

draft Data and Research Committee Minutes  
Thursday, January 4, 2024, at 10:00 a.m.

**Chair:** Lee Tumminello

**Voting Members:** Lee Tumminello, Melanie Lewis, Nate Rivera, Alba Vogland, Kevin Hennessy, Connor Toney, Mitch Burgelela, Dale Bromaghin, and KC Chumachenko.

**Non-voting members:** Josh Thomas and Kitty O'Keefe.

**Guests:** Scott Gallegos, Frank Planton and Kim Boyd-OCC. Jeff Simas, City of Medford. Diana Anderson, Ziplly. Trish Schoof and Erica Lee – CGA.

1. Announcements and Introductions
  - a. Announcements and Guest sign-in
  - b. Motion to approve the minutes from 8.29.23 by Kevin and 2<sup>nd</sup> by Dale. Kitty to post on OUNC website.
  - c. Chair – Lee thanked members and guests for attending. She reminded members of the two primary objectives for the meeting: #1 Guiding Direction and #2 Proving Effectiveness.
2. Old Business
  - a. Recap last meeting
    - o Oregon DIRT Report findings – Josh shared we have a 5-year trend in Oregon to reduce damages. We have seen an increase in damages in Jackson, Douglas and Umatilla counties and we may want to focus outreach in these counties.
    - o Data sources – Josh shared we have identified additional data sources beyond DIRT to help guide our efforts.
    - o Measurement and reporting – Josh mentioned partnering with utilities for damage resources they can share with us.
  - b. Common Ground Alliance 2023 DIRT Report recommendations
    - o Trish Schoof and Erica Lee – CGA representatives (See their full ppt attached)
      - Focus for today's meeting:
        - Overview of DIRT Report 2022 Key Findings
        - 2023 Industry Survey Results
        - 811 Center Industry Spotlight
        - Data-Driven Strategy to Decrease Damages: 50in 5 Challenges.
        - Google Fiber discussion on white paper: to learn more, [click here](#)
3. New Business
  - a. Outlook for 2024 – Josh reminded members we are working on a Service Tariff increase in 2024 along with 7 proposed rule changes. Approximately 30% of board members are new. We are evolving and focused on continual improvement and how to maximize board efficiency and effectiveness. Josh reminded members from the last meeting that guest speakers reiterated you can't put all your stock into DIRT. However, it's the best we have and provides relevant information to draw actionable conclusions. OCC Master Report is a helpful tool. OPUC and OSHA have incident reports. Working closely with utilities and comparing information with them is another great resource.
  - o Committee needs/requests for information:
    - Mandatory damage reporting –Melanie had submitted her request via the concept submission form. (See attachment for reference) Josh stated, he can start an Issue Summary. Frank shared other states that have adopted damage ticket; downside: may not capture root cause... just that a damage happened. Kansas 811 just added a damage ticket, but OCC has no data yet. Does the report that Scott created show compliance? No. WA811 has in their law, damage reporting as a requirement. But does not know statistics. How do you enforce? Kevin asked CGA reps, how many fields are part of a single damage report? (Fields of entry must a person provide?)

(See CGAs form attached) She shared CGA has been looking at having Call Centers collect the damage data. Kevin commented, he sees from the excavator side: what is the benefit of me reporting this damage if I'm getting something out of it? Is there added value for the stakeholder? CGA shared end of February roll out with a user-friendly app to collect data. Lee suggested waiting till after the 1<sup>st</sup> quarter (concept form consideration) and look at Colorado's process reporting for comparison. Tabled this discussion.

- Definition of excavation excludes sidewalk, road, and ditch maintenance of less than 12" (data from other states?) (ORS 757.542(3) and OAR 952-001-0010(8))
  - Members asked why this on the Data & Research agenda?
  - Will request a concept form from Jaimie for clarification on definition.
  - Kevin shared that CGAs definition of excavation is more conservative and doesn't include some of the exemptions that many states have in their law.
- Service tariff – Josh shared long term sustainability; increase in operational costs and staffing costs to consider with an increase in our service tariff. Josh is working on an Issue Summary to bring back to the board.
- Consideration of standing committee instead of ad hoc – Lee asked members if we consider keeping this committee as an ad hoc or standing? Some members shared concerns with each committee chair role along with what is our membership within each committee. Lee asked that we continue this conversation at the next meeting. Josh said this is a bigger conversation and would require an issue summary for further discussion on ad hoc vs standing committee. Nate commented on the Contract Committee; it's a 3-meeting process. Feels an ad hoc committee for the RFP process will be needed (not in this committee) Kevin offered to assist in the RFP process when it gets going.
- Positive Response (mandatory/enhanced) consideration - tabled.

4. For the Good of the Order –

- Lee asked Kitty to schedule the next committee meeting.
- Nate would like this meeting scheduled for 2 hours to allow for enough time for substantive discussions on agenda items. Members agreed.

5. Next Meeting – tbd

*Motion to adjourn by Connor and 2<sup>nd</sup> by Alba at 11:34am  
Minutes submitted by Kitty OKeefe on 1.12.24*

**Action Items:**

- Kitty to schedule next meeting based on member availability; Positive Response moves to next agenda
- Committee to revisit mandatory damage reporting/damage tickets after first quarter, looking at Washington, Kansas and Colorado for comparison, Scott provided a spreadsheet, may need issue summary
- Melanie preparing concept submission form for reconsideration of standing/ad hoc committees
- Josh to request creation of RFP/Contract Committee for management of notification center (current contract ends December 2025)
- Jaimie to provide concept submission form for agenda item addressing sidewalk, road and ditch maintenance
- Josh is working with Melanie and Nate on an issue summary addressing a long term approach to the service tariff.

# Oregon Utility Notification Center

**Data & Research Committee Meeting**

**January 4, 2024**



# Introductions

**Erika Lee**  
Vice President, Programs &  
Strategic Initiatives

**Trish Schoof**  
Data Program  
Manager





# Focus for Today

- Overview of DIRT Report 2022 Key Findings
- 2023 Industry Survey Results
- 811 Center Industry Spotlight
- Data-Driven Strategy to Decrease Damages: 50-in-5 Challenge
- Q & A

# DIRT – Key Findings and Trends



# 2022 Report Highlights

- **Top 6 damage root causes are persistent year-over-year** (no locate request, not marked/marked inaccurately, failure to maintain clearance, failure to pothole, improper excavation).
- **Excavation/construction was the top reporting source for first time.**
- Telecom and natural gas remain the **most damaged facilities**.
- **Telecom work caused most damages.**
- **Damages are flat or increasing** based on statistical analysis.
- Reversing the upward damage trend is critical to **reach 50% reduction in 5 years**.



**76%**  
of all damages  
are due to just  
SIX root causes

**3-year trending suggests damages rose between 2021 and 2022:**

↑ **9.34%**

Increase in  
damages/811 center  
transmissions

↑ **12.35%**

Increase in  
damages/construction  
spending



Half a trillion+ dollars are  
being allocated to new  
infrastructure in the  
U.S. over 5 years

# Root Cause Analysis

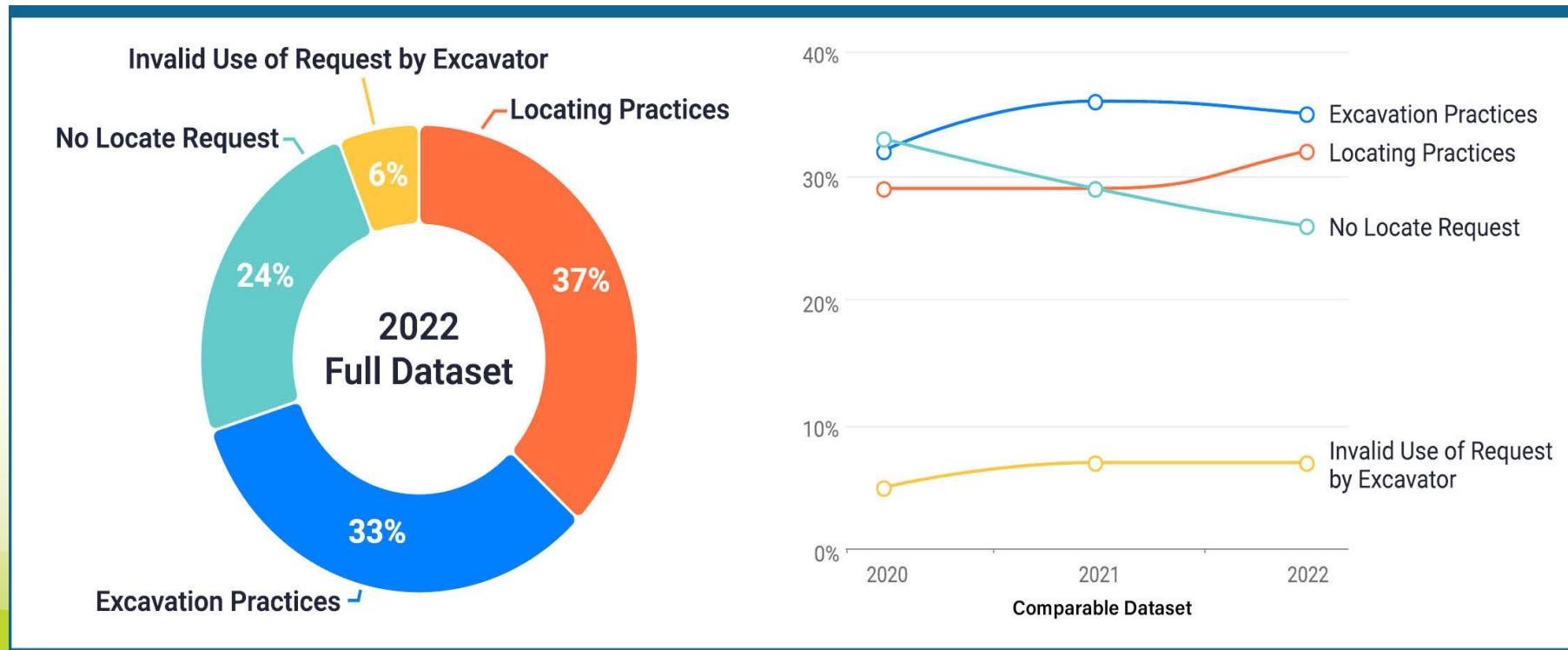
**The top 6 root causes remain consistent.**

ROOT CAUSE	Reports	2022 % of Total
No notification made to 811 Center	35,860	24.81%
Facility not marked due to locator error	21,951	15.19%
Excavator failed to maintain clearance after verifying marks	19,448	13.46%
Marked inaccurately due to locator error	12,048	8.34%
Improper excavation practice not listed elsewhere	11,835	8.19%
Excavator dug prior to verifying marks by potholing	7,965	5.51%

**\*Unknowns excluded**

# Damages By Root Cause Group

The consistency in damage drivers provides an opportunity to focus our efforts and measure progress.



\*Unknowns excluded.

# Late Locates: 811 Center Data

- Data from 7 states with mandatory positive response was analyzed.
- As many as 56% of tickets receive late or no positive response, **meaning work cannot legally start**.
- Some operators/locators mark sites on time but **delay updating positive response systems**.
- Excavators report inaccurate status codes, including those **indicating sites are marked when they are not**.

AS OFTEN AS  
**56%** OF THE  
TIME,  
excavators cannot  
legally begin work  
on their planned  
start date

# Industry Survey – Damage Prevention Today



CGA is conducting a **State of Damage Prevention** survey to collect information from each stakeholder group on the greatest challenges facing the damage prevention industry, damage prevention priorities and policies/practices that have the most potential to reduce damages. Please take **3-5 minutes to complete this brief survey** and ensure your industry group is represented. Be sure to provide your name and email address at the end of the survey for your chance to win a **CGA YETI 12 Soft Cooler**.

**\* Required Information**

**\*1. Which of the following best describes the industry in which you work?**

- 811 Center / One Call
- Electric
- Emergency Services
- Engineering / Design
- Equipment Manufacturing
- Excavator / Road Builder

# Most Critical Damage Prevention Challenges by Industry

## Damage Prevention Industry Survey – October 2023



\* Survey question – “From your perspective, please select five issues from the list that currently present the greatest challenge to the damage prevention industry.” Responders chose from 18 critical issues/challenges. The top 8 are listed above.

	Challenge/Issue	All	811 Center / One Call	Telecom	Excavator / Road Builder	Natural Gas Distribution	Locator	Liquid Pipeline / Gas Transmission
1	<b>Facilities not marked</b> (facility not marked due to no response, inaccurate facility maps, improper ticket screening practices, etc.)	56%	66%	78%	71%	43%	13%	36%
2	<b>Inaccurate line locates</b> (facilities marked but not marked accurately)	54%	28%	78%	77%	45%	29%	39%
3	<b>Inaccurate and outdated facility maps</b>	41%	28%	34%	58%	32%	25%	31%
4	<b>Excavator errors in the field</b>	36%	21%	28%	37%	45%	38%	33%
5	<b>Late locates</b>	34%	60%	69%	31%	23%	29%	21%
6	<b>Lack of potholing by excavator</b>	33%	25%	34%	26%	43%	42%	22%
7	<b>Excavator failing to maintain clearance after verifying marks</b>	32%	26%	22%	26%	38%	33%	48%
8	<b>Lack of communication between stakeholders</b>	32%	51%	25%	31%	30%	42%	39%

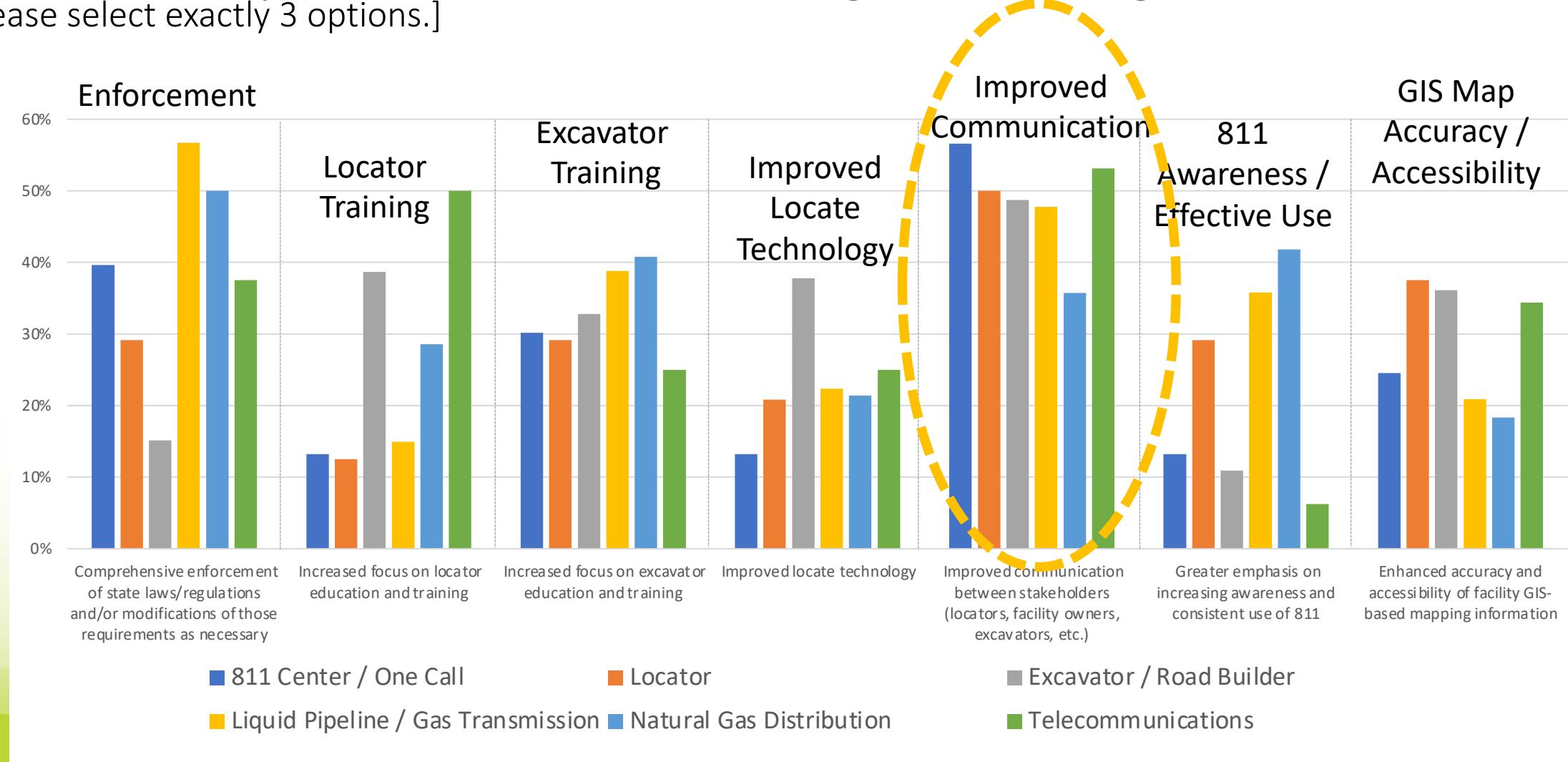
# Policies and/or Initiatives with the Most Potential to Reduce Damages

## Damage Prevention Industry Survey – October 2023

	Challenge/Issue	All	811 Center / One Call	Telecom	Excavator / Road Builder	Natural Gas Distribution	Locator	Liquid Pipeline / Gas Transmission
1	Improved communication between stakeholders (locators, facility owners, excavators, etc.)	15%	20%	18%	17%	12%	18%	16%
2	Increased focus on excavator education and training	12%	10%	8%	11%	14%	10%	14%
3	Comprehensive enforcement of state laws/regulations and/or modifications of those requirements as necessary	12%	14%	13%	5%	17%	10%	19%
4	Increased focus on locator education and training	10%	4%	17%	13%	10%	4%	5%
5	Enhanced accuracy and accessibility of facility GIS-based mapping information	10%	8%	11%	12%	6%	12%	7%
6	Improved locate technology	9%	4%	8%	13%	8%	7%	8%
7	Greater emphasis on increasing awareness and consistent use of 811	8%	4%	2%	4%	14%	11%	12%
8	Enhanced communication among stakeholders through robust positive response	7%	10%	4%	6%	6%	7%	6%

\* Survey Question - Which of the following practices, policies and/or initiatives do you think has the most potential to reduce damages to underground?

# Which of the following practices, policies and/or initiatives do you think has the most potential to reduce damages to underground facilities? [Please select exactly 3 options.]



\*Responses that received 20% or more noted above

# 811 Center Industry Spotlight

## Damage Trends

↑ **9.34%**

Increase in  
damages/811 center  
transmissions

↑ **12.35%**

Increase in  
damages/construction  
spending

U.S. damage counts from consistently reporting organizations have increased over the past 3 years

146,038

153,886

163,726

2020

2021

2022



Half a trillion+ dollars are  
being allocated to new  
infrastructure in the  
U.S. over 5 years

3-year trending using a  
comparable dataset showed  
increases in key metrics  
between 2021-2022.

## Incoming Locate Requests / Outgoing Transmissions



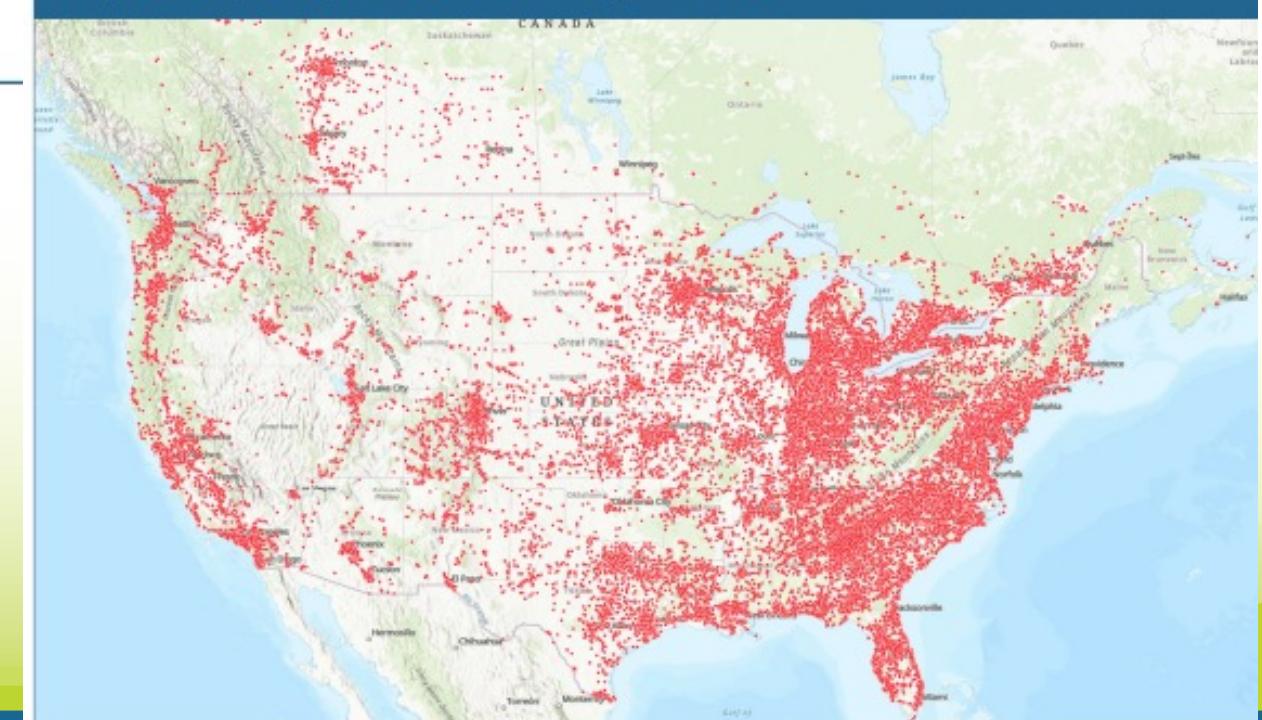
Total Incoming **42,716,394**  
Total Transmissions **274,244,329**  
Transmissions/Incoming **6.42**



Total Incoming **2,444,851**  
Total Transmissions **10,193,154**  
Transmissions/Incoming **4.17**



Map of Unique Reported DIRT Damages in 2022



# Oregon Utility Notification Center

## Annual 811 Center Statistics

Based on data submitted for 2022

Zero ( 0 ) means data was not provided by the 811 Center

5.51

Transmissions / Incoming ?

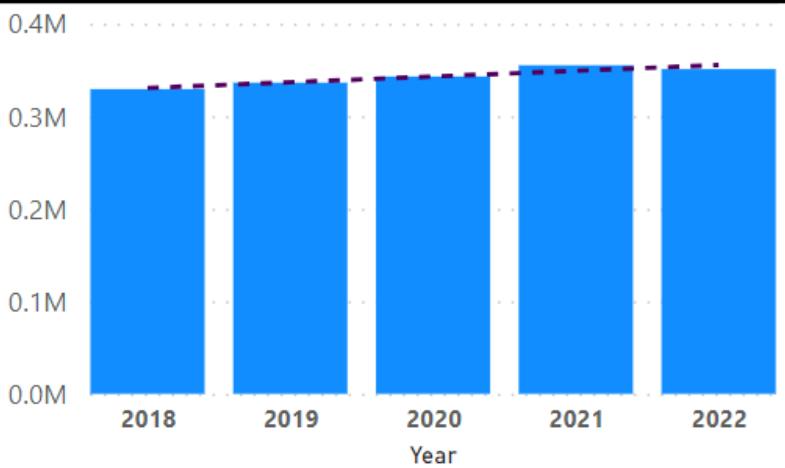
350,949

Incoming Tickets ?

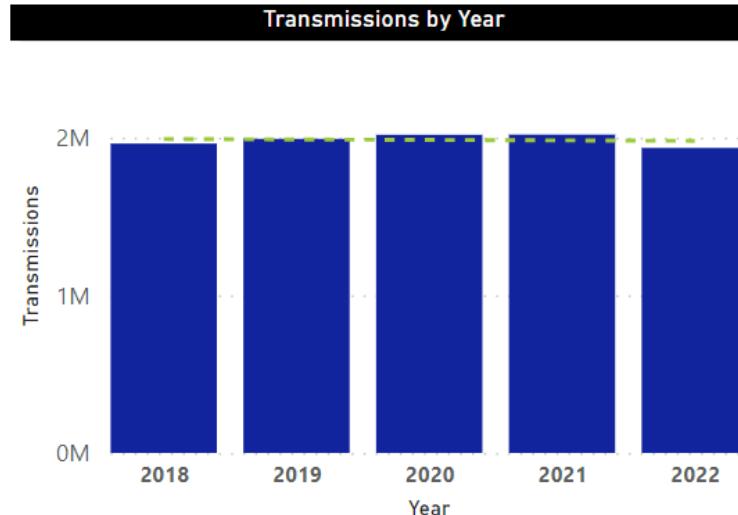
1,934,676

Transmissions ?

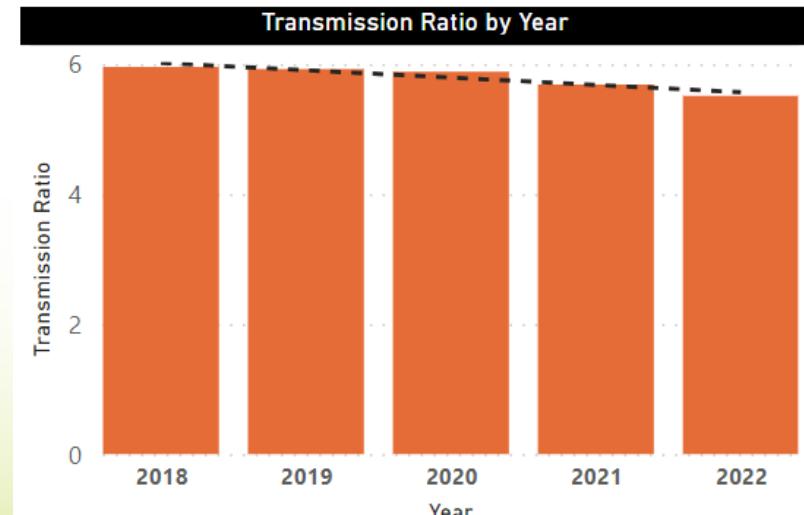
### Incoming Tickets by Year



### Transmissions by Year



### Transmission Ratio by Year



- 1.15 %

Incoming Tickets: Percent Change  
(compared to 2021)

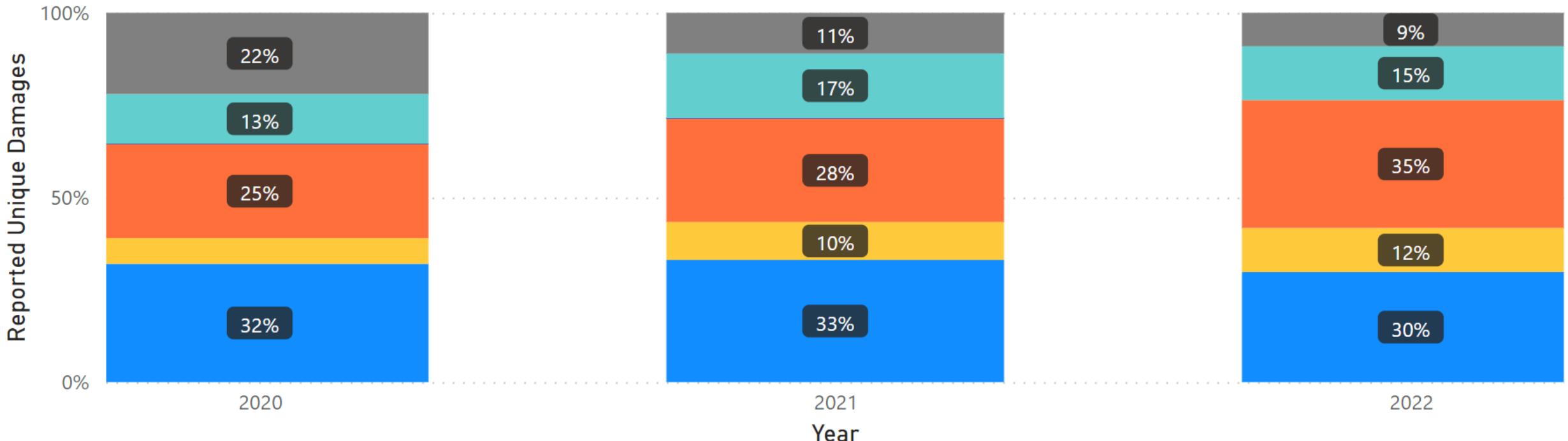
- 4.18 %

Transmissions: Percent Change  
(compared to 2021)

# Oregon Damage Root Cause Groups - 2022

State	Reported Unique Damages (2022)	Transmissions (2022)	Incoming Tickets (2022)	Transmissions / Incoming (2022)
OR	1,758	1,934,676	350,949	5.51

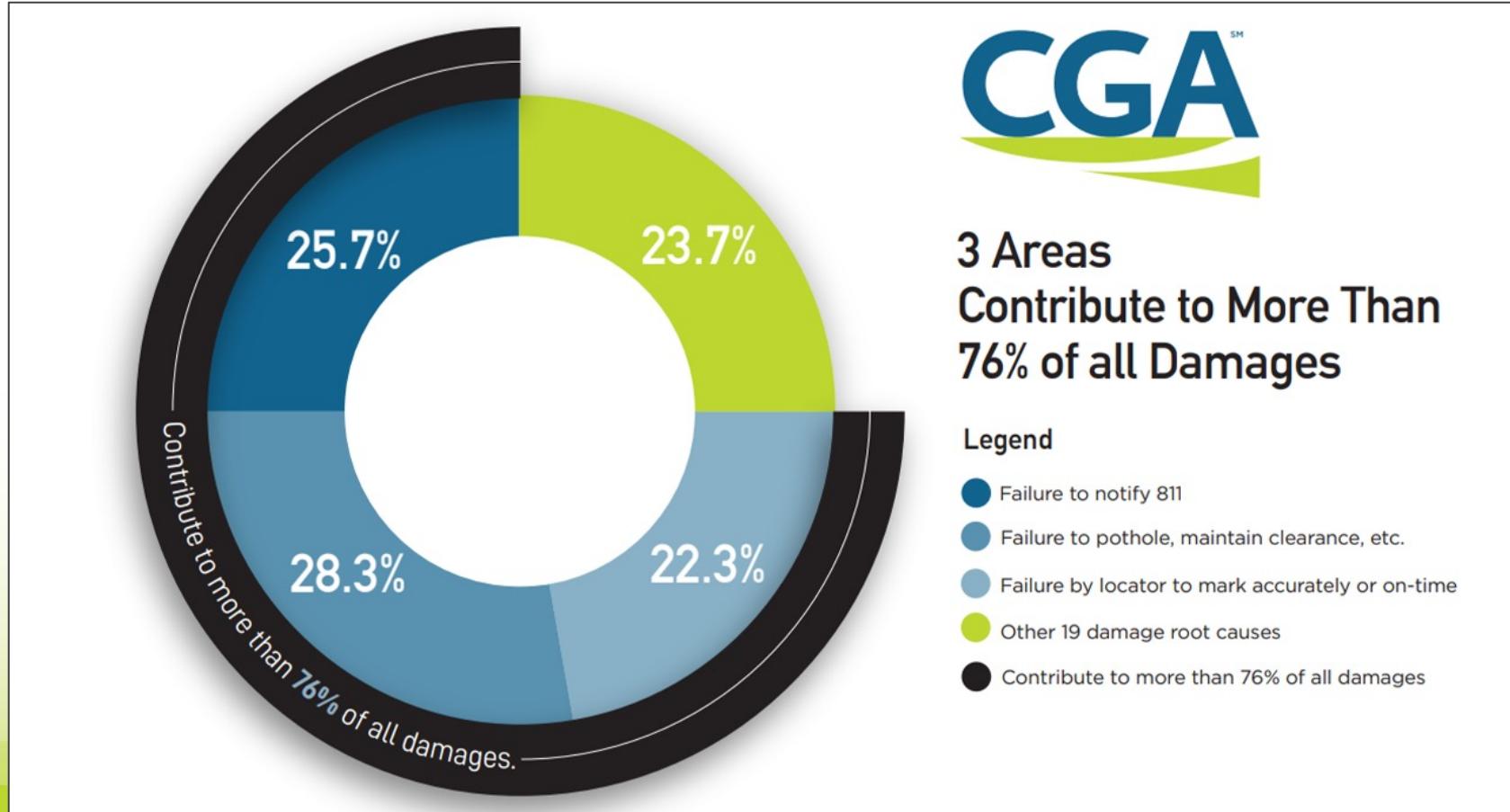
● Excavation Practices ● Invalid Use of Request by Excavator ● Locating Practices ● Miscellaneous ● No Locate Request ● Unknown/Other



# Effectiveness of State Level Data

- Encourage completeness of data
- Ability to look more closely at the effects of laws and regulation
- Alignment with DIRT statistics / data comparison
- Importance of consistency with 811 ticket data collection

# Data-Driven Strategy to Decrease Damages: 50-in-5 Challenge



# Industry Call-to-Action

## Recommendations:

- ▶ **Incentivize comprehensive damage and near-miss reporting** across organizational departments and integrate reporting into operating workflows.
- ▶ **Focus 811 outreach to excavators on behavior change** – particularly consistent and effective use of 811 – and tailor messages to professional vs. private property excavators.
- ▶ **Prioritize tolerance zone safety on the jobsite** (pothole, maintain marks, use observers to help maintain clearance (see Best Practices 5-17 through 5-20)), **in trainings, via technology investments** (e.g., vacuum excavators) **and through contract structures**.
- ▶ **Prioritize sufficient resources to meet marking timelines**, and consider innovative technologies and/or processes for leveling locating demand (see Best Practice 4-17).
- ▶ **Examine enforcement of all primary participants in the process** to ensure penalties are balanced and incentivize those involved to change their behavior.

# RISING TO THE CHALLENGE

## of Damage Prevention

APRIL  
**14 - 18, 2024**

THE BROADMOOR  
**Colorado Springs,**  
**Colorado**

[Register](#)



Conference  
& Expo 2024

#CGAexpo 2024

# Registration Open

[cgaconference.com](http://cgaconference.com)

# Question & Answer



# CONCEPT SUBMISSION FORM

The Oregon Utility Notification Center (OUNC) Board of Directors welcomes ideas and suggestions that prevent damage, ensure safety and improve OUNC's contact center and programs. To submit a concept for consideration by the OUNC Board or its committees, fill out this form using whatever space you need, include relevant attachments, and submit it to [info@digsafelyoregon.com](mailto:info@digsafelyoregon.com).

## PROBLEM STATEMENT

*At this time the OUNC does not have accurate way to track damages in the field.*

## RULE/LAW/POLICY REFERENCE

Proposed Addition to OAR 952-001-0090 (6)

## PROPOSED CHANGE(S)

*Proposed Addition to OAR 952-001-0090 (6)*

### ***Consideration:***

I am proposing to the OAR committee, the adoption of required damage ticket/reporting. Adopting this process would:

- Prevent damages
- Prevent serious incidents/accidents
- Improve workplace safety
- Save time and resources
- Protect companies – recorded damage ticket
- Improve damage investigations - claims

To take it a step further, the data collected would:

- Assist in targeting and increasing awareness in problematic:
  - Geographical areas
  - Contractors
  - Utility companies
  - Locating Companies
- Which can lead to additional:
  - Training
  - Public awareness

Near misses and incidents lead to major injuries, it's just matter of time. If we are more informed of the happenings in the field, we can better inform excavators, utility companies, homeowners and locate contractors to prevent damages. Also an added benefit, we will be able to monitor bad actors.

**Possible Processes:**

- A damage ticket would be created when a damage or near miss occurs in the field. The ticket would notify the utility/contractor locator of the damage. This would establish a recorded record of the damage which would be for public use. The ticket would be treated as an emergency ticket.
- Another option is to not create a ticket but log the damage data as Washington, Colorado and California does which would lead to mandatory damage reporting.
- Or both

**Enforcement:**

- Processes and mandatory requirements can be approved but the driver to making change will be enforcement of the rule.
  - Consideration –
    - Statute change regarding enforcement ORS
    - OAR 757.993

**Language change - OAR 952-001-0090 (6):**

**• Current Language**

If the excavator causes or observes damage to underground facilities, the excavator must notify the operator of the underground facilities immediately. If the damage causes an emergency or if the damage from excavation activity is to a pipeline and causes release of any natural gas, other gas or hazardous liquid from the pipeline, the excavator must promptly report the released to appropriate emergency response authorities by calling the 911 emergency telephone number and must take reasonable steps to ensure the public safety. The excavator must not bury damaged underground facilities without the consent of the operator of the damage underground facilities.

**• Proposed Language**

If the excavator causes or observes damage to underground facilities, the excavator must notify the operator of the underground facilities **and notify the Oregon Utility Notification Center** immediately. If the damage causes an emergency or if the damage from excavation activity is to a pipeline and causes release of any natural gas, other gas or hazardous liquid from the pipeline, the excavator must promptly report the released to appropriate emergency response authorities by calling the 911 emergency telephone number and must take reasonable steps to ensure the public safety. The excavator must not bury damaged underground facilities without the consent of the operator of the damage underground facilities.

Damage reporting submittal is required within 60 days of damage date. Submittal shall be completed at >>>>>>>

**Reference:**

- *Existing state laws, including Wyoming (ticket), California (report), Colorado (report), Nebraska (ticket), Texas (ticket)*

**COMMITTEE REFERRAL**

OARs

**ADDITIONAL INFORMATION**

*Is there anything else we should know about this issue or your proposed concept?*

**NAME:**

Melanie Lewis

**COMPANY/ORGANIZATIONAL AFFILIATION AND TITLE:**

Employed @ PacifiCorp - OUNC Board Member representing the Regulated Electric

**EMAIL ADDRESS:**

Melanie.Lewis@PacifiCorp.com

**PHONE:**

307.247.1177

## Damage Information Reporting Tool (DIRT) - Field Form

## Part A – Original Source of Event Information

<b>Who is providing the information?</b>	<input type="checkbox"/> Electric	<input type="checkbox"/> Engineer/Design	<input type="checkbox"/> Equipment Manufacturer	
<input type="checkbox"/> Excavator	<input type="checkbox"/> Liquid Pipeline	<input type="checkbox"/> Locator	<input type="checkbox"/> Natural Gas	<input type="checkbox"/> Private Water
<input type="checkbox"/> Public Works	<input type="checkbox"/> Railroad	<input type="checkbox"/> Road Builders	<input type="checkbox"/> Federal / State Regulator	
<input type="checkbox"/> Telecommunications		<input type="checkbox"/> Unknown/Other		

**Name of person providing the information:**

**Part B – Type, Date, and Location of Event**

Type of Event:	DIRT Event	<input type="checkbox"/> Underground Damage	<input type="checkbox"/> Underground Near Miss
	Non-DIRT Event	<input type="checkbox"/> Above Grade	<input type="checkbox"/> Aerial

**\*Date of Event:** (MM/DD/YYYY)

**\*Country**

**\*State**

**\*County**

## City

**Street address:**

## Nearest Intersection:

**Latitude/Longitude:** Lat:

Long

□ D

\*Right

where event occurred

**\*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       Unknown/Other

## Part C – Affected Facility Information

<b>*What type of facility operation was affected?</b>			<input type="checkbox"/> Cable Television	<input type="checkbox"/> Electric	<input type="checkbox"/> Liquid Pipeline		
<input type="checkbox"/> Natural Gas	<input type="checkbox"/> Sewer	<input type="checkbox"/> Steam	<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Water	<input type="checkbox"/> Unknown/Other		
<b>*What type of facility was affected?</b>			<input type="checkbox"/> Distribution	<input type="checkbox"/> Gathering	<input type="checkbox"/> Service/Drop	<input type="checkbox"/> Transmission	<input type="checkbox"/> Unknown/Other
Was the facility part of a joint trench?			<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown		
Did this event involve a Cross Bore?			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
Was facility owner One Call Center member?			<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown		
If No, is facility owner exempt from One Call Center membership?			<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown		
Measured Depth		<input type="checkbox"/> Embedded in concrete/asphalt pavement		<input type="checkbox"/> <18" / 46 cm	Measured depth		
From Grade		<input type="checkbox"/> 18" - 36" / 46 - 91 cm		<input type="checkbox"/> >36" / 91 cm	from grade	in/cm	

## Part D – Excavation Information

<b>*Type of Excavator</b>	<input type="checkbox"/> Contractor	<input type="checkbox"/> County	<input type="checkbox"/> Developer	<input type="checkbox"/> Farmer	<input type="checkbox"/> Municipality
	<input type="checkbox"/> Occupant	<input type="checkbox"/> Railroad	<input type="checkbox"/> State	<input type="checkbox"/> Utility	<input type="checkbox"/> Unknown/Other
<b>*Type of Excavation Equipment</b>	<input type="checkbox"/> Auger	<input type="checkbox"/> Backhoe/Trackhoe	<input type="checkbox"/> Boring	<input type="checkbox"/> Bulldozer	
<input type="checkbox"/> Drilling	<input type="checkbox"/> Directional Drilling	<input type="checkbox"/> Explosives	<input type="checkbox"/> Farm Equipment	<input type="checkbox"/> Grader/Scraper	<input type="checkbox"/> Hand Tools
<input type="checkbox"/> Milling Equipment	<input type="checkbox"/> Probing Device	<input type="checkbox"/> Trencher	<input type="checkbox"/> Vacuum Equipment	<input type="checkbox"/> Unknown/Other	
<b>*Type of Work Performed</b>	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Bldg. Construction	<input type="checkbox"/> Bldg. Demolition	<input type="checkbox"/> Cable Television	
<input type="checkbox"/> Curb/Sidewalk	<input type="checkbox"/> Drainage	<input type="checkbox"/> Driveway	<input type="checkbox"/> Electric	<input type="checkbox"/> Engineering/Survey	
<input type="checkbox"/> Fencing	<input type="checkbox"/> Grading	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Landscaping	<input type="checkbox"/> Liquid Pipeline	<input type="checkbox"/> Milling
<input type="checkbox"/> Natural Gas	<input type="checkbox"/> Pole	<input type="checkbox"/> Public Transit Auth.	<input type="checkbox"/> Railroad	<input type="checkbox"/> Road Work	<input type="checkbox"/> Sewer
<input type="checkbox"/> Site Development	<input type="checkbox"/> Steam	<input type="checkbox"/> Storm Drain/Culvert	<input type="checkbox"/> Street Light	<input type="checkbox"/> Telecommunication	<input type="checkbox"/>
Traffic Signal	<input type="checkbox"/> Traffic Sign	<input type="checkbox"/> Water	<input type="checkbox"/> Waterway Improvement	<input type="checkbox"/> Unknown/Other	

## Part E – Notification and Locating

**\*Was the One-Call Center notified?**  Yes  No **Ticket Number**  
If Yes, type of locator  Facility Owner  Contract Locator  Unknown/Other  
If No, is excavation activity and/or excavator type exempt from notification?  Yes  No  Unknown

Was work area white-lined?  Yes  No  Unknown

## Part F – Intentionally left blank

## Part G – Excavator Downtime

Did Excavator incur down time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
If yes, how much time?	<input type="checkbox"/> < 1 hr	<input type="checkbox"/> 1 - <2 hrs	<input type="checkbox"/> 2 - <3 hrs	<input type="checkbox"/> 3+ hrs	Exact Value _____	<input type="checkbox"/> Unknown
Estimated cost of down time?	<input type="checkbox"/> \$0	<input type="checkbox"/> \$1 - 1000	<input type="checkbox"/> \$1,001 - 5,000	<input type="checkbox"/> \$5,001 - 25,000		
	<input type="checkbox"/> \$25,001 - 50,000	<input type="checkbox"/> >\$50,000	Exact Value _____	<input type="checkbox"/> Unknown		

## Part H – Interruption and Restoration

*Did the damage cause an interruption in service? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown						
If yes, duration of interruption	<input type="checkbox"/> < 1 hr	<input type="checkbox"/> 1 - <6 hrs	<input type="checkbox"/> 6 - <12 hrs	<input type="checkbox"/> 12 - <24 hrs	<input type="checkbox"/> 24 - <48 hrs	
<input type="checkbox"/> 48+ hrs	Exact Value _____ hrs		<input type="checkbox"/> Unknown			
Approximately how many customers were affected?						
<input type="checkbox"/> Unknown	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2 - 10	<input type="checkbox"/> 11 - 50	<input type="checkbox"/> 51+	Exact Value _____
Estimated cost of damage / repair/restoration:	<input type="checkbox"/> \$0	<input type="checkbox"/> \$1 - 1,000	<input type="checkbox"/> \$1,001- 5,000	<input type="checkbox"/> \$5,001 - 25,000		
	<input type="checkbox"/> \$25,001 - 50,000	<input type="checkbox"/> > \$50,000	Exact Value _____	<input type="checkbox"/> Unknown		

## \*Part I – Root Cause Select only one

### Notification Issue

- No notification made to One Call Center/ 811
- Excavator dug outside area described on ticket
- Excavator dug prior to valid start date/time
- Excavator dug after valid ticket expired
- Excavator provided incorrect notification information

### Excavation Issue

- Excavator dug prior to verifying marks by test-hole (pothole)
- Excavator failed to maintain clearance after verifying marks
- Excavator failed to protect/shore/support facilities
- Improper backfilling practices
- Marks faded or not maintained
- Improper excavation practice not listed above

### Miscellaneous Root Causes

- Deteriorated facility  One Call Center Error
- Previous damage  Root Cause not listed (comment required)

### Locating Issue

*Facility not marked due to:*

- Abandoned facility
- Incorrect facility records/maps
- Locator error
- No response from operator/contract locator
- Incomplete marks at damage location
- Tracer wire issue
- Unlocatable Facility

*Facility marked inaccurately due to*

- Abandoned facility
- Incorrect facility records/maps
- Locator error
- Tracer wire issue

## Part J – Additional Comments

## Part Z – Images and Attachments: List the file names of any images and attachments to submit with this report

