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I've tended to complain about slowness to adopt new technologies and expand use of existing technologies that could improve damage prevention. It seems like whenever a new technology or process could save \$5 million, but would cost \$1 million to implement, it never stood a chance of becoming widely used.

I get tired of complaining, so it was good to see something recently that I could cheer about. I'm referring to the report on the Virginia pilot project to incorporate GPS technology "to enhance One-Call damage prevention." The report was distributed by the Common Ground Alliance (CGA) and the project was funded by the Pipeline Research Council International (PRCI). The Virginia Utility Protection Center (VUPS) conducted the project.

I think they are on to something that stands a chance, mainly because it piggybacks on cell phone technology that is already in wide use.

Essentially, the primary goal of the project—in its initial stage—was to reduce over-notifications to facility owners by improving the quality and accuracy of dig site descriptions provided by excavators to VUPS. Historically, the notification process has had a lot of CYA in it. Excavators understandably tend to inflate their dig site areas, mostly so they don't have to spend a lot of time describing the site location to a call center attendant. It's easier to say, "Just mark the whole street."

Digging at N 45.46.154 Lat Ave and W 091.46.051 Lon Road

The most effective way to get people to stop taking the easy route is to provide an even easier alternative, and the Virginia project seems to have accomplished that. Besides combining GPS and cellular technologies, it introduced some new remote-ticket-entry software. This combination reduces locate requests to a matter of pushing buttons to transfer dig site coordinates from a cell phone to a One-Call ticket.

Over the years, call centers have striven to eliminate complications and chances for errors from the ticket process. Dig site descriptions have always been a problem. "I will be digging at 3467 Oak Street. Oh, you say there is no Oak Street? Just Oak Avenue and Oak Road. Heck, it's a street called Oak and that's all I know."

Or, "You want the nearest cross street? Well let's see, I think the site is about halfway between two streets. Which one do you want?"

Or, "You need the township, range, section and quarter section? Are you kidding? No, I don't have a property tax statement that would have those numbers. I'm just the contractor, not the property owner."

Using GPS coordinates certainly eliminates these types of complications. There are just two street names—"Latitude" and "Longitude"—and they cover every point on the globe. Even if you needed to dig somewhere in Outer Mongolia and gave a lat/lon address, they'd know where you were. It's the ultimate in standardization.

Don't be fixated on the accuracy capabilities of cell phone GPS readings. If you get 50-foot accuracy, that's a lot better than you get for most site descriptions today. Besides, getting surveyor level accuracy takes too long

and requires GPS receivers that are much more sophisticated than those in cell phones. And, excavators are not going to buy receivers that would only be used to take coordinates at dig sites.

Although every contractor may not currently have a GPS-enabled cell phone, that day is probably not far off. Most cell phones already incorporate GPS technology, but it is usually enabled only when 911 is dialed. However, if you have the right kind of cell phone, you can access GPS data today. Sprint/Nextel phones with the "walkie talkie" feature prized by contractors are among those with accessible GPS.

The project results showed that the square footage of notification areas was reduced by nearly 90 percent by using lat/lon addresses. The dollar figure for the corresponding statewide reduction in locate costs was given as \$6.3 million annually.

Excavators using the pilot technology saved between \$2.9 million and \$8.7 million. This savings comes from reductions in wait time incurred when an excavator identifies clear evidence of an operator's unmarked facility. In Virginia, the excavator must notify that operator, who then has three hours to mark the facility. Project results showed a 56 percent reduction in the number of requests for these three-hour locates. (Part One of a two-part series covering the Virginia project appears inside this issue.)

I can also see where excavators would rather spend more time digging and less time on the phone trying to describe dig site locations.

A copy of the report can be downloaded at www.commongroundalliance.com. **UF**