

DIRT Training

Ohio Gas Association Technical Seminar

March 29, 2012
Columbus, OH

Brian Tooley / Verizon
and member,
CGA Data Reporting & Evaluation Committee



Digging into DIRT

- Overview
 - What is DIRT
 - Where is DIRT
 - How to submit to DIRT
- Features
 - Virtual Private DIRT (VPD)
 - Data Access Grants
 - Query Wizard, DQI +
- 2010 Annual Report review
- Value of Participation
- Q&A

DIRT

What is it?

DIRT is a secure, web application used for collecting and reporting of underground damage information.

- Based on Figure 9-1 of the original Best Practices of the Common Ground Study
- Appendix C of the current Best Practice

Anonymity and confidentiality are paramount issues among stakeholders:

- Security Whitepaper
- Public Confidentiality Memo

Single Sign-On

Welcome to Single Sign-On!
CGA's central site for gaining access to a host of applications and services.

[What is SSO?](#)

Already registered and forgot your password?

[Help](#)

[Log In](#)

New to DIRT?

Registration is fast and easy. In just a few minutes, you can be submitting your data via our secure web-based form or taking advantage of our Automated Data Loader or Universal Front End Loader tools.

Why use DIRT? [Find out more ...](#)



About CGA

The Common Ground Alliance (CGA) is a non-profit organization dedicated to promoting shared responsibility in damage prevention. Representing individuals from 15 stakeholder groups and over 150 member organizations, the CGA works cooperatively with all interested stakeholders to identify and implement effective measures to protect the underground infrastructure during excavation activity.

[Tell Me More](#)

DIRT Tools & Documentation

NEW Annual Report [Menu](#)

Universal Front End Loader [download](#)

DIRT User Guide [Guide](#)

DIRT Security Whitepaper [download](#)

DIRT Confidentiality Memo [download](#)

Damage Report Form (off line completion) [download](#)

Software Release Notes [v5.3](#)

Need Training?

- [Registration](#)
- [Web Data Entry](#)
- [Automated Data Loader](#)
- [Profile & Password](#)
- [Manager Tasks](#)
- [Data Grants & Query Wizard](#)

Videos for Feedback and Universal Front End Loader are coming soon!

Virtual Private DIRT

NEW Virtual Private DIRT (VPD) is your own version of DIRT customized for your company or organization.

[Get It!](#)

[VPD Overview](#)

Technical Support & Feedback

Have a question or comment?
Maybe you need account assistance?

[Feedback & Support](#)

Single Sign-On

Welcome to Single Sign-On!
CGA's central site for gaining access to a host of applications and services.

[What is SSO?](#)

Already registered and forgot your password?

[Help](#)

[Log In](#)

New to DIRT?

Registration is fast and easy. In just a few minutes, you can be submitting your data via our secure web-based form or taking advantage of our Automated Data Loader or Universal Front End Loader tools.

Why use DIRT? [Find out more ...](#)

About CGA

The Common Ground Alliance (CGA) is a non-profit organization dedicated to promoting shared responsibility in damage prevention. Representing individuals from 15 stakeholder groups and over 150 member organizations, the CGA works cooperatively with all interested stakeholders to identify and implement effective measures to protect the underground infrastructure during excavation activity.

[Tell Me More](#)

DIRT Tools & Documentation

NEW Annual Report [Menu](#)

Universal Front End Loader [download](#)

DIRT User Guide [Guide](#)

DIRT Security Whitepaper [download](#)

DIRT Confidentiality Memo [download](#)

Damage Report Form (off line completion) [download](#)

Software Release Notes v5.3 [v5.3](#)

Need Training?

- [Registration](#)
- [Web Data Entry](#)
- [Automated Data Loader](#)
- [Profile & Password](#)
- [Manager Tasks](#)
- [Data Grants & Query Wizard](#)

Videos for Feedback and Universal Front End Loader are coming soon!

Virtual Private DIRT

NEW Virtual Private DIRT (VPD) is your own version of DIRT customized for your company or organization.

[Get It!](#)

[VPD Overview](#)

Technical Support & Feedback

Have a question or comment?
Maybe you need account assistance?

[Feedback & Support](#)



Data Submission

- A. Individual incidents reported singularly on the damage report form
- B. Bulk data submission
 - Delimited Text File
 - XML File
- C. Universal Front End Loader
- D. Virtual Private DIRT



Damage Prevention
is a Shared Responsibility.

DIRT North America - File Upload

Upload legacy ADL Delimited Text File

The legacy ADL (Automated Data Loader) format accepts comma-, tab-, or pipe-delimited text files in a very specific format, described in the [File Upload Specification](#) document.

Submitted data is validated immediately on upload and is saved only if *all* rows in the file pass validation.

*Columns Delimited By:

*Choose delimited-text file to upload:

Upload DIRT Incident Service XML File NEW

The new XML (Extensible Markup Language) format is designed to be extensible for future evolution of the DIRT collection tool and ancillary incident data. Designed for automated business-to-business integration, the Incident Report XML web service can be used to submit new and updated sets of DIRT data, attachments, and flex fields. See the [Web Service Status](#) page for WSDL and schema access. Web Service Submissions require authorization keys, which can be managed on the [XML Authentication](#) page.

This form allows you to submit XML files directly for testing or as an alternative to the legacy ADL format. Your XML must be formatted according to the [dirtIncidentReport.xsd](#) XML schema. See the following file for an example: [sample-dirtIncidentReport.xml](#).

Submitted data is validated immediately on upload and is saved only if *all* rows in the file pass validation.

*Choose XML file to upload:

ABC's of data collection & reporting

- A. Who is submitting data
- B. Date and Location of the event
- C. Affected Facility Information
- D. Excavation Information
- E. Notification
- F. Locating and Marking
- G. Excavator Downtime
- H. Description of Damage
- I. Description of the Root Cause
- J. Additional Comments (Character Limit: 4000)
- Z. Images & Attachments

Required Fields

- 16 required fields are:
 - Stakeholder Type
 - Date
 - Country, State, County, City, ROW Type
 - Type of Facility Operation and Facility Affected
 - Type of Excavator, Excavator Equipment and Work Being Performed
 - Did the Excavator notify the One-Call Notification Center
 - Was there damage to a facility and did the damage cause a service interruption
 - Root Cause

DIRT Features

- Virtual Private DIRT (VPD)
- Data Access Grants
- Query Wizard

Virtual Private DIRT (VPD)

What is it?

VPD is a secure, isolated copy of the DIRT application with a dedicated URL path (e.g. <https://damagereporting.org/michigan>)

- Dedicated database space
- Customized look & feel
 - Logo image for your organization name
 - Style, colors, layout to match your org.
 - Emails to/from your org.
- Flex Field Customization
 - Add your own fields to CGA DIRT



NTDPC Damage Reporting (DIRT)

Damage Reporting is a Shared Responsibility

[Support](#) / [User Guide](#)

Please log in to continue

About NTDPC

The North American Telecommunications Damage Prevention Council (NTDPC), is a non-competitive forum dedicated to promoting the protection of underground facilities, subsurface facility awareness and the use of One Call notification systems.

Our goal is to prevent damage to the buried facilities that form our nation's telecommunications infrastructure, the integrity of which, being vital to the national interests of the United States.

[Tell Me More](#)

New to DIRT?

Registration is fast and easy. In just a few minutes, you can be submitting your data via our secure web-based form or taking advantage of our Automated Data Loader or Universal Front End Loader tools.

Why use DIRT? [Find out more ...](#)

[Register](#)

Already Registered? Login

Enter your email address and password. Required fields are marked with a red *.

Forgot your password? [Help](#)

Email:*

Password:*

[Login](#)

DIRT Tools & Documentation

- [NEW 2005 Annual Report](#) download
- [Universal Front End Loader](#) download
- [Automated Data Loader](#) Spec
- [DIRT User Guide](#) Guide
- [Damage Report Form \(off line completion\)](#) download
- [Software Release Notes](#) v5.2

Need Training?

- [Registration](#)
- [Web Data Entry](#)
- [Automated Data Loader](#)
- [Profile & Password](#)
- [Manager Tasks](#)
- [Data Grants & Query Wizard](#)

Videos for Feedback and Universal Front End Loader are coming soon!

Virtual Private DIRT

You are logging in to a Virtual Private DIRT, instance #5 -- your own version of DIRT customized for your company. For the main CGA DIRT North America instance, click [here](#).

[VPD Overview](#)

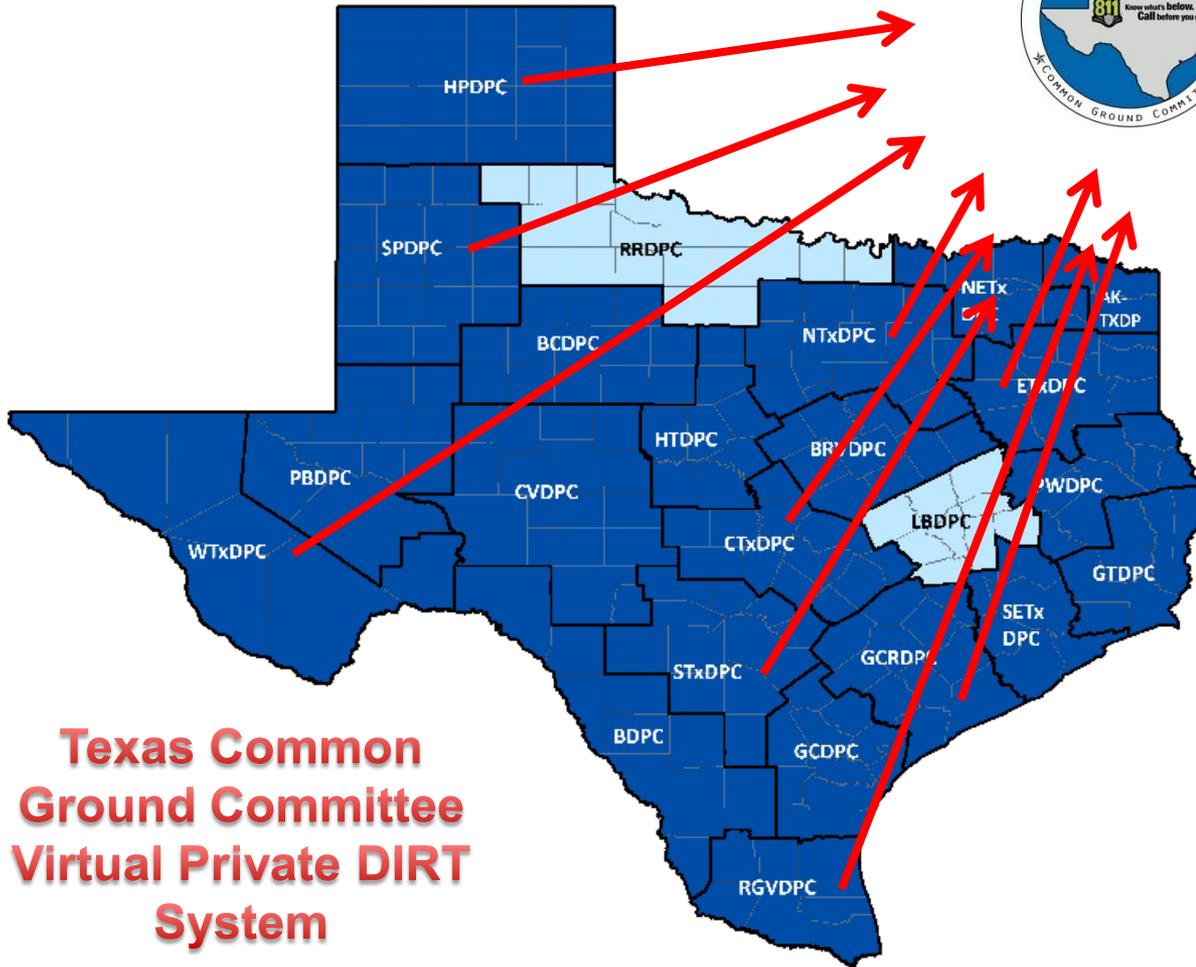
Technical Support & Feedback

Have a question or comment? Maybe you need account assistance?

[Feedback & Support](#)



CGA DIRT North America



Texas Common Ground Committee Virtual Private DIRT System

1. Tx CGC establishes TX VPD
2. Tx CGC registers as a 'Reporting Organization'
3. Each regional damage prevention council registers as a company / organization w/in TX VPD
4. Each regional DPC grants access of its data to Tx CGC
5. Tx CGC creates 'Reports' under Power Query Wizard

Note: Each record submitted to TX VPD is automatically shared with DIRT North America for analysis on a national level



DIRT

Damage Information Reporting Tool



Part Z

Part I: Description of the Root Cause

*Choose a first-level cause:

Excavation practices not sufficient ▼

*Choose a 2nd-level cause:

- - Failure to verify location by test-hole (pot-holing) ▼

For Other/None of the above, please explain:

Part J: Additional Comments (Character Limit: 4000)

this space is for narrative and additional comments

Part Z cont. (non-CGA) Images and Attachments

Thumbnail	File Name	Size	Last Modified	Action
Add #1	C:\Users\brian.tooley\P <input type="button" value="Browse..."/>			Remove
Add #2	C:\Users\brian.tooley\P <input type="button" value="Browse..."/>			Remove
Add #3	<input type="text"/> <input type="button" value="Browse..."/>			Remove
Add #4	<input type="text"/> <input type="button" value="Browse..."/>			Remove
				Add More Attachments...

Flex Fields – Part Z

Part I: Description of the Root Cause	
*Choose a first-level cause:	<input type="text" value="-- select --"/>
If applicable, choose a 2nd-level cause:	<input type="text" value="n/a: no 2nd-level causes for this option"/>
For Other/None of the above, please explain:	

Part J: Additional Comments (Character Limit: 4000)
<input type="text"/>

Part Z: Site-Specific (non-CGA) Data	
Name of excavator onsite:	<input type="text"/> (optional: text w/maximum length 80)
Contact Name:	<input type="text"/> (optional: text w/maximum length 80)
Soil Type:	<input type="text" value="-- select --"/> (optional: choose one)

|

Edit Flex Field

ID: 883612

Display/sort order:
Number used to determine the order in which this flex field is displayed on the damage report form and file upload specification

Field name:
Short name for this field. Must be alphanumeric with no spaces or special characters. Example: ExcavatorName

File Upload (ADL) name:
Name for this field in the ADL/file upload specification. Should be all upper-case with no spaces or special characters, except underscore (_). Example: EXCAVATOR_NAME

Web form "helpful" label:
User-friendly label to display on the damage report form. Example: Optionally, enter the Excavator Name

Required?
Indicate whether this flex field should be a required or optional value. Note: required flex fields can only be created when there are no damage reports in the system. An optional flex field cannot be changed to a mandatory flex field once in use.

Data type:
Indicate the type of data to be input in this flex field

Lookup table values:

#	Order	Abbr	Description	
1	<input type="text" value="120"/>	<input type="text" value="SAND"/>	<input type="text" value="Sand"/>	<input type="text" value="⊗"/> Del
2	<input type="text" value="130"/>	<input type="text" value="MUD"/>	<input type="text" value="Mud"/>	<input type="text" value="⊗"/> Del
3	<input type="text" value="140"/>	<input type="text" value="LOAM"/>	<input type="text" value="Loam"/>	<input type="text" value="⊗"/> Del

Add

This flex field is not in use by any damage reports.

Data Access Grant

What is it?

Data Access Grants are a means for a user / submitter to allow a Reporting Organization (One-Call Center, Trade Association, State agency, etc) access to its raw data

- Access can be granted / revoked at any time
- Access can be limited to specific states
- Reporting Orgs provide local or industry analysis
- Company / Organization name remains anonymous
 - New development underway creating real efficiencies to enable DIRT submissions to be used in those states where damage reporting is mandated
 - Eliminates reporting multiple times in various formats to different
 - DIRT to become the Standard damage report format

Data Access Grant



Damage Reporting is a Shared Responsibility

Log Out

- Log Out
- Main Menu
- User Guide
- Downloads
- Support

Grant Data Access

Sharing my data

Texas Common Ground Committee has shared data with the following organizations:

Sharing with Texas One Call System identity shared restricted to Texas with Company Administrators only

[Modify](#)
[Revoke](#)

Provide New Grant...

Data Receiving Organization Settings

Yes, Texas Common Ground Committee *is* a Data Receiving Organization and allows other organizations to grant access to their data.

Change Status...

Data Grantors:

7 other companies/organizations have shared their data with Texas Common Ground Committee.

Provide new Data Grant

My company/organization agrees to share data with the indicated Data Receiving Organization:

From my org: Texas Common Ground Committee

To data receiving org: North TX - DPC

Share Identity of my company/organization

Geo Limit: US-Texas

User Limit: with Company Administrators only

Cancel Add Grant

Query Wizard



Texas Common Ground Committee Damage Reporting (DIRT)

John Sparks <johnsparks@texas811.org> of Texas Common Ground Committee

eng | fra [beta]

Damage Reporting is a Shared Responsibility

Log Out

Log Out

Main Menu

User Guide

Downloads

Support

Quick Reports

Power Reports

STEP 1: Enter date range for Date of Damage

Start Date: End Date: (MM/DD/YYYY)

STEP 2: Choose whether to include granted data

- Report only on data I submitted
- Report on data for my organization (Texas Common Ground Committee)
- Plus** data for all organizations that granted access to their data ([display list](#)).

STEP 3: Choose format and run the report

Report Name:

Domain Options:

Value Options:

Web Report (.html)

Display in browser

Comma-delimited (.csv)

Download for spreadsheet analysis, e.g. Excel

Tab-delimited (.tsv)

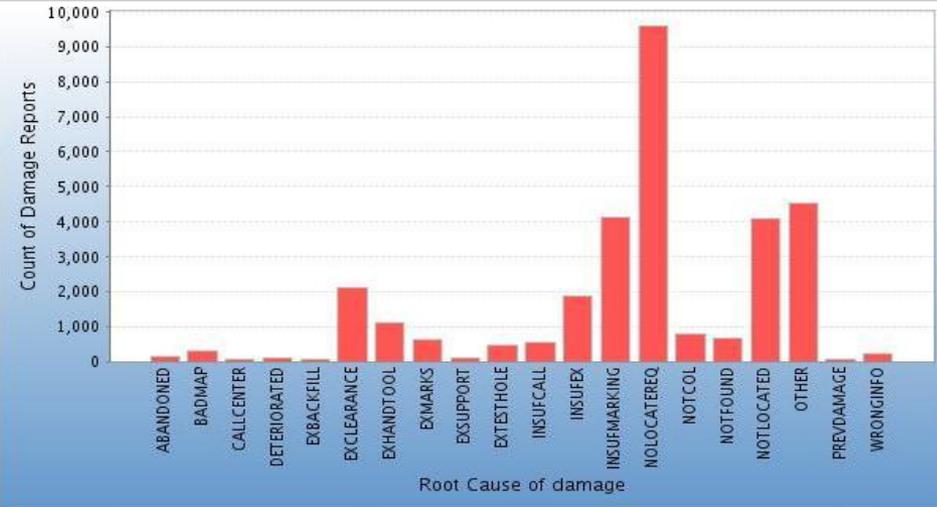


Damage Reporting is a Shared Responsibility

Log Out

- Log Out
- Main Menu
- User Guide
- Downloads
- Support

Report: RPT04: Breakdown by Category - Bar **Time Period:** 01/01/2008 to 02/22/2010
Data Set: Granted data for Org Admin and data for Texas Common Ground Committee **Report Run:** 2010-02-22 19:50:12 MST



ABBR	DAMAGE CAUSE	COUNT	PERCENT
ABANDONED	Abandoned facility	135	0.42
BADMAP	-- Incorrect facility records/maps	312	0.99
CALLCENTER	One-Call notification center error	65	0.20
DETERIORATED	Deteriorated facility	93	0.29
EXBACKFILL	-- Improper backfilling	47	0.14
EXCLEARANCE	-- Failure to maintain clearance	2116	6.71
EXHANDTOOL	-- Failure to use hand tools where required	1101	3.49
EXMARKS	-- Failure to maintain the marks	604	1.91
EXSUPPORT	-- Failure to support exposed facilities	95	0.30
EXTESTHOLE	-- Failure to verify location by test-hole (pot-holing)	477	1.51
INSUFCALL	-- Notification to one-call center made but not sufficient	529	1.67
INSUFEX	Excavation practices not sufficient	1890	5.99
INSUFMARKING	-- Facility marking or location not sufficient	4141	13.14
NOLOCATEREQ	-- No notification made to the one-call center	9586	30.42
NOTCOL	Data Not Collected	781	2.47
NOTFOUND	-- Facility could not be found/located	664	2.10
NOTLOCATED	-- Facility was not located or marked	4085	12.96
OTHER	Other	4534	14.38
PREVDAMAGE	Previous damage	43	0.13
WRONGINFO	-- Wrong information provided	211	0.66

Back / Change

Data Quality Index (DQI)

What is it?

DQI is a tool that provides submitters with confidential feedback about the data they have submitted

- “Measure of Completeness”
 - How many fields were populated with something other than ‘Data Not Collected’ or ‘Unknown/Other’
- Calculated based on a computerized scoring of each record submitted and then averaging those scores
- DQI provided for single entries, bulk uploads or via Query Wizard

On Site Report Form

Rev: 2/1/2012
 ** indicates a Required Field

Damage Information Reporting Tool (DIRT) - Field Form

Rev: 2/1/2012
 ** indicates a Required Field

Part A – Who is Submitting This Information

Who is providing the information? Electric Engineer/Design Equipment Manufacturer
 Excavator Insurance Liquid Pipeline Locator Natural Gas
 One-Call Center Private Water Public Works Railroad
 Road Builders State Regulator Telecommunications Unknown/Other

Name of the person providing the information:

Part B – Date and Location of Event

*Date of Event: (MM/DD/YYYY)
 *Country *State *County City
 Street address Nearest Intersection
 *Right of Way where event occurred
 Public: City Street State Highway County Road Interstate Highway Public-Other
 Private: Private Business Private Land Owner Private Easement
 Pipeline Power /Transmission Line Dedicated Public Utility Easement
 Federal Land Railroad Data not collected Unknown/Other

Part C – Affected Facility Information

*What type of facility operation was affected?
 Cable Television Electric Natural Gas Liquid Pipeline Sewer (Sanitary Sewer)
 Steam Telecommunications Water Unknown/Other

*What type of facility was affected?
 Distribution Gathering Service/Drop Transmission Unknown/Other

Was the facility part of a joint trench?
 Unknown Yes No

Was the facility owner a member of One-Call Center?
 Unknown Yes No

Part D – Excavation Information

*Type of Excavator
 Contractor County Developer Farmer Municipality Occupant
 Railroad State Utility Data not collected Unknown/Other

*Type of Excavation Equipment
 Auger Backhoe/Trackhoe Boring Drilling Directional Drilling
 Explosives Farm Equipment Grader/Scraper Hand Tools Milling Equipment
 Probing Device Trencher Vacuum Equipment Data Not Collected Unknown/Other

*Type of Work Performed
 Agriculture Cable Television Curb/Sidewalk Bldg. Construction Bldg. Demolition
 Drainage Driveway Electric Engineering/Survey Fencing
 Grading Irrigation Landscaping Liquid Pipeline Milling
 Natural Gas Pole Public Transit Auth. Railroad Maint. Road Work
 Sewer (San/Storm) Site Development Steam Storm Drain/Culvert Street Light
 Telecommunication Traffic Signal Traffic Sign Water Waterway Improvement
 Data Not Collected Unknown/Other

Part E – Notification

*Was the One-Call Center notified?
 Yes (If Yes, Part F is required) No (If No, Skip Part F)
 If Yes, which One-Call Center?
 If Yes, please provide the ticket number

Part F - Locating and Marking

*Type of Locator
 Utility Owner Contract Locator Data Not Collected Unknown/Other

*Were facility marks visible in the area of excavation?
 Yes No Data Not Collected Unknown/Other

*Were facilities marked correctly?
 Yes No Data Not Collected Unknown/Other

Part G – Excavator Downtime

Did Excavator incur down time?
 Yes No
 If yes, how much time?
 Unknown Less than 1 hour 1 hour 2 hours 3 or more hours Exact Value _____

Estimated cost of down time?
 Unknown \$0 \$1 to 500 \$501 to 1,000 \$1,001 to 2,500 \$2,501 to 5,000
 \$5,001 to 25,000 \$25,001 to 50,000 \$50,001 and over Exact Value _____

Part H – Description of Damage

*Was there damage to a facility?
 Yes No (i.e. near miss)

*Did the damage cause an interruption in service?
 Yes No Data Not Collected Unknown/Other

If yes, duration of interruption
 Unknown Less than 1 hour 1 to 2 hrs 2 to 4 hrs 4 to 8 hrs 8 to 12 hrs 12 to 24 hrs
 1 to 2 days 2 to 3 days 3 or more days Data Not Collected Exact Value _____

Approximately how many customers were affected?
 Unknown 0 1 2 to 10 11 to 50 51 or more Exact Value _____

Estimated cost of damage / repair/restoration
 Unknown \$0 \$1 to 500 \$501 to 1,000 \$1,001 to 2,500 \$2,501 to 5,000
 \$5,001 to 25,000 \$25,001 to 50,000 \$50,001 and over Exact Value _____

Number of people injured
 Unknown 0 1 2 to 9 10 to 19 20 to 49 50 to 99
 100 or more Exact Value _____

Number of fatalities
 Unknown 0 1 2 to 9 10 to 19 20 to 49 50 to 99
 100 or more Exact Value _____

*Part I – Description of the Root Cause *Please choose one

<p>One-Call Notification Practices Not Sufficient</p> <input type="checkbox"/> No notification made to the One-Call Center <input type="checkbox"/> Notification to one-call center made, but not sufficient <input type="checkbox"/> Wrong information provided to One Call Center	<p>Locating Practices Not Sufficient</p> <input type="checkbox"/> Facility could not be found or located <input type="checkbox"/> Facility marking or location not sufficient <input type="checkbox"/> Facility was not located or marked <input type="checkbox"/> Incorrect facility records/maps
<p>Excavation Practices Not Sufficient</p> <input type="checkbox"/> Failure to maintain marks <input type="checkbox"/> Failure to support exposed facilities <input type="checkbox"/> Failure to use hand tools where required <input type="checkbox"/> Failure to test-hole (pot-hole) <input type="checkbox"/> Improper backfilling practices <input type="checkbox"/> Failure to maintain clearance <input type="checkbox"/> Other insufficient excavation practices	<p>Miscellaneous Root Causes</p> <input type="checkbox"/> One-Call Center error <input type="checkbox"/> Abandoned facility <input type="checkbox"/> Deteriorated facility <input type="checkbox"/> Previous damage <input type="checkbox"/> Data Not Collected <input type="checkbox"/> Other

Part J – Additional Comments

Additional Comments:

Visit DIRT at www.cga-dirt.com

DQI – Bulk Upload

File Uploaded Successfully:

File Upload Id: 863750

Number of rows inserted into database: 2

Overall Average Data Quality Score out of 100 ([more info...](#)): 96

Data Quality Details:	Score (out of 100)	Weighting %	Weighted Score
Part A: Who is providing this information	100.0	5 %	5.0
Part B: Date and Location of the event	100.0	12 %	12.0
Part C: Affected Facility Information	85.0	12 %	10.2
Part D: Excavation Information	100.0	14 %	14.0
Parts E & F: Notification, Locating and Marking	100.0	12 %	12.0
Part G: Excavator Downtime	75.0	6 %	4.5
Part H: Description of Damage	100.0	14 %	14.0
Part I: Description of the Root Cause	100.0	25 %	25.0
Part J: Additional Comments	n/a	n/a	n/a

CGA DIRT Analysis and Recommendations

— Volume VII —
For Calendar Year 2010

Released October, 2011

When you call



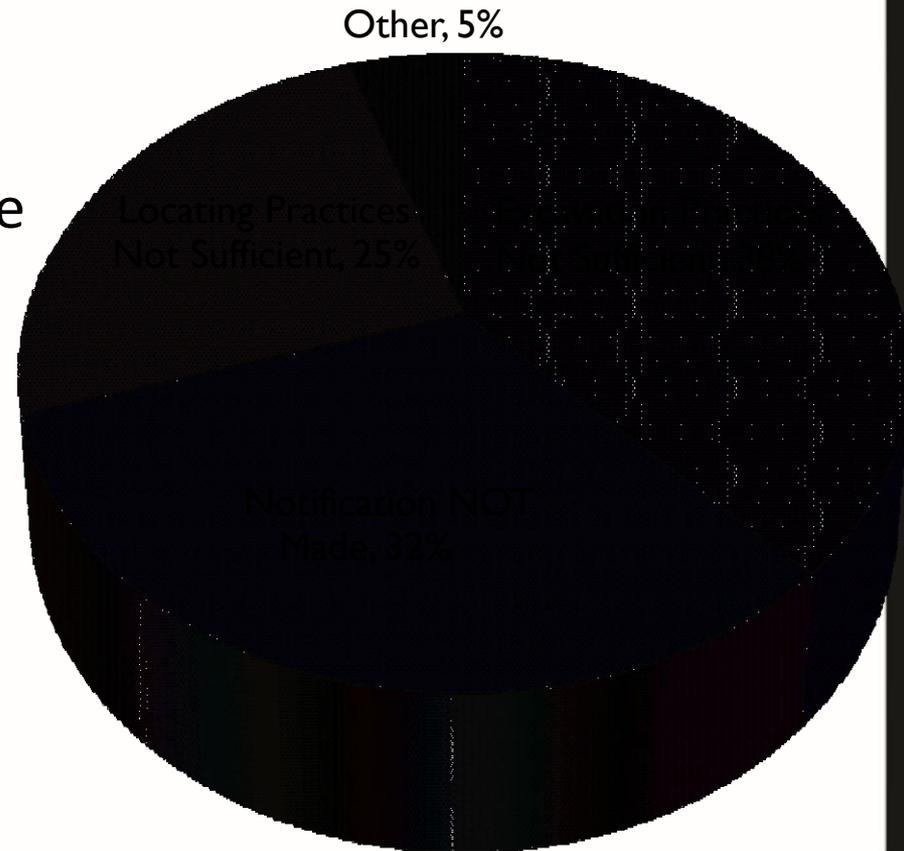
prior to excavation...

less than 1% chance of experiencing damage.



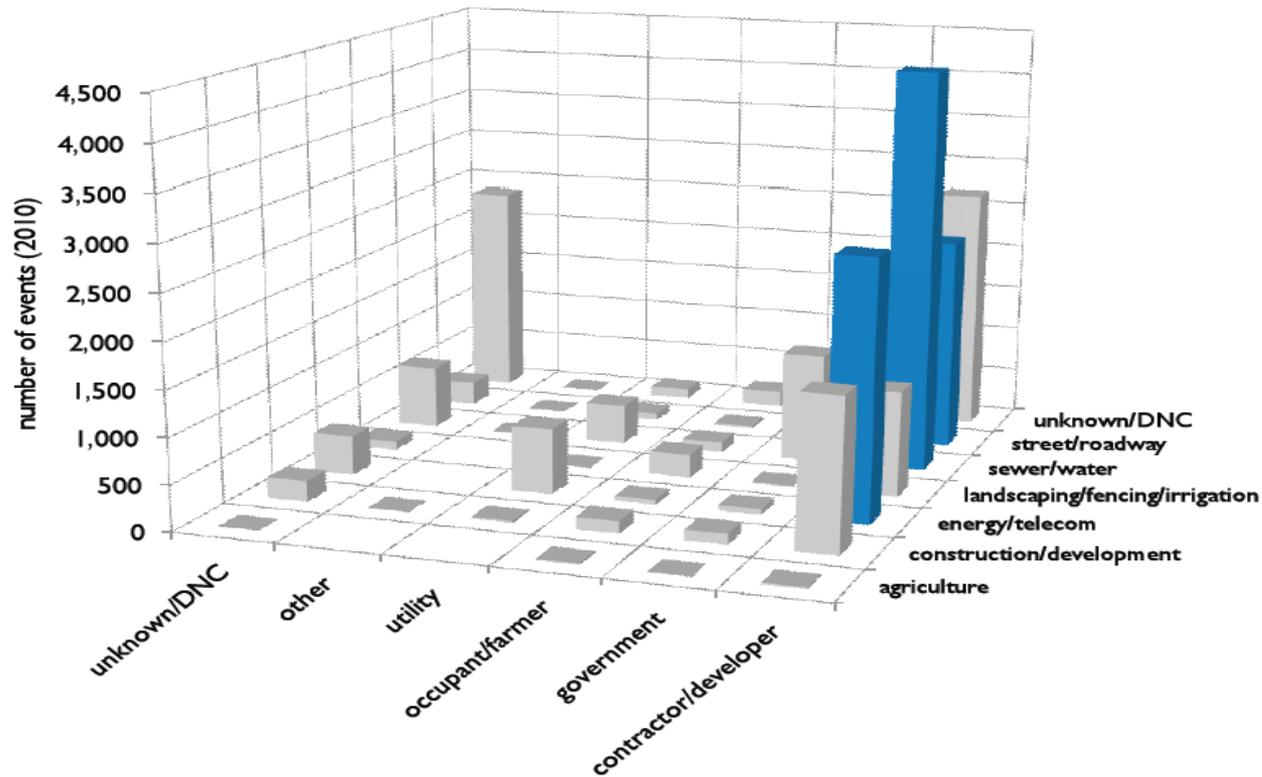
DIRT 2010: Looking to Answer Questions

- **DIRT looks to answer the following questions related to root cause:**
 1. Was a locate request made prior to excavation?
 2. Was the facility properly marked?
 3. Was the site properly excavated?



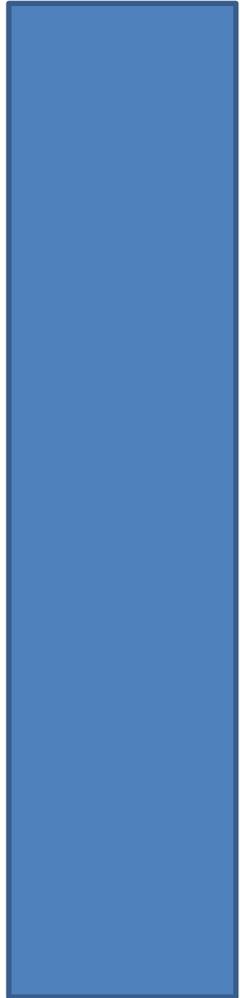
Segmentation of “Excavation Practices Not Sufficient”

Exhibit 7: Segmentation of “Excavation Practices Not Sufficient” Root Cause by Excavator Type and Work Performed (Part D)

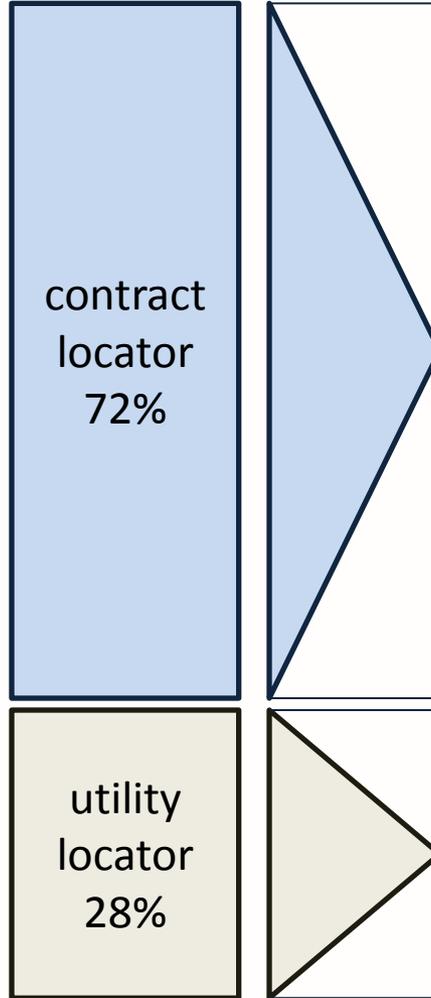


Site Marking Characteristics by Locator

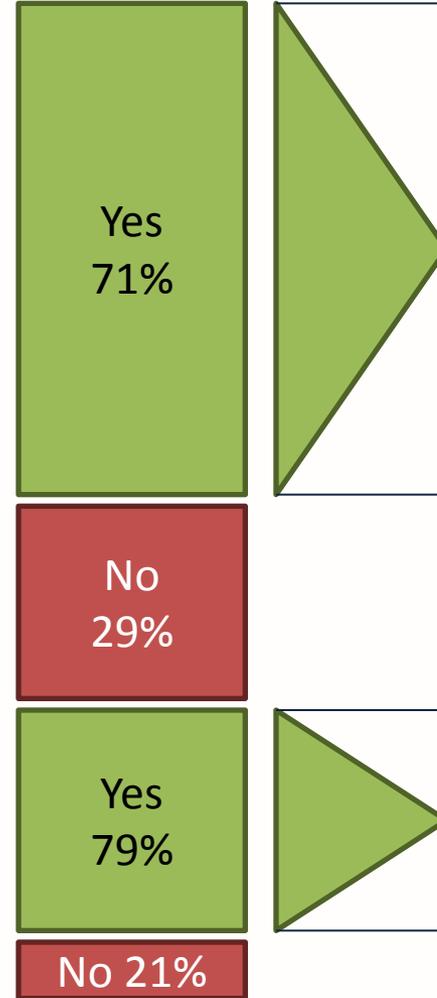
All locate requests made



Locator type



Locate marks visible?



Locate marks correct?



The Pay DIRT – Value To You

- Enhances Public Safety
- Supports Industry Stakeholders
 - Bottom Line Savings \$\$\$\$ resulting from Reduction in Damages
- Provides Answers

Questions

Information:

- www.cga-dirt.com
- www.commongroundalliance.com
- www.call811.com
- Report Qs: Dirt@commongroundalliance.com
- Tech Feedback/Support: www.cga-dirt.com

DIRT

Get the Word Out
and
Get the Data In

Deadline for Data Submission
March 31, 2012

