The Space Workforce Incubator for Texas (SWIFT) presents:

The Space Economy Jobs Report

A Bottom-Up Analysis of the Emerging Space Economy Workforce

SWIFT

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About SWIFT

Our Mission: Building connections. Testing limits. Launching rockets.

SWIFT's mission is to serve as the integrator of Texas' space workforce ecosystem, uniting community colleges, universities, and industry around a shared purpose.

We bring together the strengths of diverse institutions, combining those who dream with those who do, to streamline collaboration and focus on hands-on experiences that employers need in their workforce. Through shared resources and purposeful connections, we ensure that Texas students and organizations achieve more together than they ever could alone.

Our Vision: Dreaming big. Doing more. Launching Texas.

SWIFT's vision is to make Texas a gateway to the universe and the heart of space exploration and innovation: those who reach for the stars will do so through the Lone Star State. We are lighting the path for future generations by connecting high-school and post-secondary educational pathways with employers, creating a space talent pipeline where dreamers and doers come together not just to imagine, but to build, test, and launch the space technology that will shape tomorrow.

Just as Stanford fueled the rise of Silicon Valley, SWIFT is breaking down barriers and uniting diverse educational and technical strengths. From four-year degree programs to skilled blue-collar talent, we are building an ecosystem where anyone with a dream of space can contribute, innovate, and see their creations take flight from Texas soil.

Meet the Board + Advisors:

Geoff Tudor - President

Spearheaded the legislative team that funded the Delta Clipper and the Clementine missions - paving the way for SpaceX, Planet Labs, and the new space movement.

Dr. Leon Vanstone - Vice President

Rocket Scientist, storyteller, recovering academic. Leon founded the Texas Rocket Engineering Lab at UT Austin.

Harvin Moore

Sits perfectly at the intersection of space and education. Began his career working on the world's first commercial rocket launch.

Joseph Kopser

U.S. Army veteran, technology innovator, and policy leader focused on national security, energy, and workforce development.

Heather Wagner Reed

Award-winning founder and CEO of Juice Consulting, a leading PR and marketing firm in Austin serving the technology + innovation, creative and workforce industries.

Sandy Barker (Advisor)

Designed simulators and trained astronauts for NASA. Built compliance, safety, and training for Firefly Aerospace.

Executive Summary

The Emerging Space Workforce: Degrees Optional, Skills Essential

The global space economy stands on the brink of unprecedented expansion. The World Economic Forum projects it will triple in value to $1.8 trillion by 2035, driven by breakthroughs in launch systems, communications, and orbital infrastructure. In the United States, the Bureau of Economic Analysis reports that the private space sector already supports 373,000 jobs, with an average salary of $135,000 (nearly double the national average). Momentum continues to build: *The Space Report 2025* notes the industry has added more than 100,000 new jobs over the past decade.

During that same decade, the U.S. space economy has transformed from a federally led exploration effort into a thriving commercial ecosystem spanning launch systems, satellite manufacturing, defense technology, and software-enabled mission support. Yet as new players redefine what it means to "work in space," the workforce pipeline faces both a challenge and an opportunity: how to prepare talent fast enough for a rapidly diversifying industry.

Looking ahead, the U.S. space economy could add $428 billion in economic value, 300,000 additional jobs, and tens of billions in employee compensation over the next decade. No single state yet dominates this landscape, but history shows what happens when one region seizes the moment. California's university-driven workforce pipeline anchored the digital revolution in San Francisco, transforming the state into the center of the internet economy and securing both economic power and global influence for decades.

This is Texas's Silicon Valley moment. Just as California defined the internet age, Texas can define the space age, capturing hundreds of billions in economic value, hundreds of thousands of jobs, and lasting leadership in the industries that will shape the next century. By investing in people and building a Texan workforce pipeline the sector cannot grow without, Texas can make space indelibly Texan.

But you cannot build what you do not understand. So to chart the future, we first had to measure today's demand. Unfortunately, the space economy still exists outside the boundaries of traditional "top-down" labor metrics and so conventional labor statistics don't capture the sector's complexity. We performed a "bottoms-up" analysis, directly examining 5,000 active job postings from 27 leading employers in the space economy as of August 2025.

The findings reveal a workforce in transition: the traditional "rocket scientist" archetype is giving way to a skills-based ecosystem where certifications, standards, and technical expertise increasingly determine opportunity.

The race for space is a race for workforce readiness and Texas is uniquely positioned to win it.

Executive Summary: Key Findings

These are the key findings from our “bottoms-up” analysis of nearly 5,000 space economy jobs postings, across 27 companies, a snapshot of talent needs as of August 2025.

1. **Jobs Follow Workforce Density**
   Hiring is concentrating in states with established aerospace ecosystems and the workforce pipeline that drives them. California holds roughly one-third of existing aerospace jobs but half of new openings in the top five states, signaling that talent pipelines and employer clusters reinforce one another. Without coordinated workforce strategies, Texas risks ceding future growth to incumbent hubs.

2. **Skills Are Essential, Degrees are Optional**
   Nearly half of entry-level roles require only a high school diploma, yet many go unfilled. The gap isn’t in graduates, but a lack of hands-on, industry-ready skills that traditional educational institutions still struggle to deliver.

3. **Credentials Signal Readiness**
   Employers are hiring for proof of capability, not pedigree. One-third of postings specify or prefer technical certificates or standards, most commonly offered by community colleges, but degrees rarely match what employers actually need.

4. **Employers Are Paying to Close the Gap**
   Nearly half of all job postings offer tuition or training reimbursement. Companies are signaling frustration and inviting their employees to skill up themselves by encouraging them to gain the skills they need wherever they can train.

5. **Technical Roles Dominate the Shortage**
   One in eight postings (12%) are for welding alone, which is an incredible share for any single profession. But, the problem isn’t a lack of welders; it’s a shortage of space-qualified welders with the skills space companies need. This pattern repeats across most technical roles, where education-to-industry misalignment limits the pace of production and innovation.

> *We need welders. Lots of amazing engineering has happened, and now we need welders.*

Mike Edmonds - VP at Blue Origin

Executive Summary: Key Insights

The traditional image of the “rocket scientist” is being replaced by a skills-driven ecosystem where certifications, standards, and technical expertise increasingly define the needs of space economy companies. Our findings show that future space economy jobs will emerge where workforce density already exists. Yet, the current talent pipeline is misaligned.

Education and training systems are not yet producing credentialed, job-ready talent at the scale required, while the space industry itself has yet to establish shared standards to guide hiring and curriculum design. This double misalignment leaves many high-paying roles unfilled because workforce pipelines have not kept pace with growth.

For Texas, this represents more than a challenge, it is a generational opening. The state already has the community colleges, technical schools, and regional training centers to build the next-generation workforce locally. By aligning programs around industry-recognized credentials, expanding paid, rapid training pathways, and creating regional space workforce hubs, Texas can prepare workers for both degree and non-degree pathways that lead directly to high-value roles.

Mobilizing around this strategy would allow Texas to capture a disproportionate share of the $428 billion economic opportunity, anchoring 300,000 high-wage jobs in both urban and rural communities. Degree-required roles offer an average salary of $151,293, while non-degree roles average $76,408. Non-degree roles far exceed the national average for high school graduates and prove that the space economy rewards technical skill and offers upward mobility across education levels.

These opportunities are especially meaningful for rural regions, where lower costs of living amplify their impact and create new pathways to prosperity. By leveraging its rural workforce and technical institutions, Texas can make the space economy both a driver of innovation and a source of broad-based economic renewal.

The space economy now stands at an inflection point. Growth follows alignment and the states that act intentionally, connecting education, credentials, and employers, will define the next era of American space leadership. Alignment is not only a workforce issue but an economic imperative. The next five years will determine which regions set the standards and capture the benefits of this transformation.

Our analysis shows that while California maintains a strong lead, it lacks a coordinated statewide effort to build the talent pipeline, creating a major opportunity for Texas.

This is Texas’s moment to lead, capturing the space economy workforce pipeline and dominating space for decades to come.

Today belongs to California… but tomorrow belongs to Texas.

Methodology

To better understand the workforce dynamics of the space economy, we analyzed 5,000 individual job postings drawn from 27 employers in August 2025. Each posting was reviewed and structured using a custom taxonomy designed to encode role, requirements, skills, qualifications, etc. This allowed us to compare jobs systematically across employers and categories.

The following analysis should be thought of as a snapshot of the talent needs of the surveyed space economy companies in August 2025.

This analysis aims to understand workforce demand through directly analyzing the open jobs positions in the Space Ecosystem. This bottom-up approach was necessary because the space economy still exists outside the boundaries of traditional labor metrics. There is no single classification in the Bureau of Labor Statistics (BLS) or Bureau of Economic Analysis (BEA) that fully captures what the space workforce or the space economy. Tools like the O*NET database and SOC codes, while useful for other sectors, blur or omit many of the occupations that power the space industry, making detailed understanding of the labor needs difficult. Hence, our initial efforts to directly address this gap by directly examining open jobs to get an industry snapshot of the workforce needs.

This analysis seeks to examine the needs of the space economy through the lens of open jobs postings, which provide a strong indication of the real workforce needs of the sector. However, it is important to note that this report was compiled as a snapshot of that need at one particular time (August 2025). It is important to realize that statements concluded from this snapshot represent the state of the workforce needs of those companies at that time. While broader inferences can be made, it is always important to consider them within the context of the data from which those insights were synthesized.

For context, various jobs boards (Glassdoor, Space Crew, Space Talent) report about 10,000 - 20,000 open space jobs in the US as of August 2025. Based on that benchmark, our sample of 5,000 Space Economy postings likely represents a significant sample size in relation to the true total Space Economy Jobs postings.

Jobs Follow Workforce Density

As stated, measuring the size of the U.S. space ecosystem workforce is challenging because conventional labor data does not isolate the space economy workforce. For comparison, we use aerospace jobs by state as a proxy for the number of space economy jobs. Aerospace jobs play a central role across civil and commercial sectors, and state-level employment trends highlight where the space economy is concentrated today and where it is most likely to grow tomorrow.

California dominates the national picture, employing nearly twice as many aerospace engineers as any other state.

Figure 1 shows aerospace employment by state for the top five states in the US. California dominates the national picture, employing nearly twice as many aerospace engineers as any other state. Texas and Washington are second and third and Alabama and Colorado follow just behind (respectively), each supporting significant space-related clusters. This distribution shows California dominates the employment sector, with over a third of all national aerospace jobs concentrated in its state alone.

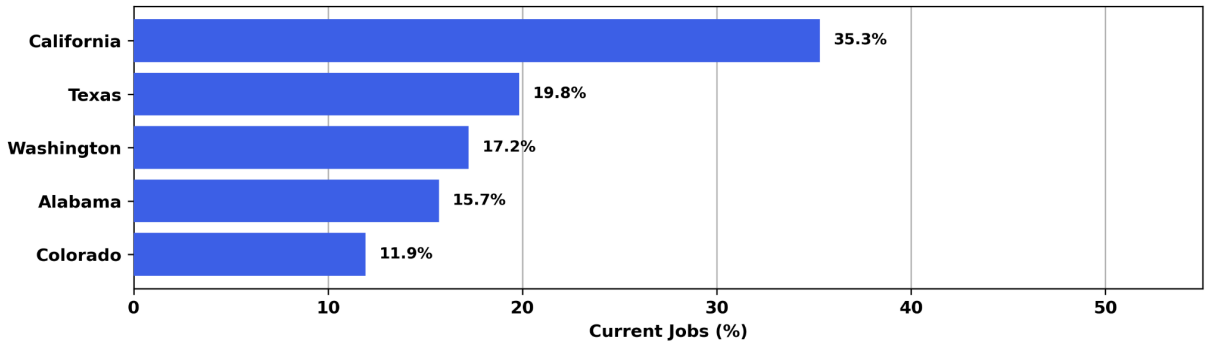

Figure 1 - Top 5 states for aerospace jobs.

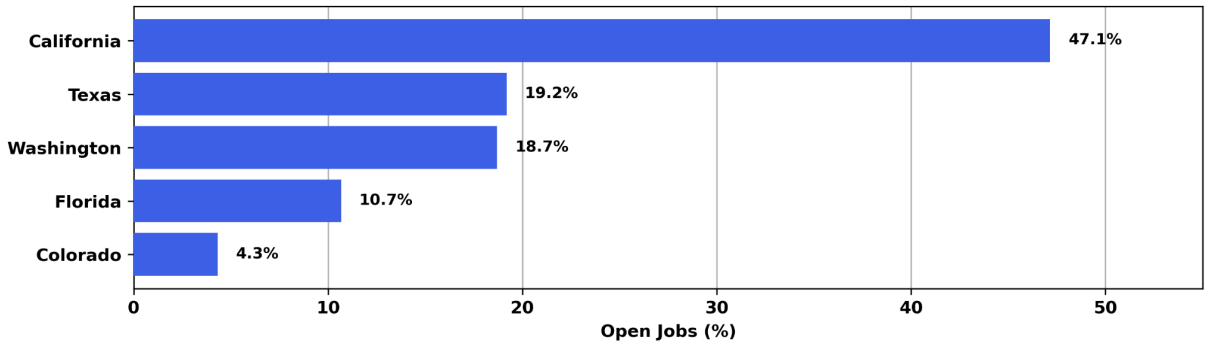

Figure 2 - Top 5 states for job opening location.

Figure 2 makes the trend impossible to miss: half of the new space jobs in the top five states are in California. Yet California accounts for only a third of existing jobs. That gap is the story. Hiring follows workforce density: the states that built the biggest pipelines now capture the most growth because they can supply the employees. California's concentration of employers and training capacity feeds on itself, accelerating hiring far faster than elsewhere. Texas and Washington remain in distant second, Florida rises on the gravity of Cape Canaveral, and Colorado holds its ground with a strong aerospace backbone. California has more jobs created in it than the next three states combined. Without intentional, large-scale workforce efforts in other states, California will continue to widen the distance, accruing the bulk of the economic impact, jobs, and influence of the new space economy.

The states that built the biggest pipelines now capture the most growth because they can supply the employees.

Growth follows workforce pipelines. California remains first because of the naturally occurring workforce pipelines that it has built to accommodate its workforce to date and the momentum of this workforce development is accelerating it forward. However, Texas has a unique opportunity to lead the nation in developing a coordinated and strategic workforce pipeline. By aligning and mobilizing our world-class institutions, Texas can become the premier hub for the growing space economy. Ensuring that innovation, education, and opportunity thrive across the state and nation. These geographic patterns highlight existing talent pipelines. Still, true readiness in the space workforce depends on skills, not location.

Skills Are Essential, Degrees are Optional

Figure 3 illustrates the highest degree requirements for entry-level jobs positions (requiring a year or less of experience to apply). We focus on these roles because they represent the opportunities most workforce pipelines are designed to fill.

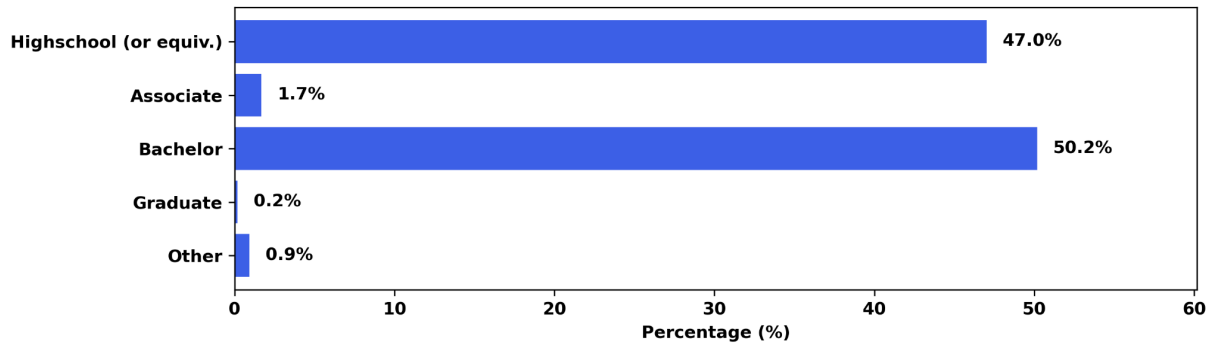

Figure 3 - Highest degree level required to apply for a job position.

Our analysis reveals a surprising reality: 47% of entry-level “rocket scientists” jobs require no more than a high school diploma or equivalent. Most of the remainder require a bachelor’s degree, with only a small fraction asking for associate or graduate-level credentials.

This implies that the workforce is almost evenly split: about half are four-year degree holders, and the other half are not. The space economy is powered not only by engineers and scientists, but also by a vast number of highly skilled technicians who are in extraordinary demand. As Blue Origin’s Mike Edmonds put it: *“We need welders. Lots of amazing engineering has happened, and now we need welders.”*

The space economy is powered not only by engineers and scientists, but also by a vast number of highly skilled technicians.

What’s striking isn’t just the large share of high school–level roles, but the near absence of associate-degree requirements. Given the role community colleges play in developing technical talent, we would expect associate degrees to serve as a natural entry point. Instead, employers appear comfortable hiring directly from the high school pipeline.

This doesn’t mean associate-degree holders aren’t valued, only that the credential itself isn’t seen as an easy way to down-select the talent you need (as opposed to a bachelors). In technical areas, employers seem more focused on demonstrated skills and certifications than on formal degrees, willing to hire capable high school graduates just as readily as those with two-year programs.

If associate degrees were viewed as a key signal of readiness, more postings would require them. Their rarity points to a broader mismatch: many current programs may not align with the competencies the new space economy demands, prompting firms to train candidates in-house rather than rely on existing credentials.

Credentials Signal Readiness

Figure 4 shows that a third (34.1%) of job postings in the space economy mention a certificate or standard as required or preferred. Put another way, roughly one in three positions calls out specific certificates or standards. Even among entry-level roles (those requiring less than a year of experience) the share remains high, at 30%.

These findings highlight how important certifications and standards are in the emerging space economy and how employers are using them to examine the readiness of the workforce they are hiring. They are most often associated with skilled technical positions where precision, safety, and compliance are essential. These roles form the foundation of the industry, ensuring that rockets are built correctly, systems operate reliably, and missions succeed.

What’s notable, however, is where this knowledge is taught. R1 universities, the traditional training grounds for aerospace engineers and “rocket scientists”, rarely incorporate certifications

or industry standards into their curricula owing to their strong focus on research and discovery. In contrast, technical colleges, community colleges, and many non–R1 universities are more tightly aligned with industry practice. They are the institutions explicitly teaching the certificates and standards employers are seeking.

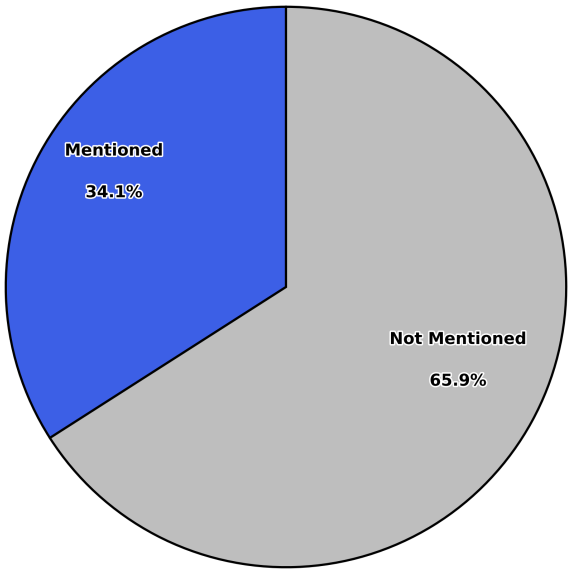

Figure 4 - Number of job positions that required or requested a certificate or standard.

This distinction matters because the current workforce demand extends well beyond R1 institutions and the prototypical "rocket scientists" they produce. The data show a strong and persistent need for skilled technical talent fluent in certifications and standards, from entry-level positions through advanced roles. As a result, institutions that specialize in applied, industry-connected training are playing an increasingly vital role in preparing the workforce the space economy needs today.

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This finding is especially striking when viewed alongside Figure 3. While half of entry-level positions require no more than a high school diploma and nearly half call for a bachelor's degree, very few list an associate degree as the highest requirement. Yet many of the certificates and standards employers are seeking, such as welding codes, electrical certifications, avionics standards, etc., are precisely the kinds of competencies taught in associate and technical programs that award associate degrees.

If associate degrees reliably indicated mastery of desired skills, we might expect employers to use them as a proxy in hiring (as they do for Bachelors). Their absence suggests otherwise: either existing associate programs aren't teaching the specific standards the space economy needs, or the space economy itself is still too new and fragmented to have settled on common credentials for colleges to align around.

In short, the prominence of certifications and standards in job postings underscores the need for education pathways that produce job-ready, credentialed talent alongside traditional degrees. Yet the limited use of associate degrees as hiring requirements reveals a lingering gap between what schools teach and what the space economy needs, a gap that will take time to close. In the meantime, space employers aren't waiting; they're investing directly in their workforce, paying for the skills they need now to close the skills gap.

Employers Are Paying to Close the Gap

Figure 5 illustrates the share of job postings that offered financial reimbursement for the direct costs of upskilling or other off-the-job education. While the details of these programs often vary case by case, they are typically designed to support learning outside regular work hours through evening, weekend, or part-time study. Most courses last a few months and are delivered through community colleges, technical colleges, online programs, or specialized university initiatives built around specific industry needs.

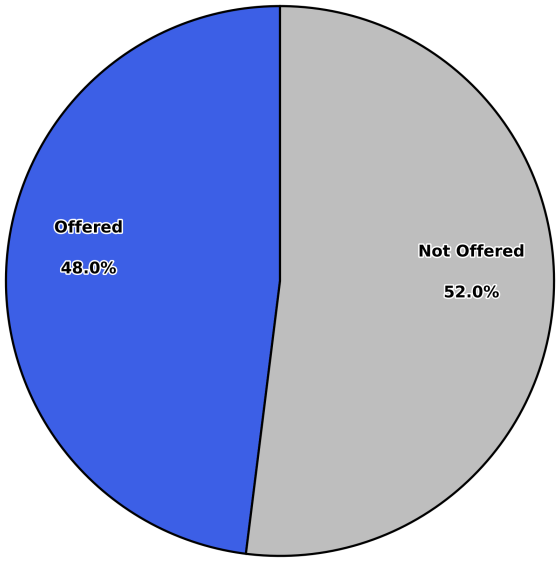

Figure 5 - The percentage of job positions that offered educational reimbursement.

Crucially, these reimbursements rarely cover four-year degrees. Instead, they fund short, targeted learning experiences, certification courses, technical training, or night classes that provide job-ready skills quickly. This focus underscores employers' preference for fast, applied skill development rather than long academic pathways.

Employers are hiring now and training on the job.

Together, these findings reflect a workforce reality: the space economy's demand for skilled talent is outpacing the existing education pipeline. Employers consistently need technicians, welders, machinists, and other skilled trades, roles that traditional universities seldom prepare workers for. Many candidates enter without the desired credentials, but companies are increasingly willing to hire first and invest in training later, using reimbursement programs to bridge the skills gap on the job.

The more extreme end of these initiatives see companies build their own talent pipelines into high-schools or post-secondary education. This is always done program by program and this work must be repeated to the next company that needs a workforce. Startups can not commit to this and simply go to states that have the talent they need instead. A unified state workforce pipeline tailored to industry needs would be a powerful magnet for space economy companies both big and small. Particular need exists in the trades, technical skills, and blue-collar jobs.

Technical Roles Dominate the Shortage

As shown in Figure 6, welding dominates a surprising share of the entry-level labor market in the space economy: 12% of all open positions are dedicated exclusively to welding. More than one in every eight jobs as of August 2025, an incredible share for a single profession. In an industry spanning engineers, scientists, technicians, and specialized trades, the fact that such a large proportion of open positions center exclusively on welding underscores how essential this skill is to space manufacturing and launch operations.

Despite the strong national supply of welders, these positions remain persistently unfilled.

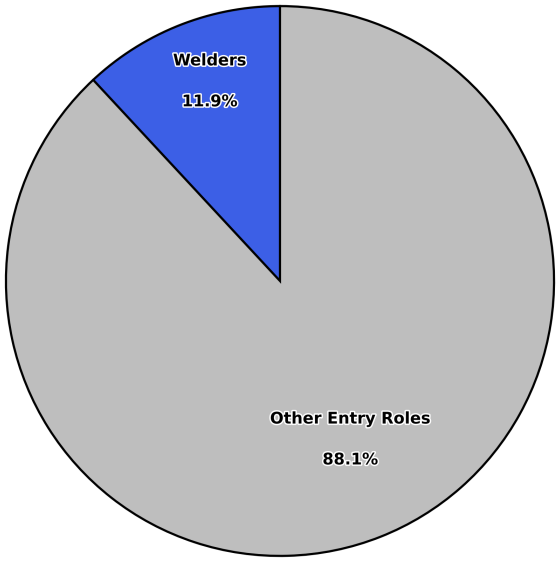

Figure 6 - Percentage of all Space Economy jobs that are solely welding.

Yet despite the strong national supply of welders, these positions remain persistently unfilled. The challenge isn't a shortage of people who can weld, it's a shortage of welders qualified to meet exacting standards. Space economy companies require specialized skills, certifications, and familiarity with precision materials, processes, and codes that go well beyond conventional welding work.

This gap reflects the same pattern seen elsewhere in the data: a mismatch between educational pathways and workforce demand. Many community and technical colleges across the country teach welding and award associate degrees in the trade. However, the specific competencies and certifications required for space companies are not well defined and so can not be built into these programs.

The result is a growing reliance on post-hire upskilling. Companies are hiring welders with strong fundamentals, then training them to meet internal standards. Some have gone further, building bespoke pipelines into high schools and post-secondary programs to secure the skilled workers they need. But these efforts are often ad hoc and must be recreated by each company in turn, with startups lacking the resources to build their own programs.

To truly meet demand, welding and technical education programs must evolve to include the certifications and standards specific to space manufacturing. A coordinated, statewide workforce pipeline aligned with industry needs would be a powerful draw for space economy companies—especially in the trades and technical fields where the need is greatest and salaries are strong.

Salaries are Sky-High

Figure 7 illustrates the salary distribution across the analyzed space economy workforce. The histogram shows that nearly all positions cluster well above the national average wage ($60,000), underscoring the sector's strong demand for specialized skills. While a small number of internship or entry-level roles fall in the $40,000–$60,000 range, salaries rise sharply beyond that point.

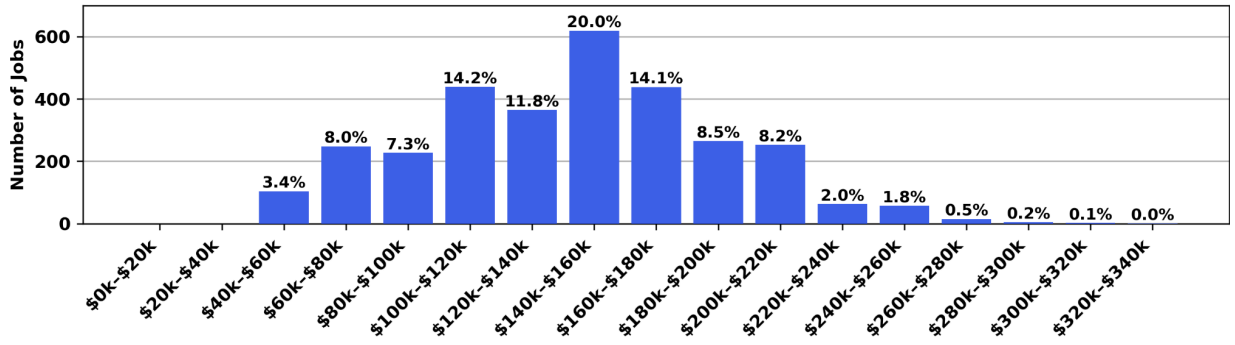

Figure 7 - Histogram of salaries across the entire dataset.

Across the 5,000 job postings analyzed, the average salary in the space economy is $143,203, matching national data from other sources and over double the U.S. average wage ($60,000). When broken down by education requirements, the data show two distinct but equally vital pathways: degree-required roles average $151,293, while non-degree roles average $76,408.

The near 50-50 split between degree and non-degree positions highlights a balanced demand for both advanced technical expertise and skilled trades. Importantly, even the non-degree positions pay over 1.5 times the national average for workers with a high school diploma. Many of these roles are located in rural communities, where lower living costs further amplify their economic impact.

The non-degree positions pay over 1.5 times the national average for workers with a high school diploma.

This combination: high wages, meaningful work, and geographic reach, underscores a transformative opportunity for Texas. By connecting its rural workforce, technical institutions, and industry partners, Texas can build a transformative space workforce. This effort not only supports the growth of the space economy but also offers Texans across the state the chance to build prosperous, future-focused careers and realize their version of the American dream.

Insights and Discussion

Taken together, Figures 3 through 6 reveal a consistent and telling pattern across the space economy's workforce demand. Figure 3 shows equal demand for positions requiring bachelor's degrees and those requiring only a high school diploma, with almost no roles calling for associate degrees. Since open postings represent a snapshot of unfilled demand, this absence suggests that employers are not using associate credentials as a reliable signal of readiness in the same way that they might for a bachelor's degree.

This finding becomes more striking when considered alongside Figure 4, which shows that one in three jobs mentions or requires certificates or standards. These are precisely the kinds of skills that community and technical colleges are designed to teach, and yet their degrees are rarely listed as requirements. If associate programs were producing graduates with the certifications and competencies the space sector needs, we would expect to see far greater demand for them. Instead, the data point to a misalignment: the credentials being taught do not yet match the standards space economy employers value most.

Figure 5 reinforces this interpretation. Nearly half of employers offer financial reimbursement for off-the-job learning, signaling that companies routinely hire candidates who lack critical skills and then pay to upskill them afterward. This is a strong indicator that the education pipeline is not fully meeting industry needs, especially in fast-growing technical fields.

Figure 6 brings this mismatch into sharp relief. As of August 2025, 12% of all entry-level openings in the space economy are for welders, more than one in eight jobs, a staggering share of workforce demand for a single profession. Welding is a widely taught trade in the United States, yet the large number of open roles suggests a shortage of qualified candidates at every level. The problem isn't the number of welders being trained, but rather the specialized certifications and precision experience required for space applications, skills often missing from standard programs.

The near 50–50 split between degree and non-degree jobs highlights the dual structure of the space workforce. High demand for both advanced engineers and skilled technicians.

Figure 7 extends this picture through salary data, revealing both the scale of opportunity and the urgency of alignment. Across all job postings, the average salary is $143,203, with degree-required positions averaging $151,293 and non-degree roles averaging $76,408. The near 50–50 split between degree and non-degree jobs highlights the dual structure of the space workforce. High demand for both advanced engineers and skilled technicians. Importantly, even non-degree positions pay over 1.5 times the national average for high school graduates, reflecting both scarcity of qualified talent and the high value placed on technical skill. Many of these roles are based in rural communities, where lower living costs amplify their economic impact and make them especially transformative for regional growth.

Together, these findings show that the space economy's rapid expansion has outpaced the capacity and coordination of traditional education and training systems. At the same time, the industry itself remains relatively young, with few widely recognized, industry-wide standards or certifications to anchor workforce development.

This creates a double misalignment:

- On one side, education and workforce pipelines are not yet producing talent with the exact competencies employers need.
- On the other side, the space economy struggles to clearly define and communicate those needs, lacking a unified framework of standards and certifications that educators can build programs around.

As a result, companies are paying more, waiting longer, and shouldering the cost of upskilling employees themselves, driving wages higher but slowing growth. For workers, this means enormous opportunity, but for industry, it signals a bottleneck that must be addressed if the U.S. is to maintain global competitiveness.

For some space companies this problem is so acute they have begun building their own talent pipelines directly into high schools and post-secondary programs to secure the skilled workers they need. But these organic workforce initiatives are typically one-off and must be recreated by each new employer facing workforce shortages, they do not scale.

Startups, unable to commit the same resources, tend to simply locate in states where the talent already exists (California). A coordinated Texas workforce pipeline tailored to industry needs would be a powerful draw for both established firms and new entrants in the space economy—particularly in the trades, technical skills, and blue-collar roles that underpin space manufacturing.

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Community colleges, technical schools, and workforce programs are well-positioned to close this gap, but doing so will require a statewide collaboration with industry to identify, codify, and teach the specific skills and credentials that define job readiness in space manufacturing and operations. Until these feedback loops are established, both sides will continue to miss the mark, leaving critical roles unfilled even as eager workers search for opportunities.

> *"We need welders. Lots of amazing engineering has happened, and now we need welders."*
>
> **Mike Edmonds - VP at Blue Origin**

As Figures 1 and 2 show, states with the largest existing workforces, such as California, have begun to build their pipelines organically, simply by virtue of their scale. Over time, these gaps will organically close as major space companies develop shared standards and localized partnerships with nearby institutions. But a strategic Texas-wide approach could accelerate this process dramatically.

By coordinating workforce development across community and technical colleges, fostering alignment with universities, and helping industry define shared standards, Texas can position itself to capture a large share of jobs, investment, and economic influence within the emerging space economy. The opportunity extends beyond workforce alignment, it represents a blueprint for broad-based economic renewal, particularly in rural and industrial communities where the cost of living is lower and the need for high-wage work is greatest.

Texas can position itself to capture a large share of jobs, investment, and economic influence within the emerging space economy.

Alignment is not only a workforce issue but an economic imperative. The states that integrate education, training, and industry will not just capture more jobs, they will shape the industrial base that underpins American leadership in orbit, defense, and advanced manufacturing for decades to come. The window for leadership is narrow, and the next five years will determine which regions set the standards and capture the benefits of this transformation.

In short, growth follows alignment. States that build coordinated pipelines between education and industry will lead the next phase of the space revolution. While organic progress is already underway, the opportunity is far greater for those willing to act strategically and intentionally, creating a unified future-ready workforce to power the next century of American space leadership.

Just as California defined the internet age by capturing the workforce pipeline, Texas can define the space age in the same way. By building a workforce pipeline here in Texas the jobs will follow and Texas can capture hundreds of billions in value, hundreds of thousands of jobs, and lasting leadership in the industries that will shape the next century.

Seizing that future will require coordination, investment, and intent. But if Texas builds the playbook now, it won't just participate in the space economy; it will define it. This is Texas's Silicon Valley moment.

Those that reach for the stars will do so from the Lone Star State.

Summary

The global space economy is entering a period of explosive growth, projected to triple to $1.8 trillion by 2035. In the U.S., the private space sector already supports over 370,000 high-paying jobs and continues to expand as commercial players redefine what it means to “work in space.” Over the next decade, it could add $428 billion in value and 300,000 new jobs.

History shows what happens when one region builds the workforce first: California’s universities fueled the internet revolution. Today, Texas can power the space age by aligning education, credentials, and industry around shared goals.

But, to chart the future we first had to measure today’s demand. This analysis takes a bottom-up look at the U.S. space workforce by examining 5,000 active job postings from 27 leading employers (August 2025). This bottom-up approach was necessary because the space economy still exists outside the boundaries of traditional “top-down” labor metrics.

Our analysis shows a sector in transition. The “rocket scientist” ideal is giving way to a skills-based ecosystem where certifications, standards, and technical expertise define opportunity. Jobs are clustering in states with strong aerospace ecosystems, and California now holds one-third of aerospace jobs and half of new openings in the top five states. Nearly half of entry-level roles require only a high school diploma, yet many remain unfilled due to a shortage of industry-ready skills. One-third of postings prefer technical certificates, and nearly half offer tuition reimbursement. Clear signs that employers are investing directly in training as education systems lag behind.

For some space companies, the shortage of skilled workers is so acute that they have begun building their own talent pipelines directly into high schools and post-secondary programs. Yet these organic workforce initiatives are typically one-off efforts that must be recreated by each employer facing similar shortages—they simply do not scale.

For Texas, this represents a generational opportunity to capture a major share of the $420 billion space economy and the more than 300,000 high-wage jobs. If Texas can align its educators and industry around shared standards and credentials through a coordinated statewide workforce pipeline, it can turn today’s skills gap into a strategic advantage. The state’s network of community colleges, technical schools, and training centers provides the foundation to lead a new era of workforce innovation.

The space economy stands at an inflection point. Growth follows alignment and the states that connect education, credentials, and employers will define the next era of American space leadership.

Just as Silicon Valley became the launchpad for the digital era, Texas can be the launchpad for the space era: **Those who reach for the stars will do so from the Lone Star state.**

The Space Workforce Incubator for Texas

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