The Emerging Energy Crisis

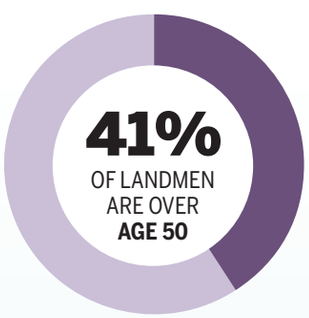
Securing the future of critical services

Submitted by members of the 2025-26 AAPL Strategic Planning Committee

THE LOOMING CRISIS: AN AGING & SHRINKING WORKFORCE

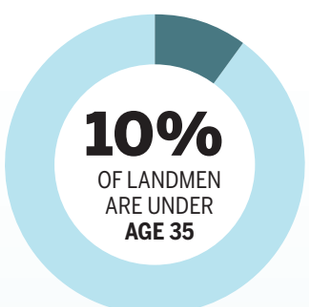
Context Summary: A critical shortage of skilled field landmen due to an aging workforce and stagnant pay threatens future energy supply chains.

AGING WORKFORCE



A large portion of the experienced workforce is nearing retirement age.

SHRINKING TALENT POOL



The industry is failing to attract and recruit the next generation of professionals.

Operators Acknowledge a Growing Problem

In a recent survey, energy companies expressed concern about the shortage of qualified field landmen. Many acknowledge the problem and believe good pay will solve the shortage.

2004
$450/DAY RATE

2026
$769/DAY RATE

PAY HAS NOT KEPT PACE WITH INFLATION

Today's Equivalent: A $450/day rate in 2004 would need to be $769/day today just to maintain the standard of living

If you called your doctor, plumber or mechanic and nobody answered, what would you do? Shortages of critical services have a profound impact on personal and business success.

For most of 1984 the nominal price of WTI was around $29/barrel and the day rate for a field landman was $200/day. Inflation adjusted, those numbers equate to $90/barrel and $624/day.[1] Pricing for both a barrel of oil and the day rate for field landman has declined in relative terms. But the similarities end there.

In 1984, horizontal drilling didn't exist and a good vertical Spraberry well in the Permian Basin, for example, would produce at an initial rate of maybe 75 bbls/day and take years to reach payout. Today, it's not unusual for a horizontal Spraberry well to produce at an initial rate of 1,000 bbls/day or more and reach payout in a matter of months.

In 1984, the field landman was expected to have an electric typewriter, a yellow pad, a set of Allen scales and a protractor, and reliable transportation. Today, the same landman must have a sophisticated computer setup and a cell phone, plus invest in expensive software subscriptions such as Microsoft Office, Enverus, and mapping applications as a minimum, as well as pay for continuing education, certification, professional memberships and more.

However, the field landman's increased investment has not resulted in more billable days in the same way that an operator's investment has resulted in more barrels.[2] In fact, the opposite has likely occurred. Without incentives, fewer people are willing to engage in this critical service. The result is predictable: a seriously declining workforce. The time has come for operators and field landmen to find a solution that creates value for both sides of the equation or be willing to suffer the scarcity of critical services.

At the most basic and broadly stated level, field landmen assure title to valuable assets, provide transactional due diligence, and negotiate and secure important exploration and surface use rights. Services to the energy industry provided by field landmen are vital to industry success. Very few energy companies, if any, are equipped to perform those same services in-house. The current workforce providing field land services is at or near retirement age, and recruitment of new talent has been largely unsuccessful.[3]

So, what are the challenges to maintaining an adequate competent field landman workforce and what are some possible solutions?[4] The challenges can generally be grouped into three categories: insufficient incentives, lack of training and — to some extent — professional recognition. The solutions are less obvious.

INCENTIVE

Historically, field landman compensation depends upon a day rate paradigm. Regardless of the task at hand, whether assuring title, obtaining leases or curative, or meeting with clients, compensation is determined by the fraction of the day spent on the task plus direct out-of-pocket expenses. In 2020, the day rate for roughly 70% of field landmen, as reported to AAPL in the 2020 Compensation Study, was at or below $400/day.[5] The same study indicates that the median compensation for that group had not changed materially during the previous 15 years.[6] The AAPL 2024 Compensation Study reveals that day rates for field landman did not increase significantly over the ensuing four years.[7] Based on the available data, day rate compensation for field landmen has been stagnant for the past 20 years.

A "living wage" is the estimated income that a full-time worker needs to cover basic needs where the person lives, including allowances for food, health care, childcare, housing, internet and cellphone expenses, transportation, miscellaneous nominal expenses and taxes.[8] A living wage does not include any allowance for savings or investment, nor does it include the expense of postsecondary education for a worker's children. A living wage is just the basics needed for independent living.

According to the MIT Living Wage Calculator, a family of four living in Houston, Harris County, Texas, would require $74,209 annually after taxes. To realize $74,209 after taxes annually, an independent field landman working from home must earn $103,500 before taxes. If the landman worked every possible day during the year, wasn't ever sick and never needed a day to care for a child or spouse, the imputed minimum day rate is $434.87. If during the year the landman missed a day for whatever reason — sickness, vacation, or lack of billable work — the day rate must necessarily increase in order to achieve the living wage goal. The latest AAPL Compensation Survey reveals that the day rate for the majority of field landmen in 2024 was less than $450/day, with most of those falling between $325 and $400 per day. This indicates that *the majority of field landmen are not making a living wage.*

None of the foregoing addresses the rising cost of operation that every business has experienced over the past two decades. The combination of inflation and changing client expectations regarding the manner and type of services expected from today's field landman implies that if day rates have remained substantially flat and expenses have increased over time, the field landman's margin of profit has necessarily narrowed. At the same time, remote access to data has significantly reduced the need for travel, which accelerates results and saves operators from reimbursing traditional mileage, meals, hotel and photocopy expenses that could easily exceed $250/day. The inescapable conclusion is that the historical compensation paradigm for field landmen must be reconsidered to provide adequate financial incentive for qualified talent to enter into this area of landwork.

TRAINING

In the past, field landmen have learned their trade and sharpened their skills through a combination of on-the-job training and mentoring by older, more experienced landmen and the occasional seminar. Because the cadre of experienced midcareer field landmen is declining, the viability of the historical training methodology is at risk. Due to advancements in technology, training in the traditional skills required by field landmen is just a beginning. Field landmen must understand and be able to adapt to the needs of a quickly changing energy industry. As artificial intelligence becomes increasingly common for large-scale document projects, contract analysis and drafting, training in these tools should be readily available and prominent. Substantial attention must be directed toward making certain that people interested in entering this critical field have access

to training that equips them with the necessary skills. Part of that will be undertaken by AAPL, but industry must also play a role.

AAPL currently has 10 accredited programs offering an undergraduate degree in some form of energy land management or energy commerce as well as another five programs offering some type of advanced degree. All of these programs are directed primarily toward a role within a corporate environment. None emphasizes field landwork as a career, although several of them include coursework that relates to the skills utilized by field landmen.

But that does not mean AAPL is standing on the sidelines in addressing the need for field landmen. Through the Strategic Planning Committee's efforts, AAPL is proactively working to facilitate dialogue between operators and field landmen, and AAPL leadership has participated in several industry podcasts in an effort to aggressively promote the value of the landman's role in bringing energy to the American public and to call attention to the declining workforce. AAPL is also working through the Education Committee, Certification Committee and a special task force to develop a Landman 101 program that will help address essential skills for field landmen. Additionally, AAPL is creating a certification in renewable energy to broaden opportunities for field landmen,[9] is actively interfacing with its accredited programs to gain their assistance, and partnering with the Hamm Institute for American Energy AI Initiative to ensure that landmen are involved in this emerging technology.[10] But all of that is just a beginning and addresses only one facet of a complex issue.

RECOGNITION

The lack of professional recognition is not the subject of the same statistical analysis as compensation and training and, as a result, is more anecdotal or implied. However, field landmen tend to earn less than landmen employed by an energy company by nearly one-third.[11] The disparity in salary is by itself telling. Similarly, the fact that the majority of formal training is not directed towards the entry-level field landman is also indicative of reduced recognition of the vocation.

To fully appreciate and recognize the importance of the field landman, it is helpful to acknowledge how the profession has changed from its inception to present day. The shale revolution not only captured tremendous value from previously noncommercial zones, it also added complexity to the field landman's role. Navigating mineral ownership in old producing areas, securing surface access, dealing with existing culture, and ensuring compliance with changing regulatory requirements when considering a 2- or 3-mile horizontal drainhole is exponentially more complex than the requirements to be met for drilling a traditional vertical well. The same can be said for field landmen working on renewable projects where new technology, rapidly evolving regulations and unique environmental considerations must find a way to coexist with competing uses and existing infrastructure. Those contributions are deserving of recognition.

THE PATH FORWARD

To gain further insight into the issues relating to the impending field landman crisis, the AAPL Strategic Planning Committee invited a representative group of field land services providers (contractors) and operators to participate in an anonymous survey intended to gauge attitudes concerning billing and compensation practices, hiring concerns and openness to change.[12] Those results follow below.

The contractors surveyed agreed that flat or stagnant day rates are a significant factor in attracting and retaining experienced, qualified personnel and negatively impact critical investment in technology and training. Contractors were uniform in reporting perceived resistance to day rate increases and fear that raised rates may result in loss of business to less expensive competitors. Contractors consistently reported that client companies appear to prioritize cost over quality, which is inconsistent with responses from the operator group survey. Day rates remain the preferred billing criteria due to industry acceptance, ease of use and predictability, but some contractors indicated a willingness to consider alternative billing structures to the extent that they do not impose unfair risk because of factors that are difficult to predict or control.

Operators responding to the survey recognized the declining labor pool of field landmen and some have been impacted by lack of qualified personnel. Operators consistently responded that hiring decisions were less driven by billing rates than by work quality, ethics and company representation, for example:

- Work quality: accuracy and completeness of the final product; adequate staffing by competent and qualified personnel; communication.
- Ethics: confidentiality; honesty and transparency in billing.
- Company Representation: expectation that field landmen act in a manner that protects the company reputation and interact with others in a professional, ethical manner.

Interestingly, the operator group reported being open to compensation based on performance, scope of project or other criteria as an alternative to the traditional day rate formula so long as the alternatives are fair to both sides, reflect value received and do not create misalignment. There seemed to be consistent recognition among the operator group that field landmen should receive compensation that assures a stable workforce as well as an expectation that contractors should invest in technology and training needed to improve quality and efficiency.

Based on the responses from the two groups, operators and contractors are aligned in their basic goals and concerns. Missing is clear communication among the individuals within the two groups.

SOLUTIONS

There is no doubt that operators and field landmen need to improve communication as a first step. Operators need to understand the investments in technology, back-office support and overhead required by their field landmen and recognize the real savings and efficiencies that have already occurred as a result of digital access to public records, and contractors should be clear in their communication of these matters. It's a question of survival for both sides to clearly understand each other's position and goals. The field landman must be able to clearly show

how investments in improved technology, artificial intelligence and training lead to enhanced efficiency and reliability, which are goals common to both operators and their contractors, and operators must be open to the conversation.

In the end, the challenge for all will be to define a fair compensation paradigm that incentivizes the field landman. That compensation paradigm may not be based upon day rates in every instance. Whether compensation in the future is based upon clearly defined deliverables, mutually agreed upon milestones, project requirements and complexity, or some other metric, change is needed to assure an adequate workforce that is equipped with the necessary tools and training.

SUMMARY

The field landman profession stands at a critical inflection point. Stagnant day rates, rising operational costs, insufficient training pathways and limited professional recognition have combined to create a shrinking and aging workforce at a time when industry complexity is rapidly increasing. Without meaningful change, the industry risks a deepening shortage of critical services that translates to operational risk: stalled projects, increased title defects, extended time to deploy capital and greater risk of failed transactions, to name a few.

Survey responses from both contractors and operators reveal that, despite misconceptions, both groups share common priorities: highquality work, ethical standards, professional representation and a stable, welltrained labor pool. Missing is transparent communication and a modernized compensation framework that reflects the value provided by field landmen. Ensuring the longterm viability of this essential segment of the energy workforce requires collaborative effort — embracing technology, investing in training and adopting compensation models beyond the conventional day rate structure that rewards expertise, efficiency and deliverables. Working together, operators and field landmen stand to benefit from a more resilient, aligned, and futureready profession.

AAPL stands ready to partner with members of the energy industry and the land profession to facilitate needed change. AAPL can provide a platform for communication, collaboration and training, but it's going to take all of us working together to avert the impending crisis. We challenge you to be a part of the solution. ▲

READ AND SHARE THE ARTICLE AS IT APPEARED IN THE *LANDMAN* MAGAZINE

THE ROI OF A LANDMAN:

Investing in Quality to Accelerate Production

Invest in highly qualified landmen to mitigate risk, accelerate time-to-production and drive significant business value.

THE HIDDEN COSTS OF THE STATUS QUO

The Million-Dollar Mistake
A single title defect missed by an inexperienced landman can cost $1M+ in litigation.

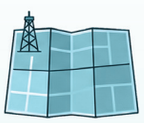
Project Delays and Idle Rigs
Poor quality landwork leads to permit bottlenecks and expensive rig scheduling delays.

A Damaged Reputation Costs More
Unprofessional field representation forces companies to pay higher premiums on future leases.

THE ROI OF INVESTING IN QUALITY

Accelerate production by 2-3 weeks
A motivated, top tier landman can deliver a "drill ready" location significantly faster.

Faster production = faster cash flow
Bringing a well generating $50,000/day online 20 days earlier pays for the investment.



Maximize Asset Value
Skilled landmen secure better ROWs and strategically unitize acreage, boosting a well's ultimate recovery.

COMPARING THE APPROACHES: KEY METRICS

THE LOW-RATE APPROACH		THE STRATEGIC INVESTMENT
Project Risk: **HIGH** (title defects, lawsuits)		Project Risk: **LOW** (clean title, good relationships)
Time-to-Production: **SLOWED** (by land hurdles)		Time-to-Production: **ACCELERATED** (ready-to-drill locations)
Future Lease Cost: **PROJECT RISK INFLATED** (due to poor reputation)		Future Lease Cost: **LOWER DUE TO TRUST AND EFFICIENCY**