2)(a) a penalty under this chapter may not be imposed on an excavator or operator unless the excavator or operator fails to comply with this chapter and damages an underground facility.
- (4) The amount of a civil penalty under this section shall be made taking into consideration the following:
  - (a) the excavator's or operator's history of any prior violation or penalty;
  - (b) the seriousness of the violation;
  - (c) any discharge or pollution resulting from the damage;
  - (d) the hazard to the health or safety of the public;
  - (e) the degree of culpability and willfulness of the violation;
  - (f) any good faith of the excavator or operator; and

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- (a) during an emergency, if reasonable precautions are taken to protect any underground facility;
  - (b) in agricultural operations;
  - (c) for the purpose of finding or extracting natural resources; or
  - (d) with hand tools on property owned or occupied by the excavator.
- (8) (a) A civil penalty under this section is in addition to any damages that an operator or an excavator may seek to recover.
- (b) In an action brought under this section, the prevailing party shall be awarded its costs and attorney fees as determined by the court.

**54-8a-9. ASSOCIATION FOR MUTUAL RECEIPT OF NOTICE OF EXCAVATION ACTIVITIES.**

- (1) (a) (i) Two or more operators may form and operate a statewide association providing for mutual receipt of notice of excavation activities.
- (ii) If an association is operational, notice to the association shall be given pursuant to Section 54-8a-4.
- (b) (i) If an association is formed, each operator with an underground facility in the area shall become a member of the association and participate in it to:
  - (A) receive a notice of a proposed excavation submitted to the association;

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- (g) any other factor considered relevant, including the number of past excavations conducted by the excavator, the number of location requests made by the excavator and the number of location markings made for the excavator or by the operator.
- (5) "Good faith," as used in Subsection (4)(f) includes actions taken before the filing of an action for civil penalty under this section to:
  - (a) remedy, in whole or in part, a violation of this chapter; or
  - (b) mitigate the consequences and damages resulting from a violation of this chapter.
- (6) (a) A civil penalty may not be imposed on an excavator if the damage to an underground facility results from an operator's:
  - (i) failure to mark; or
  - (ii) inaccurate marking or locating of the operator's underground facilities.
- (b) In addition to or in lieu of part of or all of a civil penalty, the excavator or operator may be required to undertake actions that are designed to prevent future violations of this chapter, including attending safety and compliance training, improving internal monitoring and compliance processes and procedures, or any other action that may result in compliance with this chapter.
- (7) Subsection 1 does not apply to an excavation made:

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- (B) receive the services furnished by it; and
  - (C) pay its share of the cost for the service furnished.
- (ii) If an operator does not comply with Subsection (1)(b)(i) and Section 54-8a-5, the operator is liable for damages incurred by an excavator who complies with this chapter's requirements.
- (c) An association whose members or participants have underground facilities within a county shall:
  - (i) file a description of the geographical area served by the association; and
  - (ii) file the name and address of every member and participating operator with the county clerk.
- (2) An association receiving notice as provided in Subsection 54-8a-4(1) shall:
  - (a) notify members and participants in the relevant geographic area within 24 hours after receiving notice from the person who proposes to excavate; and
  - (b) maintain a record of any notice received for a period of five years to document compliance with the requirements of this chapter.

**54-8a-9.5. INSPECTION OF RECORDS.**

The books and records of an association shall be open to inspection by its members during normal business hours upon 48 hours advance notice.

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**54-8a-10. INSTALLATION OF FIBEROPTIC OR OTHER NONMETALLIC FACILITIES.**

Any operator installing a nonmetallic facility, such as a sewer, water, or fiber optic line, shall install the nonmetallic facility so that it can be located with standard underground facility detection devices or in a concrete conduit system.

**54-8a-11. APPLICABILITY OF FEDERAL LAW.**

The following persons or entities are subject to the provisions of Title 49, Code of Federal Regulations, Part 198, Regulations for Grants to Aid State Pipeline Safety Programs, including those provisions relating to damage to underground facilities:

- (1) an operator, to the extent subject to the Natural Gas Pipeline Safety Act of 1968, 49 U.S. Code 1671 et seq. or the Hazardous Liquid Pipeline Safety Act of 1979, 49 App. U.S.C. 2001 et seq.;
- (2) an excavator; and
- (3) a person who operates an association.

**54-8a-12. ENFORCEMENT - ATTORNEY GENERAL.**

- (1) (a) The attorney general may bring an action in the district court located in the county in which the excavation is located to enforce this chapter.
- (b) The right of any person to bring a civil action for damage arising from an excavator's or

operator's actions or conduct relating to underground facilities is not affected by;

- (i) a proceeding commenced by the attorney general under this chapter; or
- (ii) the imposition of a civil penalty under this chapter.
- (c) If the attorney general does not bring an action under Subsection (1)(a), the operator or excavator may pursue any remedy, including a civil penalty.
- (2) Any civil penalty imposed and collected under this chapter shall be deposited into the General Fund.

**54-8a-13. UNDERGROUND FACILITIES DAMAGE DISPUTE BOARD - ARBITRATION - RELATIONSHIP WITH PUBLIC SERVICE COMMISSION.**

- (1) There is created within the commission the Underground Facilities Damage Dispute Board to arbitrate a dispute arising from:
  - (a) an operator's or excavator's violation of this chapter; and
  - (b) damage caused by excavation during an emergency.
- (2) The board consists of five members appointed by the governor as follows:
  - (a) one member from a list of names provided to the governor by a group representing operators;
  - (b) one member from a list of names provided to the governor by the Associated General Contractors;

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- (c) one member from a list of names provided to the governor by Blue Stakes of Utah;
- (d) one member from a list of names provided to the governor by the Utah Home Builders Association; and
- (e) one member from the Division of Public Utilities.
- (3) (a) A member of the board:
  - (i) shall be appointed for a three-year term; and
  - (ii) may continue to serve until the member's successor takes office.
- (b) At the time of appointment, the governor shall stagger the terms of the members to ensure that approximately 1/3 of the members of the board are reappointed each year.
- (c) A vacancy in the board shall be filled:
  - (i) for the unexpired term; and
  - (ii) in the same manner as the board member is initially appointed.
- (d) The board shall select an alternate for a specific board member to serve on a specific case if it becomes necessary to replace a member who has a conflict of interest because a dispute involves that member or that members' employer.
- (4) Three members of the board constitute a quorum.
- (5) The board may, upon agreement of the disputing parties, arbitrate a dispute regarding damages, not including personal injury damages, arising

between:

- (a) an operator;
- (b) an excavator;
- (c) a property owner; or
- (d) any other interested party.
- (6) At least four members of the board shall be present and vote on an arbitration decision.
- (7) An arbitration before the board shall be consistent with Title 78, Chapter 31a, Utah Uniform Arbitration Act.
- (8) The prevailing party in an arbitration conducted under this section shall be awarded its costs and attorney fees in an amount determined by the board.
- (9) (a) A member of the board who is not a state officer or employee or local government officer or employee shall receive no compensation or benefits for the member's service, but may receive per diem and expenses incurred in the performance of the member's duties at the rates established by the Division of Finance under Sections 63A-3-106 and 63A-3-107. Members may decline to receive per diem and expenses for their services.
- (b) A state officer or employee or local government officer or employee member of the board who does not receive salary, per diem, or expenses from their agency or employer for their service on the board may receive per diem and expenses

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incurred in the performance of the member's duties at the rates established by the Division of Finance under Sections 63A-3-106 and 63A-3-107. State and local government officer or employee members may decline to receive per diem and expenses for their services.

(10) The commission shall provide administrative support to the board.

NOTES

NOTES

APWA UNIFORM  
COLOR CODE

RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit
BLUE	Potable Water
PURPLE	Reclaimed Water, Irrigation and Slurry Lines
GREEN	Sewers and Drain Lines
WHITE	Proposed Excavation
PINK	Temporary Survey Marking

# **ATTACHMENT 9**

## **D.I.R.T. REPORT**



# Blue Stakes of Utah Utility Notification Center, Inc.

## DAMAGE INFORMATION REPORTING TOOL (D.I.R.T.)

TOTAL DAMAGES SUBMITTED

2006	2007	2008
5,933	6,475	3936
TOTAL	TOTAL	TOTAL

WHICH STAKEHOLDER GROUP  
SUBMITTED DAMAGE INFORMATION?

STAKEHOLDER GROUP	2006	2007	2008
CABLE TELEVISION	0.00%	0.00%	0.00%
ELECTRIC	3.79%	5.00%	9.00%
EXCAVATOR	0.25%	0.00%	4.00%
NATURAL GAS	35.19%	35.00%	0.00%
ONE CALL	0.30%	0.00%	37.00%
TELECOMMUNICATION	60.46%	51.00%	0.00%
UNKNOWN / OTHER	0.01%	0.00%	50.00%
TOTAL	100.00%	100.00%	100.00%

WHICH UTILITY TYPES WERE  
AFFECTED?

UTILITY TYPE	2006	2007	2008
CABLE TV	0.37%	9.00%	9.00%
ELECTRIC	3.79%	5.00%	4.00%
NATURAL GAS	35.29%	35.00%	37.00%
SEWER	0.10%	0.00%	0.00%
TELECOMMUNICATION	60.27%	51.00%	50.00%
UNKNOWN / OTHER	0.05%	0.00%	0.00%
WATER	0.13%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

WHICH FACILITY TYPES WERE  
AFFECTED?

FACILITY TYPE	2006	2007	2008
DISTRIBUTION	57.32%	39.00%	42.00%
GATHERING	0.27%	1.00%	0.00%
SERVICE / DROP	41.73%	9.00%	8.00%
TRANSMISSION	0.07%	0.00%	0.00%
UNKNOWN / OTHER	0.61%	51.00%	50.00%
TOTAL	100.00%	100.00%	100.00%

WHICH TYPE OF EXCAVATOR WAS  
INVOLVED IN DAMAGE?

EXCAVATOR TYPE

2006 / UTILITY TYPE REPORTING

2007 / UTILITY TYPE REPORTING

2008 / UTILITY TYPE REPORTING

2006 / UTILITY TYPE REPORTING

2007 / UTILITY TYPE REPORTING

2008 / UTILITY TYPE REPORTING

EXCAVATOR TYPE	2006	2007	2008
CONTRACTOR	87.00%	87.00%	71.00%
COUNTY	0.25%	0.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DEVELOPER	0.00%	0.00%	0.00%
FARMER	0.00%	0.00%	0.00%
MUNICIPALITY	0.25%	0.00%	0.00%
OCCUPANT	8.00%	7.00%	6.00%
RAILROAD	0.00%	0.00%	0.00%
STATE	0.00%	0.00%	0.00%
UNKNOWN / OTHER	1.00%	1.00%	1.00%
UTILITY	3.00%	2.00%	3.00%
TOTAL	100.00%	100.00%	100.00%

EXCAVATOR TYPE	2006	2007	2008
CONTRACTOR	87.00%	87.00%	71.00%
COUNTY	0.25%	0.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DEVELOPER	0.00%	0.00%	0.00%
FARMER	0.00%	0.00%	0.00%
MUNICIPALITY	0.25%	0.00%	0.00%
OCCUPANT	8.00%	7.00%	6.00%
RAILROAD	0.00%	0.00%	0.00%
STATE	0.00%	0.00%	0.00%
UNKNOWN / OTHER	1.00%	1.00%	1.00%
UTILITY	3.00%	2.00%	3.00%
TOTAL	100.00%	100.00%	100.00%

EXCAVATOR TYPE	2006	2007	2008
CONTRACTOR	87.00%	87.00%	71.00%
COUNTY	0.25%	0.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DEVELOPER	0.00%	0.00%	0.00%
FARMER	0.00%	0.00%	0.00%
MUNICIPALITY	0.25%	0.00%	0.00%
OCCUPANT	8.00%	7.00%	6.00%
RAILROAD	0.00%	0.00%	0.00%
STATE	0.00%	0.00%	0.00%
UNKNOWN / OTHER	1.00%	1.00%	1.00%
UTILITY	3.00%	2.00%	3.00%
TOTAL	100.00%	100.00%	100.00%

EXCAVATOR TYPE	2006	2007	2008
CONTRACTOR	87.00%	87.00%	71.00%
COUNTY	0.25%	0.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DEVELOPER	0.00%	0.00%	0.00%
FARMER	0.00%	0.00%	0.00%
MUNICIPALITY	0.25%	0.00%	0.00%
OCCUPANT	8.00%	7.00%	6.00%
RAILROAD	0.00%	0.00%	0.00%
STATE	0.00%	0.00%	0.00%
UNKNOWN / OTHER	1.00%	1.00%	1.00%
UTILITY	3.00%	2.00%	3.00%
TOTAL	100.00%	100.00%	100.00%

EXCAVATOR TYPE	2006	2007	2008
CONTRACTOR	87.00%	87.00%	71.00%
COUNTY	0.25%	0.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DEVELOPER	0.00%	0.00%	0.00%
FARMER	0.00%	0.00%	0.00%
MUNICIPALITY	0.25%	0.00%	0.00%
OCCUPANT	8.00%	7.00%	6.00%
RAILROAD	0.00%	0.00%	0.00%
STATE	0.00%	0.00%	0.00%
UNKNOWN / OTHER	1.00%	1.00%	1.00%
UTILITY	3.00%	2.00%	3.00%
TOTAL	100.00%	100.00%	100.00%

WHICH TYPE OF EQUIPMENT  
WAS INVOLVED IN DAMAGE?

EQUIPMENT TYPE

2006 / UTILITY TYPE REPORTING

2007 / UTILITY TYPE REPORTING

2008 / UTILITY TYPE REPORTING

2006 / UTILITY TYPE REPORTING

2007 / UTILITY TYPE REPORTING

2008 / UTILITY TYPE REPORTING

EQUIPMENT TYPE	2006	2007	2008
AUGER	9.00%	8.00%	6.00%
BACKHOE / TRACKHOE	65.00%	63.00%	40.00%
BORING	4.00%	7.00%	2.00%
DATA NOT COLLECTED	1.00%	1.00%	0.00%
DIRECTIONAL DRILLING	0.00%	0.00%	0.00%
DRILLING	0.00%	0.00%	0.00%
FARM EQUIPMENT	0.00%	0.00%	0.00%
GROUND SPOILER	0.00%	0.00%	0.00%
HAND TOOLS	2.00%	1.00%	0.00%
MILLING EQUIPMENT	0.00%	0.00%	0.00%
PROBING DEVICE	0.00%	0.00%	0.00%
TRENCHER	15.00%	5.00%	7.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
VACUUM EQUIPMENT	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

EQUIPMENT TYPE	2006	2007	2008
AUGER	9.00%	8.00%	6.00%
BACKHOE / TRACKHOE	65.00%	63.00%	40.00%
BORING	4.00%	7.00%	2.00%
DATA NOT COLLECTED	1.00%	1.00%	0.00%
DIRECTIONAL DRILLING	0.00%	0.00%	0.00%
DRILLING	0.00%	0.00%	0.00%
FARM EQUIPMENT	0.00%	0.00%	0.00%
GROUND SPOILER	0.00%	0.00%	0.00%
HAND TOOLS	2.00%	1.00%	0.00%
MILLING EQUIPMENT	0.00%	0.00%	0.00%
PROBING DEVICE	0.00%	0.00%	0.00%
TRENCHER	15.00%	5.00%	7.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
VACUUM EQUIPMENT	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

EQUIPMENT TYPE	2006	2007	2008
AUGER	9.00%	8.00%	6.00%
BACKHOE / TRACKHOE	65.00%	63.00%	40.00%
BORING	4.00%	7.00%	2.00%
DATA NOT COLLECTED	1.00%	1.00%	0.00%
DIRECTIONAL DRILLING	0.00%	0.00%	0.00%
DRILLING	0.00%	0.00%	0.00%
FARM EQUIPMENT	0.00%	0.00%	0.00%
GROUND SPOILER	0.00%	0.00%	0.00%
HAND TOOLS	2.00%	1.00%	0.00%
MILLING EQUIPMENT	0.00%	0.00%	0.00%
PROBING DEVICE	0.00%	0.00%	0.00%
TRENCHER	15.00%	5.00%	7.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
VACUUM EQUIPMENT	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

EQUIPMENT TYPE	2006	2007	2008
AUGER	9.00%	8.00%	6.00%
BACKHOE / TRACKHOE	65.00%	63.00%	40.00%
BORING	4.00%	7.00%	2.00%
DATA NOT COLLECTED	1.00%	1.00%	0.00%
DIRECTIONAL DRILLING	0.00%	0.00%	0.00%
DRILLING	0.00%	0.00%	0.00%
FARM EQUIPMENT	0.00%	0.00%	0.00%
GROUND SPOILER	0.00%	0.00%	0.00%
HAND TOOLS	2.00%	1.00%	0.00%
MILLING EQUIPMENT	0.00%	0.00%	0.00%
PROBING DEVICE	0.00%	0.00%	0.00%
TRENCHER	15.00%	5.00%	7.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
VACUUM EQUIPMENT	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

EQUIPMENT TYPE	2006	2007	2008
AUGER	9.00%	8.00%	6.00%
BACKHOE / TRACKHOE	65.00%	63.00%	40.00%
BORING	4.00%	7.00%	2.00%
DATA NOT COLLECTED	1.00%	1.00%	0.00%
DIRECTIONAL DRILLING	0.00%	0.00%	0.00%
DRILLING	0.00%	0.00%	0.00%
FARM EQUIPMENT	0.00%	0.00%	0.00%
GROUND SPOILER	0.00%	0.00%	0.00%
HAND TOOLS	2.00%	1.00%	0.00%
MILLING EQUIPMENT	0.00%	0.00%	0.00%
PROBING DEVICE	0.00%	0.00%	0.00%
TRENCHER	15.00%	5.00%	7.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
VACUUM EQUIPMENT	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

WHICH TYPE OF EXCAVATION WORK  
WAS BEING PERFORMED?

EXCAVATION WORK TYPE

2006 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
AGRICULTURE	0.00%	0.00%	0.10%
BLDG CONSTRUCTION	5.00%	2.00%	0.10%
BLDG DEMOLITION	0.00%	0.00%	0.00%
CABLE TV	2.00%	0.00%	0.10%
CURB / SIDEWALK	1.00%	2.00%	0.10%
DATA NOT COLLECTED	1.00%	47.00%	98.00%
DRAINAGE	0.00%	1.00%	0.10%
DRIVEWAY	0.00%	1.00%	0.05%
ELECTRIC	6.00%	6.00%	0.00%
ENGINEERING / SURVEY	0.00%	0.00%	0.10%
FENCING	10.00%	2.00%	0.10%
GRADING	1.00%	2.00%	0.05%
IRRIGATION	2.00%	1.00%	0.10%
LANDSCAPING	6.00%	5.00%	0.00%
LIQUID PIPELINE	0.00%	0.00%	0.00%
NATURAL GAS	13.00%	0.00%	0.10%
POLE	0.00%	0.00%	0.00%
PUBLIC TRANSPORTATION	0.00%	0.00%	0.00%
RAILROAD MAINTENANCE	0.00%	0.00%	0.00%
ROAD WORK	4.00%	7.00%	0.10%
SEWER	7.00%	0.00%	0.00%
SITE DEVELOPMENT	19.00%	0.00%	0.00%
STEAM	0.00%	0.00%	0.00%
STORM DRAIN / CULVERT	4.00%	1.00%	0.50%
STREET LIGHT	1.00%	0.00%	0.00%
TELECOMMUNICATIONS	5.00%	1.00%	0.05%
TRAFFIC SIGN	0.50%	0.00%	0.00%
UNKNOWN / OTHER	2.00%	10.00%	0.10%
WATER	10.50%	9.00%	0.10%
TOTAL	100.00%	100.00%	100.00%

2007 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
AGRICULTURE	1.00%	0.00%	0.00%
BLDG CONSTRUCTION	5.00%	2.00%	3.00%
BLDG DEMOLITION	0.00%	0.00%	0.00%
CABLE TV	0.00%	0.50%	0.00%
CURB / SIDEWALK	2.00%	4.00%	0.00%
DATA NOT COLLECTED	9.00%	1.00%	1.00%
DRAINAGE	1.00%	13.00%	0.00%
DRIVEWAY	1.00%	1.00%	0.00%
ELECTRIC	5.00%	1.00%	0.00%
ENGINEERING / SURVEY	3.00%	7.00%	1.00%
FENCING	0.00%	0.50%	0.00%
GRADING	0.00%	9.00%	0.00%
IRRIGATION	5.00%	3.00%	0.00%
LANDSCAPING	1.00%	1.00%	0.00%
LIQUID PIPELINE	11.00%	1.00%	0.00%
NATURAL GAS	13.00%	5.00%	33.00%
POLE	0.00%	0.00%	0.00%
PUBLIC TRANSPORTATION	0.00%	0.00%	0.00%
RAILROAD MAINTENANCE	0.00%	0.00%	0.00%
ROAD WORK	0.50%	1.00%	0.00%
SEWER	0.00%	0.00%	0.00%
SITE DEVELOPMENT	0.00%	0.00%	0.00%
STEAM	0.00%	0.00%	0.00%
STORM DRAIN / CULVERT	0.00%	4.00%	7.00%
STREET LIGHT	4.00%	8.00%	0.00%
TELECOMMUNICATIONS	0.00%	0.00%	0.00%
TRAFFIC SIGN	1.00%	3.00%	2.00%
UNKNOWN / OTHER	0.50%	0.00%	0.00%
WATER	7.00%	6.00%	4.00%
TOTAL	100.00%	100.00%	100.00%

2008 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
AGRICULTURE	0.00%	0.00%	0.00%
BLDG CONSTRUCTION	8.00%	1.00%	3.00%
BLDG DEMOLITION	1.00%	0.00%	0.00%
CABLE TV	0.00%	0.00%	0.00%
CURB / SIDEWALK	10.00%	1.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	0.00%
DRAINAGE	0.00%	0.00%	0.00%
DRIVEWAY	5.00%	2.00%	0.00%
ELECTRIC	8.00%	4.00%	0.00%
ENGINEERING / SURVEY	0.00%	0.00%	0.00%
FENCING	6.00%	9.00%	0.00%
GRADING	0.00%	2.00%	0.00%
IRRIGATION	12.00%	6.00%	0.00%
LANDSCAPING	15.00%	5.00%	0.00%
LIQUID PIPELINE	0.00%	0.00%	0.00%
NATURAL GAS	5.00%	1.00%	0.00%
POLE	11.00%	0.00%	0.00%
PUBLIC TRANSPORTATION	0.00%	0.00%	0.00%
RAILROAD MAINTENANCE	0.00%	0.00%	0.00%
ROAD WORK	0.00%	0.00%	0.00%
SEWER	0.00%	0.00%	0.00%
SITE DEVELOPMENT	0.00%	0.00%	0.00%
STEAM	0.00%	0.00%	0.00%
STORM DRAIN / CULVERT	4.00%	3.00%	7.00%
STREET LIGHT	0.00%	23.00%	0.00%
TELECOMMUNICATIONS	0.00%	0.00%	0.00%
TRAFFIC SIGN	0.00%	4.00%	0.00%
UNKNOWN / OTHER	0.00%	0.00%	0.00%
WATER	7.00%	5.00%	4.00%
TOTAL	100.00%	100.00%	100.00%

WHAT WAS THE ROOT CAUSE  
OF THE DAMAGE REPORTED?

ROOT CAUSE

2006 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
FACILITY NOT FOUND / LOCATED	0.00%	1.00%	0.00%
FACILITY MARKING OR LOCATION NOT SUFFICIENT	10.00%	7.00%	0.10%
FACILITY NOT LOCATED OR MARKED	13.00%	4.00%	0.10%
FAILURE TO MAINTAIN CLEARANCE	4.00%	0.00%	0.10%
FAILURE TO MARK EXISTING UTILITIES	4.00%	0.00%	0.05%
FAILURE TO SUPPORT EXPOSED FACILITIES	0.00%	0.00%	0.00%
FAILURE TO USE HAND TOOLS WHERE REQUIRED	11.00%	0.00%	0.10%
FAILURE TO VERIFY LOCATION BY TEST HOLE	20.00%	0.00%	0.05%
INCORRECT FACILITY RECORDS / MAPS	1.00%	2.00%	0.00%
NO NOTIFICATION MADE TO THE ONE CALL CENTER	25.00%	48.00%	0.50%
NOTIFICATION MADE TO ONE CALL CENTER BUT NOT SUFFICIENT	2.00%	2.00%	0.50%
DATA NOT COLLECTED	0.00%	2.00%	98.00%
EXCAVATION PRACTICES NOT SUFFICIENT	9.00%	33.00%	0.25%
ONE CALL NOTIFICATION CENTER ERROR	0.00%	0.00%	0.00%
OTHER	1.00%	1.00%	0.25%
PREVIOUS DAMAGE	0.00%	0.00%	0.00%
ABANDONED FACILITY	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

2007 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
FACILITY NOT FOUND / LOCATED	1.00%	0.00%	0.00%
FACILITY MARKING OR LOCATION NOT SUFFICIENT	9.00%	2.00%	0.00%
FACILITY NOT LOCATED OR MARKED	4.00%	6.00%	0.00%
FAILURE TO MAINTAIN CLEARANCE	13.00%	0.00%	0.00%
FAILURE TO MARK EXISTING UTILITIES	1.00%	0.00%	0.00%
FAILURE TO SUPPORT EXPOSED FACILITIES	2.00%	0.00%	0.00%
FAILURE TO USE HAND TOOLS WHERE REQUIRED	2.00%	0.00%	0.00%
FAILURE TO VERIFY LOCATION BY TEST HOLE	0.50%	4.00%	0.00%
INCORRECT FACILITY RECORDS / MAPS	2.00%	4.00%	0.00%
NO NOTIFICATION MADE TO THE ONE CALL CENTER	29.00%	44.00%	0.00%
NOTIFICATION MADE TO ONE CALL CENTER BUT NOT SUFFICIENT	2.00%	0.00%	0.00%
DATA NOT COLLECTED	0.25%	0.50%	99.00%
EXCAVATION PRACTICES NOT SUFFICIENT	35.00%	37.00%	1.00%
ONE CALL NOTIFICATION CENTER ERROR	0.00%	0.00%	0.00%
OTHER	1.00%	0.00%	0.00%
PREVIOUS DAMAGE	0.25%	0.50%	0.00%
ABANDONED FACILITY	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

2008 / UTILITY TYPE REPORTING

	Electric	Natural Gas	TELECOMMUNICATIONS
FACILITY NOT FOUND / LOCATED	0.00%	2.00%	0.00%
FACILITY MARKING OR LOCATION NOT SUFFICIENT	17.00%	7.00%	0.00%
FACILITY NOT LOCATED OR MARKED	1.00%	5.00%	1.00%
FAILURE TO MAINTAIN CLEARANCE	43.00%	0.00%	42.00%
FAILURE TO MARK EXISTING UTILITIES	1.00%	0.00%	1.00%
FAILURE TO SUPPORT EXPOSED FACILITIES	0.00%	0.00%	0.00%
FAILURE TO USE HAND TOOLS WHERE REQUIRED	8.00%	0.00%	0.00%
FAILURE TO VERIFY LOCATION BY TEST HOLE	0.00%	0.00%	0.00%
INCORRECT FACILITY RECORDS / MAPS	25.00%	6.00%	0.00%
NO NOTIFICATION MADE TO THE ONE CALL CENTER	34.00%	37.00%	35.00%
NOTIFICATION MADE TO ONE CALL CENTER BUT NOT SUFFICIENT	2.00%	1.00%	1.00%
DATA NOT COLLECTED	0.00%	0.00%	3.00%
EXCAVATION PRACTICES NOT SUFFICIENT	1.00%	40.00%	2.00%
ONE CALL NOTIFICATION CENTER ERROR	2.00%	0.00%	0.00%
OTHER	0.00%	0.00%	1.00%
PREVIOUS DAMAGE	0.00%	0.00%	0.00%
ABANDONED FACILITY	0.00%	0.00%	0.00%
TOTAL	100.00%	100.00%	100.00%

UPDATED 3/3/09