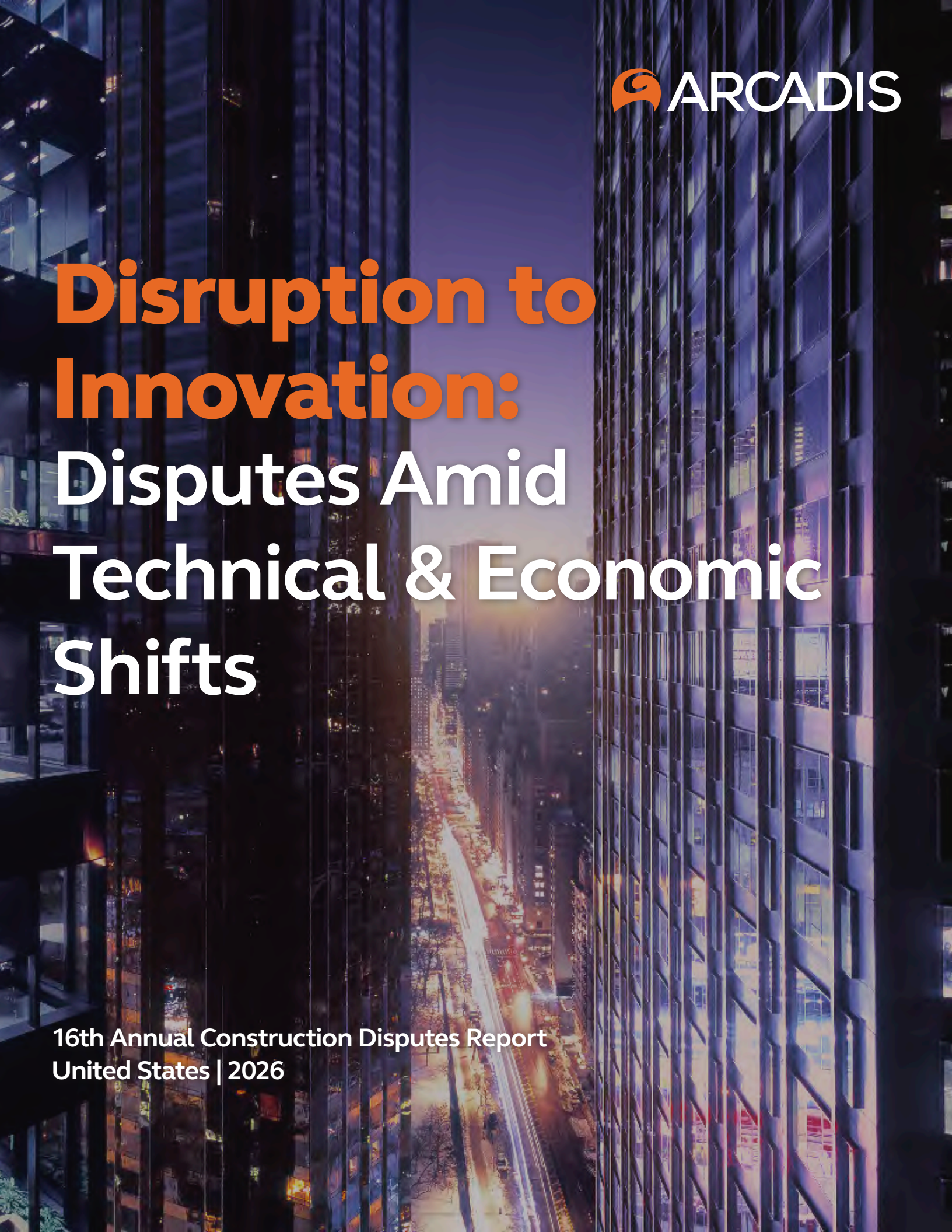


ARCADIS

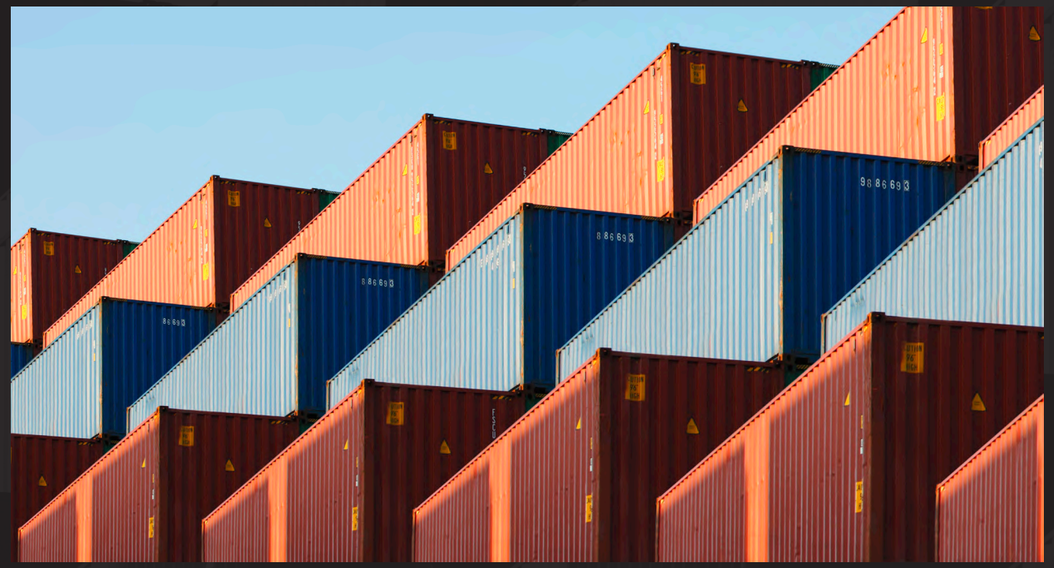
Disruption to Innovation: Disputes Amid Technical & Economic Shifts

16th Annual Construction Disputes Report
United States | 2026

Disruption to Innovation:
Disputes Amid Technical & Economic Shifts

The construction industry continues to operate in an environment defined by disruption—economic uncertainty, accelerating technology adoption, and increasing project complexity.

Findings from the 16th Annual Construction Disputes Survey indicate that while average dispute values and durations have moderated slightly, respondents expect more disputes in 2026, driven by contractual non-compliance, document quality issues, and delays. At the same time, owners, contractors, and advisors are increasingly investing in digital tools, artificial intelligence, and collaborative processes to manage risk. This year's report explores how innovation is helping parties in dispute to resolve issues more effectively, but this innovation also creates its own challenges if not properly implemented. Regardless of the new tools available, disciplined fundamentals remain essential amid rapid change.



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We define construction disputes as...

A disagreement in which two parties, typically the owner and the contractor, differ in the assertion of a perceived contractual right, resulting in a determination issued by the owner in accordance with the process specified in the contract. If the determination is disputed by the contractor, the matter becomes a formal dispute. The value of a dispute is the claimed value of additional work or event as asserted by the contractor. The length of a dispute is the duration between when the claim is formally submitted under the contract and the time of resolution or the conclusion of the hearing.

Introduction

Welcome to the 16th Annual Arcadis Construction Disputes Report: *Disruption to Innovation: Disputes Amid Technical & Economic Shifts*. The industry is managing heightened uncertainty while accelerating innovation in project delivery, contract administration, and dispute management.

Results from the 16th Annual Construction Disputes Survey show a market that is adapting but still under strain. Most respondents experienced more disputes in 2025 and even more expect volumes to increase in 2026. Although average dispute values and durations moderated slightly, respondents continue to cite familiar, fundamentals-driven triggers: contractual non-compliance, errors and omissions in contract documents, delays, and owner-directed changes. The message is consistent—disruption has not replaced the need for disciplined project controls; it has raised the stakes when those controls are weak.

Market conditions continue to add pressure. Respondents pointed to labor shortages and skills gaps, financing uncertainty, tariffs, material cost volatility, regulatory delays, and increasing project complexity, often compounded by tighter schedules and higher sustainability and permitting expectations.

When our 16th Annual Construction Disputes Survey was released in early February 2026, the current situation in the Middle East had not started. But it is important to note that geopolitical instability, including the ongoing issues involving Iran—can quickly further disrupt projects through energy-price volatility, sanctions and compliance constraints, and higher shipping and insurance costs that affect the availability, lead times, and pricing of internationally sourced or fuel-intensive materials. In this environment, incomplete designs, constrained procurement, and accelerated delivery targets can quickly translate into claims when governance, documentation, and communication fall short.

Innovation is increasingly positioned as both a solution and a stressor. Many organizations are beginning to incorporate AI into project management, scheduling, and claims analysis, while broader digital platforms aim to centralize records and improve transparency. These tools can strengthen decision-making and dispute avoidance, but uneven adoption, poor data quality, and unclear contract language around digital deliverables can create new friction. Consistent with prior years, respondents emphasized that good communication, thorough contract and specification reviews, and accurate, timely schedules remain the most effective foundations for avoiding and resolving disputes—even as technology changes how teams execute them.

This year's report explores how the industry can balance disruption with discipline—leveraging innovation to manage risk while reinforcing the contractual, procedural, and human fundamentals that ultimately determine project outcomes. Summary findings include the following:

- Dispute activity is increasing, with a majority of respondents reporting more disputes in 2025 and three-quarters expecting further increases in 2026.
- Failure to understand or comply with contractual obligations and errors or omissions in contract documents remain the leading causes of disputes, followed closely by delays and time extensions.
- Despite higher dispute volumes, both average dispute duration and average dispute value declined slightly year-over-year, indicating modest efficiency improvements.
- Transparent communication, willingness to compromise, and accurate, timely schedules are consistently identified as the most effective tools for claims avoidance and early dispute resolution.
- AI adoption is emerging but still early-stage, with most organizations just beginning to apply AI to claims analysis, planning, scheduling, and cost and risk management.

We appreciate your feedback on the survey and your comments on the report. Please feel free to contact us with any additional feedback.

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Guest Foreword

Anthony D. Lehman

Hudson Lambert Parrott, LLC, Partner
Chair, ABA Forum on Construction Law

As the Chair of the American Bar Association Forum on Construction Law, I now have the honor of providing the foreword to Arcadis' **16th Annual Construction Disputes Report, *Disruption to Innovation: Disputes Amid Technical & Economic Shifts***. Construction professionals anticipate this vital and insightful publication, as its results provide a broad-based look into where construction professionals see the industry heading each year with respect to dispute resolution. Last year, respondents to the survey predicted correctly that they would see more disputes in 2025 than 2024. This year's survey respondents echoed that prediction with an even larger percentage of respondents believing that disputes are going to be on the rise. In many respects, the issues that respondents see as their major challenges are ones that reflect challenges in the economy as a whole—labor shortages and skills gaps, financing and economic uncertainty, and material cost volatility tied to tariffs. While it is now cliché to say that business leaders must be comfortable being uncomfortable, what the results of this year's Arcadis report show is that upheaval and disruption caused both by technological advances and government actions are causing increasing discomfort for all involved.

On behalf of the ABA Forum on Construction Law, we thank Arcadis profusely for its continued efforts in serving the construction industry through this report. Its commitment to drafting the survey, identifying the key issues driving disputes in construction, and keeping all construction industry stakeholders informed regarding where we have been and where we are going is a vital service to all of us. Construction industry professionals do not seek out disputes—this is evident through the massive investments in time and resources to negotiate contracts and communicate on projects in an effort to avoid disputes. Despite this effort, the fundamental issues causing disputes seemingly remain the same—failures to understand and comply with contractual obligations, contract documents with errors and/or omissions, owner-directed changes to the project, differing site conditions, and other issues causing delay or disruption cycle are cited regularly every year as the most common dispute causes. This report by Arcadis highlighting these issues helps remind all of us in construction law that the work to draft easily understood contract clauses matters. As construction lawyers in the Forum, we share Arcadis' mission: helping construction companies and owners create better projects with fewer disputes. The Forum is committed to providing attorneys, professionals, and industry participants with the education and resources they need to be better lawyers; we hope that you will attend a Forum conference in the coming year to see how the Forum can help you. Together, through education, and efforts like this exceptional report by Arcadis, we hope to shape a more informed, agile, and resilient construction community.

Disruption, Pressure, and Progress: Navigating Construction's New Reality

Project conditions are rapidly changing. The construction industry finds itself at a crossroads, facing challenges on multiple fronts. Technological breakthroughs and shifting economic conditions are transforming how projects are planned, executed, and managed. Construction professionals must rethink their approaches to maintain productivity, control risks, and resolve disputes effectively. Moreover, as we publish this report, the 2026 Iran conflict has disrupted global energy markets, spiking oil prices and increasing construction material costs like steel, cement, and fuel worldwide. Heightened geopolitical volatility and market uncertainty from the conflict's uncertain duration will likely continue to impact the construction market.

The challenges are clear and varied. Supply chains, once reliable, now experience frequent interruptions, leading to costly delays as materials become scarce or late. Skilled labor shortages further strain timelines, forcing teams to compete fiercely for talent. Economic uncertainty—marked by inflation and unpredictable tariffs—adds pressure to project teams striving for success. Meanwhile, evolving sustainability and safety regulations demand rapid adaptation to meet new standards. This turbulent environment calls for more than just resilience, it demands agility and innovation.

Claims and disputes are evolving as well. These challenges also trigger claims and disputes as disagreements arise around scope, timing, and costs. The industry is responding by using AI to improve contractual clarity and increasing use of project delivery methods which are based on collaboration, shared risk and transparent communication.

What are the strategies and solutions? Forward-looking owners, designers and contractors are turning to technology and fresh methodologies to navigate these challenges. Digital transformation sits at the heart of this shift. Artificial intelligence (AI) and data analytics help forecast risks, optimize scheduling, and anticipate maintenance needs, turning data into actionable insight. Drones and IoT sensors monitor sites continuously, improving safety and asset management. Tools like Building Information Modeling (BIM) enhance collaboration by providing a shared, real-time project view that reduces errors and enables strategic scenario planning.

Alongside digital tools, modern methods of construction are gaining ground. Off-site prefabrication and modular construction accelerate timelines, minimize on-site disruption, and improve quality. These approaches also reduce waste, contributing to more sustainable and efficient projects.

When disputes do emerge, project teams are turning more and more to alternative dispute resolution methods such as mediation and early neutral evaluators to efficiently and effectively resolve disputes. Technology also supports dispute management by maintaining accurate, accessible digital records and employing AI to identify potential issues early, enabling proactive intervention.

Looking ahead, the fusion of innovation and robust dispute resolution is reshaping construction's future. Companies that embrace digital tools, foster open collaboration, and modernize their practices are proving more capable of weathering economic and technical storms. By managing disputes proactively, they protect relationships and safeguard project value. Through technological innovation and smarter dispute management, the industry is positioning itself not only to survive but to thrive amid ongoing change.

Overall Findings

It is noteworthy that both the average value of disputes and average time taken to resolve disputes decreased marginally from 2024 to 2025 as the industry continues to embrace digital technology. However, the average value of disputes remains at near post-COVID historic highs.

A majority of survey respondents experienced challenges due to workforce shortages and skill gaps, financing & economic uncertainty, and price volatility. Overall, our respondents handled more disputes in 2025 than in 2024, and we expect this to increase in 2026. As noted in the introduction, this year's report highlights the growing pressure, complexity, and uncertainty facing the construction industry, reinforcing the need for stronger project controls alongside evolving approaches to delivery and dispute management.

Most of our respondents this year reported increased dispute activity.

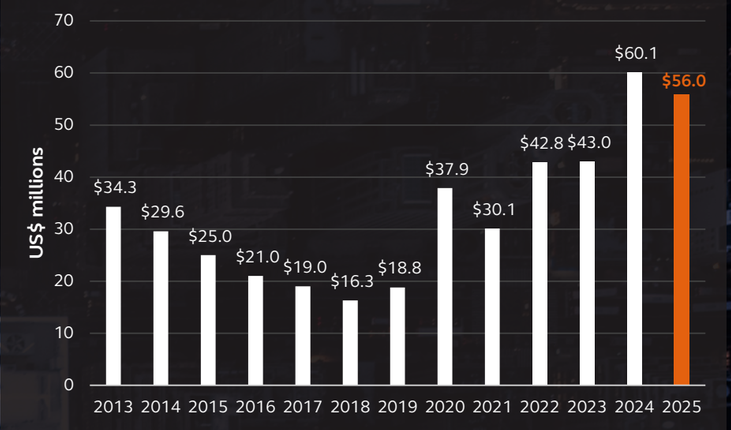
The highest value dispute reported by the respondents was

US$100 million

The average value of disputes decreased marginally to

$56.0 million

▼ 6.82%

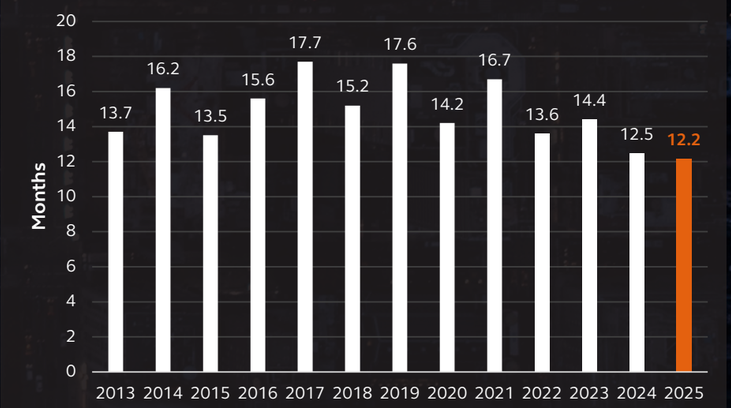


Average Dispute Value

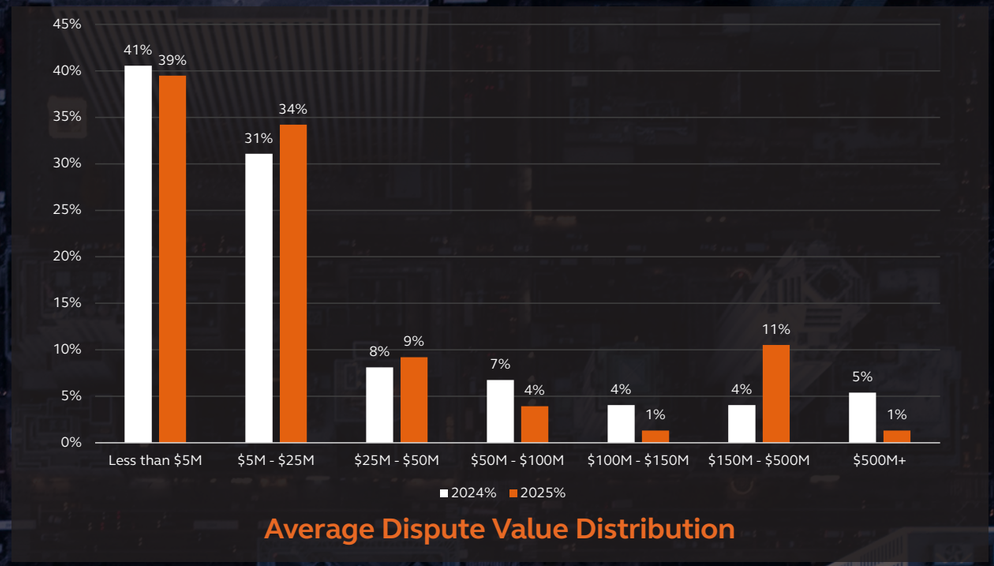
The average length of disputes decreased marginally to

12.2 months

▼ 2.40%



Average Dispute Length



Average Dispute Value Distribution

Overall dispute cause

2025 Rank		2024 Rank
1	Owner/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	2
2	Errors and/or omissions in the contract documents	1
3	Delays and Time Extensions	*unranked*

Most effective claims avoidance techniques

2025 Rank		2024 Rank
1	Good communications	2
2	Contract and specification reviews	1
3	Risk management	3

Most important factors in the mitigation/early resolution of disputes

2025 Rank		2024 Rank
1	Transparent communication and Owner/contractor willingness to compromise	1
2	Accurate and timely schedules and reviews by project staff or third parties	2
3	Contractor transparency of cost data in support of claimed damages	3

United States

In 2025, the construction industry was balancing a strong pipeline of infrastructure and energy work with uneven economic conditions, tighter financing, and continued pressure on labor and materials. Looking into 2026, owners and contractors were preparing for sustained volatility—particularly around tariffs, procurement lead times, and regulatory requirements—making disciplined planning, transparent project controls, and faster issue resolution increasingly essential.

Findings from the 16th Annual Construction Disputes Report (CDR) survey underscore a market that is growing more complex—and, in many cases, more contentious. While respondents point to continued momentum in capital programs (with half anticipating moderate growth in 2026), they also cite persistent delivery pressures that are reshaping how projects are procured, managed, and ultimately argued. Labor shortages and the skills gap, financing and economic uncertainty, and tariffs and material-cost volatility stand out as leading challenges, alongside increasing project complexity, regulatory and permitting delays, environmental and sustainability requirements, and technology adoption gaps. In that environment, **disputes are not an outlier—they are an increasingly predictable byproduct of strained schedules, constrained resources, and heightened stakeholder expectations.**

The CDR survey results suggest that dispute volumes are trending upward: a majority of participants reported seeing more disputes in 2025 (57.9%), and three-quarters expect the number of disputes they handle to increase again in 2026 (75%). At the same time, the data indicates that the cost and duration profile of disputes remains significant. Respondents reported an average dispute length of 12.16 months and an average dispute value of US$56 million. Even marginal year-over-year changes in these figures represent meaningful exposure when multiplied across large portfolios—particularly on complex programs where a single unresolved issue can cascade into schedule impacts, financing complications, and contractor capacity constraints.

When respondents ranked the most common sources of contract disputes, the answers emphasized fundamentals: parties failing to understand or comply with contractual obligations, errors and omissions in the contract documents, and delays and time extensions were among the most frequently cited drivers, followed closely by owner-directed changes and differing site conditions. Importantly, the survey also highlights what practitioners believe works. “Good communications” ranked as the most effective claims-avoidance technique, with contract/specification reviews and risk management close behind. For mitigating or resolving disputes early, respondents again prioritized transparent communication and a willingness to compromise, supported by accurate schedules, cost transparency, and clear change-order procedures. This direction of travel aligns with broader shifts in practice: over half of respondents reported participating in alternative dispute resolution (ADR) in the past year (54%), and many are beginning to incorporate AI into project management (57%), including for claims/disputes preparation and analysis. Taken together, the 2026 16th Annual CDR survey results frame the central imperative for 2026: combine speed in decision-making and resolution with agility in contracting and project controls—so inevitable change does not become avoidable conflict.

How Key Construction Sectors Are Navigating 2026

Sectors Overview

The construction industry in 2025 was impacted by a mix of factors including persistent material cost volatility and an evolving regulatory landscape. With the start of the Iran war in February 2026, further uncertainty was injected into global energy prices and supply chain stability. While the full economic effects remain uncertain, the construction sector has responded with increased caution.

In the following sections we will review the impact of different factors across key sectors including industrial manufacturing, technology, building, transportation, environmental, and energy, and we will outline expectations for what lies ahead.

Despite the distinct challenges and opportunities in each sector, all are grappling with at least one shared challenge: a deepening shortage of skilled workers. The following paragraphs examine this worker shortage in more detail, providing essential context for understanding one of the key challenges facing the industry.

In December 2025, the number of unfilled construction job openings was listed at 292,000 according to the Bureau of Labor Statistics (BLS), 87,000 higher than the number of openings reported in December 2024. This shortage is compounded by an aging workforce, with over 20% of workers above 55 years old nearing retirement and insufficient younger talent entering the field. Meanwhile, through 2034 the skilled labor need is expected to grow faster than overall occupational growth (3%), electricians (9.5%), HVAC techs (8.1%), general construction (6%).

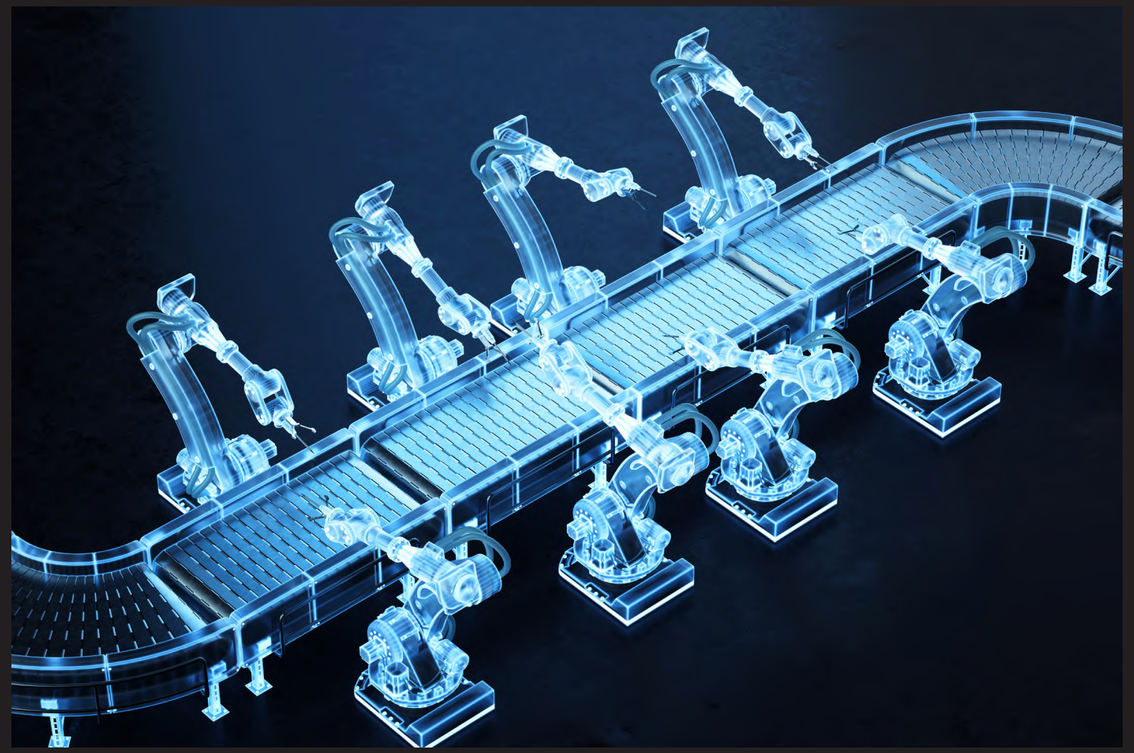
The industry has not met its needs with respect to skilled workers. Based on anticipated construction spending at the start of 2025, the industry needed to add 439,000 new workers to meet demand according to Associated Builders and Contractors (ABC) chief economist Anirban Basu; however, revised BLS numbers indicate only 14,000 new workers were added in all of 2025, down from 196,000 in 2024.

The result is that 92% of construction companies reported a difficulty in hiring for open positions, according to AGC's workforce survey.

The result is that 92% of construction companies reported a difficulty in hiring for open positions, according to AGC's workforce survey. These shortages have been exacerbated by stricter immigrant enforcement, based on anecdotal reports from home builders. These shortages are beginning to impact project delivery, as 45% of survey respondents reported project delays resulting from the worker shortage. Craft worker positions and superintendents were noted as among the most difficult positions to fill. Despite the challenges, 63% of firms reported planning to add workers in 2026, indicating the demand for these workers will stay high.

With demand high, construction wages grew in 2025. Hourly wages in construction increased 4.7% in 2025, compared to 3.8% for the total private sector according to AGC chief economist Ken Simonson. According to Federal Reserve Economic Data (FRED), the average construction worker earns $40.44 hourly, which is 9% more than the average private-sector employee ($37.02 hourly).

Relief may be coming. According to a report from Jones Lang LaSalle IP, a "generational shift" in career choices is beginning to take shape: Teenagers self-report an increase in interest in vocational and technical programs from 12% in 2018 to 38% in 2024. There are many steps that can be taken to address workforce challenges. Continued wage growth should also be a powerful draw to potential workers. Furthermore, strategic recruitment efforts, including partnerships with technical institutions, can help alleviate skilled labor shortages that frequently disrupt project timelines.



Industrial Manufacturing

Disputes and Challenges in 2026 Industrial Manufacturing Construction Projects

In 2026, overcoming disputes and challenges in industrial manufacturing construction projects requires a proactive and integrated approach that addresses the root causes of conflicts and operational hurdles. One of the primary steps is strengthening contract management by ensuring that contracts are clear, comprehensive, and detailed. This includes explicitly defining the project scope, deliverables, payment terms, and procedures for managing changes. Regular contract reviews with all stakeholders help prevent misunderstandings, while incorporating dispute resolution clauses, such as mediation or arbitration, facilitate quicker and less costly conflict resolution.

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Labor and Workforce Conflicts

Addressing workforce challenges is equally important. Investing in continuous training and development equips workers with the skills needed to handle new technologies and adhere to safety protocols, thereby improving productivity and reducing errors. Maintaining open and constructive communication with labor unions and workforce representatives helps identify and resolve concerns early, preventing labor disputes. Furthermore, strategic recruitment efforts, including partnerships with technical institutions, can help alleviate skilled labor shortages that frequently disrupt project timelines.

Technological Integration

The thoughtful integration of advanced technologies also plays a crucial role in overcoming project challenges. Industry 4.0 is also known as the fourth industrial revolution that includes “smart factories” which means the integration of intelligent digital technologies into manufacturing and industrial processes. By conducting pilot programs for Industry 4.0 technologies, project teams can identify potential issues before full-scale deployment. Collaboration among IT, engineering, and construction teams ensures smooth technological adoption, while ongoing training helps workers and managers stay proficient with new tools and processes.

Regulatory Compliance

Navigating regulatory compliance can be streamlined by engaging regulatory bodies early in the project planning phase to clarify requirements and expectations. Assigning dedicated compliance teams to monitor environmental and safety regulations throughout the project lifecycle ensures continual adherence. Additionally, integrating sustainability planning into project design aligns with evolving regulations and community expectations, helping avoid costly delays and redesigns.

Supply Chain Disruptions

Supply chain resilience is enhanced through diversifying suppliers to reduce dependency on single sources and maintaining inventory buffers for critical materials. Implementing real-time monitoring systems enables project managers to track shipments and anticipate disruptions, allowing for timely adjustments that mitigate schedule impacts.

Project Management Complexity

Finally, improving project management practices is essential. Utilizing collaborative digital platforms fosters better communication and documentation among geographically dispersed teams. Establishing a comprehensive risk management framework enables ongoing identification and mitigation of potential issues. Frequent stakeholder alignment meetings ensure that all parties remain committed to shared project objectives, reducing the likelihood of conflict.

Conclusion

By adopting these strategies, strengthening contracts, enhancing workforce relations, integrating technology carefully, proactively managing compliance, reinforcing supply chains, and improving project management, industrial manufacturing construction projects in 2026 can effectively overcome disputes and challenges. This holistic approach supports smoother project execution, cost control, and successful delivery in an increasingly complex and fast-evolving industry environment.

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Technology

The United States is in the midst a defining era for the construction industry—one driven by the rapid build-out of our digital and industrial future. As AI, cloud computing, and semiconductor reshoring accelerate, the nation faces an unprecedented demand for new data centers and semiconductor fabrication facilities. These assets are fast becoming the backbone of the modern economy.

The United States is entering a defining era for the construction industry—one driven by the rapid build-out of our digital and industrial future.

While the need for these facilities is clear and the development and contracting industries are ready to respond, they face significant challenges unique to the U.S. market. Labor shortages, supply chain constraints, and the limitations of an aging, deficient power grid all threaten to impede progress. Understanding these pressures—and the metrics that will determine future success is essential for navigating the rapidly evolving technology sector.

Accelerated Growth and Unprecedented Demand

Federal initiatives, such as the CHIPS Act, are now translating into real-world projects at breakneck speed. The U.S. Department of Commerce has finalized or proposed multi-billion-dollar awards to leading companies including TSMC, Intel, Samsung, Nvidia, Micron, and others. Meanwhile, AI data centers are scaling to unprecedented levels, with market trackers reporting that pre-leasing of these facilities is outpacing available capacity. Given this unprecedented demand, the technology sector is experiencing record-setting contracts often referred to as mega projects.

Capacity Strains and Dispute Risks

For the legacy construction industry, this fast-paced growth is straining overall capacity. Challenges such as project delays and cost overruns are all too common, often leading to disputes between contracting parties. Arcadis' previous Construction Dispute Reports have identified contractual ambiguities, scope creep, and cascading change orders as leading causes of these conflicts. In this high-speed environment, crucial design development and integration often result in contested cost escalations and scheduling disputes.

Key Recommendations for Owners and Developers

To minimize project disruptions and position themselves for success, owners and developers in the technology sector should:

- Recognize Utility Constraints Early - The current U.S. power grid is aged and deficient, posing a significant risk of schedule delays.
- Integrate Water Availability and Community Relations into Project Planning - Local communities are increasingly rejecting mega projects; early engagement is crucial.
- Rethink and Update Contracts for 2026 Realities - Transparency and timeliness are essential; contract terms should reflect current market conditions.

- Address Workforce Pipelines - Skilled labor shortages, particularly in MEP (mechanical, electrical, and plumbing) trades, must be factored into productivity schedules.
- Account for Escalation Factors and Build in Contingencies - Fluctuating tariffs and other "known-unknowns" must be recognized, and sufficient contingencies included. The era of the guaranteed maximum price contract may be ending for this sector.

Embracing Innovation Amidst Challenges

The technology sector is thriving, but it is not without significant hurdles. Construction disputes remain a major challenge. Construction disputes have long been costly, document heavy, and slow to resolve. In 2026, however, a wave of technologies—led by AI, data rich digital evidence, and virtual proceedings—is speeding outcomes while improving transparency and consistency. Digital evidence has matured from "nice to have" to decisive. AI assisted eDiscovery and large language model review compress weeks of document analysis into days, cutting costs by as much as 85% and allowing teams to sift through tens of thousands of emails and reports with far greater speed. The most visible change is the rise of AI as dispute resolution infrastructure. Leading institutions are deploying AI for case intake, panelist matching, clause drafting, and workflow efficiency, which shortens timelines and reduces administrative friction. In construction specifically, the International Centre for Dispute Resolution (ICDR), the international division of the American Arbitration Association, has introduced an AI powered arbitrator for documents only, low value cases: a human in the loop system trained on hundreds of reasoned awards to generate fast, explainable draft decisions—an opt in pathway designed to cut cost and delay. Beyond case management, AI tools now analyze contracts, correspondence, and schedules to flag risks and predict likely outcomes, building on research showing AI's high alignment with prior adjudicated decisions.

In 2026, however, a wave of technologies—led by AI, data rich digital evidence, and virtual proceedings—is speeding outcomes while improving transparency and consistency.

Conclusion

The current trends in Construction Back Logs continue to expand in this sector. In this next phase of technology and industrial expansion, market leaders will be defined by their ability to anticipate constraints, allocate risk strategically, and modernize project and dispute-resolution practices to deliver with confidence.

Buildings

In 2025, the U.S. construction landscape was defined by sharp contrasts. While total construction spending declined by 1.4% compared to the previous year, data center construction surged ahead, posting an impressive 32% year-over-year increase according to the U.S. Census Bureau. That single statistic underlines the contrast: while the sector appears stable overall, nearly all the gains are in a small population of projects.

While total construction spending declined by 1.4% compared to the previous year, data center construction surged ahead, posting an impressive 32% year-over-year increase according to the U.S. Census Bureau.

In 2025, data center construction became the largest single source of growth in new building construction revenue, with one in eight Associated Builders and Contractors (ABC) members reporting data center contracts. The Engineering News-Record (ENR) noted that new domestic contracts of Top-400 contractors jumped 14.4% to $588 billion, a leap they largely attributed to the data center boom. This growth also contributed to critical shortages of transformers and switchgear, as electrical equipment was funneled toward these high-demand projects.

Material Costs

Beneath the headline growth in data centers, 2025 saw tariff volatility and cost pressures ripple through the industry. The Producer Price Index (PPI) for new nonresidential construction (what contractors would charge for a set building) rose 1.7% for the year. This figure was driven by double-digit material price increases:

- Aluminum mill shapes (used in curtain walls, windows, and suspended ceilings): up 30.5%Copper wire and cable: up 22% Steel mill products: up 17%

Overall, non-residential construction input prices climbed 3.2%. Given total building construction spending in 2025 of approximately $1.5 trillion, even a 3% increase means roughly $45 billion in added project costs.

Workforce Shortage and Escalating Labor Costs

The building construction sector needs to attract around 200,000 workers in 2026 to meet expected demand for construction services. Given that the recent building sector growth has been almost exclusively in data centers, many of these new workers will likely be needed in the electrical and mechanical fields. Fields in which the shortages have been most acute. While exact figures can be difficult to know, ABC reported in January 2026 that non-residential specialty trade contractors (a good portion of which are electrical and mechanical) had added 95,000 jobs since August 2024. The takeaway is that the U.S. needs more construction workers.

Looking forward, leading indicators—including the Architecture Billings Index, the Dodge Momentum Index (excluding data centers), construction job openings, and hiring rates—all pointed to a sector either shrinking its workforce or holding employment steady at best.

Conclusion

The 2025 construction market was a story of divergence and risk. Data center projects powered the sector to stability, masking widespread contraction elsewhere and intensifying competition for scarce labor and remaining materials. Meanwhile, surging and sagging tariffs on metals created unpredictability, increasing material costs and further compressing contractor margins. With labor and materials together making up the lion's share of project costs, these forces combined to make 2025 a year where strategic focus and risk management were more critical than ever for industry survival and success.

Data center projects powered the sector to stability, masking widespread contraction elsewhere and intensifying competition for scarce labor and remaining materials.

Transportation

Transportation Infrastructure Construction Challenges and Disputes in 2026

Transportation infrastructure construction in 2026 faces a convergence of significant challenges driven by labor shortages, escalating costs, regulatory pressures, and technological disruptions. These factors are contributing to increased disputes and project delivery risks across the sector.

Chronic Labor Shortages and Workforce Issues

The industry is grappling with an acute shortage of skilled workers. This shortage is compounded by an aging workforce, with over 20% of workers above 55 years old nearing retirement and insufficient younger talent entering the field. Stricter immigration enforcement has further reduced available labor, causing work stoppages in nearly one-third of construction firms. Rising workers' compensation claims, including mental health issues, are also adding regulatory and scheduling challenges.

Transportation infrastructure construction in 2026 faces a convergence of significant challenges driven by labor shortages, escalating costs, regulatory pressures, and technological disruptions.

High Costs, Tariffs, and Supply Chain Volatility

Persistent inflation and tariffs have kept material prices for steel, concrete, lumber, and logistics at elevated levels, squeezing profit margins. Trade policy uncertainties have prompted firms to pre-position materials, but supply chain unpredictability continues to cause delays and disputes. Diversifying sourcing and adopting contract escalation clauses are critical measures to manage these risks.

Regulatory, Environmental, and Safety Pressures

New environmental regulations require mandatory embodied carbon reporting and waste diversion rates above 75% for public projects, increasing complexity and cost. Work zone safety still has high fatality rates that need enhanced enforcement, speed controls, and positive separation strategies. Climate change effects, such as extreme weather, cause frequent work stoppages, especially in the Southwest, impacting project timelines.

Multiple Conflicts and Disputes

The integration of AI and Building Information Modeling (BIM) technologies has outpaced contract modernization, leading to disputes over data ownership and cybersecurity. Additionally, funding conflicts, exemplified by withheld federal funds on major projects like the Hudson Tunnel, the Second Avenue Subway in New York City, Gateway program and force majeure claims related to labor and material shortages are becoming more common.

Funding and Project Delivery Challenges

Focus has shifted toward repairing aging infrastructure, which requires complex and often undocumented repairs. Economic uncertainty and tighter financing have caused some projects to be delayed or cancelled. Additionally, competition for specialized labor and materials from emerging sectors like data center construction strains resources further.

The transportation infrastructure sector must adopt innovative, technology-driven, and collaborative approaches to overcome multidimensional challenges in 2026.

Overcoming Challenges

To navigate these challenges, stakeholders should leverage digital technologies (BIM, AI, Digital Twins) for improved design, risk prediction, and simulation; employ conservative budgeting with inflation adjustments and contractual clauses to handle material cost fluctuations; use early alternative dispute resolution and forensic engineering to minimize litigation; enhance workforce development and retention, and diversify supply chains; and engage stakeholders early to align project goals and reduce delays.

Conclusion

The transportation infrastructure sector must adopt innovative, technology-driven, and collaborative approaches to overcome multidimensional challenges in 2026. Proactive risk management and digital transformation will be key to reducing disputes and ensuring successful project delivery.

Environmental

The most significant market force in environmental construction today is the rapid expansion of PFAS (per- and polyfluoroalkyl substances) remediation work. On September 17, 2025, the Trump EPA announced it would retain the Biden-era designation of PFOA (Perfluorooctanoic acid) and PFOS (Perfluorooctanesulfonate) as hazardous substances under CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act. Also known as Superfund): cementing strict, enforceable liability for polluters and utilities. The agency's decision to defend this rule in court signals welcome long-term regulatory stability, despite political turnover.

The renewed focus on "polluter pays" liability under CERCLA means contracts must be carefully drafted to address risk allocation, indemnification, and insurance. With significant sums at stake, ambiguities in scope or responsibility could quickly escalate into litigation.

The most significant market force in environmental construction today is the rapid expansion of PFAS (per- and polyfluoroalkyl substances) remediation work.

This designation has become the legal and financial backbone for a multibillion-dollar construction market. Utilities and municipal water systems are investing heavily in PFAS treatment plants and related source-control work. The combination of high, per-site project values, available public financing, and strict liability regimes is concentrating opportunities among well-capitalized contractors and firms with hazardous waste expertise.

Market Snapshot

The PFAS remediation market was valued at $1.23 billion in 2025 and is projected to reach $2 billion by 2030—a 10.2% compound annual growth rate, according to the Associated General Contractors of America.

Just as PFAS work accelerates, the EPA's proposed FY2026 budget introduces extraordinary funding uncertainty. The agency proposes a staggering 54% cut from FY2025, slashing total funding from $9.14 billion to $4.16 billion. Water infrastructure programs are hit hardest, with nearly 90% reductions across Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act (WIFIA).

Projects impacted by funding cuts could experience delays to work or payments. If funding dries up more generally, we might expect to see an increase in bid award challenges, especially on larger projects.

Drinking water decontamination is not the only remediation work being scaled back, the effort to clean up America's most polluted sites is also being wound down. EPA funding for the Superfund program is set to be reduced by $254 million in FY2026. Of particular note for construction executives is the proposed elimination of Superfund Remedial program appropriations, with the administration arguing that newly reinstated Superfund taxes from the Infrastructure and Investment Jobs Act and Inflation Reduction Act will allow the Superfund Remedial program funding to be eliminated entirely. These proposals remain in congressional review, but the message is clear: the pipeline for state-funded and federally matched projects is now fraught with uncertainty.

Addressing Known Risks

Firms should track appropriations and have a plan for the risk that federal money may stall or vanish mid-project. Escalation clauses, termination for convenience, and funding verification are becoming essential contract features.

Environmental construction in 2026 will be defined by both growth and volatility.

Despite budget cuts, the EPA under Administrator Zeldin is signaling an intent to accelerate Superfund cleanups. The agency is shifting resources from study and research phases toward direct remediation, aiming to "expedite every timeline possible." It remains to be seen if expediting every possible timeline will result in problems generally associated with accelerating work; issues such as failure of due diligence, incomplete design, compliance issues, etc.

Environmental lawyers warn that eliminating or abbreviating research phases could heighten legal, technical, and reputational risks for contractors and project owners. Incorrect site characterization under Superfund can lead to failed remediations, re-opened liability, and years of litigation. With 1,340 Superfund sites, many in residential areas, impacting nearly 78 million Americans, the scale is quite large.

Conclusion

Environmental construction in 2026 will be defined by both growth and volatility. PFAS remediation offers robust opportunities, but only for those prepared to manage complex liability and compliance demands. Meanwhile, the threat of massive EPA funding cuts and a "faster execution, less research" approach to Superfund cleanups pose real risks: contractual, financial, and possibly reputational.

Energy

Construction Delays and Disruptions in the U.S. Energy Sector

The United States energy sector is experiencing an unprecedented period of expansion, driven by federal investment and rising electricity demand, particularly for data center projects. Yet despite this momentum, construction delays and disruptions continue to challenge the delivery of generation, transmission, and storage infrastructure nationwide. These delays are largely rooted in supply chain strain, skilled labor shortages, rising material costs, and prolonged permitting cycles—factors that have reshaped U.S. project planning from late 2025 into early 2026.

A primary source of disruption across American energy projects is the persistent volatility in the supply chain. The U.S. construction sector is entering 2026 already challenged by lingering inflation, long lead times, and elevated materials pricing. Industry reports show that supply chain pressures remain central concerns, affecting energy infrastructure alongside other major construction segments. Federal spending under the Infrastructure Investment and Jobs Act (IIJA), the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act, and the Inflation Reduction Act (IRA) has stimulated enormous demand for grid upgrades, manufacturing facilities, and infrastructure projects, further straining procurement pipelines.

> The United States energy sector is experiencing an unprecedented period of expansion, driven by federal investment and rising electricity demand, particularly for data center projects.

These supply chain pressures are especially acute in the construction of electric grid and transmission infrastructure. In particular, the U.S. transformer shortage has emerged as a major bottleneck. Utilities and developers are reporting lead times of up to four years for large power transformers—far exceeding historical norms (Edison Electric Institute, Transformer Supply Chain Update, 2025).

Geopolitical instability combined with new U.S. import tariffs has further strained supply chains across the oil and gas sector. Ongoing conflicts such as the war in Ukraine and the recent military escalation involving Iran continue to disrupt global energy markets, contributing to price volatility, extended lead times, and reduced availability of critical materials (IEA, World Energy Outlook 2025).

In the U.S., the import tariffs introduced in late 2025 on steel, heavy machinery, and specialized drilling and processing equipment are projected to delay major oil and gas developments beginning in 2026. These tariffs have increased capital costs and limited procurement flexibility for operators, particularly those dependent on foreign steel and custom fabricated components (U.S. EIA, Energy Cost and Supply Chain Assessment 2025; Reuters, “U.S. Imposes New Tariffs on Industrial Inputs,” Nov. 2025).

Conclusion

As the United States accelerates toward a more resilient energy future, these construction delays highlight the critical importance of strengthened supply chain management, expanded workforce development, and meaningful permitting reform. Addressing these challenges is essential for delivering the grid modernization, renewable energy capacity, and infrastructure upgrades required to meet national energy transition goals.

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Guest Commentary

Brad Jacob

Senior Vice President and General Counsel at Prevalon Energy

The explosive growth of AI-driven data centers is creating unprecedented demand for electricity in the United States, placing enormous strain on the power generation construction industry. Utilities, independent power producers, EPC contractors, and equipment suppliers are all racing to add generation capacity quickly enough to support hyperscale data center development. This accelerated pace is intensifying long-standing construction risks while simultaneously creating fertile ground for contract disputes involving delays, cost escalation, scope growth, and risk allocation. Industry survey data confirms that labor shortages, financing uncertainty, tariffs, material cost volatility, increasing project complexity, and permitting delays are now among the most significant challenges facing North American construction projects.

Supply chain instability and procurement delays are similarly driving a new generation of construction claims. The data center boom has dramatically increased competition for transformers, switchgear, turbines, generators, breakers, and long-lead electrical equipment, all of which are critical to power generation and transmission infrastructure. At the same time, tariffs, commodity volatility, and global supply chain disruptions continue to increase procurement costs and uncertainty. The survey identifies "Tariffs and Material Cost Volatility" and "Financing and Economic Uncertainty" as leading project risks, while respondents referenced "flooded bid/procurement markets," "war prices," and "limited utility infrastructure/availability" as major project challenges. These conditions are fueling disputes concerning force majeure, price escalation clauses, procurement delays, liquidated damages, and entitlement to change orders. Notably, the survey also identified "interpretation of payment terms" and "liquidated damages" as recurring causes of disputes. On large-scale power projects supporting hyperscale data centers, even minor procurement delays can produce enormous downstream financial consequences because delayed energization may postpone billions of dollars in anticipated computing revenue.

The explosive growth of AI-driven data centers is creating unprecedented demand for electricity in the United States, placing enormous strain on the power generation construction industry.

The increasing complexity and compressed timelines of modern energy infrastructure projects are also contributing to a sharp rise in disputes related to design coordination, contract administration, and scope management. Data center owners often demand aggressive milestone dates because rapid deployment is viewed as strategically critical in the AI race. The survey specifically references "quick milestone deliverables due to urgency from owners," "lack of complete functioning designs provided by Owner," "poor designs," and "scope/spec gaps" as recurring project issues. These issues frequently lead to disputes involving incomplete engineering at notice-to-proceed, design responsibility gaps, sequencing inefficiencies, owner-directed changes, and claims for constructive acceleration. In fact, the survey found that the most common causes of contract disputes in 2025 included failure to comply with contractual obligations, errors and omissions in contract documents, delays and time extensions, owner-directed changes, and differing site conditions. Respondents also highlighted concerns regarding "contract negotiations and allocation of risks on projects of any size and complexity," reflecting a broader industry trend in which owners increasingly seek to transfer schedule, escalation, and procurement risks downstream to contractors and subcontractors through heavily negotiated EPC and construction agreements.

As these disputes become more complex and financially significant, the construction industry is increasingly recognizing the importance of incorporating AI tools and AI-enabled software into project administration, claims avoidance, and dispute resolution processes. The survey found that more than half of respondents are beginning to incorporate AI into project management, while many are already using AI tools for claims and disputes preparation, project scheduling, cost estimation, risk management, and quality control. AI platforms can help contractors and owners identify schedule risks earlier, analyze productivity impacts in real time, detect inconsistencies in contract documents, track change-order trends, and organize massive volumes of project correspondence and cost data that often become central in litigation and arbitration. In highly accelerated power generation and data center projects, where millions of project records may be generated, AI-assisted document review and predictive analytics can significantly improve early risk identification and dispute mitigation. AI tools may also help reduce disputes by improving transparency, forecasting procurement delays, and identifying potential scope conflicts before they materially affect construction progress. As with any AI tool, we still need humans to verify the accuracy of AI output.

In an era defined by explosive AI-driven data center growth and unprecedented pressure on the U.S. power generation construction industry, stakeholders that successfully combine proactive risk allocation, disciplined project administration, and responsible use of AI-enabled project management and dispute avoidance tools will be best positioned to mitigate disputes, control costs, and deliver critical infrastructure on schedule.

Methodology

This research was conducted by the Arcadis United States Contract Solutions team. It is based on the survey results within the construction industry. Only input from the United States was included in the 2026 report.

About Arcadis

Arcadis is the world's leading company delivering data-driven sustainable design, engineering, and consultancy solutions for natural and built assets. We are more than 36,000 architects, data analysts, designers, engineers, project planners, water management and sustainability experts, all driven by our passion for improving quality of life. As part of our commitment to accelerating a planet positive future, we work with our clients to make sustainable project choices, combining digital and human innovation, and embracing future-focused skills across the environment, energy and water, buildings, transport, and infrastructure sectors. We operate in over 30 countries, and in 2023 reported €5.0 billion in gross revenues.

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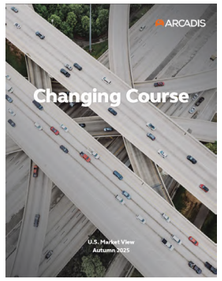

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