



2023 Q1

THE LOOK AHEAD

Market Overview

In the past two years, our economy has shown numerous anomalies. Typical indicators of growth and decline have often conflicted in the same quarter. The first quarter of 2023 was no exception with high profile layoffs but historically low unemployment rates. We saw job growth and business spending start to slow, but consumer spending continues to be high, making taming inflation extremely difficult. As we predicted in our last issue, the Fed raised the Federal Funds rate .25% in February and March. The first quarter also saw the collapse of two regional banks, which will result in less available credit and further points to an impending recession.

THE DENVER MARKET

The Denver market continues to be busy. The amount of work under construction and upcoming projects remains at capacity for what the local market can handle. Trade partners are seeing commodity materials starting to level off. However, equipment and manufactured components remain volatile for pricing and are having extended lead times for project delivery. Labor is in high demand and trades are increasing wages to keep skilled workers. Many trades are at capacity through 2023 already and are currently looking to fill

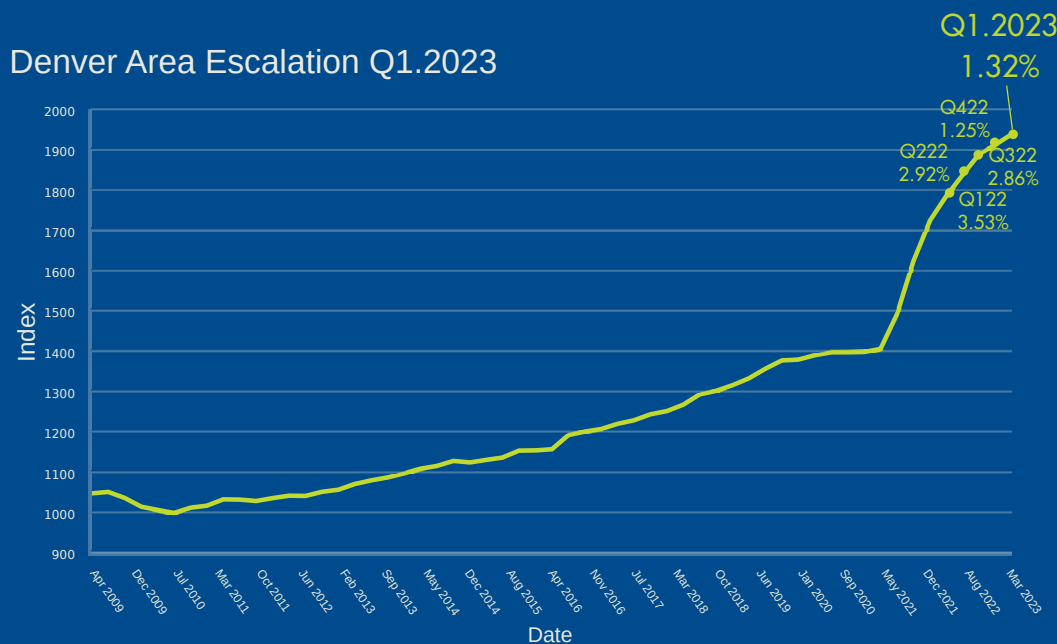


Dustin Liljehorn
OFFICE LEAD
303.782.7392
dustin.liljehorn@jedunn.com



James Anderson
PRECONSTRUCTION LEAD
719.884.4453
james.anderson@jedunn.com

Denver Area Escalation Q1.2023



backlog for 2024. Receiving three or more bids is still very challenging for most trades and extended bidding times are required in the busy marketplace. Projects outside of the Front Range Metropolitan areas are still seeing elevated pricing due to high construction demand in highly populated areas up and down the I-25 corridor. Trade partners are having to pay a premium for workers to travel any distance away from where they live and want to work.

LABOR & MATERIAL TRENDS THIS QUARTER

Labor Wage Change		Material Price Change	
Carpenter	0.00%	Fabricated Steel	0.85%
Laborer	0.00%	Fabricated Copper	9.55%
Sheet Metal Worker	0.00%	Fabricated Aluminum	-3.68%
Plumber/Fitter	0.00%	#2 Diesel Fuel	-0.78%
Electrician	0.00%	4,000 psi Concrete Ready Mix	1.72%
Bricklayer	0.00%	Lumber, FOB Jobsite	-11.11%
Iron Worker	0.00%	Glass	1.80%
Glazier	0.00%	Sheet Metal	-1.07%
Roofer	0.00%	Gypsum	7.55%
Operator	0.00%	Other Materials	2.60%

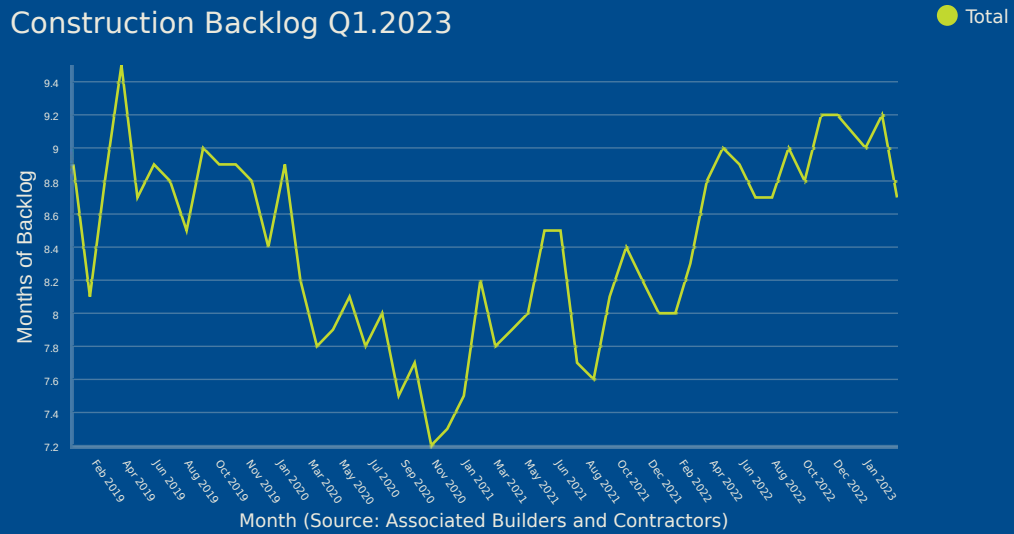
Other Materials consists of brick, block, precast insulation, floor covering, ceilings, and Miscellaneous materials

NATIONAL CONSTRUCTION INDICATORS ACTIVITY & PRICING METRICS

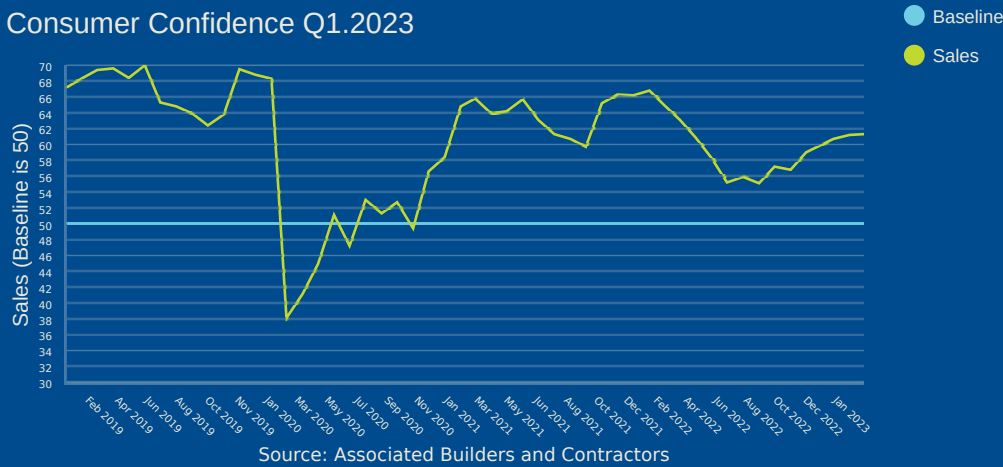
Architectural Billings Q1.2023



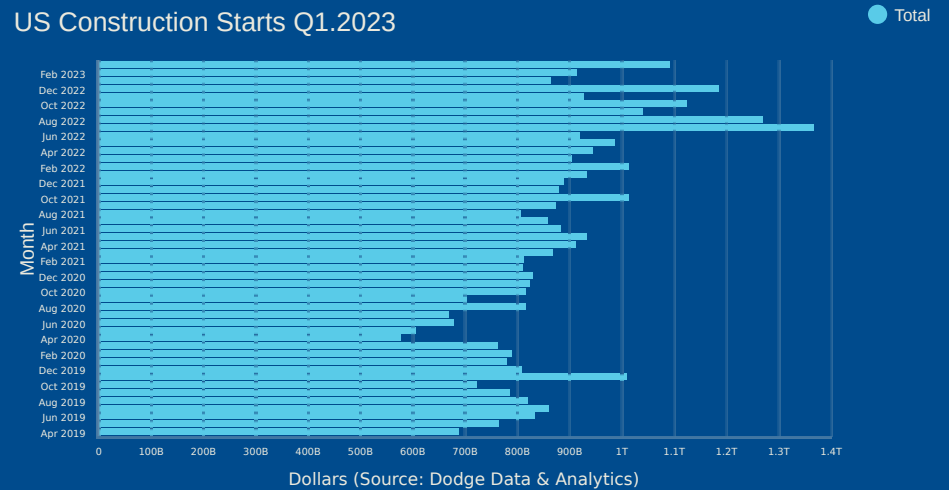
Construction Backlog Q1.2023



Consumer Confidence Q1.2023

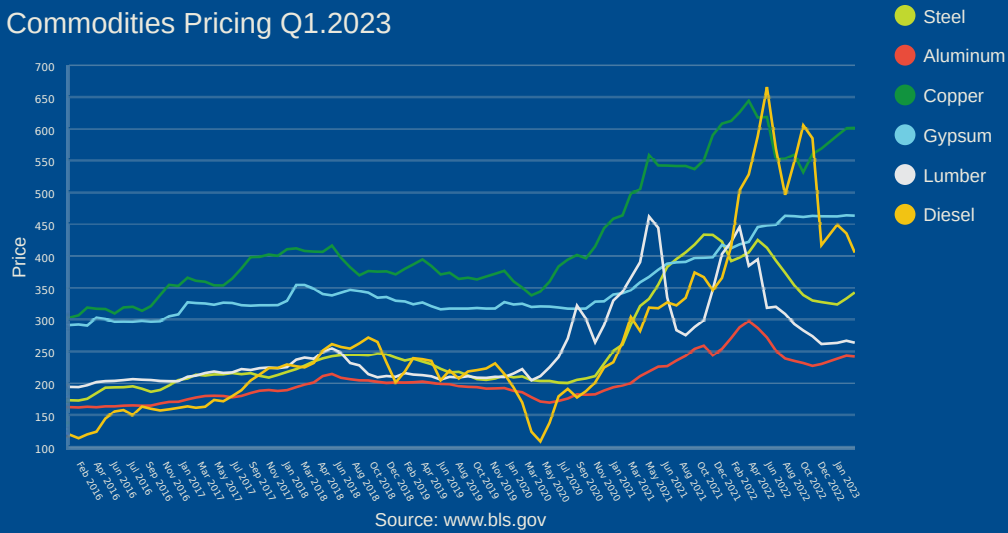


US Construction Starts Q1.2023

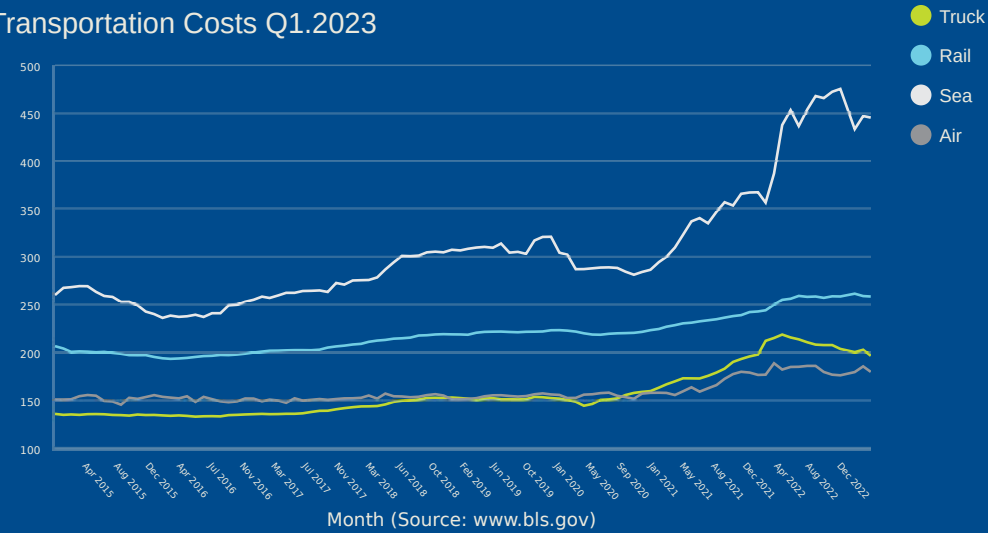


NATIONAL CONSTRUCTION INDICATORS ACTIVITY & PRICING METRICS

Commodities Pricing Q1.2023



Transportation Costs Q1.2023



FUTURE ISSUES As feedback and market-specific questions have been posed, we are always enhancing the depth and type of information The Look Ahead features. Please [click here](#) to send your comments and requests.

SPORTS SPOTLIGHT

Successful sporting and entertainment venues have a direct effect on the livability and vitality of the communities and campuses where they exist. The market is comprised of a broad range of clients and facilities, and facilities are often used by multiple groups with different goals which can make striking a balance between profitability and useability a challenge. From a construction aspect, it's imperative that these facilities are efficient to construct and operate so they can be responsible and sustainable contributors to future generations.

In this spotlight, Scott Sherry, Vice President and Project Executive for JE Dunn's Sports team, weighs in with the latest industry trends and the ways we've navigated the associated challenges.



With the immediate shut down of all mass sporting events in March of 2020, the sports industry faced unforeseen challenges. The fan experience was gone overnight, and the associated uncertainty of the pandemic and subsequent challenging economy left many wondering if an industry which some technically classify as "entertainment" would be able to survive.

As sports often do, they brought people closer together by becoming an incentive to return to normal and reengage with society, causing the phenomenal

growth we're seeing today in facility construction. In addition to a normal historical growth rate sports were experiencing before the pandemic, some sports, such as soccer, are experiencing expansion, leading to the increased need for new venues. About half of the venues hosting professional sports were built before 2000 and need renovation or even replacement. Sports facilities scheduled to open or reopen in the United States and Canada in 2022 were expected to tally \$5.8 billion in construction costs.¹

TREND: FACILITIES AS A COLLEGE RECRUITING TOOL

All college sports have dynasty programs, the ones which seem to be still playing in the final tournament or playoff. However, in recent decades, we've seen more shifting in the middle of the pack programs as colleges and universities figure out new ways to recruit the best talent and capitalize on booster investments. Having the best stadium or arena isn't enough. Higher education institutions are trying to "outbuild" each other with the nicest training facilities, locker rooms, and athlete amenities.

The NCAA's adoption of Name, Image, and Likeness (NIL) has also contributed to the competition for recruits. In some cases, a student athlete may pick a school where the fanbase will offer greater financial support through NIL than a program with a better overall record. For an athlete who prioritizes their individual brand, an up-and-coming program may have the opportunity to attract a higher caliber of athlete than before NIL. The individual athlete's popularity can contribute to the school being able to upgrade programs and facilities.

Another trend on the college front is privatization. Instead of a University paying to build their own arena, they are a tenant in a privately developed arena. The University of Texas recently built a new arena that was privately developed in downtown Austin and UT is a tenant. Deals like this offer colleges additional options to stay in the recruitment race.

TREND: EQUALITY FOR WOMEN'S SPORTS

Title IX was passed in June of 1972, and more than 50 years later, we are finally beginning to see growth in sporting facilities purpose-designed and constructed for women's sporting teams. JE Dunn currently has two projects underway being constructed specifically for women's teams, the new stadium for the NWSL KC Current (the first of its kind in the world), and the new Morgan Family Arena at Kansas State University for volleyball. It's important to note that the mandate of Title IX is just one factor contributing to these designated facilities. The momentum of increased visibility and popularity of women's sports has translated into support and investment.



KC Current Stadium At Berkley Riverfront Park

According to ESPN, WNBA viewership was up 22% in 2022 from the previous year. Social media offers the opportunity for individual athletes to increase their popularity and, in turn, increase the popularity of their sports. This was evident in the NCAA Women's Basketball tournament this year where athletes such as LSU's Angel Reese and Iowa's Caitlin Clark took center stage. Viewership for the final four was up over 66% from last year and the title game viewership (10M) matched the NBA's finals (9.8M).²

We expect to see continued financial support for women's athletics and sport-specific facilities such as new NWSL stadiums and training facilities in the coming 5-10 years.

TREND: PUBLIC FUNDS = DEMAND FOR COMMUNITY INVESTMENT

In the past, professional franchises relied almost solely on Cities and States to pay for their facilities with public money. The justification was that these teams would bring visibility, tourism, and money to the State and City. However, that desired return hasn't always been there, causing controversy as many services compete for taxpayer dollars. Currently, financing is often a mix of public and private with team ownership paying a larger and larger percentage of the cost.

We are also seeing public entities double down on their requests for shared financing with Community Benefit Agreements. In return for the public's financial contributions, Cities are asking teams to give back by committing a certain percentage of the money spent to build, maintain, and run the buildings is directed to support the City's initiatives. Some examples include MBE/WBE participation, certain wage guarantees, job training for the under-employed, and even building other facilities that serve the community.

In addition to each of these trends, we are seeing increased popularity in e-sports and many entities using sporting venues as a magnet or anchor in their mixed-use entertainment districts. JE Dunn's sports team is dedicated to following the industry's evolution and adapting to best serve the needs of our communities. Our role as a contractor is to help clients achieve a venue which is not only beautiful, but also functional and efficient.



KC Current Stadium At Berkley Riverfront Park

Sources: 1) sportsbusinessjournal.com 2) si.com

WHAT IS ESG?

Environmental, social and governance (ESG), refers to the three central factors in measuring the sustainability and societal impact of a company. It's a company's commitment to do more than make a profit and its assessment of their "downstream" impact.

ESG concerns have become increasingly topical and important as owners and investors are starting to look at these factors when deciding where to invest in their next projects. Project owners consider ESG factors when deciding which vendors and partners to do business with and prospective employees, especially

younger generations, consider ESG factors when applying for jobs.¹

Incorporating ESG considerations into business practices has been more commonplace in Europe than the U.S. for the past couple of decades. In general, public financial institutions also have greater defined standards than any private company which is not subject to regulatory practices. As ESG evolves within the U.S., one of the first issues facing corporations is which standards to follow. Consultant companies are now able to offer you a "grade" on any of the three factors, but which entity will hold the final say so? Should companies hold their suppliers accountable to the same standards and values they establish within their own culture?

These are questions facing every company in the corporate arena. In the following articles, we examine ESG issues specific to the construction industry and what measures we are taking to balance our internal ESG passions with the resources required to implement the required processes and programs.

Carbon Offset: a credit that a person or organization can buy to decrease its carbon footprint or an action intended to compensate for the emission of carbon dioxide into the atmosphere as a result of industrial or other human activity, especially when quantified and traded as part of a commercial program. Currently, companies can pay a broker to provide the offset. The customer calculates their emissions level, and the broker then charges a fee based on that level. The broker will then invest a portion of that money in a project that reduces carbon emissions. For example, an individual may take a flight that will release a certain amount of GHG into the atmosphere. The person uses a tool to calculate the emissions released on that flight and then buys a carbon credit from a broker to offset that amount of emissions. The broker subtracts its fee and uses the rest of the money to invest in an emissions project, such as a reforestation effort.

Corporate Social Responsibility (CSR): Very similar to ESG, but more specific to the balance between the governance and the responsibility to the communities where we work.

Embodied Carbon: the greenhouse gas emissions arising from the manufacturing, transportation, installation, maintenance, and disposal of building materials.

Sustainable Development Goals (SDG): These are 17 interlinked goals set forth by the United Nations in 2015 to serve as a shared blueprint for peace and prosperity for people and the planet, now and into the future. Included in the 17 are things such as Zero Hunger, Reduce Inequalities, Clean Water and Sanitation, and Decent Work and Economic Growth.

Sustainability: Within the construction industry, this often refers to the environmental impact of a building material or the impact of construction itself. Within ESG, this term has evolved to be about the balance between our current practices and future needs, i.e. is what we are doing now "sustainable" for the long term?

SOME EXAMPLES OF ESG CONSIDERATIONS

ENVIRONMENTAL	SOCIAL	GOVERNANCE
Reduced Carbon Emissions	Community Impact	Safety
Sustainable Building Materials	Diversity in Hiring	Transparency
Water Conservation	Education	Code of Ethics
Innovative Techniques and Practices	Employee Health & Well Being	Risk Management
Energy Efficiency	Responsible Sourcing/Child Labor Prevention	Board of Directors Structure
Green House Gas Emissions	Inclusive Procurement	Executive Compensation

Glossary of Associated Terms

In addition to the terms explained above, you might see the following terms in relation to ESG.

Carbon: Carbon is a chemical element, but reducing carbon is a focal point of environmental strategies because carbon emissions affect the planet significantly, as they are the greenhouse gas with the highest levels of emissions in the atmosphere.

Carbon Neutral and Net Zero Carbon: Carbon neutrality means having balance between carbon emissions and absorbing carbon from the atmosphere while Net Zero means no carbon was emitted from the onset.

1) Viewpoint.com

ESG IN CONSTRUCTION

Developing ESG programs and following established policies is becoming more and more central to winning projects, serving clients, and growing in the construction industry. According to UNEP's "Energy Efficiency for Building" study, the building sector is responsible for around 40% of global energy consumption, a quarter of global water usage, and a third of greenhouse gas emissions making this sector one where our modifications have real impact on outcomes.¹

ENVIRONMENTAL

Metrics and strategy will be unique to each organization, but most of the emphasis in the built industry is on the first category, environmental impact. For builders and contractors, this means measuring and mitigating energy consumption and corresponding carbon emissions. Carbon emissions are classified in three ways based on the source:

Scope 1: Direct. This includes carbon in our company such as our office buildings and company vehicles. Jobsite examples would include purchased fuels where emissions directly occur on the job site, e.g. gas combustion from earthmovers and natural gas for generators.

Scope 2: Indirect Upstream Activities. Purchased Electricity - these emissions occur hundreds or thousands of miles from your operation, but are attributed to your efforts, e.g., temporary power for running the project.

Scopes 1 and 2 tend to be relatively easy to track because a paper trail is established with bills and



invoices for these expenses. Not so for the third category:

Scope 3: Indirect Downstream Activities. Emissions from second- or even third-party consumption. This can include a vast amount of data with no easy way to aggregate it, such as:

- Product Transport – emissions associated with getting drywall, steel, furniture, etc. from the manufacturer/distributor to the project or supplies to our offices.
- Employee Commutes – emissions associated with getting the GC's team and onsite trade partners to and from the project each day.
- Business Travel – other travel associated with the project and company.
- Leased Assets

Environmental impact also includes reporting construction waste, often calculated in tons of waste teams have diverted from landfills. Some ESG requirements include tracking total embodied carbon emissions, which can be complex and involve a variety of sources depending on the level of depth and scope of reporting. Finally, tracking water consumption is important and dives deep into every level of construction such as use for batch concrete plants on site, or for testing pipes and waterproofing.

SOCIAL

For social impact, factors such as equality, community investment, and overall wellness are prioritized. Utilizing diverse and M/WBE (Minority and Women-owned Business Enterprises) is important, and companies are developing strategies to be more inclusive within their own work force, in the trade partners they use, and within the supply chain.

Defining the "local" impact of construction and determining what project dollars benefit the local community is important as well because jobs created during the build process and after completion, local business revenue generated, fees paid to taxes and licenses, etc. all factor into the overall ESG strategy.

Implementing more social-conscious hiring practices could also help alleviate the skilled labor shortage we've previously reported. The construction workforce is also male dominated with women accounting for only one out of every ten workers. In terms of race and ethnicity over 60% of the workforce is white. Between 2003 and 2020, the percentage of construction workers who were age 55 and over nearly doubled, from 11.5 percent to 22.7 percent. Additionally, the job openings rate has almost tripled just in the last ten years.² All this speaks to the need to have as large an employee pool as possible to draw from and how these practices can offer a win-win for both the company and employee.

1) euenergycentre.org 2) bls.gov

WHAT IS THE COST?

How to best balance ESG costs with desired outcomes is a question many companies are currently vetting out.

As we mentioned earlier, the finance industry is at the forefront of ESG in the U.S. Currently the two largest mandated corporate-compliance acts, Sarbanes Oxley and Dodd-Frank cost the financial industry more than \$50 billion in compliance costs.¹

To execute these plans, companies will have to hire people to manage this process and to create internal committees to help guide the company in ESG decision-making. Existing employees will be taxed with additional responsibilities or headcount will increase as new roles are added. Change management is required to get everyone on the same page and involved. Processes must be put in place to gather data and report on findings.

RESOURCES

JE Dunn has been producing ESG reports since 2016 and decided to revisit our goals and process in 2022. As we have researched available resources in the construction industry, three categories have emerged, all with additional costs. Some crossover exists within these groups, but we are currently researching the following resources for our own efforts:

Strategy Consultants: Companies who offer services to help corporations assess their challenges and create a roadmap to reach their goals.

Tech/Software/ Tools: While a lot of variety exists in the capabilities of each product on the market, most are aimed at evaluating design models for durability of materials, energy efficiency, daylighting, calculating carbon, and climate change.

Reporting/Scorekeeping/Grading: These are mostly online platforms where you register as a vendor and complete a series of questionnaires which may be company- or project-specific. Based on the data you enter, you achieve compliance, receive a score, identify areas where you fall short, etc...Several of our clients are using these systems and none have been universally accepted as of yet, so it's common to be required to enter similar data into multiple systems.

One thing that no one can afford to do is wait. In JE Dunn's experience, the process of assessing, adopting, and right sizing a strategy is a multi-year roadmap. It isn't possible nor responsible to pull together a well-planned program only after compliance has been mandated. Our next ESG report publishes in June and we will continue to examine this topic from our perspective, as well as that of our clients and vendors.

1) Investopedia.com