

Opportunity Occupations Revisited: Exploring Employment for Sub-Baccalaureate Workers in the Third Federal Reserve District

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Introduction

College-educated workers typically have greater success in the labor market than do workers without a bachelor's degree (hereafter *sub-baccalaureate workers*), as measured by both earnings and rates of employment.¹ In light of research indicating a “polarization” of the labor market in favor of higher- and lower-wage jobs,² it is worth asking the question: Do certain regional economies offer greater opportunity than others for the more than two-thirds of adults without a bachelor's degree?

Our Research

Our research explores the jobs available in 121 of the largest metro areas in the U.S. In each, we divide employment into one of three categories based on the annual median wage and the educational expectations of employers hiring to fill open positions:

- **Opportunity employment** is our term for jobs accessible to sub-baccalaureate workers and typically paying above the national annual median wage (\$37,690), adjusted up or down to reflect the local cost of living (i.e., the local wage threshold). Occupations characterized by a high level of opportunity employment are referred to as *opportunity occupations*.
- Equally well-compensated jobs that aren't accessible to sub-baccalaureate workers are classified as **higher-wage employment requiring a bachelor's degree**.

- **Lower-wage employment** can be found in occupations that pay below the local wage threshold.

The remainder of this report briefly summarizes our findings for eight metro areas in the Third Federal Reserve District:³ Allentown-Bethlehem-Easton, PA-NJ; Harrisburg-Carlisle, PA; Lancaster, PA; Philadelphia-Camden-Wilmington, PA-

NJ-DE-MD; Reading, PA; Scranton-Wilkes-Barre-Hazleton, PA; Trenton, NJ; and York-Hanover, PA.

Third District Findings

Opportunity employment takes many different forms. As Table 1 illustrates, the largest opportunity occupations in these eight metro areas represent a true

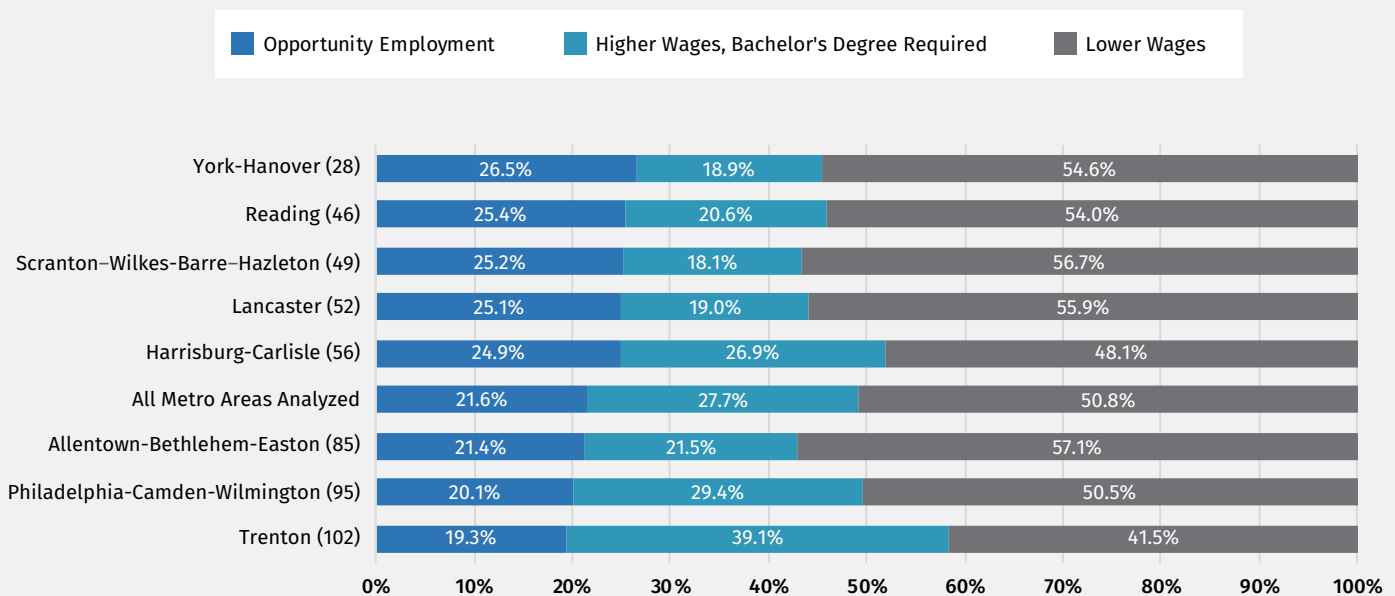
Table 1. Largest Opportunity Occupations (2017)

Rank	Occupation	Jobs Classified as Opportunity Employment
1	Registered Nurses	74,027
2	Heavy and Tractor-Trailer Truck Drivers	56,640
3	Maintenance and Repair Workers	40,220
4	Bookkeeping, Accounting, and Auditing Clerks	27,051
5	Licensed Practical and Licensed Vocational Nurses	26,840
6	Carpenters	20,810
7	Supervisors of Retail Sales Workers	20,761
8	Automotive Service Technicians and Mechanics	20,500
9	Supervisors of Office and Administrative Support Workers	20,357
10	Sales Representatives, Wholesale and Manufacturing	20,165

Sources: Authors' calculations using data from BLS Occupational Employment Statistics (May 2017), Burning Glass Technologies (2015–2017), BEA Regional Price Parities (2016), and American Community Survey Five-Year Public Use Microdata Sample (2012–2016)

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Figure 1. Distribution of Employment by Wages and Education (2017)



Note: The value in parentheses indicates the metro area's rank nationally (1 through 121) based on the share of total employment classified as opportunity employment. Estimates may not sum to exactly 100 percent because of rounding.

Sources: Authors' calculations using data from BLS Occupational Employment Statistics (May 2017), Burning Glass Technologies (2015–2017), BEA Regional Price Parities (2016), and American Community Survey Five-Year Public Use Microdata Sample (2012–2016)

cross section of the economy, ranging from health care (registered nurses and licensed practical/vocational nurses) to supervisory positions (retail sales and office and administrative support) to the skilled trades (carpenters). However, the individual character of a regional economy emerges when looking at the top 10 in each metro area. For example, while registered nurses account for the greatest level of opportunity employment overall, heavy and tractor-trailer truck drivers top the list in six of the eight metro areas in the Third District (excluding Philadelphia and Trenton). To further illustrate, welders in Reading and shipping clerks in York are top-10 opportunity occupations in these markets, even though they are not in the top 10 for the Third District overall.

Just as the largest opportunity occupations vary somewhat from place to place, we find that opportunity employment as a share of total employment also varies regionally.

As Figure 1 illustrates, the opportunity employment share ranges from 26.5 percent in York to 19.3 percent in Trenton. Figure 1 also highlights how the balance of employment can vary across regional economies. For example, Scranton's economy consists of relatively few higher-wage jobs requiring a bachelor's degree (18.1 percent) and a significant level of lower-wage employment (56.7 percent), while the reverse is true in Trenton.

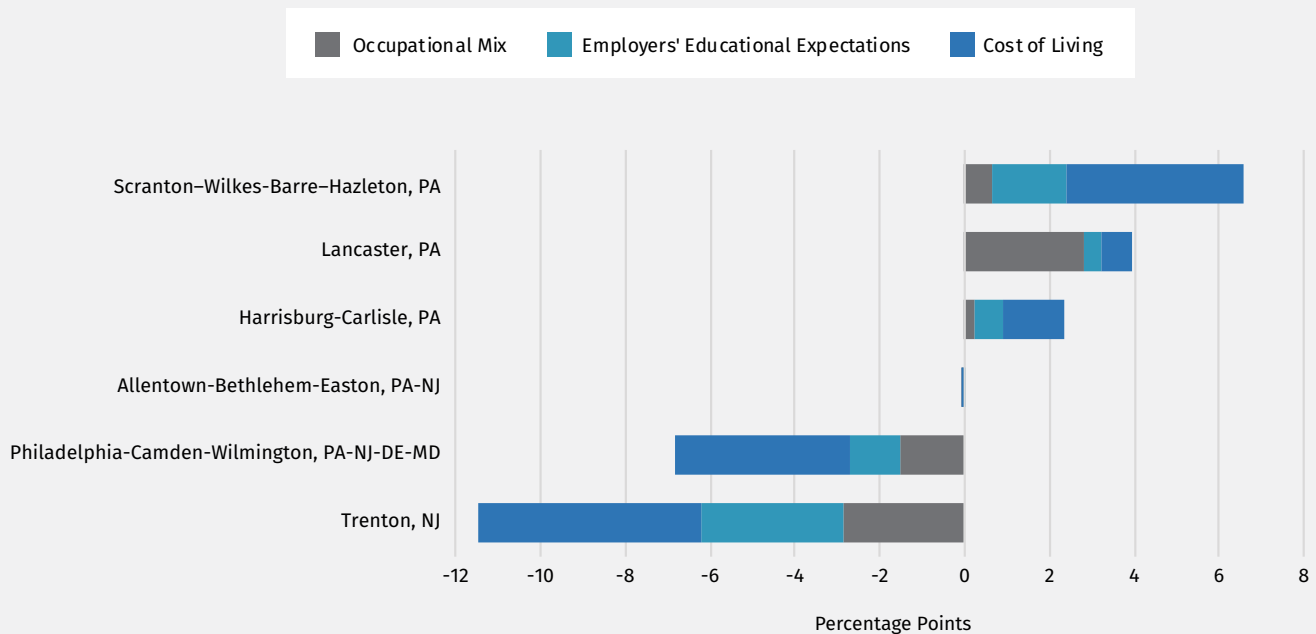
Our research also allows us to disentangle the effects of several factors that influence a regional economy's level of opportunity employment, including the mix of occupations, the level of education that employers seek when filling open positions, and the area's cost of living. By comparing actual opportunity employment shares with hypothetical levels that are based on the national averages for these factors, we can discern the effects of each factor.

For the three metro areas at the top of Figure 2, all three factors expand the local opportunity employment share when compared with their hypothetical levels using national averages. For example, Scranton's actual opportunity employment share is more than 6 percentage points higher than its hypothetical value based on national averages, and this difference is primarily attributable to its lower cost of living. However, the opportunity employment shares in Philadelphia and Trenton are lower than their hypothetical values, with the cost of living having the greatest negative effect on opportunity employment in these economies.

How can opportunity employment be expanded locally?

A regional economy's level of opportunity employment is influenced by the types of jobs available, the level of education that employers seek when filling job openings, and the relationship between wages and

Figure 2. Effect on Opportunity Employment Share



Note: Allentown's actual and hypothetical opportunity employment shares are virtually identical. Estimates are not available for Reading, PA and York-Hanover, PA.

Sources: Authors' calculations using data from BLS Occupational Employment Statistics (May 2017), Burning Glass Technologies (2015–2017), BEA Regional Price Parities (2016), and American Community Survey Five-Year Public Use Microdata Sample (2012–2016)

costs. The multifaceted nature of this issue means local opportunity employment could be expanded through any number of approaches, such as:

- Economic development strategies that prioritize industries characterized by high levels of opportunity employment.
- A reconsideration by employers of their hiring requirements and a commitment to objectively assessing the skills of workers

from a variety of educational backgrounds.

- An expansion of both private sector and public sector programs for postsecondary skills development.
- Efforts to better align regional wages and costs, possibly through modest wage increases for lower-wage workers or through efforts to expand the supply of affordable housing.

For more information on these metro areas and 121 of the largest metros in the U.S., please see [“Opportunity Occupations Revisited: Exploring Employment for Sub-Baccalaureate Workers Across Metro Areas and Over Time,”](#) by Kyle Fee, Keith Wardrip, and Lisa Nelson at the Federal Reserve Banks of Cleveland and Philadelphia. ■

Endnotes

- 1 See <https://www.bls.gov/emp/tables/unemployment-earnings-education.htm>.
- 2 David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, “The Polarization of the U.S. Labor Market.” *American Economic Review*, 96:2 (2006), pp. 189–94.
- 3 The Third Federal Reserve District covers eastern and central Pennsylvania, southern New Jersey, and Delaware.