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Diversity, Equity and Inclusion in Design and Construction

SmartMarket Report

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About Dodge Construction Network

Dodge Construction Network is North America's leading provider of commercial construction project data, market forecasting & analytics services and workflow integration solutions for the construction industry. Building product manufacturers, architects, engineers, contractors, and service providers leverage Dodge to identify and pursue unseen growth opportunities that help them grow their business. On a local, regional or national level, Dodge empowers its customers to better understand their markets, uncover key relationships, seize growth opportunities and pursue specific sales opportunities with success. The company's construction project information is the most comprehensive and verified in the industry.

As of April 15, 2021, Dodge Data & Analytics and The Blue Book—the largest, most active network in the US commercial construction industry—combined their businesses in a merger. The Blue Book Network delivers three unparalleled databases of companies, projects and people.

Dodge and The Blue Book offer 10+ billion data elements, and 14+ million project and document searches. Together, they provide a unified approach for new business generation, business planning, research and marketing services users can leverage to find the best partners to complete projects and to engage with customers and prospects to promote projects, products and services.

To learn more, visit www.construction.com and www.thebluebook.com.

Introduction

Message From the Publisher

As the findings of this study itself reveal, the design and construction industry recognizes the importance of increasing diversity, equity and inclusion (DEI) in its ranks and practices. A critical first step to do so is to be able to benchmark where the industry is now.

This study provides that benchmark, measuring engagement at architecture firms and contracting companies with various DEI practices and policies. Importantly, it also goes a step beyond, utilizing that baseline to better understand the implications of greater engagement with these initiatives for the people in the industry, the projects they engage in, their businesses and the communities that they impact.

- The findings reveal a clear pattern that higher engagement leads to better workplaces, greater ability to attract and retain workers, more innovation, better decision-making and improved collaboration both internally and externally.
- They also reveal that there is a lot of potential for improvement. Other studies have revealed the degree to which the industry falls short in its demographic distributions, especially in leadership at organizations. This study, by examining the degree of adoption of specific practices and policies, offers a clear, actionable road map for a broader impact.
- The study findings also suggest that the industry needs to consider how to tackle the challenge of truly engaging the communities that surround its projects, to create change and opportunities that mean the most to the people most impacted by their work.

We thank the U.S. General Services Administration for partnering with us to bring this vital intelligence to the industry.



Stephen A. Jones
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Message From the U.S. General Services Administration

We commissioned this report as part of GSA's Equity Action Plan and in support of President Biden's executive orders to advance diversity, equity, inclusion and accessibility (DEIA). We are pleased to support this powerful report that benchmarks DEIA efforts in the architecture and construction fields while also illuminating a path forward for all of us who support that industry, including GSA.

This past year, both of us have traveled around the country and visited dozens of the thousands of buildings and construction projects that GSA oversees on behalf of the federal government. The most compelling and successful ones are those in which government, industry, and local communities jointly prioritize equity in how projects are scoped, designed, executed, and managed.

Right now, the Biden-Harris Administration is advancing that vision through historic investments from the Bipartisan Infrastructure Law and the Inflation Reduction Act. (GSA itself is investing over \$6 billion from those two laws.)

But, GSA can't do this work alone; we need partners - including architects, contractors, and others - who fully understand that DEIA advances the federal government's mission and is good business. This data-driven report shows that there is much more work to do.

It shows that DEIA training, for example, is becoming a norm for the industry. However, it also shows that we can do much more in areas such as recruiting, empowering, and advancing a diverse workforce. The report also begins to reveal how leadership in implementing DEIA policies and practices helps a company compete for talent while uncovering new business opportunities.

GSA and our industry partners must dive deep into this data in order to see how we can do more to advance equity in architecture and construction. Our hope is that this report catalyzes those needed conversations and concrete actions.



Robin C. Carnahan
Administrator
U.S. General Services
Administration



Nina M. Albert
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Above: The Louisiana Children’s Museum project is one example of how Mithun has worked to center health equity.

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Executive Summary

Engagement With DEI in Design and Construction

Diversity, equity and inclusion practices are in use at architectural firms and construction companies, but more engagement will be necessary to make the design and construction industry more inclusive.

In order to understand their degree of engagement with DEI, architects and contractors were asked about their participation in activities that would help increase diversity, promote inclusion and encourage greater equity at their organizations, focusing mainly on practices involving hiring, training, promotion, leadership priorities and policies.

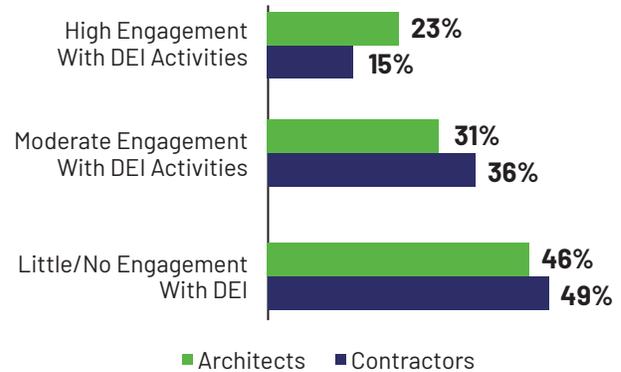
The top nine most widely used are shown in the table at lower right, and the levels of engagement overall with all the practices are shown in the chart at upper right.

- Even though architects are slightly more engaged overall, the entire design and construction industry is still in the early stages of embracing DEI, with nearly half reporting limited engagement so far with DEI activities.
- Training promoting diversity and inclusion is the most widely adopted approach by far, utilized by over half of all respondents. Training is a great start, but for real change to occur in the culture of a company, it must be reinforced by leadership.
- Architects and contractors embrace training initiatives, recruitment, promotion and policy concerns to roughly the same degree.
- However, there are two areas where architect commitments to DEI notably exceed those of contractors:
 - Consideration of diversity and inclusion when selecting other team members/trade partners
 - Leadership devoting resources to encourage diversity

The differences between architects and contractors on these two issues are part of a larger pattern that emerges throughout the findings. Contractors are most committed to training and practices that help them tactically with improving access to a skilled workforce. Architects, on the other hand, are more aspirational in their approach to DEI. For example, a much higher percentage of architects than contractors believe that more practices should be utilized by their companies in the future. Seeing DEI as a tactical necessity helps drive immediate action by contractors, but architects are ultimately interested in leadership on this issue.

Engagement With DEI Activities Included in the Survey

Dodge Data & Analytics, 2022



Engagement With Most Widely Used DEI Activities Included in the Survey

Dodge Data & Analytics, 2022

| | Architects | Contractors |
|--|------------|-------------|
| Offers Training That Promotes a More Diverse, Inclusive and Positive Workplace Culture | 58% | 54% |
| Considers Diversity and Inclusion When Selecting Other Team Members/Trade Partners | 42% | 28% |
| Code of Ethics That Includes a Diversity and Inclusion Focus | 39% | 39% |
| Leadership Training for All Staff Members | 26% | 24% |
| Leadership Devotes Resources to Encouraging Diversity | 25% | 14% |
| Staff Recruitment Extending Beyond Policies with Non-Discrimination Language | 23% | 19% |
| Formal Path for Advancement That Considers Leadership Diversity | 22% | 19% |
| Training on Unconscious Bias | 22% | 25% |
| Engagement of Underrepresented Populations (Including Training, Mentorship) | 21% | 21% |

Executive Summary

Benefits

Deeper engagement with DEI activities leads to more organizational, project and business benefits.

While the survey findings reveal that doing the right thing has been a top factor driving current DEI investments, the study also clearly demonstrates that those who invest in engaging in DEI see concrete benefits from those investments as well. The chart at right shows the benefits that architects and contractors most frequently experience.

ARCHITECTS

Architects, especially those with high levels of DEI engagement, frequently find that their DEI investments make their firms better places to work, and improve their ability to work with other project stakeholders and to make decisions.

In addition, over half of architects highly engaged with DEI activities have better communication between leadership and staff, an increased ability to recruit workers, more commitment to their organization from younger staff members and improved industry reputation due to that engagement.

Architects also frequently select more community support for project and increased collaboration internally among the top three benefits they experience, suggesting that those who experience them find them to be impactful.

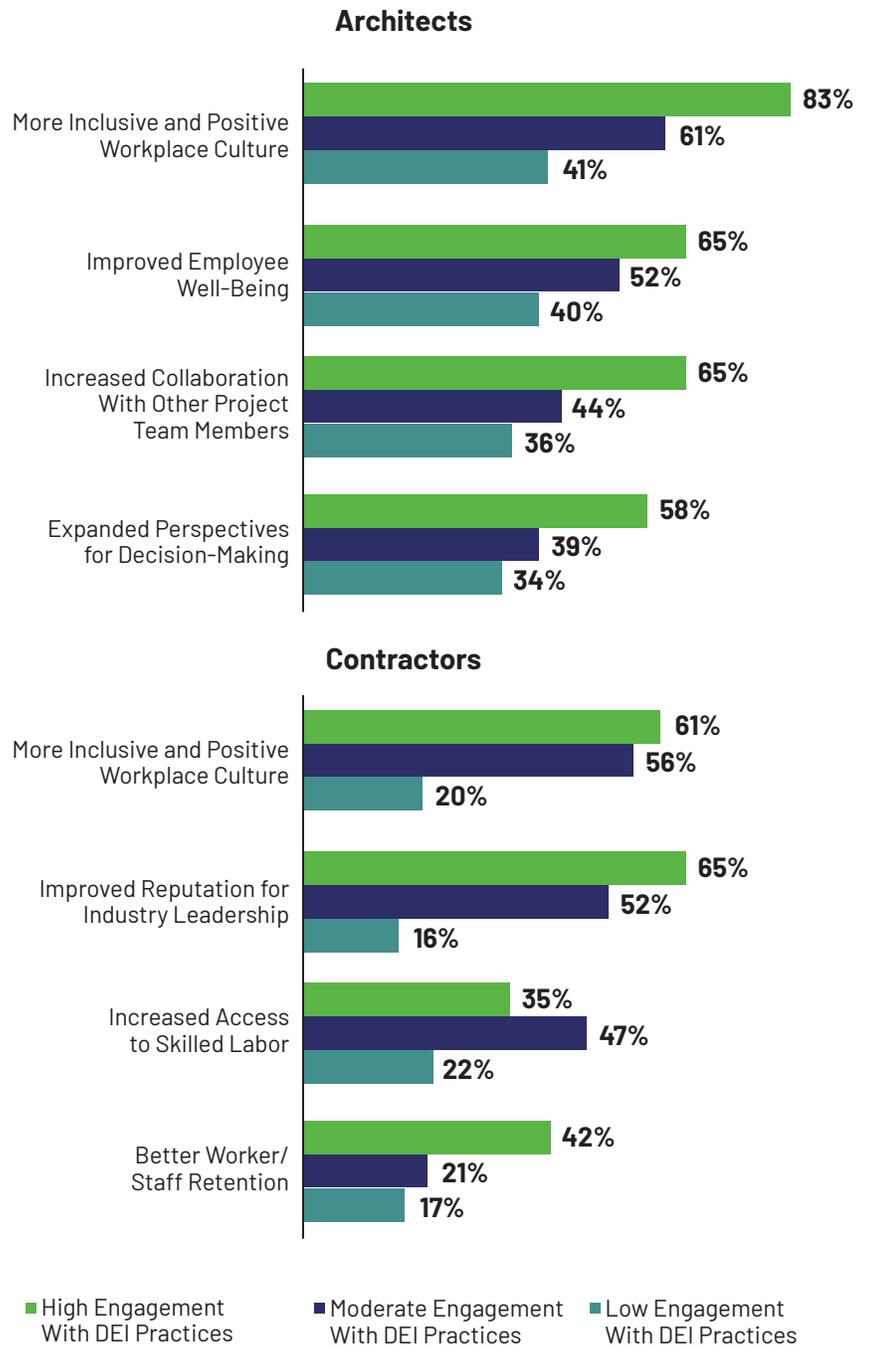
CONTRACTORS

Two of the top benefits that contractors achieve from their engagement with DEI are directly related to addressing workforce challenges: increased access to skilled labor and better worker/staff retention. The top two are indirectly related to this issue as an improved reputation helps to draw workers and a better culture helps to retain them. Again, this underscores that contractors' engagement with DEI helps them address their workforce challenges.

Over half of those highly engaged also report improved client retention and increased collaboration onsite.

Most Frequently Reported Benefits of Engaging in DEI Activities

Dodge Data & Analytics, 2022



Executive Summary

Community Engagement

The design and construction industry needs to expand its efforts to increase equity in the projects they conduct.

The impact on equity of design and construction extends beyond the companies themselves. Building projects affect the communities into which they are placed, and companies can change the communities in which they are based. As the summary of the findings at right reveals, levels of engagement with the community vary widely, but they do make clear that there is strong potential for the industry to engage more to make sure their projects and organizations have a net-positive impact on the surrounding communities. See the case study on page 44 for examples of addressing this challenge.

Drivers

Architects and contractors agree that their companies would invest more if they believed DEI engagement would help them attract staff and increase their ability to find new work.

The top reasons that have driven current investments by architects and contractors in DEI engagement is trying to do the right thing and creating a more positive culture at their company. However, the best way to drive more engagement is to demonstrate that increasing their DEI engagement would improve their ability to attract staff and find new work. These drivers are equally influential for both architects and contractors despite their different degrees of engagement with DEI activities currently.

The chart at right shows what they believe would best help them enable those investments. They need clear evidence that their increased engagement would help them obtain these top benefits, and, even more important, information on how to successfully implement DEI programs.

Community Engagement by Architects and Contractors

Dodge Data & Analytics, 2022

Architecture Firms That Consider Community Impact/Well-Being on More Than 50% of Their Projects During Design



Architecture Firms That Seek Community Input Beyond Mandated Requirements on 50% or More of Their Projects



General Contractors That Seek Community Input Beyond Mandated Requirements on 50% or More of Their Projects



Contractors That Frequently Prioritize Hiring Jobsite Workers From Communities Surrounding Their Projects



Contractors That Seek to Hire From the Communities Surrounding Their Offices

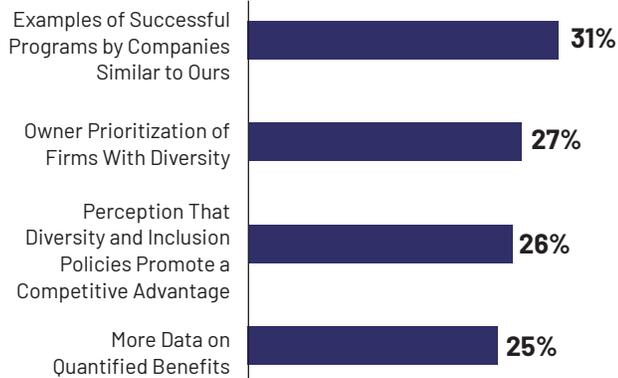


Contractors That Engage With Stakeholders From Communities Surrounding Their Offices



Factors That Would Enable Companies to Increase Investment in DEI (Selected in the Top Three)

Dodge Data & Analytics, 2022



Data: Introduction

There have been excellent studies conducted recently on the degree of diversity in the design and construction industry, and they reveal the need for increased engagement with this issue by design and construction firms.

This study provides additional insights that can help the industry address these challenges. It benchmarks the engagement with over a dozen specific activities that help promote diversity and inclusion at design and construction companies. These fall into four categories: recruitment practices, training practices, leadership priorities and policies. The findings show that the industry has begun to engage with diversity and inclusion, but only a relatively small share is currently going far enough to foster real change in their organizations.

Those findings are used to offer analysis of the benefits, drivers and community engagement activities by examining respondents in three groups: those with low, moderate and high levels of engagement with DEI. (For more information about this, see the note about the data at right and the discussion of it on page 20.)

That analysis is particularly telling when it comes to the benefits that architects and contractors experience due to engaging with DEI. Unlike other studies, where the impact of the use of a specific digital tool or a specific design/construction process can be directly drawn, the benefits of engaging in DEI involve changing a culture, and they can be subtle and only gradually appear. Therefore, it is particularly striking that over half of those highly engaged in DEI activities report that they experience, not just a more inclusive and positive workplace, but also better staff/worker recruitment, expanded perspectives for decision-making, better communication across the ranks of their organization, increased collaboration (both internally and with other project team members), more innovation, improved reputations for their company and improved employee well-being.

The study also explores their efforts to promote equity and improved well-being in the communities that surround their offices and their projects, and these findings reveal the potential for a much deeper engagement. The industry as a whole needs to find ways to help provide expertise and support for companies to engage the surrounding communities more extensively and better understand their priorities.

Finally, the study provides insight on the key drivers for current DEI efforts and what is needed to help support increased engagement in the future. As a whole, the study provides a road map for individual companies and the industry at large in how to increase diversity, equity and inclusion.

Note About the Data

The analysis explores the responses of architects and contractors. In addition to the overall responses, two main variables are used throughout the report to better understand the findings:

Size of Company: Companies are divided into size based on their annual revenues from 2021.

- Architects: These responses are divided into three groups:
 - Small: Revenues of less than \$10M
 - Midsize: Revenues from \$10M to less than \$50M
 - Large: Revenues of \$50M or more
- Contractors: These responses are divided into four groups:
 - Very Small: Revenues of less than \$10M
 - Small: Revenues from \$10M to less than \$50M
 - Midsize: Revenues of \$50M to less than \$250M
 - Large: Revenues of \$250M or more

Degree of Engagement With Diversity, Equity and Inclusion

Respondents were asked a series of questions about various activities, practices and policies that their company may have engaged in that would help promote diversity, equity and/or inclusion at their organizations. Each of these items asked of both architects and contractors were assigned a numerical score, and the total scores are used to divide their responses into three groups: Low Engagement With DEI Activities, Moderate Engagement With DEI Activities and High Engagement With DEI Activities. More information on these categories can be found on page 20.

Further information on the respondents to the survey can be found in the Methodology on page 55.

Data: Industry Use of DEI Practices

Recruitment Practices

DATA DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

Recruitment practices are an essential component of a strong diversity, equity and inclusion (DEI) strategy. In addition to providing the opportunity to attract nontraditional workers to the professions of design and construction, they provide the initial glimpse of an organization's culture for a prospective employee. Therefore, respondents were asked to identify which of the five options shown in the charts at right and on the following page best describes their company.

Architects

The findings for architects are shown in the two charts at right, and they reveal that most architecture firms do not have formalized recruitment policies. This finding is influenced by the fact that small firms account for half of the total architect respondents, and 65% of small companies report that they have no formalized policies for recruitment. In contrast, only 20% of respondents from midsize firms and 13% from large ones fall into this category, so having formal policies is more common among larger firms.

Still, given the preponderance of small firms in the profession, it is notable that the majority of small firms have no formal recruitment policies at all. While diversifying the staff of companies with less than 10 employees can be challenging, a codified policy could help make the goal more top-of-mind when actively recruiting new people.

Even among midsize and large firms, though, there is still an opportunity for much greater considerations of diversity during recruitment at their companies.

- At midsize firms, almost two thirds of those who consider diversity at all are confined to having their recruitment policies include standard nondiscrimination language. While this is an important first step, it does not prioritize diversity as an important goal in the hiring process, which could limit its overall effectiveness. Only about one quarter (28%) of respondents from midsize architectural firms find that their company makes diversity a priority.
- Large firms have the most progressive policies, with nearly half (48%) having programs in place that make diversity a priority. However, nearly as many (40%) rely solely on standard nondiscrimination language, so there is still ample room for improvement.

The findings suggest that the design profession could use more information on how to effectively implement recruitment programs to increase diversity at their firms.

Approach to Recruiting New Staff

(According to Architects)

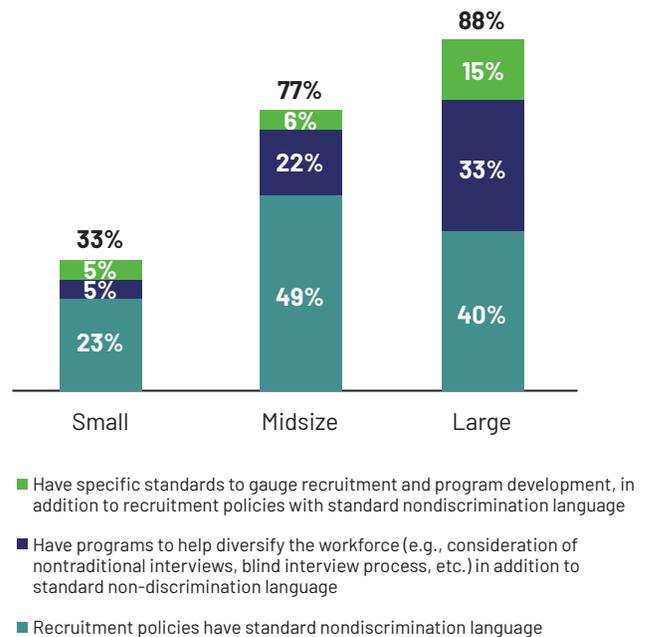
Dodge Data & Analytics, 2022



Consider Diversity During Recruitment

(Architects by Size)

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Recruitment Practices CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Contractors

Contractors were asked separately about their practices for recruiting office staff and field workers, but, as the chart at upper right reveals, their approaches are very similar for both.

- 27% do not have any formal recruitment policies.
- About half rely solely on utilizing standard nondiscrimination language in their recruitment policies.
- Less than 20% overall are utilizing programs as part of their recruitment strategy that help to diversify their workforce.

VARIATION BY SIZE OF COMPANY

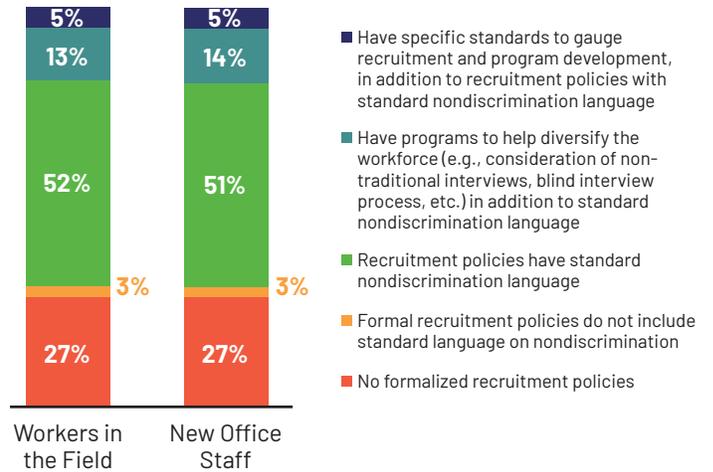
As with the architects, contractors vary notably in the degree to which their recruitment practices promote diversity at their company by size.

- Similar to the architects, very small companies (those with less than 10 employees) typically don't have formalized recruitment policies.
- Notably, the responses of small and midsize companies are similar, with great reliance on nondiscrimination language.
- About half of the respondents at large companies are actively implementing programs to recruit field workers and office staff. While this still leaves room for growth, it also suggests that large firms may have useful best practices for recruitment that could be shared with smaller companies.

Approach to Recruiting New Employees

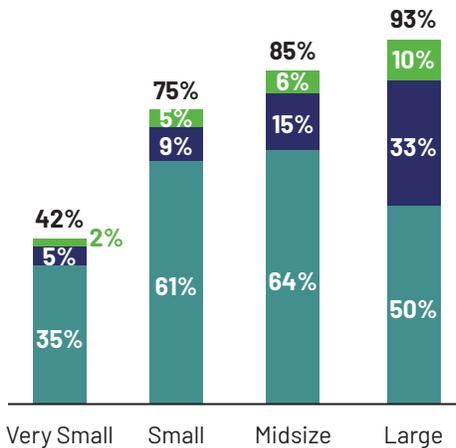
(According to Contractors)

Dodge Data & Analytics, 2022



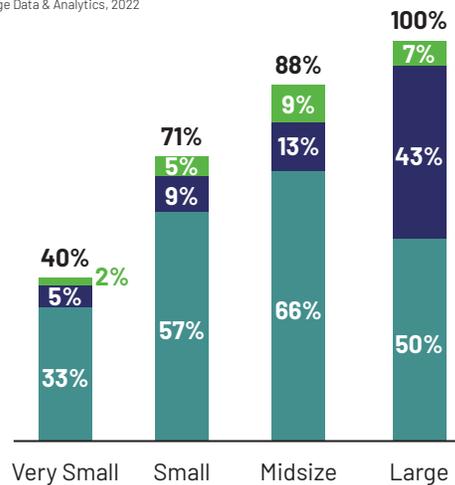
Consider DEI During Recruitment of Workers in the Field (Contractors by Size)

Dodge Data & Analytics, 2022



Consider DEI During Recruitment of Office Staff (Contractors by Size)

Dodge Data & Analytics, 2022



- Have specific standards to gauge recruitment and program development, in addition to recruitment policies with standard nondiscrimination language
- Have programs to help diversify the workforce (e.g., consideration of nontraditional interviews, blind interview process, etc.) in addition to standard nondiscrimination language
- Recruitment policies have standard nondiscrimination language

Industry Use of DEI Practices

Leadership Training

One of the current challenges in the design and construction industry is the lack of diversity in company leadership. A long-term strategy to address this issue is to make leadership training more broadly available across entire organizations, to help foster a more diverse roster of eligible candidates when positions open up. Architects and contractors were therefore asked about the degree to which leadership training is available at their organizations.

Architects

Overall, across the profession, the largest share of architect respondents (40%) do not offer leadership training on a regular basis. While this is most notable among small companies

(48%), one third of larger ones do not offer leadership training on a regular basis. While this is most notable among small companies (48%), one third of larger ones do not offer leadership training on a regular basis.



DATA INCLUSION IN DESIGN AND CONSTRUCTION DIVERSITY, EQUITY AND INCLUSION

Industry Use of DEI Practices

Leadership Training CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

they offer to all their staff, regardless of the type of worker.

- Their findings are also relatively consistent with the architect findings, with the greatest emphasis on offering leadership training to selected workers, based on perceived potential.

VARIATION BY SIZE OF COMPANY

Far more contractors at midsize and large companies offer leadership training than those at very small or small ones.

- Small companies are consistent in the share of training offered between jobsite workers and office staff.
- However, a much higher share of large companies offer leadership training to all workers in the office (37%) than they do to all jobsite workers (27%). Instead, they more frequently select jobsite workers for leadership training based on perceived potential (60%) than they do for their office staff (47%).
- Very small companies also have offer leadership training to all staff in the office more frequently than they do for workers in the field.
- Midsize companies more frequently offer training based on perceived potential to office workers than workers onsite.

Availability of Leadership Training

(According to Contractors)

Dodge Data & Analytics, 2022



Make Leadership Training Available to Jobsite Workers (By Size)

Dodge Data & Analytics, 2022



Make Leadership Training Available to Office Staff (By Size)

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

DEI Training

DATA
DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

Architects and contractors were both asked about whether their company offers training that promotes a more diverse, inclusive and positive workplace culture, and that is in addition to required compliance training. The two charts at right show their responses.

- **Architects:** Over half (58%) of architects offer this training. Even among small firms, it is relatively common, with nearly half (48%) providing it. At large companies, it is a standard practice, with nearly all reporting it.
- **Contractors:** Nearly as many contractors (54%) as architects offer this training. Their responses are also very similar to the architect findings by size of company, with just under half of very small/small contractors providing it and most large companies doing so.

The higher level of use of this particular practice by small companies than the most progressive recruitment or leadership training practices suggests that, for many companies, direct training is considered to be an essential strategy to promote diversity and inclusion. It is a highly visible endorsement of the importance of diversity, inclusion and equity at these companies, but if it is not reinforced by more policies and practices, it is unlikely to have sufficient influence to change the culture at an organization.

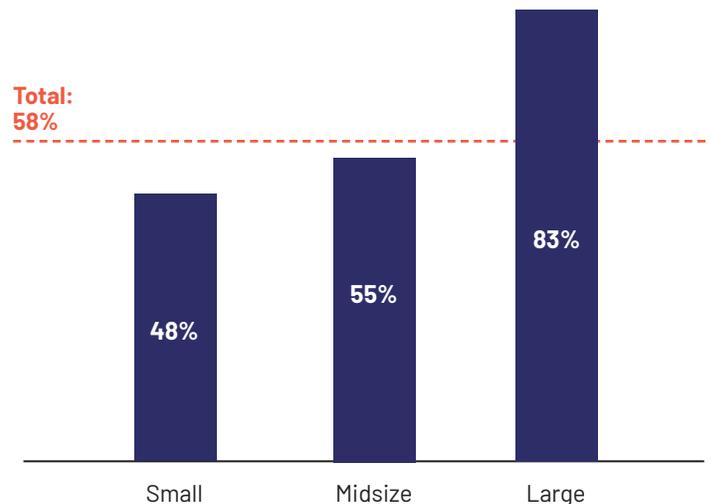
Variation by Region Among Contractors

There is no variation by region in the use of this training at architectural firms, but significantly more contractors in the West (65%) provide it than do those in South (46%) and the Northeast (47%), with those in the Midwest (58%) falling in between.

Offer Training That Promotes a More Diverse, Inclusive and Positive Workplace Culture

(According to Architects)

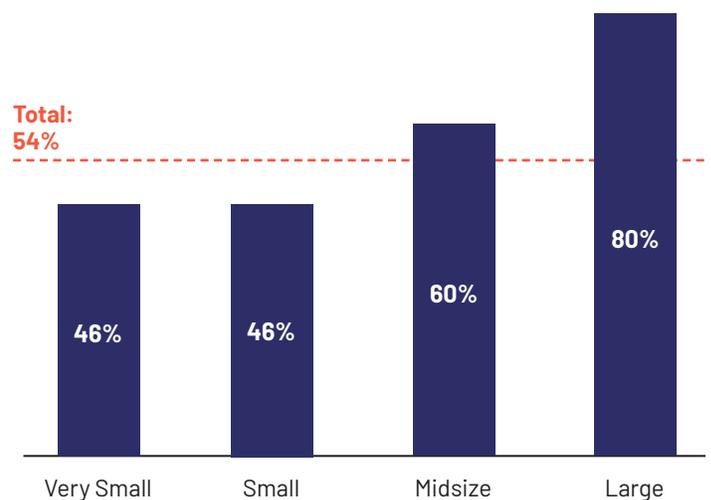
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Offer Training That Promotes a More Diverse, Inclusive and Positive Workplace Culture

(According to Contractors)

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Industry Use of DEI Practices

Skills Training for Jobsite Workers

Providing training to jobsite workers beyond the immediate needs of their role on the project can offer them opportunities for growth at their company and help create a more positive work environment that allows all to excel. Therefore, contractors were asked whether they offer their jobsite workers training in skills beyond those mandated for the current job that they have.

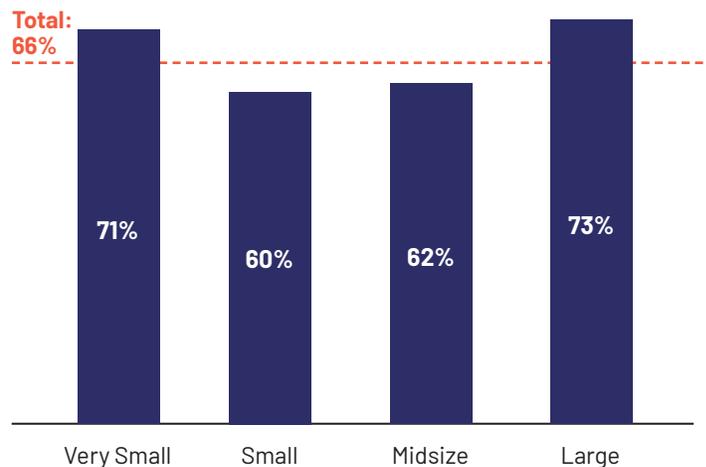
Fortunately, the findings reveal that this is a very common practice among contractors. Two thirds (66%) provide this training to their workers on average. Notably, it is much more common for very small and large companies to do so than for small and midsize ones, even though the difference technically falls within the margin of error of the study.

- Large companies may have more resources available to provide training and to help fill in any gaps while the worker is receiving that training.
- Very small companies may be more likely to self-perform work and to keep a core set of staff onboard, which would encourage them to invest more in cross-training. In fact, 70% of trade contractors report that they offer this training, compared with 63% of general contractors.

These findings continue to support the conclusion that training is the top means by which construction companies are currently promoting diversity, equity and inclusion, whether that is the intended result of the training or not. Helping workers gain new skills and create new opportunities for themselves increases the likelihood that the skilled workforce can be more diverse, especially if it is combined with other policies and activities that encourage more inclusion and equity at their companies.

Offer Jobsite Workers Training in Skills Beyond Mandates (According to Contractors)

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Formal Path for Advancement

Training is not the only way that companies can encourage diversity, equity and inclusion. Having a well-considered, formal path for advancement for employees at the company that considers diversity and helps encourage participation across the company can also help firms address inclusion and equity issues. Therefore, architects and contractors were asked to identify which of the five options shown in the chart at upper right best describes the path for advancement at their companies.

Architects

Overall, the upper chart reveals that the majority of architect respondents do not have a formal path of advancement at their company. Again, as with recruitment (page 8), this is strongly influenced by the fact that small firms are half of the total respondents to the survey. Still, given the large share of small firms in the industry as a whole, it is still worth noting that for many in the profession, a formal path of advancement is not available.

One interesting factor worth noting, though, is that the vast majority in this group state that the path for advancement is not formalized, rather than that they have no clear path for advancement at all. Clearly, most of them believe that individuals at their company are able to discern a path for advancement, even if it is not laid out formally. However, this is not useful when it comes to overcoming biases, or in helping those who do not see themselves reflected in the leadership at their organization recognize opportunities.

Having a formal path for advancement that includes consideration of leadership diversity occurs more frequently at midsize and large firms than at small ones, but it is still not a common practice at these larger firms, with fewer than half making these considerations.

These findings suggest that the profession is largely relying on organic changes to make its leadership more diverse. However, the low levels of diversity present in the leadership of the profession at this point suggest that a more intentional approach is required. This is a great opportunity for the industry as a whole, including associations and other industry organizations, to provide support. Small and midsize companies, in particular, may not have dedicated staff for promoting diversity nor the proper expertise to do so. They need to be able to draw upon the expertise and best practices shared by those engaging in these efforts to help them adopt these approaches and eventually benefit from the insights provided by having more diverse leaders at their organization.

Path for Advancement for Staff

(According to Architects)

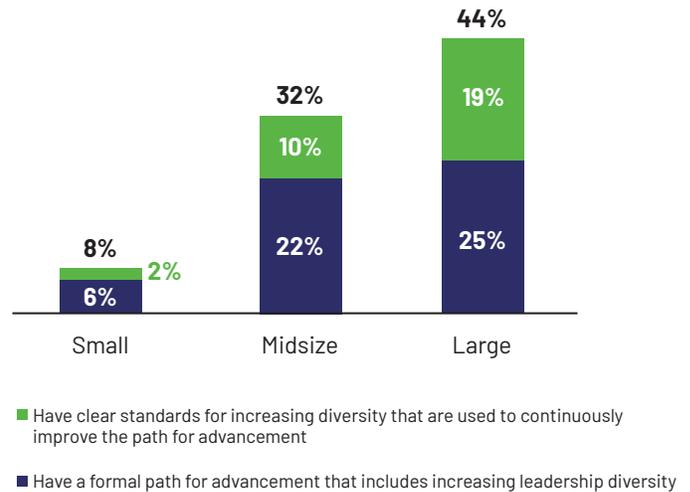
Dodge Data & Analytics, 2022



Path for Advancement Includes Diversity Considerations

(According to Architects by Size)

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Leadership Priorities

The priorities set by leadership at a company have a major impact on the behavior of staff and the overall company culture. A sincere commitment to diversity, equity and inclusion at a company can be one important factor in creating an atmosphere in which diverse workers and staff can thrive, and one of the clearest indicators to employees about the true priorities of their company is the degree to which resources are devoted to achieve those goals. Therefore, architects and contractors were asked to select which option best describes the priorities of leadership at their organizations from the list of options in the chart at right, from complete disengagement to dedicating resources and tracking their progress to encourage diversity, equity and inclusion at their companies.

Architects

Nearly all architects (87%) report that their company at a minimum has diversity and inclusion as a company value. This bodes well for the potential for wider adoption of practices to encourage diversity and inclusion in the profession.

Currently, though, the share who are actively encouraging diversity and inclusion to be prioritized is about half (53%), and they are nearly evenly split between those who devote resources to this issue and those who do not. Overall, this is an encouraging finding, but it also reveals opportunities for growth in leadership commitments to increase diversity across the profession.

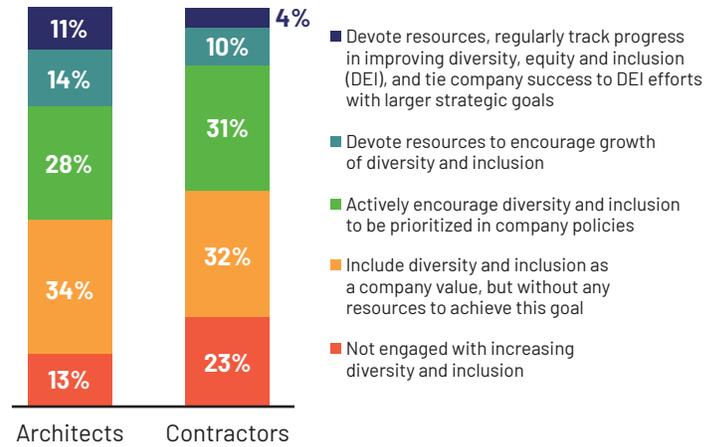
There is also a significant divide in the responses by size.

- The majority of those at small companies who address this issue at all do so by actively encouraging it, but only 7% at these firms are actually devoting resources to it.
- At midsize firms, the largest share are devoting resources to encourage the growth of diversity and inclusion at their companies, but fewer are actually tracking their progress in this issue.
- Large companies are the leaders in this area, with a significant share (29%) who are tracking the progress and including DEI efforts in their strategic goals. It is more common at these companies for resources to be devoted to encouraging DEI than not.

While large companies may be in a better position to devote resources to engaging with the issue of DEI, the efforts they are making to track progress and figure out which strategies are most effective may be able to help the industry as a whole. Therefore, it is critical that there are forums for them to share both their successes and their less successful attempts to improve, so that they can help lead the profession to become more inclusive.

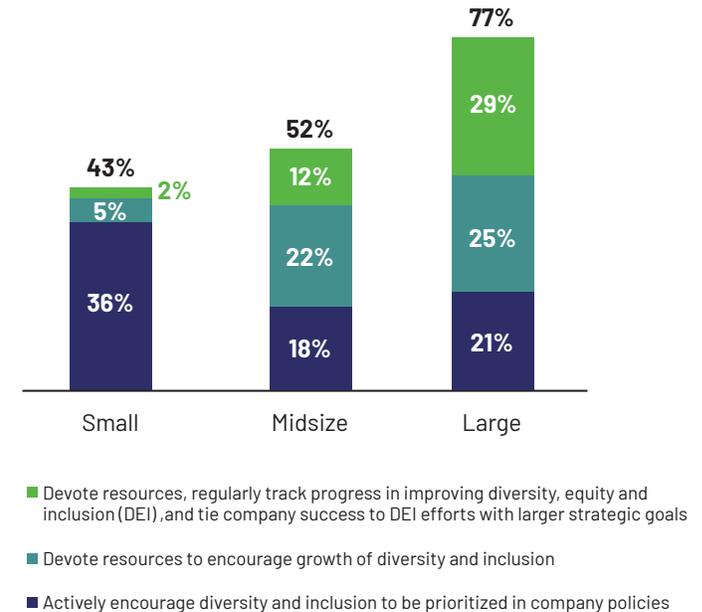
Leadership Priorities at Architect Firms and Construction Companies

Dodge Data & Analytics, 2022



Leadership That Actively Encourages Diversity and Inclusion at Architect Firms

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Leadership Priorities CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Contractors

As the chart on the previous page reveals, contractors slightly less frequently report that their leadership encourages diversity and inclusion than do architects, but the share who do (45%) is still a significant percentage of overall respondents. It is notably less common, though, for leadership at contractors to devote resources to this issue, with only 14% reporting that this occurs.

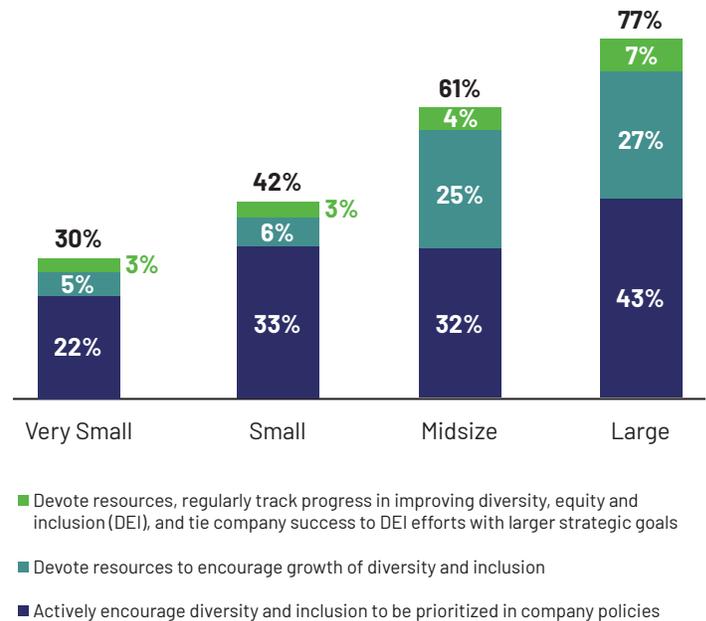
As with the architects, the size of the construction company impacts the likelihood that their leadership is actively engaging with this issue.

- At small and very small firms, the majority with leadership who actively prioritize DEI do not report that resources are dedicated at their companies to achieve these goals.
- This is in contrast to the response from midsize and large companies, where between one third and one half of those actively engaged in these issues are devoting resources to achieve better results.
- However, information on the most successful practices for contractors is far less likely than it is for architects, since 7% or fewer from companies of any size report that their progress is actively being tracked or that these efforts are tied to their larger strategic goals.

These findings are interesting when contrasted to the other findings thus far in the study. Generally, when it comes to training and recruitment, contractors have a similar level of commitment to DEI in practice as do architects. However, the leadership commitment to these goals at construction companies is not as strong. This may suggest that contractors are engaging in these issues to address some of the biggest challenges they face, such as severe labor shortages, but they may be more difficult to engage in the goal of fundamentally transforming their organization and their profession because of the strategic, rather than tactical, value of doing so.

Leadership That Actively Encourages Diversity and Inclusion at Construction Companies

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Other DEI Practices Conducted by Architects

DATA DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

The data so far has focused on the degree to which recruitment, training, formal career advancement strategies and leadership priorities can be used to increase diversity, equity and inclusion at design and construction companies. However, there are many other strategies available to companies seeking to improve in these areas.

Architects were asked about two questions about eight other practices.

- Which are currently in place at their firm
- Which are the top three that their company should be employing in the next five years

The top six most frequently used are shown in the chart at right. The findings demonstrate that many more architects believe that these activities should be utilized by their company than those who find that they are currently in place.

- The most widely used practices are consideration of diversity and inclusion when selecting other team members, and a code of ethics that includes a diversity and inclusion focus. These are also the practices that the highest percentage of architects believe should be utilized in the next three years.
- The biggest gap between use and desired use are for engagement of underrepresented populations (through training and mentorship) and training on unconscious bias. Fewer than one quarter report that these practices are in place at their company, but over 40% believe they should be.

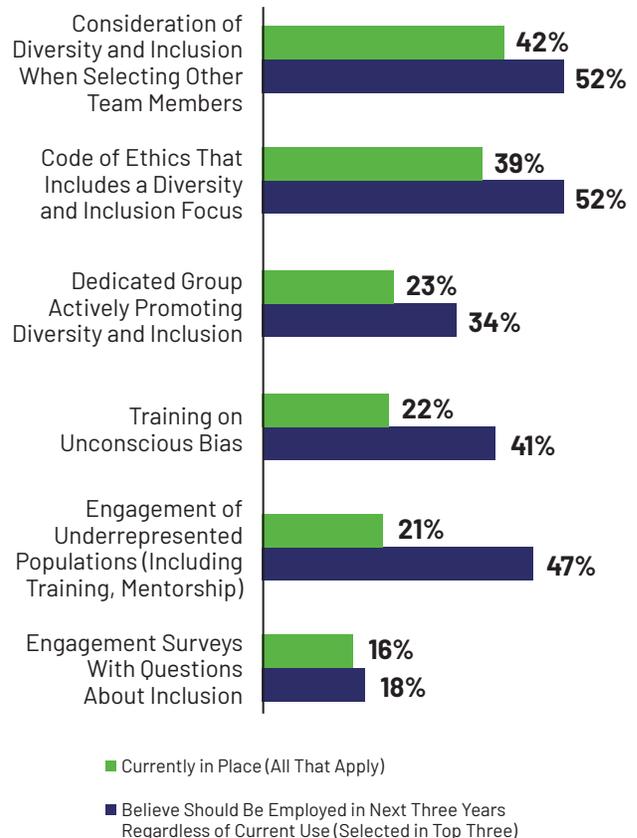
Variation by Size

Size of firm makes a difference in the use and desired use of several practices.

- Fewer respondents from large firms (29%) report that they consider diversity and inclusion when selecting other members of the project team than do midsize (43%) or small companies (46%). In addition, respondents from small firms more frequently select this among the top three practices that should be employed (63%, compared with 35% at midsize firms and 48% at large ones).
- Large firms more frequently have a code of ethics that includes diversity and inclusion (56%), a dedicated group that actively promotes diversity and inclusion (50%) and training on unconscious bias (35%) than do small companies (31%, 6% and 17%, respectively). They also trend higher in their use of these practices than midsize firms, although the differences in this case do not rise above the margin of error. Small firms may not have sufficient people to have a dedicated group for this issue, which is probably why they prioritize it less than do those at midsize and large firms.

Additional DEI Practices at Architecture Firms

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Other DEI Practices Conducted by Contractors

DATA DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

Contractors were also asked two questions about their organization's use and desired future use of DEI practices, in addition to potentially incorporating DEI into their recruitment, career advancement and training strategies and their leadership priorities. The top six practices they currently use are shown in the chart at right from a total list of nine options.

- The top practice used by contractors is a code of ethics that includes a diversity and inclusion focus, and this is an even more common practice among midsize (53%) and large (63%) companies.
- Toolbox talks rank second in use, which corresponds with the use of training as a top approach to encourage greater diversity and inclusion at their companies (see pages 11, 12 and 13).
- As the chart at lower right reveals, over three quarters (76%) of contractors select at least one additional practice that they would like their company to use in the next three years, yet only engagement of underrepresented populations has a much larger share calling for its use than are currently using it. This likely suggests that some contractors only selected items their companies are not already doing.

These findings confirm that there is definitely room for growth in DEI practices in the construction industry, but they are less conclusive about whether the need for greater engagement is widely recognized.

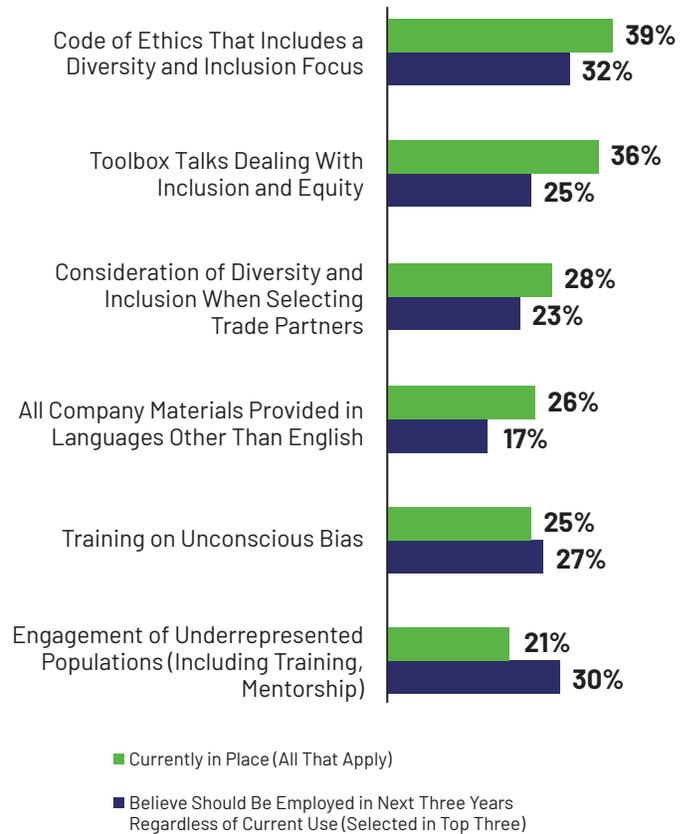
Variation by Size of Company

50% or more of large companies utilize three practices, far more than at any smaller companies: consideration of diversity and inclusion when selecting trade partners, training on unconscious bias and engagement of underrepresented populations. The wide utilization by large companies of these approaches may provide a template for smaller companies to follow.

More respondents from large companies believe their company should be engaging underrepresented populations (53%) than those from smaller companies.

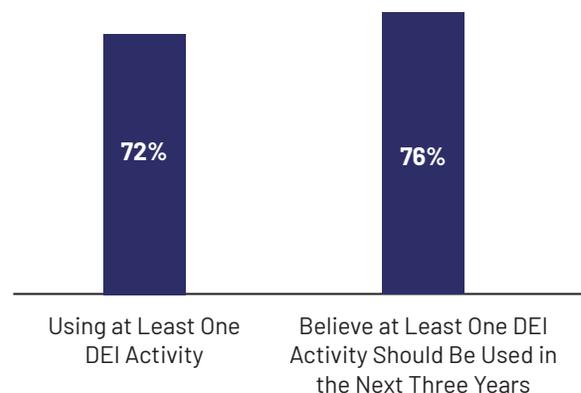
Additional DEI Practices at Construction Companies

Dodge Data & Analytics, 2022



Contractors' Use of Additional DEI Activities

Dodge Data & Analytics, 2022



Industry Use of DEI Practices

Overall Engagement With DEI Activities

The responses from architects and contractors to the DEI practices included in the survey provide a good benchmark for industry engagement with improving diversity and inclusion as a whole. They also provide a spectrum of engagement with DEI that can be used to analyze the responses in the rest of the study to show relevant differences between those who are more deeply engaged with DEI activities versus those who are not.

To create a consistent comparison, a point system was applied to each question based on the degree of engagement specifically with DEI activities that their responses revealed. Using that point system, respondents were divided into those with a high, moderate and low level of engagement in DEI.

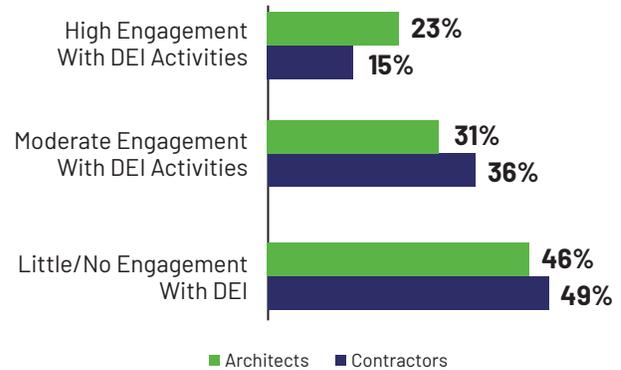
The distribution of architects and contractors into each of these categories is shown in the chart at upper right. It reveals that the industry is still in the early stages of embracing DEI as a goal, with nearly half qualifying as little/no engagement, about one third reporting moderate engagement and less than one quarter qualifying as having a high level of engagement.

The charts below look at how the engagement varies by size of company for architects and contractors. They show directly what an examination of all the findings also makes evident: Large companies are far more highly engaged with DEI than are midsize or small ones. However, it also demonstrates room across the industry for improvement, with only 40% of large architectural firms and 43% of large construction companies currently deeply engaged in these efforts.

The rest of the report will utilize these levels of engagement to better understand the benefits derived from deeper engagement and the degree to which companies highly engaged internally with DEI are also incorporating that into how they respond to the communities surrounding their offices and projects.

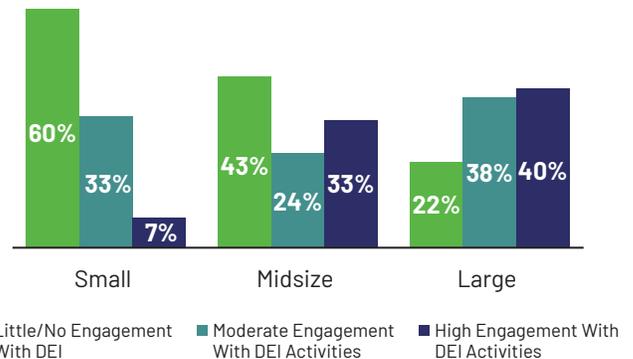
Engagement With DEI Activities Included in the Survey

Dodge Data & Analytics, 2022



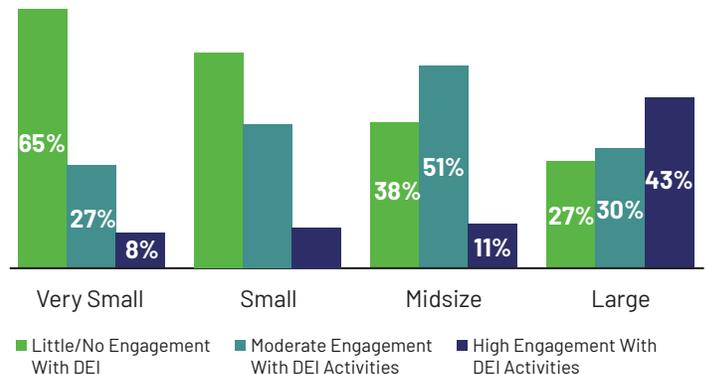
Architects' Engagement With DEI Activities Included in the Survey (By Size of Firm)

Dodge Data & Analytics, 2022



Contractors' Engagement With DEI Activities Included in the Survey (By Size of Company)

Dodge Data & Analytics, 2022



DEI: A Marathon, Not a Sprint

Building a business culture of diversity, equity and inclusion is both the right thing to do and a good economic investment.

Data¹ shows that, no matter the industry, a more diverse workforce improves performance. Companies with more than 30% women executives outperform companies with fewer female leaders, and those with the most ethnic and culture diversity are 36% more profitable than those with the least.

Why Diversity and Inclusion Matter

While some architect and construction firms may struggle to see why diversity, equity and inclusion (DEI) can make a difference, Steve Huizinga, president of Allied Mechanical Services, has a passion for inclusivity. “We call it IED, because you can’t have diversity if you don’t first have inclusion; and I don’t care how much it costs, it’s the right thing to do. Does it mean if it doesn’t make someone X amount of money, they won’t do it?”

“The benefits are numerous,” says Renée Byng Yancey AIA’s chief external EDI officer. “The question is really what are the costs of not being aware of DEI?”

In construction, for example, the annual cost of injuries is \$13 billion;² and workers who aren’t integrated into workplace culture are more likely to have accidents because of the increased stress of exclusion. The industry is also dealing with a turnover of almost 25%, costing employers 21% of an employee’s salary for each person who leaves.³ There are similar costs in architecture: Disengaged employees

cost firms 34% of their annual salaries, and turnover costs six to nine months of an employee’s salary.⁴

Making Strides in DEI

Architecture and construction firms have made strides in advancing DEI and combating biases, both organizationally and in their projects in the community, but more needs to be done. “Conscious and unconscious bias can disrupt teams and impact decision-making,” says Tia Perry, ABC director of inclusion, diversity and equity.

The major challenges to creating a truly diverse and inclusive workforce are addressing the unknowns about what DEI looks like and then making it happen. “Diversity and inclusion can be all encompassing,” says Brynn Huneke, director of diversity and inclusion, and member engagement, AGC of America. “Leaders don’t know what they don’t know, there’s uncertainty about where to go next to really create change.”

“DEI is not a check-the-box exercise. It isn’t enough to say we have more women or people of color, people with disabilities, LGBTQIA+ or any form of human diversity,” says Yancey. “Firms can measure elements like who is employed and at what level. KPIs around employee engagement and culture, wellness and retention rates are also important measures.”

The construction field is facing a significant labor shortage. “Economically in 2022, construction firms need to hire 650,000 more workers than in 2021,” says Perry. “We need to see more intentionality in recruitment with our member companies, tapping into underrepresented communities and

providing opportunities to everyone.”

Huizinga specifically focuses on programs to support a diverse workforce at his company, including a program to help employees get citizenship. “Our average retention rate is 14 years, and candidates are pouring in. People get our vision and understand we’re not just building things, we’re changing people’s lives so they can have a future.”

Building an Inclusive Culture

Building an inclusive workforce is a business problem that requires a multipronged approach. Leaders in architecture and construction can use metrics and evidence in hiring decisions and work assignments.

“The next three years, I foresee a steady drumbeat of engagement building,” says Yancey. “Look at the inspiring advocacy of emerging professionals in school and finding their way into careers, they bring expectations to their work and want to align professional interests with their values.”

“My biggest recommendation for companies looking to build a more inclusive culture is to be more intentional about communicating culture they expect to see in workplaces and on jobsites,” says Huneke, “There are a lot of companies with very robust D&I programs and a lot that are just starting. As a whole, the industry is still in the awareness stage.”

“Building a culture of DEI is a marathon, not a sprint,” says Perry. “The work can be uncomfortable, but you have to start. We can’t continue the status quo and bridge the worker shortage.” ■

¹ Diversity Wins: How inclusion matters, McKinsey, <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-how-inclusion-matters>.

² The Case for Diversity and Inclusion in the Construction Industry, AGC Diversity and Inclusion Council, <https://www.agc.org/sites/default/files/Files/Advocacy/AGC%20Report%20on%20Biz%20Case%20for%20D%26I%20FINAL.pdf>

³ Ibid.

⁴ The Elephant in the (Well-Designed) Room, AIA, <https://www.aia.org/pages/6435906-an-investigation-into-bias-in-the-architect>

Recruitment and Retention: Fostering Diversity in Construction

The labor shortage in construction is reaching new heights, with nearly 400,000 unfilled jobs reported earlier this year, and that number expected to rise as the Infrastructure Investment and Jobs Act pumps billions into the sector. According to the U.S. Bureau of Labor Statistics' 2022 figures, 87.2% of construction workers identify as white, and only 3.9% identify as women. Meanwhile, more than a million of the nation's 16- to 24-year-old minority youth and some 4.8 million minority adults are unemployed. "So do we have a labor shortage, or do we have a shortage of who we want to put to work?" says Wendell Stemley, president of the National Association of Minority Contractors (NAMC).

Diversifying the construction workforce is a two-part challenge: first to recruit more women and people of color, and second to retain them. Recruiting a more diverse workforce requires broadening the pathways into the sector; retaining diverse recruits requires implementing policies, practices and programs to mitigate the current and historical injustices that get in their way.

Diversifying Recruitment

To improve recruitment among women and people of color, "pre-apprenticeships are the one tool empirically documented to increase diversity in the construction workforce," says Maura Kelly, a professor at Portland State University, whose research focuses on inequalities in the construction trades. Pre-apprenticeships—typically five- to

10-week programs that, in addition to basic skills, provide participants with information about how to find work (often through direct-entry agreements with apprenticeship programs), how to succeed and how to navigate construction culture as a person who holds a marginalized identity—have proven successful in recruiting people from outside of the families-and-friends networks that are the more common paths to the trades. "If you want more women and people of color in construction," Kelly says, "you need to fund more pre-apprenticeships."

As another pathway for minority recruitment, Stemley highlights the importance of improved opportunities for minority-owned businesses: They are the ones most likely to train minority workers, he says. As project owners, especially public agencies, increasingly require construction teams to demonstrate that their hiring and procurement practices foster equity of opportunity for historically

alphabet soup of acronyms, you do a disservice to your client and your local community. (o) 13.8 myso1(s) T J M C P / M52D 51 T J 0.01 T c
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Do we have a labor shortage, or do we have a shortage of who we want to put to work?

disadvantaged business owners, Stemley cautions that the many acronyms through which projects measure the participation of various groups—SBE, MBE, WBE, DBE, VBE and XBE, to list a few—can render the exclusion of Black- and brown-owned businesses invisible. "Whatever metrics you use should clearly represent how minorities are faring in your procurement processes," he says. "When you get that bundled in the

Recruitment and Retention: Fostering Diversity in Construction

CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

investigation revealed that women and people of color more often meant that they were regularly harassed, weren't provided with opportunities to learn the skills of their trade, and/or didn't get enough hours to make ends meet.

Improving retention rates for women and minorities requires supporting disadvantaged workers on the one hand while changing the culture of the construction workplace on the other. As a model for supporting disadvantaged workers, Kelly highlights a highway trades workforce development program run by the Oregon Department of Transportation and the Oregon Bureau of Labor and Industries. The program supports apprentices by providing them with tools, clothing, protective equipment, travel costs, a childcare subsidy, access to hardship funds and nonfinancial support—which research has found to be particularly impactful—such as mentoring and facilitating connections to additional resources and advice as needed. “Folks who receive services through these programs are more likely to complete than those that don't,” Kelly says. “A lot of money goes into training apprentices. A relatively small investment in retention services will ultimately be worth it if you're able to improve those completion rates.”

Building a Culture of Inclusivity

As for changing the culture of the construction workplace, a sociological model of change provides recommendations at three levels of scale: institutional, interactional, and individual. From a summary provided by Kelly, the institutional level focuses on an organization's ideologies, policies and practices, with recommendations including:

- Making respectful workplaces a priority
- Assigning clear roles and responsibilities to implement the respectful workplace initiative (such as, for example, RISE Up or Green Dot)
- Improving policies for reporting and disciplining harassment and discrimination
- Addressing harassment and discrimination with appropriate consequences as they occur
- Reinforcing the respectful workplace priority with ongoing training and messaging
- Evaluating the initiative and adjusting as needed

The individual level focuses on workers' knowledge and beliefs:

- Providing information for all workers about respectful workplaces and expectations for acceptable behavior on the job
- Educating workers about the ways harassment and discrimination negatively affect everyone
- Sharing stories of experiences of harassment and discrimination from people of color, women and other groups of workers historically marginalized in the trades

“Even if we can't always change hearts and minds, we can still ensure that people get the information about what is and is not acceptable on their jobsite,” says Kelly,



A lot of money goes into training apprentices. A relatively small investment in retention services will ultimately be worth it if you're able to improve those completion rates.

The interactional level focuses on how workers interact on the job:

- Ensuring that all workers are provided with ongoing training and tools (such as bystander intervention and options for formal and informal reporting) to address harassment and discrimination when they see it
- Ensuring that workers in supervisory positions on the jobsite receive additional training, model respectful behavior and address harassment and discrimination when they see it

noting that a hostile jobsite is neither equitable, productive nor safe. “All people want to be respected at work,” she says, “and I think we have a lot of great tools that are going to get us to the place that the industry needs to be.” ■

Data: Benefits of Engaging in DEI Practices

Organizational Benefits

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Architects and contractors were asked to select all of the organizational benefits they experienced in the past five years due to their engagement with diversity and inclusion initiatives. Their responses are shown in the chart at right by their level of engagement with those initiatives.

Two findings, in particular, demonstrate the overall value of DEI engagement to improve organizations:

- 92% of respondents report experiencing at least one benefit.
- As the chart clearly reveals, deeper engagement with DEI practices yields more organizational improvements.

In general, many of the benefits experienced fall into two categories: improved workplace culture and better staff recruitment/retention.

IMPROVED WORKPLACE CULTURE

Most of the most frequently experienced organizational benefits involve improving the culture at these companies.

- A more inclusive and positive workplace culture is the top benefit of engaging in DEI practices, reported by 50% overall. While this is the most expected benefit, the findings also demonstrate that truly active engagement is needed to change a culture, with 75% of those highly engaged reporting that this is the result, compared with just 30% of those with low engagement with DEI practices.
- Better communication between leadership and staff is the second highest benefit, experienced overall by 32% and by 56% of those highly engaged with DEI.
- Higher staff/worker satisfaction is less commonly reported than the other benefits, but still experienced by 35% of those highly engaged.
- All of the benefits related to culture are more widely reported by architects than contractors.

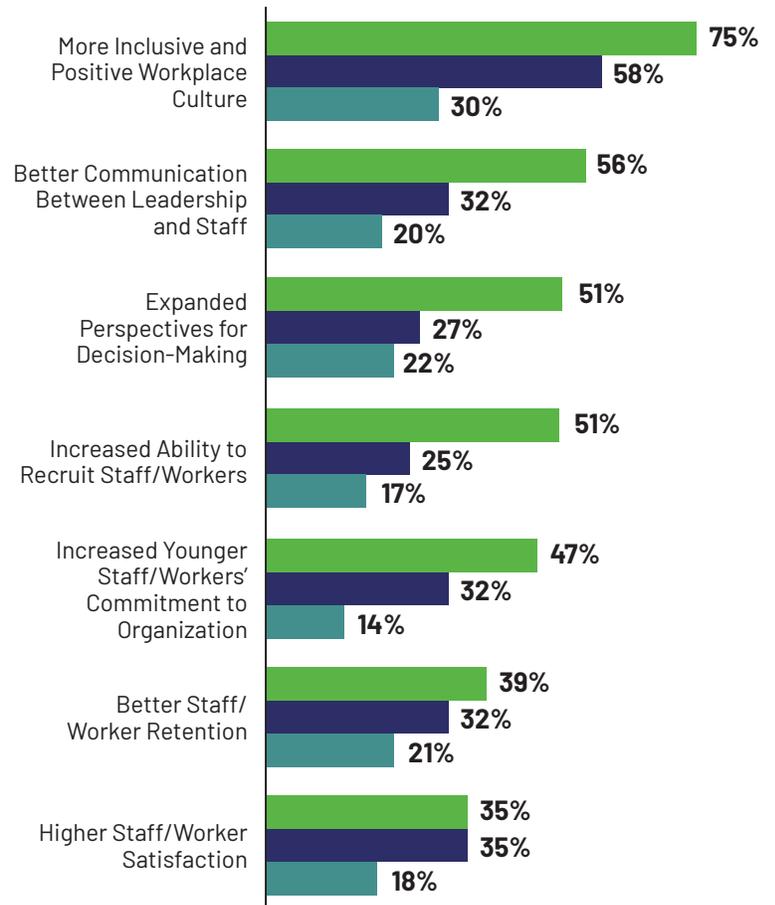
STAFF RECRUITMENT/RETENTION

The findings also demonstrate that a strong commitment to DEI improves the ability to recruit and retain staff.

- Over half of those who are highly engaged in DEI report an increased ability to recruit staff/workers due to their efforts.
- Nearly half of those highly engaged also find that younger staff/workers are more committed to their organization. This is also more widely reported by highly engaged architects (35%) than by contractors (21%).
- Surprisingly, though, there is less of an impact on overall staff retention than on the younger workers' commitment, possibly due to resistance to change among more established staff members.

Organizational Benefits Experienced in the Past 5 Years Due to Engagement in DEI Practices (by Level of Engagement)

Dodge Data & Analytics, 2022



- High Engagement With DEI Practices
- Moderate Engagement With DEI Practices
- Low Engagement With DEI Practices

Benefits of Engaging in DEI Practices

Project Benefits

Architects and contractors were asked about the benefits to their projects of their engagement with DEI that they have seen in the last five years. Since the list of benefits were somewhat different, the architect responses are shown at right and the contractor responses on the following page.

Architects

As the chart at right reveals, architects from firms with a deeper DEI engagement are more likely to experience many of the project benefits included in the study. However, the differences that rise to the level of statistical significance are largely focused in two areas: collaboration and process.

COLLABORATION

The top two benefits overall are increased collaboration with other project team members (46% of all architects) and increased collaboration internally (39%). Those at firms that are highly engaged in DEI experience these benefits significantly more frequently than those at firms with less engagement. In fact, increased collaboration both internally and externally is a relatively common benefit at the highly engaged firms.

In addition, although experienced less commonly than the other collaboration benefits, those at highly engaged firms believe that they are better able to resolve project team disputes than those at firms with low DEI engagement.

One notable finding is that project managers/directors experience increased collaboration with other project team members more frequently (69%) than do design architects (45%) or principals/executives (38%). This is likely due to the degree to which collaborating with other team members falls in their direct responsibilities, so they have a better understanding of how it is impacted by their DEI engagement.

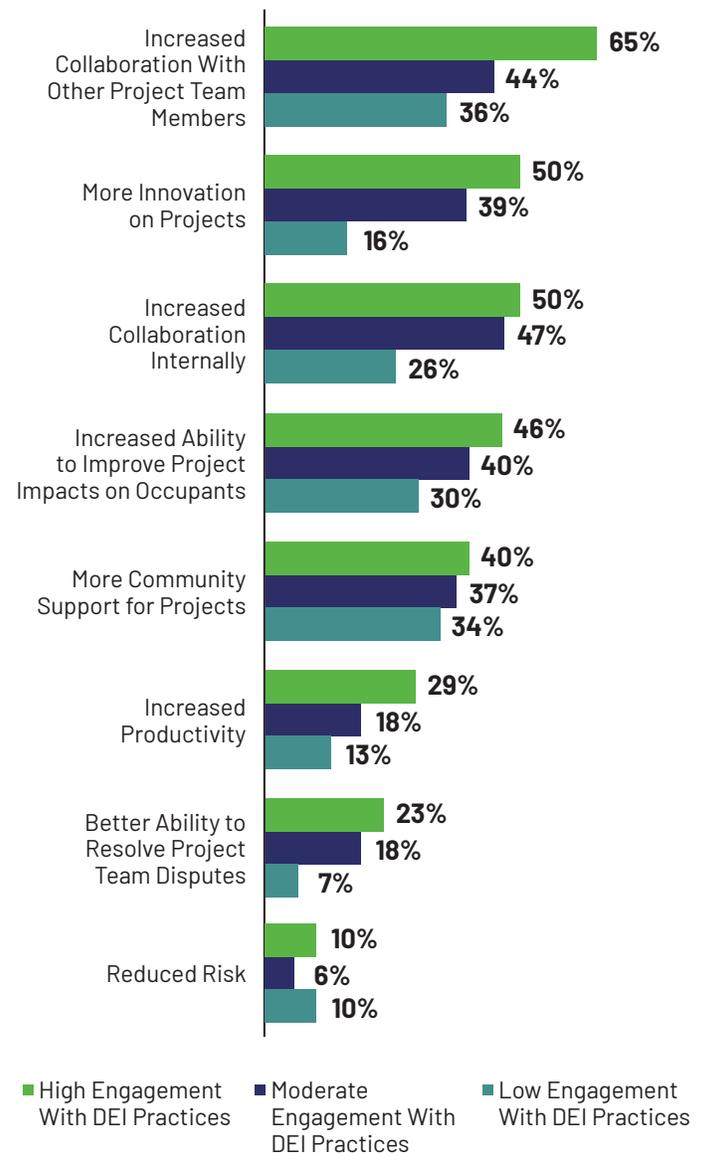
PROCESS

Those at firms with a high engagement with DEI also report more innovation on projects and increased productivity due to their DEI commitments. The finding on increased innovation, which half of those highly engaged with DEI practices experience, is particularly notable, since it may be hard to gauge the source of innovation generally, but so many are able to attribute it to their DEI commitments.

There are no significant differences by engagement with the impacts on occupants or community support, although there is still a trend for slightly higher reporting by those with high engagement of these benefits. (See pages 35 to 38 for more information on how frequently architects engage and impact the community around their projects.)

Project Benefits Experienced by Architects in the Last 5 Years Due to Engaging in DEI Initiatives (by Level of Engagement)

Dodge Data & Analytics, 2022



Benefits of Engaging in DEI Practices

Project Benefits CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Contractors

Contractors were asked about seven project benefits shown in the chart at right. Notably, 85% said that they achieved at least one of these benefits due to their DEI engagement, despite the fact that even the top benefit overall (increased access to needed skilled labor) was only selected by 34%.

As the chart at right reveals, contractors at companies with a high level of engagement with DEI practices also report several project benefits more frequently than do those at companies with less engagement, similar to the architects.

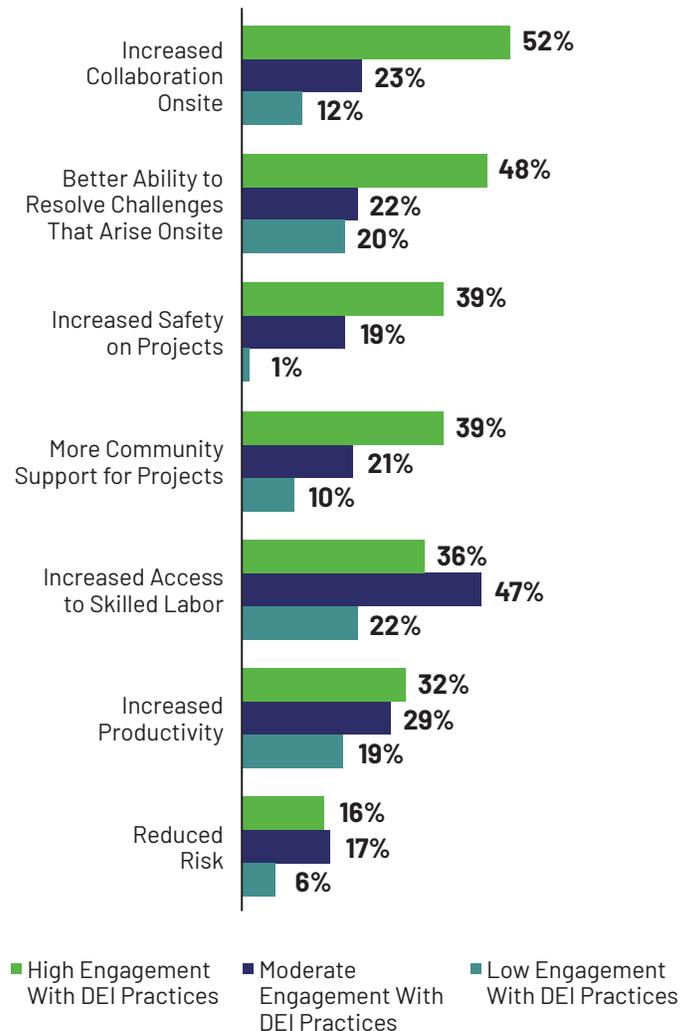
- Over half of those at highly engaged companies report that they experience increased collaboration onsite, more than double those at companies with less engagement. This collaboration can lead to other benefits, including more innovation (which was not asked of contractors), better project coordination and improved safety.
- Nearly half of those from highly engaged companies also are more able to resolve challenges that arise onsite due to their company's engagement with DEI. This is likely also a benefit derived from the increased collaboration onsite reported.
- As mentioned above, the collaboration widely experienced by those at companies with a high level of engagement no doubt contributes to the increased safety that they also notice on their projects.
- In contrast with the architects, contractors from highly engaged companies also experience more community support for their projects than do those from companies with less engagement. This benefit is also more widely reported by general contractors than specialty trade contractors, which makes sense since general contractors are more likely to be seeking community support than are the subcontractors that work for them.

Increased access to skilled labor may rank fifth among those at companies with a high level of engagement with DEI, but it ranks first among those at organizations with a moderate or low level, and it is the top benefit reported overall, selected by 34%. This finding aligns with the top practices employed by contractors, which make it clear that often, contractors appear to engage in DEI activities as a tactical choice, with a goal of attempting to address chronic labor shortages in the industry.

Overall, the combined findings of architects and contractors demonstrate that deeper engagement with DEI yields far more project benefits than simply undertaking a few activities.

Project Benefits Experienced by Contractors in the Last 5 Years Due to Engaging in DEI Initiatives (by Level of Engagement)

Dodge Data & Analytics, 2022





Benefits of Engaging in DEI Practices

Top Benefits

The data on the organizational, project and business advantages discussed on pages 24–27 provides an overview of the broad spectrum of benefits that companies engaged in DEI practices experience. However, it is also helpful to know what architects and contractors perceive to be the top benefits that their companies experience due to their engagement with DEI, regardless of how many experience them. Therefore, architects and contractors were shown a single list of all organizational, project and business benefits they previously selected and were asked to select their top three, and the five most frequently selected are shown in the table below.

Architects

The top five benefits architects experience from their engagement with DEI practices are a mix of organizational and project benefits.

- The top benefit, **more inclusive and positive workplace culture**, was selected by more than twice as many as their top benefit than any of the other options.
- **More community support for projects** ranks second in the list of most important benefits. This is surprising since it only ranks fourth among the most frequently experienced project benefits. Its high ranking on this list of top benefits reveals that, among those who experience it, it has a large positive impact.
- The next two most important benefits—**increased collaboration internally** and **better communication between leadership and staff**—reveal the degree to which architects value the improved collaboration and communication at their firms that is promoted by their DEI practices.
- The fifth most important benefit according to architects, **expanded perspectives for decision-making**, reveals that many architects recognize the value of gaining different perspectives and the influence it can have on design.

- While not represented in the top five, two business benefits, **increased ability to recruit staff** and **improved employee well-being**, rank sixth and seventh.
- Notably, the top three benefits among architects highly engaged with DEI differ from the overall ranking. A more inclusive, positive workplace culture still ranks first, but **increased ability to recruit staff** and **better staff retention** rank second and third.

Contractors

The top five benefits reported by contractors span all three categories of organizational, project and business benefits. They also align more closely with those most frequently experienced than do the ones reported by architects.

- The top benefit, **more inclusive and positive workplace culture**, is the same as it is as for architects, but the gap between it and the next most popular benefit is narrower for contractors.
- Three out of the other four top benefits are related to attracting and retaining workers/staff: **better worker/staff retention**, **increased access to skilled labor** and **increased ability to recruit workers/staff**. This suggests that contractors see the highest value in their engagement in DEI in helping them to address the skilled worker shortages that have consistently been one of the biggest challenges in their industry for over a decade.
- The other top benefit, **improved reputation as a business leader**, ranks first among the business benefits and may also be indirectly related to their improved ability to recruit workers.
- The only option selected by more contractors at companies that are highly engaged with DEI practices that is not in the overall top five is **better staff retention**. This is further evidence that many contractors are investing in DEI as a tactical means to help them tackle their workforce issues.

Top Benefits of Using DEI Practices

Dodge Data & Analytics, 2022

| Architects | Contractors |
|--|--|
| 1. More Inclusive and Positive Workplace Culture | 1. More Inclusive and Positive Workplace Culture |
| 2. More Community Support for Projects | 2. Better Worker/Staff Retention |
| 3. Increased Collaboration Internally | 3. Increased Access to Skilled Labor |
| 4. Better Communication Between Leadership and Staff | 4. Improved Reputation for Industry Leadership |
| 5. Expanded Perspectives for Decision-Making | 5. Increased Ability to Recruit Workers/Staff |

Benefits of Engaging in DEI Practices

Benefits Personally Experienced by Respondents

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Respondents at companies engaged in any DEI initiatives were asked about the impact that their company's engagement with DEI has had on them personally. Notably, nearly all (91%) respondents have experienced at least one personal benefit due to their company's DEI efforts.

The responses shown in the chart at right are by level of engagement with DEI, and it clearly reveals that those who work at companies that are more invested in DEI initiatives are far more likely to experience many of these benefits than are those who work for companies with less engagement.

Also interesting is how their responses break out by demographics.

ARCHITECTS

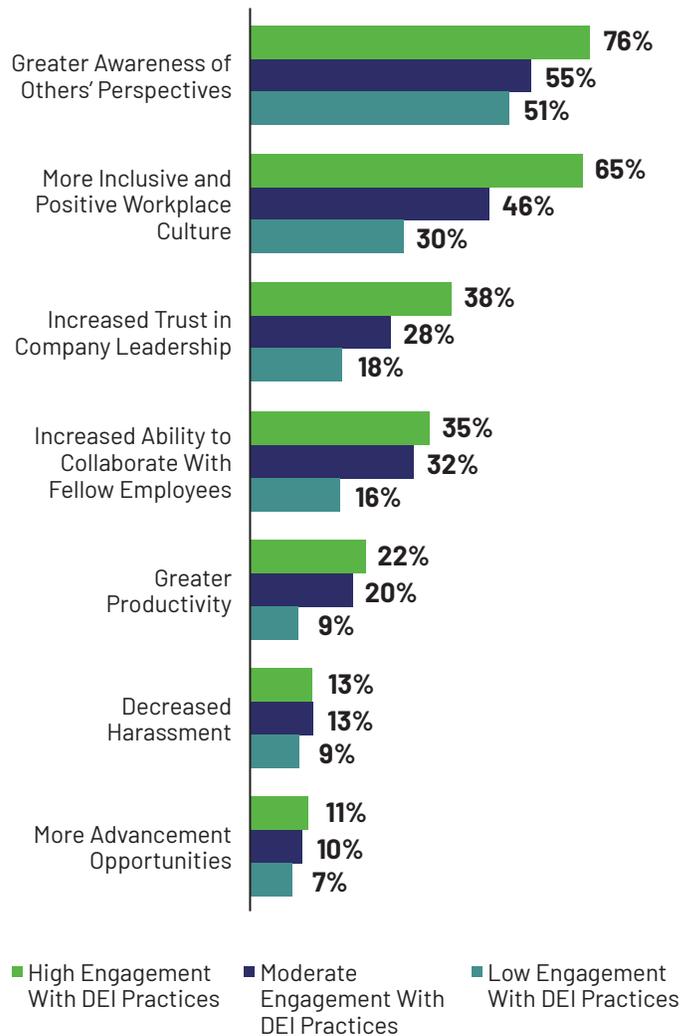
- **Ethnicity/Race:** Respondents of color more frequently experienced an increased ability to collaborate with their fellow employees than do white respondents (45% versus 23%). Interestingly, those who refuse to identify their race more frequently say they experience no benefits than those who identify themselves as white or as a person of color (26% versus 3%) and are least likely to report that they experience a more inclusive and positive workplace culture (22% versus 55% of those who identify as white and 62% of those who identify as a person of color).
- **Gender:** Those who identify as female more frequently report a more inclusive and positive workplace culture (67%) and more advancement opportunities (22%) due to their companies' DEI initiatives than do those who identify as male (48% and 7%, respectively).

CONTRACTORS

- **Ethnicity/Race:** The respondents of color employed at contractors more frequently report experiencing greater awareness of others' perspectives (75%), a more positive and inclusive workplace culture (75%), and decreased harassment (42%) than do their white counterparts (44%, 35% and 12%, respectively).
- **Age:** The respondents younger than 50 report being more productive (22%) than those 60 and older (9%) due to their company's DEI initiatives. Those who are between 50 and 59 more frequently report that they have a greater awareness of others' perspectives (52%) than do those under 50 (33%).
- **Gender:** Those who identify as male more frequently report increased trust in the leadership of their company (24%) due to their company's DEI initiatives than do those who identify as female (9%).

Personal Benefits Experienced by Respondents Due to Their Company's Engagement With DEI Initiatives in the Last 5 Years

Dodge Data & Analytics, 2022



Building a Culture of Diversity, Equity and Inclusion

HENSEL PHELPS

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

Fostering diversity is a defining value at Hensel Phelps. Since Associated Builders and Contractors inaugurated the National Diversity Excellence Award in 2012, Hensel Phelps has won the general-contractor category nine times. The award recognizes the inclusiveness of the company's hiring, training, and retention policies and practices, as well as its initiatives in support of subcontractor and vendor businesses that are owned by members of historically disadvantaged groups. "If you really focus on inclusion and equity," says Brad Lewis, the company's corporate director of supplier diversity, "you're showing people that they can bring their best selves to work every day."

In a recent conversation with Dodge, Hensel Phelps' six-member supplier diversity team shone a light on the key ways in which the company implements this core value.

Reaching Out

Looking outward, Hensel Phelps' support for supplier and trade-partner diversity comprises four focus areas: small business inclusion, workforce development, community engagement and trade partner enhancement.



Hensel Phelps Virtual Diverse Business Training and Outreach Event

SMALL BUSINESS INCLUSION

A five-phase approach, consistent throughout the company's procurement processes across each of its markets, is enabling Hensel Phelps to increase the diversity of its 10,000-strong supplier and subcontractor base.

Phase 1, Introduction and Evaluation, consists of outreach and networking events, both project-specific and general, to connect face-to-face with diverse small businesses and to understand their capabilities, goals and needs.

Phase 2, Identify Opportunities for Improvement, engages with potential trade partners to figure out how Hensel Phelps can support them in six areas that commonly limit their opportunities: notification of bidding/solicitations, bonding capacity, technical skill sets of employees, company safety and quality control programs, cash flow management and supplier relationships.

Phase 3, Implement Action Plan, deploys a suite of strategies to facilitate small business participation on Hensel Phelps' projects. Strategies may include scope de-bundling, bonding assistance, large business teaming arrangements and a Technical Assistance Program (a series of expert tutorials on core business topics—communication, accounting, safety, quality control, estimating—aimed at fostering long-term success among potential suppliers and subcontractors).

Phase 4, Support for Contract Completion, consists of ongoing communications around project expectations and what is needed to successfully complete a scope of work. Having cash flow stalled in a 90- or 120-day invoice turnaround, for example, could easily stall a small business, and Hensel Phelps' supplier diversity team advocates with its large trade partners and/or clients to make sure

small contractors are paid on a shorter interval.

In **Phase 5**, Evaluate Project Performance, formal evaluations identify lessons learned and help small businesses create action plans for ongoing improvement.

WORKFORCE DEVELOPMENT

Workforce development begins with outreach to, and support for, a community's training, development and advocacy organizations. "Basically we're supporting the pipeline," says James Harper, a manager of supplier diversity. In Nashville, for example, Hensel Phelps partners with an anti-poverty center to ensure that employees who are parents have access to childcare, and with a job training program for at-risk men to ensure that its graduates have six months' transportation guaranteed. In Denver, Hensel Phelps partners with a pre-apprenticeship program for women, training participants to read drawings and taking them on jobsite tours. The company also offers training in conflict resolution: "Redefining vulnerability as an aspect of professionalism can play a major role in success," says Dave Fisher, a manager of supplier diversity.

In addition to workforce development among hourly staff, Hensel Phelps focuses on diversity in salaried workers. The company engages with historically black universities and colleges (HBCUs)—both as a recruiter and also as an advisor on construction management curricula—and it participates in recruiting events with such organizations as the National Society of Black Engineers, the Society of Hispanic Professional Engineers and the Society of Women Engineers.

Between October 2020 and September 2021, members of minority groups made up 58% of the company's new hires, up by 3% over the previous

Building a Culture of Diversity, Equity and Inclusion

HENSEL PHELPS

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

year, and women accounted for 14%.

COMMUNITY ENGAGEMENT

Underlying Hensel Phelps' initiatives in workforce development and small business inclusion is an ongoing program of community engagement. "It's about understanding the community that we're in, and leaving things better than we found them," says Michelle Keyser, manager of supplier diversity. Examples Keyser highlights from her Southern California region include an annual turkey give-away—3,300 of them last year—through community-based organizations, gift cards to support nurse appreciation week, care kits for the homeless (some of whom the company has sponsored into a local laborers' union, with life-changing effect) and participation in such events as a fund-raising walk for Alzheimer's research. "We may start a community project at the jobsite level because we see a need, and then it becomes an event that continues to help that community even if we're gone," says Rosemary Middleton, coordinator of supplier diversity. "A lot of giving that may not be a big giant story will turn into continuing help to the workforce."

In addition to contributing to the communities Hensel Phelps considers itself part of, these efforts foster awareness and trust of the company among a diversity of potential business partners and employees, so that forming a working relationship becomes an incremental step rather than a giant leap.

TRADE PARTNER ENHANCEMENT

With the goal of nurturing disadvantaged small businesses to reach their potential as effective trade partners and as healthy, competitive members of the construction sector, Hensel Phelps runs a range of



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I a e, C, i e, f H e, e P e,

Interview: Thought Leaders



Charles G. Hardy, AIA, CCM
Chief Architect
U.S. General Services Administration



Andrea M. O'Neal
Senior Advisor to the Administrator for Equity
U.S. General Services Administration

Why do you think it is important for the construction industry to address diversity, equity, inclusion and accessibility (DEIA)?

O'NEAL: The built environment affects all aspects of our lives over generations of Americans. Its sheer scale and impact makes DEIA an essential component of the intentional and strategic considerations we make about how we design, where we build—and ultimately who those decisions affect—positively or negatively. Much like increased focus in recent years on sustainability, accessibility and how humans experience the world we have built, the principles of diversity, equity and inclusion are tools to help us further explore ways to reduce barriers and expand access—both in our design and construction practices and across the ecosystem of industry professionals who collectively make these important decisions which impact all of us.

HARDY: The design and construction industry needs to address many challenges, of which talent acquisition is a major concern. By making the industry more attractive to more people, DEIA is an especially powerful tool for solving craft labor shortages. That, in turn, could localize our labor-hiring practices, which is a win for both climate and sustainability. Additionally, GSA builds in the service of the American people. Ensuring that design is strongly founded on diversity ensures that citizens feel seen and included in the final product.

I would also like to note the “A” in DEIA. The federal government’s work in this realm also emphasizes accessibility, because physical access

does not necessarily preclude people with disabilities from experiencing attitudinal barriers to the built environment. GSA has advocated for accessibility since the passage of the Architectural Barriers Act in 1968, and we are proud to advance that work in tandem with our DEI efforts.

The design and construction industry

equally use that space, we get better outcomes for everyone.

Related are also the practices around stakeholder and community engagement during a project, which can surface important considerations at critical times that allow us to optimize mutual benefit and economic opportunity. This is particularly

Projects should have positive impacts beyond the block on which they are built, but DEIA success should multiply design’s ability to touch an entire community.

has always proudly claimed that we build America. We must now ensure that our teams and stakeholders reflect all of America. It is a marathon, not a sprint.

What are some of the best practices you currently see in the industry?

O'NEAL: We need to have two distinct but interdependent conversations around diversity, equity and inclusion. The first is about space—the actual physical structures and how they affect our experiences and our communities. Some of the best practices I’ve seen emphasize stakeholder inclusivity and universal design as a foundation—practices that go beyond metrics of success like on-time, budget or meeting baseline compliance standards. When there is deep consideration for how the broadest, most diverse group of people with their unique needs can flexibly and

important for communities that are struggling to fight back or overcome systemic inequities, which can be exacerbated by development if we are not attuned to those potential harms as we make decisions.

The second important conversation is about place—the culture of the work that we do and whose voices and interests get consideration across the spectrum of power in decision-making. We know that women, people of color, people with disabilities and communities that are otherwise socially and economically disadvantaged are chronically underrepresented in the design and construction industry itself. So we all must ask ourselves what are those barriers to career opportunity and how can we break those down for more people. As an example, GSA has memorandums of understanding

Thought Leaders

with National Association of Minority Architects (NOMA) and ACE Mentor Program of America—two organizations that are explicitly addressing career pipelines for the industry. Another great practice I see are organizations that have adopted the Culture of CARE Pledge, which sets a management tone for inclusive, harassment and bias-free workplaces. All of these big and small initiatives can cumulatively shift behavior and the culture of the industry.

HARDY: Other GSA activities, such as our Design Excellence Program's longtime stewardship of the National Register of Peer Professionals, or the agency's more recent welcoming of the Emerging Voices' cohort of hires, brings new perspectives to the table. I mention this because it parallels Andrea's thoughts on space and place. Independent peer review of GSA projects weaves diversity through the process of design and construction, while our Emerging Voices initiative envisions a more diverse industry ecosystem and a more inclusive culture to go with it. The two inform and benefit one another mutually.

Another best practice, which also is fairly simple, is promoting awareness and opportunity. This survey gets us closer to addressing real issues. Partnerships with ACE and NOMA empower voices that may have been unheard. Changing the conversation does lead to tangible change.

What is the best role that a major owner (like the GSA) can play to increase DEIA in the design and construction industry?

HARDY: Lead by example, listen and

act. In their staffing, team selections and conversations with industry, owners can underscore why DEIA is so important to us as a whole. Those actions also help others start on their own DEIA paths.

People and firms watch their peers. Owners of large organizations, in particular, send messages about what matters to them by the way they conduct business. Because these messages can be either intentional or unintentional, we need to choose intentional actions that achieve intended results. We will all be better for it.

O'NEAL: All major stakeholders and owners have a responsibility to set the tone of what is the meaningful and best opportunity to optimize DEIA. The GSA is doing this RFI to see what practices are out there. That's both a way for us

silent on the issues.

I'm excited to be at this time working in the Biden-Harris administration as a senior advisor for equity at GSA, a new role at the GSA. The enthusiasm and reception to this position alongside some policy objectives that the president has outlined ... that focus on DEIA and equity, have given us this unique government-wide, once-in-a-generation opportunity alongside some significant infrastructure investments, like the Bipartisan Infrastructure Law and the Inflation Reduction Act, to think holistically and meaningfully about what federal investment means in communities. It's a critical time for us to get this right and make sure that we're using these investments to advance DEIA in the communities we serve.

What are the biggest challenges to increasing DEI in design and construction, and what is needed to overcome them?

O'NEAL: Some of it is myth-busting. On-time and on-budget are critical, foundational success metrics for design and construction

... sometimes equity or solving for other parts of that equation are perceived to be opportunity costs that are at odds with or barriers to the success of those metrics. I don't think that's true. DEIA does take a little bit more innovative thinking. But none of this is exceptionally hard all of the time.

I think some of the biggest obstacles are driving awareness, having a road map and making sure that there is reasonable attention to another set of opportunities that exist within a design project beyond those defined metrics. Some of that takes a little up-front



Changing the ethos about why we design, how we design and who we design for is essential... This is not just about doing the right thing; this is a smart business decision.

to signal our interests in this issue and how we can better incorporate DEIA principles as we're making decisions, but also define partners in industry that are also thinking about these things and may have best practices. One of the rules of DEIA is you can't do it alone. You need to build coalitions, finding ways of innovating and iterating, taking hard looks at ourselves about where we have success and where we have those levers of influence and power and capital to actually make significant strides in this area. I think one of the best roles that a major owner can play is just not to be

Thought Leaders

investment of time or resources to get it right, but once there's a model for success that's replicable and scalable, you have those opportunities at scale.

One opportunity is the ability to have the right subject matter experts at the table, especially at inflection points where we can make meaningful impacts without slowing down the process and ask ourselves a different set of questions. Who does this impact? How can we add value? Where do we have blind spots? Whose voices aren't included, or whose interests may not be included and how we make that better? I understand there are finite resources, there's finite time, but there are opportunity costs when we don't think about these things. Similar to earlier considerations of the environment or safety on construction sites, this is one of those moments where if we take a little time, and think a little differently, we can achieve collective outcomes that are bigger than the sum of their parts on construction projects. That's what we really need because, again, the built environment is so important to every aspect of our lives.

HARDY: One of the most persistent questions heard through the industry is, "Where do I start?" Organizations freeze on it, perhaps because DEIA feels like too systemic a problem for one organization to unknot. We need to provide ways to get past that block, by sharing stories and successes, developing networks, creating mentor and feeder programs, and embracing many other tools that we can then share among change-makers.

Another obstacle has to do with the pipeline of employees, namely the time it takes to get registered or qualified in a specific discipline or craft. This means the industry needs to partner more strongly with programs like Block Kids, ACE Mentor, NOMA and many others. We

can't improve the timing to licensure, but we can augment the path to success with mentorship and support. It bears noting here, too, that a majority of kids have tentatively decided on a career path by the time they reach the eighth grade.

What does success look like?

O'NEAL: The process by which design happens and where that capital is deployed are really important factors. Changing the ethos about why we design, how we design and who we design for is essential... This is not just about doing the right thing; this is a smart business decision in some cases.

Construction firms have a similar path ... including the types of materials in use and the focus on new and innovative technologically savvy parts of the installation that can advance DEIA. As an example, GSA has a program that, through our design and construction of public buildings, incubates green technologies. I've seen different products in our federal procurement that provide more accessibility ... We can leverage our projects as a way to drive multiple goals at once. The building itself and the uses of that space are important, but the materials that we use in the space around the buildings, the community access to those spaces as appropriate, the art on the walls, all of that is part of this conversation.

For owners and organizations, the coalition that I talked about is forming. It can be a powerful network of thinkers, designers and folks that have these considerations in mind and are sharing what they're doing, what they're learning and where they've hit stumbling blocks. Sharing this knowledge can help scale these efforts, making it less situational by project. When that happens, other voices start to join.

I think about LEED when it first

emerged and was considered something for those with more resources and time who could think about approaches beyond standard practices. Now it's a widely accepted design standard: DEIA has that potential. And with the right stakeholders, the right emphasis and collective advocacy around this issue, we can make significant improvements to both the culture of design and construction companies and how that manifests in the physical space that we all inhabit.

HARDY: For design firms, success means giving voice to underrepresented, new perspectives and designing projects that leverage local skills and materials. It almost goes without saying that projects should have positive impacts beyond the block on which they are built, but DEIA success should multiply design's ability to touch an entire community.

For contractors, success is pushing design businesses to practice with DEIA in mind, and to help suppliers and subcontractors to see that DEIA is their responsibility as well. It also means engaging with a project's surrounding community on how to leverage its people and to leave a place better for having been there.

And finally for owners, success is all of the above—along with the demand signals that move industry. The strongest voice in the design and construction industry is the owner's, and it is incumbent on GSA and other leaders to drive change through action and example.

Data: Community Impacts

Consideration of Community Impacts During Design

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Building projects impact the communities in which they are placed, but the practice of architecture does not always prioritize consideration of those impacts during the design process. A firm dedicated to diversity, equity and inclusion is ideally one that considers these factors outside of the boundaries of their offices and into the communities that surround their projects.

Therefore, architects were asked about the share of projects on which they actively consider community impact and/or well-being during the design process. Those who do so on at least 50% of their projects were asked why, and those who do so less frequently were asked what would make them do so more regularly. Their responses are shown in the chart at right and on the following page.

As the pie chart at right reveals, nearly half of the architects (49%) consider community impact and/or well-being during the design process on 50% or more of their projects. In contrast, only 19% either do so rarely or are not sure how frequently they do so. This finding affirms that architects are interested in the impact of their projects, but it also suggests that there is room for the profession to improve as well.

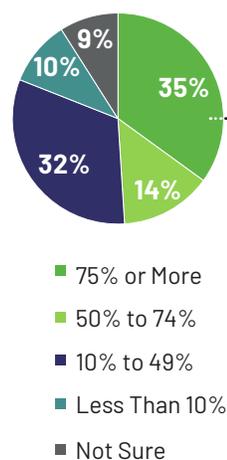
TRIGGERS FOR THOSE ACTIVELY CONSIDERING COMMUNITY IMPACTS DURING DESIGN

The largest share of those who actively consider community impacts during design select two factors as influential in their decision to do so.

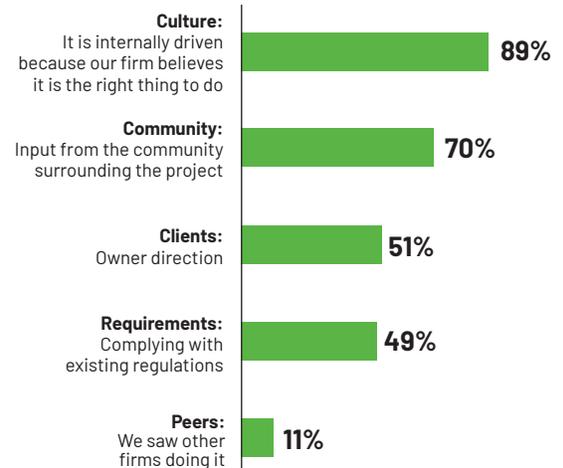
- The firm's culture has the biggest impact, with the decision to consider community impacts driven internally.
 - This is a much higher percentage than those who report that they do so at the direction of their clients, but with 51% selecting that option, owners also have a major influence and can help drive the design profession to increase these considerations.
- Encouragingly, 70% also report that they are influenced to consider impacts by input from the community surrounding the project. This finding is consistent with the importance to many architects of DEI initiatives that yield greater community support for their projects (see page 28), and it also demonstrates that many architects realize the importance of getting community input to have a thorough understanding of project impacts.

Share of Projects on Which Community Impact and/or Well-Being Is Actively Considered During the Design Process (According to Architects)

Dodge Data & Analytics, 2022



Most Important Reasons Firm Considers Community Impact/Well-Being During Design



Community Impacts

Consideration of Community Impacts During Design CONTINUED

As mentioned above, clients play an important role in these community considerations, and regulations requiring community input are also important drivers for many. The only factor that seems to have little influence is the behavior of their peers.

DRIVERS FOR INCREASED CONSIDERATION OF COMMUNITY IMPACTS AMONG THOSE WHO DO NOT CURRENTLY CONSIDER THEM FREQUENTLY

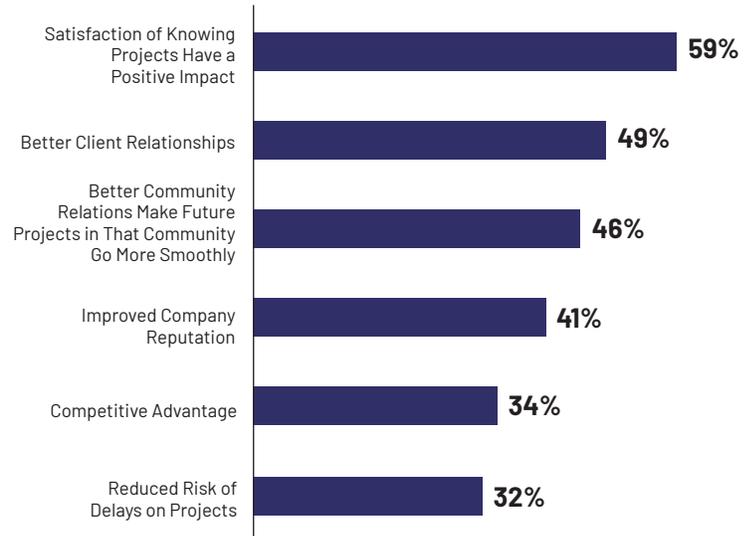
The factors that would encourage architects who do not currently consider community impacts frequently to do so more in the future are shown in the chart at right.

- The top factors are selected by a much smaller share than the triggers that have influenced those already more engaged in this activity. The reasons for doing so are quite clear to those who already do it, but there is less consensus among those who do not about the impact of these various factors to encourage them to do so in the future.
- The top factor among those doing it infrequently is similar to the top trigger among those doing it frequently: trying to make their projects have a more positive impact. This is a promising finding in terms of their goals, but the other factors provide more insight into what would encourage more of this activity.
- Better client relationships ranks second among the drivers. This demonstrates that, while clients may not be a top trigger for those doing it currently, they could have the biggest influence in encouraging more consideration of community impacts in the future among those who are not as engaged.
- Another consistent driver for DEI efforts in general, including this one, is improving community support for projects, and that is nearly as influential among these respondents as client relationships. This suggests that more examples of how engaging the community yields this benefit would probably encourage some architects to take these actions on more of their projects. More training offered on how to pursue community input effectively could also make the process of doing so more productive for firms, as managing this process well is not easy and is critical to its success.

Drivers for Wider Consideration of Community Impact During Design

(According to Those Who Currently Consider Community Impact on Less Than 50% of Projects)

Dodge Data & Analytics, 2022



Community Impacts

Obtaining Community Inputs Beyond Mandates

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

There are mandates in many jurisdictions that require outreach to the community before building, with a tendency for the stricter mandates to be in more upscale communities. While these mandates are important, they are rarely sufficient, especially when it comes to communities that are less affluent. However, these are often the communities most dramatically impacted by construction, those with more lenient or nonexistent zoning and those bordering on industrial areas.

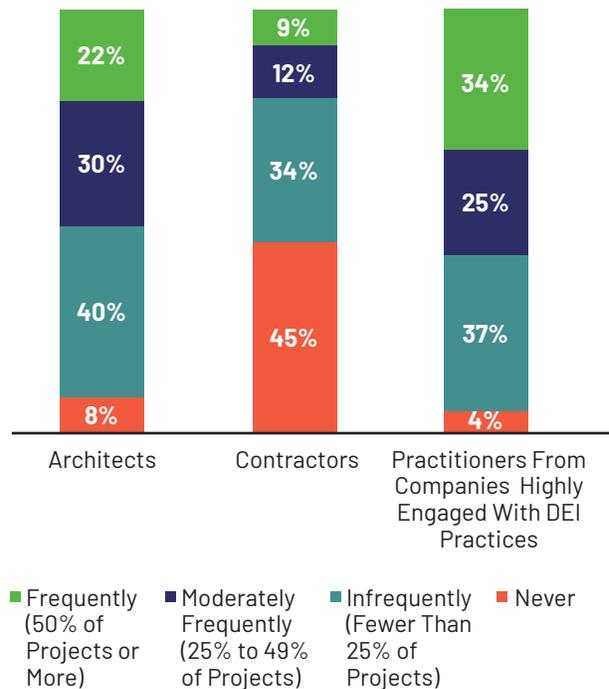
Frequency of Obtaining Community Input on Project Impacts Beyond Mandates

Many times, a committed effort to address community needs in building projects requires outreach to communities well beyond those mandates. Therefore, architects and contractors were asked on what share of their projects do they obtain community input beyond what is mandated. The chart at right shows the responses of architects and contractors, and it also combines the architect and contractor responses from the companies highly engaged with DEI practices.

- The more committed a company is to engaging in DEI practices at its own organization, the more likely they are to reach out to the community for input on their projects. However, even among this progressive group, 41% do so on fewer than 25% of projects, so there is potential for much greater engagement across the industry.
- Architects seek community input more frequently than do contractors, with nearly half of the contractors (45%) reporting that they never do so. One key reason for this difference is that many contractors (44%) believe that community impacts should be dealt with in the planning/design phase (see page 38).
- General contractors also respond very differently than specialty trade contractors do to this issue. Nearly one third of general contractors (31%) seek inputs beyond what is mandated moderately frequently or frequently.
 - While this is still below the share of architects that do so (52%), it does demonstrate more engagement than the chart suggests.
 - Specialty trade contractors are less likely to engage the community due to the timing and limited scope of their role on projects.
- Among contractors, size of company also plays a role, with 37% of large companies doing community outreach with at least moderate frequency. This is consistent with the deeper engagement with DEI practices by large companies reported in the study.

Frequency of Obtaining Community Input on Project Impacts Beyond Mandated Requirements

Dodge Data & Analytics, 2022



Community Impacts

Obtaining Community Inputs Beyond Mandates CONTINUED

Factors That Deter More Input

Architects and contractors who seek community inputs beyond mandates on fewer than 25% of their projects were asked to select the top two factors that deter them from doing so from the list of options shown in the chart at right.

The responses fall into three major categories.

LITTLE/NO NEED FOR COMMUNITY INPUTS

- A top factor for both architects and contractors is their belief that most of their projects have a net-positive impact on the surrounding communities. However, community members and practitioners may not always see impacts in the same way. For example, what some consider an improvement may be perceived by others as gentrification, with serious consequences for housing affordability.
- More promising, though, is the fact that only a few feel that mandated community input is sufficient, and even fewer believe that community input is not useful. This suggests that many are open to the value of this input.

INSUFFICIENT TIME/INABILITY TO ACT ON INPUT

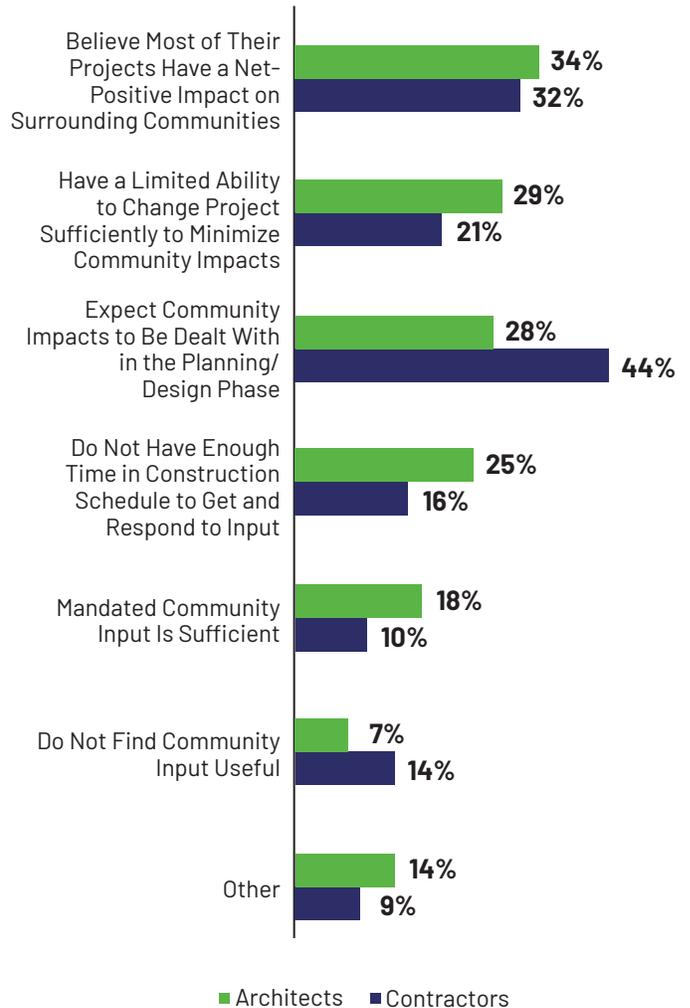
- The limits to their ability to change the projects sufficiently to minimize community impacts ranks second for architects and third for contractors. It is also reflected in the additional responses volunteered as an “other” reason, with many who blame lack of client interest in altering their projects to improve the surrounding community.
 - In a separate question, only 22% of respondents believe that the input they receive results in positive change. This is likely due to many reasons, including the challenges of getting good input, but many may also feel limited in how much they can change a project to respond to that input.
- Many specialty trade contractors also utilized the other field to state that they do not find a role for themselves in community engagement.
- Architects, in particular, also believe that there isn’t enough time in the project schedule to get and respond to input.

SHOULD HAPPEN DURING PLANNING/DESIGN

The top reason why contractors don’t seek community input is their belief that input should occur during the planning/design phase. This response again reveals the perception that there is little that can be done to adapt appropriately to the input they may get post-design. More surprising is the share of architects who select this option. Additional comments suggest that they may rely on owners to gather this input.

Factors That Deter Companies From Obtaining More Information From the Community on Project Impacts (Top Two Selected by Those Who Infrequently/Never Gather This Information)

Dodge Data & Analytics, 2022



Community Impacts

Hiring Jobsite Workers From Neighboring Communities

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Contractors were asked about the frequency with which they prioritize finding jobsite workers in the communities that surround their projects.

As the chart at upper right reveals, nearly half (42%) do so frequently/very frequently, and only 24% report that they rarely or never do so. The findings in this report show that contractors place a high premium on finding and retaining workers (see page 28), so it is not surprising to see that the majority are actively seeking people in the communities around their projects.

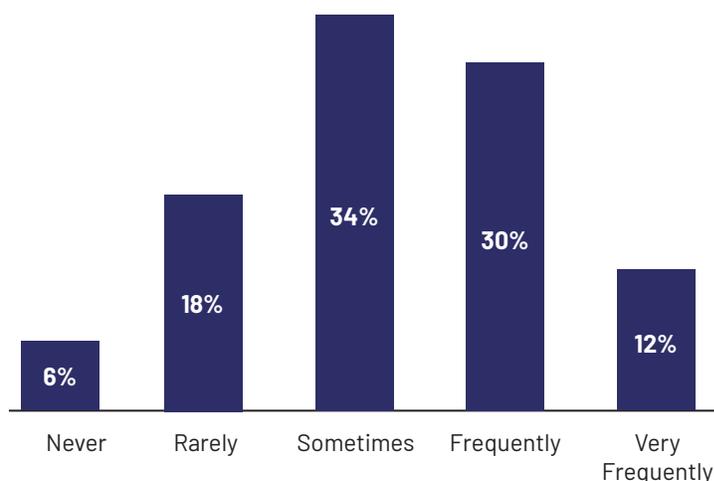
Among those who rarely/never prioritize hiring these workers, the biggest challenge preventing them from doing so is the difficulty in finding workers with sufficient skills. A notable share of the workforce needed on a project requires skills that need extensive training and experience, and it is a significant cost to contractors to cultivate these workers, who are not necessarily likely to be found in communities surrounding the projects. (See page 30 for discussion of a successful program to recruit local workers and the best practices for doing so.)

The need to hire workers with the right skills is intensified by the current workforce shortages. Contractors may have been better able to slowly increase their staff through training if they were fully staffed, but many now face an acute challenge to find the workers they need. Paradoxically, this may interfere with their ability to recruit and train among the local population.

Surprisingly, fewer report that they want to work with people they have previously hired. This suggests that the bigger hurdle is the need for skilled workers and the restraints on helping new workers get the training needed to fill those gaps.

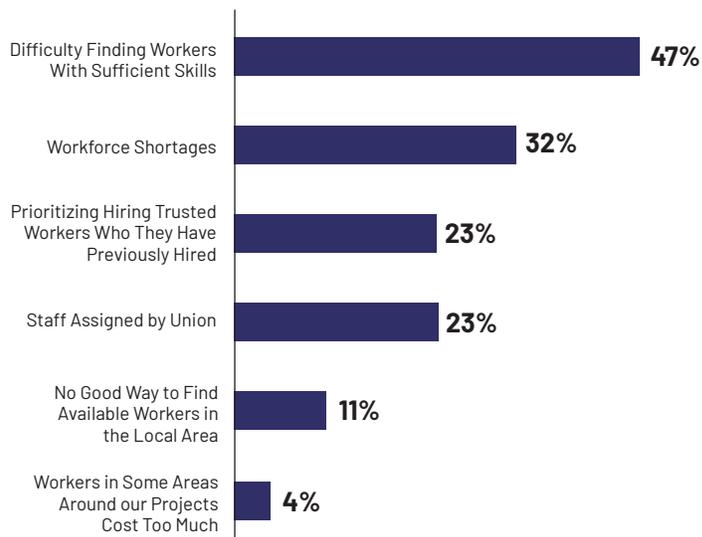
Frequency of Prioritizing Hiring Jobsite Workers From Communities Surrounding Projects (According to Contractors)

Dodge Data & Analytics, 2022



Reasons That Hiring Jobsite Workers From Surrounding Communities Is Not Prioritized More Frequently (Selected in the Top Two by Contractors Who Never, Rarely or Sometimes Prioritize Hiring These Workers)

Dodge Data & Analytics, 2022



Community Impacts

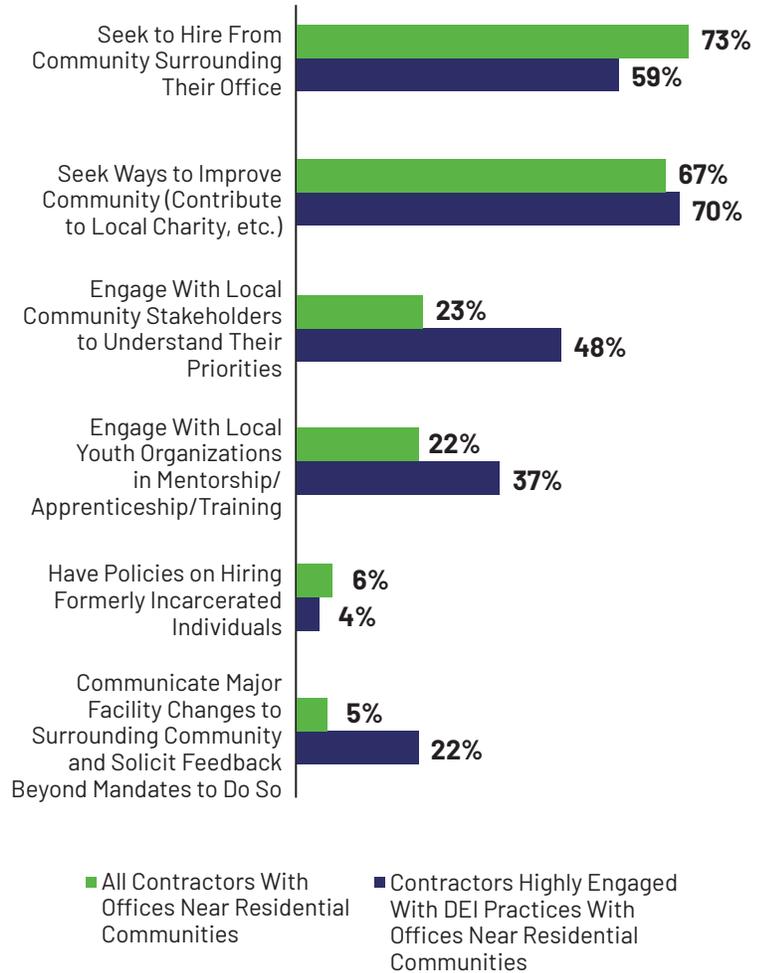
Contractors' Impact on Communities Surrounding Their Offices

In addition to impacting the communities surrounding their projects, companies can also have a significant impact on communities surrounding their offices. Contractors were asked if they engage in six possible actions that would impact their communities. Their overall responses and the responses of the contractors whose companies are highly engaged in DEI practices are shown in the chart at right.

- Most contractors attempt to have a positive impact on the communities surrounding their offices by seeking to hire from those communities, and many also look for ways to improve those communities, such as contributing to local charities.
- Companies with a high level of engagement with DEI more frequently utilize strategies that involve communication and direct community engagement, such as reaching out to local community stakeholders to understand their priorities, engaging with local youth organizations in mentorships, apprenticeships and training, and communicating about major facility changes to the surrounding community. However, they do not exceed the averages when it comes to hiring strategies.
- General contractors more frequently engage with local community stakeholders to understand their priorities (23%) than do specialty trade contractors (9%).
- Large companies more frequently seek ways to improve the community (67%) and engage with local community stakeholders (37%) and youth organizations (37%) than do small companies (43%, 8% and 13%, respectively).
- However, small companies more frequently hire from the communities surrounding their offices (64%) and have policies on hiring formerly incarcerated individuals (11%) than do larger companies (53% and 2%, respectively).

Contractor Impacts on Residential Communities Surrounding Their Office

Dodge Data & Analytics, 2022



The User Comes First

Designing for Justice, Equity, Diversity and Inclusion

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

At a conference of the Society for College and University Planning (SCUP) five or so years ago, a panel consisting of students of color asked an almost entirely white audience of design professionals what the designers were doing to make spaces “where we of color can come and feel comfortable, come and feel like there’s a sense of belonging, come and feel like we don’t have to ask permission to be there,” says Gail Shillingford, a principal at B+H Architects and one of very few people of color in the audience that day. It wasn’t so much a question as a plea, she says, and it started Shillingford—who has her own stories of feeling uncertain, unwelcome and “other” than the people who seem to belong in a space or place—on an ongoing effort to respond. “We can design great spaces, we can design beautiful spaces,” she says, “but are we necessarily responding to what it entails to create a truly equitable, truly inclusive space?”

From her own explorations of where, as a woman of color, she does and

doesn’t feel at ease, she highlights the importance of flexible, adaptable spaces without barriers; transparency at the street level; strong inter-relationships between inside and out; and programming that invites a wide diversity of participants. She stresses the importance of designing humane environments for mixed-age, mixed-income communities (rather than exclusive towers that become ghettos of well-to-do singles and couples) with welcoming, free public space that offers a sense of place and belonging.

Above all, she says, design for diversity, equity and inclusion must start with the user: “We have to understand the user before we can understand what to do in terms of creating equity,” she says. “We need to be engaging more effectively with communities.”

Listen and Support

Fostering equity through community-focused design and pre-design processes is a central tenet of the work that Mithun has been doing for the

past five years in North Richmond, a historically disadvantaged community in Contra Costa County, California. Formerly redlined (a now illegal practice in which financial institutions denied funding to residents and businesses on racist grounds), North Richmond—like many racialized communities across America—is disproportionately affected by industrial pollution, urban heat island effect, wildfire smoke, flooding and a housing crisis.

Mithun first began working with North Richmond as part of the 2018 Resilient by Design (RbD) Bay Area Challenge, which connected design professionals with local communities to catalyze ideas and collaborations toward a comprehensive regional plan. To ground the design process in community priorities, Mithun’s designers began by listening. “The whole idea of ‘design first’ is just wrong,” says Hilary Noll, an associate principal and sustainability integration leader at Mithun. “We should first be showing up, listening and serving in a role of accompaniment to communities’ collective efforts.”



North Richmond Ecovillage concept rendering

The User Comes First

Designing for Justice, Equity, Diversity and Inclusion CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION



Mithun Home Team and Community Advisory Board for North Richmond

The project team included a community-nominated advisory board whose members were paid for their time, both to make possible their fuller participation and to respect their contribution of expertise. The team also engaged a meeting facilitator from a BIPOC-led community development nonprofit, so that people of color were speaking to people of color, defining their own priorities while the designers listened.

Noll advocates for expanding the notion of “client” beyond real estate developers and institutions to include emerging community groups, such as those who participated in the RbD initiative, and expanding the services design firms provide to include capacity

building. “There are some real structural issues with regard to who holds power, who holds land, who has access to financing and so on,” she says. In North Richmond, Mithun has coached the junior real estate staff of a community land trust on the essentials of project management; facilitated connections among community leaders, county and housing authority officials and industry professionals; and helped build a support team that includes an affordable housing finance manager, a land-use attorney and members of Engineers Without Borders. Like Mithun, these professionals are working pro bono to advance such projects as an eco-village comprising housing and creekside green space, a Black wellness hub and

a horizontal levee to restore a stretch of the San Francisco Bay shoreline while protecting the community from flooding. “Dedicating as little as 1% of revenues can have a transformative impact when carefully and thoughtfully applied,” says Noll.

Data in Support of Equity

As meaningful community engagement transforms traditional design and pre-design processes, data can play a useful role. To help the regional government of the Portland, Oregon, metropolitan area (known as Metro) maximize the benefits to historically underserved communities from public investments in green infrastructure and amenities, Portland-based design firm Knot has developed a data-based analytical

The User Comes First

Designing for Justice, Equity, Diversity and Inclusion CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

tool to inform decision-making. The Environmental Justice Lens, as the tool is called, integrates demographic and environmental data to rank potential land acquisitions.

“We’re talking about ways to understand where vulnerable communities are in space,” says Michael Yun, a principal at Knot, “providing additional spatial demographic detail so that agencies have a better sense of how to focus their limited engagement resources, target the most vulnerable and marginalized people, make deep connections and from there learn more qualitative information about what people are concerned about and what they might be interested in.”

The Environmental Justice Lens’s criteria—based on criteria identified in the \$475 million parks and nature bond measure (2019) that provides for the investments—include community need, environmental burdens, flood risk abatement and access to nature. In evaluating community need, the tool incorporates census data pertaining to a community’s racial/

ethnic composition, ratio of income to poverty, linguistic isolation, access to healthcare and several other variables associated with historical injustices and reduced resilience. Factors quantifying environmental burdens include urban heat island indicators, tree canopy distribution, toxic site density, air pollution levels and anthropogenic noise. A site’s potential contribution to flood risk abatement is based on watershed floodplain modeling combined with zonal statistics on vulnerable communities. The access to nature indicator assesses a neighborhood’s acres of park, their level of services and amenities, and their popularity, all compared with total population distribution, to yield a ratio of popularity-rated acres of park and natural area per person. Combined, all four components in the Environmental Justice Lens provide an indexed spatial model to help the Metro government prioritize investment in support of a more equitable environment.

Knot has also developed an analytical tool to support the project team for the

new Multnomah County library, adapting the Environmental Justice Lens to help the project team focus its public engagement strategies so as to reach underserved census tracts. “Every project has its own set of questions,” says Yun, “and the analysis needs to be tailored to the specific historic inequities and the benefits and burdens of each project.” He emphasizes that data is an incomplete basis for decision-making, and must support qualitative community engagement.

A renewed focus on the needs and experiences of the people and communities served, more meaningful and ongoing forms of community relationship, and the innovative and strategic use of analytical tools are all contributing to what Shillingford says is the beginning of a huge conversation. “We have to get smart as designers, quite frankly,” she says. “There is a demand for equity, and we’re just scratching the surface of what equitable space means.” ■



Mithun’s muted marsh rendering, part of the North Richmond project.

Centering Health Equity: Three Spheres of Influence

MITHUN

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

As the impacts of COVID-19, climate-fueled disasters, urban heat island effect, pollution and inadequate housing compound the ongoing impacts of historic injustices, the health of marginalized populations is disproportionately affected. The built environment plays an enormous role in supporting or undermining health equity, and design professionals have significant opportunities to contribute.

“Through our research and scan of the design, real estate and planning industry, and in talking with over 60 professionals, we found that many are addressing equity in different ways through their work,” says Erin Ishizaki, a partner at Mithun and co-chair of Centering Health Equity, a research program initiated in 2020 between the Green Health Partnership (a collaboration of the University of Virginia School of Medicine and the US Green Building Council) and Mithun. “We also heard, though, that people often weren’t sure where to start or didn’t feel empowered to make changes. So the research effort developed a conceptual framework to help provide a mental model for how equity relates to the built environment, and to coordinate collective action.”

The conceptual framework comprises three spheres of influence:

1. **Projects and programs**, which can affect distributional health equity of fundamental resources for human health;
2. **Policies**, which can affect structural health equity through community connections to infrastructure and services in the daily environment;
3. **Culture and institutions**, which can affect systemic health equity through inclusion, empowerment and their ripple effects.



High Point

Here, we look at three Mithun-led projects exemplifying the pursuit of equity and inclusion in each sphere of influence. As these projects demonstrate, it’s entirely possible for a single project to operate in multiple domains.

Distributional Equity

Designers’ work with projects and programs makes distributional equity their most accessible level of influence. As an example, High Point, a federally funded HOPE VI project in Seattle, transformed 713 dilapidated World War II-era public housing apartments into a 1,600-unit development for people of diverse ages, ethnicities, family sizes and incomes. The project includes parks, community gardens, a public library, a health clinic and a neighborhood center, all with an emphasis on human and environmental health.

Extensive pre-design user-group engagement in six languages revealed that a top issue for community parents was asthma. Minority children experience higher-than-average asthma rates, and as much as 40% of their excess asthma risk can be attributed to residential allergens

such as moisture and dampness, poor ventilation, deteriorating carpet and other symptoms of socioeconomic and racial/ethnic disparities in housing quality.

In response, all of the High Point units prioritize high-quality indoor air—with low-VOC materials, airtight drywall installation, whole-house exhaust fans and filtered, fresh-air intake ports. In addition, 60 of the units were designed as Breathe Easy Homes, the first in the country, with additional features—such as no-VOC building materials, additional air filtering, hydronic heating and enhanced construction practices—to further reduce asthma triggers. A follow-up study in the *American Journal of Public Health* found that asthmatic children in the Breathe Easy Homes enjoyed 63% more symptom-free days than in their previous homes, and required 67% fewer visits to the emergency room. With fewer sleepless nights, fewer absences from work and school, increased exercise and outdoor activities, and reduced medical expenses, whole families’ quality of life improved.

Structural Equity

Structural equity can be influenced at the policy level, and pertains to such issues as access to parks and amenities, the affordability of utilities, ownership and control of land (including zoning), and community-level resilience. “Designers can affect structural equity by incorporating policy changes within their work, at any scale,” says Ishizaki. “These are midterm outcomes that typically take a bit longer to achieve.”

An example of a project contributing to structural equity is the Louisiana Children’s Museum, a 56,000-square-foot facility located on eight acres of City Park, New Orleans, and a COTE Top Ten Plus honoree. Following Hurricane

Centering Health Equity: Three Spheres of Influence

MITHUN

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

Katrina, and in light of the state’s perennially poor showing on educational outcomes—among the lowest 5% nationwide—the museum reframed its mission to contribute to environmental and social resilience.

As a result, priorities driving the design encompass connecting children to nature (including a trauma-informed approach to their contact with water) and integrating the environment into their museum experience. An arrival sequence brings visitors through groves of live oaks, across a freshwater lagoon (which also plays a resilience role in a floodwater catchment), through immersive exhibits and into a courtyard and sensory gardens. Learning environments and other program areas outside of the ticketed zones make significant resources and services available at no charge. Colocated at the museum are the Tulane Institute of Infant and Early Childhood Mental Health, which offers museum-integrated programming, as well as literacy and parenting resources with opportunities for gathering and play.

Illustrating the potential structural impact of equitable access to such amenities, students from a public charter school that brought its 120 students (98% minority and 98% economically disadvantaged) for classes at the museum during the COVID-19 closure scored 35% higher in standardized tests than the three charter schools in their cohort and 44% above grade level. This and other museum successes have led to additional funding and initiatives in nature-based learning city- and statewide.

Systemic Equity

The third sphere of influence, culture and institutions, has the potential for the deepest impacts on systemic



Liberty Bank Building

equity, through such domains as wealth, education and healthcare, and requires more organizational partnerships than a typical development might entail.

The Liberty Bank Building is a 101,646-square-foot affordable housing development located on the site of the first African American bank west of the Mississippi, in a formerly redlined neighborhood of Seattle. (Redlining was a common practice, now illegal, in which financial institutions denied mortgages or insurance based on the racial characteristics of the applicant’s neighborhood.) Developed by a partnership of Africatown Community Land Trust, the Black Community Impact Alliance, Community Roots Housing and Byrd Barr Place, the project is affordable to households earning 30% to 60% of the area median income. Affordable ground floor commercial space serves local businesses and fosters a sense of community in the neighborhood.

As a HomeFree demonstration project, the building features materials selected to provide a high-quality indoor environment for residents, and it resulted in a new protocol, generated in collaboration with the Healthy Building

Network, for how the developer selects materials. Corridors are daylit, and amenities such as bike storage and container gardens further support healthy lifestyles.

The institutional values of the partnering organizations extend the development’s impacts far beyond the building itself. These include anti-displacement strategies (to prevent gentrification), local and minority hiring (including 30% women- and minority-owned businesses, of which more than half were Black-owned), the development and support of Black-owned enterprises, long-term African American ownership of the building and affirmation of the history of the community.

“Projects like these—where team members intervene on behalf of equity, and question conventional practice—have the potential to disrupt the compounding of environmental and historic injustices,” says Ishizaki: “They can improve the quality of the places where marginalized people are living today and expand access to high-quality places that have the resources people need to survive and to thrive.” ■

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Data: Influences on DEI Engagement in Design and Construction

Drivers for Current DEI Investments

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

Architects and contractors whose companies are engaged in any DEI practices were asked to select the top reasons for that engagement from the list of 11 options shown in the chart at right.

Two of the top reasons for both architects and contractors are because investing in DEI is the right thing to do and to encourage a more positive workplace culture. In both cases, a much higher percentage of architects select these reasons than contractors, but it is still important to note that they are among the most frequently cited reasons that contractors invest, especially contractors whose companies are highly engaged in DEI practices (74% and 65%, respectively).

Architects also frequently select increased well-being of their staff, which is reported by nearly half. In contrast, only 9% of contractors report that increased health/safety of staff/workers is a cause for investment. Other Dodge research demonstrates the high degree of importance contractors place on increasing the health and safety of their workers, so the low score here suggests that most contractors do not make a direct connection between their DEI practices and safety and health, even among those highly engaged in these efforts.

Instead, the other major factor driving current levels of investment for nearly half (42%) of contractors is the ability to attract and retain workers, and again, nearly two thirds (65%) of those highly engaged in DEI efforts select this as an important reason for their investment. Among architects, this is a second-tier driver, important to about one third (34%).

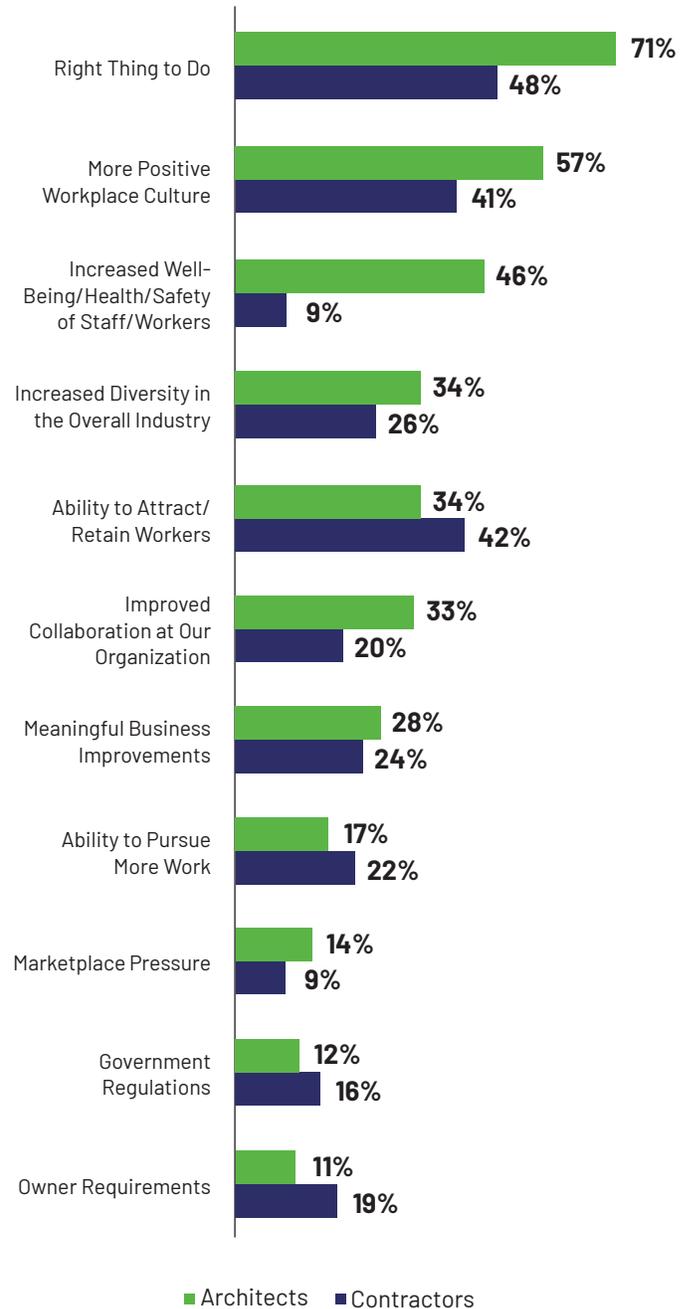
Other second tier drivers for architects and contractors include increasing diversity in the overall industry, improved collaboration, meaningful business improvements and (especially for contractors) the ability to pursue more work.

A few other findings of note include:

- More architects and contractors from companies with a high level of engagement with DEI practices select increasing diversity in the overall industry and meaningful business improvements than do others. This suggests that many of them believe that DEI engagement can have a positive impact on their businesses and the wider industry, notably more than respondents at less engaged companies.
- General contractors more frequently cite increasing diversity in the overall industry (32%), the ability to pursue more work (30%) and government regulations (20%) than do specialty trade contractors (17%, 8% and 10%, respectively).

Top Reasons Companies Currently Invest in DEI Efforts

Dodge Data & Analytics, 2022



Factors Driving Investment in DEI Programs and Policies

Architects and contractors were asked to select the top three factors that would encourage their companies to invest more resources in increasing diversity and inclusion programs and policies at their organization from the lists shown in the charts on this page and the following one.

Architects

TOP INFLUENCES

Architects most frequently select increased new work opportunities as one of the top three factors that would encourage them to invest in DEI, followed closely by increased ability to attract new staff and more inclusive and positive workplace culture.

These findings differ notably from the reasons they have made investments so far. Direct business benefits like increased new work opportunities and the increased ability to attract new staff rank much lower as a current driver than do the desire to do the right thing and to create a better workplace culture. These findings suggest that more knowledge about how DEI engagement can yield these benefits could drive more investment.

- The desire for increased new work opportunities suggests the role that owners can play in helping to drive engagement with DEI in the industry, by considering their diversity and approaches to inclusion when reviewing architect proposals (see page 53 for more information).
- More information about how firms' staff recruitment efforts are impacted by their commitments to diversity and inclusion could also help encourage greater engagement across the design profession.

Having increased ability to attract new staff ranks even higher among respondents from midsize (45%) and large (46%) firms than it does for small ones (24%), and nearly half of project managers (49%) also consider this highly influential.

OTHER INFLUENCES

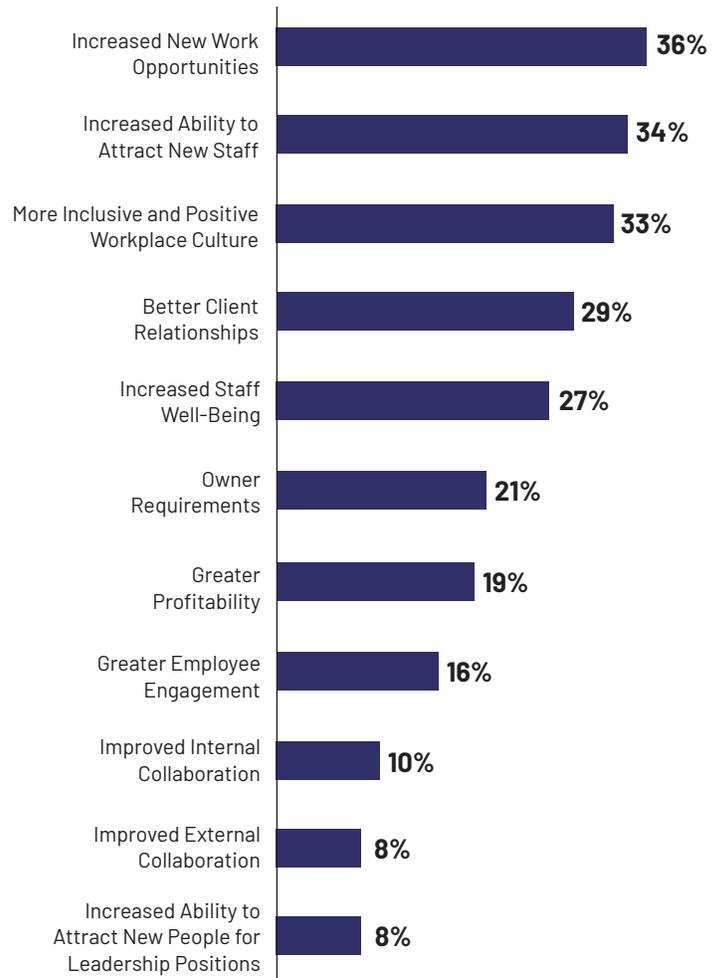
Better client relationships and increased staff well-being form a second tier of influential factors. Increased staff well-being is of greater importance to those with a moderate (39%) or high (33%) level of engagement with DEI practices than it is for those who are less engaged (17%), which may suggest that those more engaged with DEI have a higher expectation that improved well-being of their staff is a potential benefit. The challenge is likely in quantifying that impact.

Owner requirements, greater profitability and greater employee engagement are also moderately influential.

Factors That Would Encourage Architect Firms to Invest More Resources in Increasing Diversity and Inclusion Programs and Policies

(Selected in the Top Three)

Dodge Data & Analytics, 2022



Factors Driving Investment in DEI Programs and Policies

CONTINUED

Contractors

Contractor responses about what would encourage them to invest in the future are more consistent with the factors that have encouraged their current investments than are the architect responses.

TOP INFLUENCES

Their top two most influential factors, increased ability to attract new talent and desire to do the right thing, are the factors that are already encouraging those who are investing in DEI to do so. This suggests that more concrete examples of how DEI programs help recruit talent would encourage more contractors to increase engagement with DEI at their companies.

- Encouragingly, more respondents under 50 (37%) include the increased ability to attract new talent among the top three influential factors more frequently than do those 60 and over (20%). This may suggest that a reputation for diversity and inclusion helps to recruit younger staff members, and it may be a reason for wider adoption in the future, since attracting younger people to the construction industry has been a long-term challenge.
- Doing the right thing is particularly influential as a reason for those whose companies are already highly engaged in DEI practices (58%) to engage more. This suggests that many of these contractors may believe there is more that they can do than what their company has already done.

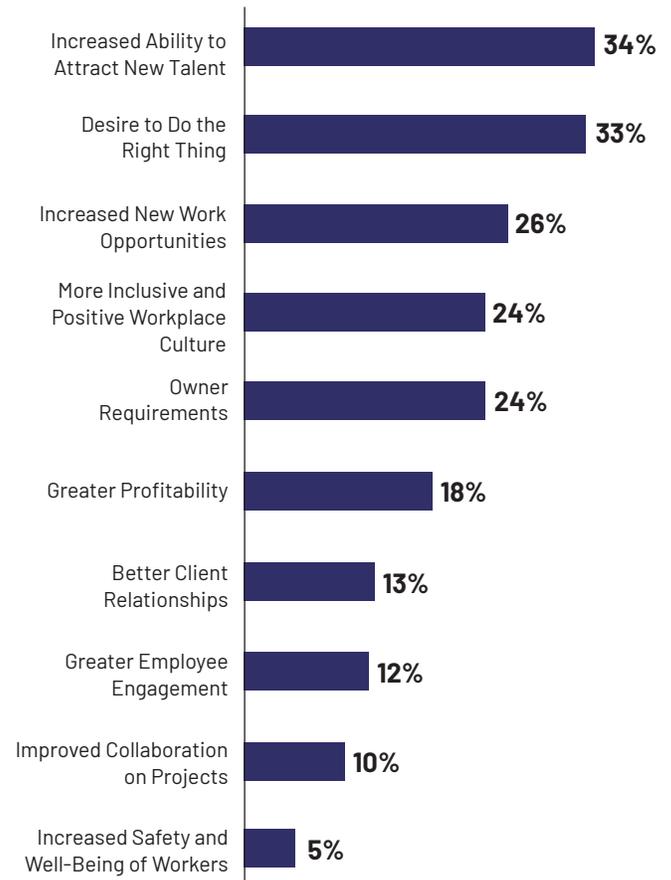
OTHER INFLUENCES

Three of the factors included in the study form a second tier of influence. They include a mix of items, including the pull of business benefits and improving workplace culture, and the push of owner requirements.

- Similar to doing the right thing, having a more inclusive and positive workplace culture is particularly influential among those at companies with a high level of engagement with DEI currently. Again, this suggests wide recognition of the continuing need to improve, especially among those already most engaged.
- Owner requirements rank fifth on this list, but they rank eighth as a reason for engaging in DEI currently. This again reinforces the importance of owners as a driver for future engagement, and may reflect expectations that more owners are likely to have DEI requirements in the future.
- Respondents from the West frequently place owner requirements (32%) in their top three, significantly more often than those in the South (16%) and slightly more frequently than in the Northeast (20%) or Midwest (27%).

Factors That Would Encourage Construction Companies to Invest More Resources in Increasing Diversity and Inclusion Programs and Policies (Selected in the Top Three)

Dodge Data & Analytics, 2022



External Factors That Would Enable More DEI Investment

In addition to understanding what has led companies to make their current investments in DEI, it is also important to know what factors will drive those investments in the future. Internal triggers for those investments, such as the ability to realize specific benefits, are important, but so are factors outside of their direct control, which nonetheless influence their investments. Therefore, architects and contractors were asked about the factors that would enable them to increase their investment in DEI.

Notably, despite the differences in the drivers that have encouraged investment so far between architects and contractors (see page 47), their response to the external factors are very similar, and are thus shown together in the chart at right.

The majority of these respondents (84%) believe that at least one of these factors would influence their company. Notably, though, there is no single factor or two that ranks highly above the rest. Instead, seven different factors fall within a 10-percentage-point spread, suggesting that all of them are likely to have some influence.

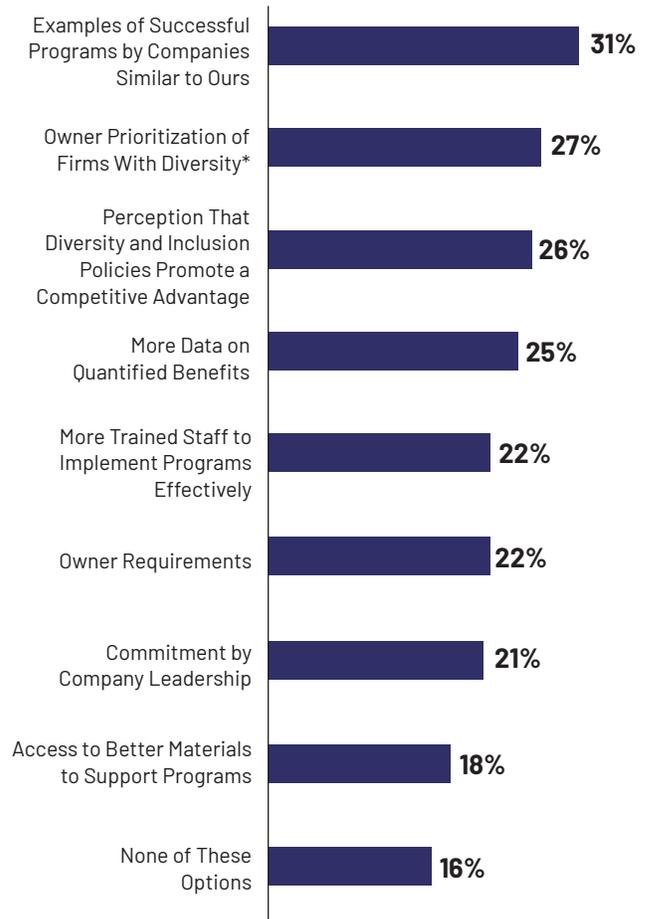
- The top factor is having examples of successful programs by companies similar to ours. This finding suggests that architects and contractors need more information about how to implement these programs. Notably, there are no significant differences by company size in those who believe this would be influential.
- They also seek more information on the benefits of adopting more practices, from the degree to which they offer a competitive benefit to more quantified data on benefits. Among contractors, the quantified data is especially sought by large companies (33%), and among architects, it is of particular importance to project managers (41%).
- The architects were also asked about the influence of owners' prioritizing firms that are diverse, and project managers (41%) again would be influenced by this more than others. This factor has slightly more impact than owners setting DEI requirements, which suggests they would prefer a competitive advantage over a mandate.
- Other factors that would have some influence include having more trained staff and leadership commitments.

These findings demonstrate the importance of providing more information about investments in DEI programs in the industry, both in terms of the benefits offered and also to reveal strategies for implementation and other best practices.

Factors That Would Enable Companies to Increase Investment in DEI

(Selected in the Top Three)

Dodge Data & Analytics, 2022



*Only Architects Asked

Architects and contractors were asked about the top challenges to increasing diversity and inclusion at their organizations and across the industry at large.

Challenges to Increasing DEI Efforts at Their Companies

Notably, the responses for architects and contractors were very similar about the top challenges that prevent their organizations from investing more in DEI, revealing that most of these challenges are industry-wide.

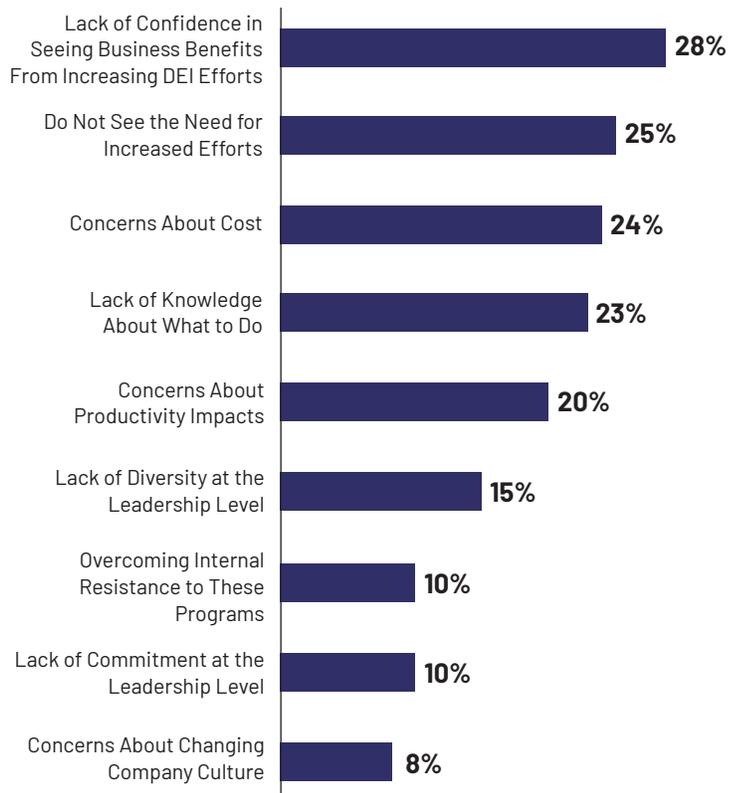
However, there is also no clear consensus around one or two challenges as the biggest issues. Instead, about one quarter of architects and contractors selected five different options in their top three. This suggests that many different issues will need to be tackled to see significant increases in DEI engagement.

- The top two challenges, lack of confidence in seeing business benefits from increasing DEI efforts and not seeing the need for increased efforts, reveal that many do not recognize that lack of diversity is an issue or that increasing diversity and inclusion would improve their companies. While this study demonstrates that organizational, project and business benefits can be achieved through greater diversity and inclusion, the perception that there is no need to improve will be difficult to dislodge.
- Concerns about cost and productivity impacts also suggest that some companies view DEI efforts as potentially disruptive. Companies also report that lack of knowledge about what to do is a hurdle. These particular concerns can be addressed with more case studies and examples being provided to the industry. These materials will need to show any negative impacts faced when implementing policies, but they also can demonstrate that the positive impacts on companies can outweigh the negative ones.
- Interestingly, very few cite specific resistance either among their staff or among leaders as a major issue. While that may be due to the concerns already expressed by the respondents themselves, it may also suggest likely adoption of more DEI efforts, should the business case and the means of doing so with minimal disruptions be more widely understood.

About 14% of respondents indicate that they face other challenges in addition to the ones included in the survey. Over half of them listed finding diverse individuals with the skills they need to be a challenge faced by their

Most Significant Challenges to Increasing Diversity and Inclusion Efforts at Individual Companies (Selected in the Top Three)

Dodge Data & Analytics, 2022



Challenges to Increasing Diversity and Inclusion Efforts CONTINUED

DATA
DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION

organization, and this was pointed out equally by architects and contractors. A few architects also felt their company was too small to tackle this issue.

Most Significant Challenges to Increasing DEI in the Industry

As with the factors inhibiting greater engagement with DEI efforts at companies, the findings about the most significant industry challenges to increasing diversity are also closely grouped, with only an 11-percentage-point range between all the options, and just a 3-percentage-point range between the top three. Again, this suggests that there is no single factor but many issues that deter wider adoption of these efforts currently.

Architects and contractors largely agree about the top three factors: lack of trained diversity and inclusion professionals, the lack of confidence in the business benefits of diversity and inclusion, and varying hiring practices across organizations, so again, these are challenges that stretch across the design and construction industry. Those highly engaged with DEI efforts (37%) consider the lack of trained DEI professionals to be a particularly difficult challenge.

However, there are notable differences in the share who rate some of the other challenges among their top three. Architects more frequently select the lack of coordinated efforts to provide outreach to underrepresented communities (31%) and the lack of an industry standard for promoting underrepresented groups to leadership positions (26%) among their top obstacles than do contractors (17% and 12%, respectively). An even higher share of those highly engaged with DEI efforts (35%) regard the lack of coordinated efforts to provide outreach to underrepresented communities to be a challenge.

These findings, especially when combined with the concern expressed by the respondents about finding diverse qualified candidates, suggest that the industry needs to find ways to encourage participation from more than those traditionally involved in construction. Specific examples of successful engagements with community organizations and training could help those interested in engaging in these efforts but who don't know where to begin.

Most Significant Challenges to Increasing Diversity and Inclusion Efforts Within the Design and Construction Industry (Selected in the Top Three)

Dodge Data & Analytics, 2022



Role of Owners in Helping to Advance Diversity in Design and Construction

Owners can be true agents of change in design and construction. Their requirements can reshape trends into established practices, and they can add elements to their criteria for evaluating bids that they think will benefit the project and the industry. It is likely that owner engagement with increasing diversity and inclusion through their bidding and proposal review processes would have the impact of encouraging the industry, but that influence would be affected by the degree to which the industry believes it can meet the standards set by owners.

Therefore, the respondents to the survey were asked about three topics:

- Do they agree or disagree that owner requirement for diversity/use of diversity as a selection criterion would create a major burden for their company?
- Do they agree or disagree that owner requirements for diversity/use of diversity as a selection criterion would have a positive impact on diversity in the industry?
- Do they agree or disagree that owner requirements for diversity/use of diversity as a selection criterion would have a positive impact on the industry as a whole?

The responses to each of these sets of questions are shown in the charts on this page and the next for architects and contractors.

PERCEPTION THAT OWNER REQUIREMENTS FOR DIVERSITY/USE OF DIVERSITY AS A SELECTION CRITERION WOULD BE A BURDEN

The chart at upper right show the responses of architects and contractors on the degree to which owner requirements would create a burden for their organizations.

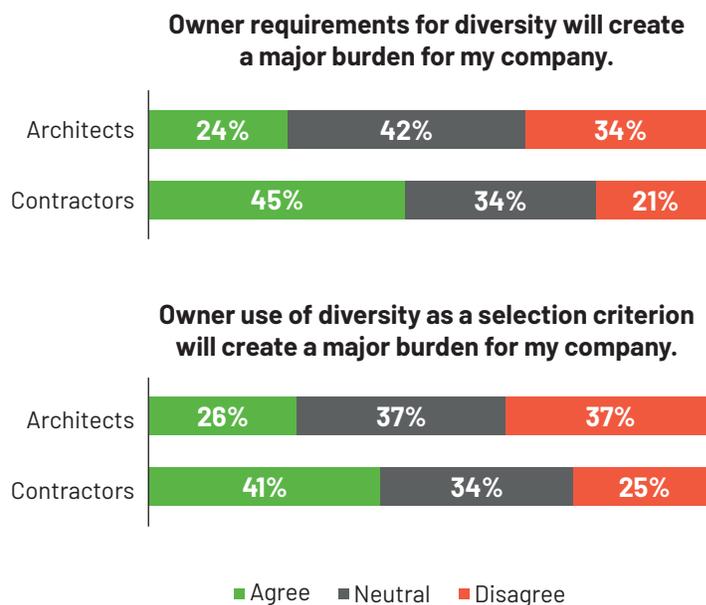
- There is little distinction in the responses between owners having requirements for diversity or just using diversity as a selection criterion. Roughly the same share find each to either be or not be a burden.
- Architects are much more sanguine about the impact of these owner efforts, with well over one third actively disagreeing with the assumption that they would be a burden compared with around one quarter who agree.
- Over 40% of contractors, in contrast, expect such requirements/selection criterion to be a major burden, and only about one quarter disagree.

The notable share of architects and contractors who are neutral about the impacts of these measures suggest that they expect some challenges, but not major ones, if owners were to take these approaches.

Throughout the findings, contractors have consistently

Impact on Companies of Owner Efforts to Increase Diversity

Dodge Data & Analytics, 2022



Role of Owners in Helping to Advance Diversity in Design and Construction CONTINUED

DIVERSITY, EQUITY AND INCLUSION IN DESIGN AND CONSTRUCTION DATA

considered diversity to be a workforce issue, with benefits to boosting the workforce and challenges due to limited skilled resources to choose from prioritized in their responses (see pages 28, 49 and 52). Therefore, it is not surprising that contractors are more concerned about the degree of burden these approaches would have on their ability to get work.

Not surprisingly, the share already highly engaged in diversity efforts who expect that the owner actions will be a burden is much smaller than those at the low end of the spectrum (17% versus 41%). Companies already focusing on diversity are better positioned to benefit from these changes.

PERCEPTION OF THE IMPACT OF THESE OWNER EFFORTS ON INCREASING DIVERSITY IN THE INDUSTRY

Again, in both sets of responses, there is little distinction between owner requirements for diversity and owner use of diversity as a selection criteria. Architects are also more positive about the potential for these owners' activities to improve diversity in the industry and contractors less so, consistent with the responses to the previous set of questions. Again, with the contractor concerns about finding enough skilled workers at all, many may believe that owner requirements/selection criteria will not help them directly address this issue.

Notably, well over half of those who have a high level of engagement with DEI practices agree that these owner actions would improve diversity in the industry. This is also likely due to their perspective about the degree to which diversity can be increased based on their own experiences.

PERCEPTION OF THE IMPACT OF THESE OWNER EFFORTS ON IMPROVING THE INDUSTRY

Responses to this question are similar to those about increasing diversity in the industry. It is notable, though, that a slightly smaller share think these actions will improve the industry than those who think they will increase diversity in the industry.

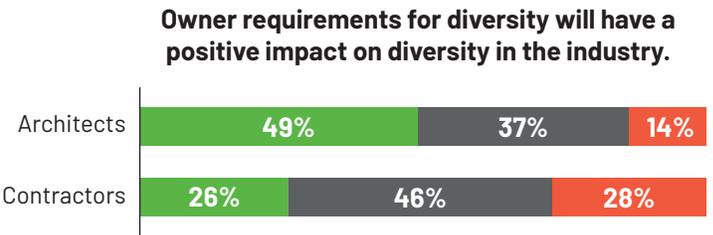
A small share (7%) of respondents who believe that the requirements will create a major burden also believe that having them will improve the industry.

BEST MEANS FOR OWNERS HAVING AN IMPACT

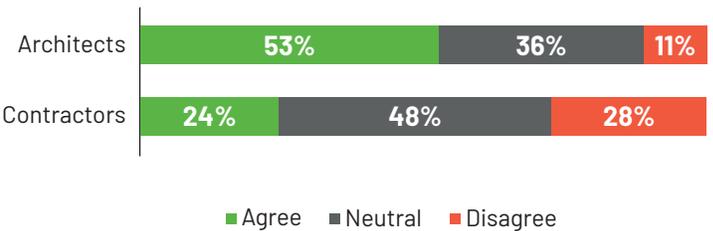
Architects and contractors were asked an open question about how owners can best help the industry with diversity and inclusion. The top responses included leading by example and setting benchmarks/policies/goals. However, many also felt that owners should not play a role at all. The findings suggest notable divisions across the industry about the role owners should play in promoting diversity.

Impact of Owner Efforts on Increasing Diversity in the Design and Construction Industry

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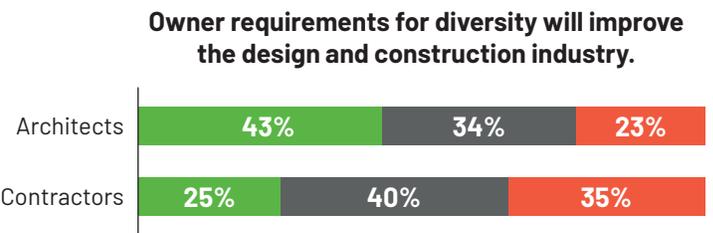


Owner use of diversity as a selection criterion will have a positive impact on diversity in the industry.

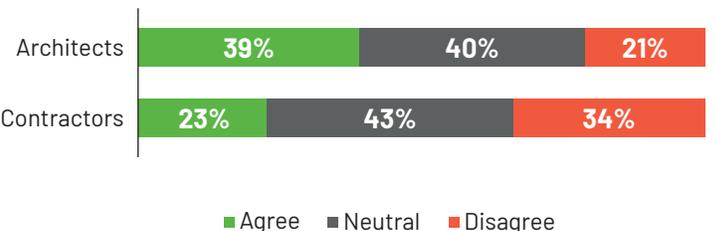


Impact of Owner Efforts on Improving the Design and Construction Industry

Dodge Data & Analytics, 2022



Owner use of diversity as a selection criterion will improve the design and construction industry.



Methodology:

Diversity in Design and Construction Study

The research was conducted from April 6 to May 26, 2022 utilizing an online survey/ Request for Information (RFI) issued by the U.S. General Services Administration. Sample was provided by the DD&A Architect and Contractor panels.

Respondents

All respondents were required to work at a company located in the US and to work on primarily nonresidential construction.

- **Architects:** Respondents had to be employed at an architectural firm or a design-build company that leads with architecture. All job roles were allowed except graduate architect, drafter or intern.
- **Contractors:** Respondents had to be employed at a general contractor, construction manager, design-build company or a specialty trade contractor/ fabricator company. All job roles were allowed except administrative staff.

418 professionals responded to the survey.

- **205 Architects**
- **213 Contractors**

Respondents work on commercial (87%), institutional (77%), multifamily (55%), industrial (47%), single family residential (29%), transportation (17%), water/ wastewater (14%) and energy/power (9%) projects.

ARCHITECT RESPONDENTS

- **Distribution by Region**
 - Northeast: 20%
 - Midwest: 25%
 - South: 25%
 - West: 30%
- **Job Roles of Respondents**
 - Principal or Executive: 45%
 - Design Architect, Project Architect or Staff Architect: 33%
 - Project Manager or Project Director: 19%
 - Other: 3%

- **Race**
 - White: 75%
 - Asian: 9%
 - Black/African American: 2%
 - Native American/American Indian/ Alaska Native: 1%
 - Native Hawaiian or Other Pacific Islander: 1%
 - Other: 3%
 - Prefer Not to Answer: 14%
- **Ethnicity**
 - Hispanic or Latino: 3%
 - Not Hispanic or Latino: 84%
 - Prefer Not to Answer: 13%
- **Age**
 - 30-39: 7%
 - 40-49: 25%
 - 50-59: 34%
 - 60-69: 24%
 - 70 or Older: 10%
- **Gender Identity**
 - Male: 69%
 - Female: 24%
 - Prefer Not to Answer: 7%

CONTRACTOR RESPONDENTS

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Resources

Organizations, websites and publications to help you get smarter about promoting diversity, equity and inclusion at your company and in your practice.



Dodge Construction Network

Main Website:

www.construction.com

Dodge Construction Central:

www.construction.com/products

Market & Competitive Intelligence:

www.construction.com/products/construction-market-data

Sweets:

www.construction.com/products/sweets

SmartMarket Reports:

www.construction.com/toolkit/reports

ACKNOWLEDGEMENTS:

We would like to thank the U.S. General Services Administration for their partnership in bringing this critical research to the design and construction industry, which demonstrates their leadership and commitment to this important issue.

We thank BHDP for their skilled project coordination efforts and astute insights during the research process.

We also thank all the people who contributed their insights, images and data in our sidebar articles and case studies for generously sharing their experiences with diversity, equity and inclusion with the rest of the industry.



U.S. General Services Administration

www.gsa.gov

Resources

Diversity, Equity, Inclusion and Accessibility at the U.S. General Services Administration:

www.gsa.gov/governmentwide-initiatives/diversity-equity-inclusion-and-accessibility

American Institute of Architects (AIA) Equity, Diversity, Inclusion and Belonging:

www.aia.org/landing-pages/6436683-equity-diversity-inclusion-and-belonging

Associated Builders and Contractors Inclusion, Diversity and Equity Program: <https://diversity.abc.org>

Associated General Contractors of America Diversity and Inclusion: www.agc.org/diversity

Boston Society of Architects (BSA) Equity in Practice Resource Guide: www.architects.org/uploads/BSA_EquityInPractice_ResourceGuide.pdf

Culture of Care: <https://buildculture.org>

Design for Freedom by Grace Farms:

www.designforfreedom.org

International Living Future Institute:

<https://living-future.org>

National Association of Minority Architects:

www.noma.net

National Association of Minority Contractors:

<https://namcnational.org>

National Institute of Building Sciences 2021 Built Environment Social Equity Survey:

www.nibs.org/projects/2021-built-environment-social-equity-survey

North America's Building Trades Union Diversity Toolkit:

<https://nabtu.org/wp-content/uploads/2017/06/Diversity-Toolkit-draft-6-15-17.pdf>

U.S. Green Building Council (USGBC) Environmental Justice LEED Credit: www.usgbc.org/credits/cities-existing-communities-existing/v41-32

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