WAKE Invests in WOMEN

Gender Equity Gaps in Wake County

Representation and Wages in STEM Fields

EXECUTIVE SUMMARY

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About the Report

About Wake Invests in Women

The mission of Wake Invests in Women (WIIW) is to close the gender wage gaps for women in Wake County. Led by a Steering Committee of business, government, higher education and non-profit partners, supported by Wake Technical Community College as its backbone and sponsored by Wake County, WIIW aims to develop data-driven strategies for reaching pay parity, career advancement through the management pipeline, and increasing representation of women in higher-demand, higher-wage occupations. While most of these occupations can be categorized as STEM and STEM-related, lessons learned will be applied to other occupations/industries over time.

About the Report Collaborators

Wake Technical Community College

Wake Tech is North Carolina's largest community college, serving more than 74,000 adults annually, with six campuses, three training centers, multiple community sites, and a comprehensive array of online learning options. With a mission to provide "equitable access to education that transforms lives through economic mobility and personal fulfillment," Wake Tech functions as the backbone for the WIIW initiative, providing research, data and coordination support through the College Initiatives and Assessment Department of the Effectiveness and Innovation Division.

RTI, International

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Its vision is to address the world's most critical problems with science-based solutions in pursuit of a better future. RTI has provided support for the multivariate statistics needed to glean insights into the gender wage gaps in Wake County.

North Carolina State University Belk Center for Community College Leadership and Research

The Belk Center supports community colleges across North Carolina and the nation to help them improve student access and success through executive leadership programs, research support to North Carolina's community colleges, and a Doctor of Education Program in Community College Leadership. Thanks to Steering Committee member Andrea DeSantis, who has provided input into the analyses, literature reviews as well as input into the report.

Land Acknowledgement

Wake Invests in Women would like to acknowledge the traditional and ancestral land of the Tuscarora Nation, Skaru'ren (Skaroreh) tribe, on which we learn and work.

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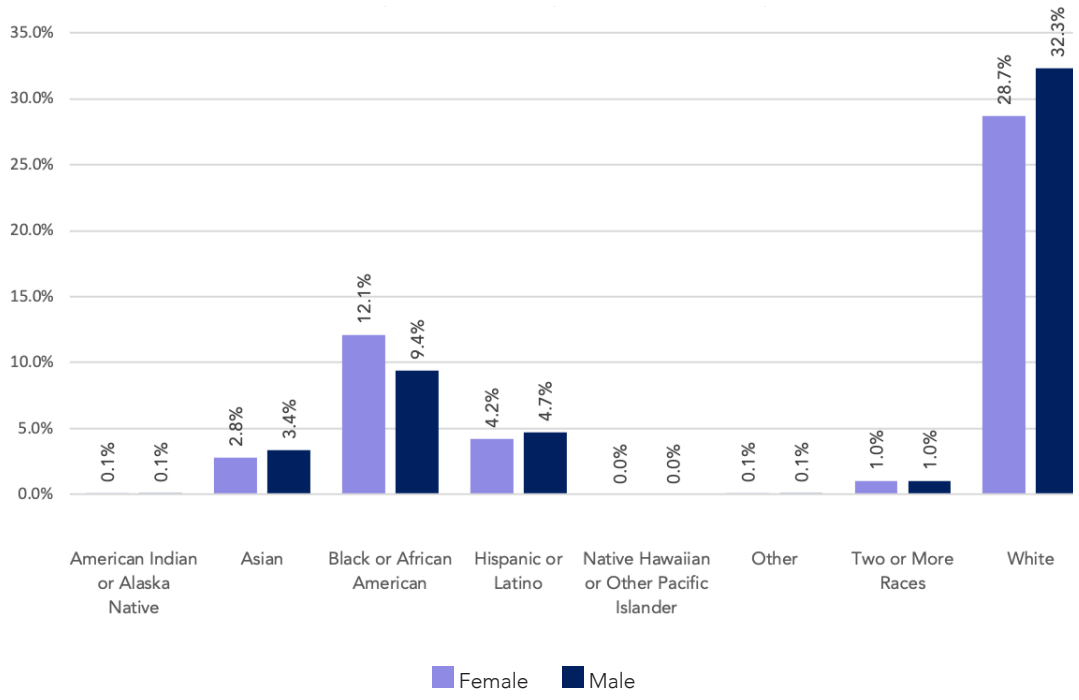
The mission of Wake Invests in Women is to close gender wage gaps for women in Wake County. We aim to collaborate with corporate and community partners to develop data-driven strategies for reaching wage parity and increasing representation of women in higher-demand, higher-wage occupations. Our data has led to our current focus on increasing representation of Black or African American and Hispanic or Latina women into STEM and closing existing wage gaps. While the initial focus is on STEM/STEM-related occupations, lessons learned will be applied to other occupations and industries over time.

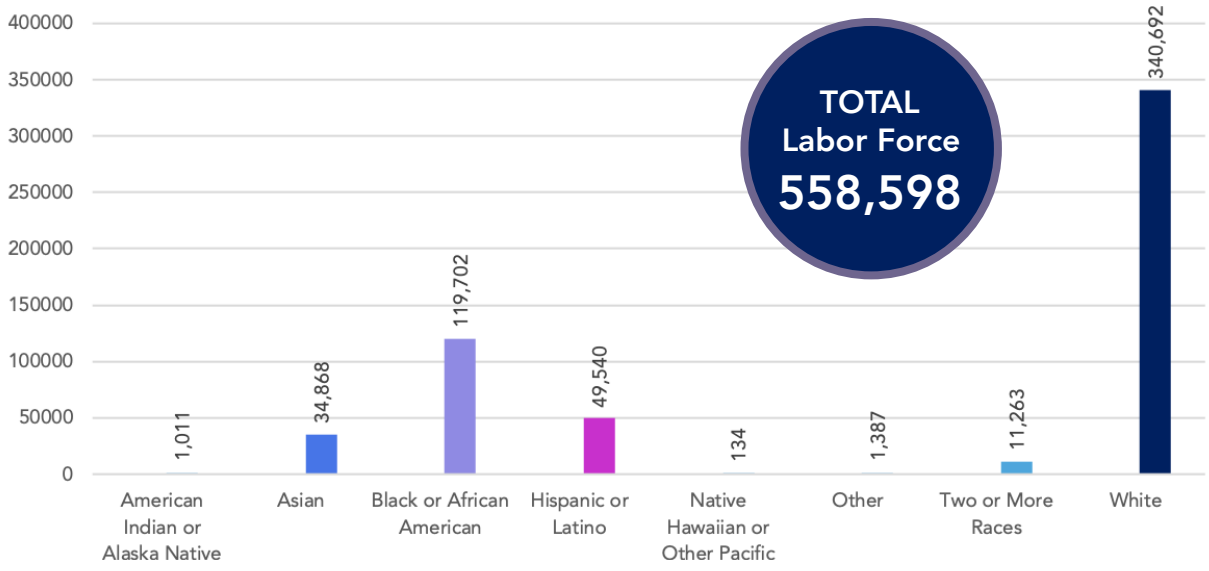
WHY NOW?

Our research reveals significant gender wage and representation gaps within STEM fields in Wake County. Black or African American and Hispanic or Latina women are especially underrepresented in STEM fields compared to their relative proportion in the labor force. Of the total labor force of Wake County (Figure 1), the three largest race/ethnic groups by gender are White males (32.3%), White females (29%) and Black or African American females (12%).

Wake County Labor Force by Race and Ethnicity- Figure 1



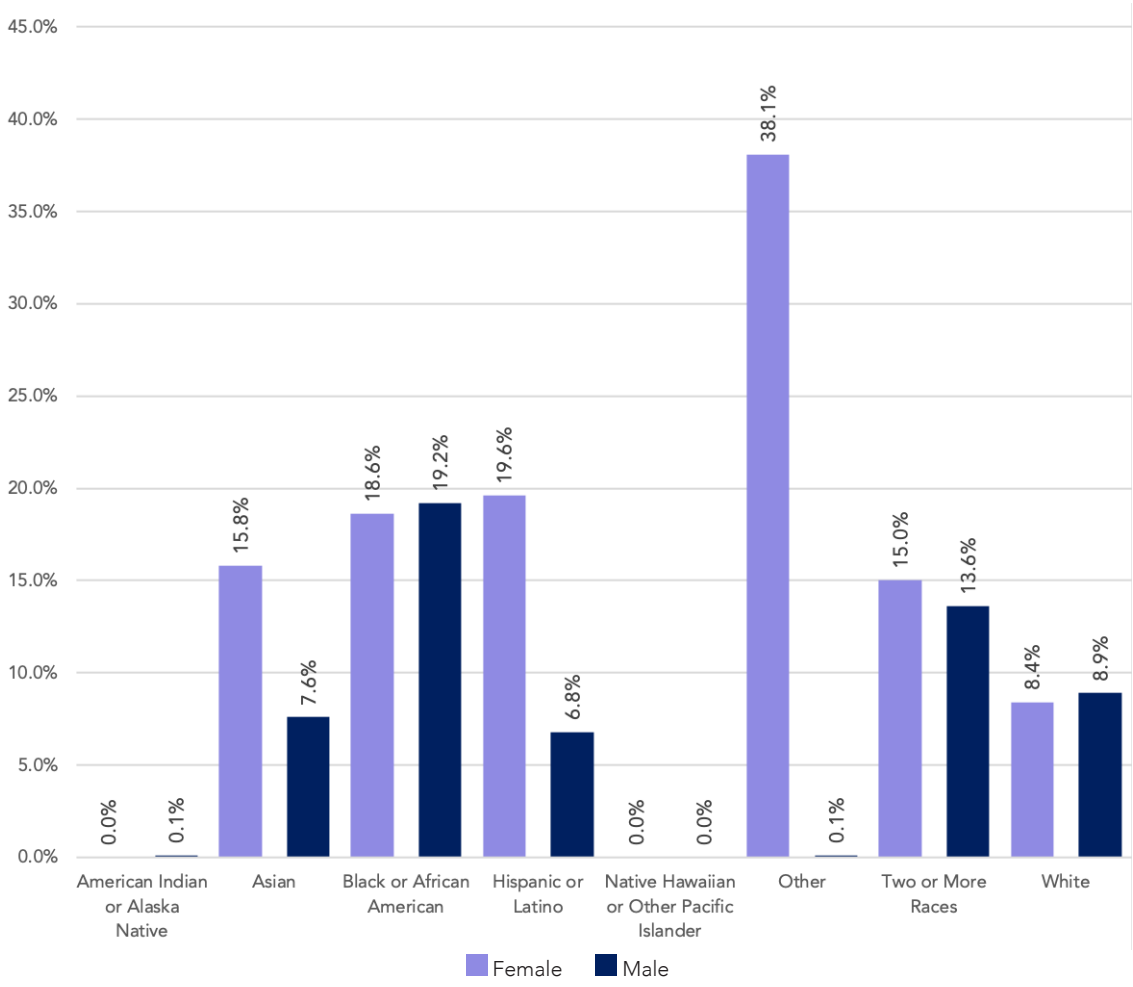
Wake County TOTAL Labor Force by Race and Ethnicity- Figure 1A



Sources: Burning Glass © estimates based on American Community Survey, Local Area Unemployment Statistics.
Percentages among the entire table add-up to 100%.

With the COVID-19 pandemic, Wake County has experienced a jump in unemployment (Figure 2) from 4% to 11.5% percent in the two months between March and May 2020. Unemployment rates were higher for females than for males, with Black or African American and Hispanic or Latina females experiencing higher rates (18.6% and 19.6% respectively) than White females and males.

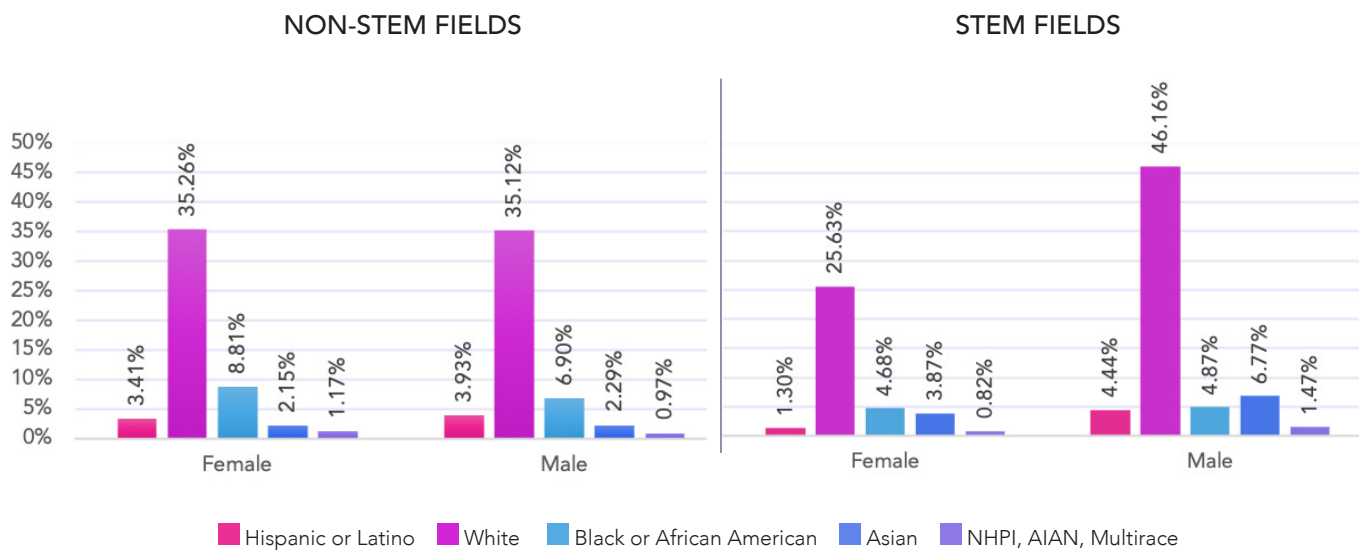
Wake County Unemployment by Race and Ethnicity – Figure 2

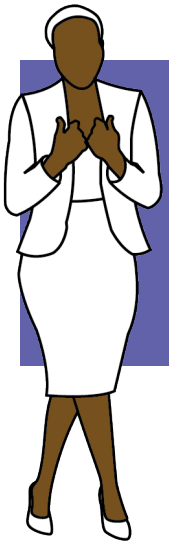


Sources: Burning Glass © estimates based on American Community Survey, Local Area Unemployment Statistics. Percentages among the rows result in the average unemployment rate in the third column. Other is self-identified on the ACS when a respondent does not feel they fit in any other category.

Women of color are especially underrepresented in STEM fields compared to their relative proportion in the labor force. For example, while Black or African American women make up about 9% of employees in non-STEM fields in this study, they make up only 5% in STEM fields. Similarly, Hispanic or Latina women are significantly underrepresented with only 1.3% in STEM fields (Figure 3).

Wake County Race and Ethnicity in STEM: Figure 3





Black or African American women make up about 9% of employees in non-STEM and only 5% in STEM fields.

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In addition to representation, on average, women earn less in STEM and STEM-related occupations. The greatest disparities are among Hispanic or Latina and Black or African American women compared to White males among all STEM fields.

Table 1: Percent Wages Earned by Gender and Race and Ethnicity

Sub-Population of Interest	Comparison Group	Percent of Wages Earned of Comparison Group
Female Asian	Male White	83.51%***
Female Black or African American	Male White	73.06%***
Female Hispanic or Latina	Male White	69.21%***
Female NHPI, AIAN, & Multirace	Male White	79.52%**
Female White	Male White	77.08%***
Male Asian	Male White	91.19%
Male Black or African American	Male White	80.48%***
Male Hispanic or Latino	Male White	81.39%***
Male NHPI, AIAN, & Multirace	Male White	89.03%*

Differences of Sex Race Least Squares Means (hourly wages)
* P < 0.05, ** p < 0.01, ***p < 0.001

Call to Action

Gender representation and wage gaps in Wake County have been further compounded by the COVID-19 pandemic. Unemployment is higher among women compared to men, particularly in occupation families within STEM and STEM-related jobs, and among Women of Color as compared to White men. Even though Raleigh has been noted as one of the top 10 cities in the US best positioned to recover from the COVID-19 crisis (Moody's Analytics/ Forbes), the historically lower representation and wages of women in STEM and STEM-related fields in Wake County threatens to thwart this come-back.

Wake Invests in Women is uniquely positioned to help Wake County rebuild and thrive. Through its research-based practices and collective impact approach, the Wake Invests in Women initiative is designed to work with community partners in crafting, "pro-active, large-scale, and integrated measures...to make strong and sustained impacts" based on Wake County specific research (International Labor Organization, 2020).

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