This System Is Designed to Fail. We're Done Pretending Otherwise.

By the National Utility Locating Contractors Association (NULCA)

A five-year-old boy is dead.

On April 9, 2025, in Lexington, Missouri, a subcontractor had contacted 811 five days before breaking ground. Utility operators were notified. A locator was dispatched and marked the lines. Every box was checked. Every step of the process was followed. That evening, a drill struck a gas main that was never marked. Gas leaked for more
than three hours. At 7:42 p.m., the home of Jacob Cunningham and his two children exploded. Five-year-old Alistair Lamb was killed. His father and ten-year-old sister were airlifted to Kansas City with severe burns.

The 811 process worked exactly as designed.

That's the problem.

What We're Not Going to Do

We are not going to stand at another CGA (Common Ground Alliance, the industry's primary damage prevention organization) conference and present a slide deck about incremental improvement goals.

We are not going to take a passive role when we see that the DIRT Root causes haven't changed in years, while we congratulate ourselves for showing up.

And we are not going to keep absorbing blame for a system that was structurally designed to produce the outcomes we are all sitting here documenting, year after year, in the DIRT Report (the industry's primary national analysis of underground infrastructure damage).

The locating industry has been quiet for too long. That ends now.

What We Own

Before we say what needs to be said about this system, we need to say what we own.

We have accepted contracts priced at levels that make quality training, adequate staffing, and reasonable workloads economically unworkable, and then delivered predictably inconsistent results. We have let ticket volume become the measure of our work when it measures almost nothing that matters. We have not invested enough in training our people, and we have not demanded loudly enough that facility owners invest in the records our technicians depend on to do their jobs.

And we own our staffing failures. Recruiting and retaining qualified locating technicians is one of the hardest problems in this industry, and we have not solved it. We can ask for every systemic change described in this article; capped ticket scope, better maps, advance notice for large projects — and none of it closes the gap if we cannot put trained people in the field. That is on us. We own it and are committed to change it.

For too long, locating contractors have accepted contracts that were economically impossible to execute at the quality level the job demands.

One locating technician described arriving at a jobsite where multiple utilities crossed a narrow corridor. Doing it right would have taken more time; confirming signals, reviewing maps, verifying locations. But with more than twenty stops still on the board that day, the technician marked what the signals and records provided and moved on.

That is not a character failure. It is the direct output of a system that made that outcome inevitable. And we helped build that system by accepting the contracts that funded it.

We own that. We are naming it out loud. We are committing to change it.

Now let's talk about what the rest of this industry needs to own.

The System Is Not Broken. It Is Working Exactly As Built.

Here is the truth that nobody in this industry has said plainly enough:

Any system that allows an excavator to submit unlimited work orders at zero cost, with no consequence for scope inflation, no accountability for tickets that never generate a single shovel of dirt, and a legal requirement that someone respond to all of it within two business days — that system is not broken. It is functioning precisely as designed. And
it was designed to fail.

This is not a locator problem. This is not an excavator problem. This is a structural failure that has been building for fifty years while every stakeholder group found reasons to look the other way.

The 811 system was designed roughly fifty years ago for a world processing less than one million locate requests per year. It was made free to excavators to encourage adoption. That made sense in 1974.

Last year, the system processed more than 43.5 million incoming requests, generating nearly 265 million transmissions to facility operators. The architecture has not changed. In one documented dataset, a single excavator submitted a ticket covering 464 million square feet, over 8,000 football fields, with a legal response window of two business days. That is not a ticket. That is an ambush. And the locating company received it the same way they receive every ticket: when it appeared in their queue.

No reasonable person looks at that and concludes the system is working. Even as DIRT Report data quality has improved, damage outcomes have not meaningfully improved. We are doing a better job of reporting, but the problem itself is not getting better. Yet the industry's response has been to talk about training programs.

Training is not going to fix 8,000 football fields due in 48 hours.

The Excavators Are Not the Enemy. But We Need to Talk.

To the excavation community: we are not pointing at you.

Most excavators are doing exactly what the system incentivizes them to do. When submitting tickets is free, unlimited, and consequence-free, rational actors submit more of them. When the system has trained you to

over-notify because you can't trust locates will come back on time, you over-notify. The system reinforces the very behaviors that are driving the problem. We understand that cycle. We live in it too.

But we need to have an honest conversation about what happens downstream when 200 tickets land simultaneously in a locating queue, all due in two business days, for a highway corridor from St. Louis to Kansas City. The locating crews find out when the tickets arrive. There is no warning. There is no additional time. There is no additional pay. There is just the queue, and the clock, and a workforce that was sized for normal volume.

We want to work with you to fix this. We are done fighting with you about who caused it.

What we are no longer willing to do is let facility owners watch the two of us fight while they collect the benefits of a system they control, fund, and have declined to reform.

Facility Owners: We Are Talking to You Now

You fund the 811 system. You write the contracts. You own the maps. You set the ticket rules in most of the states where those rules exist. You have more control over the structural conditions that produce damages than any other stakeholder in this industry.

And for decades, the industry has been content to watch excavators and locating contractors point at each other while the DIRT numbers stayed flat.

On maps: The 2024 DIRT Report documents that marking accuracy failures and facility identification issues remain among the most persistent root causes of damages in this industry. Locating professionals have described, repeatedly and consistently, marks placed exactly where records indicated, only for excavation to reveal infrastructure in a completely different location. Not a few feet off. On the wrong side of the road. Crossing at the wrong block. Or not shown in the records at all.

In one case gathered during our research, a telecommunications line was discovered nearly six feet from its recorded location after excavation began; the locator had marked precisely where the signal and maps indicated. In another, a facility was found on the opposite side of the street from where the utility's own records placed it. In both cases, the locator followed correct procedure. The records were wrong.

One facility owner acknowledged this directly during our research: "We're the first to admit our records aren't always correct." Many of your maps were built before GPS-grade accuracy existed. They have not been

updated. And every day a technician goes into the field with inaccurate records, you are setting them up to fail, and setting up whoever is digging to get hurt.

There is no accreditation program, no training standard, and no workforce retention initiative that can offset sending a technician into the field with a map that puts the gas main on the wrong side of the road.

On renewal tickets: In California, 40% of ticket volume consists of renewal submissions, tickets claiming that existing marks are still valid, extending them for 28 more days without requiring new field verification of the markings. California allows unlimited renewals.

Your financial incentive to maintain this system is clear. If California capped renewals at two per ticket, you would need to fund meaningfully more locating work. We understand the economics. We are asking you to explain the public safety calculus to regulators and policymakers, because we are going to be explaining it too.

On contracts: When a major Midwest utility budgets $15 million for locating services, a rounding error on their balance sheet, and then sends that contract through a procurement process designed to squeeze another 15% out of it, the outcome is predetermined. The incoming contractor is underfunded. Technicians are overloaded.

Turnover spikes. The workforce is rebuilt from scratch with people who are six weeks into a job that takes six months to learn. And somewhere in that gap, a line gets missed.

That is not a passive outcome. It is the direct result of a procurement decision.

Surge Without Warning: How Large-Scale Projects Expose the System's Limits

Federal broadband and infrastructure programs are funding significant rural fiber and broadband construction across the United States, work the country needs. It is also generating a category of locate demand that the current 811 system has no mechanism to anticipate or absorb.

Rural construction projects are often executed in compressed windows by multiple subcontractors simultaneously, in areas that have historically required minimal locating staffing. The economics of a rural territory that justified one locating technician for years do not accommodate the sudden arrival of six or seven subcontractors placing tens of thousands of feet of infrastructure per week.

In one documented example, a locating company serving a rural territory found out a major fiber build had started when tickets began going late and complaints arrived. By the time the full scope was understood, the

company faced a binary choice: mobilize technicians from other markets at significant expense, or fall further behind and accept the consequences.

Hiring new technicians was not an option. Training a locating technician to full competence takes four to six months minimum. The project window was seven months. There was no time to hire, train, and deploy before the project was over.

This is not a failure of the locating company's planning. It is a failure of a system with no mechanism for advance notice, no financial structure to fund surge response, and no regulatory framework that creates accountability for the operators and construction companies who could share schedule information early but typically don't.

The cost-sharing implications here are distinct from the large-ticket abuse problem. When a single project requires going from one technician to six or eight for a defined window, and then back to one when the project ends, there must be a mechanism to fund that mobilization. The current system has none. That is a problem every stakeholder at this table has an obligation to help solve.

What Needs to Change…And Who Needs to Change It

The failures above are not mysteries. They have corresponding fixes. What they have lacked is the collective will to implement them.

Mapping must become a priority, not an afterthought. This is a foundational issue. There is no national standard for what a facility record must contain or how accurate it must be. There should be. The technology exists. A locator can only mark what they can accurately identify, and when the records are wrong, no amount of skill or training completely closes the gap. Utilities must be held to a standard of record accuracy that reflects the life-safety consequences of getting it wrong.

Ticket scope must be capped. A submission covering 8,000 football fields is not a ticket. It is a project. It should be treated as one: planned in advance, staffed accordingly, and compensated appropriately. Several states, including Arizona, have begun implementing project ticket models that require advance planning and extended response timelines for large-scale work. These approaches should be the rule, not the exception.

Free and unlimited must end. Some form of accountability for scope inflation, submission limits, project-tier requirements, cost-sharing for demonstrably outsized tickets, is necessary. The current system has no rational demand management whatsoever. That is a policy choice. It can be changed.

Renewal abuse must stop. Where excavation is ongoing, re-marking must be required, not optional. No more than one or two renewals per ticket should be permitted, with mandatory field verification before any extension is granted. A gas main that has not been physically verified in over a year should not be considered "marked" in a system designed to protect excavation safety.

Advance notice must be required for large-scale projects. Federal funding data is publicly available. Construction schedules are not competitive secrets. Operators who know where major work is planned should be required to provide meaningful advance notice to locating crews in affected territories. Meaningful advance notice, ideally six months or more, is not an unreasonable ask for projects of significant scale. It is the difference between a staffing plan and a crisis.

Cost-sharing mechanisms must be developed for surge work. When federal or large-scale projects require rapid mobilization of locating resources in rural or low-density territories, the current per-ticket model cannot absorb the cost. Project-tier funding structures that account for mobilization, surge staffing, and demobilization are not optional, they are what makes the work executable at a quality level that protects public safety.

Locating professionals must have seats at the table. In most states, locators cannot vote on 811 board decisions. We are the parties most directly affected by ticket volume, scope rules, and response time requirements. The system cannot be reformed by the stakeholders who benefit from its current design without the participation of the people who bear its consequences.

The industry must measure the right things. Ticket counts alone do not reflect the true workload or complexity of locating work. Performance metrics that incorporate work scope, footage, and complexity would provide a far more accurate picture of both workload and outcomes, and would make it much harder to obscure systemic failure behind aggregate numbers.

The Stakes

Ron Peterson, NULCA's Executive Director, learned about the Lexington explosion at the start of a board meeting. He did not learn about it from a regulatory report or an industry newsletter.

He learned about it because a child died.

This is not an isolated event. This is what a system designed to fail produces, on schedule, year after year, while the rest of the industry discusses improvement goals and root cause percentages.

The locating technician in the field is the last person in a long chain of structural failures. They carry the paint can. They take the call when the investigation starts. They absorb the blame when a system that was always going to produce this outcome finally does.

We are not going to accept that burden silently anymore.

This system is designed to fail. We have the data. We have the case studies.

We are here to fix it. We are asking every stakeholder to decide whether they are here for the same reason, or whether they are here to protect the system that built this problem in the first place.

The time for talk is over. The action starts now.

NULCA, the National Utility Locating Contractors Association, represents utility locating professionals across the United States. To engage with NULCA on damage prevention reform, visit nulca.org.

About CGA and the DIRT Report

The Common Ground Alliance (CGA) is a member-driven association of nearly 4,000 damage prevention professionals across the underground utility industry. Established in 2000, CGA works to prevent damage to underground infrastructure through shared responsibility across stakeholders.

The CGA DIRT Report is the most comprehensive national analysis of damages to underground infrastructure in North America. The latest report is available at: https://dirt.commongroundalliance.com/

← PREVIOUS
2025 International Utility Locate Rodeo

NEXT →
Late locates. The clock starts when the…

411 West Lexington Street
Richmond, MO 64085

About NULCA
Membership
Accreditation
News
Contact Us