Educational Attainment in the EDWorks Northeast Tennessee Region



Educating Our Workforce for the 21st Century Economy and Improving Lives



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The following brief addresses the educational attainment of the EDWorks northeast Tennessee region comprised of Carter, Greene, Hawkins, Johnson, Sullivan, Unicoi, and Washington counties. Hancock and Hamblen counties are not included in these analyses because sparsely populated counties are often aggregated with other counties to avoid sampling error; in this case, these two counties are aggregated with other counties outside of the region. This brief compares the EDWorks region to the state of Tennessee and the nation as a whole, identifying how our population compares at each level along the education pipeline, as well as the disparities among subpopulations in our region. Finally, this brief helps to establish a baseline as the EDWorks collaboration works strategically to improve the education and workforce conditions in the region, and ultimately improve the lives of its residents.

The National and State Landscape

In 2008, the Lumina Foundation, a private, non-profit educational organization brought national attention when it set an ambitious educational attainment goal for the United States - for 60% of working-aged adults to have some type of credential beyond high school by the year 2025. The reason for this attainment goal began largely because of the personal and societal benefits associated with a more educated population, such as higher personal earnings over a lifetime, better health and longevity. Over time, it has shifted more toward the workforce and economy, as well as on the heightening attention being paid to racial and ethnic gaps. America's transition from an industrial to a knowledge-based economy is creating the need for education beyond high school for success in nearly all career paths; many middle-class workers with just a high school diploma are being left behind. Economists predicted that with the rise of automation and globalization, low-skill bluecollar and clerical jobs largely would be replaced by high-skill managerial and professional jobs. The last fifteen years have borne this out: according to the Georgetown Center on Education and the Workforce (GCEW), over 95% of all jobs created in the U.S. since the Great Recession of 2008 have gone to workers with at least some college education. Lumina and its broad constituency and policy network have been tracking the nation's (and the state's) progress since the goal was established. The following are figures from their recent "Stronger Nation for Education" report showing Tennessee's position relative to the U.S., as well as many of the counties in the state.

TENNESSEE ATTAINMENT

41.2%* 47.9%

46.5%* 54.3%

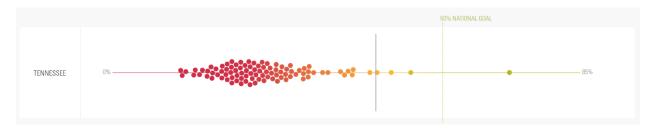
NATIONAL ATTAINMENT

NATIONAL GOAL

Figure 1: Tennessee Relative to the U.S. and National Goal in 2022

*without short-term credentials

Figure 2: Tennessee Counties Relative to the U.S. and National Goal in 2022



Sources: for figure 1 and 2 Lumina Foundation, Stronger Nation 2024

The figures above display the relative position in college attainment of Tennessee and its counties (with roughly 100,000 residents and above) with respect to the state and national goal. In addition to the state lagging the nation as a whole, only a few of the state's most educated counties surpass the goals set forth by Lumina Foundation and the state of Tennessee. The vast majority are lagging substantially behind, reflecting sizable disparities in educational attainment across the state.

Tennessee, along with many other states, followed Lumina's lead and established its own big attainment goal: for 55% of working-age adults to have a postsecondary credential by the year 2025. Currently, Tennessee's college attainment level stands at 48 percent, approximately seven points shy of the 2025 goal. These percentages include a national estimate applied (by the GCEW) to those with some college, but no degree, that estimates credential completion requiring a shorter term than an associate degree.

Educational Attainment in the EDWorks Northeast Tennessee Region

Compared to the state and the nation, the EDWorks region has a substantially larger proportion of its working age population who have stopped their educational pursuits at high school completion,

leaving many working-aged residents on the sidelines as the economy becomes increasingly reliant on knowledge-based, computer, and technical skills. Fewer than half of adults ages 25 to 64 in the region (including those with no high school diploma) have completed any formal education beyond high school (Figure 3).

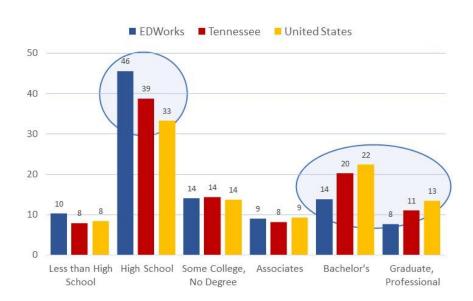


Figure 3: Educational Attainment of Adults Ages 25 to 64 in 2022 EDWorks, Tennessee, and the U.S.

Source: U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.

Conversely, despite the inclusion of an array of postsecondary education providers, the region struggles to produce, retain, and attract the education and skill levels needed for the higher levels of the workforce and economy.

The region's workforce and economic conditions will depend in large part on how well it transitions from relying on high schools to fully prepare students for more advanced entry-level jobs, to one that needs continuous training and re-training beyond high school in order to meet the demands of an everchanging and advancing economy.

Younger Working Age Population 25 to 39

Unlike the U.S. and many state goals, the EDWorks initiative will focus more on the educational attainment of those among the ages most likely impacted by many of the initiatives, interventions, and strategies underway to address the challenges above. The following figures reflect the same conditions for the EDWorks region relative to the state and U.S. for younger working-aged adults, ages 25 to 39.

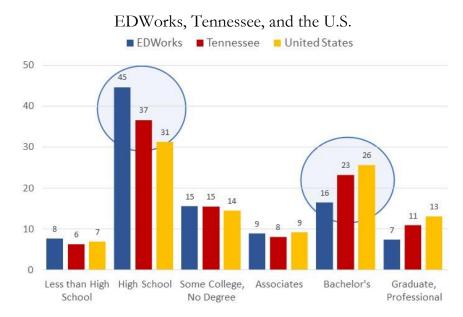


Figure 4: Educational Attainment of Adults Ages 25 to 39 in 2022

Source: U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.

The patterns of educational attainment among the younger adults, as well as the gaps between the state and nation, are very similar as those for the overall working-aged population, indicating the region is following a similar trend in its younger generation as it did for its older adults. Our postsecondary institutions and employers should work together to realize ways to break this cycle in our region in order to avoid an even greater mismatch between what our institutions collectively award to students and the skills and education levels needed to foster and support our rapidly changing economy.

Change Over Time

Among the younger-aged workforce, the percentage with high school diplomas only actually increased over the eight-year period. However, over the same time, the proportion who have not completed high school dropped nearly 5 percentage points, indicating perhaps that some of the residents in this category at least transitioned to high school completion, or equivalent.

The proportion with college degrees among this age-group at all levels has risen, but at roughly the same levels as the state and U.S., indicating the need for even more intentional efforts to boost educational attainment at levels greater than the state and U.S. in order to be a more economically vibrant region.

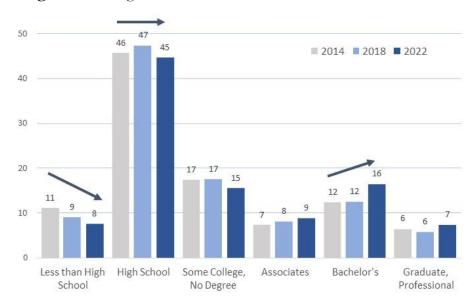


Figure 5: Change in Educational Attainment from 2014 to 2022

Source: U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.

Educational Attainment by Race and Ethnicity

Relative to many areas of the U.S, the EDWorks region has a less diverse population racially and ethnically. In the EDWorks region itself, 93 percent of the population is White, followed by two percent Black and Hispanic, and three percent of other or mixed races. Of particular note, Black and Hispanics are much less likely to finish high school, and lower percentages have completed bachelor's degrees and above. Of particular concern is the high percentage (nearly a third) of young working-aged Hispanics who have not even completed education at the high school level. While the region is growing in population, Hispanics are major contributors to this growth, and will increasingly contribute to the region's workforce.

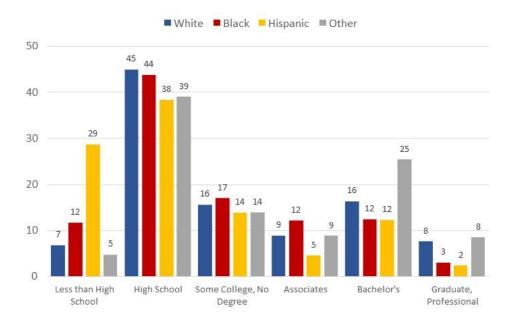


Figure 6: Educational Attainment of Adults Ages 25 to 39 by Race, Ethnicity (2022)

Source: U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.

Educational Attainment by Gender

Some College, No Degree

Associate Bachelor's ■ Graduate, Professional

Relative to other parts of the U.S., the EDWorks region stands out in its gap in educational attainment between males and females. Many more young men stop their educational pursuits after completing high school. And vice-versa, more young women enter and complete postsecondary education at all levels.

Percentage Difference between Males and Females Educational Attainment by Gender 2014 and 2022 2014 and 2022 2014 2022 50 42 40 College College Degree Degree 30 High School 20 Only 10 Male Fem ale Male Female Less than High School U.S. Census Bureau: 2022 American Community Survey. Public Use Microdata Sample (5-Year sample). Steen Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rodgers, and Megan Schouweiler. IPL/MS USA: Version 150, Idataset]. Minneapolis, MN: IPUMS, 2024, https://doi.org/10.18128/D010.V15.0 High School Only

Figure 7: Educational Attainment of Adults Ages 25 to 39 by Gender

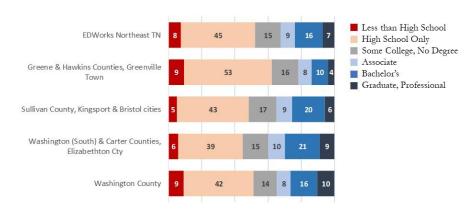
This gap actually widened over the period from 2014 to 2022, with smaller percentages of females stopping after high school and higher percentages entering postsecondary education and completing credentials at all levels, while males experienced the opposite trend.

Striving for social justice and gender equality aside, the sizable gender gap reflects a workforce and economy that is likely transitioning away from many of the male-dominated occupations and a mismatch of educational opportunities that recognize gender differences at least to some degree. Over time, we are fortunate to be achieving more equitable working conditions for males and females; however, we must be mindful and strategic about providing pathways that align interests and strengths of females and males in their pursuits to succeed in the local workforce and economy.

Variation within the EDWorks Region

The figure below displays the educational attainment of young working-age adults across the four Public Use Microdata Areas (PUMAs) within the EDWorks region. The prevalence of not enrolling in, or completing, any formal education beyond high school is felt most in the more rural parts of the region. While this represents more than half (53 percent) of the younger working-age population in the region, nearly two-thirds (62 percent) have not pursued education beyond high school in the rural areas of Greene, Hawkins, Unicoi and Johnson counties. Conversely, the proportion of college degree-holders is more prevalent in or near the larger cities, and in the city with the region's largest postsecondary institution (which is home to a sizable number of students, faculty and administrators with college credentials).

Figure 7: Educational Attainment of Adults Ages 25 to 39 by Public Use Microdata Area (PUMA)



Source: U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.

Conclusion

The above all point to the critical need to increase participation and completion in postsecondary education at all levels, across all subpopulations, and by all types of institutions in the region. At the onset of the EDWorks initiative, it was clear to nearly all in the alliance that the first, and most obvious, goal of the initiative is to improve the rate at which high school graduates transition into at least some form postsecondary education. As a result, the collaborative agreed to a goal of 65 percent of high school graduates going directly into postsecondary education by the year 2030 – up from 53 percent in 2022, and in line with the state goal and U.S. participation rates. The trends, disparities across the region, and the goal for the college-going rate in the region are discussed in a companion brief on the college-going rates in the EDWorks region.

In order to achieve this goal, it is also crucial to create education and training pathways within our system of institutions that lead to success in employment and long-term careers and that are transferable across industries and occupations. Along with the many other well-documented benefits associated with a more educated citizenry, more attention needs to be paid to aligning the paths through our education systems with high-wage and high-demand opportunities for Northeast Tennesseans – for the health and well-being of our residents and our communities.

Sources and Notes

Stronger Nation: Learning Beyond High School Builds American Talent. Lumina Foundation. 2024

U.S. Census Bureau: 2022 American Community Survey, Public Use Microdata Sample (5-Year sample). Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rodgers, and Megan Schouweiler. IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024, https://doi.org/10.18128/D010.V15.0

Public Use Microdata Areas Public Use Microdata Areas (PUMAs)

PUMAs are analysis units for the annual U.S. Census Bureau American Community Survey. In order to secure valid and reliable sampling, PUMAs have a minimum population size of 100,000 people and must maintain that population throughout a decade. PUMA boundaries nest within the states and are combinations of more than one county in sparsely populated areas, disaggregated within county boundaries (at the Census tract level) in more densely populated metropolitan areas.