



## COVID-19: Equity in Recovery Series

# Who's Employed in the Early Months of the COVID-19 Recession? An Analysis by Education, Race, Ethnicity, and Gender

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### Introduction

By now, the top-line numbers are all too familiar. Between February and April 2020, the U.S. economy lost roughly 22 million jobs, with a little more than half of these losses recouped over the following six months of uneven growth.<sup>2</sup> It is also well established that the missing 10 million jobs were neither evenly nor randomly distributed across the labor market. Rather, these jobs were concentrated in lower-wage occupations<sup>3</sup> and held by workers contributing to the budgets of lower-income families.<sup>4</sup> Research clearly shows that lower-wage workers have borne the brunt of this recession to date,<sup>5</sup> much more so than in recent downturns.<sup>6</sup> In fact, job losses have been so concentrated in the lower-wage end of the labor pool that median weekly earnings for full-time workers rose markedly in the second quarter of 2020 as a result<sup>7</sup> — not only a dramatic finding in its own right but also an example of the sometimes misleading nature of aggregate statistics. Digging below the surface, this brief explores changes in employment levels for residents of Pennsylvania, New Jersey, and Delaware (i.e., Third District states) by education, race, ethnicity, and gender, and it sets the stage for a deeper dive into the causes of the uneven outcomes that emerge.

### Labor Market Disparities

Because the effects of this recession have been concentrated on lower-wage workers, the economic downturn precipitated by the COVID-19 pandemic holds the potential to exacerbate preexisting disparities in labor market outcomes pertaining to education, race, ethnicity, and gender. For example, it is well-known that workers with less education earn lower wages<sup>8</sup> and are generally more likely to be unemployed than those with higher levels of education, both in good economic

times and in bad.<sup>9</sup> Workers with a bachelor's degree or more education tend to hold jobs that are more compatible with working from home,<sup>10</sup> and in the early months of the downturn, those jobs were much less affected than jobs that had to be performed onsite.<sup>11</sup>

Further, historic and contemporary barriers uniquely faced by individuals of color in the labor market lay the groundwork for inequitable outcomes to emerge from the current recession.<sup>12</sup> For example, because of their overrepresentation in lower-wage occupations, which some view as evidence of labor market discrimination,<sup>13</sup> Black and Hispanic workers earn measurably less than they would if they were equally represented across the occupational landscape — a disparity that remains particularly strong for Black and Hispanic women even after controlling for workers' education.<sup>14</sup> Hispanic women, in particular, are overrepresented in many of the industries and occupations hit hardest during the spring of 2020.<sup>15</sup>

As with workers of color, women's overrepresentation in lower-wage jobs increases their vulnerability to job loss during this recession, and women's greater likelihood of living in a household without another potential caregiver makes it more likely than for men that school closures could prevent them from remaining in or rejoining the labor force.<sup>16</sup> Women have been more likely to leave or consider leaving the workforce or to reduce their hours than men during the COVID-19 pandemic, with childcare responsibilities appearing to play a key role for working mothers.<sup>17</sup>

A vast amount of research has been conducted to date to understand which workers, occupations, and industries have been the hardest hit or the fastest to rebound since the current recession began. Rather than summarize this body of research, predicated as it is on different data sets,



time periods, and methodologies, I will instead concisely report the pertinent findings from the most recent results (at the time of this writing) of three nationally representative surveys: the Current Population Survey (CPS) conducted for the Bureau of Labor Statistics, the Household Pulse Survey conducted by the Census Bureau, and the Survey of Household Economics and Decisionmaking conducted by the Board of Governors of the Federal Reserve System. These three resources track different metrics but reach the same general conclusions: White workers have fared better than Black and Hispanic workers, and workers with a bachelor's degree have fared better than those with lower levels of formal education.<sup>18</sup> The findings across these three surveys as they pertain to gender are less clear-cut: While a greater share of women reported being laid off between March 2020 and July 2020, changes in the employment rate relative to 2019 and the share reporting a loss of household income since the onset of the pandemic are fairly comparable between women and men.<sup>19</sup>

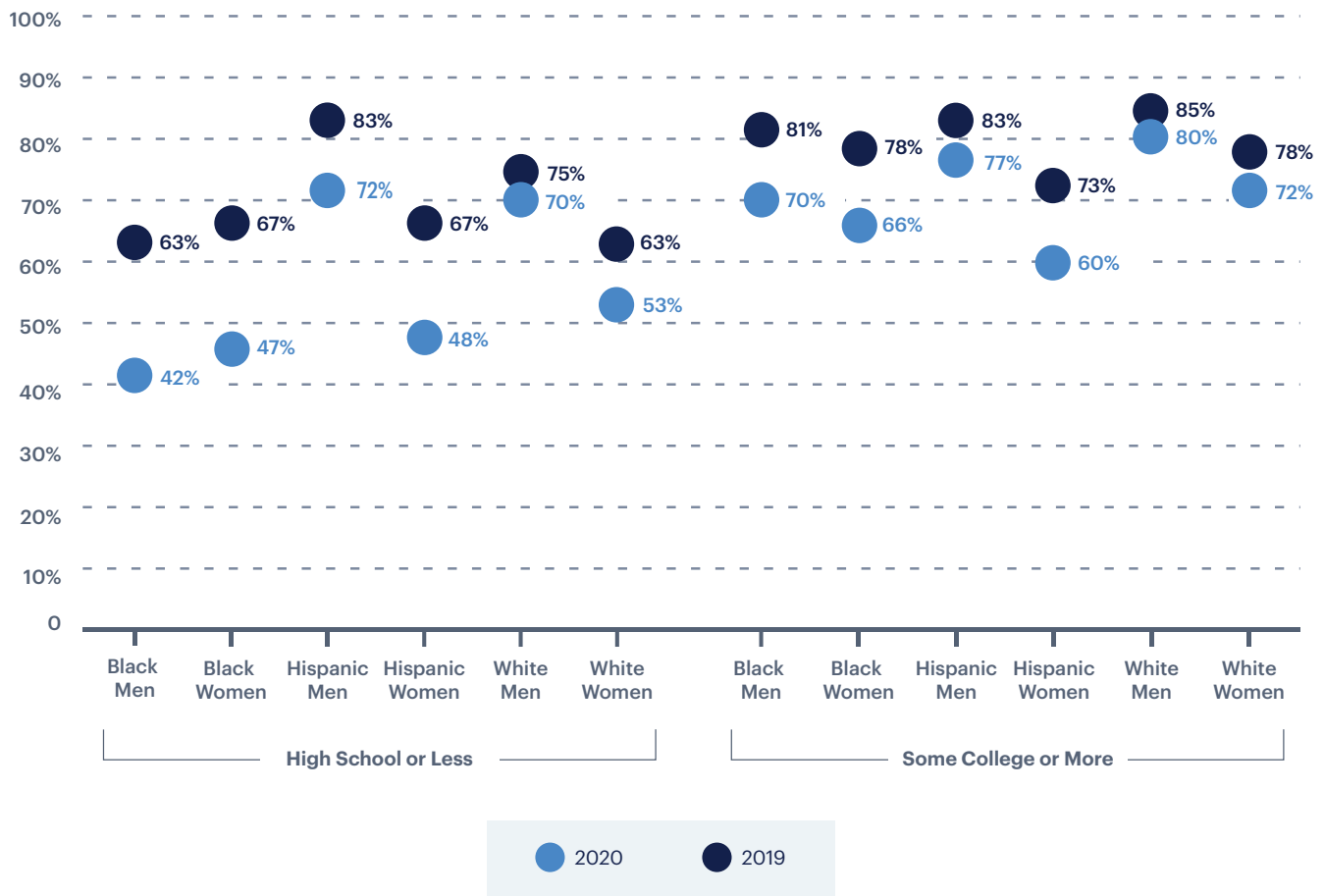
## Analysis

At the risk of stating the obvious, no worker is one-dimensional — either college-educated or female, Black or male. Every worker sits at the intersection of education, race, ethnicity, and gender, and, as described previously, each characteristic has associations with employment outcomes both before and after the onset of the COVID-19 recession. Given this, I apply a multidimensional approach in the following descriptive analysis of employment in Third District states. Using monthly data from the CPS, I compare

the employment rate — calculated simply as the share of working-age residents employed — for 12 groups of workers, reflecting their level of educational attainment (high school diploma or less; some college or more), race/ethnicity (non-Hispanic Black; non-Hispanic White; Hispanic of any race), and gender (men and women).<sup>20</sup> In order to remove the effects of seasonality and in contrast to many other analyses that measure changes in the labor market over the course of 2020, I compare data from May 2020 through October 2020 with data from the same period in 2019. For the sake of simplicity, I refer to these six-month periods as 2019 and 2020 in the summary that follows.

The collection of CPS data in 2020 was affected by the COVID-19 pandemic in several ways, and the potential implications for this analysis are worth stating explicitly. First, during the study period in 2020, some CPS respondents who should have been classified as laid off were mistakenly classified as employed but absent from work for “other reasons.” Although this miscoding is more apparent in the early months of the pandemic, there were still more workers so classified in October 2020 than in prior years. As a result, for both the 2019 and 2020 samples, I count workers absent from their job for “other reasons” as not employed in order to make a more direct year-over-year comparison. Second, monthly CPS estimates do not include population controls at the state level for all of the demographic groups analyzed in this brief. Consequently, the precision of the following estimates may be affected by who responded to the survey during the study period, and response rates were notably lower in 2020 than in 2019.<sup>21</sup>

**Figure 1. Employment Rate in Third District States (May 2020–October 2020 vs. May 2019–October 2019)**



**Note:** Analysis is restricted to the civilian noninstitutional population, 20 to 64 years of age. Owing to misclassification issues identified by the U.S. Bureau of Labor Statistics in 2020 data collection efforts, survey respondents reporting that they are employed but absent from work for “other reasons” are not counted as employed in this analysis.

**Source:** Author’s analysis of CPS basic monthly samples (May 2019–October 2019 and May 2020–October 2020), retrieved from IPUMS-CPS, University of Minnesota, [www.ipums.org](http://www.ipums.org)

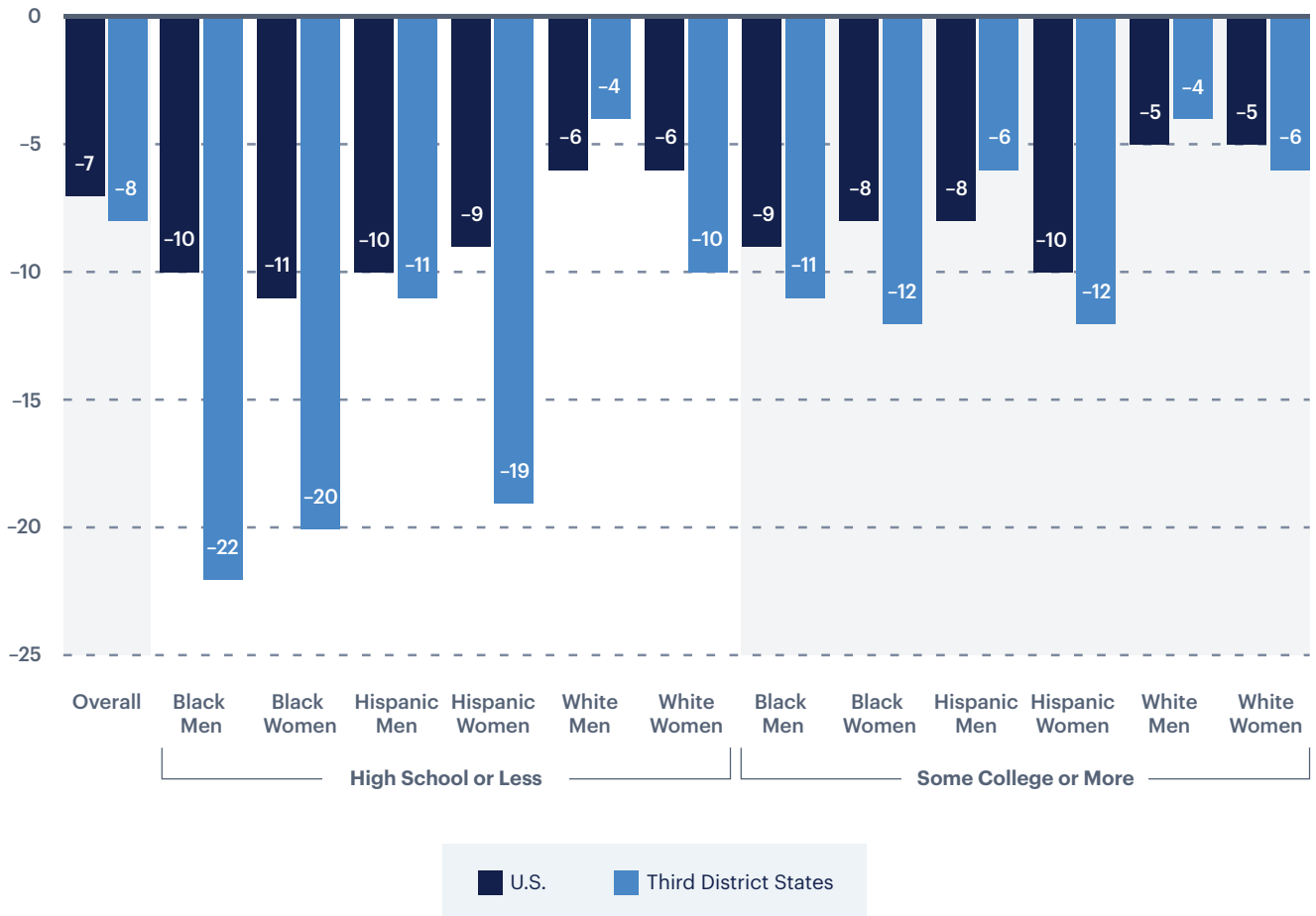
**Findings**

Overall, the employment rate in Third District states fell by roughly 8 percentage points from 2019 to 2020, from 76.5 percent to 68.4 percent. Employment rate declines between 2019 and 2020 appear to be statistically significant for every group of workers analyzed, but as **Figure 1** illustrates, the magnitude of the decline varied dramatically along lines drawn by education, race, and gender.<sup>22</sup> Employment rate declines approached or exceeded 20 percentage points for three groups of workers with no more than a high school diploma: Black men, Black women, and Hispanic women. At the other end of the spectrum, White men in both educational attainment groups experienced only minimal employment rate declines, as

did both Hispanic men and White women with at least some college education.<sup>23</sup>

For workers in the same educational attainment and race/ethnicity groups (displayed sequentially in Figure 1), women generally fared worse than men, if only modestly. The employment rate declined by an appreciably greater amount for Hispanic women than for Hispanic men with no more than a high school diploma. For workers of a given race/ethnicity and gender (occupying the same position on the left and right sides of Figure 1), those with lower levels of education were also more likely to experience negative labor market outcomes. Employment rate declines were particularly acute for both Black men and Black women with a high school diploma or less relative to their counterparts with at least some college education.

**Figure 2. Percentage-Point Decline in Employment Rate (May 2020–October 2020 vs. May 2019–October 2019)**



**Note:** Analysis is restricted to the civilian noninstitutional population, 20 to 64 years of age. Owing to misclassification issues identified by the U.S. Bureau of Labor Statistics in 2020 data collection efforts, survey respondents reporting that they are employed but absent from work for “other reasons” are not counted as employed in this analysis.

**Source:** Author’s analysis of CPS basic monthly samples (May 2019–October 2019 and May 2020–October 2020), retrieved from IPUMS-CPS, University of Minnesota, [www.ipums.org](http://www.ipums.org)

**Figure 2** compares the employment rate declines in the Third District states (i.e., the differences between the 2020 and 2019 levels shown in Figure 1) with those observed for the U.S. as a whole. In the U.S., the employment rate declined by 7 percentage points overall and by between 5 and 10 percentage points for nearly every group of workers. In the Third District states, the overall employment rate declined by a slightly higher 8 percentage points, and for most groups of workers, the decline was within a handful of percentage points of the national decline over this time period. Reinforcing the previous findings, however, the modestly greater overall decline in the Third District states’ employment rate relative to the U.S. appears to have been driven by the magnitude of job losses among three groups of workers with no more than a high school diploma: Black men, Black women, and Hispanic women.

As was true in the early months of the pandemic,<sup>24</sup> differences could also emerge in the average number of hours worked each week among those still employed — differences that would not be apparent in the foregoing analysis but that could nonetheless affect the financial stability of workers and their families. This metric held relatively steady in the U.S. from 2019 to 2020, falling by one or two hours for most groups of workers, but in the Third District states, the average dropped by four hours for Black and Hispanic women with a high school diploma or less.<sup>25</sup> To the extent that schools rely on remote instruction rather than in-person classes, working mothers appear to be more likely than fathers to leave the labor force or reduce their hours,<sup>26</sup> and the latter response could potentially serve as an explanation for this finding.

## Conclusions

The U.S. economy in 2020 was characterized by historic levels of job losses and job gains. Following sharper declines in the spring, hiring activity from June through mid-December for lower-wage jobs more closely returned to trend than it did for higher-wage work<sup>27</sup> — a development that should not be misinterpreted to suggest equivalence in the strength of the rebound for lower- and higher-wage workers.<sup>28</sup> To ensure that the anticipated recovery is not only full but also equitable, it is imperative that we monitor the net effects of this labor market volatility on the workers it has displaced.

In Pennsylvania, New Jersey, and Delaware, the collision of this recession's particularly pernicious effects on lower-wage employment and the structural inequities in the labor market mentioned previously has produced uneven

impacts to date: White men in both educational attainment groups, along with both White women and Hispanic men with at least some college education, have experienced fairly modest employment rate declines, while three groups of workers with no more than a high school diploma — Black men, Black women, and Hispanic women — have experienced far worse outcomes during the current downturn.

As the economy rebounds, reemploying those workers who have lost their jobs will be key to ensuring a return to pre-pandemic labor market conditions. Overcoming the disparities that characterized the labor market prior to the pandemic, however, will require that we revisit the factors that shaped them. Future research should explore the underlying drivers of the uneven outcomes identified in this brief, including the potential roles played by occupational segregation, labor market discrimination, and access to affordable, high-quality childcare.

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## Endnotes

<sup>1</sup> The views expressed here are those of the author and do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

<sup>2</sup> Author's analysis of U.S. Bureau of Labor Statistics Current Employment Statistics data, seasonally adjusted.

<sup>3</sup> See "Which Earnings Groups Have Been Most Affected by the COVID-19 Crisis?," by Aaron Amburgey and Serdar Birinci, published by the Federal Reserve Bank of St. Louis.

<sup>4</sup> See *Update on the Economic Well-Being of U.S. Households: July 2020 Results*, published by the Board of Governors of the Federal Reserve System.

<sup>5</sup> See "The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data," by Raj Chetty, John N. Friedman, Nathaniel Hendren, Michael Stepner, and the Opportunity Insights Team; "The COVID Economy Carves Deep Divide Between Haves and Have-Nots," by Eric Morath, Theo Francis, and Justin Baer, published by *The Wall Street Journal*.

<sup>6</sup> See "The COVID-19 Recession Is the Most Unequal in Modern U.S. History," by Heather Long, Andrew Van Dam, Alyssa Fowers, and Leslie Shapiro, published by *The Washington Post*.

<sup>7</sup> See "The Illusion of Wage Growth," by Erin E. Crust, Mary C. Daly, and Bart Hobijn, published by the Federal Reserve Bank of San Francisco.

<sup>8</sup> See "Unemployment Rates and Earnings by Educational Attainment," published by the U.S. Bureau of Labor Statistics.

<sup>9</sup> See "Unemployment Rates for Persons 25 Years and Older by Educational Attainment," published by the U.S. Bureau of Labor Statistics.

<sup>10</sup> See "Job Flexibilities and Work Schedules—2017–2018," published by the U.S. Bureau of Labor Statistics; "Work from Home After the COVID-19 Outbreak," by Alexander Bick, Adam Blandin, and Karel Mertens, published by the Federal Reserve Bank of Dallas.

<sup>11</sup> See "Ability to Work from Home: Evidence from Two Surveys and Implications for the Labor Market in the COVID-19 Pandemic," by Matthew Dey, Harley Frazis, Mark A. Loewenstein, and Hugette Sun, published by the U.S. Bureau of Labor Statistics.

<sup>12</sup> For an overview of these labor market inequities, see *Racial Inequality in the Labor Market and Employment Opportunities*, by K. Steven Brown, published by the Urban Institute.

<sup>13</sup> See "Whiter Jobs, Higher Wages: Occupational Segregation and the Lower Wages of Black Men," by Darrick Hamilton, Algernon Austin, and William Darity, Jr., published by the Economic Policy Institute.

<sup>14</sup> See "The Evolution of Occupational Segregation in the United States, 1940-2010: Gains and Losses of Gender-Race/Ethnicity Groups," by Coral del Rio and Olga Alonso-Villar, published in *Demography*.

<sup>15</sup> See *Latinx Workers — Particularly Women — Face Devastating Job Losses in the COVID-19 Recession*, by Elise Gould, Daniel Perez, and Valerie Wilson, published by the Economic Policy Institute.



- <sup>16</sup> See “Why Has COVID-19 Been Especially Harmful for Working Women?,” by Nicole Bateman and Martha Ross, published by the Brookings Institution.
- <sup>17</sup> See “Women in the Workplace: 2020,” published by McKinsey & Company and LeanIn.org; “Gender Differences in Couples’ Division of Childcare, Work, and Mental Health During COVID-19,” by Gema Zamarro and Maria J. Prados, published as a CESR-Schaeffer working paper by the University of Southern California; *Update on the Economic Well-Being of U.S. Households: July 2020 Results*, published by the Board of Governors of the Federal Reserve System.
- <sup>18</sup> The negative employment effects felt by some workers of color and less educated workers cannot be fully explained by their overrepresentation in particular industries and occupations, however, as job losses for these workers were greater than for White workers and college graduates even within specific occupations. See “The Heterogeneous Labor Market Impacts of the COVID-19 Pandemic,” by Guido Matias Cortes and Eliza C. Forsythe, published by the W.E. Upjohn Institute for Employment Research.
- <sup>19</sup> See “The Employment Situation — October 2020,” based on Current Population Survey data and published by the U.S. Bureau of Labor Statistics; “Week 18 Household Pulse Survey: October 28–November 9,” fielded by the U.S. Census Bureau; and *Update on the Economic Well-Being of U.S. Households: July 2020 Results*, based on a supplement to the Survey of Household Economics and Decisionmaking, published by the Board of Governors of the Federal Reserve System.
- <sup>20</sup> The employment rate is also commonly referred to as the employment-population ratio.
- <sup>21</sup> For more information, see “Impact of the Coronavirus (COVID-19) Pandemic on the Employment Situation for October 2020,” published by the U.S. Bureau of Labor Statistics.
- <sup>22</sup> T-tests indicate statistical significance at the 95 percent confidence level for all groups of workers, but the standard errors used in the tests do not fully account for the covariance introduced by the fact that roughly one-quarter of respondents analyzed in this brief appear in both the 2019 and 2020 samples.
- <sup>23</sup> For research showing that Black men are more likely than White men to become unemployed in a weakening economy, see “Last Hired, First Fired? Black-White Unemployment and the Business Cycle,” by Kenneth A. Couch and Robert Fairlie, published in *Demography*.
- <sup>24</sup> See “COVID-19 and the Gender Gap in Work Hours,” by Caitlyn Collins, Liana Christin Landivar, Leah Ruppanner, and William J. Scarborough, published in *Gender, Work & Organization*.
- <sup>25</sup> Author’s analysis of CPS basic monthly samples (May 2019–October 2019 and May 2020–October 2020), retrieved from IPUMS-CPS, University of Minnesota, [www.ipums.org](http://www.ipums.org).
- <sup>26</sup> See *Update on the Economic Well-Being of U.S. Households: July 2020 Results*, published by the Board of Governors of the Federal Reserve System.
- <sup>27</sup> See “Coronavirus and U.S. Job Postings Through December 11: Data from Indeed.com,” by Jed Kolko, published by Indeed Hiring Lab.
- <sup>28</sup> See “The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data,” by Raj Chetty, John N. Friedman, Nathaniel Hendren, Michael Stepner, and the Opportunity Insights Team.