In the Summer of 2008, Lamar University was selected as one of several institutions by the Incorporated Research Institutes for Seismology (IRIS) to determine where in Texas to place earthquake seismic stations associated with the EarthScope Transportable Array program. These stations are scheduled to be installed in 2009 to 2010, and will record seismic waves of earthquakes from around the world for 2 years or more after installation. The job of the Lamar team was to determine exactly where 20 seismic stations were to be sited in east and southeast Texas based on a preferred grid with a 70 km spacing between each station. Requirements for each site included placement of the site within 7 km of the preferred location if possible, out to 15 km away from the preferred location if necessary. Other requirements included landowner permission, cell phone reception, a low seismic noise environment away from wells, pipelines, highways, secondary roads, airports and flight paths, etc., out of a floodplain, away from trees, and with enough open exposure for GPS reception and solar panel charging. Needless to say, meeting all these requirements was a challenge in east and southeast Texas. This presentation illustrates how all (or at least most of) the challenges were eventually met using GIS and GPS tools for preliminary to final site evaluation, combined with a lot of salesmanship and (literally) sweat equity in the form of numerous hours in the field.