

# Aletheia

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# Findings Report

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**BASELINE MEMBER DIVERSITY INITIATIVE**

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# Executive Summary

## WHO

Aletheia Research Institution leveraged its expertise in survey development and statistical analysis to investigate the demography of employees at member companies of the Associated Builders and Contractors New Jersey Chapter (ABC-NJ).

## WHAT

The investigation combined ABC-NJ member data, publicly available demographic data and detailed profile data reported by a sample of ABC-NJ member companies (which included an opt-in survey about COVID and labor force diversity).

## WHEN

The profiles of member companies were collected during a 6 month window and those used in the study were filled out between December '21 and May '22.

## HOW

Both the extended profile and survey data were collected using an application designed by Aletheia Research Institution and distributed by ABC-NJ.

## WHY

This research offers detailed baseline information about the demographic composition of ABC-NJ member companies as well as the distribution of ABC-NJ member companies. The results provide a comprehensive summary of workforce demography during the period of analysis and offer insight into the stability of this demography during the COVID-19 pandemic.

## SUMMARY FINDINGS

Overall, the results show that the percentage of female W-2 employees at ABC-NJ member companies is higher than the percentage of females in the construction industry within the State of New Jersey. When looking at the racial makeup of W-2 employees at ABC-NJ member companies, we found that the percentage of non-white workers at participating businesses is higher than the percentage of non-white construction workers in New Jersey.

Company-level analysis identified substantial differences in the demography of ABC-NJ member companies. Almost two-thirds of participating ABC-NJ member companies have percentages of both female and non-white W-2 employees that are comparable to or above state benchmarks. At the same time, 10 percent of ABC-NJ member companies have percentages below benchmarks. A key finding is that businesses that identified diversity as a priority exceeded state benchmarks at a higher rate than businesses that do not.

# Introduction

## OVERVIEW OF PROJECT DETAILS

Aletheia Research Institution completed this project as a part of ABC-NJ's Workforce Diversity Initiative and designed the process to map workforce demography among ABC-NJ member companies. The report provides a foundation for ongoing research that enables evidence-based policy recommendations and improvements to the delivery of services to ABC-NJ member companies.

Aletheia Research Institution completed a series of geographical information system (GIS) and statistical analyses using public and proprietary data. The results are presented in this report. This report also provides the results of a survey on the workforce demography of ABC-NJ member companies. Survey results are compared with key benchmarks to infer the level of workforce diversity among varying survey respondents.

## OVERVIEW OF PROJECT SETTING

The New Jersey Chapter of Associated Builders and Contractors represents the business interests of construction companies in the State of New Jersey. 186 ABC-NJ member companies completed an extended institutional profile and 86 of those filled out the additional opt-in questionnaire. The 186 participants represent approximately 16.5 percent of ABC-NJ member companies and are considered a representative sample.

The construction industry accounts for more than 4 percent of the US economy and employs more than 7 million individuals in different occupations.<sup>1,2</sup> This unique study provides baseline measures for the demography of W-2 workers in the construction industry, in a single state and draws conclusions about ABC-NJ member companies that could have broader applications.

This study also investigates changes in the workforce demography during the COVID-19 pandemic. Understanding how particular demographics in the construction industry might have been affected during the pandemic allows us to form predictions about the trajectory of workforce diversity in the sector. The organizational priorities of ABC-NJ member companies regarding diversity were also explored and used to provide additional analysis.

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<sup>1</sup> <https://fred.stlouisfed.org/series/VAPGDPC>

<sup>2</sup> <https://www.bls.gov/charts/employment-situation/employment-levels-by-industry.htm>

# Research Methodology

## RESEARCH QUESTION

The research design was developed within the constraints of available data to answer questions about the demographic composition of ABC-NJ member companies as well as the distribution of ABC-NJ member companies in New Jersey.

The primary question being: What is the workforce demography at ABC-NJ member companies and how does it compare to the contemporary demographic composition in the regions where ABC-NJ member companies operate?

In particular, the research design was developed to confirm if population density of non-whites were representative of W-2 employees and minority business owners in the construction industry. A legal and institutional analysis was also completed to investigate factors affecting labor force organization in the state of New Jersey.

## FIRM-LEVEL DATA

Aletheia received several data elements from ABC-NJ that assisted us in understanding current information gaps. ABC-NJ provided a full member list, additional exports regarding women-owned and minority-owned businesses, member folder handouts, event sponsorship packets, 2021 Member Application form, email samples, print ad samples, and email metrics.

From these sources, Aletheia identified key ABC-NJ member data to be integrated in the final member profile form, including but not limited to member types, CIS codes, minority/women-owned, and apprenticeship program participation. The final member profile form also included additional data fields developed by Aletheia to better understand diversity and inclusion in ABC-NJ member companies. Missing data was fortified with AA302 forms.

## REGIONAL BENCHMARKS

Appropriate benchmarks were obtained for the workforce demography among ABC-NJ member companies from two sources. First, state-level information on the gender and racial composition of the State of New Jersey were obtained from the Census Bureau. Second, information on the gender and racial composition of locations served by ABC-NJ member companies were obtained from the American Community Survey (ACS) at the ZIP code-level.

Demographics specific to the construction industry in New Jersey came from the Bureau of Labor Statistics. These data were joined with geographic shapefiles from the State of New Jersey. The geographic joins allowed us to obtain benchmark demographic composition for different counties and in some cases ZIP codes.

# Research Methodology

## PROFILE DATA

A comprehensive member profile was developed and distributed to ABC-NJ member companies. The intake form for the profiles also included an optional survey. To ensure the accessibility of questions and availability of relevant data, Aletheia tested the member profile and survey with a small group of ABC-NJ member companies and organized a virtual focus group. After improvements were completed, the profile questionnaire was deployed through email. A series of reminder emails encouraged ABC-NJ member companies to respond to the member profile form completion request.

The profile form included items on the current workforce demography and a survey that included questions on the impact of the COVID-19 on the workforce demography. The survey also included questions that captured whether diversity is a priority and whether workplaces at ABC-NJ member companies are LGBTQ+ friendly. If the practice of circulating and completing profile forms is maintained, the collected data will improve representation and service delivery at ABC-NJ in perpetuity.

## ANALYSIS

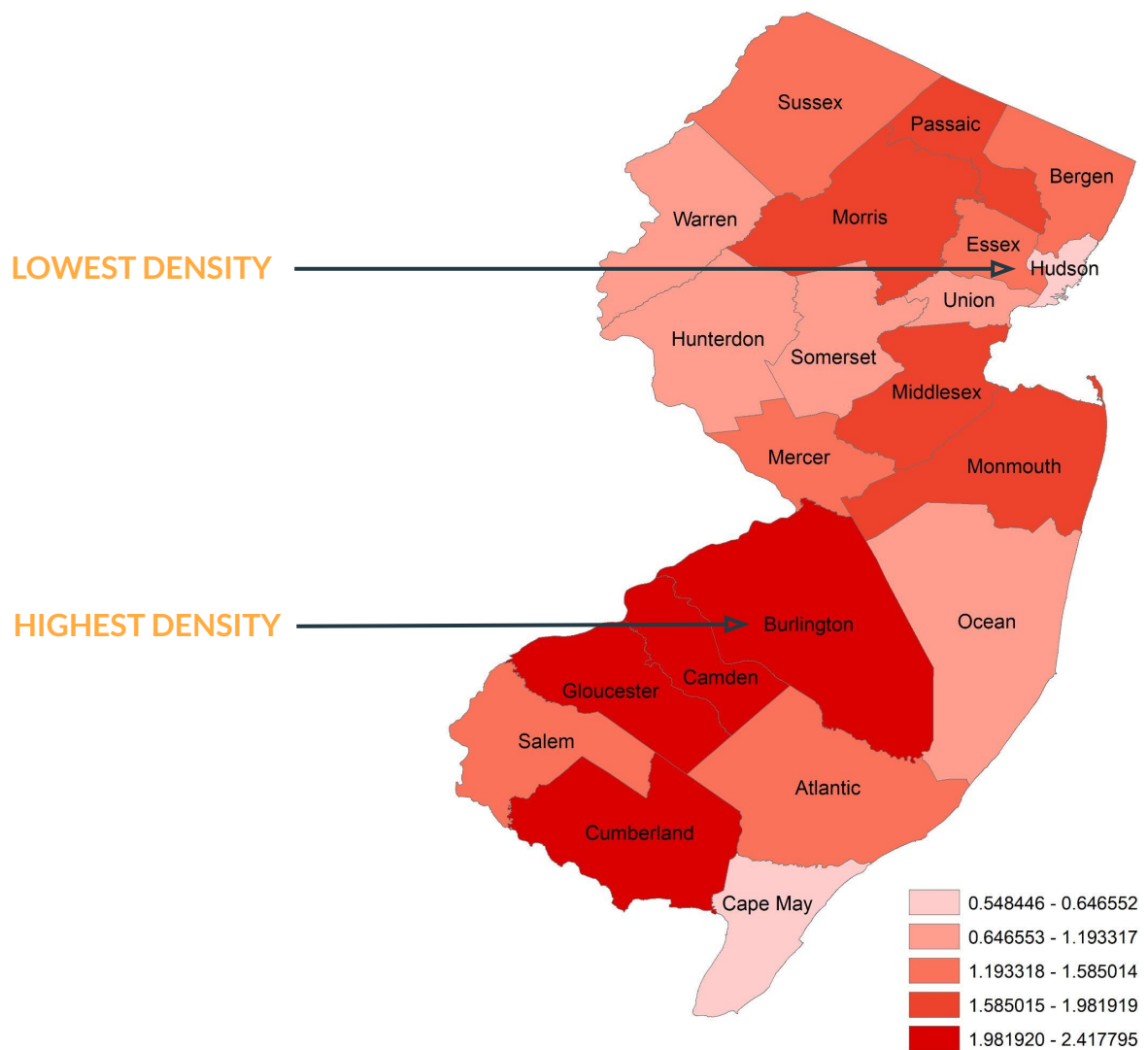
The analyses used descriptive statistical methodologies to identify trends and infer the central tendencies of the data. A data dispersion investigation used histograms and diversity curves to assess how the workforce demography differs across ABC-NJ member companies. Additionally, a quadrant analysis was also performed that produced diversity milieus that could illustrate how the percentages of different demographic groups correlate with each other and to understand how the observed demographic composition at ABC-NJ member companies is associated with self-reported organizational priorities related to diversity.

# Landscape

## ABC-NJ MEMBERSHIP AMONG CONSTRUCTION COMPANIES IN NEW JERSEY

**Figure 1** shows the density of the ABC-NJ member companies across the State of New Jersey. The percentage of construction companies represented by ABC-NJ were estimated in each county. We found that ABC-NJ's market share fluctuates between 0.5 and 2.4 percent. ABC-NJ's lowest membership is in Hudson County, while its highest is in Burlington County.

*Figure 1: ABC-NJ Membership among All Construction Companies by County*



# Landscape

## ABC-NJ MEMBERSHIP AMONG WOMEN-OWNED AND MINORITY-OWNED COMPANIES

The level of representation of women-owned business enterprises (WBE) and minority-owned business (MBE) in ABC-NJ was investigated as a part of the research design. **Table 1** also shows the percentage ABC-NJ member companies that are owned by women and minorities. The level of representation of women-owned and minority-owned enterprises in ABC-NJ in different counties is plotted in **Figures 2** and **3**, respectively. The highest ABC-NJ membership numbers among women-owned and minority-owned construction enterprises is found in Cumberland and Burlington Counties, respectively.

**Table 1: Percentage of ABC-NJ Membership of All Construction Companies, WBE, and MBE by County in The State of New Jersey**

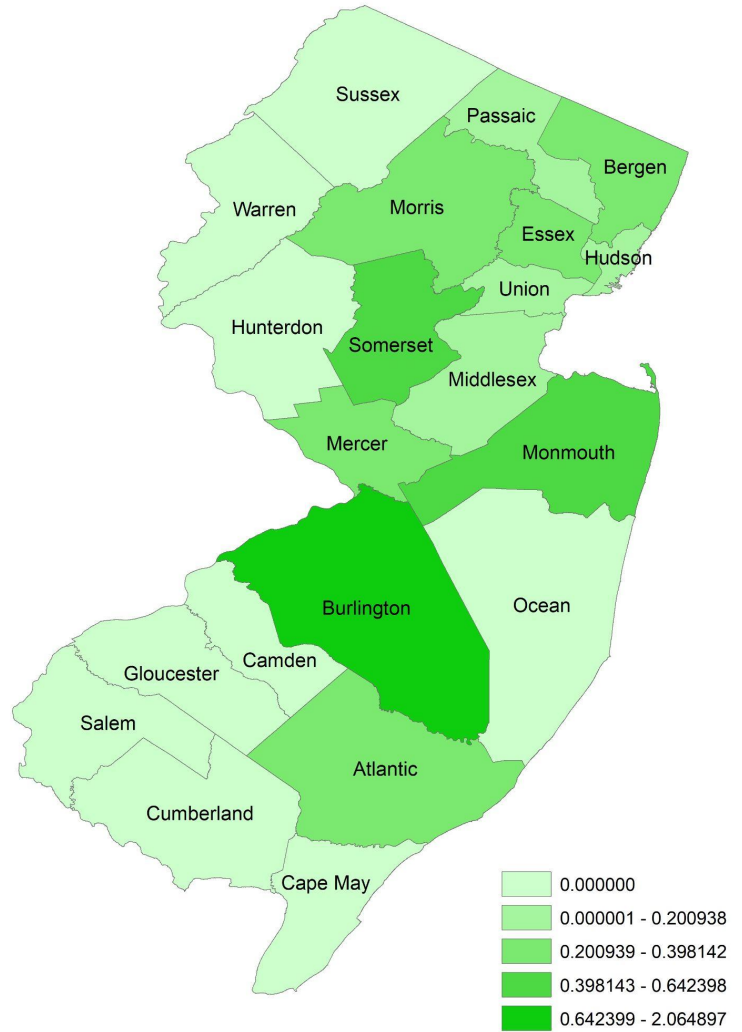
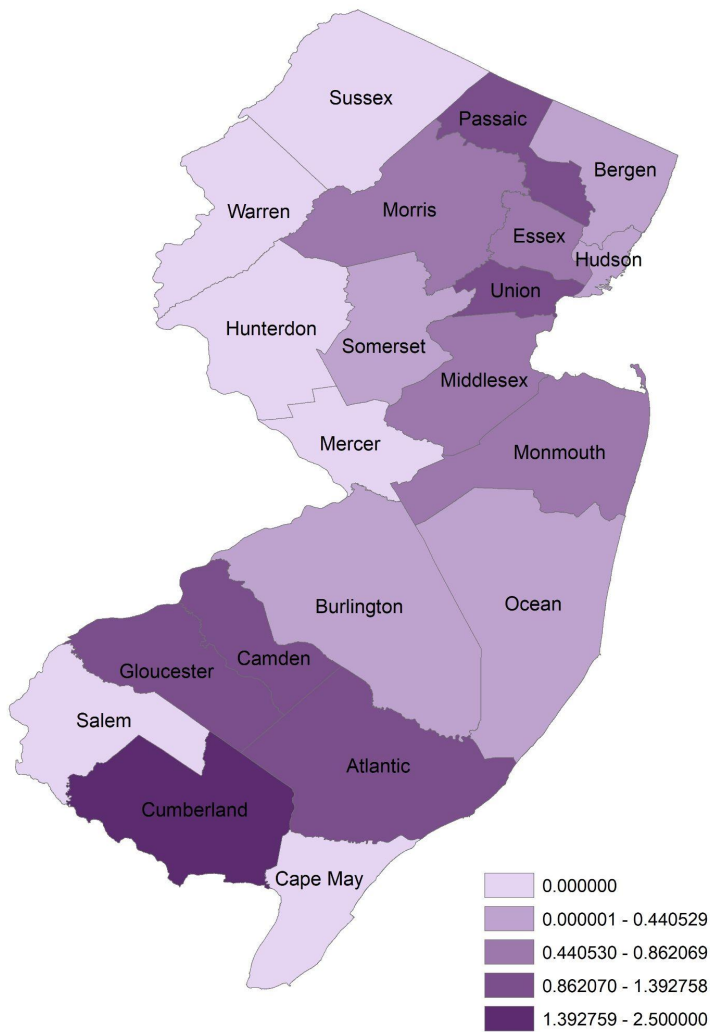
County	Construction Firms Total	% ABC-NJ Member Companies	WBE in Construction Total	% WBE ABC-NJ Member Companies	MBE in Construction Total	% MBE ABC-NJ Member Companies
Atlantic	1987	1.4	144	1.4	358	0.3
Bergen	8156	1.4	681	0.4	1507	0.4
<b>Burlington</b>	<b>2993</b>	<b>2.4</b>	<b>273</b>	<b>0.4</b>	<b>339</b>	<b>2.1</b>
Camden	3615	2.2	294	1.4	653	0.0
Cape May	1392	0.6	154	0.0	78	0.0
<b>Cumberland</b>	<b>1034</b>	<b>2.4</b>	<b>40</b>	<b>2.5</b>	<b>131</b>	<b>0.0</b>
Essex	5212	1.4	377	0.8	2458	0.3
Gloucester	2092	2.3	219	1.4	106	0.0
Hudson	3829	0.5	247	0.4	2282	0.1
Hunterdon	1735	1.0	78	0.0	120	0.0
Mercer	2276	1.4	103	0.0	398	0.3
Middlesex	5231	1.8	557	0.7	1493	0.2
Monmouth	5752	2.0	580	0.9	849	0.5
Morris	4874	1.7	445	0.7	735	0.3
Ocean	5604	0.9	456	0.4	485	0.0
Passaic	4832	1.8	359	1.4	1249	0.2
Salem	694	1.6	65	0.0	11	0.0
Somerset	3036	1.0	292	0.3	467	0.6
Sussex	1928	1.4	145	0.0	183	0.0
Union	4609	1.2	264	1.1	1823	0.2
Warren	921	0.9	53	0.0	51	0.0
<b>Total</b>	<b>71802</b>	<b>1.5</b>	<b>5826</b>	<b>0.7</b>	<b>15776</b>	<b>0.3</b>

# Landscape

## ABC-NJ MEMBERSHIP AMONG OWNERS OF CONSTRUCTION COMPANIES IN NJ

**Figure 2: ABC-NJ Membership among Women-owned Construction Companies by County**

**Figure 3: ABC-NJ Membership among Minority-owned Construction Companies by County**

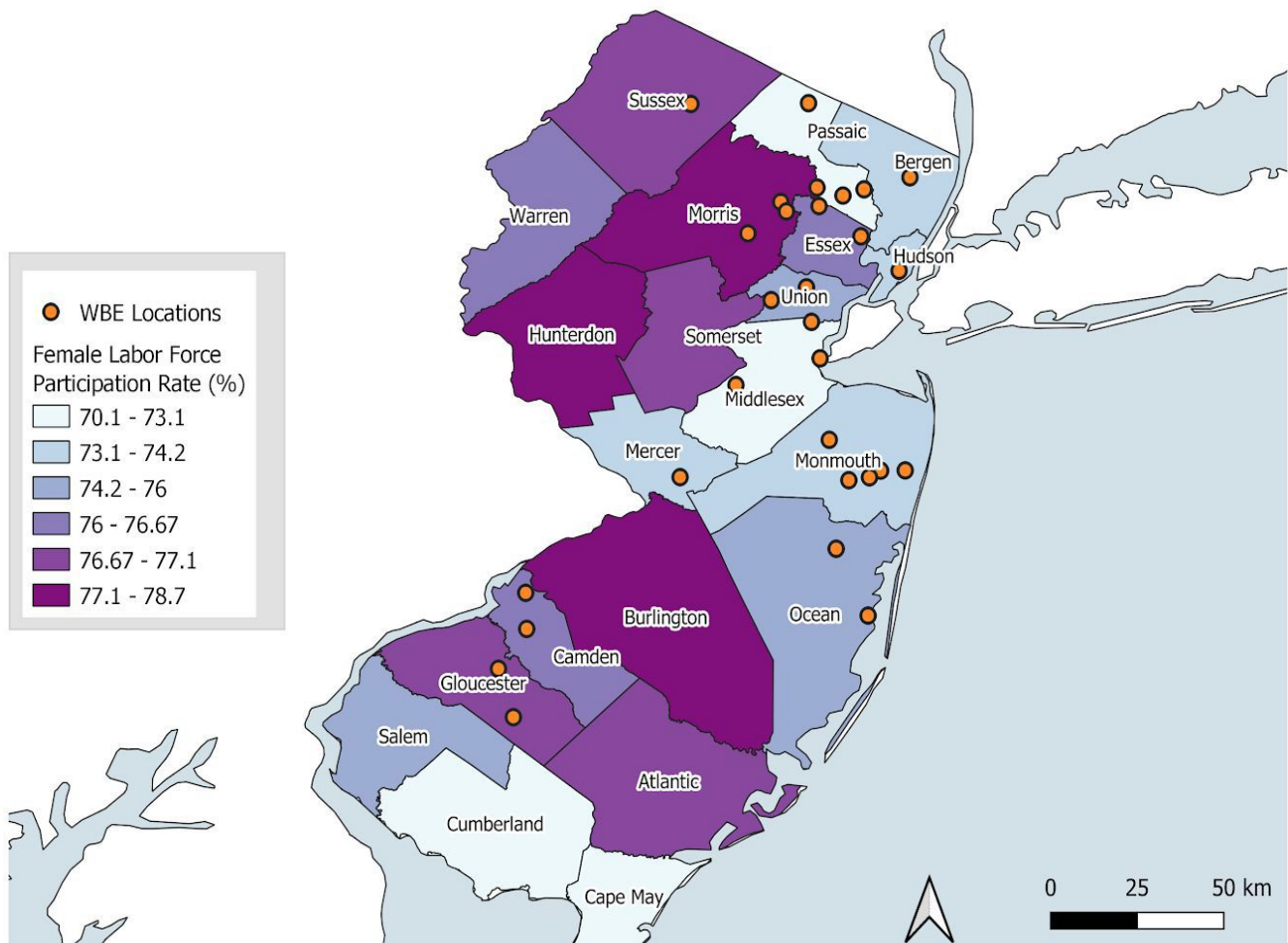


# Landscape

## ABC-NJ MEMBERSHIP AMONG WOMEN-OWNED CONSTRUCTION COMPANIES IN NJ

One might expect more women-owned enterprises in areas with higher female labor force participation. We use publicly available data to plot the locations of women-owned enterprises that are ABC-NJ member companies against the county-level female labor force participation (see **Figure 4**). We did not find a clear association between the geographic location of ABC-NJ affiliated women-owned construction enterprises and the local labor force participation.

**Figure 4: Association between WBE and Female Labor Force Participation**

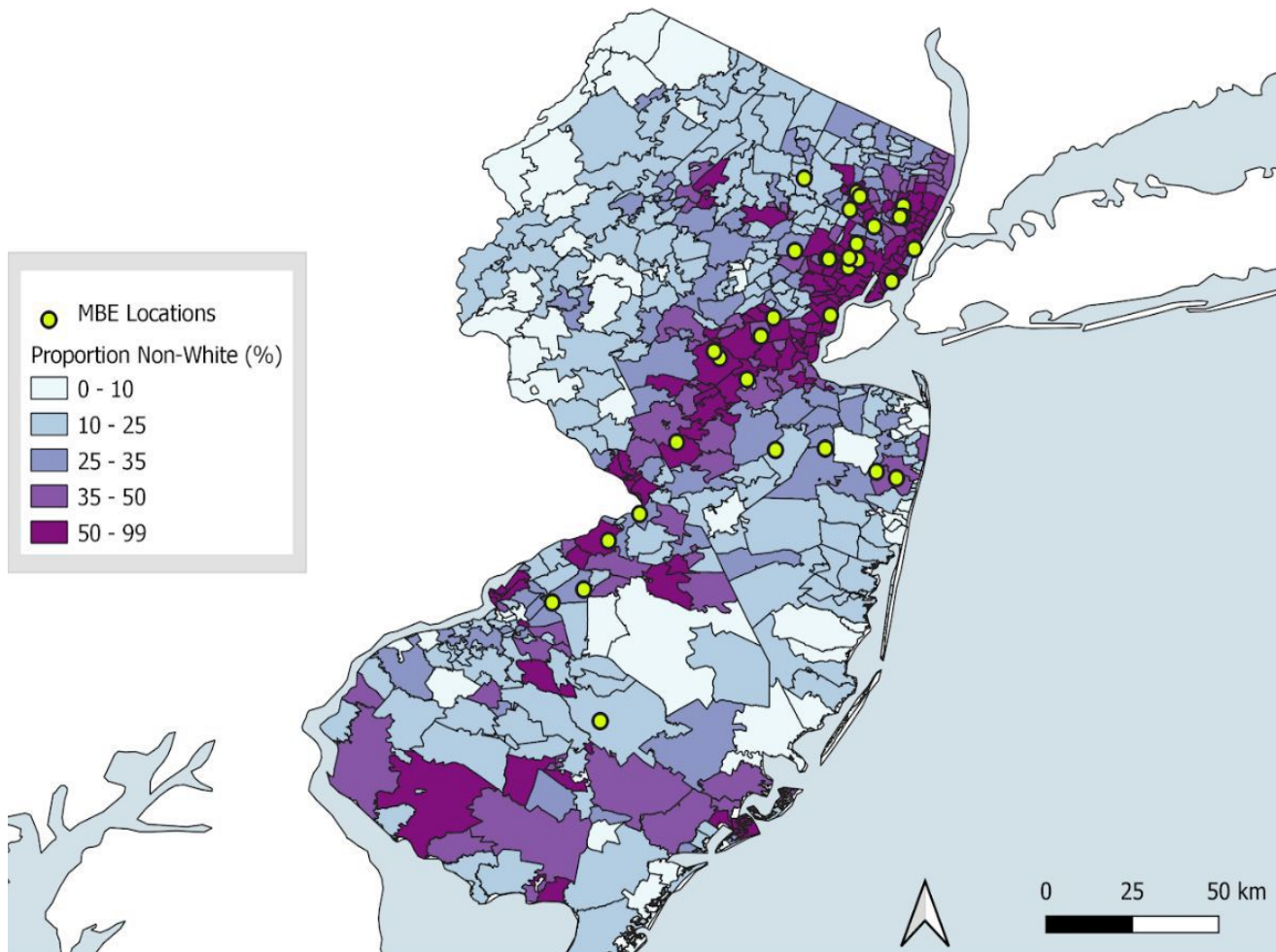


# Landscape

## ABC-NJ MEMBERSHIP AMONG MINORITY-OWNED CONSTRUCTION COMPANIES IN NJ

Similarly, one might anticipate more minority-owned enterprises in areas with a higher representation of racial minorities in the general population. **Figure 5** identifies the location of ABC-NJ affiliated minority-owned construction enterprises against the percentage of individuals with a non-white racial background in each county. We found moderate association between the location of minority-owned ABC-NJ member companies and the local demography.

**Figure 5: Association between MBE and the Proportion of Non-White Population**

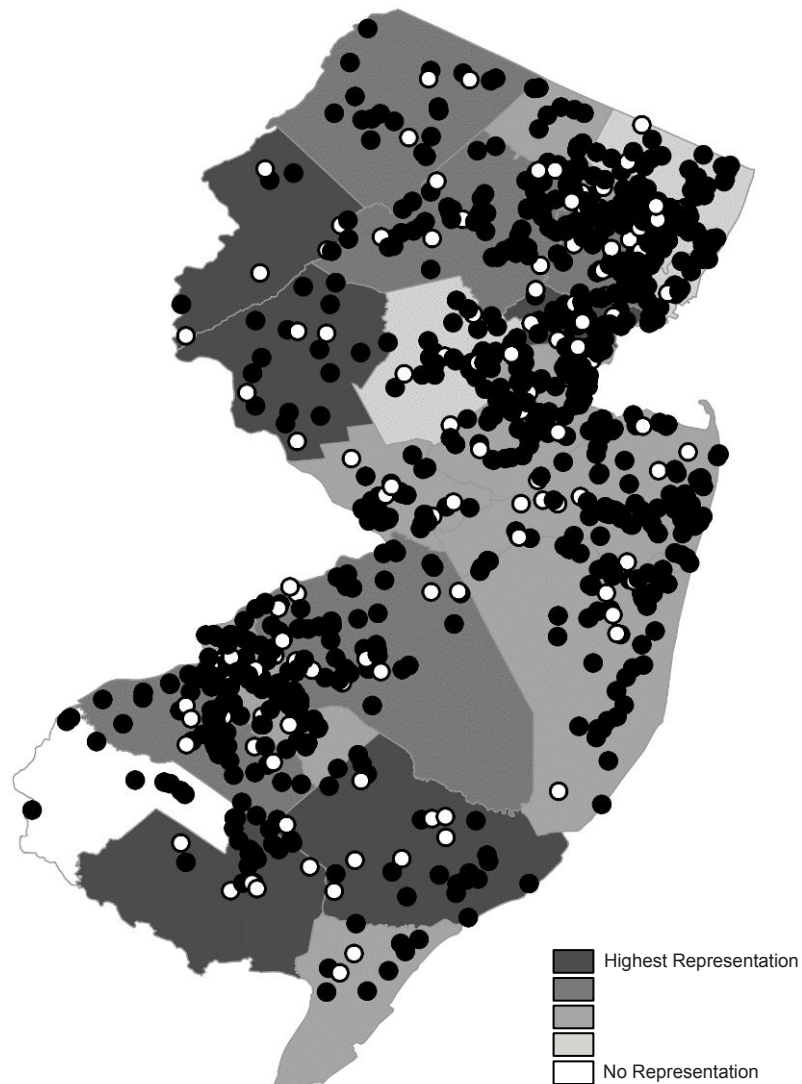


# Member Profile Results

## ABC-NJ MEMBER COMPANY PARTICIPATION

Responses from 186 participants were obtained, which represent roughly 15 percent of ABC-NJ member companies. **Figure 6** shows the geographic variation in the response rate for the survey. Overall, responses from ABC-NJ member companies were obtained in almost every county of New Jersey, but the representation of each county in the collected data is uneven. Future studies will be able to obtain a more balanced sample and draw stronger conclusions about the comparison of the demography in ABC-NJ member companies against benchmarks in the area they operate.

*Figure 6: Profile Representativeness*



# Demographics of ABC-NJ Member Companies

## OVERALL DEMOGRAPHIC PROFILE OF ABC-NJ MEMBER COMPANIES

**Table 2** reports the workforce characteristics at ABC-NJ member companies and compares them to appropriate benchmarks. The observations indicate that the percentage of female employees at ABC-NJ member companies is greater than the percentage of female workers in the construction industry nationwide and in New Jersey.

**Table 2** also shows that the percentage of non-white employees at ABC-NJ member companies. These observations indicate that the percentage of non-white employees at ABC-NJ member companies is higher than the percentage of non-white workers in the construction industry in New Jersey or nationwide.

*Table 2: Demographic Comparison of ABC-NJ Member Companies to Population Across New Jersey and in Locations with ABC-NJ Member Companies*

Category	New Jersey	Locations with ABC-NJ Member Companies	Construction Industry Nationwide	Construction Industry in New Jersey	ABC-NJ Member Companies
Female	51.1	51.2	11.0	9.1	14.7
Non-White	32.2	44.4	12.1	9.1	27.1
Former Felons	N/A	N/A	N/A	N/A	0.2
Veterans	5.0	N/A	N/A	N/A	0.4
Persons with Disabilities	10.4	N/A	N/A	N/A	0.6

Notes: Each entry represents a percentage. N/A denotes Not Available. Demographics about the general population in New Jersey come from the Census Bureau (<https://www.census.gov/quickfacts/NJ>).

Demographic data about the general population in locations (zip codes) with ABC-NJ member companies come from the American Community Survey. Nationwide benchmarks come from the Bureau of Labor Statistics (<https://www.bls.gov/cps/cpsaat17.htm>).

The percentages of female and non-white construction workers in NJ come from the Bureau of Labor Statistics. All benchmarks reflect the currently available information.

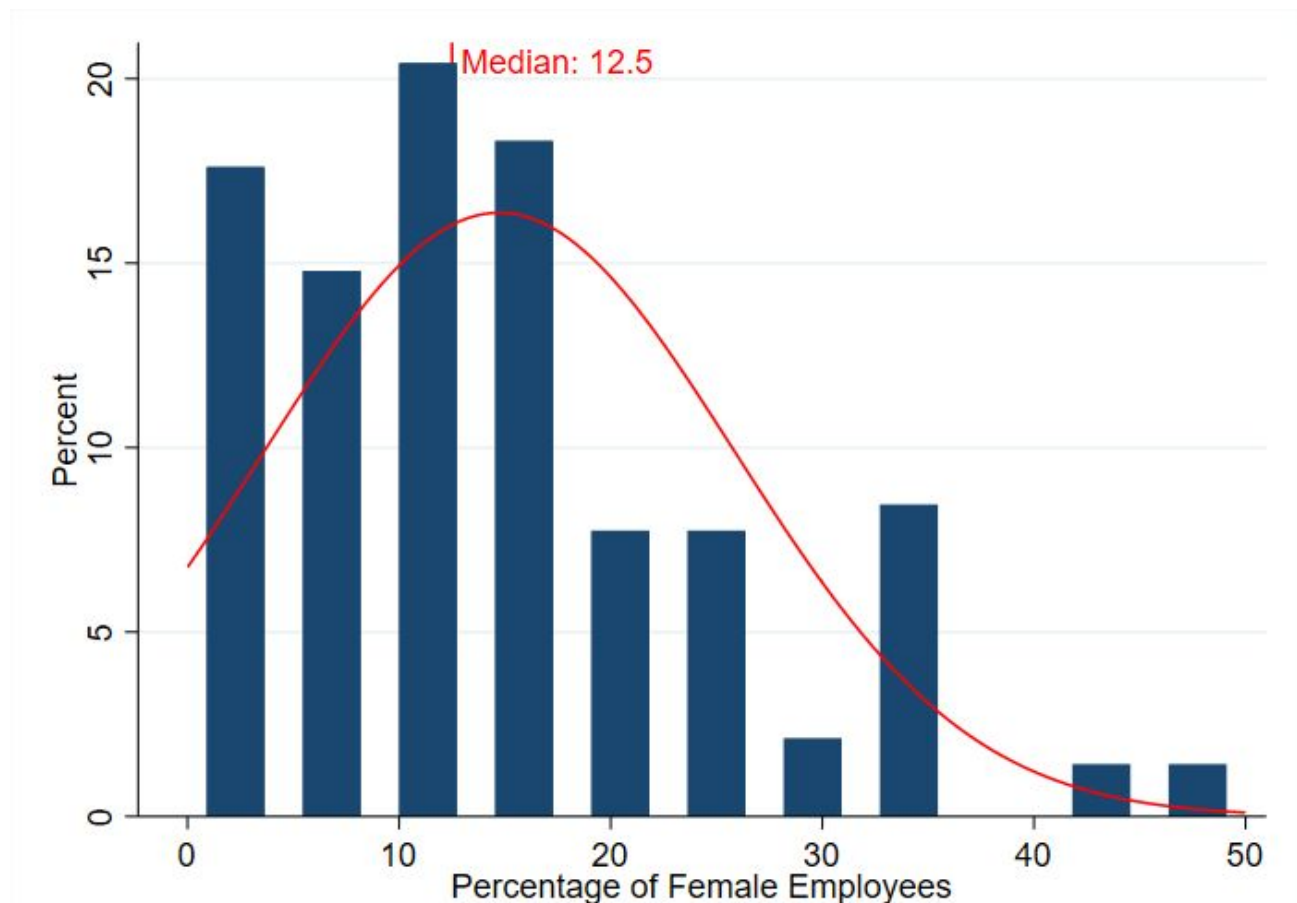
# Demographics of ABC-NJ Member Companies

## DISTRIBUTION OF EMPLOYEE DEMOGRAPHICS AMONG ABC-NJ MEMBER COMPANIES

The averages presented in **Table 2** do not identify the substantial variation in the demographic profiles of individual ABC-NJ member companies. It is important to understand how similar or dissimilar the ABC-NJ member companies are demographically. We follow two approaches. First, we plot the distribution of the company-specific percentage of female and non-white workers. Second, the company-specific percentage of female and non-white workers is compared with appropriate benchmarks at the state or county level.

**Figure 7** plots the distribution of company-specific percentages of female employees. Half of the ABC-NJ member companies have a percentage of female workers (across all workers) lower than 12.5 percent. The distribution of percentages of female employees skewed toward smaller values. This suggests that there are a larger number of ABC-NJ member companies that have lower percentages of female employees or percentages around the average, while a small number of companies have very high percentages of female employees.

*Figure 7: Distribution of Percentages of Female Employees among ABC-NJ Member Companies*

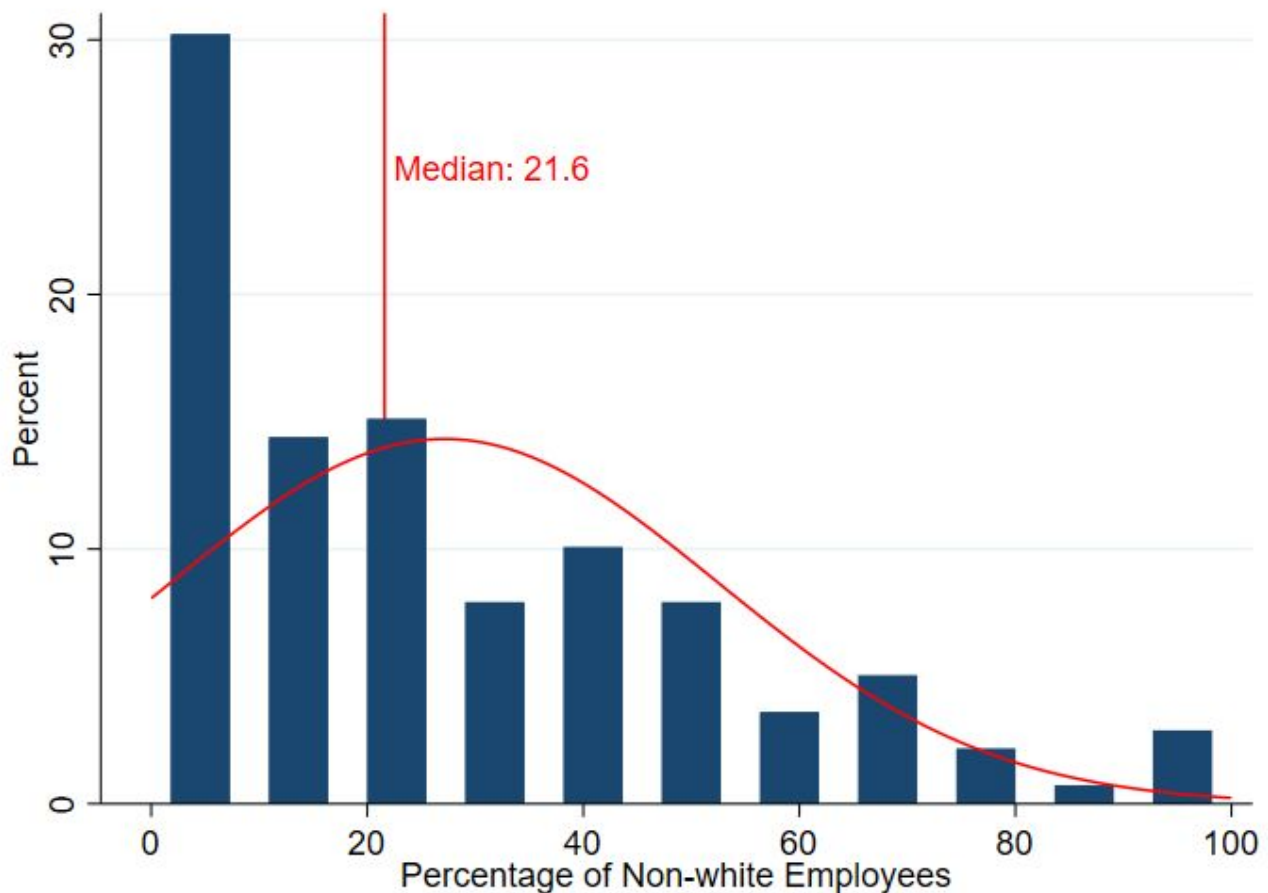


# Demographics of ABC-NJ Member Companies

## DISTRIBUTIONS OF EMPLOYEE DEMOGRAPHICS AMONG ABC-NJ MEMBER COMPANIES

**Figure 8** shows the distribution of company-specific percentages of non-white workers. The results show that half of the surveyed ABC-NJ member companies have a percentage of non-white employees (across all employees) smaller than 21.6 percent. The distribution of percentages of non-white employees is skewed toward smaller values. The observations suggest that 30 percent of ABC-NJ member companies have low percentages of non-white employees, whereas over half of the companies have percentages above 20 percent.

*Figure 8: Distribution of Percentages of Non-White Employees among ABC-NJ Member Companies*



# Demographics of ABC-NJ Member Companies

## COMPARISON OF THE DEMOGRAPHICS OF COMPANIES AGAINST BENCHMARKS

The demographic profile of each participating ABC-NJ member company is compared to appropriate local benchmarks. Both the percentage of female workers and the percentage of non-white workers are measured against statewide averages. The benchmarks used are summarized as follows:

Percentage of Interest	Benchmark
Female workers at ABC-NJ member companies	<i>Female workers in construction statewide</i>
Non-White workers at ABC-NJ member companies	<i>Non-White workers in construction statewide</i>

The percentages of female and non-white workers in the construction industry reflects the likelihood females or workers with a non-white racial background, respectively, will join the construction industry more accurately than other available indicators like their labor market participation rate or their representation in the general population. We consider ABC-NJ member companies to have a percentage of female or non-white workers equal to the benchmark when the former is within a 3-percentage point margin of the latter. This means that results +/- 3 percentage points above or below the average are considered similar enough to be comparable. The possible characterizations of the comparison to the benchmark are summarized as follows:

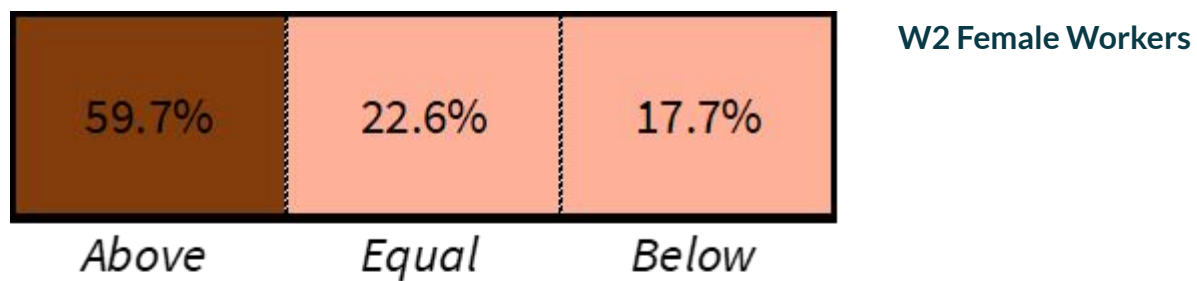
Characterization	Interpretation
Above	<i>Having a percentage of a particular demographic higher than 3 percentage points above the benchmark.</i>
Equal or Comparable	<i>Having a percentage of a particular demographic within a 3-percentage-point margin around the benchmark.</i>
Below	<i>Having a percentage of a particular demographic lower than 3 percentage points below the benchmark.</i>

# Diversity Curves for W-2 Employment

## DISTRIBUTION OF FEMALE WORKERS STATE BENCHMARKS

Figure 9 shows the diversity curve for female workers among ABC-NJ member companies. The findings indicate that nearly 60 percent of ABC-NJ member companies exceed state averages for permanent female employment.

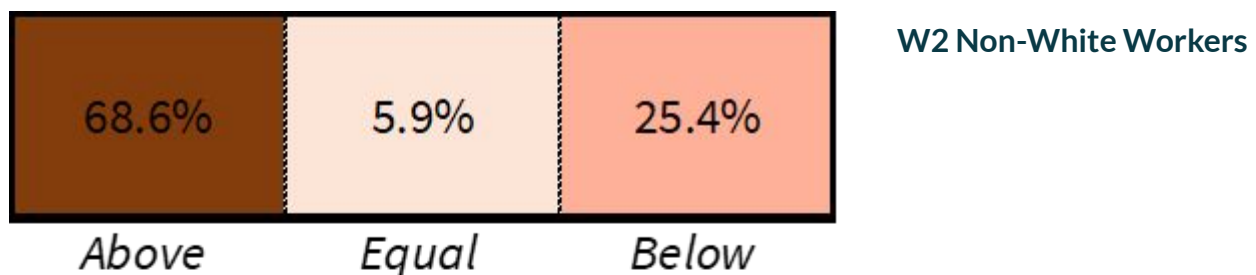
Figure 9: Diversity Curve for Female Workers



## DISTRIBUTION OF INDIVIDUAL ABC-NJ COMPANIES AGAINST STATE BENCHMARKS

Figure 10 presents the diversity curve for non-white workers. The results show that 69 percent of ABC-NJ member companies have a percentage of non-white W2 employees that is higher than the percentage of non-white employees in the construction industry across the State of New Jersey. Roughly a quarter of ABC-NJ member companies have a percentage of non-white W2 employees below the benchmark..

Figure 10: Diversity Curve for Non-White Workers



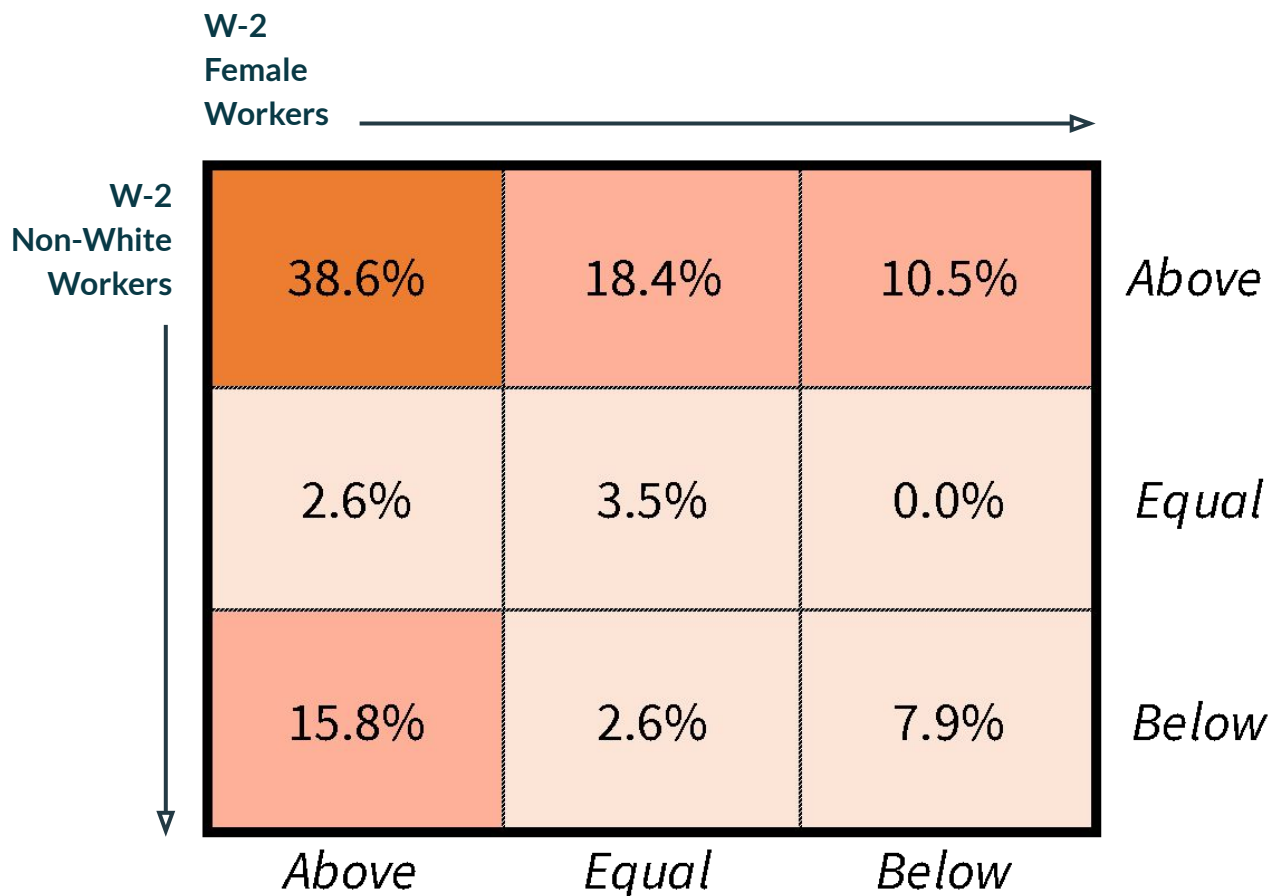
Note: Each entry represents the percentage of ABC-NJ member companies compared to the state average in each category.

# Diversity Milieus for Permanent Employees

## COMPARISON OF THE DEMOGRAPHICS OF COMPANIES AGAINST BENCHMARKS

We investigated the combined deviation of the representation of females and racial minorities in each participating company from respective benchmarks. In particular, we calculate the percentage of companies having percentages of female and non-white workers below, equal to, or above the benchmark. **Figure 11** shows diversity milieus of W2 employees at ABC-NJ companies when compared to statewide averages of female and non-white construction industry participation rates. The results show that approximately 39 percent of ABC-NJ member companies exceed state averages for both female and non-white employment among their permanent employees. At the same time less than 10 percent of ABC-NJ member companies have a percentage of female or non-white workers below the benchmark.

Figure 11: Diversity Milieus for W2 Workers



Note: Each entry represents the percentage of ABC-NJ member companies compared to the state average in each category.

# Demographics of ABC-NJ Member Companies

## GEOGRAPHIC VARIATION IN DEMOGRAPHICS OF ABC-NJ MEMBER COMPANIES

**Table 3** reports the average percentage of female and non-white employees at ABC-NJ member companies in each county in addition to appropriate benchmarks from the general populations. Other relevant benchmarks such as the percentage of females working in construction are available only at the state level.

We found substantial variation in the demography of workers of ABC-NJ member companies in different counties. Specifically, the percentage of female workers at ABC-NJ member companies at the county level ranges from roughly 6 percent to 28 percent. Similarly, the average percentage of workers at ABC-NJ with a non-white background at the county level ranges from 2 to 65 percent.

**Table 3: Geographic Variation in Demographics of ABC-NJ Member Companies**

County	Population Female (%)	ABC-NJ Member Employees Female (%)	Population Non-White (%)	ABC-NJ Member Employees Non-White (%)
Atlantic	51.6	17.6	38.7	9.0
Bergen	51.5	28.2	43.5	64.5
Burlington	51.4	14.9	27.2	18.8
Camden	51.5	11.2	39.4	37.8
Cape May	51.2	7.7	14.5	23.1
Cumberland	50.8	6.3	51.0	31.5
Essex	51.7	20.6	70.7	51.0
Gloucester	51.4	9.1	22.2	21.8
Hudson	50.1	10.0	75.0	66.7
Hunterdon	51.2	9.7	14.3	51.4
Mercer	51.1	15.7	49.6	36.0
Middlesex	50.6	17.4	57.7	16.9
Monmouth	51.6	10.1	26.8	21.6
Morris	50.9	9.9	29.8	57.5
Ocean	51.5	27.2	15.8	23.2
Passaic	51.3	12.1	54.0	45.5
Salem	N/A	N/A	N/A	N/A
Somerset	51.3	15.8	42.9	34.8
Sussex	50.4	14.8	13.2	2.0
Union	51.0	11.7	60.8	40.7
Warren	51.1	15.2	20.8	31.3
<b>Total</b>	<b>51.2</b>	<b>13.8</b>	<b>44.4</b>	<b>32.4</b>

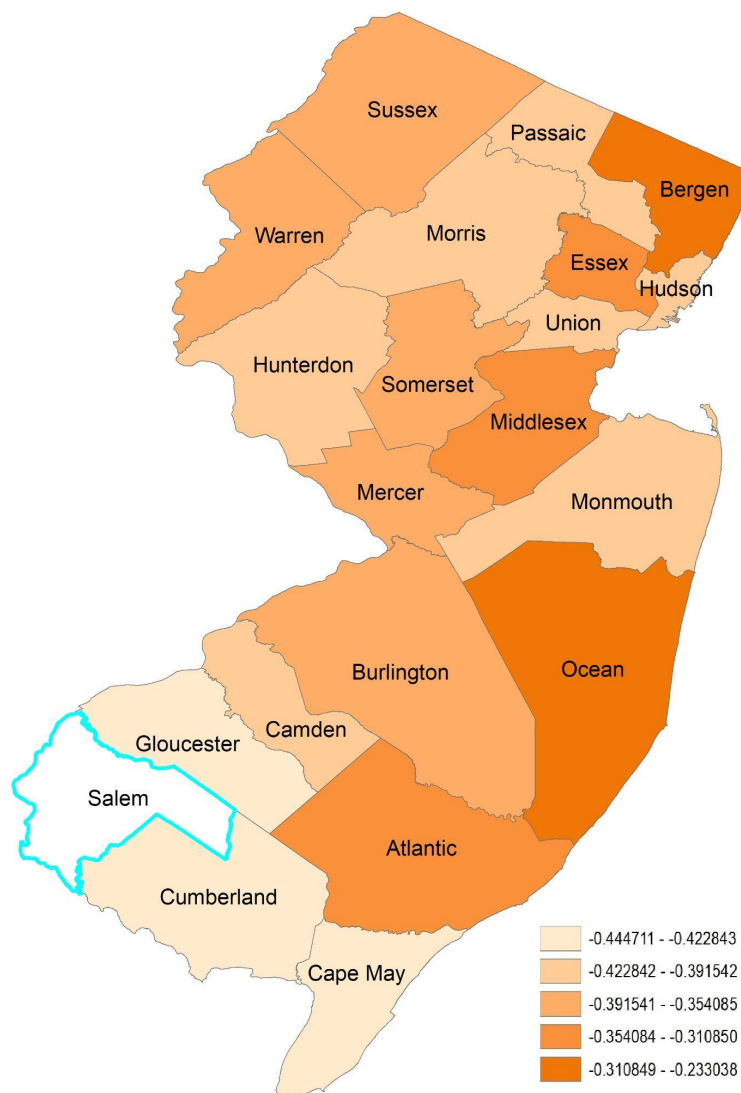
*Note: Each entry represents a percentage. Averages are obtained across the general population and employees at ABC-NJ member companies.*

# Demographics of ABC-NJ Member Companies

## GEOGRAPHIC VARIATION IN DEMOGRAPHICS OF ABC-NJ MEMBER COMPANIES

**Figure 14** plots the difference between the county-level percentage of females in the general population and the percentage of females in the workforce of ABC-NJ member companies in the same county. The highest deviation from the local gender demography is observed in Cumberland and the lowest in Bergen.

*Figure 14: Deviation from Local Gender Demography*



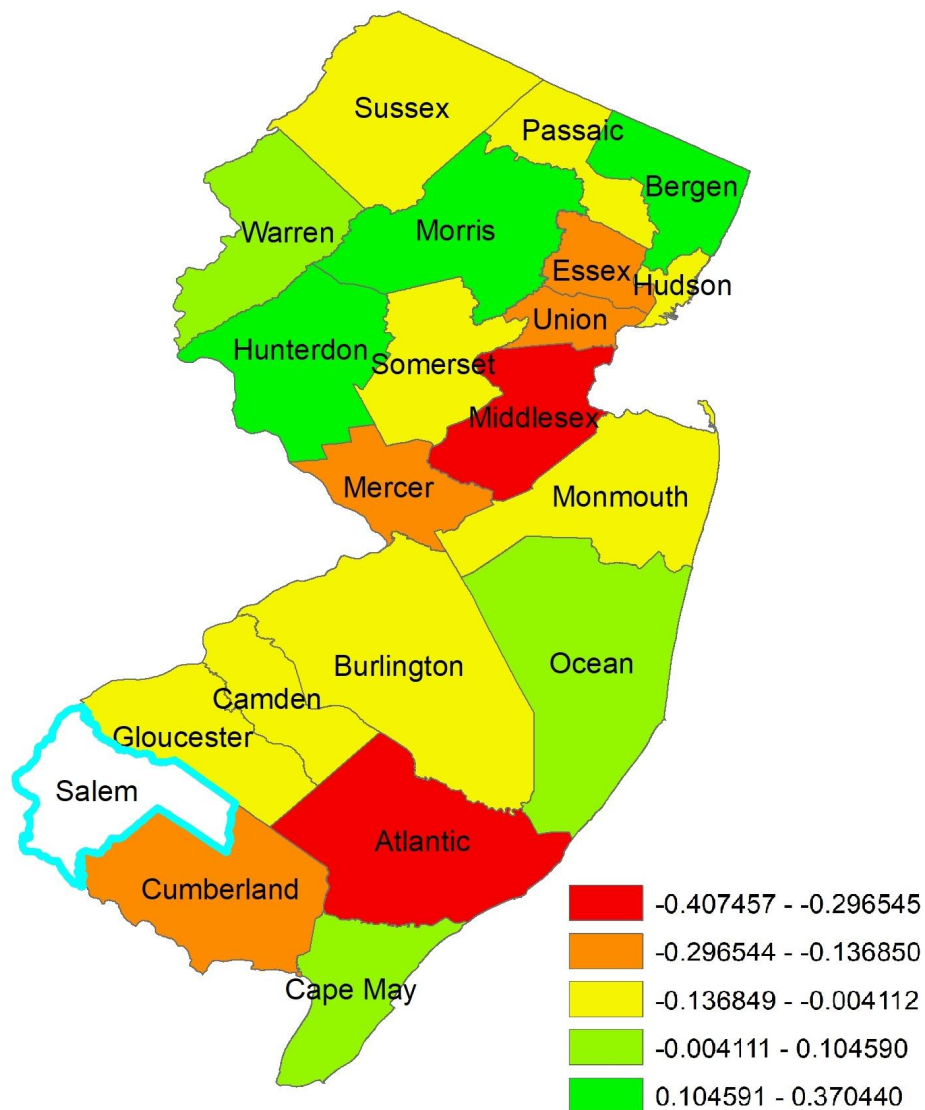
*Note: No data available for the county of Salem.*

# Demographics of ABC-NJ Member Companies

## GEOGRAPHIC VARIATION IN DEMOGRAPHICS OF ABC-NJ MEMBER COMPANIES

Figure 15 presents the difference between the county-level percentage of non-white population and the percentage of non-white workers in ABC-NJ member companies in the same county. In the counties of Hunterdon, Morris, Bergen, Warren, Cape May, and Ocean the percentage of non-white workers in ABC-NJ member companies exceeds the local percentage of individuals with a non-white racial background. The workforce racial composition at ABC-NJ member companies is the farthest below local racial composition in the county of Middlesex.

Figure 15: Deviation from Local Racial Composition



Note: No data available for the county of Salem.

# Opt-in Questionnaire Results

## PUBLIC WORKS AND EMPLOYEE RETENTION DURING THE PANDEMIC

**Table 4** shows that around a third of participating ABC-NJ member companies bid for public work in the pre-pandemic years; however, only a small portion of ABC-NJ member companies bid for public work during the pandemic years. Among survey respondents, plans to bid for public work in 2022 would return the numbers to pre-pandemic levels.

**Table 4** also shows that over 90 percent of participating ABC-NJ member companies who bid for public work won a project in the pre-pandemic years. These estimates drop dramatically during the pandemic years to 64 percent and 50 percent.

**Figure 16** reports survey responses to the question “Did you see a decrease in the number of employees during the pandemic?” We found that more than 76 percent of ABC-NJ member companies did not experience a decrease in the number of employees in their company.

At the same time, nearly 18 percent of participants report that their company had or it felt like it had a decrease in the number of employees during the COVID-19 pandemic.

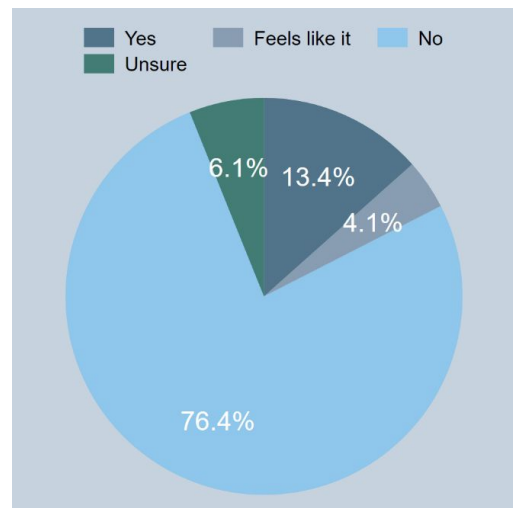
Forty-six percent (86) of respondents answered the opt-in questionnaire. The questions allowed us to investigate whether the COVID-19 pandemic affected the demography among ABC-NJ member companies.

**Table 4: Percentage of ABC-NJ Members Bidding or Planning to Bid for Public Work by Year**

Year	Bid	Won
2017	36.6	92.6
2018	37.6	91.4
2019	40.9	93.4
2020	5.9	63.6
2021	4.3	50.0
2022	43.5	N/A
2023	40.9	N/A
2024	36.6	N/A

Note: Entries represent a percentage.

**Figure 16: Responses to: “Did you see a decrease in the number of employees during the pandemic?”**

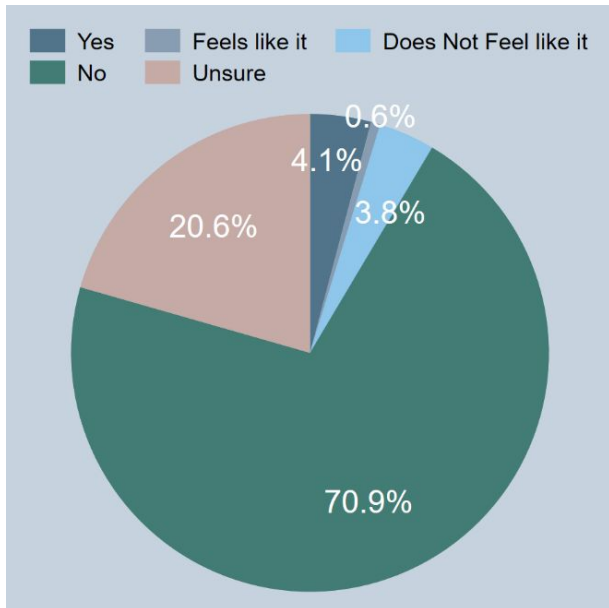


# Opt-in Questionnaire Results

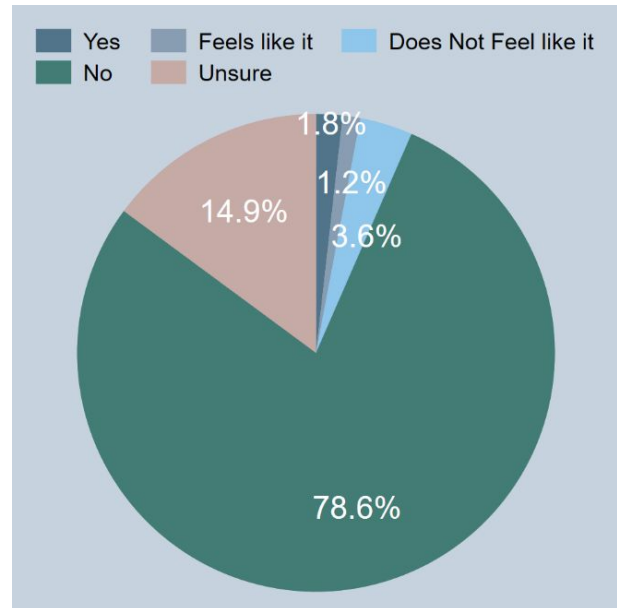
## INCREASES OR DECREASES IN FEMALE EMPLOYMENT DURING THE PANDEMIC

**Figure 17** and **Figure 18** plot responses to the question “Did you see a decrease (increase) in the number of female employees during the pandemic?” Our results show that more than 70 percent of ABC-NJ member companies report neither a decrease nor an increase in the number of female employees in their companies during the COVID-19 pandemic. This finding suggests that the impact of the pandemic on the gender makeup of the workforce at ABC-NJ member companies may have been limited. At the same time, 4 and approximately 2 percent of participants respond that the number of female employees clearly decreased and increased, during the pandemic.

**Figure 17:** Responses to: “Did you see a decrease in the number of female employees during the pandemic?”



**Figure 18:** Responses to: “Did you see an increase in the number of female employees during the pandemic?”

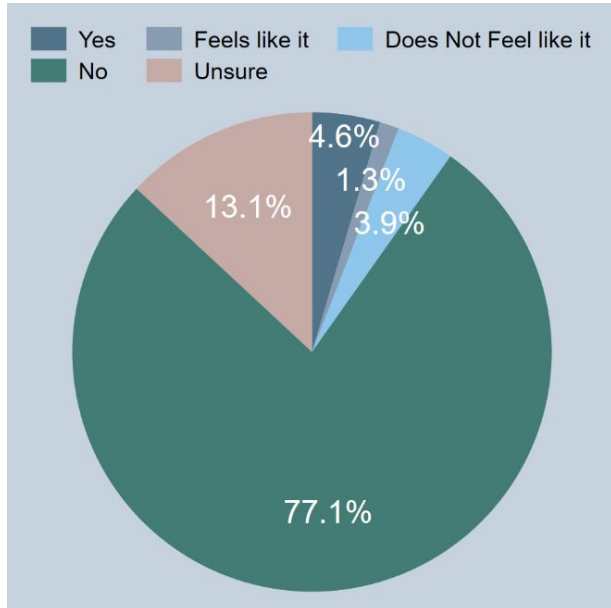


# Opt-in Questionnaire Results

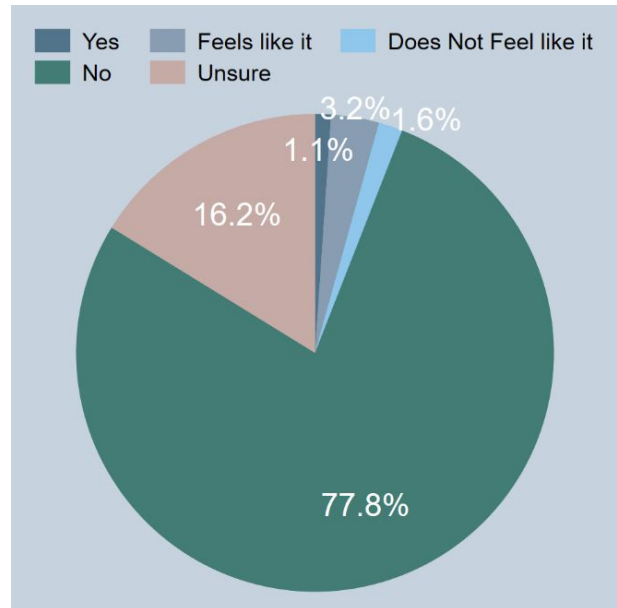
## INCREASES OR DECREASES IN NON-WHITE EMPLOYMENT DURING THE PANDEMIC

**Figure 19** and **Figure 20** report survey responses to the question “Did you see a decrease (increase) in the number of non-white employees during the pandemic?” We find more than 77 percent of ABC-NJ member companies experienced neither a decrease nor an increase in the number of non-white employees during the pandemic. This suggests that the pandemic may not have impacted the racial makeup of employees among ABC-NJ member companies. Approximately 5 and 1 percent of respondents report that the number of non-white employees in their companies clearly decreased or increased, respectively, during the pandemic. The results suggest that among the ABC-NJ member companies where female or non-white employees were impacted during the pandemic, a decrease in their respective number is more likely than an increase.

**Figure 19: Responses to: “Did you see a decrease in the number of non-white employees during the pandemic?”**



**Figure 20: Responses to: “Did you see an increase in the number of non-white employees during the pandemic?”**



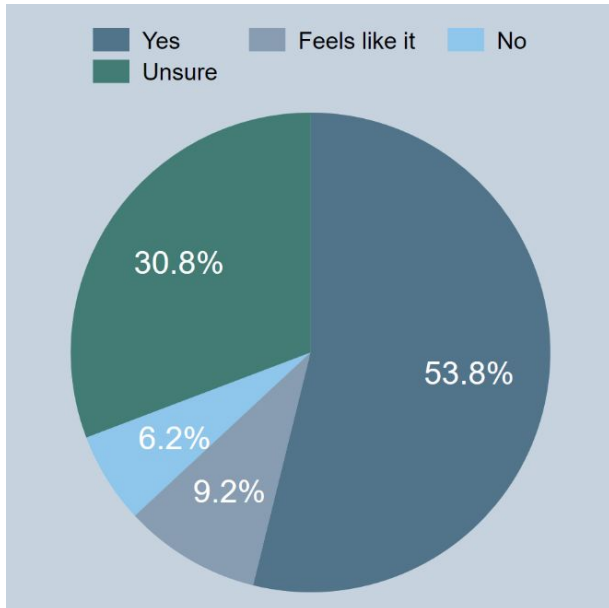
# Opt-in Questionnaire Results

## WORKPLACE ACCEPTANCE AND DIVERSITY AS AN ORGANIZATIONAL PRIORITY

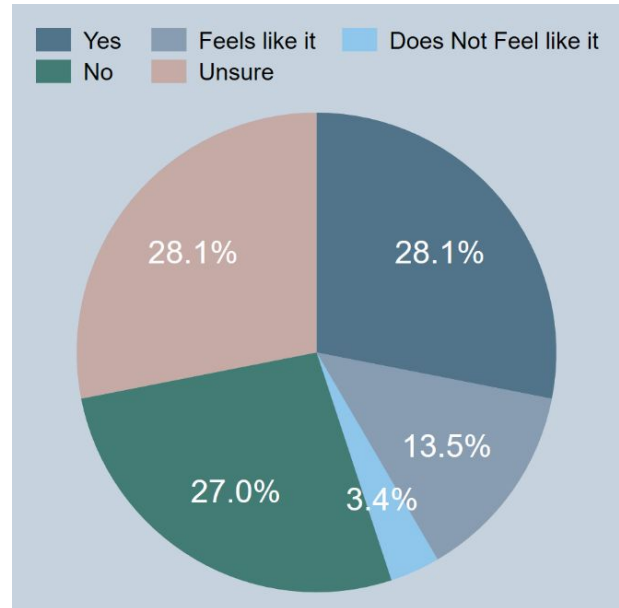
**Figure 21** presents survey responses to the question “Is your workplace LGBTQ friendly?” We find that the majority of ABC-NJ member companies respond that their workplace is or feels like LGBTQ friendly.

**Figure 22** plots survey responses to the question “Is diversity an organizational priority?” Our results show that roughly 59 percent of ABC-NJ member companies report that diversity is not or does not feel like an organizational priority or that they are unsure about whether diversity is an organizational priority. This finding suggests that among the majority of ABC-NJ member companies diversity may not have been clearly discussed or evaluated as a priority for their organizations.

**Figure 21: Responses to: “Is your workplace LGBTQ friendly?”**



**Figure 22: Responses to: “Is diversity an organizational priority?”**

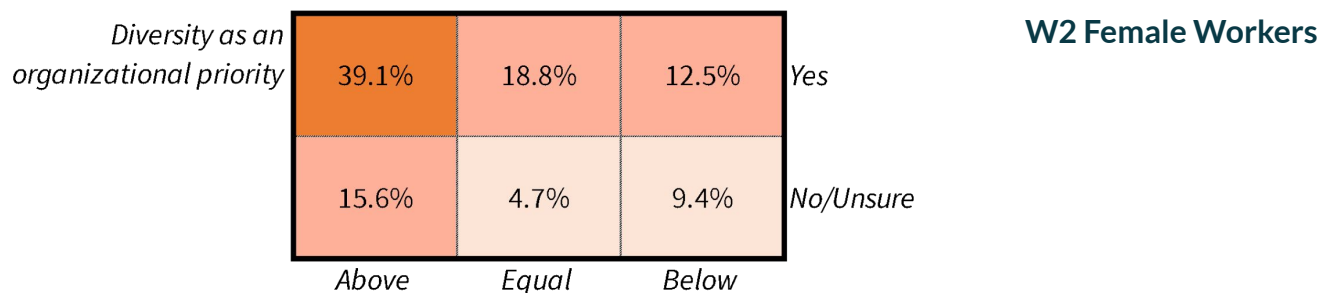


# Diversity as an Organizational Priority

## RELATIONSHIP BETWEEN FEMALE DIVERSITY AND ORGANIZATIONAL PRIORITIES

In this section, we compare the responses of ABC-NJ member companies on whether they consider diversity an organizational priority against their demographic profile. **Figure 23** plots the responses of ABC-NJ member companies on whether diversity is an organizational priority against their categorization of female representation among W2 employees relative to the benchmark. In particular, we find that roughly 39 percent of participating member organizations report diversity as an organizational priority and have percentage of female workers below the benchmark.

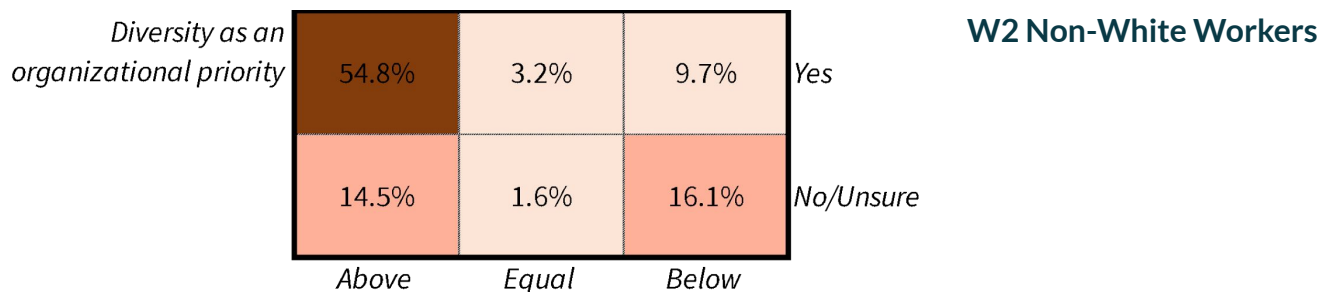
**Figure 23: Diversity Goal and Female Representation among W2 Workers**



## RELATIONSHIP BETWEEN NON-WHITE DIVERSITY AND ORGANIZATIONAL PRIORITIES

**Figure 24** shows the responses of ABC-NJ member organizations on whether diversity is an organizational priority against their categorization of non-white representation relative to the benchmark. In particular, we find that more than 55 percent of participating member organizations report diversity as an organizational priority and have percentages of non-white workers above the benchmark.

**Figure 24: Diversity Goal and Non-White Representation among W2 Workers**



# Conclusion

## INTERPRETATION OF RESEARCH DESIGN AND RECOMMENDATIONS GOING FORWARD

Aletheia Research Institution conducted the first study on the workforce demography among ABC-NJ member companies in the state of New Jersey. Our results bring forth important insights regarding the workforce diversity among ABC-NJ member companies.

The participating ABC-NJ member companies have a larger percentage of female workers and non-white workers when compared to nationwide and statewide averages in the construction industry. At the same time, this report identifies that there are segments of the ABC-NJ member workforce where diversity may require attention.

The firm-level analysis uncovers substantial variation in the demographic profiles (diversity curves and diversity milieus) of different companies. Roughly 61 percent of ABC-NJ member companies have percentages of female or non-white workers comparable to or above the benchmark. At the same time, 10 percent of ABC-NJ member companies have percentages of female and non-white workers below the benchmark.

Finally, our opt-in questionnaire results suggest that diversity and inclusion may not be clearly identified as a priority for many ABC-NJ member companies; however, identifying diversity as a priority is found to be associated with a more diverse workforce in terms of gender and racial representation.

Future studies can benefit from the developed communication infrastructure to collect demographic information from a larger sample of ABC-NJ member companies. At the same time, an in-depth investigation of the organizational best practices or obstacles in diversifying the workforce at ABC-NJ member companies will allow ABC-NJ to help its members achieve their human resources goals.

We recommend against an organization-wide campaign for diversity since a majority of ABC-NJ member companies are equal to or above state averages in both female and non-white permanent employment. Instead we have identified four specific activities capable of advancing the stated the goals of ABC-NJ. These recommendations include 1) focusing on the organizations that have identified diversity as a priority, but are performing below state averages; 2) building diversity from the ground up through a well marketed apprenticeship program; 3) increasing outreach to women-owned and minority-owned businesses; and 4) continuing to collect and fortify the data of the organization to paint a clearer picture of the landscape.

# Appendix A: Additional Analyses

## USING AN ALTERNATIVE BENCHMARK FOR NON-WHITE WORKERS (DEMOGRAPHY)

In this section, we offer an alternative benchmark for the non-white workers at ABC-NJ member companies. We compare the percentage of non-white workers among W2 workers against the percentage of non-white labor force participants in each company's zip code area. The percentage of non-white workers in the zip code area shows what we can expect the percentage of non-white workers to be if they equally distributed in the construction industry.<sup>3</sup>

Figure A1: Diversity Curve for Non-White Workers using Local Non-White Demography as Benchmark

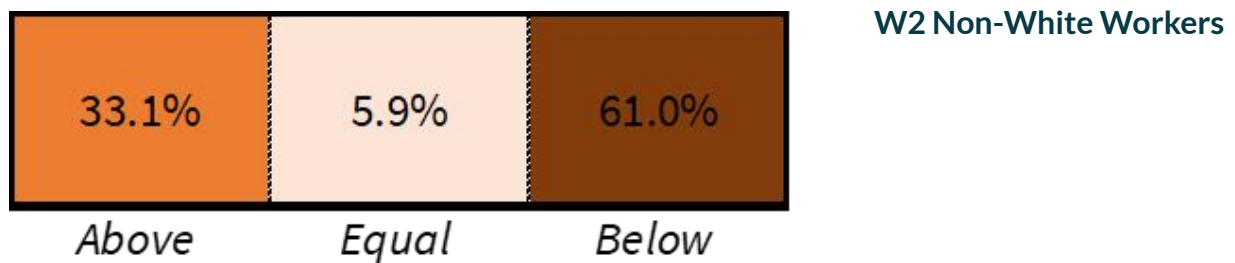


Figure A2: Quadrant of Diversity Goal and Non-White Representation among W2 Workers using Local Non-White Demography as Benchmark

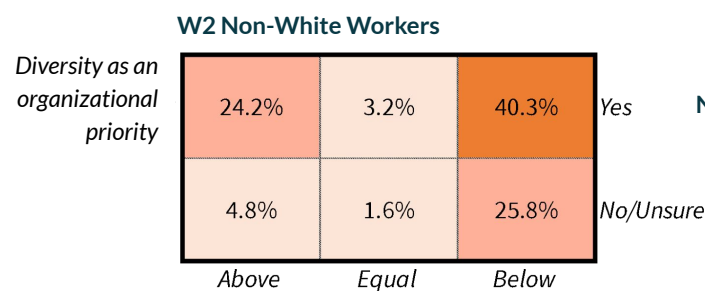
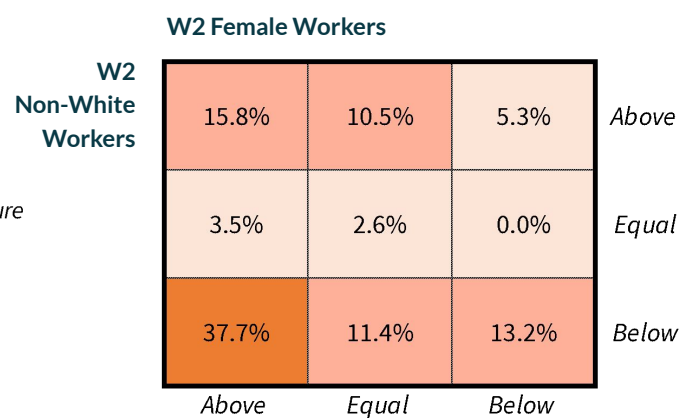


Figure A3: Diversity Milieu for W2 Workers using Local Non-White Demography as Benchmark



<sup>3</sup>This approach assumes that non-white workers are as likely to join the construction industry as they are to join any non-construction-related industry.

# Appendix A: Additional Analyses

## USING AN ALTERNATIVE BENCHMARK FOR NON-WHITE WORKERS (2016 ACS)

In this section, we offer an alternative benchmark for the non-white workers at ABC-NJ member companies. We compare the percentage of non-white employees among, W2 workers against the percentage of non-white construction workers in the state using data from the 2016 American Community Survey.<sup>4</sup>

Figure A4: Diversity Curve for Non-White Workers using 2016 ACS Benchmark

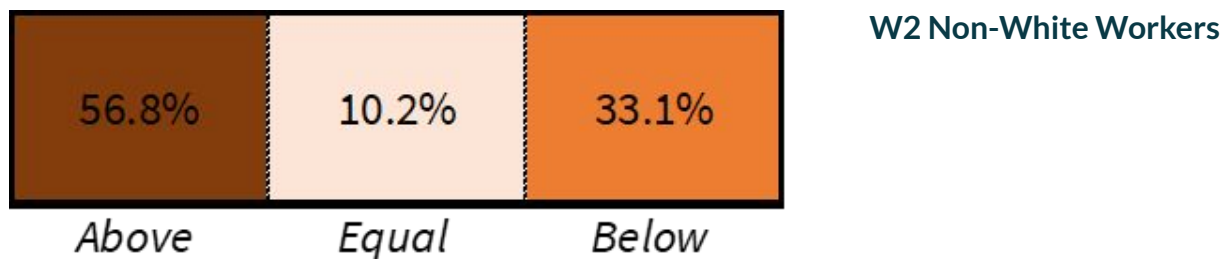


Figure A5: Quadrant of Diversity Goal and Non-White Representation among W2 Workers using 2016 ACS Benchmark

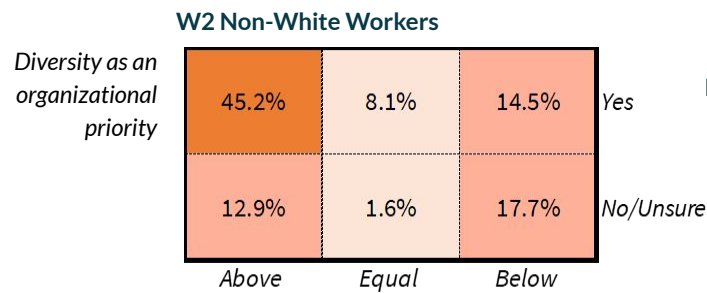
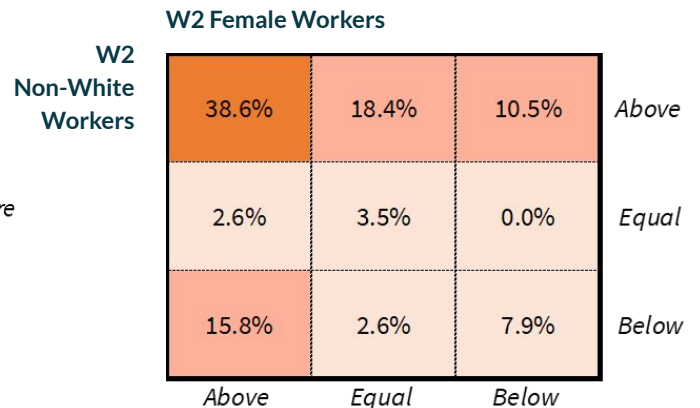


Figure A6: Diversity Milieu for W2 Workers using 2016 ACS Benchmark



<sup>4</sup> Data source:

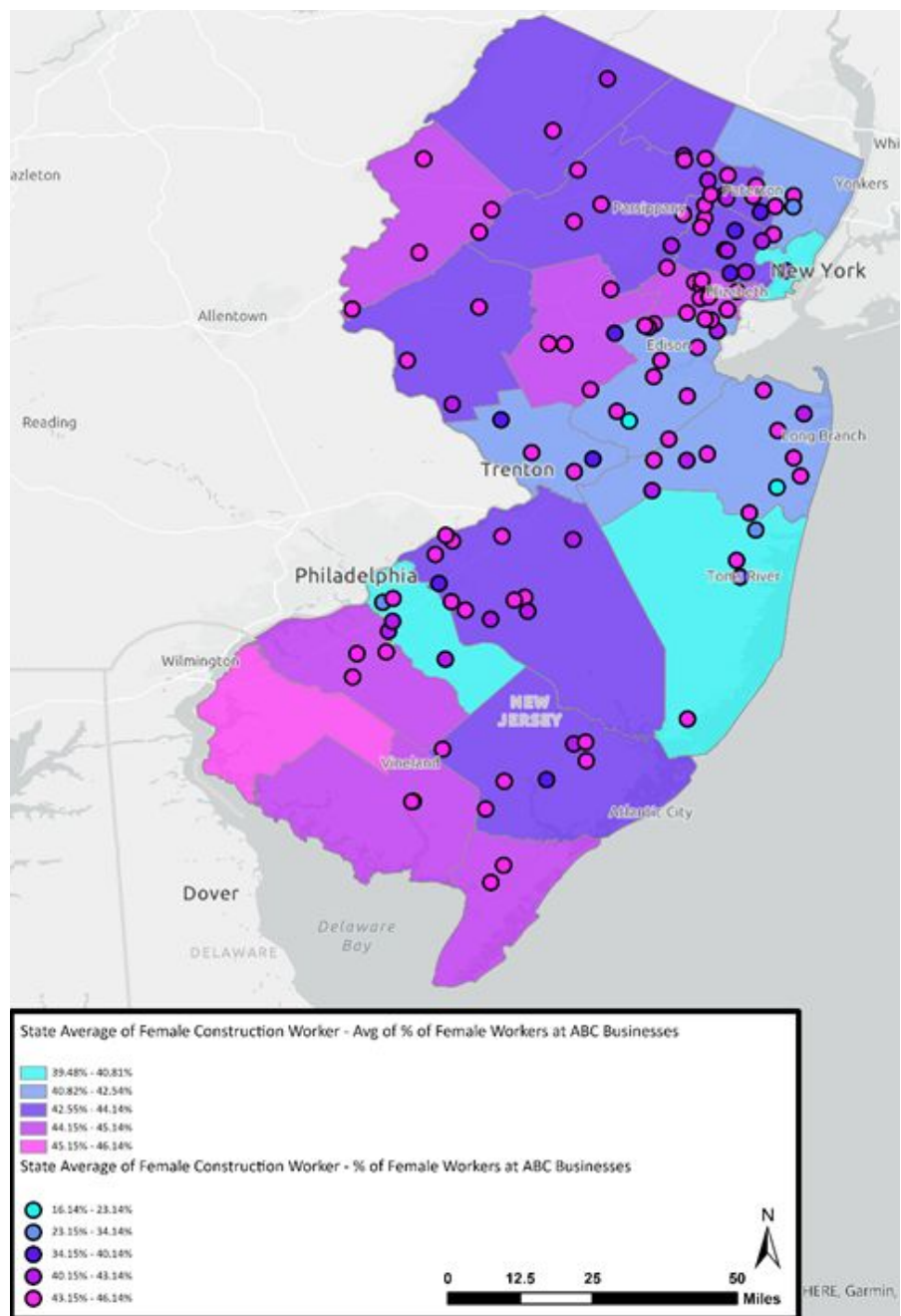
<https://app.powerbigov.us/view?r=eyJrIjoiYTdkYTEwNGUtMjQxMjQzLWJmNjltOWFmOGFjOTMwMTAzIiwidCI6IjUwNzZjM2QxLTM4MDItNGI5Zi1iMzZhLWUwYTQxYmQ2NDJhNyJ9>

# Appendix A: Additional Analyses

## USING ALTERNATIVE GEOGRAPHICAL BENCHMARKS FOR FEMALE WORKERS

**Figure A7** compares two deviations. The first deviation is between the average percentage of female workers at ABC-NJ member companies at the county level and the percentage of females working in the construction industry at the state level. The second deviation is between the company-specific percentage of female employees and the percentage of females in the construction industry at the state level. The comparison shows noticeable difference between ABC-NJ member companies in terms of female representation in their workforce.

**Figure A7: Map of Deviation of Female Representation at ABC-NJ Member Companies from State Average**

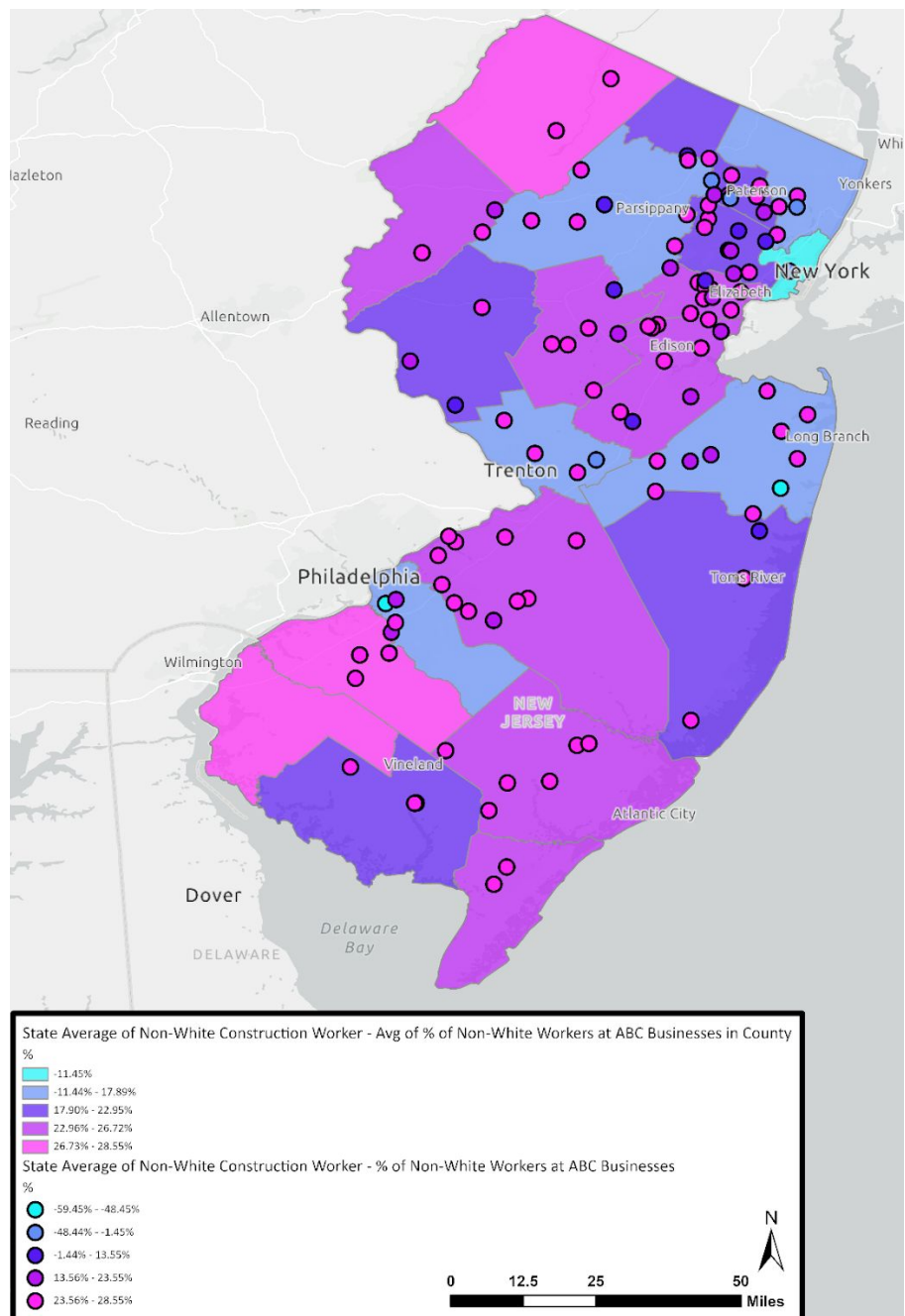


# Appendix A: Additional Analyses

## USING ALTERNATIVE GEOGRAPHICAL BENCHMARKS FOR NON-WHITE WORKERS

**Figure A8** compares two differences. The first difference is between average percentage of non-white employees at ABC-NJ member companies at the county level and the percentage of individuals with a non-white racial background at the state level. The second difference is between the company-specific percentage of non-white employees and the percentage of non-white individuals in the general population at the state level. The map shows that there is substantial variation in the racial composition of different ABC-NJ member companies.

**Figure A8: Map of Deviation of Non-White Representation at ABC-NJ Member Companies from State Average**

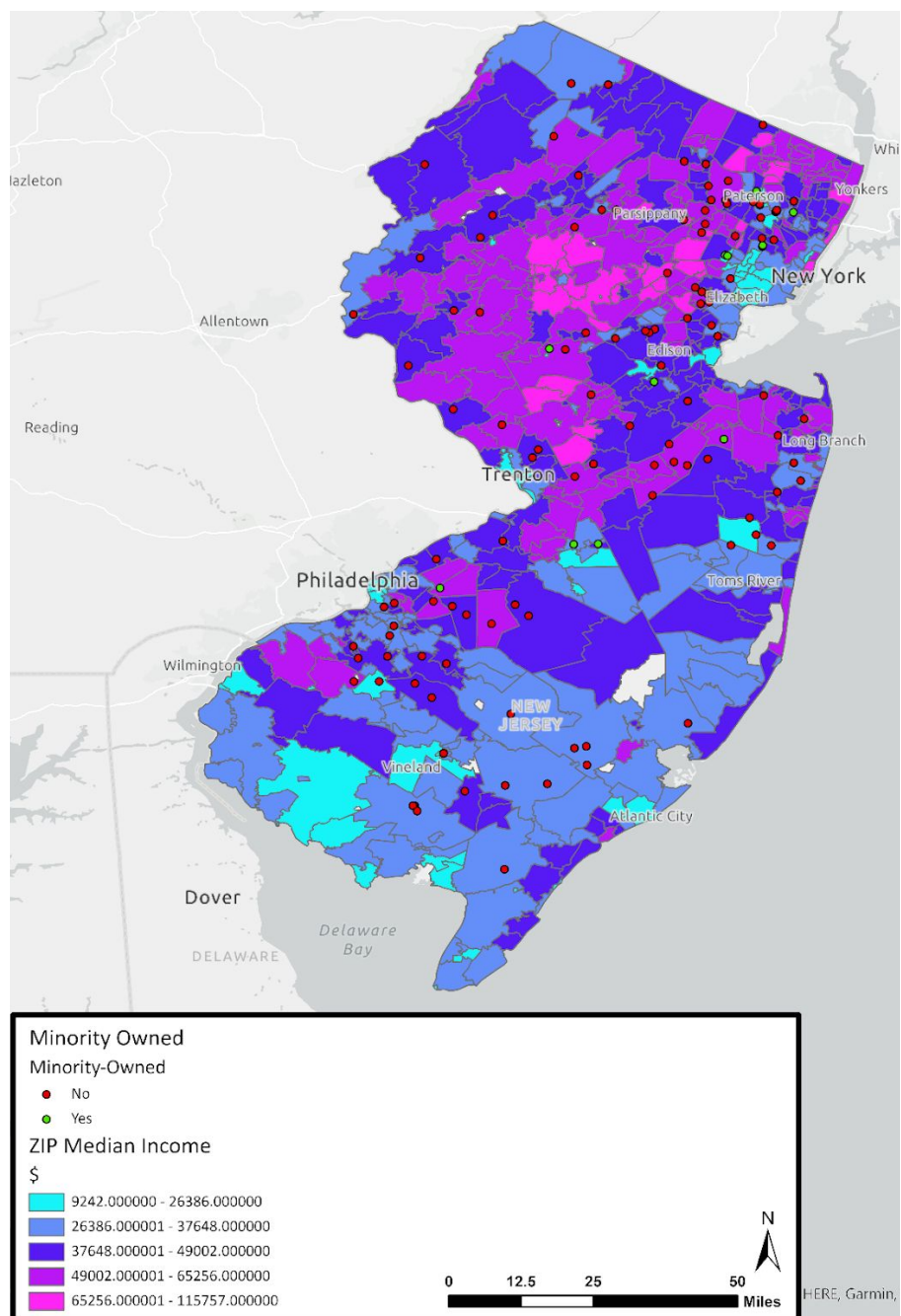


# Appendix A: Additional Analyses

## MINORITY-OWNED ABC-NJ MEMBER COMPANIES LOCATIONS AND LOCAL INCOME

Figure A9 explores the association between the location of minority-owned ABC-NJ-affiliated construction companies and local income level. Visual inspection suggests that minority-owned construction companies may be more likely to be in counties with average income below the top tier, although the association seems weak.


Figure A9: Locations of Minority-owned ABC-NJ Member Companies and Local Income Level



# Appendix B: Survey Instrument

This appendix presents the profile form used to collect information from ABC-NJ member companies.

## Part A: General Profile

MEMBER NAME (COID)		General Profile Section-1
Owner / President	<input type="text"/>	
HR or Administration Cant	<input type="text"/>	
HR or Administration Number	<input type="text"/>	
Main Contact (First Name)	<input type="text"/>	
Main Contact (Last Name)	<input type="text"/>	
Title	<input type="text"/>	
Date Joined	<input type="text" value="(Format: MM/DD/YYYY)"/>	
Associate	<input type="text"/>	
Website	<input type="text"/>	
Phone	<input type="text"/>	
Fax	<input type="text"/>	
Mobile	<input type="text"/>	
Contact Email 1	<input type="text"/>	
Contact Email 2	<input type="text"/>	
Contact Email 3	<input type="text"/>	
Street Address 1	<input type="text"/>	
Street Address 2	<input type="text"/>	
City	<input type="text"/>	
State	<input type="text"/>	
Zip Code	<input type="text"/>	

# Appendix B: Survey Instrument

This appendix presents the profile form used to collect information from ABC-NJ member companies.

## Part B: Detailed Profile

Detailed Profile  
Section-2

Member Type - Associate     Yes     No

Member Type - Supplier     Yes     No

Gross Sales   

Minority-Owned Enterprise     Yes     No

Women-Owned Enterprise     Yes     No

Type of Contractor     General     Subcontractor

Bid For Public Work?     Yes     No

Part of Apprentice Program?     Yes     No

---

Trades and Specialties	Trades We Self Perform	Pay Into ERISA Trust
Carpenter	<input type="checkbox"/>	<input type="checkbox"/>
Roofer	<input type="checkbox"/>	<input type="checkbox"/>
Construction Craft Laborer	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Equipment Operator	<input type="checkbox"/>	<input type="checkbox"/>
Electrician	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	<input type="checkbox"/>	<input type="checkbox"/>
Painting	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing	<input type="checkbox"/>	<input type="checkbox"/>
Sheet Metal	<input type="checkbox"/>	<input type="checkbox"/>
Ironworker (Structural)	<input type="checkbox"/>	<input type="checkbox"/>
Mason (Bricklayer Construction)	<input type="checkbox"/>	<input type="checkbox"/>
Dock Builder	<input type="checkbox"/>	<input type="checkbox"/>

Number of Trade Specializations   

Number of Trade Specializations Eligible for Public Work Bids

# Appendix B: Survey Instrument

This appendix presents the profile form used to collect information from ABC-NJ member companies.

## Part C: Workforce Profile

	W2-Employees	1099 Contractors	Workforce Profile Section-3
Total Number of Workers	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number with Veteran Status	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number with Disability Status	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number of Former Felons	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number of Non-White	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number of Females	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			
Number of Journeymen with State Certifications	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Official Record <input type="checkbox"/> Estimated Figure			

Below is an optional questionnaire of 10 questions. By participating in the Opt-In Questionnaire, we'll be able to learn more about how we can better serve and represent our ABC member organizations. Data collected from the questionnaire is completely anonymous and will be identified with a unique randomly selected ID for analysis. Although your profile will be associated with your member-ID any identifiable data will be removed from the questionnaire responses prior to analysis and your organization will not be identifiable. Participate in our expanded diversity and inclusion study by completing 10 questions about your organization?

Yes  No

# Appendix B: Survey Instrument

This appendix presents the profile form used to collect information from ABC-NJ member companies.

## Part D: Opt-in Questionnaire

**Opt-in Questionnaire**

Did You Bid for Public Work in? (Please Mark the Years You Bid)  
 2017  2018  2019  2020  2021

Did You Win Bids for Public Work in (Please Mark the Years You Won)  
 2017  2018  2019  2020  2021

Do you Foresee Bidding for Public Work in (Please Mark if You Intend to Bid)  
 2022  2023  2024

Did you see a decrease in the number of employees during the pandemic?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Did you see a decrease in the number of female employees during the pandemic?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Did you see an increase in the number of female employees during the pandemic?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Did you see a decrease in the number of non-white employees during the pandemic?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Did you see an increase in the number of non-white employees during the pandemic?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Is diversity an organizational priority?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Is your workplace LGBTQ friendly?  
 Yes  Feels Like It  Unsure  Does Not Feel Like It  No

Thanks!