



## It's Your Move

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Just a few years ago most landmen were happy to be working on a project to assemble a 3,000- to 5,000-acre leasehold block for a company's conventional oil and gas prospect in Texas or Oklahoma. Then we all learned of the huge success in the Barnett Shale located near Fort Worth, Texas.

Immediately, a radical shift occurred — often referred to as a “paradigm shift” — in what many companies were focused on exploring for. As a result, the Oil & Gas Express train pulled out of the station headed for the next Barnett Shale or unconventional reservoir to exploit, and there is no turning back.

It was loaded with horizontal drilling technology, state-of-the-art fracturing techniques, lots of capital, a nation's resolve to be more energy independent and a voracious appetite for LAND like never before. As one prominent geologist and CEO of a NYSE firm told me: “I guess I spent the last 40 years looking for the wrong reservoirs.” The demand for landmen to acquire, develop and manage this massive amount of land has found our profession lacking the sheer numbers of experienced land professionals to handle this task.

To make this point, I had our GIS group at Cinco run some rough analytics on the acreage under lease in the lower 48 before the Barnett Shale (Jan. 1, 2000) and the prospective leasehold acreage in the currently active shale plays outlined on the map. The data is from the Energy Information Association and the USGS. This article is not intended to be a scientific paper but rather to provide insight into the magnitude of change that has occurred in the amount of acreage to be managed by landmen in the future as compared to the past.<sup>1</sup> The EIA estimates that there were 23 million acres under lease on Jan. 1, 2000. We assume that this acreage is associated with conventional oil and gas production. Next, we added up all the acreage within the current shale plays in the lower 48 for a whopping 311.5 million acres — an increase of 1,350 percent.

So what as landmen can we do about this drastic change in the amount of land to be acquired, developed and managed? In nature, when change occurs, you have three decisions to consider: You can hibernate, adapt or migrate. Keep in mind there is no right decision; they are all paths to survival.

If you decide to do nothing new and to continue business as usual, you probably have chosen to hibernate. You can adapt, as Richard Hines wrote in an article a couple of months ago, by embracing new technologies available to landmen, such as Web-based land software, GIS tools, electronic document management and the use of hand-held mobile devices. But I think the option with the most upside for landmen is to migrate or move.

The shift has occurred not only in technology but where the resource can be found. If you look at the map, you will see the greatest potential for shale gas reserves has shifted away from the Gulf Coast and Mid Continent to the eastern United States — more specifically Appalachia. If you add up all the acreage in the major shale plays in the Gulf Coast and Mid Continent areas — the Eagleford, Barnett, Haynesville, Woodford and Fayetteville — you have 35,792,975 acres. Compare that to the Marcellus, which comprises 101,667,356 acres, making it approximately 300 percent greater than all five combined.

If you decide to make the move like we have, you may have to stop talking about how hard East Texas title is that starts around the 1880s because in Appalachia you may have to go back to 1780. The descriptions are based on metes and bounds, sometimes described only by adjoiners or based on markers that have not been found for 100 years. There are no title plants where you can walk in and call up a tract's ownership history. What about researching production history in Pennsylvania when the state does not require companies to report well results for five years. There is no Railroad or Corporation Commission where you can go to get this information. These are just a few of the obstacles working in some of the new frontiers.

<sup>1</sup> The amount of acreage used in this article is overstated because (1) the EIA counts all the acreage in the sections as leased if any acreage in the section is leased, and (2) we used the entire area in each of the shale polygons on the map as if all the acreage could be potentially leased.