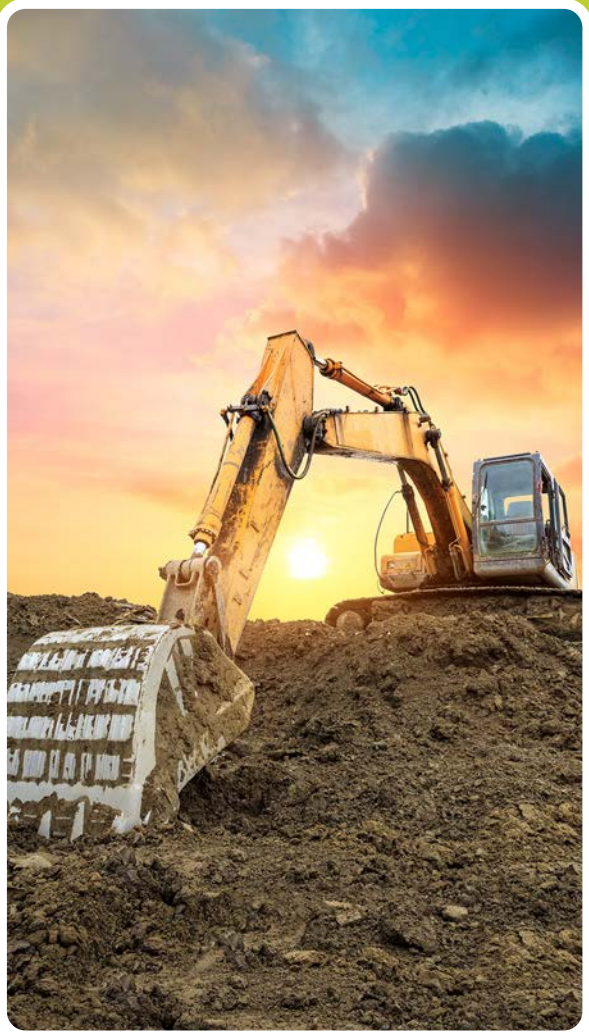
2024 COLORADO UNDERGROUND UTILITY DAMAGE REPORT



Annual summary report of Colorado underground facility damages based on data provided by the Common Ground Alliance (CGA) Damage Information Reporting Tool (DIRT).

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COLORADO 811
Know what's below. Contact 811 before you dig.

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PURPOSE

The underground facility damage data presented in this report originates from the Common Ground Alliance (CGA) DIRT tool reported data and is summarized and published by the Utility Notification Center of Colorado (UNCC), DBA "Colorado 811", as mandated by C.R.S. 9-1.5-103(7)(b)(c)(d) & 9-1.5-105(2.6) (a)(I) and (2.6) (b). This report is intended to be viewed by various Colorado stakeholders, including underground utility/facility owner/operators, locating/marking professionals, excavation, and construction sector stakeholders, industry associations, regulatory bodies, and the Colorado public.

Colorado 811 encourages the reader segments to use the presented data and analysis for positive change in underground utility safety and damage prevention efforts.

SUBMITTING DAMAGE DATA – INCIDENTS

Colorado facility owners and operators must adhere to state regulations and laws, which mandate the submission of underground facility damage details and corresponding data sets to the Common Ground Alliance (CGA) Damage Information Reporting Tool (DIRT) within 90-days of service restoration following any underground facility damage incident. Excavators are also obliged to report such damage as soon as possible and outline and post the damage(s) by contacting Colorado 811.

The Utility Notification Center of Colorado, "Colorado 811", does not enforce or oversee accurate or timely damage data submission to DIRT or its corresponding data analysis as presented by DIRT.

To participate and submit your Colorado underground facility damage data via the online CGA DIRT tool submission, stakeholders must register at www.cga-DIRT.com.

CGA DIRT DATA

The Common Ground Alliance (CGA) and Colorado 811 urge industry stakeholders to submit facility damage information to DIRT as a central repository for this type of damage data within the parameters outlined in the corresponding Colorado laws and guidelines. **However, challenges and inaccuracies in the reported DIRT data set may occur based on data quality, timeliness, submission frequency, CGA data analysis practices and processes, or quantity of data included in the analysis process, resulting in duplicate or exclusion of submissions from a variety of different entities for the same damage incident, encompassing data reported from facility owners, locators, excavators, government agencies, industry associations, loss recovery firms, and insurance companies.**

It is important to note that The Common Ground Alliance (CGA) initially aimed to analyze the data separately for each submitted data source to provide a diverse perspective on the same incident. **Regrettably, CGA instead opted to aggregate all damage reports from various Colorado stakeholders, leading to a previous significant overestimation of DIRT reported damages in the State of Colorado in the annually published CGA National Damage Report due to multiplication data submitted for the same incidents by various stakeholders.** To minimize the duplication of data source issues, Colorado 811 discontinued submitting excavator related damage ticket data to the CGA DIRT tool and fully relies on external entity data submissions for its damage data analysis. Currently, Colorado 811 only collects a limited data set of damage reporting data information for internal analysis and benchmarking purposes.

As a result, this report only focuses on data analysis of data provided by facility owner/operators directly to DIRT who submitted damage incident data directly to the CGA DIRT tool. It does not include any data collected directly by Colorado 811. Details on the specific data sets used in this report are outlined in the methodology sections.

DISCLAIMER

The Utility Notification Center of Colorado (UNCC), "Colorado 811", is not responsible for any actions taken based on or resulting of the data, analysis, statements, or interpretation of any information presented in this report. UNCC does not guarantee the accuracy or completion of the data set provided by the CGA DIRT tool data that is analyzed by Colorado 811 or any other entity. Colorado 811 is not an oversight and enforcement body that guarantees timely or accurate submission of damage data by any participating entity.

IMPORTANT ADVISORY NOTE ON INTERPRETING DIRT REPORT DATA SHOWING FEWER UNDERGROUND DAMAGES SINCE 2022!

The most recent DIRT reports indicate a decline in overall underground damages—and particularly in telecommunication-related damages—across Colorado in 2023 and 2024.

However, this data interpretation warrants caution!

According to the DIRT data, total underground damages decreased by 18% in 2023 compared to 2022, and telecommunication facility damages declined by 67%. On the surface, these figures suggest substantial progress in damage prevention efforts statewide. Such a drop would represent a remarkable turnaround, especially considering that 2022 recorded the highest volume of underground damages since 2018.

Yet, it is important to remember that DIRT data collection is not comprehensive or fully verified. Not all utilities in Colorado report their damage incidents consistently, completely, or on time. The DIRT reporting process relies on voluntary and accurate submissions from all facility owners and operators over a multi-year period. While Colorado law requires utilities to report underground damage incidents, there is currently no enforcement or oversight mechanism to ensure full compliance or data accuracy or oversight to ensure year-over-year submissions for accurate historical comparison by the CGA.

As a result, unreported or incomplete submissions directly affect the reliability of DIRT's conclusions and findings presented in this or previous reports. Missing data creates potential gaps that can distort statewide trends. Other data sources from Colorado 811, in fact, suggest that 2023 and 2024 were exceptionally active years—particularly for fiber-related excavation work—casting further doubt on the completeness of DIRT's reported decline.

For example, 2023 set an all-time record for locate requests, with 1.2 million tickets processed—a 13% increase over 2022—driven largely by fiber construction activity (311,000 fiber-related tickets, up 137% vs. 2022). In 2024, ticket volume decreased by only 2.5%, making it the second-highest year on record.

Given these record levels of excavation activity—and the absence of any major legislative or procedural changes, one would reasonably expect underground damage incidents to have increased, not decreased. The discrepancy suggests that underreporting remains a significant challenge in DIRT's dataset.

In conclusion, while the DIRT report data may appear to show improvement, the lack of comprehensive and validated reporting limits confidence in those findings. Any analysis of DIRT data should therefore be approached with caution, recognizing that the apparent reduction in underground damages may be influenced as much by reporting inconsistencies as by actual field performance improvements.

KEY FINDINGS

In 2024, CGA DIRT reported **2,198 underground utility facility damages in Colorado, a 36% decrease from 2023**. This marks the second consecutive year of decline since 2022, which that year's damages peaked at an all-time high of **4,413**. A significant driver of this decline has been the sharp reduction in **telecommunications reported underground facility damages**, which reportedly fell **94% from 2022 to 2024**.

Despite the encouraging trend, questions remain about reporting accuracy, as DIRT relies on **self-reported incidents from facility owners**.

DAMAGE TRENDS (2018-2024):

- Reported damages have fluctuated, peaking at more than 4,400 in 2022 before declining consecutively in 2023 and 2024.
- The damage rate per 1,000 Colorado 811 tickets fell from 4.05 in 2022 to 1.83 in 2024.

TELECOMMUNICATION & NATURAL GAS FACILITY UNDERGROUND DAMAGES:

- Telecommunications damages were the largest contributor to the statewide decline. In 2022, telecom damages spiked with extensive fiber work, but by 2024, the rate dropped from **1.53 to 0.09 damages per 1,000 tickets**.
- With telecommunications declining, **natural gas facilities** remain the second most frequently damaged type, at **0.8 damages per 1,000 tickets in 2024**.

CAUSES AND PREVENTION:

- The leading cause of damages remains **failure to notify Colorado 811 prior to excavation**. "No Notification to 811" accounted for **21% of reported damages in 2024**, a consistent trend since 2018.

REPORTING CONCERNS:

- The **reliability of DIRT data remains questionable**, as reporting is voluntary. Some incidents may not be submitted at all and damage reporting from telecommunication facility owners has been highly variable the last few years.
- Colorado law (Section 7 (a) and (b) of the Notification Law) requires facility owners/operators to report damages meeting the threshold within **90 days**. However, Colorado 811 does not have authority to enforce compliance or verify completeness of DIRT submissions.
- For context, **Colorado 811 ticket data shows excavation activity reached record highs in 2023** with **1.2 million tickets (a 13% increase from 2022)**, including **311,000 fiber-related tickets (a 137% increase)**. The significant activity contrasts with the reported DIRT damages decline from 2022 to 2023, suggesting that not all damages are being captured.

CONCLUSION:

While the reported decrease in damages is encouraging, **gaps in data submission raise concerns about the accuracy of CGA DIRT figures**. The inconsistency between reported damages and Colorado 811 ticket activity indicates that actual damages may be underreported.

As excavation activity, particularly fiber installations, continues to be elevated, it is essential to:

- Improve reporting frequency and accuracy.
- Promote greater compliance with damage reporting requirements.
- Reinforce awareness of safe excavation practices statewide.

CGA DIRT DATA

The data source used for this analysis is collected and provided by the CGA DIRT Tool. To prepare the data for analysis, the following steps are conducted:

- Filter to Colorado incidents only
- Filter to underground damage incidents
- Filter to facility owner/operators reported incidents.

The period for the data set is from 2018-2024, where the CGA DIRT current specification version (2018.0 Current) is used. Colorado 811 does not guarantee accuracy of the CGA DIRT data set.

METRIC DEFINITIONS

Damage: Any impact or exposure that results in the need to repair an underground facility due to 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. There does not need to be a release of product.

Damages per 1K Tickets: A calculated rate defined by taking the reported types of damages divided by total Colorado 811 ticket volumes. Then the calculated number is multiplied by 1,000 to get a per 1K ticket rate.

DIRT: Damage Information Reporting Tool (DIRT), which is the data repository managed by CGA.

Facility Damage: The type of facility (e.g., gas, electricity, water, etc.) that is impacted by the damage incident.

Incident: A reported damage event entered into DIRT.

Population: All state and county population information obtained through U.S. Census data.

Ticket: A submitted request by either a homeowner or professional excavator to Colorado 811 for a utility locate prior to digging.

DECREASE IN STATE REPORTED DAMAGES

A total of 2,198 total underground facility damages were reported into the Common Ground Alliance (CGA) DIRT Tool for damages in 2024 in the State of Colorado; this represents a 50% decrease from 2022.

Total Reported Underground Utility Damages (2018-2014)

- Damages fluctuated between 3,000–3,600 from 2018 to 2021.
- Reached a peak of 4,413 in 2022 (highest on record).
- Declined for two consecutive years, down to 3,439 in 2023 and 2,198 in 2024.

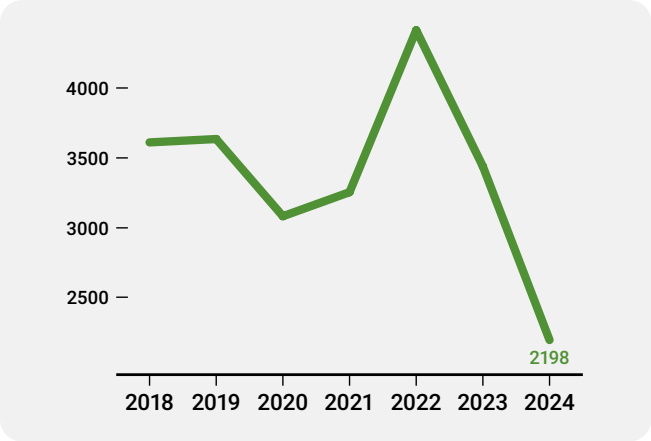
Overall trend: After peaking in 2022, reported damages have dropped by 50% in just two years.

Damages per 1,000 Colorado 811 Tickets (2018-2014)

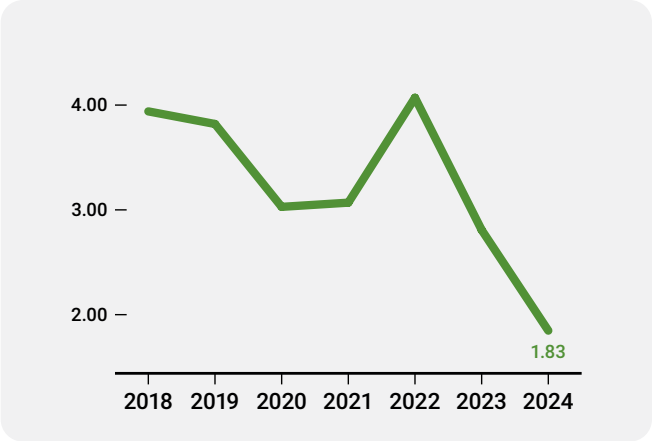
- Sizeable fluctuations in a seven-year span ranging from 1.8 to 4.05.
- Damage rate peaked in 2022 at 4.05
- Then it has trended downwards in the last two years reaching 1.83 in 2024

Overall trend: The damage rate per ticket is at its lowest point in seven years, less than half of the 2022 peak.

2018-2024 Total Damages



2018-2024 Total Damages per 1K Tickets



2018-2024 Total Damage Table

METRIC	2018	2019	2020	2021	2022	2023	2024
Total Underground Facility Reported Damages	3,611	3,635	3,083	3,255	4,513	3,439	2,198
Total Colorado 811 Tickets (in thousands)	920K	955K	1,024K	1,063K	1,089K	1,233K	1,202K
Damages per 1K Tickets Rate	3.92	3.80	3.01	3.05	4.05	2.79	1.83

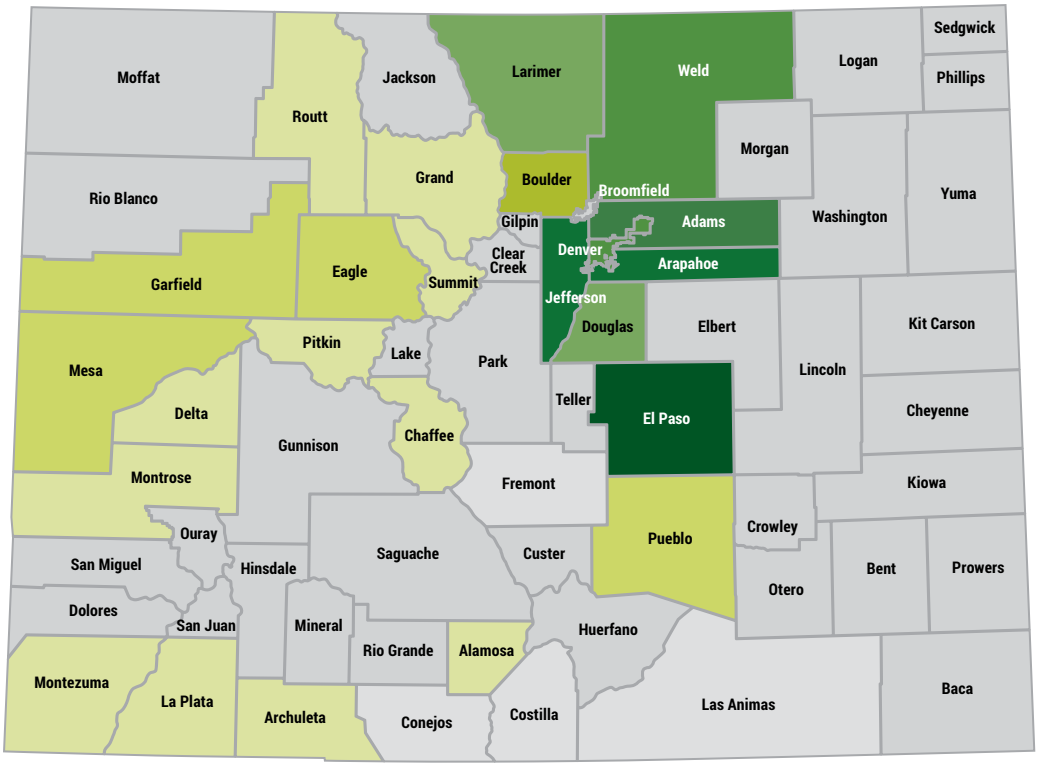
DAMAGES CONCENTRATED IN URBAN AND HIGH-GROWTH AREAS

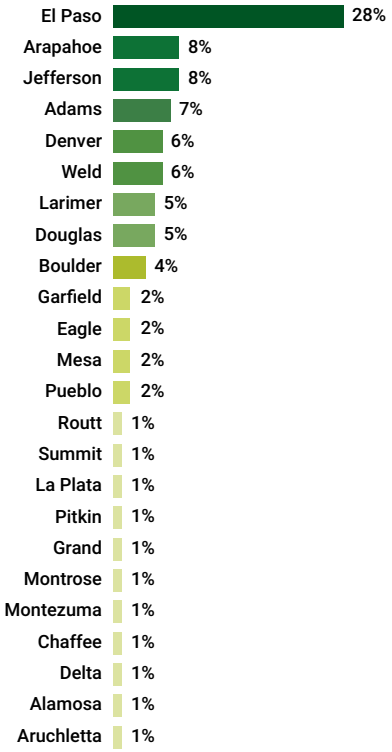
Damages are heavily concentrated in urban and high-growth areas along the Front Range, especially El Paso County and Denver metro counties. Rural and mountain counties report relatively few damages, each contributing only 1–2% of the statewide total.

DIRT Damages by County

- El Paso County accounts for the largest share of reported damages, making up 28% of the state total.
- A cluster of Front Range counties (Arapahoe 8%, Jefferson 8%, Adams 7%, Denver 6%, Weld 6%, Larimer 5%, Douglas 5%, Boulder 4%) together represent nearly half of all reported damages.

DIRT Damages by County





SHARP DECLINE ON REPORTED DIRT TELECOM FACILITY DAMAGES

Natural gas has been the most consistently reported underground facility type damage in DIRT, but telecommunication facility types drove the 2022 spike and the declines reported in 2023 and 2024.

Damages per 1K Ticket Rate by Underground Facility Type

- Natural Gas: Historically the most frequently damaged facility. Rates fell steadily from 2.01 (2018) to 0.80 (2024).
- Telecommunications: Showed volatility – spiking to 1.53 in 2022 during fiber buildout, then plummeting to 0.09 in 2024 (a 94% drop from the peak). Keep in mind there are DIRT data quality concerns associated with these numbers (see next section).
- Electric: Fluctuated between 0.33–0.62, with a long-term decline, ending at 0.33 in 2024.
- Cable TV: Remained stable over time (around 0.36–0.50), with a slight decrease in 2024.
- Water & Sewer: Consistently very low (≤0.13 per 1,000 tickets).
- Liquid Pipeline: Negligible across all years.

2018-2024 Total Damage per 1K Tickets by Facility Type Table

METRIC	2018	2019	2020	2021	2022	2023	2024
Natural Gas	2.01	1.80	1.27	1.63	1.51	1.31	0.80
Telecommunications	0.82	0.72	0.80	0.41	1.53	0.34	0.09
Electric	0.57	0.62	0.37	0.49	0.46	0.56	0.33
Cable TV	0.44	0.50	0.41	0.39	0.38	0.43	0.36
Water	0.05	0.11	0.13	0.09	0.09	0.09	0.05
Sewer	0.01	0.03	0.01	0.03	0.02	0.02	0.02
Unknown/Other	0.01	0.01	0.01	0.01	0.03	0.03	0.17
Liquid Pipeline	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Total Damages	**3.92**	**3.80**	**3.01**	**3.1**	**4.01**	**2.79**	**1.83**

UNDERGROUND FACILITY DAMAGE CAUSE

"No Notification to Colorado 811" Continues to be Leading Cause of Damages

Top Four Causes Drive the Majority of Reported Damages

- The top four reported damage causes account for 63% of all reported damages in 2024:
  - No notification made to One-Call Center / 811 (21%)
  - Not marked due to Locator error (18%)
  - Excavator failed to maintain clearance after verifying marks (12%)
  - Excavator dug prior to verifying marks by test-hole (12%)
- These categories reflect the core procedural and communication failures that continue to drive most underground damage in Colorado.
- No notification made to One-Call Center continues to be the leading damage cause in Colorado since reporting back to 2018.

Locator and Excavator Practices Remain Key Problem Areas

- Combined, locator-related issues (e.g., inaccurate marks, faded marks, record/map errors) account for roughly 30% of all damages.
- Excavator-related causes (e.g., failure to verify marks, maintain clearance, or notify 811) collectively make up ~50% of total damages—highlighting continued opportunities for excavator education and compliance.

Data Completeness Still a Challenge

- "Root cause not listed above (comment required)" represents 5% of all reports, suggesting some gaps in data entry or classification accuracy.
- A similar proportion is labeled "Improper excavation practice not listed above" (4%), indicating ambiguity in how some causes are being categorized.

2024 DIRT Damage Causes

Damage Causes	Total DIRT Damages	% of DIRT Damages
No notification made to One-Call Center / 811	451	21%
Not marked due to Locator error	388	18%
Excavator failed to maintain clearance after verifying marks	272	12%
Excavator dug prior to verifying marks by test-hole (pot-hole)	267	12%
Marks faded, lost or not maintained	117	5%
Marked inaccurately due to Locator error	108	5%
Root Cause not listed above (comment required)	103	5%
Improper excavation practice not listed above	93	4%
Excavator dug outside area described on ticket	83	4%
Excavator dug prior to valid start date/time	61	3%
Excavator dug after valid ticket expired	60	3%
Excavator failed to protect/shore/support facilities	39	2%
Not marked due to Incorrect facility records/maps	33	2%
No response from operator/contract locator	32	1%
Excavator provided incorrect notification information	15	1%
Unlocatable facility	15	1%
Marked inaccurately due to Incorrect facility record/maps	13	1%
Previous damage	12	1%
Marked inaccurately due to Tracer wire issue	11	1%
Not marked due to Abandoned facility	10	0%
Site marked but incomplete at damage location	6	0%
Improper backfilling	3	0%
Not marked due to Tracer wire issue	3	0%
One-Call Center error	2	0%
Deteriorated facility	1	0%
Total	**2,198**	**100%**

NO CHANGES IN DAMAGES OBSERVED WITH EXCAVATOR PRACTICES

Damages are heavily concentrated among professional contractors that stem from mechanized digging (backhoes, boring, drilling), aligning with the recent fiber expansion surge.

Excavator Type Trends (2018-2024)

- Contractors dominate reported damages — rising from 74% in 2018 to 86% in 2024.
- Unknown/Other dropped sharply from ~20% to 2%, indicating improved reporting accuracy.
- Utilities and municipalities show gradual increases (now ~5–6% and ~3%), reflecting more self-performed work.
- Other categories (developers, farmers, counties) remain minimal.

2018-2024 DIRT Underground Facility Reported Damages by Excavator Type

Excavator Type	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Contractor	2,665 (74%)	2,747 (76%)	2,066 (67%)	2,632 (81%)	3,676 (83%)	3,020 (88%)	1,896 (86%)
Unknown/Other	771 (21%)	685 (19%)	769 (25%)	353 (11%)	435 (9.9%)	67 (1.9%)	50 (2.3%)
Utility	28 (0.8%)	55 (1.5%)	74 (2.4%)	129 (4.0%)	101 (2.3%)	164 (4.8%)	124 (5.6%)
Occupant	84 (2.3%)	90 (2.5%)	116 (3.8%)	104 (3.2%)	85 (1.9%)	63 (1.8%)	52 (2.4%)
Municipality	22 (0.6%)	20 (0.6%)	24 (0.8%)	13 (0.4%)	84 (1.9%)	100 (2.9%)	58 (2.6%)
Developer	22 (0.6%)	21 (0.6%)	20 (0.6%)	11 (0.3%)	13 (0.3%)	6 (0.2%)	8 (0.4%)
Farmer	9 (0.2%)	8 (0.2%)	8 (0.3%)	8 (0.2%)	7 (0.2%)	9 (0.3%)	5 (0.2%)
County	8 (0.2%)	8 (0.2%)	6 (0.2%)	4 (0.1%)	10 (0.2%)	10 (0.3%)	5 (0.2%)
State	0 (0%)	1 (<0.1%)	0 (0%)	1 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)
Railroad	2 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[1]n (%)

Excavator Equipment Trends (2018-2024)

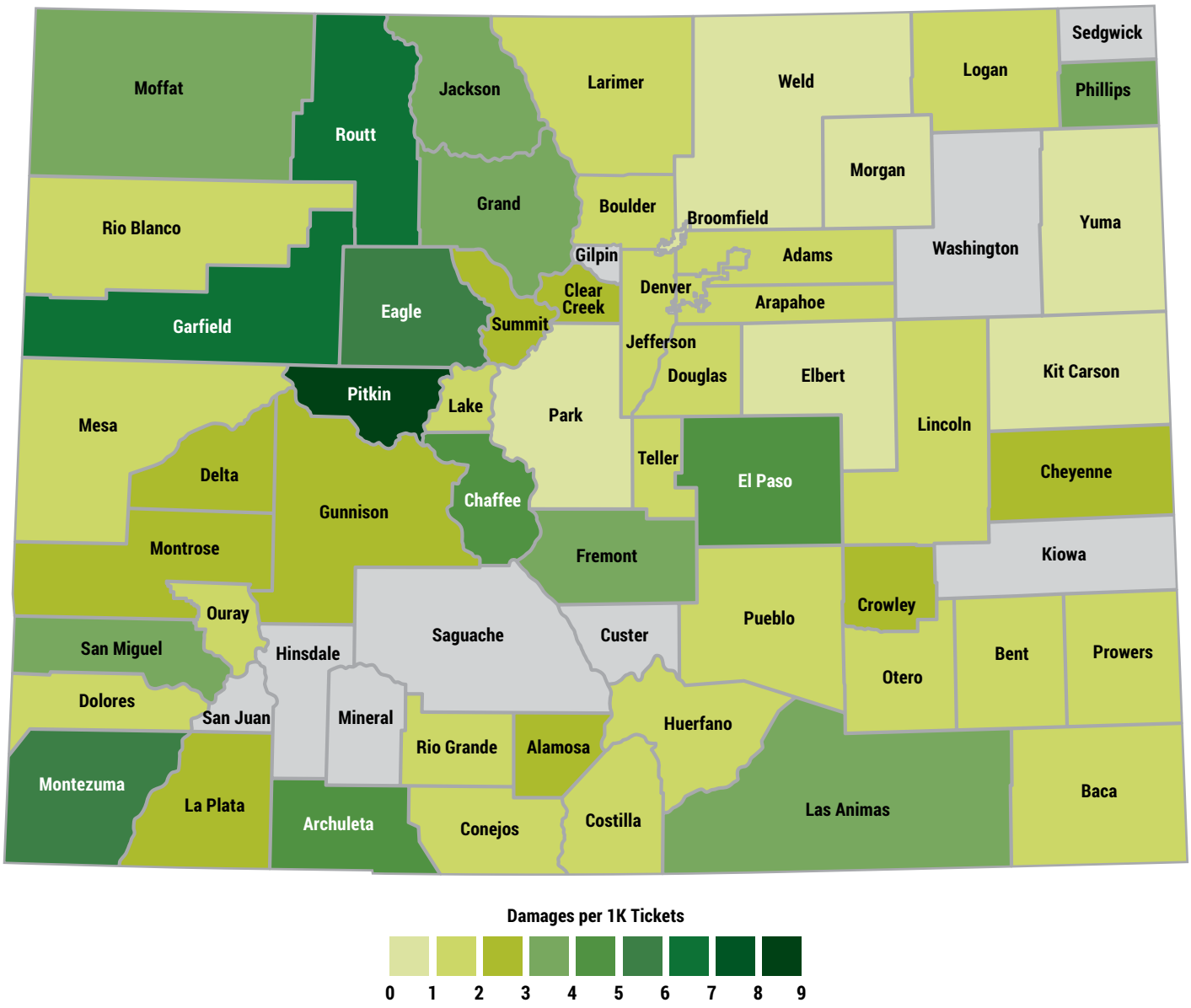
- Backhoe/Trackhoe consistently leads all equipment types (~45% of damages).
- Boring and directional drilling increased to a combined ~20%, tied to fiber installation growth.
- Hand tools remain steady (~10–12%).
- "Unknown/Other" declined from ~20% to ~11%, showing improved data quality.

2018-2024 DIRT Underground Facility Reported Damages by Excavator Equipment

Excavation Equipment	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Backhoe/Trackhoe	1,655 (46%)	1,638 (45%)	1,239 (40%)	1,639 (50%)	1,945 (44%)	1,491 (43%)	999 (45%)
Unknown/Other	519 (14%)	730 (20%)	613 (20%)	353 (11%)	653 (15%)	372 (11%)	245 (11%)
Hand Tools	383 (11%)	340 (9.4%)	317 (10%)	387 (12%)	445 (10%)	361 (10%)	249 (11%)
Directional Drilling	461 (13%)	326 (9.0%)	293 (9.5%)	289 (8.9%)	467 (11%)	390 (11%)	239 (11%)
Boring	125 (3.5%)	161 (4.4%)	253 (8.2%)	196 (6.0%)	222 (5.0%)	418 (12%)	219 (10.0%)
Trencher	214 (5.9%)	185 (5.1%)	165 (5.4%)	164 (5.0%)	279 (6.3%)	138 (4.0%)	101 (4.6%)
Auger	157 (4.3%)	143 (3.9%)	108 (3.5%)	130 (4.0%)	204 (4.6%)	102 (3.0%)	46 (2.1%)
Grader/Scraper	60 (1.7%)	56 (1.5%)	33 (1.1%)	45 (1.4%)	115 (2.6%)	47 (1.4%)	31 (1.4%)
Drilling	2 (<0.1%)	8 (0.2%)	23 (0.7%)	7 (0.2%)	32 (0.7%)	67 (1.9%)	5 (0.2%)
Bulldozer	9 (0.2%)	25 (0.7%)	21 (0.7%)	15 (0.5%)	17 (0.4%)	29 (0.8%)	26 (1.2%)
Probing Device	10 (0.3%)	11 (0.3%)	4 (0.1%)	13 (0.4%)	8 (0.2%)	6 (0.2%)	23 (1.0%)
Vacuum Equipment	4 (0.1%)	7 (0.2%)	10 (0.3%)	12 (0.4%)	7 (0.2%)	14 (0.4%)	12 (0.5%)
Farm Equipment	11 (0.3%)	4 (0.1%)	4 (0.1%)	4 (0.1%)	15 (0.3%)	3 (<0.1%)	2 (<0.1%)
Milling Equipment	1 (<0.1%)	1 (<0.1%)	0 (0%)	1 (<0.1%)	4 (<0.1%)	0 (0%)	0 (0%)
Explosives	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)

[1]n (%)

COLORADO MAP OF DIRT UNDERGROUND FACILITY REPORTED DAMAGES PER 1K CO811 TICKETS BY COUNTY



REPORTED DAMAGES BY COUNTY

County	County Type	Population (2023 US Census Est.)	Total Tickets	Pop. per Sq Mi	Pop. per Ticket	Damages	% of Damages without One Call/811 Notification	Damages per 1K Tickets
Adams	Urban	542,973	114,061	465	4.8	146	27%	1.3
Alamosa	Rural	16,689	1,975	23	8.5	4	25%	2.0
Arapahoe	Urban	666,918	114,667	836	5.8	184	21%	1.6
Archuleta	Rural	14,112	2,546	11	5.5	11	55%	4.3
Baca	Rural	3,367	944	1	3.6	1	100%	1.1
Bent	Rural	5,779	845	4	6.8	1	100%	1.2
Boulder	Urban	330,262	72,452	455	4.6	91	35%	1.3
Broomfield	Urban	78,323	13,057	2,371	6.0	5	40%	0.4
Chaffee	Rural	20,780	3,729	21	5.6	15	47%	4.0
Cheyenne	Rural	1,712	992	1	1.7	2	50%	2.0
Clear Creek	Rural	9,076	3,264	23	2.8	9	33%	2.8
Conejos	Rural	7,549	959	6	7.9	1	100%	1.0
Costilla	Rural	3,686	567	3	6.5	1	100%	1.8
Crowley	Rural	5,600	497	7	11.3	1	0%	2.0
Custer	Rural	5,553	682	8	8.1			
Delta	Rural	32,215	4,662	28	6.9	13	62%	2.8
Denver	Urban	729,019	112,991	4,765	6.5	140	24%	1.2
Dolores	Rural	2,467	739	2	3.3	1	0%	1.4
Douglas	Urban	393,995	78,100	469	5.0	111	32%	1.4
Eagle	Rural	54,330	7,633	32	7.1	44	34%	5.8
Elbert	Rural	29,382	12,264	16	2.4	11	18%	0.9
El Paso	Urban	752,772	145,904	354	5.2	616	76%	4.2
Fremont	Rural	50,093	4,658	33	10.8	14	29%	3.0
Garfield	Rural	63,167	7,054	21	9.0	46	43%	6.5
Gilpin	Rural	5,963	798	40	7.5			
Grand	Rural	16,154	5,541	9	2.9	21	24%	3.8
Gunnison	Rural	17,310	3,096	5	5.6	8	38%	2.6
Hinsdale	Rural	747	324	1	2.3			
Huerfano	Rural	6,988	1,323	4	5.3	2	100%	1.5
Jackson	Rural	1,273	289	1	4.4	1	0%	3.5
Jefferson	Urban	578,533	126,716	757	4.6	180	17%	1.4
Kiowa	Rural	1,392	576	1	2.4			
Kit Carson	Rural	7,080	3,082	3	2.3	2	50%	0.7
Lake	Rural	7,369	2,970	20	2.5	3	33%	1.0
La Plata	Rural	56,823	10,265	34	5.5	26	42%	2.5
Larimer	Urban	374,574	82,718	144	4.5	114	19%	1.4
Las Animas	Rural	14,518	1,315	3	11.0	4	50%	3.0
Lincoln	Rural	5,598	2,297	2	2.4	3	33%	1.3
Logan	Rural	20,755	2,664	11	7.8	4	0%	1.5
Mesa	Rural	161,260	28,033	48	5.8	40	30%	1.4
Mineral	Rural	933	240	1	3.9			
Moffat	Rural	13,142	1,871	3	7.0	7	71%	3.7
Montezuma	Rural	26,841	3,357	13	8.0	17	47%	5.1
Montrose	Rural	44,806	7,806	20	5.7	19	42%	2.4
Morgan	Rural	30,300	6,049	24	5.0	3	0%	0.5

(Continued)

REPORTED DAMAGES BY COUNTY

(Continued)

County	County Type	Population (2023 US Census Est.)	Total Tickets	Pop. per Sq Mi	Pop. per Ticket	Damages	% of Damages without One Call/811 Notification	Damages per 1K Tickets
Otero	Rural	17,991	1,682	14	10.7	2	50%	1.2
Ouray	Rural	5,197	1,813	10	2.9	2	50%	1.1
Park	Rural	18,316	3,608	8	5.1	2	50%	0.6
Phillips	Rural	4,488	525	7	8.5	2	0%	3.8
Pitkin	Rural	16,643	2,665	17	6.2	23	26%	8.6
Prowers	Rural	11,957	1,877	7	6.4	3	67%	1.6
Pueblo	Urban	169,866	26,810	71	6.3	35	29%	1.3
Rio Blanco	Rural	6,607	1,711	2	3.9	2	0%	1.2
Rio Grande	Rural	11,132	1,476	12	7.5	2	100%	1.4
Routt	Rural	25,243	4,634	11	5.4	32	34%	6.9
Saguache	Rural	6,670	1,132	2	5.9			
San Juan	Rural	821	166	2	4.9			
San Miguel	Rural	7,819	1,606	6	4.9	6	33%	3.7
Sedgwick	Rural	2,257	867	4	2.6			
Summit	Rural	30,882	10,971	51	2.8	30	23%	2.7
Teller	Rural	24,862	6,785	45	3.7	9	67%	1.3
Washington	Rural	4,771	1,074	2	4.4			
Weld	Urban	369,745	134,456	93	2.7	125	27%	0.9
Yuma	Rural	10,048	1,438	4	7.0	1	0%	0.7
COLORADO		**5,957,493**	**1,201,868**	**58**	**5.0**	**2,198**	**42%**	**1.8**

REPORTED DAMAGES BY FACILITY TYPE

FACILITY DAMAGE	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Natural Gas	1,855 (51%)	1,726 (47%)	1,305 (42%)	1,734 (53%)	1,650 (37%)	1,611 (47%)	967 (44%)
Telecommunications	757 (21%)	688 (19%)	824 (27%)	439 (13%)	1,664 (38%)	424 (12%)	108 (4.9%)
Electric	523 (14%)	598 (16%)	381 (12%)	519 (16%)	498 (11%)	696 (20%)	392 (18%)
Cable TV	408 (11%)	478 (13%)	417 (14%)	419 (13%)	419 (9.5%)	536 (16%)	435 (20%)
Water	47 (1.3%)	110 (3.0%)	135 (4.4%)	96 (2.9%)	102 (2.3%)	108 (3.1%)	64 (2.9%)
Unknown/Other	10 (0.3%)	6 (0.2%)	8 (0.3%)	13 (0.4%)	38 (0.9%)	37 (1.1%)	204 (9.3%)
Sewer	8 (0.2%)	25 (0.7%)	9 (0.3%)	31 (1.0%)	26 (0.6%)	25 (0.7%)	26 (1.2%)
Liquid Pipeline	3 (<0.1%)	4 (0.1%)	4 (0.1%)	4 (0.1%)	16 (0.4%)	2 (<0.1%)	2 (<0.1%)

[1]n (%)

REPORTED DAMAGES BY EXCAVATOR TYPE

EXCAVATOR TYPE	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Contractor	2,665 (74%)	2,747 (76%)	2,066 (67%)	2,632 (81%)	3,676 (83%)	3,020 (88%)	1,896 (86%)
Unknown/Other	771 (21%)	685 (19%)	769 (25%)	353 (11%)	435 (9.9%)	67 (1.9%)	50 (2.3%)
Utility	28 (0.8%)	55 (1.5%)	74 (2.4%)	129 (4.0%)	101 (2.3%)	164 (4.8%)	124 (5.6%)
Occupant	84 (2.3%)	90 (2.5%)	116 (3.8%)	104 (3.2%)	85 (1.9%)	63 (1.8%)	52 (2.4%)
Municipality	22 (0.6%)	20 (0.6%)	24 (0.8%)	13 (0.4%)	84 (1.9%)	100 (2.9%)	58 (2.6%)
Developer	22 (0.6%)	21 (0.6%)	20 (0.6%)	11 (0.3%)	13 (0.3%)	6 (0.2%)	8 (0.4%)
Farmer	9 (0.2%)	8 (0.2%)	8 (0.3%)	8 (0.2%)	7 (0.2%)	9 (0.3%)	5 (0.2%)
County	8 (0.2%)	8 (0.2%)	6 (0.2%)	4 (0.1%)	10 (0.2%)	10 (0.3%)	5 (0.2%)
State	0 (0%)	1 (<0.1%)	0 (0%)	1 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)
Railroad	2 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[1]n (%)

REPORTED DAMAGES BY EXCAVATION EQUIPMENT

EXCAVATOR EQUIPMENT	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Backhoe/Trackhoe	1,655 (46%)	1,638 (45%)	1,239 (40%)	1,639 (50%)	1,945 (44%)	1,491 (43%)	999 (45%)
Unknown/Other	519 (14%)	730 (20%)	613 (20%)	353 (11%)	653 (15%)	372 (11%)	245 (11%)
Hand Tools	383 (11%)	340 (9.4%)	317 (10%)	387 (12%)	445 (10%)	361 (10%)	249 (11%)
Directional Drilling	461 (13%)	326 (9.0%)	293 (9.5%)	289 (8.9%)	467 (11%)	390 (11%)	239 (11%)
Boring	125 (3.5%)	161 (4.4%)	253 (8.2%)	196 (6.0%)	222 (5.0%)	418 (12%)	219 (10.0%)
Trencher	214 (5.9%)	185 (5.1%)	165 (5.4%)	164 (5.0%)	279 (6.3%)	138 (4.0%)	101 (4.6%)
Auger	157 (4.3%)	143 (3.9%)	108 (3.5%)	130 (4.0%)	204 (4.6%)	102 (3.0%)	46 (2.1%)
Grader/Scraper	60 (1.7%)	56 (1.5%)	33 (1.1%)	45 (1.4%)	115 (2.6%)	47 (1.4%)	31 (1.4%)
Drilling	2 (<0.1%)	8 (0.2%)	23 (0.7%)	7 (0.2%)	32 (0.7%)	67 (1.9%)	5 (0.2%)
Bulldozer	9 (0.2%)	25 (0.7%)	21 (0.7%)	15 (0.5%)	17 (0.4%)	29 (0.8%)	26 (1.2%)
Probing Device	10 (0.3%)	11 (0.3%)	4 (0.1%)	13 (0.4%)	8 (0.2%)	6 (0.2%)	23 (1.0%)
Vacuum Equipment	4 (0.1%)	7 (0.2%)	10 (0.3%)	12 (0.4%)	7 (0.2%)	14 (0.4%)	12 (0.5%)
Farm Equipment	11 (0.3%)	4 (0.1%)	4 (0.1%)	4 (0.1%)	15 (0.3%)	3 (<0.1%)	2 (<0.1%)
Milling Equipment	1 (<0.1%)	1 (<0.1%)	0 (0%)	1 (<0.1%)	4 (<0.1%)	0 (0%)	0 (0%)
Explosives	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)

[1]n (%)

REPORTED DAMAGES BY WORK PERFORMED

WORK PERFORMED	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
Unknown/Other	1,258 (35%)	1,209 (33%)	1,023 (33%)	925 (28%)	1,400 (32%)	883 (26%)	561 (26%)
Telecommunications	284 (7.9%)	223 (6.1%)	267 (8.7%)	231 (7.1%)	281 (6.4%)	867 (25%)	390 (18%)
Electric	343 (9.5%)	313 (8.6%)	259 (8.4%)	327 (10%)	384 (8.7%)	282 (8.2%)	189 (8.6%)
Water	216 (6.0%)	290 (8.0%)	230 (7.5%)	267 (8.2%)	330 (7.5%)	215 (6.3%)	185 (8.4%)
Landscaping	236 (6.5%)	226 (6.2%)	200 (6.5%)	239 (7.3%)	251 (5.7%)	192 (5.6%)	160 (7.3%)
Natural Gas	200 (5.5%)	220 (6.1%)	183 (5.9%)	214 (6.6%)	235 (5.3%)	182 (5.3%)	74 (3.4%)
Sewer	164 (4.5%)	217 (6.0%)	189 (6.1%)	200 (6.1%)	218 (4.9%)	120 (3.5%)	100 (4.5%)
Cable TV	119 (3.3%)	123 (3.4%)	140 (4.5%)	159 (4.9%)	221 (5.0%)	102 (3.0%)	107 (4.9%)
Fencing	147 (4.1%)	163 (4.5%)	132 (4.3%)	96 (2.9%)	176 (4.0%)	54 (1.6%)	86 (3.9%)
Grading	118 (3.3%)	91 (2.5%)	40 (1.3%)	89 (2.7%)	123 (2.8%)	86 (2.5%)	79 (3.6%)
Pole	98 (2.7%)	109 (3.0%)	61 (2.0%)	99 (3.0%)	100 (2.3%)	109 (3.2%)	49 (2.2%)
Road Work	112 (3.1%)	91 (2.5%)	53 (1.7%)	62 (1.9%)	149 (3.4%)	55 (1.6%)	43 (2.0%)
Bldg. Construction	52 (1.4%)	73 (2.0%)	69 (2.2%)	86 (2.6%)	138 (3.1%)	56 (1.6%)	35 (1.6%)
Irrigation	59 (1.6%)	48 (1.3%)	60 (1.9%)	76 (2.3%)	59 (1.3%)	55 (1.6%)	27 (1.2%)
Curb/Sidewalk	39 (1.1%)	44 (1.2%)	46 (1.5%)	34 (1.0%)	80 (1.8%)	54 (1.6%)	8 (0.4%)
Storm Drain/Culvert	44 (1.2%)	46 (1.3%)	27 (0.9%)	45 (1.4%)	75 (1.7%)	16 (0.5%)	6 (0.3%)
Driveway	45 (1.2%)	34 (0.9%)	20 (0.6%)	28 (0.9%)	50 (1.1%)	39 (1.1%)	21 (1.0%)
Drainage	32 (0.9%)	37 (1.0%)	40 (1.3%)	16 (0.5%)	15 (0.3%)	20 (0.6%)	16 (0.7%)
Streetlight	5 (0.1%)	36 (1.0%)	11 (0.4%)	21 (0.6%)	28 (0.6%)	11 (0.3%)	30 (1.4%)
Site Development	16 (0.4%)	12 (0.3%)	11 (0.4%)	17 (0.5%)	47 (1.1%)	13 (0.4%)	13 (0.6%)
Bldg. Demolition	11 (0.3%)	10 (0.3%)	5 (0.2%)	9 (0.3%)	13 (0.3%)	11 (0.3%)	9 (0.4%)
Liquid Pipeline	6 (0.2%)	5 (0.1%)	5 (0.2%)	4 (0.1%)	2 (<0.1%)	1 (<0.1%)	2 (<0.1%)
Waterway Improvement	0 (0%)	6 (0.2%)	3 (<0.1%)	5 (0.2%)	4 (<0.1%)	3 (<0.1%)	4 (0.2%)
Agriculture	2 (<0.1%)	1 (<0.1%)	5 (0.2%)	2 (<0.1%)	7 (0.2%)	6 (0.2%)	1 (<0.1%)
Traffic Sign	2 (<0.1%)	1 (<0.1%)	2 (<0.1%)	0 (0%)	15 (0.3%)	0 (0%)	1 (<0.1%)
Engineering/Surveying	0 (0%)	2 (<0.1%)	1 (<0.1%)	1 (<0.1%)	8 (0.2%)	3 (<0.1%)	2 (<0.1%)
Traffic Signal	2 (<0.1%)	3 (<0.1%)	0 (0%)	3 (<0.1%)	1 (<0.1%)	0 (0%)	0 (0%)
Steam	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (<0.1%)	2 (<0.1%)	0 (0%)
Milling	1 (<0.1%)	1 (<0.1%)	1 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Public Transit Authority	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)	0 (0%)
Railroad	0 (0%)	1 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	0 (0%)

[1]n (%)

REPORTED DAMAGES BY DAMAGE CAUSE

DAMAGE CAUSE	2018, N = 3,611[1]	2019, N = 3,635[1]	2020, N = 3,083[1]	2021, N = 3,255[1]	2022, N = 4,413[1]	2023, N = 3,439[1]	2024, N = 2,198[1]
No notification made to One-Call Center / 811	674 (19%)	684 (19%)	507 (16%)	729 (22%)	909 (21%)	663 (19%)	451 (21%)
Not marked due to Locator error	461 (13%)	548 (15%)	335 (11%)	480 (15%)	591 (13%)	623 (18%)	388 (18%)
Root Cause not listed above (comment required)	798 (22%)	703 (19%)	888 (29%)	380 (12%)	335 (7.6%)	199 (5.8%)	103 (4.7%)
Excavator dug prior to verifying marks by test-hole (pothole)	406 (11%)	466 (13%)	300 (9.7%)	383 (12%)	324 (7.3%)	368 (11%)	267 (12%)
Excavator failed to maintain clearance after verifying marks	267 (7.4%)	207 (5.7%)	279 (9.0%)	325 (10.0%)	432 (9.8%)	292 (8.5%)	272 (12%)
Marked inaccurately due to Locator error	324 (9.0%)	217 (6.0%)	114 (3.7%)	128 (3.9%)	202 (4.6%)	174 (5.1%)	108 (4.9%)
Improper excavation practice not listed above	148 (4.1%)	225 (6.2%)	80 (2.6%)	218 (6.7%)	208 (4.7%)	291 (8.5%)	93 (4.2%)
Marks faded, lost, or not maintained	118 (3.3%)	159 (4.4%)	114 (3.7%)	118 (3.6%)	143 (3.2%)	137 (4.0%)	117 (5.3%)
Excavator dug outside area described on ticket	59 (1.6%)	74 (2.0%)	57 (1.8%)	57 (1.8%)	115 (2.6%)	196 (5.7%)	83 (3.8%)
Excavator failed to protect/ shore/support facilities	49 (1.4%)	45 (1.2%)	36 (1.2%)	63 (1.9%)	297 (6.7%)	51 (1.5%)	39 (1.8%)
Excavator dug prior to valid start date/time	51 (1.4%)	53 (1.5%)	60 (1.9%)	75 (2.3%)	143 (3.2%)	123 (3.6%)	61 (2.8%)
No response from operator/ contract locator	8 (0.2%)	9 (0.2%)	51 (1.7%)	19 (0.6%)	390 (8.8%)	43 (1.3%)	32 (1.5%)
Excavator dug after valid ticket expired	56 (1.6%)	50 (1.4%)	38 (1.2%)	68 (2.1%)	94 (2.1%)	73 (2.1%)	60 (2.7%)
Not marked due to Incorrect facility records/maps	85 (2.4%)	63 (1.7%)	44 (1.4%)	48 (1.5%)	47 (1.1%)	59 (1.7%)	33 (1.5%)
Marked inaccurately due to Incorrect facility record/ maps	11 (0.3%)	17 (0.5%)	55 (1.8%)	24 (0.7%)	42 (1.0%)	21 (0.6%)	13 (0.6%)
Unlocatable facility	21 (0.6%)	24 (0.7%)	30 (1.0%)	22 (0.7%)	35 (0.8%)	27 (0.8%)	15 (0.7%)
Site marked but incomplete at damage location	18 (0.5%)	21 (0.6%)	24 (0.8%)	36 (1.1%)	33 (0.7%)	34 (1.0%)	6 (0.3%)
Marked inaccurately due to Tracer wire issue	12 (0.3%)	12 (0.3%)	17 (0.6%)	17 (0.5%)	12 (0.3%)	12 (0.3%)	11 (0.5%)
Excavator provided incorrect notification information	12 (0.3%)	5 (0.1%)	5 (0.2%)	17 (0.5%)	14 (0.3%)	20 (0.6%)	15 (0.7%)
Not marked due to Tracer wire issue	13 (0.4%)	4 (0.1%)	21 (0.7%)	18 (0.6%)	18 (0.4%)	7 (0.2%)	3 (0.1%)
Not marked due to Abandoned facility	6 (0.2%)	6 (0.2%)	6 (0.2%)	7 (0.2%)	11 (0.2%)	10 (0.3%)	10 (0.5%)
Previous damage	5 (0.1%)	11 (0.3%)	6 (0.2%)	6 (0.2%)	5 (0.1%)	3 (<0.1%)	12 (0.5%)
Marked inaccurately due to Abandoned Facility	5 (0.1%)	4 (0.1%)	8 (0.3%)	14 (0.4%)	5 (0.1%)	4 (0.1%)	0 (0%)
Deteriorated facility	1 (<0.1%)	23 (0.6%)	1 (<0.1%)	2 (<0.1%)	5 (0.1%)	4 (0.1%)	1 (<0.1%)
Improper backfilling	3 (<0.1%)	4 (0.1%)	7 (0.2%)	1 (<0.1%)	2 (<0.1%)	5 (0.1%)	3 (0.1%)
One-Call Center error	0 (0%)	1 (<0.1%)	0 (0%)	0 (0%)	1 (<0.1%)	0 (0%)	2 (<0.1%)

[1]n (%)

REPORTED DURATION HOURS

OUTAGE DURATION HRS.	2018, N = 3,611	2019, N = 3,635	2020, N = 3,083	2021, N = 3,255	2022, N = 4,413	2023, N = 3,439	2024, N = 2,198
Mean, Median, (IQR)	15, 1, (0, 12)	16, 1, (0, 20)	20, 1, (0, 20)	36, 1, (1, 20)	2, 0, (0, 1)	3, 1, (1, 1)	4, 1, (1, 1)
Range	0, 1,300	0, 720	0, 5,016	0, 9,999	0, 240	0, 48	0, 48
Unknown	2,590	2,623	1,954	2,546	2,732	2,869	1,906

REPORTED FACILITY DEPTH (INCHES)

FACILITY DEPTH INCHES	2018, N = 3,611	2019, N = 3,635	2020, N = 3,083	2021, N = 3,255	2022, N = 4,413	2023, N = 3,439	2024, N = 2,198
Mean, Median, (IQR)	7, 1, (1, 1)	8, 1, (1, 1)	11, 1, (1, 20)	10, 1, (1, 18)	9, 1, (1, 18)	8, 1, (1, 18)	11, 1, (1, 18)
Range	0, 120	0, 96	0, 120	0, 120	0, 96	0, 84	0, 76
Unknown	1,609	1,603	1,561	829	2,403	1,066	836

Utility Notification Center of Colorado

16361 Table Mountain Pkwy
Golden, CO, 80403

303-232-1991

Email: **administrator@co811.org**

Monday through Friday
7am to 5pm MST
Open 24x7 for Emergency and Damage Requests.

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