Gas and Pipeline Industry Q&A Series

How does aging infrastructure impact related industries?

In August 2003 there was a major failure of the electric transmission system. The infrastructure is not only old, but it hasn't kept up with the growth of the load. So the electric infrastructure has kind of a dual problem: one of age and one of capacity. If we were to see a wide adoption of any alternative sort of electric transportation system—electric trains, electric cars—where the transportation system is going to rely more heavily on electric we are going to see that the adequacy of the electric transmission system is going to be difficult. What we will probably see is not only upgrades of the electric transmission systems but also an increase in the capacity. The problem with that of course is that electric transmission is difficult to site.

Electric transmission companies have, over the years, tried to keep up with the some of the maintenance practices of electric transmission, and like the pipeline, age isn't the only determination of risk of failure. We also must consider how well the system has been maintained, where the transmission lines run, what the transmission line is exposed to. For example, if it's exposed to a lot of salt contamination from the coast, or high winds, it's apt to be more vulnerable than it would be if it was in a less-exposed area. Electric transmission infrastructure is critical to the future of our country and the world.

Thank you very much Bill, and for future inquests, Bill’s e-mail address is bmeehan@esri.com.