Member Webinar
May 21, 2019
1:00pm Eastern

CGA White Paper
Data-Informed Insights and Recommendations for More Effective Excavator Outreach
Webinar Instructions

All attendees are in listen-only mode.

Click “hand raise” icon to ask a question verbally during Q&A session. Ensure you have entered your audio pin.

Click “?” to submit a written question.
Today’s Panelists

PRESENTERS & CONTRIBUTORS

Common Ground Alliance
• Sarah Magruder Lyle, President & CEO
• Erika Lee, Vice President
• Khrysanne Kerr, Vice President
• Steve Blaney, DIRT Program Manager

MGH
• Chris McMurry, EVP/COO
• Kelly Cahill, Marketing and PR Account Director

Povaddo
• Katie Schrik, Vice President
Mission

The Common Ground Alliance is dedicated to preventing damage to underground utility infrastructure and protecting those who live and work near these important assets through the shared responsibility of our stakeholders.
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The Common Ground Alliance is dedicated to preventing damage to underground utility infrastructure and protecting those who live and work near these important assets through the shared responsibility of our stakeholders.

Education
Increase education of the industry, public and policymakers about the importance of the damage prevention process.

Information & Analysis
Develop information and analysis designed to enhance our members’ ability to implement effective damage prevention processes and programs.

Stakeholder Engagement
Provide a collaborative forum for stakeholders to identify and highlight effective damage prevention practices and programs.
Damage Prevention Stakeholders

One Call
Gas Transmission
Gas Distribution
Oil
Telecommunications
Electric
Public Works
Locators
Excavators
Road Builders

State Regulators
Engineering
Equipment
Insurance
Emergency Services
Railroad
# Estimated Total Damages (U.S.)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>% Change 2016-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Estimated Damages (U.S.)</strong></td>
<td>378,000</td>
<td>416,000</td>
<td>439,000</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Total Estimated Transmissions</strong></td>
<td>199.9 M</td>
<td>221.9 M</td>
<td>234.9 M</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>Estimated damages per 1,000 transmissions</strong></td>
<td>1.89</td>
<td>1.88</td>
<td>1.87</td>
<td></td>
</tr>
<tr>
<td><strong>Estimated damages per million dollars of construction spending</strong></td>
<td>0.354</td>
<td>0.351</td>
<td>0.359</td>
<td></td>
</tr>
</tbody>
</table>
Where can we make an impact?
2017 DIRT Report

- Includes analysis of data submitted into DIRT for 2017
- Highest event submissions to-date with more than 411,000 records and the most complete data to date
- After consolidating multiple reports on the same event and near misses, total damage reports were 316,422
- Written report supplemented by online interactive dashboard
Damage Cause Analysis

DAMAGE ROOT CAUSE GROUP
DIRT REPORT FOR 2017

- Excavation Practices Not Sufficient: 52%
- Notification Not Made: 24%
- Locating Practices Not Sufficient: 17%
- Notification Practices Not Sufficient: 6%
- Miscellaneous: 1%
Damage Cause Analysis

DAMAGE ROOT CAUSE GROUP
DIRT REPORT FOR 2017

- Excavation Practices Not Sufficient: 52%
- All Other Root Causes: 48%
<table>
<thead>
<tr>
<th>Group</th>
<th>Root Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavation practices not sufficient</td>
<td>• Failure to maintain clearance</td>
</tr>
<tr>
<td></td>
<td>• Failure to support exposed facilities</td>
</tr>
<tr>
<td></td>
<td>• Failure to use hand tools where required</td>
</tr>
<tr>
<td></td>
<td>• Failure to test hole (pot-hole)</td>
</tr>
<tr>
<td></td>
<td>• Improper backfill practices</td>
</tr>
<tr>
<td></td>
<td>• Failure to maintain marks</td>
</tr>
<tr>
<td></td>
<td>• Excavation practices not sufficient (other)</td>
</tr>
<tr>
<td>Notification NOT made</td>
<td>• No notification made to one call center</td>
</tr>
<tr>
<td>Locating practices not sufficient</td>
<td>• Incorrect facility records/maps</td>
</tr>
<tr>
<td></td>
<td>• Facility marking or location not sufficient</td>
</tr>
<tr>
<td></td>
<td>• Facility was not located or marked</td>
</tr>
<tr>
<td></td>
<td>• Facility could not be found or located</td>
</tr>
<tr>
<td>Notification practices not sufficient</td>
<td>• Notification of one call center made but not sufficient</td>
</tr>
<tr>
<td></td>
<td>• Wrong information provided to one call center</td>
</tr>
<tr>
<td>Miscellaneous root cause</td>
<td>• Abandoned</td>
</tr>
<tr>
<td></td>
<td>• One call center error</td>
</tr>
<tr>
<td></td>
<td>• Deteriorated facility</td>
</tr>
<tr>
<td></td>
<td>• Previous damage</td>
</tr>
</tbody>
</table>
Reporting Stakeholders

- Other: 16%
- Excavator: 5%
- Locator: 6%
- Natural Gas: 7%
- Telecommunications: 66%
Your industry, your safety, your story, your data...we need it!

CGA's annual DIRT Report provides the only national estimate of damages to buried infrastructure in the U.S., but we rely on data submitted by our stakeholders — and we need to hear your side of the story.

2017 DIRT Report • CommonGround Alliance.com/DIRT
Exploratory Research: Professional Excavators

Research Process and goals
EXCAVATOR AWARENESS OF CALL-BEFORE-YOU-DIG SERVICES

AWARENESS

Yes 84%
No 16%

USAGE

Yes 65%
No 35%
NOTIFICATION OF 811 OR CALL-BEFORE-YOU-DIG

**NOTIFY YOUR LOCAL ONE CALL CENTER BEFORE WORK BEGINS**

Q: For each of the following actions, please indicate if you or someone at your company, does this all of the time, most of the time, some of the time, rarely, or never when completing a digging project? -Notify your local one call center by calling 811 or making an online request 2-3 days before work begins.

- **All the time**: 54%
- **Most of the time**: 11%
- **Some of the time**: 20%
- **Rarely/Never**: 6%
- **Unsure**: 10%

**WHY DO YOU NOT NOTIFY ALL OF THE TIME?**

- 25% Already know where they are/Already marked
- 19% Do Call/Call Local Utilities
- 13% Don’t need to/Not necessary for the project (non-specific)
- 9% Timing
- 8% Someone else takes care of it
- 7% If not digging deep/Depends on how deep we are digging
- 4% Not aware of 811/CBYD
- 3% Depends on the job
- 4% Other
- 12% None/Don’t know/Refused

Q: Being as specific as you can, why do you not notify 811 or call-before-you-dig all of the time? This question was asked of the n=102 respondents who said they do not notify 811 all of the time.
Q: For each of the following actions, please indicate if you or someone at your company, does this all of the time, most of the time, some of the time, rarely, or never when completing a digging project? - Dig carefully around the marks provided by locator following safe digging practices.

**Why do you not dig carefully all of the time?**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do dig carefully all of the time</td>
<td>22%</td>
</tr>
<tr>
<td>Knowledge of the area/lines</td>
<td>19%</td>
</tr>
<tr>
<td>Timing</td>
<td>16%</td>
</tr>
<tr>
<td>Not needed at the time</td>
<td>12%</td>
</tr>
<tr>
<td>Depends on the job/Depends on the operator</td>
<td>5%</td>
</tr>
<tr>
<td>Don’t dig carefully all of the time (non-specific)</td>
<td>3%</td>
</tr>
<tr>
<td>Someone else does the digging</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
<tr>
<td>None/Refused</td>
<td>15%</td>
</tr>
</tbody>
</table>
SAFE DIGGING TRAINING

Q: Do you or your employer utilize any training on the safe digging process?

- Utilize Safe Digging Training: 74%
- None of the above: 21%
- 5% Other

SAFE DIGGING RESOURCES

Q: What resources do you reference for information on safe digging practices?

- Safety Seminars: 57%
- Toolbox talks/Site visits: 34%
- Construction Companies: 30%
- State One Call Center Excavation: 24%
- Pipeline Company Materials: 20%
- CGA Best Practices: 16%
- Toolbox talks/Site visits: 16%
- State One Call Center Excavation: 16%
- Pipeline Company Materials: 13%
- CGA Best Practices: 12%
- Toolbox talks/Site visits: 10%
- State One Call Center Excavation: 2%
- Pipeline Company Materials: 6%
- CGA Best Practices: 2%
WHO IS RESPONSIBLE FOR SAFE DIGGING PRACTICES?

- All employees: 51%
- Site supervisors: 20%
- Safety directors: 10%
- Company owner: 9%
- Equipment operator: 7%
- Observer/Spotter: 2%

Q: Who do you believe is most responsible for maintaining safe digging practices on a job site?
Information & Analysis

• DIRT Report for 2017
• 2018 Public Awareness Study
• DIRT Report for 2017 Supplemental Analysis: Comparison of DIRT Report and CBYD/811 Public Awareness Study Data
• 2018 CGA Excavator Online Survey Report
• 2018 CGA Excavator Focus Groups Report
• Four key takeaways for effective excavator outreach
• Includes data-supported recommendations based on analysis of excavator focus groups and survey, DIRT data and additional reports
Poll 1

Have you read the White Paper?
Key Takeaway #1

Continue increasing awareness of 811 through strategic marketing and education campaigns.
Awareness of CBYD Services and No Call Damages
Reasons for Not Contacting 811 or Call-Before-You-Dig

- The project was not in an area that needed marking: 30%
- Already aware of where the utility lines were located: 29%
- Not digging deep enough to warrant marking/digging was shallow: 23%
- Utility lines run overhead/they’re not buried: 23%
- Dug in this area previously without problems: 16%
- Replacing a similar project in the same location: 15%
- The project location was far from other buildings: 13%
- The project timeline does not allow: 12%
- Not aware marking was necessary: 10%
Key Takeaway #1

Recommendations

RECOMMENDATIONS:

1. Stakeholders should develop public awareness campaigns that can effectively reach both DIY diggers and professional excavators with the 811 message.
   While professional excavator awareness of 811 (76 percent aided awareness) is nearly double that of the general public (36 percent aided awareness), continued promotion of 811 to both groups remains incredibly important, especially among smaller excavation firms.

2. Mass media has the power to reach both audiences at the same time, making campaigns more efficient.
   When promoting the 811 message, mass media—both traditional and digital—has the potential to reach both audience groups with the same campaigns, which allows for more efficient targeting of advertising dollars.

3. Targeted efforts that promote 811 also matter.
   Educational tactics that tap into existing communications channels—such as facility operators including 811 information in bill inserts and on company websites—were identified as memorable outreach efforts by attendees of both excavator focus groups. CGA encourages all stakeholders to consider additional ways to directly target all types of excavators.

4. Campaigns focused on 811/notification should highlight projects that may be performed by both homeowners and professional excavators.
   To be successful in targeting both groups with advertising and public service announcements that resonate equally, CGA recommends showcasing projects that occur in a residential setting, including landscaping, fence installation, deck or patio building, excavation for a swimming pool, etc., in marketing and educational materials.
Poll 2

Does your company utilize mass media to promote safe digging?

Examples – Radio, TV, Billboards
Key Takeaway #2

Acknowledge the realities of the jobsite when communicating Best Practices to excavators.
Risk Assessments on the Jobsite

What might motivate behavior change?

- 77% strongly agreed that fear of physical harm to self or others would be an effective motivator.
- 71% strongly agreed that financial reasons (fines/court rulings/repair bills) would motivate change.
- 69% strongly agreed that an OSHA citation would be a key motivator.
Excavators Do Believe Damage Prevention is a Shared Responsibility

Q: Thinking of your experiences with professional excavation projects, generally speaking, what do you believe is the leading cause of damage to underground utilities?

- Locating Issues: 33%
- Notification Not Made: 26%
- Excavation Issues: 24%
- Notification Issues: 15%
- Other/Root Cause Not Listed: 2%
RECOMMENDATIONS:

1. Acknowledge some of the “judgment calls” that excavators make to expedite work. Across your training programs, advertising and educational materials targeting excavators, directly engage with excavators’ perceptions about the necessity of getting the job done rather than only talking about what happens in best-case, unhurried scenarios.

2. Leverage the factors that motivate excavators. A general focus on the costs of not following the process may be more easily understood by all types of excavators, based on input from excavator focus groups. There is confusion or general lack of awareness about the differences between expenses originated by facility operators’ claims departments and those that come from a state enforcement agency. The more general financial costs would likely be more widely understood. Physical harm is also the most powerful motivator for this stakeholder group.

3. Highlight the experiences of seasoned excavators. CGA’s research shows that previous experience with damage-causing events resonates with excavators. As evidenced by near consensus in CGA’s excavator focus groups, professional excavators’ on-the-job incidents influence their safe digging practices, which makes more seasoned excavators more likely to understand and follow state laws and best practices. Showcasing the stories of experienced excavators who may have learned hard lessons on the job can be powerful.
Key Takeaway #3

Develop and integrated communications plan to reach all types of excavators.
76% of Damages Reported into DIRT Were Due to Root Causes OTHER than “Notification Not Made”
Difference Among Excavators by Age

- Reported personally contacting a one call center
  - 74% of respondents 50-64 years old
  - 54% of respondents 21-34 years old
- Reported digging carefully around marks
  - 86% of respondents 50-64 years old
  - 62% of respondents 21-34 years old
- Reported always waiting the required amount of time for utilities to be marked
  - 64% of respondents 50-64 years old
  - 54% of respondents 21-34 years old
Key Takeaway #3

Recommendations

**RECOMMENDATIONS:**

1. Help excavators see themselves in the marketing and educational materials your organization produces.
   
   In general, CGA’s online excavator study found that younger employees and employees of smaller companies were less likely to know and follow all of the steps in the damage prevention process. CGA recommends members consider featuring younger excavators in materials to help connect with these new professionals who are still learning.

2. Produce materials that focus on the full damage prevention process with specific references to state law.
   
   These materials could include:
   
   - Videos, which could include those that are hosted within the [CGA 811 Communications Plan](#)
   - Fact sheets that visually explain the importance of and steps included in the entire damage prevention process
   - Informative and easy-to-read one-pagers that use concise and direct language and visuals

3. Keep all information approachable by avoiding industry jargon whenever possible.
   
   The knowledge and awareness gap between younger and older employees measured in the CGA online excavator study highlights the importance of using language that is easy for more novice audiences to understand, all while remaining true to state laws. For example, consider simplifying terms like “positive response” with language that is more descriptive/action-oriented like “confirm response from all utilities,” along with other modifications that describe a process.
Key Takeaway #4

Make damage prevention training more easily accessible, relevant and actionable.
Only half (51%) of respondents to CGA’s excavator safety study believe that all employees are responsible for maintaining safe digging practices.
Safe Digging Training

What resources do you reference on safe digging practices?
RECOMMENDATIONS:

1. Continue investing in online training modules and programs that identify influencers in excavator safety (such as insurance providers, general contractors, associations, internal risk management/safety directors).
   Tasking these stakeholders with training of the broader excavation workforce is an approach that is scalable, approachable and can easily fit into employee downtime.

2. Work to integrate damage prevention training into existing processes.
   Given the potential value of damage prevention training, CGA encourages member organizations to find opportunities to integrate damage prevention training into important state-level processes/business relationships. Examples include, but are not limited to, training provided by utility operators, governmental agencies such as state and local permitting offices and programs provided by contractors.

3. Be mindful of using words and illustrations that carry the broadest meaning.
   Terms that come directly from state laws, including “tolerance zone,” “positive response” and “pot-holing,” may be barriers to understanding by all target audiences. Consider showing what these concepts mean in a visual way and give short process tips that help all audiences understand their legal requirements in plain language.
Poll 3

Does your company or organization execute virtual training?
Resources for Taking Action

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- White Paper is designed to supplement existing CGA programs and resources
- Links to full reports referenced are included
- CGA committees working to develop additional tools / resources
Q&A - Webinar Instructions

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Click “hand raise” icon to ask a question verbally during Q&A session. Ensure you have entered your audio pin.

Click “?” to submit a written question.
CGA White Paper: *Data-Informed Insights and Recommendations for More Effective Excavator Outreach*

• Continue increasing awareness of 811 through strategic marketing and education campaigns.

• Acknowledge the realities of the jobsite when communicating best practices to excavators.

• Develop an integrated communications plan to reach all types of excavators.

• Make damage prevention training more easily accessible, relevant and actionable.
Call811.com

• Monday, April 8 was the busiest day in Call811.com history

• Most total visitors/site sessions, unique visitors and page views ever in a single month

• 17 of the 22 busiest days ever
Poll 4
Do you have an event or promotion planned for 8/11 Day?
Thank You!

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Steve Blaney: stevenb@commongroundalliance.com