

Managing Construction Disputes in the Digital Age

14th Annual Construction Disputes Report
North America | 2024

Managing Construction Disputes in the Digital Age

From 2022 to 2023 the average value of disputes in North America increased by 1% compared to 42% from 2021 to 2022. The increase over the last two years of 43% remains historically high compared to 2021 and earlier. The average time taken to resolve disputes increased 6% and has remained relatively consistent over the last ten years.

This year's report emphasizes the importance of adaptability in avoiding, mitigating and resolving construction disputes in the digital age. Stakeholders are quickly adjusting to rapid technological advancements, including the integration of digital systems into construction projects and the management of digital records. The digital age introduces new complexities and opportunities, requiring the industry to navigate these challenges with innovative strategies and technologies.





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We define a construction dispute 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 14th Annual Arcadis Construction Disputes Report: Managing Construction Disputes in the Digital Age, which reveals key trends and insights into the construction disputes market in North America.

While every dispute is unique, recognizing trends in common causes and tracking statistical averages provides valuable insight into industry issues and can steer project participants toward best practices and away from potential problems. Guided by our experience over the past year and results from our annual industry survey, we are pleased to share our findings regarding current market trends.

Based on our research, the construction industry is experiencing swift transformation as technology progresses in tandem with Environmental, Social, and Governance (ESG) requirements. Innovations like Artificial Intelligence (AI) and other digital platforms have become integral to every sector in the construction industry. Project stakeholders are swiftly integrating these advancements, prompting consideration of whether the industry comprehensively grasps both their advantages and potential drawbacks.

The US Energy Information Administration projects a 12% growth in renewable energy projects, and Yahoo Finance projects a growth in data center construction of nearly 10%, contributing to the industry's upward trajectory. Additionally, the demand for residential and commercial real estate development and infrastructure investment is anticipated to drive a further increase in construction activity. Furthermore, advancements in construction technologies and techniques, such as modular construction and sustainable building practices, are expected to drive efficiency and productivity, further supporting the industry's positive outlook for 2024.

Overall, the predicted growth in the construction industry presents promising opportunities for stakeholders and underscores the potential for a dynamic and thriving market in the coming years.

The report also reveals the following:

- Respondents are anticipating seeing more disputes in 2024 than in 2023.
- Contract and specification reviews moved into the top slot as the most effective dispute avoidance technique.
- Nearly 30% of respondents encountered project impacts due to price escalation and supply chain issues which is consistent with last year's findings.
- The building sector moved into the top slot having the most disputes during 2023.

If you have any feedback or insight that you wish to share, please contact us.



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Guest Foreword

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Chair – Forum on Construction Law, American Bar Association

I am honored to continue the tradition of the Chair of the Forum providing the foreword to the Annual Arcadis Construction Disputes Report. The Report provides the historical and forecasting results for the construction industry to understand and learn how best to assess the nature, type, and resolution methodologies in our ever-evolving industry. The information contained in the Report provides the necessary spark to spur advancements in communication and technology to build innovative and sustainable projects in our environment.

The construction industry faces a swiftly changing environment that requires rapid adaptation to overcome numerous sources of risk, including inflation, skilled labor shortages, complex building systems, sustainability goals, supply chain and price escalation issues. Thankfully dramatic advances in technology through BIM, AI, drones, robotics, LiDAR, wearables and autonomous equipment allow the industry to design and build far more creative and complex projects while monitoring and adapting schedule, scope and cost.

We have all experienced projects where numerous unresolved claims strained relationships and negatively impacted the teams' completion of the project. As mentioned in the Report, each party has a unique role to play in the success of a construction project and must remain vigilant to recognize early issues to mitigate them before they accelerate into massive claims that bog down progress and threaten completion of the project. The Report discusses how contracts should be drafted to include early claim resolution techniques utilizing project neutrals and dispute resolution boards so that the project teams can present issues and receive timely decisions to move the project forward.

The Report highlights that claims typically arise when the project participants do not understand their contractual obligations, are not familiar with how to properly document claims, and the contracts omit alternative resolution techniques. Thorough and coordinated contract language and communications regarding risk allocation are even more important with today's projects. Technology will enhance our ability to design and construct projects but should not be seen as substitution for continuous and collaborative communications.

With predictions of a robust slate of construction projects, communications will be the ultimate key in building the necessary relationships to achieve successful projects with fewer claims and disputes. Success requires timely communications from project managers and schedulers to maintain costs and avoid delays. Technology can assist by mining the numerous data generated on projects, but people must recognize trends, like slips in product delivery schedules, equipment breakdowns or slipped production from labor crews, that lead to claims.

Unfortunately, no matter the size or complexity of the construction project, claims are inevitable. However, successful projects effectively manage those claims before they become out of control and pit the parties against each other. The Report provides an annual review of the industry's efforts to promote communications to resolve claims reminding each of us of our role in the ever-shifting landscape of construction.



“...dramatic advances in technology through BIM, AI, drones, robotics, LiDAR, wearables and autonomous equipment allow the industry to design and build far more creative and complex projects.”



Managing Construction Disputes in the Digital Age:

Harnessing Technology for Effective Resolution

In the digital age, the construction industry is witnessing a transformation in how disputes navigate towards resolution. Technology has brought innovative tools and methods that streamline the analysis of disputed issues, enhance communication, and provide greater transparency.

Managing construction disputes in the digital age requires a combination of advanced technology, collaborative platforms, and adaptable strategies to navigate complexities and ensure successful project outcomes.

Technology has revolutionized how construction disputes are managed, offering a range of digital tools that facilitate efficient communication, data analysis, and documentation management. Artificial Intelligence, cloud-based platforms, and digital collaboration tools have become essential components in addressing disputes and fostering effective resolution.

Digital platforms enable enhanced communication and collaboration among project stakeholders during construction. Cloud-based project management systems, virtual meeting platforms, and real-time messaging applications allow for seamless interaction and information sharing, promoting transparency and alignment among

all the parties. This level of connectivity greatly facilitates the resolution of disputes by ensuring that all stakeholders are on the same page – focusing on the same key questions and answers. This alignment of understanding can only enhance the prospects of resolution.

The digital age has ushered in a new era of data-driven dispute resolution. Project management software and analytics tools provide valuable insights into project performance, timelines, and potential areas of contention. By leveraging data analytics, stakeholders can identify trends, anticipate issues, and make informed decisions to mitigate disputes before they escalate.

Digital platforms offer robust document management capabilities, allowing for the secure storage, organization, and retrieval of project-related documents and communications which not only enhances project management, but also facilitates effective dispute resolution. This transparency

minimizes misunderstandings and ambiguities, providing a clear record of project activities and decisions. In the event of a dispute, easily accessible documentation supports the resolution process and aids in reaching equitable solutions.

Advanced technologies such as virtual reality (VR) and 3D modeling have found applications in dispute resolution by providing detailed and accurate visual representations of construction projects. These tools enable stakeholders to virtually explore project designs, identify potential conflicts, and visualize proposed solutions, fostering a deeper understanding and facilitating consensus among parties.

In the digital age where the virtual world is becoming more and more our actual working environment, dispute resolution strategies have increased in adaptability and flexibility. Online mediation and arbitration platforms enable parties to engage in dispute resolution processes remotely, overcoming geographical barriers and logistical challenges. This flexibility ensures that disputes can be addressed timely and efficiently without compromise to the access and availability of critical information, while minimizing project disruptions.

However, as digital tools become integral to dispute resolution, cybersecurity and data protection have emerged as critical considerations. Robust cybersecurity measures are essential to safeguard sensitive project data, communications, and intellectual property, ensuring the integrity and confidentiality of information exchanged during dispute resolution processes.

Managing construction disputes in the digital age requires a proactive embrace of technology, collaborative platforms, and adaptable strategies.

By harnessing advanced digital tools for enhanced communication, data-driven decisions, and transparent documentation, stakeholders can navigate complex issues, mitigate disputes, and achieve successful project outcomes. Embracing the opportunities presented by the digital age enables construction industry professionals to foster greater collaboration, transparency, and efficiency in resolving disputes, ultimately contributing to the success of construction projects in an increasingly interconnected world.



Overall Findings

It is noteworthy that the average value of disputes and the average time taken to resolve disputes both increased marginally from 2022 to 2023 as the industry continues to embrace digital technology. However, the average value of disputes remains at post-COVID historic highs.

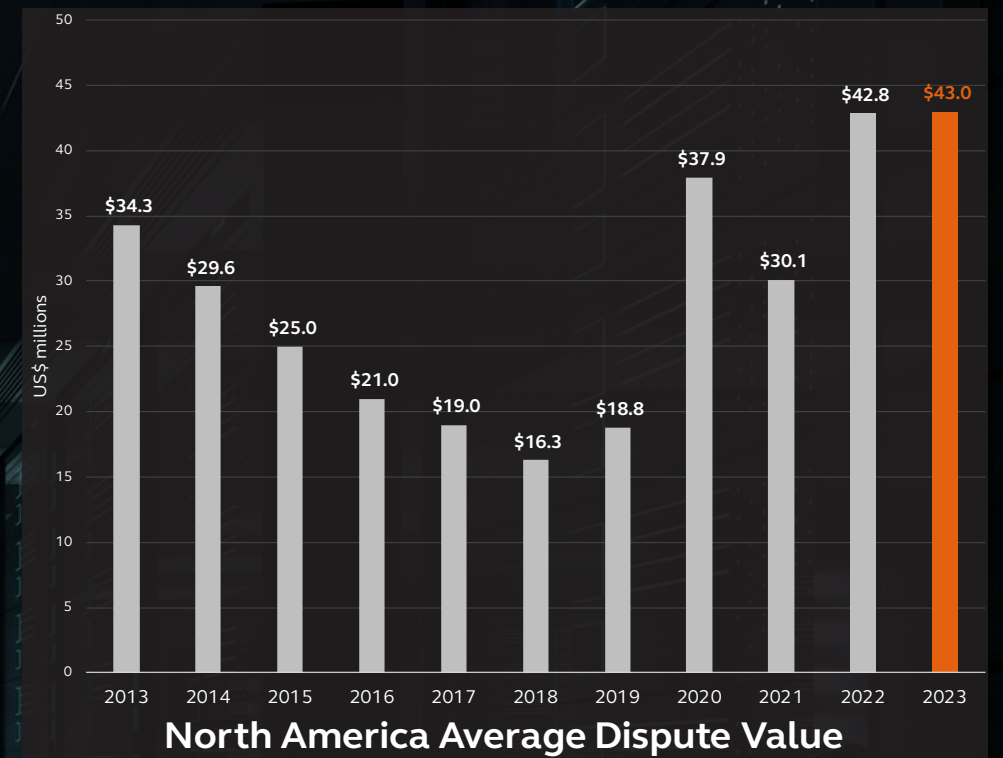
Similar to last year's survey, a majority of survey respondents experienced disputes due to supply chain impacts and price escalation. Overall, our respondents handled more disputes in 2023 than in 2022, and we expect this to increase in 2024. As noted in the introduction, this year's report highlights the rapid changes and impacts that the construction industry is currently facing. This is forcing project participants to do things differently.

For North America, the 2023 results show that the **Building (Education, Healthcare, Retail/Commercial, Government)** — sector saw the most disputes. In 2022, the **Transportation (Highways, Bridges, Mass Transit, Airports, Ports)** sector experienced the most disputes.

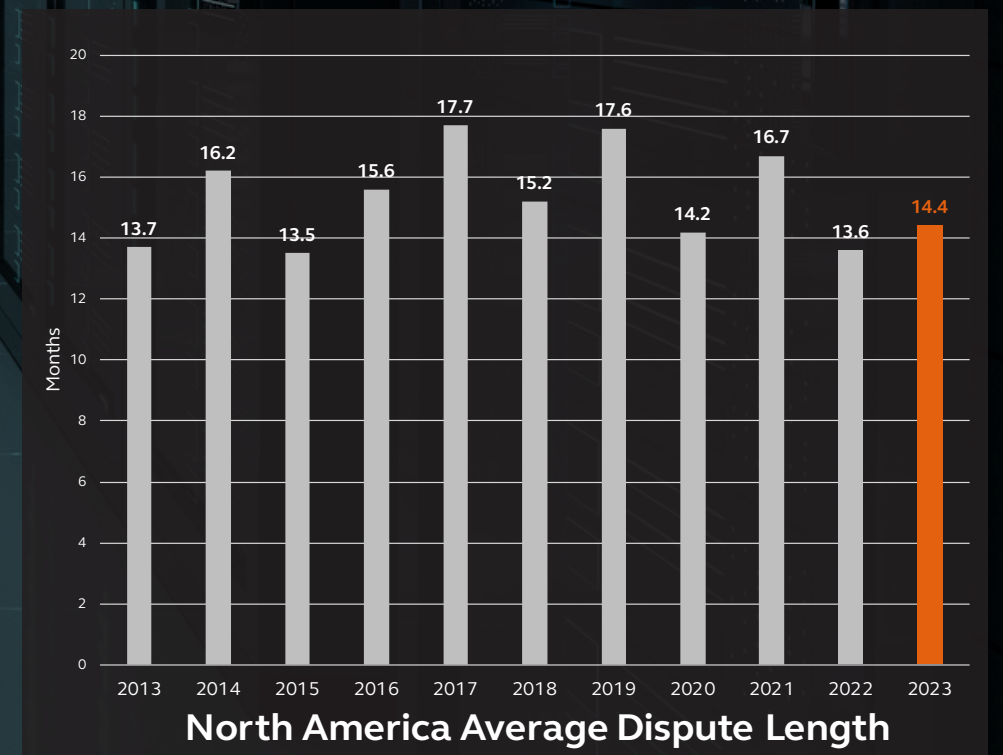
The highest value dispute reported by the respondents was

US\$2 billion

The average value of disputes increased marginally to **\$43.0 million** ↑ **0.5%**



The average length of disputes increased marginally to **14.4 months** ↑ **6.0%**



Overall dispute cause

2023 Rank		2022 Rank
1 (tied)	Errors and/or omissions in the contract documents	1
	Owner/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	2
3	Poorly drafted or incomplete and unsubstantiated claim	3
4	Owner-directed changes	5

Most effective claims avoidance techniques

2023 Rank		2022 Rank
1	Contract and specification reviews	2
2	Risk management	1
3	Constructability reviews	3

Most important factors in the mitigation/early resolution of disputes

2023 Rank		2023 Rank
1	Owner/contractor willingness to compromise	1
2	Accurate and timely schedules and reviews by project staff or third parties	2
3	Contract mandated early resolution forums such as mediation, disputes review boards, etc.	4



North America

Over the past year, the average value of disputes in North America was \$43 million which is nearly the same as it was in 2022 (\$42.8 million). These values remain significantly greater than the highest value reported in 2021 of \$30.1 million. The 2022 and 2023 results are double what we saw from our 2016-2019 survey results. The results indicate that the industry has not fully recovered from the challenges it faced in 2020, compounded by supply chain issues.





In 2023, the average time to resolve construction disputes in North America saw a slight increase to 14.4 months from 13.6 months in 2022. Over the past decade, the average duration has been 15.4 months. When considered alongside a notable increase in dispute values over the last two years, these findings indicate that the industry has made progress in the dispute resolution process. Despite the escalation in dispute values, larger disputes are being resolved within a similar timeframe, reflecting advancements in the industry's efficiency in resolving disputes.

Last year's report, *Embracing Change Moving Forward*, addressed the theme of new challenges in the construction industry including social and economic factors, along with supply chain impacts and climate change. Over the past two years, these all had a significant impact on the owner's cost and contractor's profitability. John Cook, Esq. of Fox Rothschild in Washington D.C., who provided our guest commentary in last year's report, stressed the importance of the adaptability of project participants

in the ever-changing construction landscape.

Our survey results for this year's Report reiterate our concerns that were central in last year's Arcadis Construction Disputes Report. While inflation for 2023 somewhat leveled off to 3.4% from the 7.5% rate in December 2022, the industry is still facing significant other challenges and exciting changes. The construction industry is projected to experience significant growth in 2024, with forecasts indicating a robust expansion driven by various factors. As discussed in the introduction to this year's report projections suggest a steady increase in construction activity. Furthermore, advancements in construction technologies and techniques, such as modular construction, sustainable building practices, and 3D printing are expected to drive efficiency and productivity, further supporting the industry's positive outlook for 2024. Overall, the predicted growth in the construction industry presents promising opportunities for stakeholders and underscores the potential for a dynamic and thriving market in the coming years.

At the forefront of the changes is Artificial intelligence (AI). As reported by ENR in the May 27, 2024 "Top 400 Contractors" edition, contractors are leveraging artificial intelligence across business operations. AI is revolutionizing the construction industry by introducing innovative capabilities that enhance efficiency, safety, and decision-making processes. AI-powered technologies are being employed for various tasks, including project planning, design optimization, and predictive maintenance. For instance, AI algorithms can analyze vast amounts of data to optimize construction schedules, reduce material waste, and improve resource allocation. Additionally, AI-enabled drones and autonomous vehicles are transforming site surveys, monitoring, and logistics, enhancing operational productivity and safety. Moreover, AI's predictive analytics are allowing construction firms to anticipate and prevent potential issues, leading

to proactive risk management and cost savings. As AI continues to evolve, its integration into the construction industry is expected to drive significant improvements in project delivery, sustainability, and overall performance. How these AI and other new technologies will affect the resolution of disputes is still unfolding, but they will certainly play a large role in the avoidance, mitigation, and resolution of construction disputes in the future.

"...advancements in construction technologies and techniques, such as modular construction and sustainable building practices, are expected to drive efficiency and productivity, further supporting the industry's positive outlook for 2024."



Dispute Causes

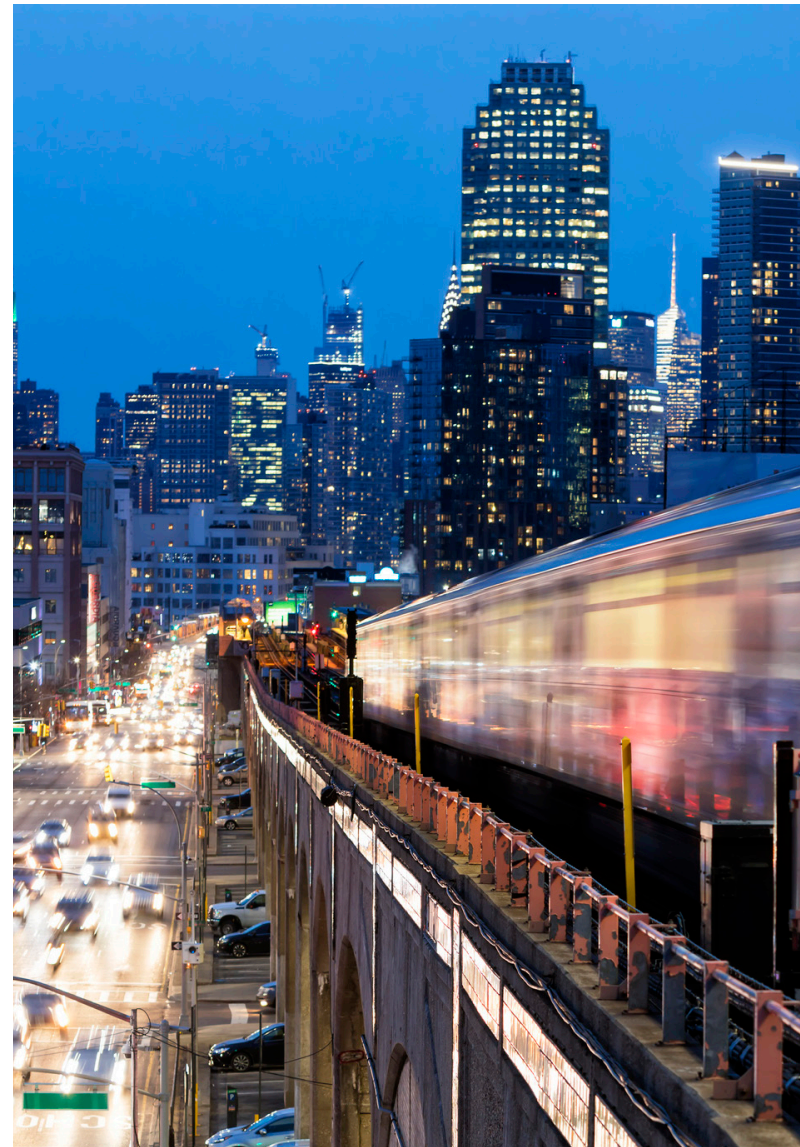
In a tie at the top of the list of the most common causes for construction disputes in North America for 2024 was errors and/or omissions in the contract documents along with Owner/Contractor/Subcontractor failing to understand and/or comply with its contractual obligation. This is the second year in a row where these causes were in the top two spots. Poorly drafted or incomplete and unsubstantiated claims round out the top three. These causes consistently appear in the top three.

Respondents to our survey commented on the tension that exists to deliver more complex projects under tighter timeframes and budgets in sectors such as technology and life sciences. The pressure to deliver construction projects within tight deadlines and budgets can often lead to errors and omissions, which in turn become catalysts for disputes within the industry. These errors and omissions may result from inaccuracies, miscommunications, or oversights during project planning, design, and execution. Respondents pointed to inadequate or ambiguous project documentation, design flaws, or discrepancies in contractual specifications leading to misunderstandings and conflicting interpretations among project stakeholders, causing delays, cost overruns, and quality issues that ultimately escalated into disputes. Furthermore, inadequate risk assessment or non-compliance with industry standards and regulations exacerbated the potential for disputes. Proactively addressing errors and omissions early in the project lifecycle through robust quality control, clear communication, and comprehensive documentation is crucial to minimizing their impact on dispute resolution and ensuring overall project success.

Respondents also discussed how project participants not fully understanding and complying with contractual obligations can lead to differing interpretations and conflicting expectations among stakeholders. This lack of clarity can result in disputes related to scope changes, payment disputes, delays, and quality issues. Failure to comply with contractual obligations, such as delivering work within specified timelines or adhering to quality standards, can further escalate tensions and trigger disputes. It is crucial for all project participants

to thoroughly comprehend their contractual obligations and communicate effectively to ensure alignment, mitigate risks, and maintain a harmonious project environment. Proactive measures, such as clear documentation, regular communication, and a collaborative approach, are essential in minimizing disputes arising from misunderstandings or non-compliance with contractual obligations.

“Proactively addressing errors and omissions early in the project lifecycle through robust quality control, clear communication, and comprehensive documentation is crucial to minimizing their impact on dispute resolution and ensuring overall project success.”



Looking Forward

The issues encountered on construction projects due to the COVID-19 pandemic are now fully manifesting themselves in the form of disputes. The unprecedented challenges posed by the pandemic, such as supply chain disruptions, labor shortages, and project delays, have significantly impacted the construction industry. Fifty-six percent of respondents stated that they had experienced issues or disputes on their projects from supply chain impacts and price escalation. As projects resumed and completed after the pandemic, disputes came to the forefront regarding the allocation of costs, schedule adjustments, and contract modifications.

Sectors such as manufacturing and technology are experiencing robust growth. The data center market is expected to top \$258 billion in 2024 and rise to \$430 billion by 2032. This rapid growth is a reflection on every aspect of life including construction. Technology is rapidly changing how projects are delivered and how disputes are avoided, mitigated and resolved. In the digital age, project stakeholders face challenges in avoiding,

mitigating, and resolving construction disputes. These include the complexity of digital systems, data security concerns, interpretation of digital records, cybersecurity threats, adapting to rapid technological changes, legal compliance, and collaboration issues. Addressing these challenges requires proactive approaches such as clear communication, robust data governance, staying updated on regulations, fostering digital literacy, and promoting collaboration.

With all of these exciting changes, it is important not to lose sight of the basics when it comes to delivering projects and avoiding, mitigating and resolving disputes. According to our survey results, the most effective dispute technique over the past year has been contract and specification review. In the number two position was risk management. These two survey results confirm that effective claims resolution starts when a project begins. It has remained a common theme that the project participants who proactively plan for changes and anticipated challenges in the industry such as advancement in technology will be in the best position to deliver projects on time and on budget.





Dispute Management and Mitigation Strategy

Project participants understand that the resolution of construction disputes can be very costly. They are more often seeking to resolve disputes earlier, mitigate them during construction, or avoid them altogether. The following section outlines strategies for avoiding, mitigating, and resolving construction disputes on projects.

Avoid

Mitigate

Resolve

Avoid

Avoiding Construction Claims: Using Lessons Learned from Claims to Recognize Symptoms and Proactively Take Actions

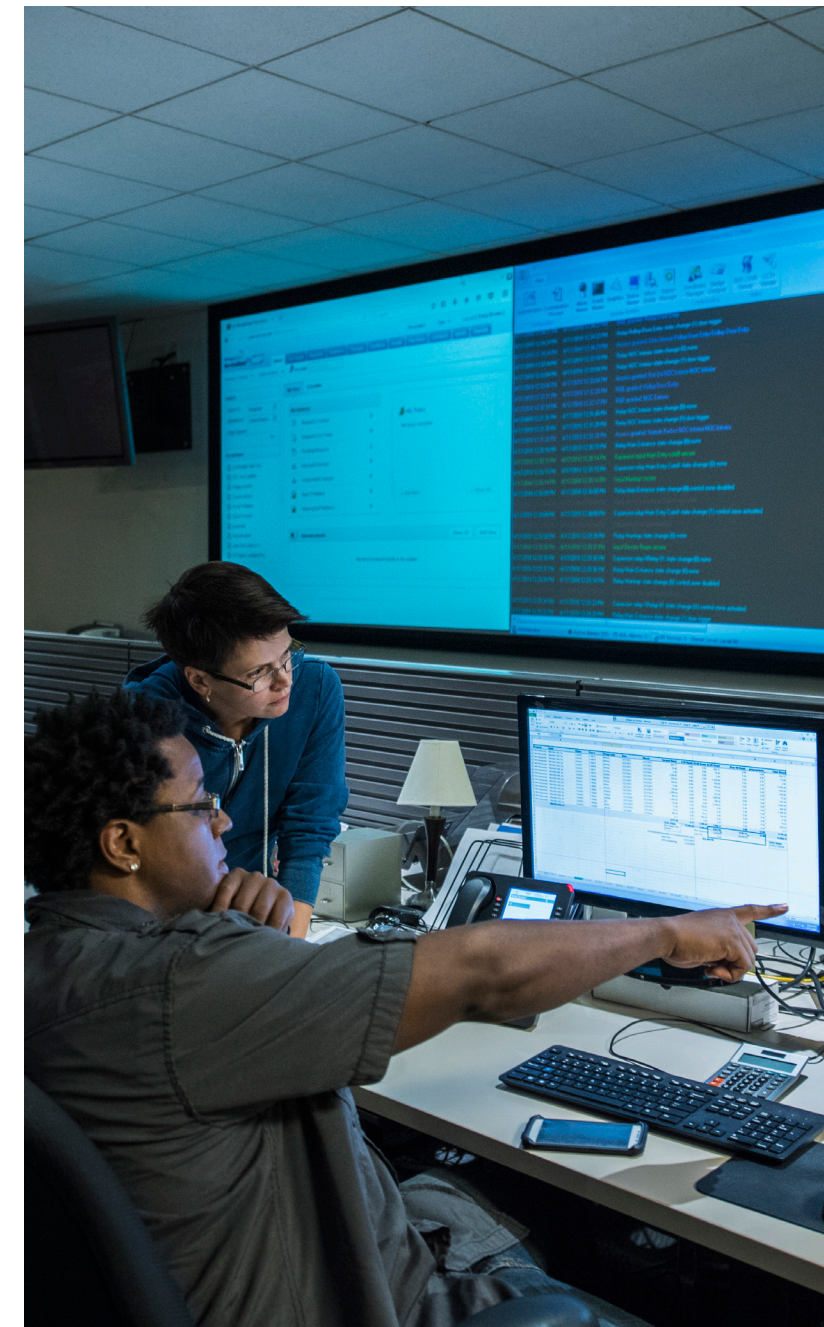
Disputes are never simply disagreements that happen at a single point in the construction lifecycle, they are the end of a long pathway with multiple milestones when the disputes could have been avoided. The earlier along this pathway that a dispute could be avoided, the more the resolution can happen at the project level, the more efficient the solution, and the less expensive the resolution.

Benefits of a Collaborative Environment

When the entire construction management team is engaged in identifying and resolving problems, win-win type solutions are much more likely to surface thus avoiding disputes. Studies have shown that a collaborative culture provides more successful results in completing projects on time and on budget. The owner, contractor, and construction managers all have a part to play in promoting collaboration; from providing better analysis of delays to timely review and response to fair negotiations.

Lessons Learned from Claims and Forensic Analysis

Disputes do not happen in a vacuum, nor do they spring unnoticed from thin air, there are usually significant symptoms, both obvious and nuanced, that occur early in the pathway to a claim. Obvious symptoms include missed milestone completions, time impact analysis submissions, or disagreements about contract scope. Failure to address these issues will allow them to grow into full blown claims. Less obvious symptoms include failure to work the original plan, idle equipment, or disorganization among the trade contractors. Failure to recognize and address these symptoms will show in contractors losing money which result in claims, often submitted much later than the symptoms. Taking advantage of the digital tools for collaboration and data mining now readily available yields high efficiency and valuable insight.





Designing the digital project controls process to recognize these early symptoms and implement early avoidance actions reduces disputes. Implementation of the process includes technical analysis using data management tools, agendas that promote time management as a significant discussion point of meetings, open discussions about efficiency and production, and continuous risk management to identify and address threats to production and milestone completion. Every symptom that is identified, analyzed, and proactively resolved is another avoided dispute.

Dispute Avoidance Through Proactive Risk Management by Capitalizing on Opportunities

Even good proactive risk programs tend to focus on negative risks by identifying threats, but few manage to extend those programs to the positive side of risk management and find opportunities to improve performance. No cost opportunities to improve performance lie in digital mining of data for schedule optimization and trending analysis, which support and enhance a collaborative culture and create buffers to reduce future risks.

Data monitoring and database analysis of trends reveal small issues that, left unchecked, will accumulate to large disputes. A performance slippage in one trade of four days in a month can result in a forty-day delay that is unnoticed until the quantum grows too large to easily rectify. The key is to identify the trend using the full array of digital database tools, model the full extent of the trend continuing to cause delay, and report on the accumulated trend rather than the single event. While it is vital to monitor the critical path and near-critical path delays, trending delays are less noticeable and fly under the radar.

Optimization of the progress schedule is an opportunity that yields huge returns, enhanced by active data management and digital modeling of multiple possibilities. Contractors are experts at reviewing short interim plans and implementing improvements, but true optimization promotes technical digital database review of the entire project plan regularly to find small opportunities that can accumulate significant gains.

These are often opportunities to fast-track the work, moving sequential critical path work to concurrent paths, as well as data-oriented efficiency and constructability reviews to improve productivity and shorten trade contractor activity durations.

“Contractors are experts at reviewing short interim plans and implementing improvements, but true optimization promotes technical digital database review of the entire project plan regularly to find small opportunities that can accumulate significant gains.”

Conclusion

Using lessons learned, analyzed with digital database management tools, from past disputes to inform the project controls operations will yield large benefits in preventing disputes by implementing collaborative project cultures, identifying symptoms of disputes and proactively resolving them, and exploiting opportunities to optimize performance which builds in protection against delays from all parties.



Mitigate

Mitigating Construction Claims: The Power of Compromise, Accurate Schedules, and Early Dispute Resolution

In the construction industry, claims resulting from errors and omissions, non-compliance with contract requirements, and poorly supported claims can lead to costly disputes, delays, and strained relationships. Mitigating these issues requires a proactive approach that involves a willingness to compromise, maintaining accurate construction schedules, and the use of early dispute resolution forums.



The Impact of Errors and Omissions

The difference between a clear and complete design reflected in the construction documents and those that contain errors and omissions continues to narrow while the opportunity for claims based upon those errors and omissions widens. The increase in complexity in projects further exacerbates the challenge. The result - errors and omissions discovered during the construction process can lead to significant financial implications and project delays. When left unresolved, they can result in disputes, claims, and potential litigation.

Failing to Comply with Contract Requirements

Non-compliance with contract requirements regarding the notice, submission and documentation

of claims further complicates resolution of potentially merited claims. Failure to adhere to the administrative requirements regarding claims and disputes can prevent the parties from engaging in productive discussion simply for the fact that all the necessary information needed for evaluation and resolution has not been provided. Poorly supported claims can strain relationships and lead to prolonged disputes. These claims often lack clear documentation, evidence, or quantification, making it difficult for parties to reach a resolution. Owners understandably feel that if they are paying the bill, they are entitled to an itemized breakdown of the charges with charges with appropriate supporting documentation. Failing to comply with these requirements delays resolution and can lead to

project slowdowns, cost overruns, and damage to the lines of communication and trust between the parties.

The Power of Compromise

Mitigating construction claims by reaching early resolution while the dispute is small begins with a willingness to compromise. Parties involved in construction projects must be open to negotiation and finding mutually beneficial solutions. By fostering an environment of collaboration and compromise, stakeholders can address issues before they escalate into formal disputes, saving time and resources, and most importantly, allowing the project teams to focus on the completion of the project.

Accurate Construction Schedules

Accurate, current construction schedules are not only essential to manage the on-going project but are also a critical tool to mitigate claims and disputes. When confronted with potential project delays and armed with accurate project schedules, both the owner and the contractor can consider possible mitigation actions before the delay is actually experienced. Since nobody has the power to roll back time, the project team should evaluate and implement mitigation alternatives which can avoid or reduce the delay and the consequential costs. Everyone wins when the project is completed on time.

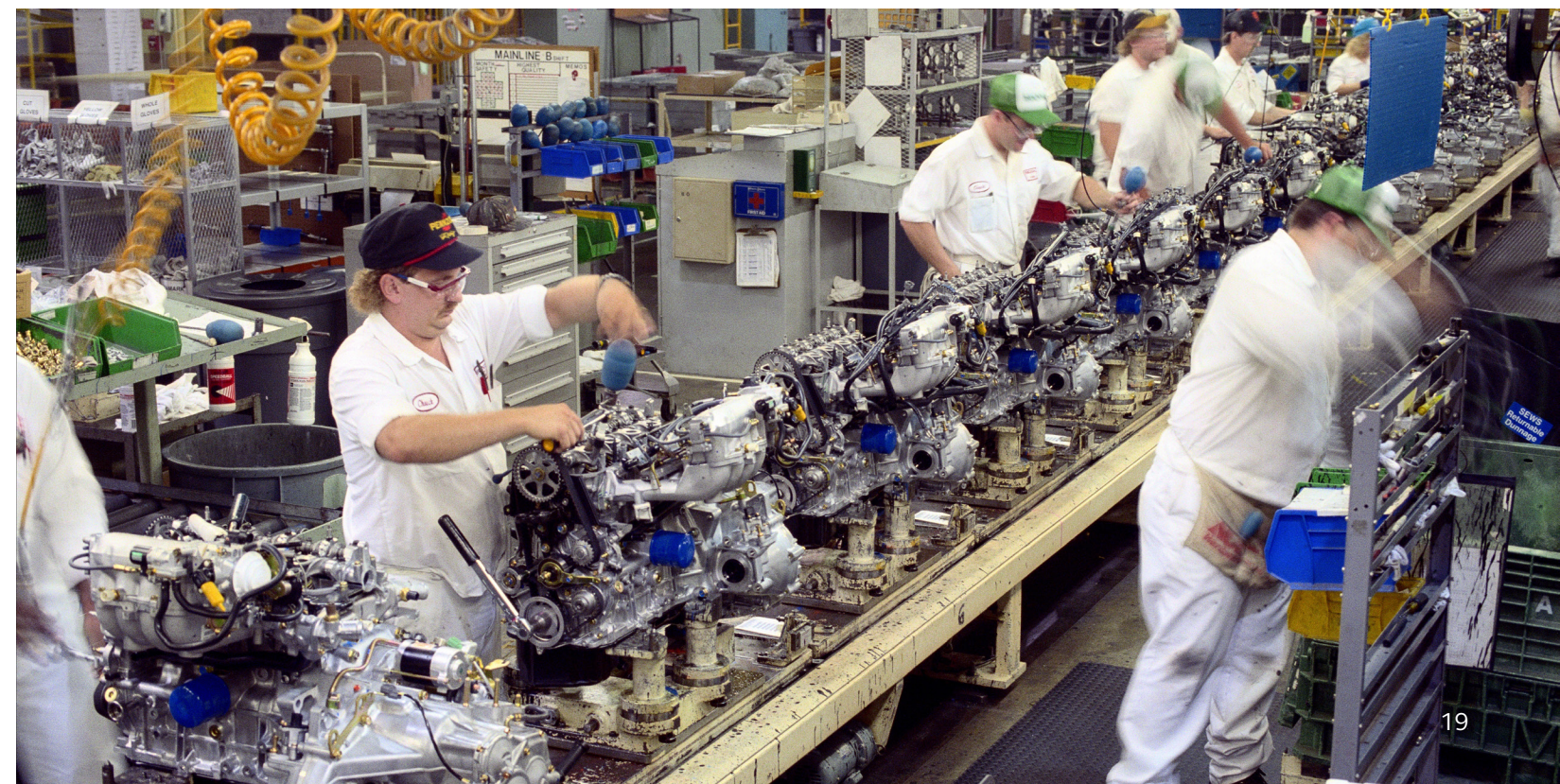
Early Dispute Resolution Forums

The construction industry is continuing to expand and embrace the use of early dispute resolution forums such as dispute resolution boards (DRB) and mediation. These forums can significantly mitigate the impact of construction claims. They provide a structured process for parties to resolve disputes outside of traditional litigation, saving time and costs. By addressing issues proactively and collaboratively, stakeholders can work towards mutually acceptable resolutions and again enable the project teams to focus on project completion.

Conclusion

Mitigating construction claims requires a multi-faceted approach. A willingness to compromise, accurate construction schedules, and the use of early dispute resolution forums are crucial elements in achieving early dispute resolution and successful project outcomes. Stakeholders can minimize the impact of claims, maintain project momentum, and preserve positive working relationships. Embracing these strategies can lead to successful construction projects which ultimately benefits all parties.

“By fostering an environment of collaboration and compromise, stakeholders can address issues before they escalate into formal disputes.”



Resolve

Resolving Construction Claims: An Accurate, Complete Project Record Facilitates Resolution

The complexity of construction projects creates challenges that can impede the parties' progress in pursuing resolution of disputes. Whether that accuracy is in the project schedule, cost records, correspondence, or even in the claim itself, the ability to analyze the required information and accurate data is one of the most important drivers in the successful resolution of disputes. Most disputes are fact intensive as applied to specific terms and conditions in the contract. With the widespread use of project management systems, the creation and maintenance of vital project records should be a problem of the past. However, the simultaneous growth of "alternative" communication platforms such as instant messaging, social media and the like have created a potential shadow record not maintained in the official project record. So, access to the "facts" is not straightforward. Dispute resolution is facilitated when all parties have a common and undisputed fact set. While the intent and interpretation of the contract may remain in dispute, the common ground of facts removes one barrier to resolution.



Using Alternative Dispute Resolution (ADR) to Resolve Disputes Quickly

Today, most construction contracts include provisions that address alternative dispute resolution options before the parties must resort to formal arbitration or litigation. Owners and contractors are all now well-versed in the different resolution methods – the learning curve is over. When a dispute is escalated to an ADR alternative, the project participants can quickly initiate and engage in the process in the hopes of prompt and equitable resolution. While ADR in general has proven to be successful, there are also concerns that the pursuit of resolution may result in some compromise of contractual rights. If the recommended outcome by the neutral ignores core contractual rights and responsibilities, then resolution can be more elusive.

Checking all the Boxes to Resolve Disputes

Today, perhaps more than ever, global events are impacting economies and supply chains, which is further compounded by workforce shortages. This has resulted in an increase in the number and value of disputes and an increase in the amount of time it takes for resolution. In the desire to reach early resolution, we see more claims that are hastily compiled and submitted with incomplete information. In many cases, the submitted claims do

not strictly adhere to the contract requirements for such submittals. This creates a resolution process that goes through more and more "rounds" wherein the contractor's initial claim submittal is insufficient to allow for meaningful negotiation. Consequently, the contractor must revise and/or supplement the initial claim to allow for proper review and consideration by the owner. In the haste of submitting the claim in hopes of jump-starting the negotiation, the contractor risks just the opposite response from the owner. Owners ultimately "pay the bill" and expect detailed statements of merit and justification as well as financial documentation supporting the claimed costs. There is seldom, if ever, a shortcut to these requirements.



Conclusion

A complete and accurate project record continues to be key to enable a productive and equitable resolution process. Absent the necessary facts and project record, the spectrum of potential disagreement widens and only accomplishes to create further disagreements. When the parties are on the same page, the focused dialogue can be channeled through ADR methods which increases the prospects for successful resolution. However, the scope of the dispute, the claimed basis of entitlement, and most importantly, the claimed damages, must be properly submitted and documented in accordance with the contract requirements before resolution can be reached.



Guest Commentary

Hank E. Pearson

Global Construction Claims Manager at Intel Corporation

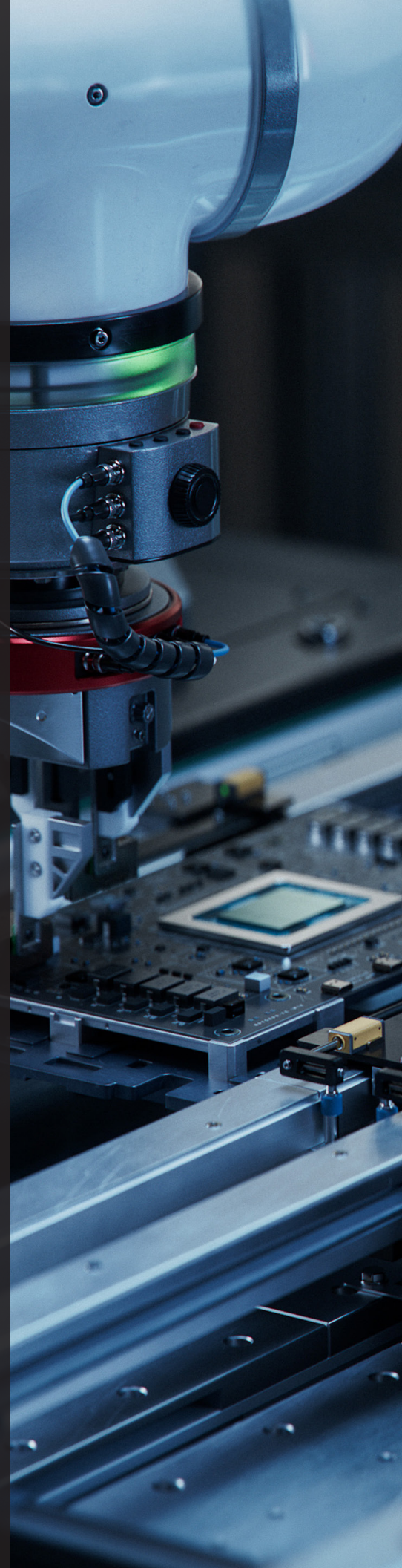
Arcadis' data reflects our own experience that clear contract requirements, including clear scopes, schedules and pricing data are critical in reducing construction project disputes and permitting fair and timely resolution of them. Large projects often face constrained labor resources and supply chains. Technology projects, however, by necessity involve substantial ongoing change and scope development and very tight schedules, which present clear risk for claims for time and money.

Emerging AI technology presents opportunities to proactively tackle commercial risks creatively to enhance contract clarity and the accuracy and timeliness of claim evaluation. Existing tools to mitigate and disposition commercial risk include project coaches and dispute resolution personnel, along with pre-negotiated remedies for rapid disposition of recurring risk anticipated at project commencement. Now, however, emergent AI tools under development will allow analysis of voluminous project data, permitting better understanding of unclear contractual risk allocation or inappropriate pricing of changes in risk allocation. This data permits needed contract language revisions and data-driven pricing negotiations regarding changes in contract risk profiles.

Additionally, when a claim arises, AI models under development will assist the claim evaluation team in determining which facts drive claim value. This data enables detection of deficiencies in data presented with claim submission, which contractor and owner may then collaboratively work toward resolving. AI models under development will analyze the critical facts in the claim data, providing the expected range of claim value and data-driven claims management.

The ultimate benefits to contract life cycle management include: 1) compliance with fiduciary obligations to shareholders; 2) appropriate risk allocation in contract forms through clearer drafting and fair pricing; and 3) fair and timely claim evaluation and disposition.

Hank Pearson manages internal claims processes and advises management regarding construction claims occurring in worldwide Intel construction projects. Prior to joining Intel, Hank practiced law for 29 years in the Phoenix area in the areas of Commercial and Construction Litigation.



Methodology

This research was conducted by the Arcadis North America Contract Solutions team. It is based on the survey results within the construction industry. Only input from North America was included in the 2024 report.

About Arcadis

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 36,000 people, active in over 70 countries that generate \$3.5 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

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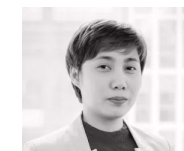
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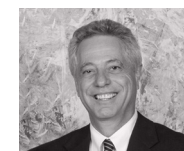
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