Construction activity continues to increase across the country, underscoring the need for steadfast dedication to prevent damages to underground facilities. Cross bores, or intersections of existing underground utilities by a second utility during installation, are enduring problems carrying potentially disastrous consequences. When analyzing the underlying causes of cross bores, as well as alternative ways to address and reduce them, a lack of consistency and clarity is evident among the key stakeholders.

Close working relationships between contractors and their customers in the gas distribution industry can go a long way to reduce cross bores. However, further action is needed by gas utilities, local and state governmental agencies, as well as the federal government to ultimately turn the reduction of cross bores into total prevention. The DCA believes the following practices and actions will collectively help raise awareness and prevent cross bore scenarios and facility damages across the country.

**Contractor**

Contractors utilize a wide range of methods and procedures to recognize and prevent cross bores. These measures may be required by law, job permits and regulations or by mandate of internal/external company policy. While cross bores of sewer laterals are of primary concern, this can also occur on sewer mains. Due to the difficulty of locating non-metallic sewer systems, some contractors do not currently employ these practices – but may find them useful in the future. Others have been utilizing many of these methods for years depending on project-specific criteria. Accordingly, we believe all contractors should consider the following actions to prevent underground facility damages and cross bore situations:

- Call 811 prior to excavation and adhere to all related “call before you dig” requirements.
- Consider Common Ground Alliance (CGA) best practices and related resources when practical.
- To the extent possible, ensure that underground facilities owners who are not members of the one-call system are notified of planned excavation.
- Utilize all job site drawings to establish locations of underground facilities, including information related to depth, position, shape and type of facility.
- Investigate thoroughly, including: on site interviews, evaluation of plat maps, excavation permits, one-call tickets, photographs of related equipment, excavations, facility marks.
- “Pothole” to locate underground facilities when appropriate or required.
- Use subsurface utility verification when practical (Camera inspection, Ground Penetrating Radar, Acoustic, etc...)
- Maintain supporting documentation (“as-builts,” plat sheets, GIS information, etc...)
- Stop excavation when unsure of existing underground facilities and consult with facility operator(s).
- Communicate and report underground facility hits according to state law.
Gas Utility

There are several procedures and types of equipment used to identify buried utility systems that could be applicable to locating sewer laterals. Because these systems are generally composed of non-metallic material, they tend to be difficult to locate using traditional methods. Technologies such as surface ground penetrating radar (GPR), acoustic/seismic measures, traceable wire, electronic markers or closed-circuit television (CCTV) camera inspections are often necessary to complete the job. While the responsibility to locate and mark underground facilities typically lies with the facility operator, contractors who perform work for the utility companies may be in a better position to locate sewer laterals. Discussions during the bidding process among all parties involved with cross bore mitigation, as well as cost recovery language in gas pipeline agreements, provides the opportunity for contractors to ensure all responsibilities are met in an equitable fashion.

State and Local Government

Unmarked sewer laterals remain the single largest cause of cross bores. While state law generally requires underground facility operators to locate and mark their infrastructure prior to excavation, the responsibility for marking and locating sewer laterals continues to be a contentious issue. Municipalities, who generally own and operate the water and sewer systems, are often exempt from one-call membership requirements. This exemption effectively relieves them of their responsibility to locate their sewer systems. To make matters worse, because these laterals generally exist on private property, municipalities often place the responsibility of locating and marking sewer laterals in the hands of unknowing property owners. It is unrealistic to expect landowners to be aware of, understand, or fulfill the responsibilities associated with locating sewer laterals on their property. Municipalities, who derive revenue from the sewer systems, are best equipped to locate and mark them. This is consistent with best practices developed by the Common Ground Alliance (CGA), who maintains that the “service line is marked in response to a locate request to a governmental entity that provides a product or service to an end-use customer via the service line.”

Federal Government

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 included language restricting federal dollars from being allocated to state damage prevention programs. These same programs also exempt municipalities and their contractors from one-call notification requirements. While DCA supports all efforts to reduce exemptions from one-call and damage prevention statutes, the association believes the 2011 pipeline act stopped short of ensuring ‘shared responsibility’ in damage prevention by not including one-call membership in eligibility requirements for federal pipeline grant assistance. As described above, municipal exemptions to one-call membership compromise damage prevention. All municipal facilities need to be included in the one-call process. Therefore, we believe federal damage prevention grant eligibility requirements should apply the same restriction to state programs exempting municipalities from having to belong to their respective 811 one-call center.