

## Damage Prevention One-Call Center Survey

In August 2023, the Alliance for Innovation and Infrastructure (Aii) prepared and disseminated a survey designed to collect certain information from the one-call centers. The survey was composed of 17 questions, inclusive of optional write-in spaces and follow-up questions. The questions ranged from simple operational details to perceptions of the industry, its trajectory, and proposed future actions.

The survey recipients were the executive directors at each one-call center in the U.S. and Canada. This approach allowed Aii to query a discrete list of stakeholders that was manageable and specific (rather than surveying broad stakeholder groups, like “locators” or “excavators” that could include many thousands of potential respondents).

The survey was anonymous and emailed directly to the executive director or comparable leader at each center. While we do not know which individuals responded, we received responses equivalent to over half of call centers (about a 60 percent response rate).

### Key Findings:

- **75 percent** of respondents believe the U.S. is “**not on track**” to reduce excavation damages by 50 percent over five years. 25 percent believe the industry “is on track” for that goal. There was overwhelming support for the Common Ground Alliance “*50-in-5*” *Challenge*, even while expressing hesitation that it would be achieved.
- **81 percent** of respondents believe web-entry (as opposed to phone-in) requests lead to **more accurate locate requests**.
- **71 percent** of call centers responding **offer a mapping tool** for excavators to pre-mark their dig site.
  - It is unclear if in every case this meets the definition of “electronic white-lining” or merely functions as a request polygon that is then used to generate notifications.
  - In at least once case, an online mapping tool leads to excavator drawing the dig site shape, but the utility/locator only receiving a buffered general site polygon.
- **90 percent** of respondents view an **electronic notice** from the locator directly to the one-call center to be a **positive response**. Fewer respondents consider certain other practices to be a positive response, such as paper documentation left on site or verbal communication to on-site personnel.
- **Approximately half** of call centers responding allow a **ticket to be accessible** by the excavator or attached to a locator **positive response** – one component of an enhanced positive response. Responding centers reported that they allow the following to be attached to a positive response or are accessible to the excavator through a portal include: electronic white-ling map (40 percent), digital photographs (37 percent), facility maps (34 percent), and virtual manifests (19 percent). A quarter of responding call centers indicated that none of the above are able to be included via attachment or hyperlink in a positive response or accessible to the excavator through a portal (thus not offering an enhanced positive response).

## **This Report**

The survey results (attached as an appendix to this cover) speak for themselves and shed light on the practices and perceptions of the one-call center systems. We are aware that, while the response rate exceeded 50 percent, no individual response nor the totality of the survey entails a perfect representation of call centers generally or any individual call center specifically. The results of the survey are being shared back with call centers to provide the insights of their peers.

## **Brief Discussion of Survey Results**

It appears that many responding call centers are working to advance the use of technology within the industry beyond legislative and regulatory requirements. In some cases, offering technological best practices like electronic white-lining or electronic positive response when the state only requires pre-marking in certain instances (or not at all) or only requires a basic positive response. The survey also reveals differences in approach and potentially different paths pursued by certain call centers. The high level of agreement for certain practices and great diversity of approach and perspective for others may present opportunities for industry collaboration, discussion, and interstate learnings.

## **Technology Usage**

Call centers are implementing and using technology. From regular social media usage to data collection and analysis, 80 percent or more of respondents have embraced common or emerging technology at their centers. Website improvements were a notable form of technology in use at call centers, as it merges technology with communication. The user experience appears to be a key focus for most call centers. This observation is supported by the level of website enhancements reported, including concurrent functional, written, and layout enhancements, not merely individual elements.

Other technology-related interests include the use of mobile apps. By a margin of 60 percent to 40 percent, respondents indicated they do have such smartphone applications. While we are cognizant that locate requests are not the only use of a mobile, respondents reported the proportion of incoming locate requests processed through the app generally ranged from one percent to 10 percent.

## **Agreement and Coalescing Around Most Impactful Options**

While 90 percent of respondents stated that at their center, an electronic notice is considered a positive response, it was interesting that nearly 22 percent also consider a paper document left on site or a verbal communication to someone on site to be a positive response.

When asked about the top measures that can be taken to reduce underground damage, the spread of responses indicate many different viewpoints. In fact, true consensus only existed for one measure. While nearly 94 percent of respondents selected “better communication between parties throughout the entire digging process,” the next most selected answer received only 47 percent: “imposition of new penalties for no-notice excavation.” The survey allowed respondents to select their top five answers. The next answers included about 44 percent selecting “government enforcement of certain best practices,” about 40 percent selecting “educating contractors and

excavators,” and tied at 37.5 percent were “required or strongly encouraged certification programs run by industry groups” and “use of more technology by locators when performing the locate.” Other options received around 30 percent or less and included technology, regulations, and awareness campaigns.

The same lack of consensus exists around the “best” “systemic reforms” needed to improve damage prevention. The results were: 38 percent in favor of government regulations, 38 percent in favor of voluntary stakeholder leadership, 19 percent for industry initiatives, and only three percent for government support.

A more unified consensus may or may not result in progress toward damage prevention. It is noteworthy that some believe the top reform options look different from one another, and this may be an opportunity for collegial debate and discussion within the industry.

## Appendix:

The following pages include select highlighted survey responses. A full version of the report was only available to the call center executive directors themselves. We encourage call centers, all of whom responded anonymously, to consider the responses and reach out to peer call centers to learn more and undertake greater collaboration. This survey result highlight is in the public interest and may benefit the industry.

### Aii One-Call Center Survey

#### 1.

Over the last several years, there has been a shift toward the use of more web-entry locate requests as opposed to an excavator calling in a ticket request. Do you think that web-entry, as opposed to a phone-in request, leads to more accurate locate requests?	
Yes	81.25%
No	12.5%
No Difference	6.25%

#### 2.

Does your one-call center have a mobile app in addition to a website for excavators to make locate requests?	
Yes	59.4%
No	40.6%

#### 2a

If you have a mobile app, what percentage of incoming locate requests come in through your app? (If you have percentages for app, website, and call-ins separately, please list respectively for the last year you have data available)

- Among written responses, the predominant response indicated 10 percent or less.

#### 3.

Do you use social media (e.g., Twitter, Facebook, YouTube, Instagram, LinkedIn, etc.) to promote awareness of the need to request a locate before digging?	
Regular social media presence for that purpose	81.3%
Occasional social media posts for that purpose	18.8%
No use of social media for that purpose	0%

4.

How do you determine the effectiveness of your call center’s messaging to excavators to make locate requests through the call center? (select all that apply)	
Internally generated statistics	81.3%
Feedback from third-party organizations (e.g., CGA/DIRT Report)	50%
Surveys prepared by the one-call center	50%
Word of mouth	31.3%
Write in responses included other digital and social metrics.	

5.

In the past three years, have enhancements been made to your website and/or mobile app? (select all that apply)	
Added new functionalities	21.9%
No functional changes, but new educational resources or written content added	6.3%
Layout, formatting, or visual changes only	3.1%
Each of the above (functional, written, and/or layout enhancements)	62.5%
No significant changes	6.3%
“We do the most amount of work on advancing tools in ticketing system based on analytical research and behavior in the field”	
<i>(this write in was included above within “Added new functionalities” but is listed here as a notable quote as well)</i>	

6.

The Common Ground Alliance (CGA) has identified electronic white-lining as having a high return on investment and recently revised its best practice statement to emphasize this form of proposed excavation delineation. Do you offer an online mapping tool for excavators to pre-mark their digging site?	
Yes, not promoted	6.3%
Yes, promoted	40.6%
Yes, mandatory to use for web-entry requests	25%
No	28.1%

7.

At your call center, which of the following do you consider to be a positive response to a locate request? (select all that apply)	
Electronic notice from the locator provided directly to one-call center	90.6%
Spray paint or flags on the ground	59.4%
Text or email to excavator	43.8%
Phone call to excavator (and verbal communication)	37.5%
Phone call to excavator (and voice message left)	37.5%
Paper documents left on site	21.9%
Verbal communication on site to an excavator or construction employee	21.9%
No marks on site after the required waiting period if no facilities are present	0%

8.

CGA has recognized additional forms of a positive response to a locate request in its best practice guide, including enhanced positive response (Best Practice Guide 3.31). Does your center allow any of the following to be attached to a locate request response and/or be accessible to the excavator via a link supplied to the excavator by the one-call center? (select all that apply)	
Ticket	53.1%
Electronic white-line map	40.6%
Photographs	37.5%
Facility Maps	34.4%
Manifest	18.8%
None of these	25%
Write in responses included additional attachments and file formats.	

9.

From your experience, what is the most common reason for not notifying 811 before digging?	
Lack of knowledge about 811	18.8%
Time constraints	28.1%
Cost concerns	3.1%
Previous marks found on site	0%
Lack of understanding about what constitutes "digging" is (e.g., landscaping, planting, fence building not viewed as "excavation")	15.6%
Write in responses included some of the above in combination with others views, along with potential "lack of faith in the system."	

**10.**

Which of the following types of information does your call center collect and analyze? (select all that apply)	
Call center metrics (e.g., call volume, wait times)	100%
Technology adoption rates (e.g., mobile app downloads, web portal usage)	78.1%
Damage events (i.e., to identify and understand root causes)	65.6%
None of these	0%

**11.**

What additional measures can be taken to help reduce underground damages most? (please select up to five that you would prioritize)	
Better communication between parties throughout the entire digging process	93.8%
Imposition of new penalties for no-notice excavation	46.9%
Government enforcement of certain best practices	43.8%
Educating contractors and excavators	40.6%
Required or strongly encouraged certification programs run by industry groups	37.5%
Use of more technology by locators when performing the locate	37.5%
Use of more technology by excavators during excavation	31.3%
Increasing public awareness campaigns	31.3%
Shift from calling 811 to web-entry tickets	21.9%
Use of more technology at the one-call center during ticket generation	21.9%
Implementing more stringent digging regulations	9.4%
Consolidating public awareness programs	6.3%
Write in responses prominently mentioned mapping.	

**12.**

In February 2023, the Common Ground Alliance (CGA) issued an industry challenge to reduce excavation damages by 50 percent in five years. Do you think the U.S. is on track to reduce these damages by 50 percent over the next five years?	
Yes	24.1%
No	75.9%

**12a.**

If you would like to provide more information with respect to your answer to the *previous question*, please do so below.

- Written responses held the 50 in 5 challenge to be “fantastic” or “commendable,” but indicated that the collaboration necessary to realize the challenge is not a present reality. Others were unsure how CGA intended to go about achieving the goal.

**13.**

To the extent that systemic reforms are needed to improve damage prevention, what is the best way to do so in your opinion?	
Government regulations (e.g., call before you dig laws, operational requirements)	38.7%
Voluntary Stakeholder Leadership (e.g., adherence to best practices)	38.7%
Industry initiatives (e.g., certification programs)	19.4%
Government support (e.g., technology grants, federal technology studies)	3.2%

**14.**

We would be interested to know in what ways you believe one-call centers can continue to support reducing damages across the damage prevention ecosystem. How do you see your role evolving in the future? What opportunities do you want to pursue or see in the industry?

- Education, collaboration, and technology featured prominently in written responses.

**15.**

Do you have additional thoughts on the damage prevention system, the need for reform, or the reason for certain successes or failures?

- There were many long and thoughtful responses submitted in this space. Common themes were the need for collaboration, not only among stakeholders but among states. Prudent use of public policy, technology, and close and communicative relationships between and among all stakeholder groups is a clear priority.





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## About Aii

The Alliance for Innovation and Infrastructure (Aii) is an independent, national research and educational organization that explores the intersection of economics, law, and public policy in the areas of climate, damage prevention, energy, infrastructure, innovation, technology, and transportation.

Aii is a think tank consisting of two non-profits: the National Infrastructure Safety Foundation (NISF), a 501(c)(4) social welfare organization, and the Public Institute for Facility Safety (PIFS), a 501(c)(3) educational organization. Both non-profits are legally governed by volunteer boards of directors. These work in conjunction with the Alliance's own volunteer Advisory Council.

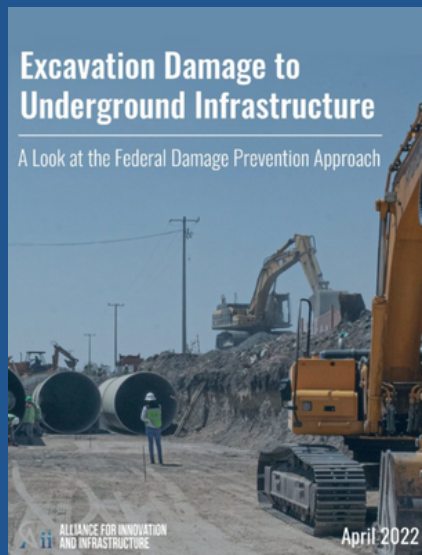
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