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THE SCOOP

FALL 2026



IN THIS ISSUE:

In this issue, explore the latest tools, technologies, and strategies for preventing underground utility damage. Learn about Missouri 811's new dig-up status codes, enhanced mapping capabilities, and advancements in locating non-metallic utilities. Discover how damage data can improve safety, seven ways municipalities can strengthen damage prevention, and opportunities to help improve the 811 process. Plus, see how Missouri 811's Damage Prevention Team provides free training, resources, and support to excavators, utilities, and locators across the state.

7 WAYS MUNICIPALITIES CAN STRENGTHEN DAMAGE PREVENTION

Municipalities have a lot of responsibility when it comes to protecting underground infrastructure. From water and sewer lines to electric and communication facilities, damage to these utilities can lead to costly repairs, service interruptions, project delays, and serious safety risks.

Having a strong damage prevention program can help reduce those risks. But where should a municipality start, and what can it do to improve an existing program?

That's where Missouri 811's Damage Prevention Team can help.



EVERY MUNICIPALITY HAS DIFFERENT NEEDS

A small community with limited staff may need help developing procedures or training employees who handle several responsibilities. A larger city may be dealing with multiple contractors, major utility installations, or communication challenges between departments.

As Missouri 811's Hub of Damage Prevention, the Damage Prevention Team works with municipalities to identify their biggest challenges and develop practical solutions.

That might mean reviewing damage trends, improving communication between departments, establishing clearer expectations for contractors, or bringing stakeholders together to address recurring problems.

The goal isn't to create more paperwork. It's to help municipalities prevent damage before it happens.

GETTING EVERYONE ON THE SAME PAGE

One of the most effective ways to improve damage prevention is to bring the right people together.

Missouri 811 can help facilitate meetings involving municipal leaders, public works departments, engineers, inspectors, utility owners, locators, and contractors.

These meetings provide an opportunity to discuss what's working, identify problems, and agree on solutions. They're not intended to point fingers or reprimand contractors. They're about improving communication and making sure everyone understands their responsibilities.

For larger projects, particularly directional boring and other trenchless excavation, municipalities may consider requiring preconstruction meetings.

These meetings can help everyone:
- Identify underground utilities and potential conflicts.

- Review excavation and potholing requirements.
- Establish inspection procedures and points of contact.
- Discuss project-specific risks and expectations.
- Understand the consequences of failing to follow requirements.

For large or long-term projects, regular progress meetings can also help identify problems before they lead to utility damage.

7 WAYS TO STRENGTHEN MUNICIPAL DAMAGE PREVENTION

Municipalities have several options for improving oversight of excavation projects.

Depending on local authority and applicable law, they may consider adopting policies, permit requirements, or ordinances that establish clear expectations for work within their jurisdiction.

For example, municipalities may establish requirements that reinforce Missouri Revised Statutes Chapter 319 and Common Ground Alliance Best Practices.

They may also consider additional requirements for higher-risk projects, including large utility installations, fiber and telecommunications work, directional boring, and excavation affecting the public right-of-way.

Here are seven (7) specific approaches municipalities can consider:

1. REQUIRE POTHOLE VERIFICATION

Before directional boring or other trenchless excavation begins, municipalities may require contractors to expose underground utilities for inspection.

A designated municipal contact can coordinate inspections, verify that facilities have been properly exposed, and identify deficiencies that need to be corrected before work proceeds.
The process should be clearly defined so inspections improve safety without creating unnecessary delays.

2. REQUIRE ADDITIONAL TRAINING AFTER VIOLATIONS

Fines and stop-work orders aren't the only ways to address violations.

Municipalities may require contractors to complete additional damage prevention training following certain violations. This gives contractors an opportunity to correct unsafe practices and helps reduce repeat problems.

3. ESTABLISH PROJECT-WIDE ACCOUNTABILITY

Instead of holding only the individual excavator responsible for violations, municipalities may consider project-level accountability where legally appropriate.

For example, enforcement actions could affect the broader project or responsible parties, encouraging franchise utilities and prime contractors to carefully select and oversee their subcontractors.

4. REQUIRE APPROVAL FOR CERTAIN TRENCHLESS EXCAVATION METHODS

Some municipalities may require written approval before contractors use higher-risk or unguided trenchless equipment, such as pneumatic gophers, moles, or missiles.

Because the position of this equipment cannot be continuously monitored through conventional electromagnetic locating methods, additional planning, utility exposure, or documentation may be appropriate.

5. ESTABLISH DESIGNATED TRENCHLESS EXCAVATION HOURS

Municipalities may consider limiting certain trenchless excavation activities to hours when inspectors and utility repair personnel are available.

The objective isn't simply to restrict work. It's to make sure the right people and resources are available if problems arise.

6. REQUIRE WHITE-LINING FOR LARGE PROJECTS

Clearly identifying the proposed excavation area can help improve the accuracy of locate requests.

For larger projects, municipalities may establish additional white-lining expectations to help utility owners, locators, and excavators understand exactly where work is planned.

7. ADJUST OVERSIGHT BASED ON PROJECT RISK

Not every excavation project needs the same level of oversight.

A routine excavation might require standard permitting and notification, while a large directional boring project could require a preconstruction meeting, additional documentation, pothole verification, recurring meetings, and inspections.

Municipalities can establish requirements based on project size, excavation method, location, utility conflicts, and previous project history.

MANAGING EXCAVATION ACTIVITY AND AVAILABLE RESOURCES

Another challenge municipalities face is making sure local locators, inspectors, and utility personnel can keep up with excavation activity.

When construction activity exceeds available resources, municipalities may consider adjusting project schedules, improving coordination, reassigning personnel, or adding temporary resources.

Where legally appropriate, temporary permitting or scheduling adjustments may also be considered.

Any limitations should be reasonable, transparent, and consistent with applicable state requirements.

USING TODAY'S PROJECTS TO PREVENT TOMORROW'S DAMAGE

Excavation projects also provide an opportunity to improve underground utility records.

For example, when a contractor exposes a utility that isn't where existing maps indicate, that information can be used to correct facility records.

Municipalities may also consider requiring updated as-built drawings, GPS coordinates, verified facility locations, or documentation of previously unmapped utilities.

Better records can help future excavators, engineers, designers, and utility owners avoid unnecessary risks.

Damage data can be just as valuable.

By reviewing locate ticket activity, damage histories, inspection findings, and recurring problem areas, municipalities can identify patterns that deserve attention.

For example, repeated damages involving a particular excavation method may point to a need for additional training or stronger inspection procedures.

Rather than treating each damage as an isolated incident, municipalities can use that information to address the underlying problem.

MISSOURI 811: YOUR HUB OF DAMAGE PREVENTION

Municipalities don't have to tackle damage prevention challenges alone.

Missouri 811's Damage Prevention Team serves as the Hub of Damage Prevention, connecting municipalities with the people, training, and resources they need to protect underground infrastructure.

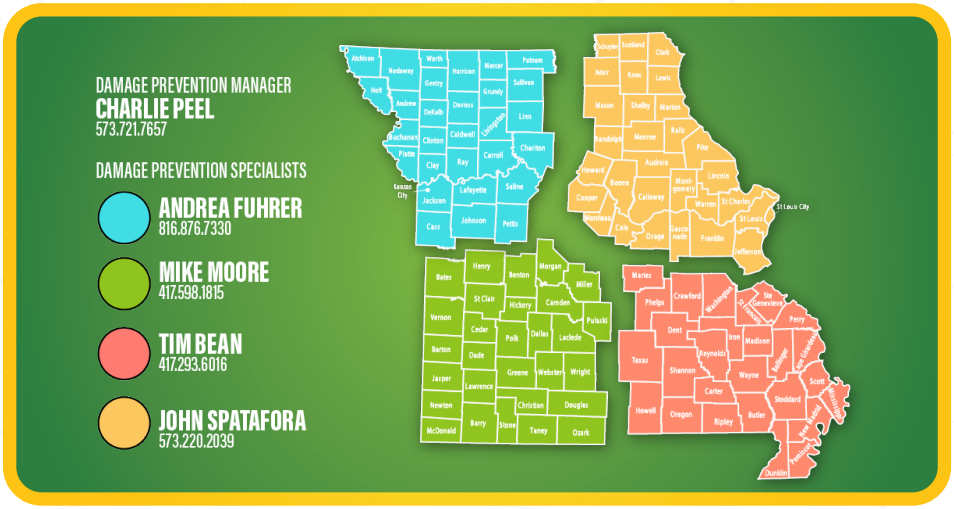
Whether your community needs help improving excavation procedures, addressing recurring damages, training contractors, or bringing stakeholders together, the team is ready to help.

Best of all, assistance and training from Missouri 811's Damage Prevention Team are available at no cost.

Ready to Strengthen Your Municipality's Damage Prevention Program?

Contact your regional Missouri 811 Damage Prevention Specialist to discuss your community's challenges and learn how the team can help.

Safety is in Your Hands. Every Dig. Every Time.



NEW DIG-UP STATUS CODES IMPROVE COMMUNICATION WITH EXCAVATORS



Missouri 811 has expanded status code communication to dig-up (damage) tickets, giving excavators more information following a damage notification.

Since 2016, utilities have been able to assign status codes on routine and renewal tickets to indicate when excavation may safely begin. Common examples include "Marked" when underground facilities have been located, or "Clear / No Conflict" when no facilities are present.

Missouri 811 has now extended that same concept to dig-up tickets, providing excavators with clearer and more timely feedback after a damage notification is placed.

NEW DIG-UP STATUS CODES

Utilities can now apply one of the following status codes on dig-up tickets:

1. UTILITY ACKNOWLEDGES ACTIVE FACILITY DAMAGED
Indicates the utility has visited the site and confirmed damage to an active facility.

2. UTILITY ACKNOWLEDGES ABANDONED FACILITY DAMAGED
Indicates the utility has confirmed damage to a facility it previously owned that has since been abandoned and poses no active concern.

3. UTILITY OBSERVES NO DAMAGE TO FACILITIES
Indicates the utility has investigated and found no damage to its facilities. This does not rule out damage to another utility's infrastructure.

4. UTILITY ACKNOWLEDGES RECEIPT OF DAMAGE NOTIFICATION
Indicates the utility has received the dig-up notification but has not yet been able to visit the site. This confirms awareness and provides interim communication to the excavator.

WHY THIS MATTERS

Missouri 811 frequently hears from excavators that a dig-up ticket is submitted, but little to no follow-up communication occurs afterward. These status codes are designed to help close that communication gap.

For example, an excavator may submit a dig-up ticket after striking an underground facility but may not know which utility owns the damaged line. As utilities respond to the ticket, the new status codes can help the excavator determine whether a utility has confirmed damage, found no damage to its facilities, or simply acknowledged the notification and has not yet visited the site.
This gives excavators better information about the status of a damage notification and helps identify when additional follow-up may be needed.

ENHANCING DAMAGE PREVENTION: HOW MISSOURI 811'S NEW MAPPING TOOLS STRENGTHEN SAFETY FOR UTILITIES

Accurate utility mapping is one of the most critical components of underground damage prevention. As rural communities grow, utility systems expand, and infrastructure becomes more complex, the need for accurate, up-to-date mapping information continues to increase.

To support utilities in meeting these challenges, Missouri 811 now offers Enhanced Locator Mapping.

This tool is designed to streamline the locating process, reduce the chance of mistakes in the field, and equip utilities and locators with better, clearer information. It represents an important step forward in making Missouri's underground infrastructure safer and easier to protect.

ENHANCED LOCATOR MAPPING: A SMARTER WAY TO LOCATE

Enhanced Locator Mapping (formerly known as Web Mapping Service or Web Feature Service integration) is designed to solve one of the most common challenges locators face today: the need to compare two separate maps while reviewing a ticket.

Traditionally, when a locator receives a Missouri 811 ticket, it includes a map showing the excavator's stated scope of work. The locator must then pull up a separate internal utility map, often from a GIS department, and mentally determine how the two relate. If the locator misreads either map, or if the maps do not align visually, the risk of unnecessary marks, missed lines, or incorrect locations increases.

Enhanced Locator Mapping eliminates that risk.

HOW IT WORKS

Missouri 811 collaborates with the utility's GIS department to securely access a live, continuously updated web mapping service. Utilities may provide this through:

- An unencrypted web link
- A secure username and password protected link

Once connected, Missouri 811 overlays the utility's live GIS data directly onto the excavator's scope-of-work map within the locator's ticket view. Instead of toggling between two documents, the locator sees a unified, precise map showing:

- The exact dig area
- The utility's own infrastructure layers
- How each line relates to the excavation site



As Nick Rasa, Chief Operating Officer at Missouri 811, explains, "Utilities are always updating and improving their system. Using a live web service ensures that the locator is always seeing the most current map possible. Static map files go out of date almost immediately."

WHY IT MATTERS

Accurate, real-time GIS data helps utilities:

- Reduce misreads and mistakes when reviewing scope boundaries
- Prevent unnecessary locates
- Speed up field decisions
- Improve locating consistency across all stakeholders

The system is designed to work especially well for in-house locators but may also be used with contracted locators.

ONLY THE UTILITY SEES ITS OWN DATA

Utilities can rest assured that their information remains private. Enhanced Locator Mapping is not visible to excavators or other utilities on the ticket.

Each utility sees only its own map, and only within its internal locating workflow. The goal is to help the locator make better, faster decisions without exposing system maps to outside parties.



LOW BARRIER TO ADOPTION

Many utilities, large and small, have already made the switch. Most modern GIS systems can generate web mapping services at little or no additional cost, making this an accessible enhancement for utility systems of all sizes. Several small utilities are already using the service successfully.

GETTING STARTED

Enhanced Locator Mapping represents a significant step forward in how Missouri utilities can manage their locating operations. By improving accuracy and reducing uncertainty in the field, this tool helps create a safer and more predictable environment for everyone involved in excavation work.

For utilities ready to modernize their locating process and reduce preventable damages, Missouri 811 is here to help. To learn more or get started with Enhanced Locator Mapping, contact:

Nick Rasa, Chief Operating Officer, Missouri 811
nrasa@missouri-811.org

Missouri 811 looks forward to partnering with utilities across the state to build a safer underground infrastructure for the future.



LOCATING THE UNLOCATABLE: ADVANCEMENTS IN NON-METALLIC UTILITY LOCATING

Locating underground utilities has become increasingly accurate thanks to advances in locating equipment, mapping technologies, and the widespread use of tracer wire. But one challenge has remained: locating older non-metallic underground utilities that were installed without a detectable location device.

While acoustic locating technology has been around for years, recent advancements are improving its accuracy and making it a more practical option for locating certain non-metallic underground facilities. These innovations have the potential to help utility owners, contract locators, and excavators better identify buried infrastructure and reduce the risk of utility damage.



Missouri 811 is not endorsing any specific manufacturer or product. The purpose of this article is to highlight advancements in an emerging area of locating technology. Subsurface Solutions is referenced below simply as one example of this type of technology and as a resource for readers who would like to learn more.

THE CHALLENGE WITH OLDER PLASTIC UTILITIES

Traditional electromagnetic locating equipment works by detecting an electrical signal traveling through a metallic pipe, cable, or tracer wire.

Because plastic does not conduct electricity, locating older plastic utilities without tracer wire can be much more difficult. This includes some water lines, sewer lines, natural gas distribution lines, telecommunications conduit, irrigation systems, and other non-metallic underground facilities.

While experienced locators have several methods available to help identify these facilities, there has long been a need for additional technologies that can improve

locate accuracy in certain situations.

TRACER WIRE IS IMPROVING THE FUTURE

Fortunately, today's installations are becoming much easier to locate.

Many new plastic underground facilities are installed with tracer wire, allowing locators to accurately trace the utility using conventional locating equipment.

Missouri has also taken steps to improve the locatability of newly installed underground facilities. State law now requires new underground facility installations to include a **detectable location device**, such as tracer wire, helping improve the accuracy of future locates.

You can learn more about this requirement in our blog:

SB 133: Big Changes for Safe Digging



However, millions of feet of non-metallic utilities were installed before these practices became common and remain in service today without tracer wire.

ADVANCEMENTS IN ACOUSTIC LOCATING

Acoustic locating technology offers a different approach.

Rather than detecting an electrical signal, these systems introduce sound waves into a non-metallic pipe. A sensitive receiver is then used above ground to detect those sound waves and help trace the path of the buried utility.

Recent improvements in sensors, electronics, and signal processing are making acoustic locating systems more precise and easier to use in the field. While they are not intended to replace conventional locating methods, they provide another tool that may help locate certain non-metallic underground facilities when traditional methods are limited.

One example of this technology is the **SonicFinder 1000** from **Subsurface Solutions**. Readers interested in learning more about acoustic locating can visit the company's website or watch one of its demonstration videos to better understand how this technology works.

WHY IT MATTERS

Every improvement in locating technology supports the damage prevention industry by giving stakeholders more information and better tools.



For utility owners, advancements in acoustic locating may provide another option for locating certain non-metallic facilities.

For contract locators, these technologies can complement conventional locating methods when working with older infrastructure that lacks tracer wire.

For excavators, more accurate locate information can help reduce project delays, minimize utility damages, and improve jobsite safety.

LOOKING AHEAD

Damage prevention continues to evolve through better technology, improved installation practices, and stronger communication among utility owners, locators, and excavators.

No single locating method is effective in every situation. Good utility records, proper installation practices, tracer wire, and safe excavation practices remain the foundation of damage prevention. As acoustic locating technology continues to advance, it has become another valuable tool for locating certain non-metallic underground utilities. When used alongside conventional locating methods, it can help improve locate accuracy, reduce underground utility damages, and make excavation safer for everyone.

HAVE AN IDEA? MAKE YOUR VOICE HEARD

Do you have an idea that could improve the Missouri 811 process? Is there an issue you continue to see in the field? Missouri 811 wants to hear from you.

Missouri 811's quarterly Operations Committee Meetings give excavators, utility members, and locators an opportunity to sit down together, talk about operational issues, and discuss ways to improve the 811 process.

These meetings aren't meant to be a complaint session. They're about identifying real issues, sharing ideas, and working together to find solutions.

And your input can make a difference. Ideas discussed during the meetings are reviewed to determine what can be improved operationally. Some changes may be relatively simple to implement, while others may be sent to Missouri 811's Technical Committee or Board of Directors for additional review.



Join Us December 17

The next Operations Committee Meeting will be held **Thursday, December 17, from 9:00 a.m. to noon** at the Missouri 811 office in Jefferson City. Can't make it in person? Join virtually through Microsoft Teams. There is no cost to participate.

You don't need to be a committee member or submit an idea ahead of time. Come participate in the discussion, share what you're seeing in the field, or simply listen and learn.

CLICK HERE TO RSVP

If you have an idea for making Missouri 811 work better, come be part of the conversation and make your voice heard.

TURNING DAMAGE DATA INTO DAMAGE PREVENTION

Every reported damage tells a story. When thousands of those reports are analyzed together, they can tell us much more.

Missouri 811 has access to years of damage information that can help identify trends, recurring issues and opportunities to make the One Call process safer and more effective for everyone. By bringing that information together, Missouri 811's Damage Prevention Team can look beyond an individual incident and begin asking bigger questions about when, where, how, and why damages occur.

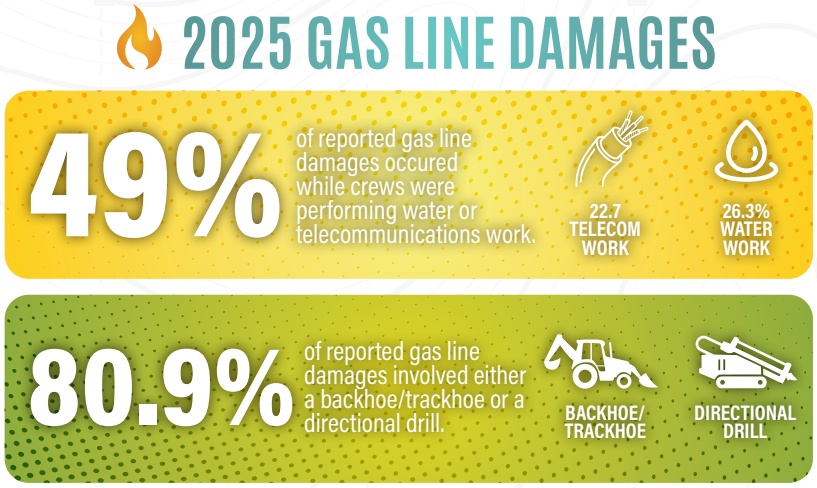
The data can be analyzed in a number of ways, including by county, city, ticket type, utility damaged, work being performed, equipment used, facility depth, excavator, and the timing of the damage in relation to the ticket start and expiration date.

Put those pieces together, and the data becomes much more than a record of past damages. It becomes another tool for preventing the next one.

WHAT CAN THE DATA TELL US?

One example of the insights available can be found by looking specifically at damages to gas facilities.

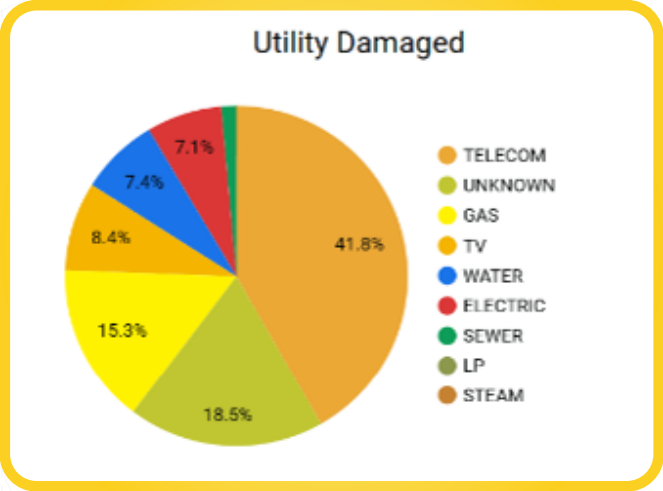
In 2025, the data shows that the two leading types of work being performed when gas lines were damaged were water work at 26.3% and telecommunications work at 22.7%. Combined, that means nearly half (49%) of reported gas line damages occurred while crews were performing water or telecommunications work.



The data can then be taken another step further. Of those damages, 80.9% involved either a backhoe/ trackhoe or a directional drill.

That information gives Missouri 811 a much clearer picture of where opportunities for damage prevention may exist. Rather than simply knowing that a gas line was damaged, the data can help identify what type of work was taking place and what equipment was being used.

Those insights can help Missouri 811 focus education, outreach and safety resources where they may have the greatest impact.



Note: "Unknown" means the damaged utility was not listed on the Dig Up ticket.

LOOKING BEYOND A SINGLE DAMAGE

Other trends become apparent when the information is viewed collectively.

As expected, reported damages increase during the spring and summer months as excavation activity increases. Based on the 2021–2026 data, reported damages climb from 4,454 in January to a peak of 9,265 in August before declining later in the year.

While the seasonal increase itself isn't surprising, the real value comes from being able to dig deeper into the data. For example, Missouri 811 can examine what equipment was being used, what type of work was taking place, what utility was damaged, where the damage occurred and what type of ticket was associated with the incident.

The data shows that backhoes and trackhoes account for 41.9% of reported damages by equipment category, while directional drilling represents another 25.4%.

Looking at these factors together can provide much greater insight than any single data point on its own. A trend involving a particular type of damage can lead to additional questions: Is it concentrated in a particular area? Is a certain type of work involved? Is the same equipment commonly being used? Is there a ticket-related pattern?

Each additional layer of information helps provide a clearer picture of what is happening and where opportunities for prevention may exist.

FROM DATA TO PREVENTION



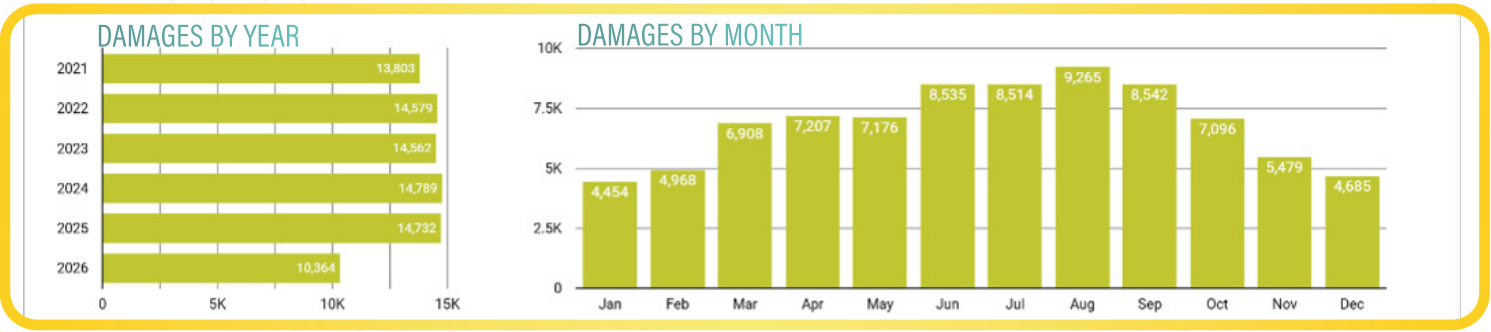
TAKING THE DATA A STEP FURTHER

Statewide trends can help identify where opportunities may exist, but Missouri 811 has the tools to take the analysis much further. The Damage Prevention Team can drill down from a statewide trend to the individual companies associated with damages and look for recurring patterns.

Are similar damages occurring during the same type of work? Is the same equipment frequently involved? Are damages occurring outside the active ticket window? Is there a pattern involving a particular type of underground facility?

When recurring patterns are identified, Missouri 811's Damage Prevention Team will reach out to the companies involved. The goal is to better understand what is happening and provide appropriate resources, education and safety training to help improve practices and prevent future damages.

This is where the data becomes especially valuable. The process doesn't have to end when a damage is reported. Missouri 811 can use multiple data points to identify a trend, investigate the circumstances, provide education and ultimately work toward preventing similar damages in the future.



GOOD DATA MAKES A DIFFERENCE

The value of this analysis starts with accurate and reliable information. Missouri 811 encourages all stakeholders to provide complete and accurate damage data whenever a report is submitted.

The better the information, the better Missouri 811 can identify trends, understand recurring issues and develop resources and education that benefit the entire damage prevention community.

Accurate data helps us all learn from what has happened and work together to improve what happens next.

PROTECTING YOUR DATA

Missouri 811 understands the importance of protecting stakeholder information and has safeguards in place to keep damage data secure. The information is used responsibly to identify trends, support education and help improve damage prevention efforts across Missouri.

The goal is simple: use the data to make the One Call process safer and more effective for everyone.

WORKING TOGETHER TOWARD ZERO

Every damage report provides an opportunity to learn. By providing accurate information, identifying trends and working together, Missouri 811, excavators, utility owners/operators and locators can improve the One Call process and make excavation safer across Missouri.

That effort supports Missouri 811's vision:

SHOW ME ZERO ZERO INJURIES AND ZERO INTERRUPTIONS.

Every accurate report, every lesson learned, and every damage prevented moves Missouri one step closer to zero.

Safety is in Your Hands. Every Dig. Every Time.

NEW MEMBERS

- Oram Precision AG
- HFL Networks
- New Madrid Solar, LLC

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EDUCATIONAL PRESENTATIONS

The Damage Prevention team are well-versed in the Missouri 319 statutes and available to provide training, FREE of charge. Schedule today by calling **573-635-1818** or directly contacting:

DAMAGE PREVENTION MANAGER
CHARLIE PEEL
573.721.7657

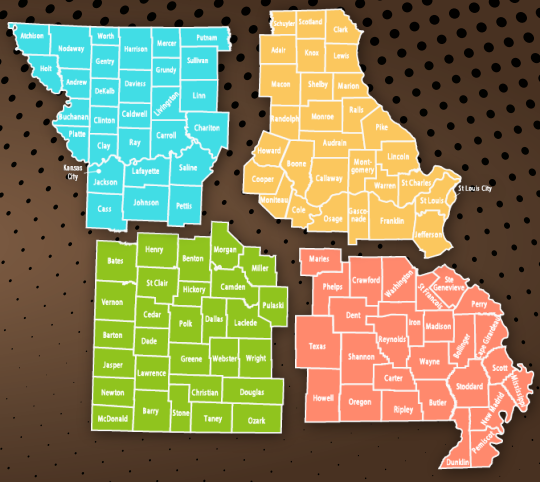
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THE

SCOOP

FALL 2026

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