

Shale of the Century

Small Towns Dazed by Eagle Ford Influx

By Harold D. Hunt

Technology has a way of humbling those brave enough to forecast our energy future.

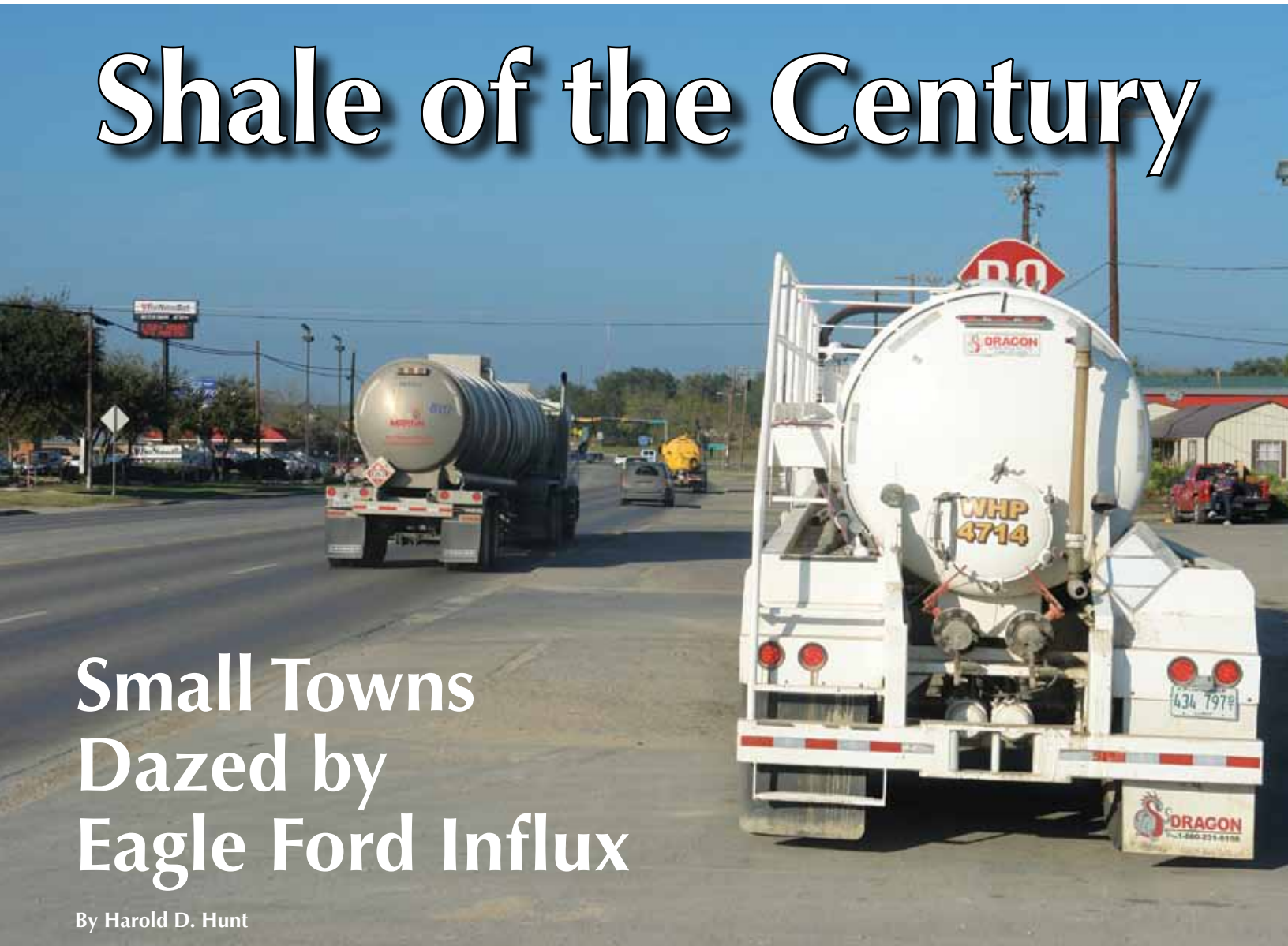
In an April 1977 speech, President Jimmy Carter declared, “The oil and natural gas we rely on for 75 percent of our energy are running out.” Federal Reserve Chairman Alan Greenspan also took a stab at predicting the future of U.S. energy in 2003, testifying before Congress that “(natural gas) futures prices suggest that we are not apt to return to earlier periods of relative abundance and low prices anytime soon.”

Both predictions proved to be wrong. Technical advances in horizontal drilling and hydraulic fracturing (more commonly called fracking; Figure 1) have led to dramatic increases in new U.S. oil and gas discoveries.

Subsurface shale deposits spread across the country are the primary sources for increased production. Natural gas from shale rock increased from a mere 2 percent of continental U.S. production in 2000 to 34 percent by September 2011. That share will balloon to 60 percent by 2035 according to a recent IHS Global Insight study.

One of the most successful shale formations being tapped today is the Eagle Ford Shale. The 50-mile-wide by 400-mile-long formation touches 24 Texas counties between the Mexico border and northeast Texas (Figure 2).

The economic impact generated by the Eagle Ford is impressive. A 2011 UT San Antonio study estimated that \$2.4 billion in lease payments were made to mineral owners in 2010 alone. By 2020, the Eagle Ford is expected to generate \$21.6 billion in total economic output and support more than 67,000 full-time jobs according to the study.



While this economic growth is welcome in light of the national economic downturn, such rapid growth can be painful to smaller communities. The activity is clearly having an impact on a few specific real estate segments in and around the region while other segments remain relatively unaffected.

Rural Towns Overwhelmed

About a dozen counties in the Eagle Ford are home to the bulk of the shale drilling activity. Several are sparsely populated, claiming no more than a few thousand residents. McMullen County, the smallest of the group, reported a 2010 population of just 707.

Drilling activity in the Eagle Ford ramped up quickly. The first well was drilled in central La Salle County in 2008. Today, more than 250 rigs are operating in the region.

Rural towns were largely caught off guard by the tremendous influx of oilfield workers. Officials in communities such as Cotulla and Carrizo Springs assert their populations have easily doubled as a result.

"We have one red light in a county the size of Rhode Island," says Jay Watson, broker and owner of Tierra Roja Real Estate in Cotulla. "But we have five new hotels that are all full or will be full when completed."

Hotel room rates in and around the hottest part of the Eagle Ford are generally running \$140 or more per night with no vacancies. Hotel construction is by far the most active real estate sector, with three to five new hotels completed or under construction in most towns.

Housing Shortage Severe

Watson also states that owners would rather rent a single-family home in Cotulla than sell it.

"I only have two homes listed for sale," he says. "But to rent a three-bedroom, two-bath house would cost you about \$1,500 per month right now. There is little incentive to sell a home when rents are so high."

Surprisingly, new home construction is almost nonexistent in many of these booming small towns. Lack of developable land is a big factor. Large ranches surround many of the towns, and owners are in no hurry to sell their land for new residential subdivisions.

Another factor is financing. Even if land were available, credit is still extremely tight for proposed new development in most rural areas today.

Getting a buyer qualified is a major hurdle. Credit standards have become much tougher for potential homebuyers since the mortgage industry collapse.

Finally, homebuilders would have to be brought in from distant cities such as San Antonio or Laredo. Assuming builders and their subcontractors could be found, the problem would then become finding a place for workers to stay during construction.

The lack of available housing has not been limited to single-family homes. Most of the smaller towns in the hottest part of the Eagle Ford have not constructed any new market-rate apartments in decades. As a result, RV parks

and other types of so-called "man-camps" have popped up to handle the overload.

Early on, many of the RV parks were located inside the city limits of towns in the Eagle Ford. However, the congestion and strain on city services has resulted in some towns refusing to permit any new parks. Most new RV facilities are outside the city limits.

Cities such as Carrizo Springs and Three Rivers are witnessing the arrival of hybrid temporary housing facilities such as extended-stay hotels, corporate apartments and full-service, high-amenity manufactured housing "lodges."

The list of amenities in these facilities can be extensive, including housekeeping, 24-hour food service, workout rooms and high-speed, wireless Internet service. Kitchens, washer-dryer facilities and satellite TV reception are common in extended-stay properties.

Gun-Shy Developers

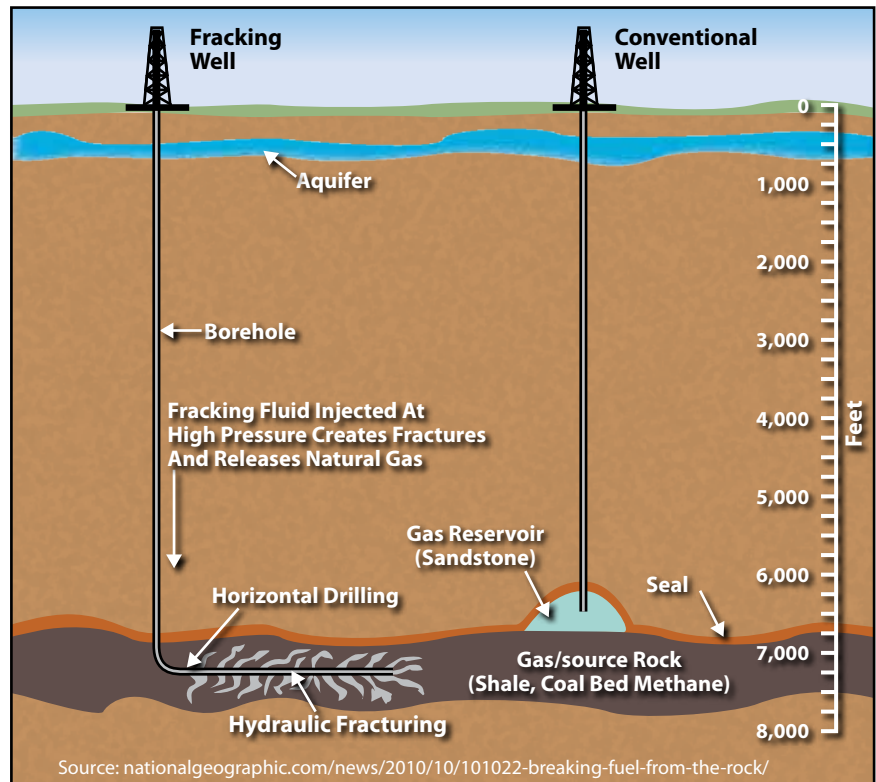
Brokers and local government officials in several small towns report that new apartment and retail developments are being discussed. However, they also believe that some developers remain hesitant based on their memories of the late-1970s/early-1980s oil boom.

During that time, oilfield activity built up rapidly but fell just as fast. Businesses were as unprepared for the fall in economic activity as they were for the rise.

New retail construction in the rural towns within the Eagle Ford has generally been limited to a few select big-box retailers.

"We have had an unprecedented run-up in our sales tax revenue in the last year," says Ray Kroll, executive director of Karnes County economic and community development. "And we've basically done it with a Walmart, an H-E-B and a Tractor Supply."

Figure 1. Horizontal and Conventional Drilling



Kroll believes the City of Kenedy can support much more retail.

"We have people making good money going to San Antonio to spend it when they could be spending it here," he says.

Kenedy is one of the few rural communities in the Eagle Ford with any major new development in the pipeline.

"Kenedy Station, a 166-acre, \$78 million mixed-use project, will break ground this year," says Kroll. The development will include single-family and multifamily residential housing, retail development, office-warehouse space and hotels.

"We've needed new residential housing for 40 years," says Kroll. "Luckily, this was planned before the Eagle Ford came online and the timing couldn't be better."

Drilling, Exploration Employment Concerns

An important question being pondered by many real estate professionals is how long the drilling-exploration employment will remain in the Eagle Ford before it's replaced by a smaller permanent production workforce.

The IHS Global Insight study argues that the distribution of drilling-exploration jobs to production jobs in shale gas areas will be the same in 2035 as it was in 2010. According to the study, "The high levels of capital investment seen in the infrastructure phase will continue as natural gas production increases in step with natural gas demand."

If true, this would mean sustained oil and gas employment levels that are higher than in the past. IHS has calculated an employment multiplier of 3.0 for the shale gas industry. In other words, every direct job created in oil and gas will result in the creation of three additional jobs.



DESPITE MUSHROOMING demand for housing, new home construction is almost nonexistent in small Eagle Ford Shale communities. Instead, manufactured housing "man camps" and extended-stay hotels are popping up, including this one in Three Rivers.

IHS maintains that the relatively high multiplier of 3.0 is because it is a capital-intensive industry that spends significant money for services. Also, oil and gas suppliers are largely domestic firms, keeping a high percentage of spending in the United States to support American jobs.

The Dallas Federal Reserve has calculated a more refined multiplier of 4.7 from the creation of every oil and gas "exploration" job. The multipliers are smaller for oil and gas refining jobs (2.1) and oil and gas manufacturing jobs (3.5).

The average oil and gas wage is more than double the overall average wage in most Eagle Ford counties according to the Texas Workforce Commission. As a result, many local residents have been eager to obtain oilfield-related employment.

Although this has been a boon for local economies, some cities have suffered from a reduction in their available labor pool.

"We've had restaurants here in Kenedy that have had to close at 3:00 in the afternoon because they don't have enough staff," says Kroll.

A common scenario is playing out in some smaller towns. Because of insufficient local oil and gas talent, workers are brought in from other areas. When they arrive, housing is limited. They bid up available housing, displacing lower-income local residents. These residents leave the area, shrinking the labor pool for non-oil-and-gas employment.

"We have had local residents whose rents have been virtually the same for years," says Lydia Saenz, a real estate agent for Prime Properties Winter Garden in Carrizo Springs. "Now we see rents that have doubled or tripled in some cases since the oilfield activity arrived. The low-income renters can no longer afford the higher rents, so they are often displaced."

Migration to Larger Cities

Migration patterns will be important if oil and gas activity in the Eagle Ford continues another ten to 20 years as expected. While some small-town residents may be pushed out, others may be pulled out, enticed by better job opportunities or a perceived higher quality of life in larger regional cities.

Quality of life is an important variable affecting migration patterns. Individuals will decide for themselves what an acceptable quality of life is. If the definition includes multiple entertainment options, easy access to medical facilities and a variety of retail choices, cities such as San Antonio, Victoria or Corpus Christi may be chosen over rural towns.

Transportation infrastructure is an important variable that favors larger cities. The hottest section of the Eagle Ford is divided into thirds by I-35 and I-37. As a result, commutes to San Antonio or Corpus Christi from the southern counties are relatively efficient but long.

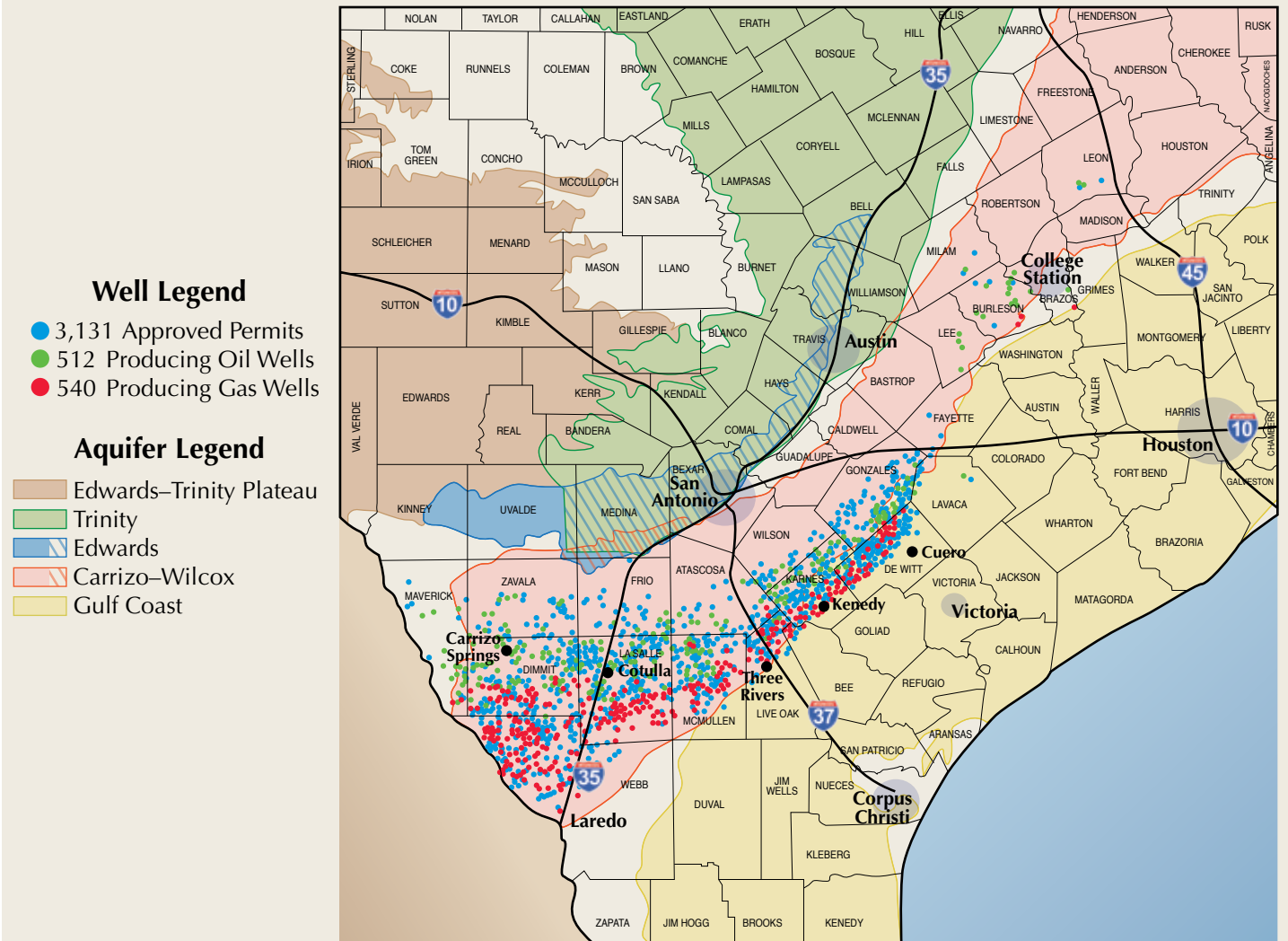
Future land availability will be an obvious determinant for smaller cities in the Eagle Ford's southern region. If they remain relatively landlocked, significant new development will prove difficult.

Alternatively, other cities farther north outside big ranch country such as Cuero are already developing new residential subdivisions to meet demand.

What Could Go Wrong?

A drop in the price of crude oil would be an obvious detriment to oil and gas activity in the region. However, recent declines in the price of dry natural gas have been offset by the sustained price of accompanying natural gas liquids (NGLs) such as

**Figure 2. Wells Permitted and Completed in Eagle Ford Shale
In Relation to Major Texas Aquifers
As of December 2, 2011**



Sources: Railroad Commission of Texas and Texas Water Development Board

butane, propane and ethane, a favorite of the petrochemical industry.

Many of the Eagle Ford discoveries are high in NGLs, which are priced relative to the price of crude oil, not natural gas. Some of the region's gas wells are so productive in NGLs that producers could afford to give away the natural gas for free and still break even from NGL profits.

Federal regulation of well fracking is another unknown that could have a negative effect. The Environmental Protection Agency is currently conducting a national study of the effects of hydraulic fracturing on drinking water resources. It is scheduled to release initial study results this year and an additional report in 2014.

Technological Advance, Not Boom

Although hype can often be bigger than reality, all signs point to the Eagle Ford providing significant economic benefits for Texas for many years to come.

"Don't call the Eagle Ford a boom. Call it a technological leap that allows us to produce oil and gas we've known was there but just couldn't produce," says Ben Tinnin, commercial development consultant for Project Consulting Services Inc., a Houston-based oilfield consulting firm.

"That's not near as sexy as calling it a boom. But it's a lot more profitable in the long run." 📌

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THE TAKEAWAY

Increased oil and gas activity in the Eagle Ford Shale has dramatically boosted the economies of many small South Texas towns. However, the influx of oilfield workers has caused severe housing shortages and is straining local infrastructures.



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The oil and gas reviews are in!



Colossal!*

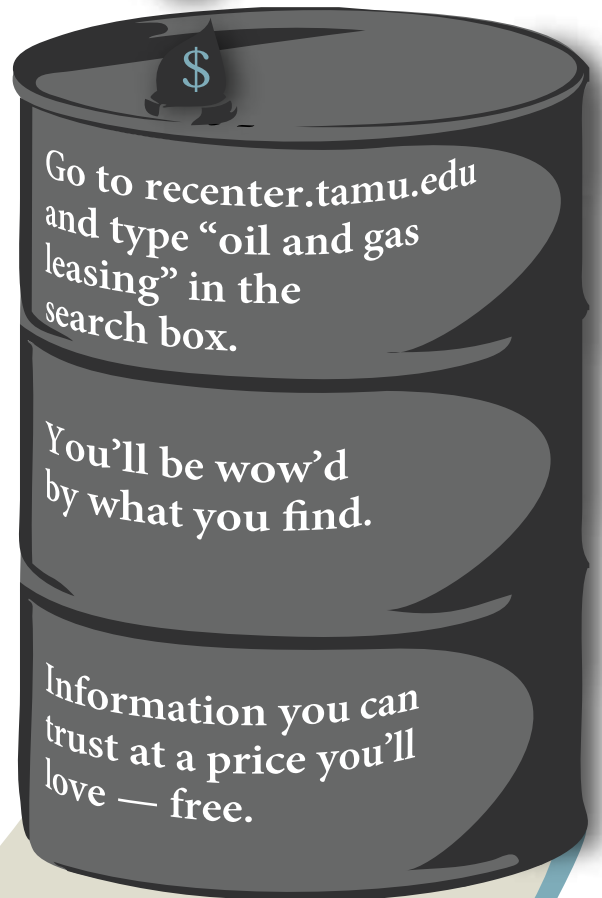
*Amount of oil and natural gas drilling in Texas.

Immense!**

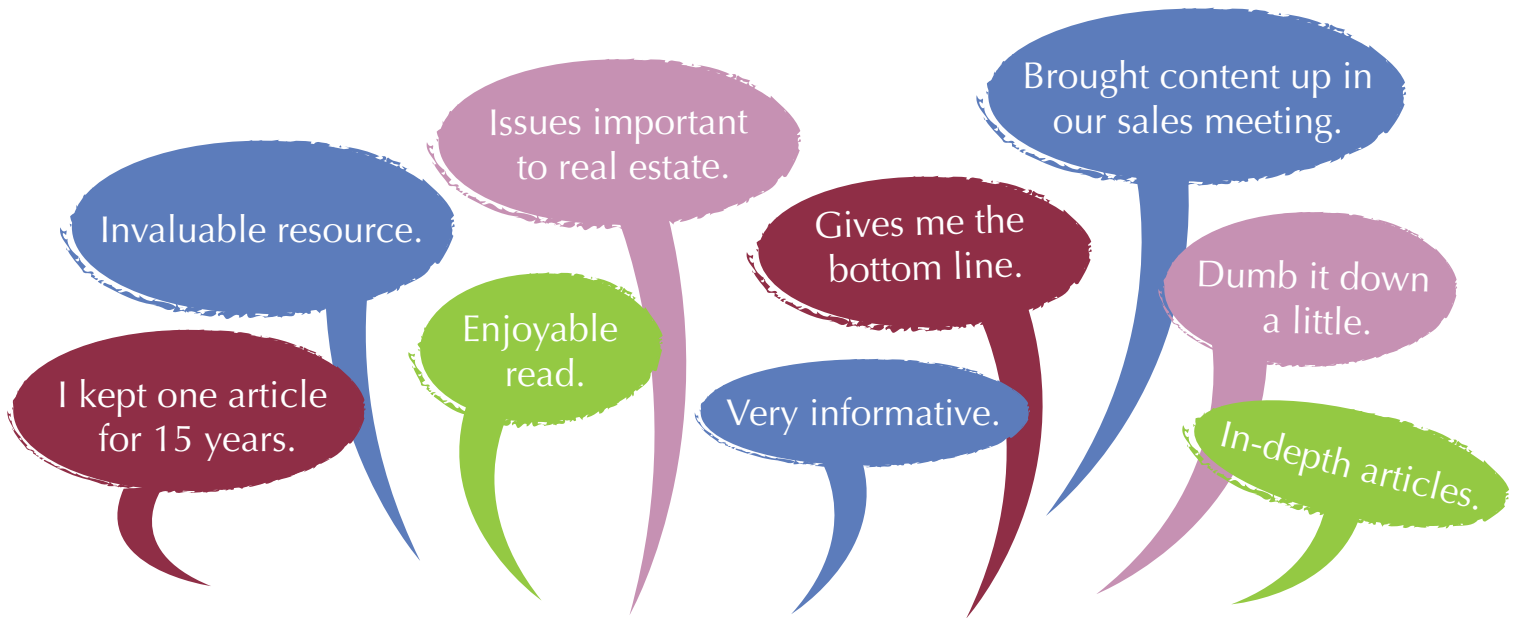
**Amount of knowledge landowners need to negotiate an oil and gas lease.

Monumental!***

***Amount of oil and gas leasing information available on the Center's website.



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