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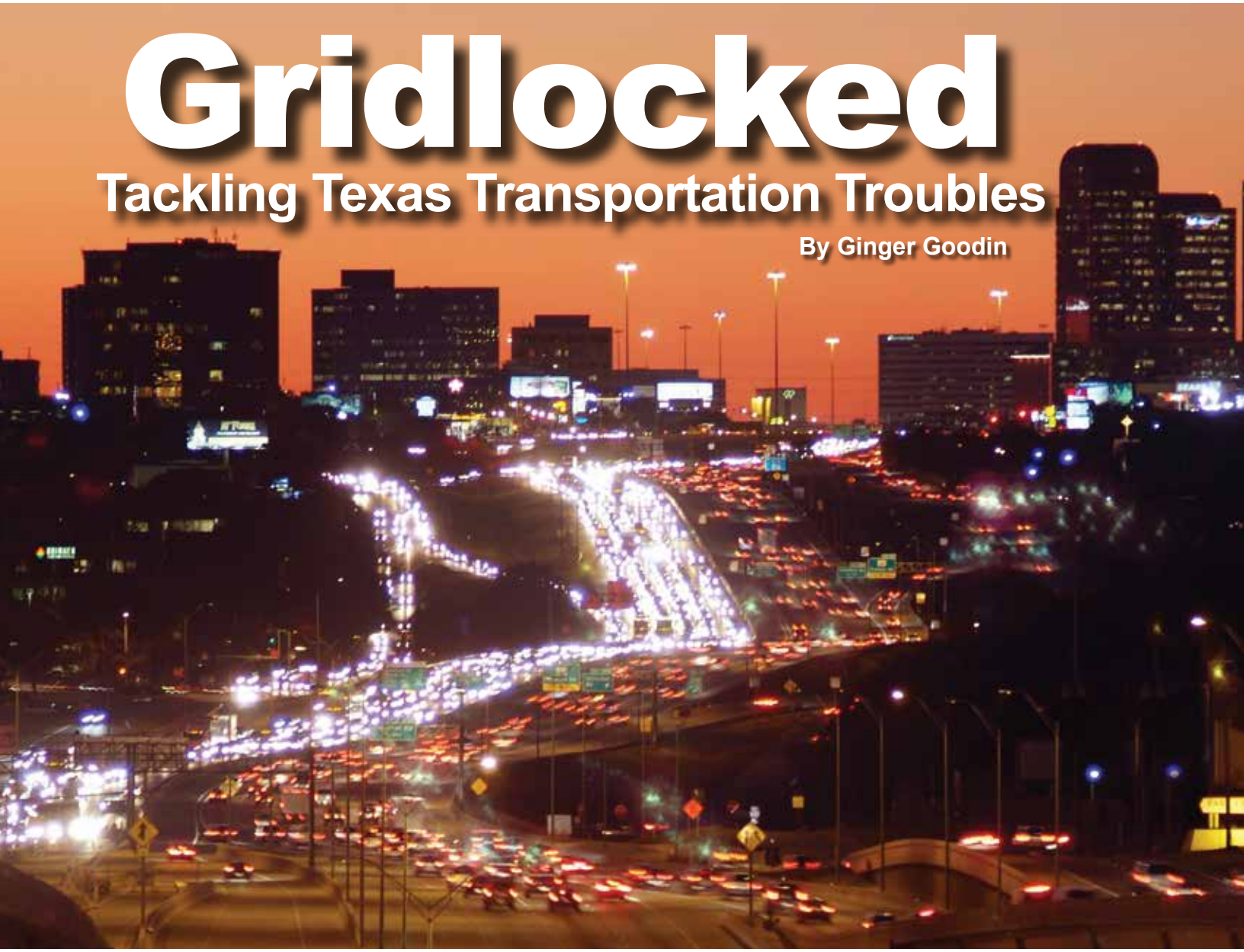
Gridlocked

Tackling Texas Transportation Troubles

By Ginger Goodin



Real estate professionals are familiar with the supply-and-demand patterns that drive so much of what they do. If housing demand exceeds supply, prices increase; if supply exceeds demand, prices decline. But a new kind of supply-and-demand puzzle is emerging in Texas — one that directly impacts the real estate industry — the demand for, and supply of, highway space.

Over the past 40 years, the state's population has more than doubled. The number of registered vehicles has almost tripled. And the number of miles those cars and trucks travel has more than tripled. By comparison, the supply of roadway space we have to accommodate that travel demand has hardly grown at all. In this example, higher demand once again increases the price, albeit less directly than in the housing example. The higher price Texans pay comes not in the form of higher rent or mortgage payments but in the form of lost time and wasted fuel. These costs rise each year for those living in the largest urban areas, who lose about $1,000 annually, largely because of the roughly 40 hours they spend stuck in traffic.

Traffic congestion takes a huge toll on the state every year:

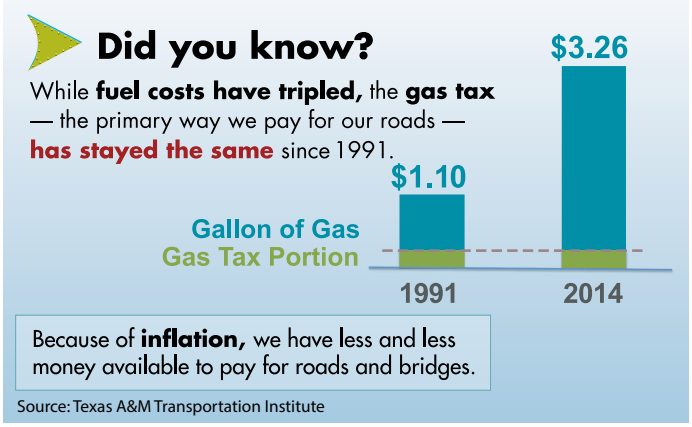
- 472 million hours of added travel time;
- $10.1 billion in delay and wasted fuel costs; and
- $2.1 billion in added truck freight moving costs.

A LOVELY SUNSET *serves as backdrop for congested highways and feeder roads in Dallas (previous spread). Houston's light rail system is one alternative to traveling by car.*

Daily commutes have not only become longer and more costly, they've also become more unreliable. The Texas A&M Transportation Institute (TTI), in its *2012 Urban Mobility Report*, began to illustrate just how much longer those commutes have become through its planning time index (PTI). That index measures how much extra time should be allowed to ensure on-time arrival for higher-priority events, such as an airline departure or medical appointment. For instance, for a PTI of 3.0, a traveler should allow 60 minutes for a trip normally requiring 20 minutes. Drivers in Austin, Dallas-Fort Worth, El Paso and Houston all have PTIs greater than 3.0.

The supply-and-demand equation is also evident when looking at the financial aspect of the transportation issue in Texas. The state now assesses a per-gallon fuel tax of 20 cents (no matter what the pre-tax gallon price may be). That tax and the proceeds from vehicle registration fees constitute the main revenue sources for the State Highway Fund, the purpose of which is to pay for state-maintained highway construction and repairs. The state gas tax, however, has not been raised since 1991. Since that time, inflation has steadily eroded the value of the tax, cutting its purchasing power by about half.

And if there's a downside to fuel efficiency, this is where to find it. As cars and trucks get better mileage, drivers buy less gas, so that 20-cent tax is assessed on fewer and fewer gallons of gasoline and diesel. Demand placed on the transportation system is rising, but the supply of funding available for that system is falling.



To help fill the funding gap, the state has turned to debt financing. Texas voters approved an amendment in 2003 allowing the state to borrow money for building highways, with the bonds to be guaranteed by future gas tax revenue. As a result, obligations for the State Highway Fund now include not only road construction and maintenance but also debt service. That total debt obligation for the state currently stands at $17 billion.

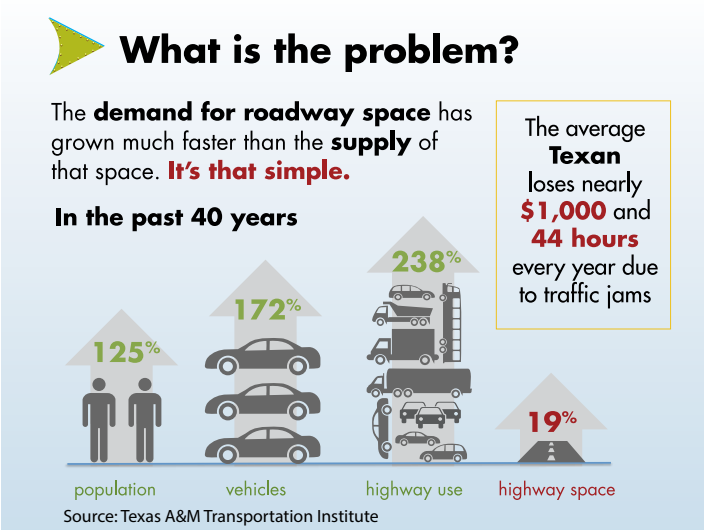
This problem has taken shape so slowly that it's been difficult to see it happening. Recent TTI research demonstrates that Texans believe a quality transportation system is important to the state. However, they:

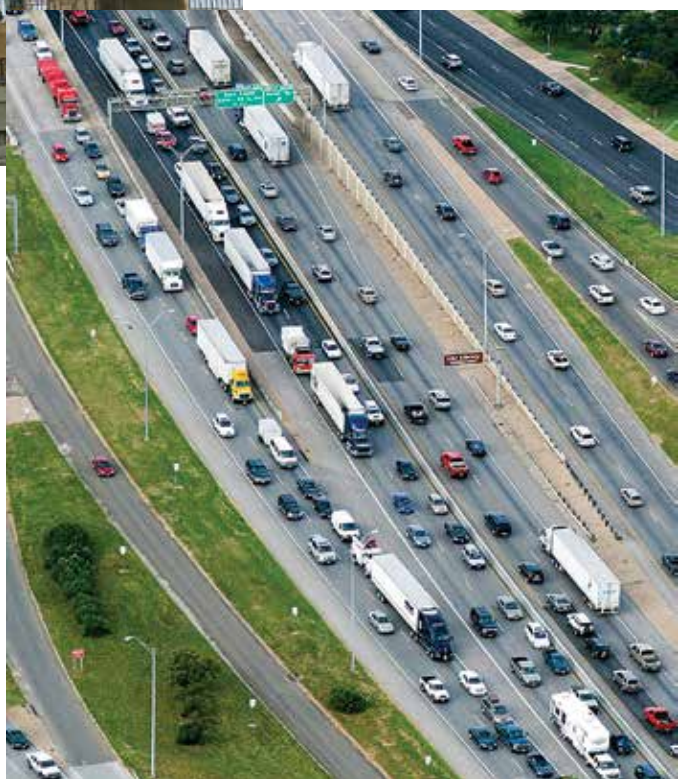
- have little understanding of how transportation is funded;
- are frustrated that the fuel tax has not kept pace with inflation;
- perceive that there is waste in the current system; and
- are concerned about the use of debt financing to build new highways.

TTI's findings suggest that once Texans are presented with an explanation, they generally recognize and understand the severity of the problem. Without that explanation, however, transportation is not a top-of-mind issue for them. Education, immigration and other issues routinely command more public attention.

The state's economy attracts attention, too. But the economy and the transportation system are interdependent. Roads take Texans to their jobs, where they earn money, and to the shopping, dining and recreation destinations where they spend it. It's hard to imagine ranking the state's economy at or near the top of any priority list without putting transportation right up there with it.

The challenge has come about as a result of otherwise positive developments. Of all the new jobs created in the United States in the wake of the 2008 recession, some 40 percent were





NEW ROAD CONSTRUCTION *in Texas hasn't kept up with population growth (left). Traffic backs up near the LBJ Presidential Library in Austin (below).*

Texas jobs. Texas fell into that recession later than most states, and recovered sooner than most. The state's economy is bigger than those of South Korea and Mexico, and it rivals those of Spain and Australia. By a variety of economic yardsticks, Texas has been on a steady, impressive run.

But gridlock in the state's major urban areas is worsening every year. And although it's certainly more visible in the most populous places, congestion is not exclusively a big-city problem. Traffic delays in Dallas or Houston can drive shipping costs up, raising the prices paid for goods in small towns. The cost of success is also apparent in rural areas, where the state's booming energy business has taken a serious toll on many narrow farm roads built to accommodate pickup trucks, not the massive equipment vehicles necessary to the oil and gas industry.

Meeting this challenge will require solutions on both sides of the supply-and-demand equation. On the supply side, Texas took a significant step in 2011 when the Texas Legislature directed TTI to serve as coordinator for state and local agencies in helping implement construction projects for the most congested Texas corridors. The Mobility Investment Priorities study identified those needs and helped to determine how to get the biggest return on the investments legislators had appropriated. Actions such as this are an essential part of the solution, but this problem cannot be solved through new construction alone.

Another essential part involves the concept of travel demand management, which attempts to get the most efficient possible use from the current system. That can take a number of forms — transit, ride-share programs, bicycle and pedestrian options, park-and-ride programs and work pattern changes. A number of these innovative ideas are already making a positive difference in Texas.

Systems in several cities feature high-occupancy vehicle, high-occupancy toll lanes, managed lanes and toll roads. The time- and cost-saving benefits in Houston, for example, have led to the emergence of *casual carpooling*, in which passengers meet at locations close to HOV facilities, and drivers pick up enough passengers to meet HOV requirements and avoid a toll.

In Austin, another program began in 2013 with the introduction of Carma, a real-time ride-sharing option. Interested commuters download the app, find nearby matches and reduce the number of single-occupant vehicles, one carpool at a time. In El Paso, iCarpool software supports ride-sharing actions by helping participants identify route information, pick-up and drop-off locations and time preferences, and also by offering an emergency ride home provision. Carpooling is nothing new, of course, but apps such as Carma and iCarpool demonstrate how modern technology can offer new solutions to a not-so-new problem.

Texans can also look to other states for best practices that have potential here. One example is telework, which refers to arrangements that allow employees to work from home or other locations on a regular basis. State employees participating in the Telework Arizona program avoided about 5.2 million miles of vehicle travel and 180,000 hours of commute time in one year alone. In Georgia, if state employees participate in the Work Away program at least once a week, they can eliminate 416,000 trips and 5.4 million miles of vehicle travel annually. In addition to their trip-reduction benefit, programs like these offer a win-win by boosting morale for employees who appreciate flexibility, and by giving employers a significant recruiting and retention strategy to attract and keep top talent.

To be successful, strategies like these call for the involvement of business as well as government. Since the early 20th century, Texans have relied on the public sector to meet their transportation needs. State and local agencies assumed the exclusive role of building, maintaining and operating our highway system. That model was sufficient for its time. But the challenges are different today, so the approach to those challenges must also be different. For travel demand management to be an effective and successful strategy, its purpose and approach must be embraced by both the public and private sectors.

EVERY COMMUTER'S NIGHTMARE *is traffic backed up as far as the eye can see.*

Apart from all these potential solutions, is "doing nothing" an option? Certainly it is, but like all the other available options, it involves a predictable cost. Doing nothing means Texans will spend more time stuck in traffic. They will spend more money on wasted fuel and will spend more on just about everything that's delivered by trucks. Texans will also face the prospect of slower emergency response times. Doing nothing is an option, but it's not a cost-free option.

For decades, Texans have enjoyed a legacy of quality roads. But for a variety of reasons — many of them positive in their own right — that legacy is now threatened, largely because of growth. And more growth is on the way. The state demographer projects the state's population to be 28.9 million in 2020, up from 25.2 million in 2010. By 2030, Texas will add four million more. All those new people will need places to live, so the state demographer's projections certainly foretell a robust real estate environment.

But those Texans will also need streets and highways to get to the jobs that largely define their prosperity, and to the recreation and leisure activities that largely define their quality of life. And with travel demand outstripping roadway supply at a steadily growing pace, future prosperity and quality of life both grow more uncertain.

What is certain is that there is no single solution to this problem. Carpooling and telework are choices that only some may find to be practical. Not all commuters have access to public transit. New construction will help, but it would be impossible to simply build our way out of congestion. The right approach will involve a mix of all the available tools, along with getting the most efficient possible use from the available transportation system. That all-of-the-above approach offers the best hope of bringing our transportation supply-and-demand equation into better balance.

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THE TAKEAWAY

A reliable transportation system is essential to the state's prosperity and quality of life. Funding for new roads has not kept pace with population growth, and, as a result, traffic gridlock grows worse every year. There is no single solution to the ever-worsening congestion problem, which underscores the need for the state to look not only to new road construction, but also to other solutions to get the best use out of the current transportation system.

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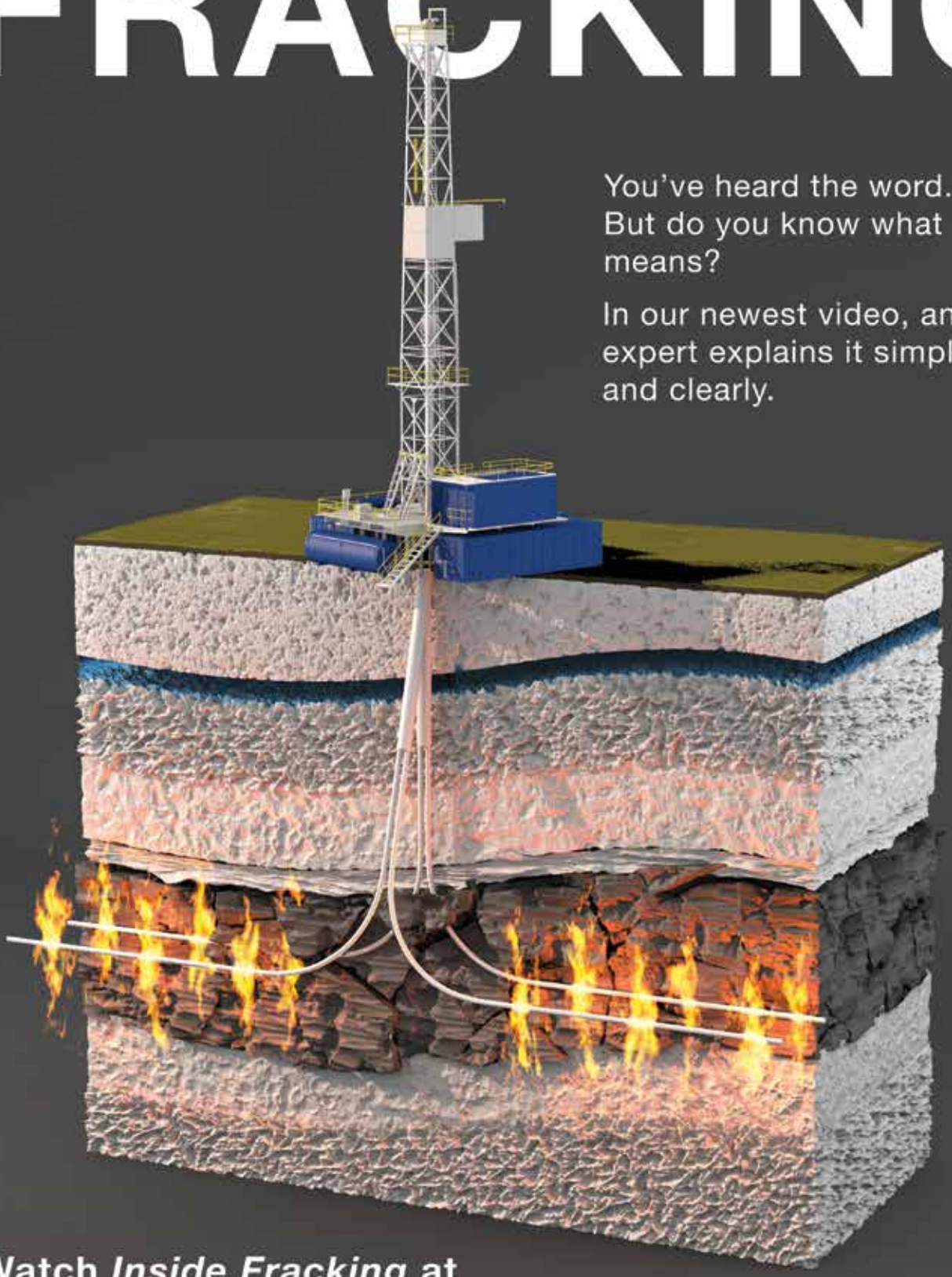

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