Baseline on Belonging: Examination Report

Report Structure

NCARB and NOMA are releasing the full Baseline on Belonging report in seven phases. This is the second phase, featuring data related to the Architecture Registration Examination® (ARE®). The following reports will be released individually over the coming months, ending with the full report, which will compile and summarize the previous sections.

1. Overview
2. Experience
3. Examination
4. Education
5. Firm Culture
6. Career Development
7. Full Report

In This Summary

This executive summary report features an overview of the key findings and next steps from the Baseline on Belonging: Examination Report. To explore survey findings related to the Architectural Registration Examination® (ARE®) in depth—including charts showing filtered responses to each ARE-related survey question—please visit ncarb.org/belong.

For more information about the study, read the Baseline on Belonging: Experience Report, which includes findings related to the experience program, and the Baseline on Belonging: Overview Report, which includes a breakdown of the survey structure and an explanation of respondent demographics.

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Executive Summary

The Architect Registration Examination® (ARE®) is a national licensing examination for architects. Passing all six divisions of the exam is required by all 55 U.S. states and territories as a qualification for becoming an architect. Completing the ARE requires significant investments of both time and money, and while some firms offer support to candidates taking the exam, others do not. The Baseline on Belonging survey included a number of questions exploring how respondents prepared and paid for the ARE, with a goal of better identifying where cost, firm support, and exam preparation may create unintended impediments on the path to licensure.

The majority of survey respondents had either passed the ARE, taken at least one division, or were preparing to take a division of the exam; just 22 percent of respondents reported they had not yet begun preparing for the ARE. Viewed as a whole, responses from the 78 percent who had experience either preparing for or taking the exam reveal significant impediments to affordability, regardless of demographic. In addition, only 46 percent of individuals preparing for the exam and 66 percent of individuals who have begun or finished testing reported that their firm contributed to the cost of the exam—indicating that candidates may receive less ARE support from their firms than anecdotal claims would suggest.

As with the Baseline on Belonging experience report, survey findings were filtered primarily by race, ethnicity, and gender, with additional demographic characteristics such as age and firm size taken into consideration. Where appropriate, NCARB provided supplemental data from ARE candidates to offer additional insight and background information. This includes the first-ever release of national ARE 5.0 pass rates filtered by race and ethnicity, gender, and age. The pass rates indicate significant disparities for people of color, women, and older candidates. An independent bias audit concluded that the individual items on the ARE exhibit no pattern of bias, suggesting that these disparities are not caused by the exam itself, but by outside factors—such as those highlighted throughout the entire Baseline on Belonging study. Some key factors that are likely impacting pass rates include access to the necessary education and experience opportunities, as well as factors related to cost and firm support explored in this report.

For example, viewing the Baseline on Belonging survey responses by race and ethnicity reveals slight disparities when it comes to firm support for the exam and barriers to the exam’s affordability, with Hispanic or Latino respondents the most consistently impacted. For example, Latino respondents are the least likely of all races/ethnicities to report that their firm has or will pay for the exam and the most likely to spend over $500 on study materials.

The disparities grow when gender is factored in along with race and ethnicity, with women of color more likely to report that their firm did not contribute to the cost of the ARE. In addition, African American and Asian women were 5-6 percent more likely to report that their income was a significant factor impacting their ability to afford the exam compared to their male peers.
Executive Summary (Continued)

African American women were also the most likely of all groups to cite college debt as a barrier to affording the exam. Likewise, Latina women for the least likely of all groups to report receiving study materials from their firm.

Although the Baseline on Belonging study is primarily focused on the impacts of race, ethnicity, and gender, two additional demographic factors also had a strong impact on exam-related responses: age and firm size. Firm support for the ARE—including free study materials and contributions toward the cost of the exam—drops significantly for candidates aged 40 or older. Despite this disparity, older candidates are more likely to feel confident they can afford the exam compared to their younger peers.

Viewing the survey responses by firm size also revealed significant disparities in the amount of support firms provided to their candidates, with large firms more likely to provide free study resources or pay for the cost of the exam than small firms. However, although employees at large firms were more than twice as likely to say their firm would pay for the cost of the exam compared to those at small firms, this did not make them more confident in their ability to afford the ARE or impact the factors that prevented them from feeling they could afford the ARE.

While NCARB does not have Record holder data regarding firm size, data regarding ARE completions underscores the disparities revealed by the survey findings. The disparities seen in ARE pass rates naturally lead to disparities in ARE completions. White candidates—especially white men—make up a disproportionately large percentage of ARE completions when compared to the total population of candidates’ testing. In addition, white candidates complete the ARE an average of 7-8 months sooner than their African American and Latino peers. Candidates in their 20s and 30s are also more likely to complete the ARE than their older peers, and do so in significantly less time.

As with key findings related to experience, additional study is needed to better understand the core causes of disparities related to exam progress and support. For more information about NCARB and NOMA's planned follow-up surveys and additional research, see page 77 of the full report. For more details on key findings related to the ARE, see page 5. For more information about how NCARB will address pass rate disparities, please visit ncarb.org.
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Key Findings

Cost of the Exam is a Financial Burden for Many Candidates

When it comes to the cost of the ARE, many candidates reported facing significant difficulties in affording the exam.

- Of respondents who have completed the exam, roughly one third reported receiving no firm support toward the cost of the exam.
- 80 percent of respondents personally purchased study materials—42 percent of which reported spending $500 or more.
- Only 26 percent of candidates who have taken a division were confident in their ability to afford the ARE.
- Nearly two-thirds of individuals who have completed the exam reported facing difficulty paying for the exam.
- 74 percent of candidates reported income/compensation as a factor impacting their ability to afford the ARE.
Key Findings

African American and Latino Candidates Less Likely to Receive Firm Support for the Exam

African American and Latino candidates are less likely to report that their firm provided financial support to the cost of the exam.

Of all candidates who completed the ARE:

- 2 in 3 received firm support toward the cost of the exam.

But African American and Latino candidates are:

- 5-6% less likely to have received firm support toward the cost of the exam.

When it comes to receiving financial support for the ARE, African American and Latino candidates are less likely to report that their firm will contribute to the cost of the exam.

- African American and Latino candidates were 7 and 9 percentage points less likely, respectively, to report their firm would contribute to the cost of the exam than their counterparts.
- Of those who have completed the exam, African Americans and Latinos were 5 and 6 percentage points more likely, respectively, to report they had received no firm support than their counterparts.
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Key Findings

African American and Latino Candidates More Likely to Report Financial Burdens Impacting Exam Affordability

When it comes to issues like college debt, personal debt, and family obligations, African American and Latino candidates are more likely to report that these factors impact their ability to afford the ARE.

- African American candidates were 17 percentage points more likely to report college debt as a factor impacting their ability to afford the ARE compared to their Asian counterparts.
- African American candidates were 14 percentage points more likely to report personal debt as a factor impacting their ability to afford the ARE than white candidates.
- Latino candidates were 17 percentage points more likely to report family obligations as a factor impacting their ability to afford the ARE than white candidates.
- Latino candidates were 8 percentage points more likely to spend $500 or more on study materials compared to their white and Asian counterparts.
Key Findings
Candidates of Color and Women Less Likely to Pass the Exam

NCARB’s Record holder data shows that candidates of color and women are less likely to both pass individual exam divisions and complete the entire exam.

- White candidates are much more likely to pass than candidates of color. The Programming & Analysis division has the largest disparity: white candidates’ pass rate is 38 percentage points higher than their Black or African American peers.
- In general, men outperform women on five of the six divisions. A similar trend can be seen when factoring race and ethnicity, although Black or African American women generally outperform Black or African American men.
- Candidates between the ages of 18-29 have the highest pass rates, outperforming those who are 40 or older by 9-14 percentage points, depending on the division.
- In addition, NCARB’s data regarding exam completions shows that pass rates impact representation in the pool of candidates passing the exam:

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- Women make up 42 percent of active testers but only 36 percent of 2019 ARE completions.
- African Americans make up 5 percent of active testers but only 2 percent of 2019 ARE completions.
- Latino candidates make up 14 percent of active testers but only 6 percent of 2019 ARE completions.
- In contrast, white candidates make up 53 percent of active testers and 68 percent of 2019 ARE completions. African Americans make up 5 percent of active testers but only 2 percent of 2019 ARE completions.
Key Findings

African American and Latina Women Experience Disproportionate Barriers Related to Exam Affordability

African American and Latina women are more likely to experience barriers related to ARE support and affordability.

- African American and Latina women were 10 and 11 percentage points less likely, respectively, to report that they would receive firm support toward the cost of the exam compared to white women.

- African American and Latina women reported more barriers in affording the exam and study materials compared to white peers of both genders:
  - Latinas were the most likely group to purchase their own study materials—8 percentage points higher than white men.

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Latinas were the most likely group to spend $500 or more on study materials—11 percentage points higher than white men.

African American women were most likely to report college debt as a factor impacting their ability to afford the exam—10 percentage points higher than white women.

Latinas who completed the exam were 20 percentage points more likely to report experiencing difficulty paying for the exam compared to white women.
Age is a significant factor when it comes to the amount of support ARE candidates receive, with older candidates receiving less firm support and spending more toward ARE costs than their younger counterparts.

- Respondents aged 40+ who completed the ARE were 24 percentage points less likely to report receiving full firm support toward the exam cost compared to candidates aged 18-29.
- Candidates aged 40+ were 23 percentage points less likely to receive free study materials from their firm compared to those aged 18-29.
- Candidates aged 40+ were 22 percentage points more likely spend $500 or more on study materials than those aged 18-29.
Key Findings

Large Firms More Likely to Provide Candidates with Support

Firm size has a significant effect on the amount of support candidates receive, with large firms more likely to assist with the cost of the ARE and study materials.

- Candidates at large firms were more likely to report that their firm had or would assist with the cost of the exam:
  - Candidates at large firms were 26 percentage points more likely to report that they would receive firm support toward the cost of the exam compared to candidates at small firms.
  - Of those who completed the exam, respondents at small firms were 34 percentage points more likely to report that they did not receive firm support toward the cost of the exam compared to those at large firms.
- Candidates at large firms were 41 percentage points more likely to report receiving free study materials than those employed by small firms.
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Next Steps

Responses to the preliminary study provided insight into candidates’ challenges during the examination process and illuminated areas for NCARB and NOMA to pursue for further research. For example, some key insights from the report raise important questions—including why candidates at larger firms are more likely to receive financial support for the exam, or why candidates who identify as racial and ethnic minorities are more likely to spend more on exam-related costs.

- Why are candidates at small firms less likely to receive financial support for the exam and exam-related costs?
  - Is this purely due to economic affordability for small firms?
  - Do small and large firms have different perspectives on the value of licensure and the benefit to their firm?
  - Are small firms more likely to regard licensure as an individual pursuit?
  - Do small firms have less need or benefit in their employees becoming licensed?

- How do socioeconomic factors faced by candidates of color affect their ability to afford the exam?
  - How do personal debt and other financial obligations impact a candidate’s ability to take the exam?
  - Are candidates deferring testing due to affordability concerns?
  - Does affordability slow down the testing process for candidates under financial stress?
  - Is affordability limiting candidates’ ability to access test prep materials?

- Why are candidates of color less likely to receive firm support for the exam and exam-related costs?
  - Are there examples where a specific firm is treating candidates differently?
    - How might differences in treatment affect a candidates’ ability to perform or focus on preparing for the exam?
  - Are Latino candidates less likely to receive firm support because they are more likely to work in small firms?
  - Is financial support an established and defined benefit or are candidates having to advocate and negotiate to gain exam support?
    - If the latter, are candidates equally empowered to advocate for support, and are there other influencing factors?
Next Steps (Continued)

- What is the mechanism for financial support—are candidates being reimbursed, or are they provided funds in advance? Is financial support dependent on successful performance?
- Does the lack of more senior minority professionals in the profession affect minority candidates’ ability to receive firm support?

- How do women of color navigate facing disproportionate challenges affording, preparing for, and taking the ARE?
  - How are women of color specifically impacted by the intersection of both gender and race/ethnicity, in a profession historically led by white males?
  - How do debt and other financial obligations (which disproportionately affect women of color) specifically impact their ability to prepare for the exam?
  - Does the lack of female, minority mentors impact women of color in preparing for and taking the exam? If so, how?

- What drives disparities in firm support based on the candidates' age?
  - Are older candidates receiving less firm support because they are more likely to work in a small firm?
  - Are firms regarding older candidates as being more financially self-sufficient and therefore requiring less support?
  - Are older candidates disadvantaged because firm culture toward licensure is focused on recent graduates?
  - If licensure becomes a recent pursuit for an established contributor, is it harder for that candidate to establish support structures?
  - Is succession planning within firms a driver for older candidates to pursue licensure?

In Phase #2, NOMA and NCARB will look to further explore these questions by conducting focus groups and follow-up micro surveys to further explore these important questions. By conducting a drill-down study of the disparities revealed in this report, NCARB and NOMA aim to propose targeted actions that will lead to measurable progress in ensuring all candidates can succeed on the path to licensure.