BREAKING DOWN BARRIERS

Famous mid-20th century American writer Thomas Wolfe wrote a book called, *You Can Never Go Home.* It tells a story of an author who writes about his hometown. The town's people didn't take it kindly. The main character got into trouble with the angry townsfolk of his hometown. I can relate. I grew up in the blue-collar city of Somerville, Massachusetts. Somerville's claim to fame at one time was that it was the most densely populated city in the United States. So it consisted of packed in houses and city streets. You could say that I was raised on the streets of Somerville. Shortly after I married and had a child, our family moved to the suburbs. Later in my carrier, I ran electric operations for the power company that covered most of eastern Massachusetts, including my home town of Somerville.

I recall one particular evening, about 15 years ago, I was invited as "special guest" to appear before a public session of the Somerville City Council. Residents, some may have graduated with me from Somerville High School, packed the chamber.

It wasn't pretty. I felt like that author in Wolfe's novel.

There were a number of issues. Some were about a rash of power failures that had occurred during the past couple of weeks. Actually the reliability of Somerville was actually pretty good, compared to other cities in the service territory and much better than the national average. Somerville had a mix of underground and overhead circuits and not many trees.

The more vexing issue was the condition of the city streets.

The City Council members had been getting a lot of heat from the residents about potholes and the generally poor condition of the some of the streets. So, the city's repaving program had gained considerable attention. I had to explain why on a number of occasions, just after the city completed a nice newly paved street, that I personally, dug a trench across their road. And then had the audacity to use "cold patch" to cover over the trench. Cold patch is this tar like substance that utilities and cities use to cover temporarily potholes and trenches. When a car drives over it, you can hear the stuff make this awful noise in the car wheel well. The city council members wanted to know why the power company ruined their beautifully paved street not days after the tax payers had just paid to pave it. They were speaking to me of course, but mostly to the assembled voters.

Well my answer was that I didn't know why. Of course I said that in my head voice. I explained out loud that we had planned work on those streets and the work orders were around for some time. We had received a street opening permit and the work had been scheduled for some time. It was an unfortunate situation that the city had paved the street in advance of us digging up the street. I actually refrained from reminding them that if they had bothered to cross check their street opening permits with their paving schedule, they might have figured it out for themselves. I didn't want to end up like the protagonist in Wolfe's novel. One particularly irate council member reminded me that this situation was not the first time that this had happened. I agreed to have the power company repave the full section of the street (not using cold patch) we had ruined.

What does this story have to do with GIS? A lot really. The power company had a GIS. The city had some kind of mapping system. The city created pavement schedules on their mapping system. The power company had their work orders detailed in the GIS. How then could this lack of communication happen? Simple. Like many companies, they didn't have a foolproof way of collaborating with each other. Even

within the city, one department didn't communicate with each other. GIS's didn't talk to each other. No one could create a simple query in either GIS that answered the question: show me where there is a scheduled repaving project in the same area that the power company (the phone company, the gas company, the transit agency) is planning to dig up the streets.

We talk a lot of how GIS is the underlying technology that supports the Smart Grid. We write papers about how the GIS provides vulnerability analysis to help utilities prioritize capital spending. There are tons of high value apps available for gas leaks, integrity management and theft detection. They are all wonderful applications of geospatial technology. Why is it that the simplest of situations, having one department or agency know where another agency is doing something that impacts them is so hard to implement?

Barriers. Technological and process barriers.

It's hard not anymore, with the ArcGIS platform. The ArcGIS platform has the technology to remove those barriers to communication, collaboration and sharing of information. The ability to share map-based information seamlessly across teams, departments, the company and other companies is the power of the ArcGIS location platform.

What exactly do we mean when we say platform? To quote Phil Simon, the author of the highly acclaimed book, *The Age of the Platform,* a platform allows people to reach and connect with one another and obtain information. Facebook, the Apple i platform, Amazon and others are common platforms we all use. A platform is a destination for people to go to, to communicate with others, to share insights and information and to collaborate to get things done. The difference between the other platforms is that ArcGIS takes advantage of maps – a natural way for people to communicate. What better way for utilities to work than to have a platform, based on maps (that they have always used anyway) to connect departments, field workers, regulators, the media and their customers.

The ArcGIS platform provides a place for utilities, municipalities, customers, regulators and other agencies to communicate, share and collaborate using maps to answer those very simple questions: what is going on right here and are there things we ought to know about that someone else is doing right now? It is if everyone has the same GIS on any device, accessible anywhere at any time. Just like Facebook.

Other situation I recall from that painful homecoming at the Somerville City Council meeting was when a woman who with a very pained expression raised her hand to be heard. She timidly told a story of how I had ruined her daughter's wedding. What? It turns out that we had crews working on overtime on Saturday afternoon outside the church digging up the street. I don't recall why. Of course, during the wedding march, the sound of jackhammers drowned out the organ during the wedding march. Oops.

Today, the ArcGIS platform can publish all the utility work going on throughout the city for all to see.

So sometimes going home can get quite painful. I look back on those times and know now with the ArcGIS platform that today if I was in that same situation, maybe I might have been welcomed home as a hero, or at least not a villain.