



Request for Proposal

Analysis of Excavation Damages and One Call Center Operations

BACKGROUND

The Common Ground Alliance (CGA) seeks to engage a professional services contractor to assist in the statistical analysis of data relating to excavation damages to underground facilities and One Call Center operations.

CGA is a non-profit organization that receives financial support from the owners of underground utilities (oil and gas pipelines, electrical power lines, water systems, telecommunications lines, cable television systems and others), excavators, one call centers, equipment manufacturers, the insurance industry, government regulators, the general public and the federal government through the U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA).

CGA was created, in part, to promote the concept that damage prevention is a shared responsibility and that it is in the public interest to ensure the safety, environmental protection and utility service reliability of underground facilities. Damage to underground utilities can result in deaths and injuries to individuals, damage to property and the environment, utility service interruptions and disruptions due to evacuations and road closures.

In order to fully understand the complex issues surrounding underground facility damages on a national scale, thorough analysis of a large volume of data is required. The primary purpose in collecting and analyzing underground facility damage data is to identify the factors that contribute to damages, and how action by stakeholders can prevent them in the future. Data collection will allow the CGA to identify root causes, perform trend analysis, and help educate all stakeholders so that damages can be reduced through effective education, public awareness and industry standards or practices.

The CGA has developed a Damage Information Reporting Tool (DIRT) – a secure web application for the collection and reporting of underground damage information. The DIRT system allows users to submit damage reports and is open to all stakeholders in the United States and Canada. CGA has produced annual DIRT Reports since 2004.

The CGA also collects data from One Call Centers such as number of incoming notices of intent to excavate (locate requests), outgoing transmissions to member facility operators, exemptions, and regulations.

Additional background on CGA can be found here: <https://commongroundalliance.com/about-us>

CGA's Best Practices Manual contains additional background on CGA in the Introduction, more definitions in the Glossary, and 10 Best Practices Chapters based on various aspects of damage prevention. It can be viewed online here: <https://commongroundalliance.com/programs/best-practices>



Past annual DIRT Reports can be found here: <https://commongroundalliance.com/media-reports/dirt-reports>

Additional information on the damage prevention process can be found here: <http://call811.com/>

Definitions

Damage: Any impact or exposure that results in the need to repair an underground facility due to a weakening or the partial or complete destruction of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection, or housing for the line, device, or facility.

Locate Request: A communication between an excavator and one call center personnel in which a request for locating underground facilities is processed.

Notice: The timely communication by the excavator/designer to the one call center that alerts the involved underground facility owners/operators of the intent to excavate.

One Call Center: An entity that administers a system through which a person can notify owners/operators of lines or facilities of proposed excavations. Note: most One Call Centers cover an entire single state, but not always.

Ticket: See Locate Request and Notice. These are often used interchangeably.

Transmissions—The number of initial notices of intent to excavate sent by one call centers to their member facility operators, including those sent directly to locating vendors on behalf of members. Each incoming notice of intent to excavate generates outgoing transmissions to several members, such as electric, gas, cable TV, water, sewer, telecommunications, etc.

PROBLEM STATEMENT

The standard damage prevention metric to make comparisons and measure progress has been some form of damages/per ticket. In order to track their own progress, individual facility operators typically use damages per 1000 tickets, with “tickets” referring to notices it receives from the one call center it participates in of an impending excavation that may be near its buried facilities. Because each individual utility within an excavation work area is theoretically at risk of being damaged, CGA’s DIRT reports use damages per 1000 transmissions (as defined above). At this level, the metric is an aggregate of the risk to all facility operators and allows for performance tracking and comparison at the state and national level.

The advantages of this metric are it is easy to understand on the surface, and the data is readily available. However, looking below the surface reveals several issues. Foremost is that “tickets” are not the same everywhere due to differences in state laws and one call center policies. For example, some states require tickets be renewed if the work extends beyond a certain time limit (ex: 15 day “life-of-



ticket”), some limit the geographical size of the work area per ticket (ex: 1 mile along a road, 1 city block, 10 address or lot numbers on same street). Some of the complications this presents are:

1. If notices within a state increase year-over-year but damages stay level, or even increase slightly, the metric improves.
2. If two states (A and B) are similar in terms of population, number of damages, density of buried facilities, GDP, GDP growth, etc., but State A has more notices due to variables such as life/scope of ticket, State A will *appear* better than State B because its denominator is larger, making the overall metric lower.
3. This is no corresponding ticket in the denominator for damages caused by no notification to the one call center.
4. It does not account for excavations with no damage and no one call notification.

The desired deliverable is an analytical model to calculate a metric (or metrics) that allows for measuring progress over time within a single state, and for comparisons between states of damage prevention regulations, exemptions, enforcement, marketing, education and awareness, etc. The metric would be used to identify practices, policies, laws, etc. that are successful in improving damage prevention performance, but normalize the denominator to account for differences in what constitutes a ticket or drives ticket volume in a state.

CGA has explored other denominators such as construction spending, miles of buried facilities, population, GDP growth, etc. There are issues with availability of this data and with correlating it to the risk of excavation damages. Although CGA may continue to explore this avenue, it is not the subject of this RFP.

Many damage prevention stakeholders are also interested in metrics that would allow industry-to-industry comparisons (ex: natural gas vs. telecommunications), or company-to-company within an industry. There is also interest in metrics that would allow comparisons on a country to country basis, such as the US and Canada versus other “first-world” countries. The focus of this RFP is on state-to-state comparisons, but solutions that are adaptable to such other comparisons are welcome.

SCOPE OF WORK

The CGA is seeking a professional services consulting firm with expertise in developing analytical models, normalizing data, and developing performance metrics, to perform analysis and make recommendations to address the above Problem Statement. Experience in the utility sector and/or in the damage prevention industry is preferred.

The desired approach is to use one call ticket data from several participating one call centers (approx. 10 to 12) to establish a baseline or “center of the curve,” and normalization factors that could then be applied to other states to calculate a damages-per-ticket ratio that accounts for the variations in tickets as described above, to allow meaningful comparisons. CGA has preliminary data, which may need



updating, from several one call centers such as life of ticket, size limits, exemptions, etc. CGA will assist in identifying the participating states and obtaining data from the One Call Centers.

The recommendations may include multiple alternatives with a discussion of trade-offs and pros and cons and should be scalable from the initial states participating in the study up to a national level.

The bidder should anticipate attendance of 3-5 conference calls of 1-2 hours in duration (with the conference call costs paid by the CGA), the issuance of the deliverables, responding to emails from the CGA in connection with the Scope of Work, and being available by telephone for questions from the CGA at the completion of the project for a summary conference. Although not currently anticipated, the bidder should submit their daily rate to attend face-to-face meetings with the CGA, should that process be necessary. The CGA would pay any reasonable travel costs associated with such meetings.

DELIVERABLES

1. Written report describing the research conducted, approach used to address the problem, recommendation(s) with discussion of pros and cons and trade-offs.
2. Mathematical model demonstrating the recommendations with examples of application over three years of past data.

BID PROCESS

To express an interest in becoming the CGA's contractor for this Scope of Work, please submit the following:

- A statement of capabilities relative to the goals of the project as described above.
- A description of any relevant prior experience, including in the utilities, risk management and/or damage prevention industries if applicable, and/or solving similar issues in other industries. CGA may request contact information for references.
- A workplan outlining the intended approach to the Scope of Work.
- A cost estimate demonstrating how a total price is calculated, such as person-days for various tasks and/or personnel experience and qualification levels.
- A proposed billing method for the Scope of Work in the form of one of the following: hourly rate, monthly retainer with minimum hours, combination structure, or flat rate. It is the expectation of the CGA that the proposal shall have a project price which consultant agrees not to exceed for performing the Scope of Work. If the CGA requires consultant to travel in connection with the performance of the scope of work, CGA shall reimburse consultant for all reasonable travel costs. Consultant shall in its proposal include a per day rate in the event CGA desires to have consultant perform services on that basis or to travel to attend meetings in connection with performing the Scope of Work.
- A proposed schedule to complete the project.



The successful bidder shall enter into a written agreement with the CGA encompassing not only this RFP and the proposal submitted to the CGA but also the attached contract terms. If you would like to request any modifications to the attached contract terms, please submit with your proposal. The successful bidder shall also assign all intellectual property rights to deliverables, including, without limitation, copyrights, to the CGA in accordance with the attached contract terms.

Submitting Proposals:

Proposals must be submitted electronically by February 28, 2020 at 5:00PM (Eastern).

Submit an electronic copy of your proposal to:

<https://commongroundalliance.com/dirt-report-metrics-request-proposal-february-2020>

(Electronic confirmation of receipt of proposal will be sent following submittal)

Questions: Send any questions related to the scope of work or RFP to dirt@commongroundallianc.com. Please specify "CGA Metrics RFP" in the email subject.