2021 End of Year Analysis



This report by the Utilities and Transportation Commission (UTC) provides a summary and analysis of Washington's 2,473 damage events occurring in 2021, and a brief description about dig law complaints and training. To generate the most accurate analysis of damage events, it is important that damages are reported to Washington's Damage Incident Reporting Tool (DIRT) within the 45-day timeframe set forth in the statute.

The UTC now pulls the DIRT damage submittals several times a month. This has been extremely beneficial in capturing late reports, which may have been excluded in the past. Evaluating damage submittals more frequently results in flagged investigations being examined closer to the damage date.

The UTC also continues to use a flex field in the DIRT reports to provide a designated section for the submitter to give specific contact information about the excavator who caused damage. Prior to the addition of the flex field, contact information could only be placed in the comments section of the DIRT form. Due to this change, the UTC has seen improvements in reporting information, especially related to damage to natural gas without a locate. In addition, the detail in reporting has significantly helped the UTC in its ability to accurately analyze the DIRT data for enforcement, education, and training.

Due to Covid-19, no in-person trainings were offered by the UTC in 2021. However, online versions of the Staking University Locator training and the National Utility Contractors Association (NUCA) Dig Safe trainings were available as a temporary replacement in 2021.





The five root cause options on the DIRT form are:

- 1. Notification Issue
- 2. Locating Issue Facility NOT marked
- 3. Locating Issue Facility marked INACCURATELY
- 4. Excavation Issue
- 5. Miscellaneous

Two problematic issues with the root cause determinations are:

Under Excavation Issue, there is a selection choice of "Improper excavation practice not listed above" (meaning the submitter doesn't believe the damage cause fits into any of the other categories). Unfortunately, there is not a comment requirement to determine what caused the damage, and it is the most used selection in the category.

The Miscellaneous category has an option to choose "root cause not listed" with a requirement to leave a comment. When examining the comments, many times the correct root cause for the damage will correctly fit into another category.



2021 Damage Reporting

Who is reporting:

• Electric: 339

• Excavator: 327

Natural Gas: 1399

Public Works: 55

Telecommunications: 313

Other: 40



It should be noted that facility operators and excavators are both required to submit DIRT reports for each damage event, as outlined in RCW 19.122.053(1). There continues to be a lack of duplicate reports in 2021, indicating both the facility operator and excavator are not submitting a report on the same damage. This year we have seen the highest number of submittals by excavators thus far. Because there are so few duplicates, both reports have been left in this report, as most of them have listed different root causes for the incident.



2021 Damage Picture

Damaged Facilities:

Cable TV: 189

• Electric: 331

Natural Gas: 1467

• Other: 36

Telecommunications: 361

Water: 89





Locate Requests by Year

Requests for locates rebounded slightly with **19,835 more** submissions in 2021. This was likely due to construction and excavation services picking back up after a year of shutdowns related to Covid-19.

Year	Incoming Locate Requests	Outgoing Locate Transmissions	Locate Request Percentage Change (Year to Year)
2014	353,296	2,904,807	
2015	366,320	2,992,222	3.55%
2016	398,003	3,274,468	7.96%
2017	488,242	4,198,115	18.48%
2018	534,550	4,779,815	8.66%
2019	538,080	4,816,343	.66%
2020	535,826	4,778,004	42%
2021	555,661	4,872,436	3.56%



Washington's 2021 Root Cause Damage Picture

One Call Notification Issue has dropped by just 3 percent over last year, making up 34% percent of the 2021 damages incidents. There were 701 reports stating, "No notification made to the one call center", 49 reports that the "excavator dug after a valid ticket expired" and 44 stated that the "excavator dug outside the area described on the ticket".

Excavation Practices stays the same at 28 percent of the reported damages, with 310 damage reports listing "Improper excavation practices" as the main reason for the damage, 149 stating the "Excavator dug prior to verifying the marks (by pot-holing)", and another 149 stating that the "Excavator failed to maintain clearance."

Locating Issue – Facility Not Marked represents 20 percent of the reports received with 341 listing that the damage was because the utility was "Not marked due to locator error."

Locating Issue – Facility Marked Inaccurately makes up eight percent of the damages with 140 incidents stating the facility was "Marked inaccurately due to locator error."

Damage Root Cause	2021	2020
One Call Notification Issue	34%	37%
Excavation Practices Not Sufficient	28%	28%
Locating Issue - Facility Not Marked	20%	16%
Locating Issue - Facility Marked Inaccurately	8%	9%
Miscellaneous Root Cause	10%	10%

Miscellaneous Root Cause accounts for the last 10 percent damages with 239 reports stating that "Root Cause not listed." When this field is selected, the submitter is asked to provide a comment on the cause of the incident. Many times, the comment will identify another root cause that should have been selected. When submitting DIRT reports, the submitter should carefully identify the actual root cause so more relevant information can be analyzed about damage incidents and their cause.



2021 Locate Requests

The 2,473 DIRT damage reports submitted in 2021, indicate that 63 percent had a locate request made prior to excavation. This is an improvement from the previous year by five percent.

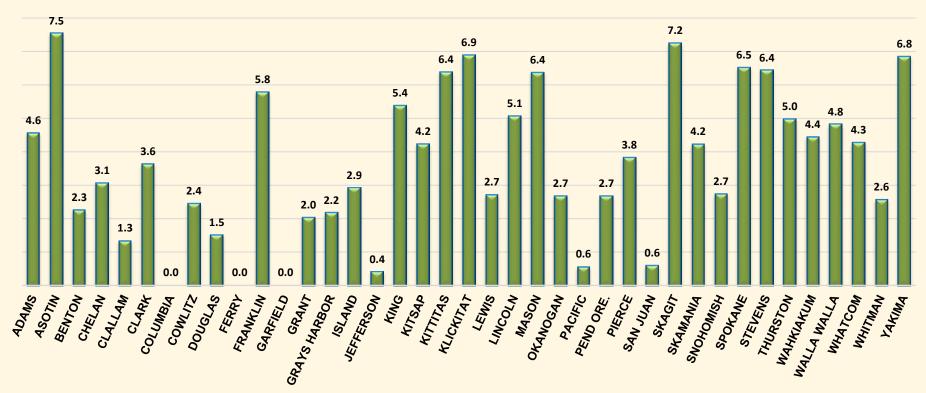
This may be because of warning letters issued by the UTC reminding people of the importance of getting locates, and the consequences of not having obtained a valid locate prior to excavation.

It also could be the result of a very direct advertising campaign by Washington811 and several other stakeholders who targeted homeowners doing DIY projects. The campaigns focused on the risk of excavating without knowing where buried utilities are located prior to digging, the embarrassment of causing a service outage in their neighborhood, and the high cost associated with damaging an underground utility.





2021 Damages by County



There was an average of **4.5 damages per 1,000 locate requests** in 2021. This is just slightly lower than last year's statewide number and shows a bit of improvement. It should be noted that the numbers for smaller counties may look higher since they have fewer requests for locates and we base the average on damages per 1,000 locate requests.



2021 Complaints, Enforcement Actions

2021 was less challenging for enforcement as the UTC and the Washington Dig Law Safety Committee (Safety Committee) worked together to adjust to Covid-19 shutdowns and the inability to hold in-person meetings. The Safety Committee continued to use Zoom and a call-in process to review complaints, resulting in 17 recommendation referrals to the UTC for investigation.

The UTC sent 416 technical assistance warning letters to 292 professional excavators and 124 homeowners, who damaged natural gas facilities in 2021 without first securing a valid locate.

Additionally, UTC staff performed 86 additional investigations on parties who violated the dig law by damaging natural gas service without first requesting an underground locate. These violators had also received at least one warning letter.

Total monetary penalties levied by the UTC in 2021 totaled \$157,000. Many included an option for deferral of the penalty amount, provided the offender had no additional violations for one year and/or completed a National Utility Contractor Association (NUCA) Dig Safe training.





All fines collected through penalty assessments are deposited into the Damage Prevention Penalty Account which can only be used for educational purposes to improve worker and public safety relating to excavation and underground utilities.

For a second year, in-person trainings were suspended in 2021. Staking University Locator Training online was available again in 2021, with 240 people registered. Unfortunately, that course seemed to be more on the technical side of locating and difficult for people to finish and pass, resulting in a low completion rate. For this reason, we believe the best locator training is still the two-day hands-on training, with an instructor.

NUCA Dig Safe Training online was rolled out early 2021 and has been a success in terms of people completing the course. The 45-minute virtual training covers the Dig Law in RCW 19.122, and other aspects of safe excavation practices. If during the test the student gets the wrong answer, the course educates them on the correct answer and allows them to correct it. For that reason, everyone that completes all the modules and the test, passes the course. In 2021, 343 people earned a Dig Safe Training online 2-year certificate.



Locator Training in 2019



For questions about this report, please contact:

Lynda Holloway
Damage Prevention Program Specialist
Utilities and Transportation Commission

Lynda.Holloway@utc.wa.gov

360-664-1118 - Office 360-529-9262 - Cell