CAROLINA DEMOGRAPHY

UNC CAROLINA POPULATION CENTER

Past, Present, and Future:

Demographic Change and North Carolina's Community College System

MARCH 2018

This report presents findings from an analysis of data from state and federal sources to understand the current landscape of educational attainment and enrollment in North Carolina community colleges and other colleges and universities. The report was written by Carolina Demography, a research service unit at the Carolina Population Center at the University of North Carolina at Chapel Hill. We are grateful to Sommer Barnes and Kate Allison for input on early versions of this report.

The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the sponsor organization, the North Carolina Community College System. Additional information about this report may be obtained from:

Rebecca Tippett, PhD
Director, Carolina Demography
Carolina Population Center, UNC-Chapel Hill
Carolina Square, Suite 210
123 West Franklin Street
Chapel Hill, NC 27516

E-mail: demography@unc.edu

Additional information about Carolina Demography is available at http://demography.cpc.unc.edu.

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Executive Summary

There is a gap between current levels of educational attainment and the projected demand for educated workers in North Carolina. Georgetown University's Center on Education and the Workforce predicts that 67% of North Carolina jobs will require education and training beyond high school by 2020.[1] As of 2015, just 37% of North Carolina's prime working-age (18-64) adults had an associate degree or higher, nearly thirty percentage points below the projected demand.[2] The North Carolina Community College System is a major provider of education and training to North Carolina workers; it will play a critical role in helping North Carolina ensure sufficient levels of education and training to remain competitive in the changing economy.

Despite the increasing demand for education, the North Carolina Community College System has seen steadily declining enrollments since recovery from the Great Recession began in 2010. Of the state's 3.2 million working-age adults without a college degree, 689,000 or 22% were enrolled in a postsecondary program in Fall 2015. More than half of these enrollments—422,000—were in community colleges: 218,000 were enrolled in a continuing education program and 204,000 were enrolled in a curriculum program. Of the state's population ages 18-64 without a college degree, most—78% or 2.5 million—are not currently pursuing additional education or training.

While population projections suggest that the North Carolina Community College System may recover some of the recent enrollment declines, many individual community colleges face increased recruitment challenges due to demographic changes. This report was developed as part of the System's strategic planning process and focuses specifically on demographic trends and their potential impacts on the community colleges' target population: adults ages 18-64 without a college degree.

Demographic Headwinds

The working-age population will grow at a slower pace than recent decades. Between 2000 and 2015, the state's prime working-age population (18-64) grew by 1.1 million or 22%. While total population is projected to increase by 21% between 2016 and 2036, the working-age population is projected to increase by only 14%, gaining just 870,000 individuals in the next 20 years.

Slowest growth projected for the traditional "college-age" population. Young adults ages 18-24 are both more likely to need postsecondary training and they are more likely to be enrolled in a postsecondary program. This age group is projected to be the slowest growing age group over the next 20 years, growing by just 8% or 83,000 between 2016 and 2036.

Compared to young adults, the majority of early career adults (ages 25-34) already have a college degree, though community college program participation remains high among those who do not yet hold a postsecondary degree. While this age group is projected to grow at nearly the same pace as the state over the next 20 years (20%), many of these new adults will be in-migrants who already have an associate degree or more. As a result, the number of adults 25-34 without a college degree is projected to grow more slowly (18%) and the overall proportion of adults without a degree will decrease.

Population growth is increasingly concentrated in urban areas with historically lower interest and enrollment in North Carolina community colleges.
More than half of all North Carolina counties—58—are projected to have fewer working-age adults by 2036 than they do today, and 64 counties are projected to have fewer 18-24-year-olds. Young adult population declines are projected to occur in areas of the state where: high school seniors typically have greater interest in attending community colleges, a larger share of the adult population does not have a college degree (associate degree or higher), and a higher share of adults without degrees tend to participate in community college programs.

Opportunities and Challenges

In addition to these fundamental demographic challenges, the North Carolina Community College System faces challenges and opportunities in three other key areas: 1) the institutional landscape (for-profit colleges); 2) the transition from high school to postsecondary; 3) widening attainment and enrollment gaps between men and women; and 4) growing diversity in the child population.

For-profits attract market share from community colleges.
For-profit institutions have attracted a growing share of degree seekers with significant impacts on the market share of the state's community colleges. Between 2001 and 2015, the share of degree-seekers enrolled in community colleges had declined by nearly four percentage points, with significant impacts among students aged 35-64. This decline in market share was nearly mirrored by growth in the for-profit sector. Barring broader changes in the institutional landscape of the state, for-profits will pose continued challenges to community college enrollments as the population shifts to older ages where for-profit enrollments are more common.

Many NC high school graduates fail to successfully transition to postsecondary.
Most of North Carolina's graduating high school seniors report intentions to continue their education but many do not successfully enroll in postsecondary programs after graduation. In 2015, one in four high school graduates—24,700 individuals—stated a desire to enroll in a postsecondary program but were not enrolled in a 2-year or 4-year program in the fall.

There is a persistent and growing achievement gap between men and women.
There is a large and growing sex gap in educational attainment and enrollment. Compared to women, North Carolina men are less likely to have graduated high school and less likely to have completed a postsecondary degree, meaning more men lack a postsecondary education. Among those without college degrees, men enroll in postsecondary programs at lower rates and are much less likely than women to enroll in curriculum programs. Just five percent of men without a college degree are enrolled in North Carolina Community College System curriculum programs compared to eight percent of women.

Growing Hispanic child population may face even more barriers to connect intentions to postsecondary enrollment.
Nearly 355,000 North Carolina children are Hispanic or Latino. Hispanic children comprise 14% of children aged 10-17 and 17% of children under age 10. These individuals will be a growing source of students for the North Carolina Community College System. Half of North Carolina's Hispanic high school graduates intend to continue their education at a community

college or technical institute, significantly higher than the state average (39%) and the highest of any racial/ethnic group.

Though Hispanic students are more likely to be interested in enrolling at community colleges, Hispanic young adults enroll at lower rates than their white and Asian peers. One reason for this gap may be that many Hispanic and minority youth would be first-generation college students. In 2015, nearly two-thirds of Hispanic children—63%—were living in a household in which neither parent had exposure to any education or training beyond high school. New programs may be necessary for community colleges to reach, engage, and successfully enroll these future students.

Successfully addressing these challenges will help North Carolina's workers receive the education and training necessary for them—and the state as a whole—to remain competitive in the changing economy.

Introduction: Workforce Demand and Role of NCCC

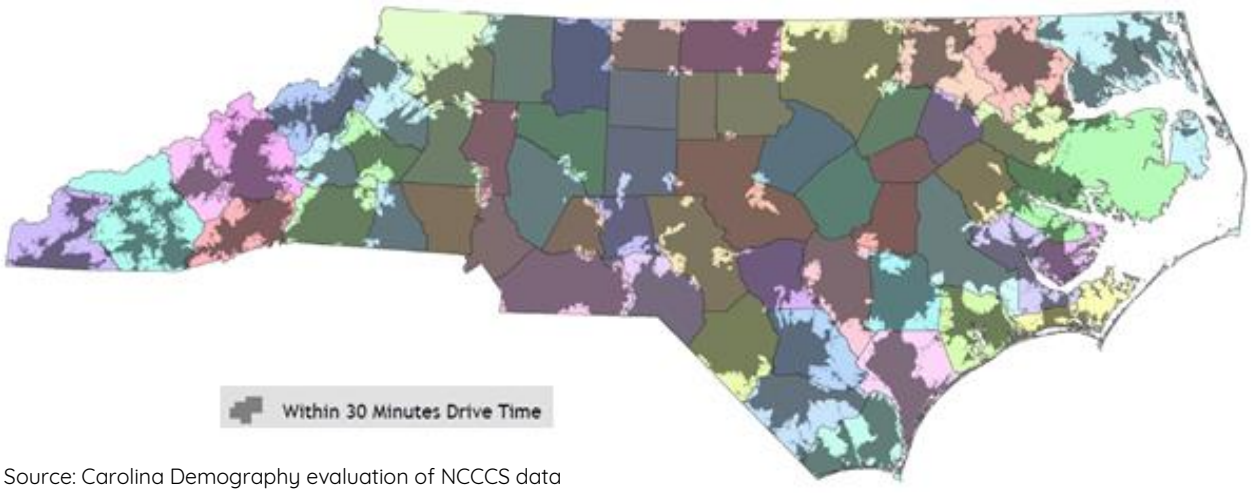
There is a gap between current levels of educational attainment and the projected demand for educated workers in North Carolina. Research from Georgetown University's Center on Education and the Workforce (CEW) predicts that 65% of jobs nationwide will require education and training beyond high school by 2020.[3] By 2020, CEW predicts that 67% of North Carolina jobs will require postsecondary education.

Thirty-seven percent of North Carolina's prime working-age (18-64) adults had a college degree (associate degree or higher) in 2015, nearly thirty percentage points below the projected demand.[4] An additional 11% of these adults may have a certificate or license but not a postsecondary degree.[5] The addition of this estimate yields 48% of North Carolina adults with a college degree or postsecondary credential, still far below projected demand. Preliminary work from the Labor and Economic Analysis Division at the North Carolina Department of Commerce examined differences between the educational attainment of North Carolinians and projected workforce demands. Their work found that the biggest shortfalls are in the supply of workers with an associate degree, some college but no degree, or a bachelor's degree.[6]

The North Carolina Community College System is the largest source of postsecondary education and workforce development for North Carolinians. Between 2005 and 2015, North Carolina community colleges served 3.3 million students, and more than a third (37%) of North Carolina workers between July 2015 and July 2016 had been students in the Community College System within the last 10 years.[7] With 58 individual colleges serving the state's 100 counties, most North Carolina residents live within a 30-minute drive of a community college. In Fall Semester of 2015, nearly 440,000 prime working-age (18-64) residents were enrolled in a community college program, representing 7% of all 18-64 year-olds in the state.

Figure 1. Most North Carolina residents live within a 30-minute drive from a community college campus

Shaded areas represent areas of the state 30 minutes or less from an NCCC institution (all campuses)



Source: Carolina Demography evaluation of NCCCS data

North Carolina's Community College System plays a critical role serving individuals of prime working-age (18-64) without a postsecondary degree such as an associate degree, bachelor's degree, or higher. For the purposes of this analysis, this population is broken into two key groups:

1) **Lack high school diploma**: Individuals without a high school diploma or equivalent (GED). These are potential targets for enrollment in the Community College's Basic Skills programs (BS).

2) **Lack postsecondary degree**: Individuals who have a high school diploma or GED but no postsecondary degree. This includes individuals who report some college attainment but no degree.[8] These individuals are potential targets for curriculum (CU) or continuing education (CE) enrollments and are the primary focus of this report.

Between 1990 and 2015, North Carolina's prime working-age population (18-64) grew from 4.2 million to 6.2 million. This overall population growth fueled a steady increase in the size of the potential pool of NC Community College students. At the same time, demographic factors are reducing the concentration of potential NCCC students. Recent trends suggest that future years may bring increased recruitment challenges for the system and its schools.

Part I: Current Landscape of Educational Attainment

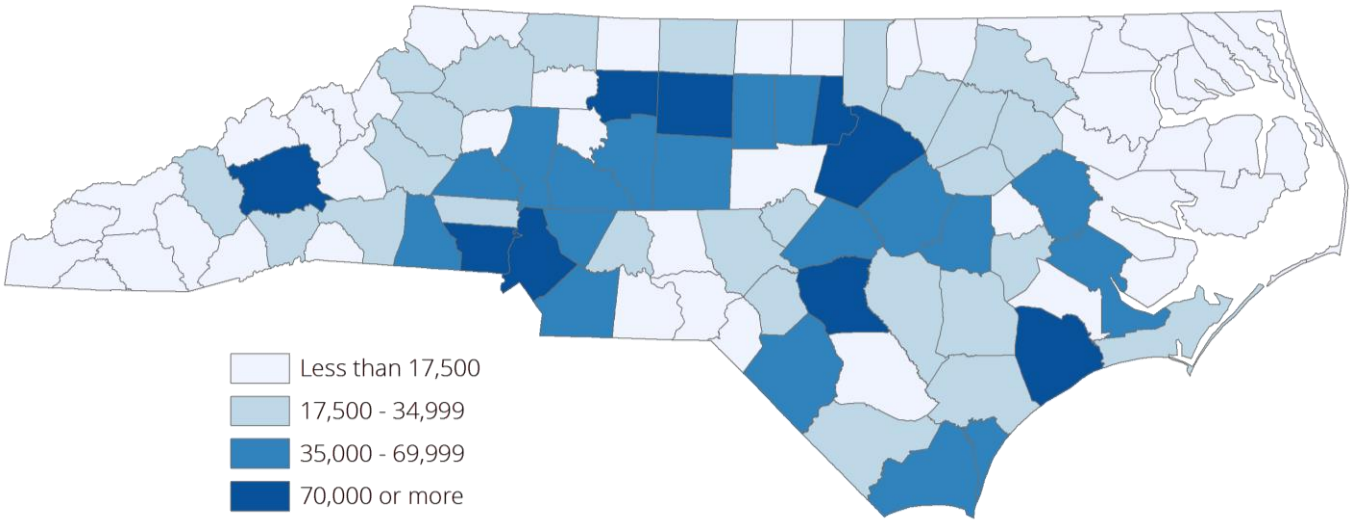
In 2015, 3.2 million North Carolina adults aged 18-64—51% of the population—had completed high school but did not have a college degree (associate degree or higher). This population was split nearly equally between those with only a high school diploma or GED (26% of adults) and those with some college, no degree (25% of adults). Thirty-seven percent of North Carolina adults (2.3 million) already had an associate degree or higher in 2015, the highest share in state history. The remaining 766,000 North Carolina adults (12%) had not completed high school.

Geographic Variation

In terms of absolute numbers, North Carolina's population without a college degree (associate degree or higher) is concentrated in the state's urban centers, reflecting overall population distributions. Twenty-nine percent of these adults live in Mecklenburg (273K), Wake (243K), Guilford (163K), Cumberland (125K), or Forsyth (110K). In 13 counties, there are fewer than 5,000 adults without a degree.

Figure 2. Largest number of adults without a college degree are in major urban areas

Number of adults (18-64) with HS/GED or some college, no degree by county, 2011-15
(see Table A1 for county detail)



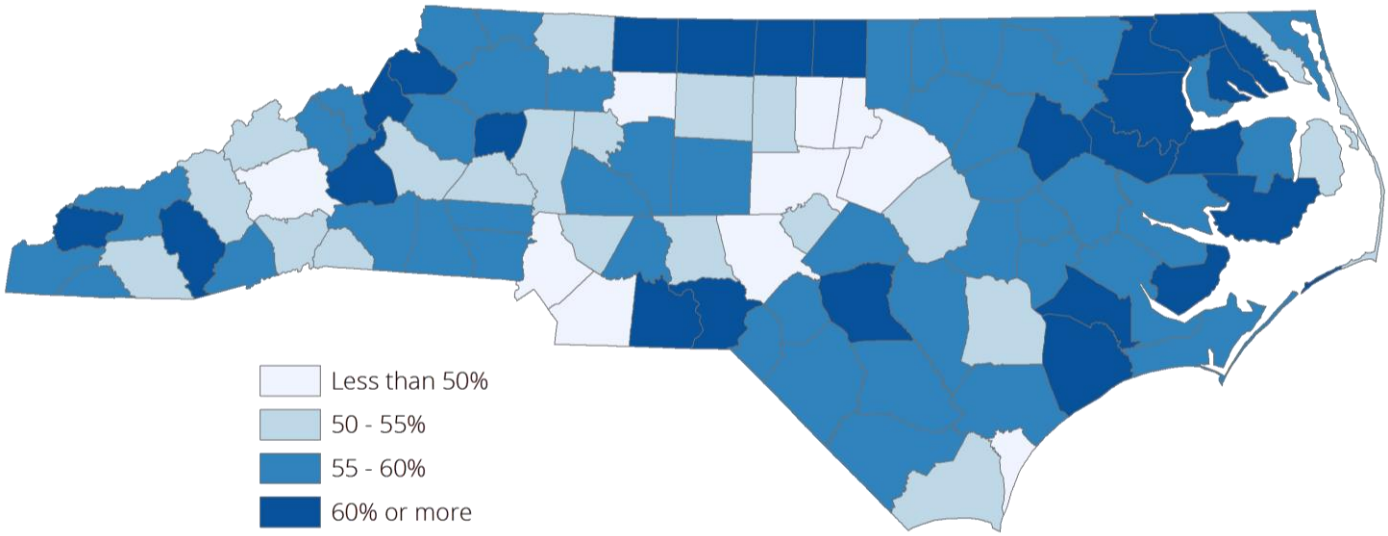
Source: 2015 5-year American Community Survey

While these counties have a large number of adults who lack a degree, these adults are typically a smaller share of the overall population due to relatively higher rates of educational attainment in urban areas. In most of the urban areas, the share of working-age adults who have a high school diploma but no college degree is far below the state average of 51%, especially in the Triangle and Charlotte. The three core counties of the Triangle region—Wake (38%), Durham (39%), and Orange (41%)—have the smallest share of adults who lack a postsecondary degree, reflecting the influence of major research institutions and the influx of highly educated workers for jobs in Research Triangle Park.

In contrast, most North Carolina counties have a greater share of adults with a high school diploma or some college, no degree than the statewide average. There are 89 counties where more than 51% of working-age adults do not have a college degree. The highest share is in Onslow (70%), followed by Hyde (66%), Anson (65%), Alexander (65%), and Jones (64%).

Figure 3. Counties with highest percentage of adults without a college degree are in rural areas

Percentage of adults (18-64) with HS/GED or some college, no degree by county, 2011-15 (see Table A1 for county detail)



Source: 2015 5-year American Community Survey

Sex

Working-age men in North Carolina have lower rates of any degree attainment than working-age women, reflecting sex differences in high school graduation rates, postsecondary entry, and postsecondary completion. Just 33% of North Carolina men aged 18-64 have an associate degree or higher, eight percentage points lower than women (41%). Compared to women, North Carolina men ages 18-64 are:

- More likely to report less than a high school diploma (14% vs. 10%)
- More likely to only have a high school diploma or GED (29% vs. 23%)
- Less likely to have some college, no degree (24% vs. 26%)

While men make up 49% of the total adult population, they make up nearly 58% of adults without a high school diploma, 51% of the population with a high school diploma but no college degree, and just 43% of adults with an associate degree or higher.

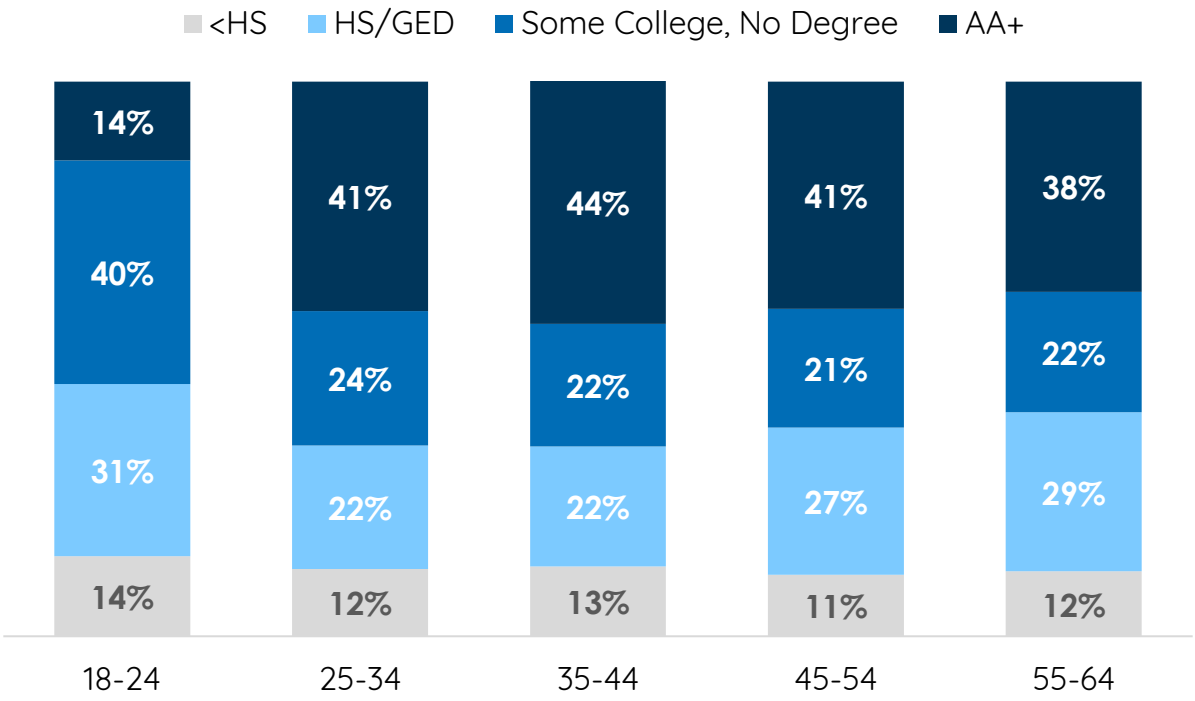
Age

Few young adults (aged 18-24) had completed an associate degree or higher in 2015 (14%), but 40% reported some college, no degree, indicating either current or previous enrollment in a postsecondary program. Thirty-one percent had completed high school but did not have any postsecondary experience.

Figure 4. Majority of North Carolina adults have some postsecondary experience

Highest educational attainment of NC adults by age, 2015

Source: 2015 American Community Survey



Among adults, aged 25 and older, younger generations have higher degree attainment or postsecondary experience than older generations, reflecting the increased demand for postsecondary education and training in the labor market. While there is little variation in the share of adults with less than a high school diploma, adults aged 25-44 are much more likely to have exposure to the postsecondary system than adults aged 45-64. Two of every three (66%) adults ages 25-44 have a postsecondary degree or some college, no degree; this proportion drops to 62% among adults ages 45-54 and 60% among adults ages 55-64.

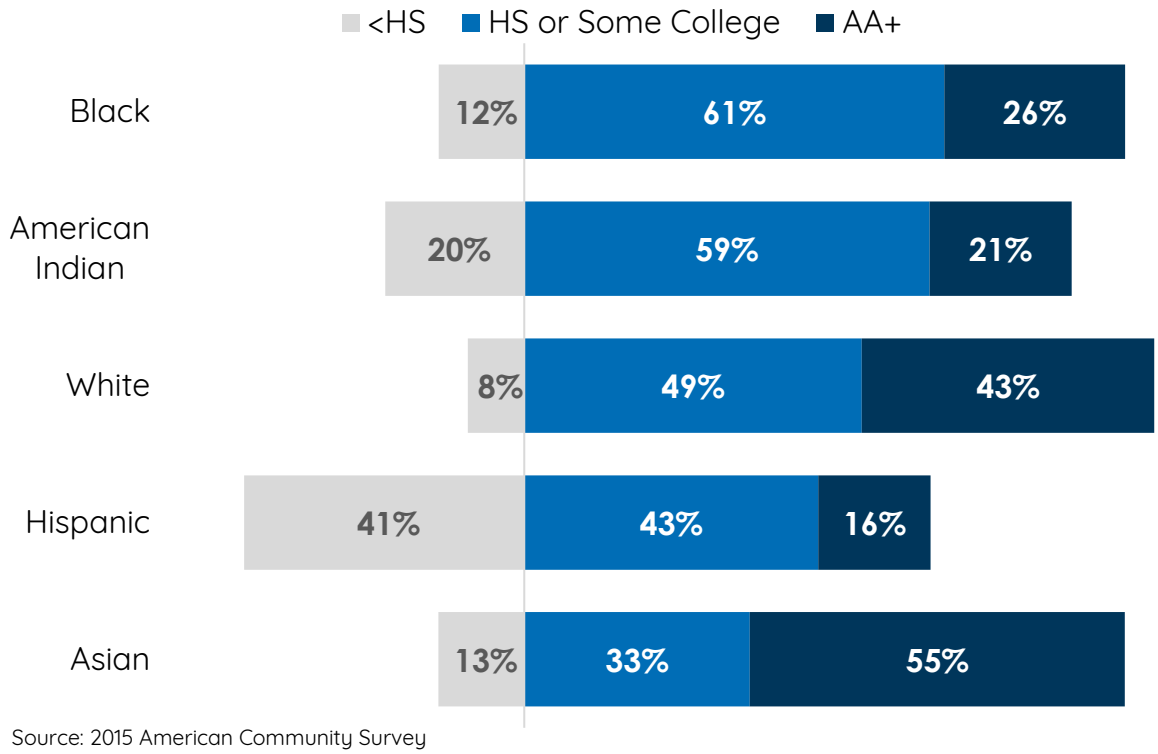
Race/Ethnicity

There are significant differences in the proportion of adults who lack a college degree across North Carolina's racial/ethnic subgroups, as well different drivers of this variation.

Asian adults have the smallest share of individuals with a high school diploma or equivalent but no college degree—33%—as the majority (55%) already have an associate degree or higher. Hispanic or Latino adults have the next lowest of rate—43%—although for very different reasons: 41% of Hispanic adults aged 18-64 do not have a high school diploma; 16% have completed an associate degree or higher. Among other subgroups, black adults have the largest share reporting HS/GED or some college (61%) followed by American Indian (59%) and white (49%) adults.

Figure 5. Educational attainment varies across race

Educational attainment of NC adults by racial/ethnic group, 2015



Source: 2015 American Community Survey

Race/Ethnicity and Sex

Across all racial/ethnic groups, women's educational attainment outpaces men's. At every age—for nearly every group[9]—women are more likely to have completed high school and are more likely to have a college degree.

Attainment Trends, 1990-2015

North Carolina's prime working-age adult population grew by 2 million between 1990 and 2015, rising from 4.2 million to 6.2 million. The state's working-age population grew rapidly during the 1990s—growing at an annual rate of 2%—and maintained steady growth during the 2000s. Although the pace of overall population increase has slowed, North Carolina's 18-64 year-old population has continued to grow since 2010, adding 205,000 new residents between 2010 and 2015, an annual growth rate of 0.7%.

Much of this population growth—particularly during the 1990s and 2000s—was fueled by migration. Since 1990, more than 2 million individuals moved to North Carolina from other states and countries. These individuals frequently arrive with high educational attainment. Forty-three percent of these non-native North Carolinians have a college degree (associate or higher) compared to just 30% of NC-born residents.[10]

Less than High School (Basic Skills Targets)

In 1990, about 1 million North Carolina working-age adults (18-64) did not have a high school diploma or the equivalent, representing 23% of the adult population. Increasing high school graduation rates and the steady in-migration of highly educated adults to North Carolina

caused both absolute and relative declines in the number of individuals who are potential targets for Basic Skills enrollments.

Between 1990 and 2015, the absolute number of adults without a high school degree declined steadily, dropping from 1 million in 1990 to 766,000 in 2015. As the overall adult population grew, the proportion of adults without a high school diploma nearly halved, declining from 23% in 1990 to 12% in 2015.

High School/GED and Some College, No Degree (Postsecondary Targets)

From 1990 to 2010, there were steady increases in the number of North Carolina prime working-age adults who had graduated high school but did not have a college degree. This population grew by 1 million individuals, rising from 2.2 million in 1990 to 3.2 million in 2010. Since 2010, the number of adults without a college degree declined slightly, with a total loss of nearly -18,000.

Although the relative proportion of North Carolina adults who are primary targets for recruitment into college degree programs has held stable at just over 50%, this proportion is beginning to decline, dropping from 53% in 2010 to 51% in 2015.

Table 1. Highly educated fastest-growing share of NC adults

Change in NC adult population (18-64) by educational attainment, 1990-2015

	Total Population	Educational Attainment		
		Less than High School	HS/GED or Some College	AA+
Total Population				
1990	4,209,660	986,373	2,206,542	1,016,745
2000	5,123,217	963,131	2,704,471	1,455,615
2010	6,037,030	820,926	3,198,644	2,017,460
2015	6,241,588	765,777	3,180,780	2,295,031
Numeric Change				
1990-2000	913,557	-23,242	497,929	438,870
2000-2010	913,813	-142,205	494,173	561,845
2010-2015	204,558	-55,149	-17,864	277,571
Annual Rate of Growth				
1990-2000	2.0%	-0.2%	2.1%	3.7%
2000-2010	1.7%	-1.6%	1.7%	3.3%
2010-2015	0.7%	-1.4%	-0.1%	2.6%

Source: Decennial census and American Community Survey, IPUMS-USA

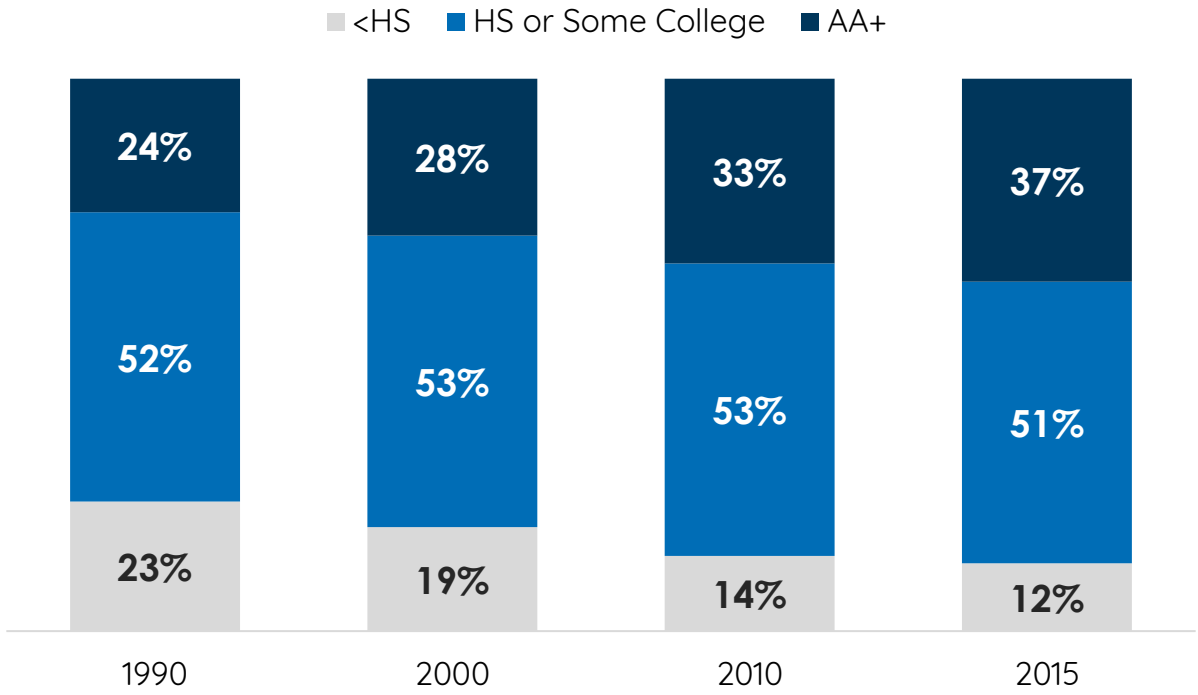
Postsecondary Degree Holders (AA+)

Individuals with a postsecondary degree have been the fastest-growing segment of North Carolina's prime working-age population since 1990. This population grew by nearly 1.3 million over the past 25 years, with annual average growth rates far outpacing the growth rate of the total population. This population was 24% of all adults in 1990 and increased to 37% in 2015.

Despite recent slowdowns in overall population growth, the adult population with a postsecondary degree has grown steadily since 2010. This continued growth reflects both the impacts of in-migration of highly educated adults and of generational replacement, in which older, less educated adults age out of the workforce and are replaced with younger, more educated individuals.

Figure 6. Declining share of adults in NCCC target populations

Educational attainment of NC adults (18-64), 1990-2015



Source: Decennial census and American Community Survey, IPUMS-USA

Because of these shifts, the adult populations historically targeted by the North Carolina Community College System for enrollment—adults without a high school diploma and those with a high school diploma but no postsecondary degree—are steadily declining as a share of the state's adult population. The marked improvements in high school graduation rates helped to add individuals to population of adults who are prime targets for curriculum and continuing education programs, but this growth was counterbalanced by the faster growth of highly educated adults.

Demographic Shifts

Between 1990 and 2015, North Carolina's population without a college degree shifted from being majority female to majority male,[11] reflecting a growing sex gap in educational attainment.

The most significant change, however, has been in the racial/ethnic composition of potential postsecondary degree seekers. In 1990, 98% of North Carolina's adults with a high school diploma but no college degree were either white (77%) or black (21%). In 2015, these two groups made up 87% of this population—61% white and 26% black—with Hispanics (7%) the third largest share.

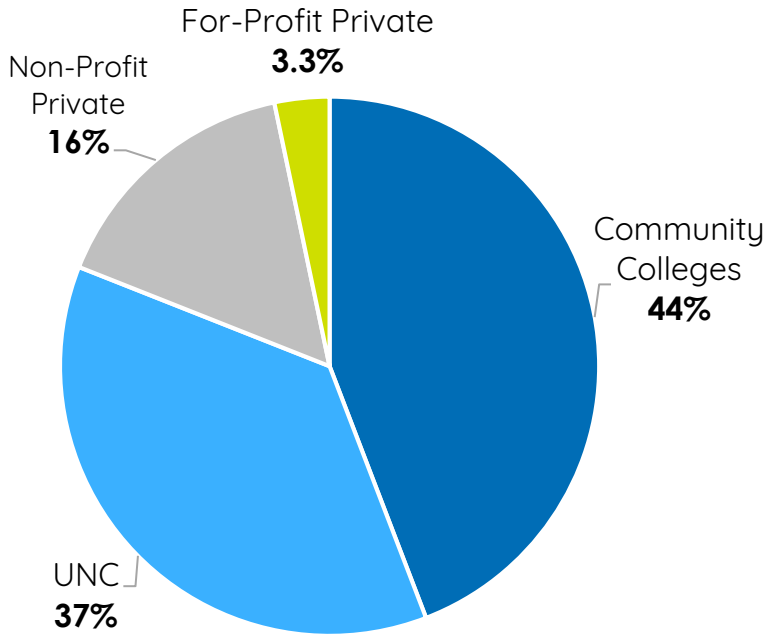
Part II. Credit and Continuing Education Programs

In 2015, there were 462,000 North Carolinians aged 18-64—14.5% of all adults—enrolled in postsecondary credit programs at a 2-year or 4-year institution in North Carolina.[12] Another 218,000 working-age adults were enrolled in a community college continuing education program[13] and 9,000 more were enrolled in other non-credit programs.[14] In total, 689,000 North Carolina adults were enrolled in a postsecondary program in Fall Semester 2015, representing 22% of all adults who lack a college degree.

Institutional Type

Most credit enrollments—81%—were at public institutions. The largest share— 204,000 or 44% of enrollments—were in curriculum programs at a state community college. Another 170,000 or 37% were enrolled in undergraduate programs at a UNC system school. Nearly 73,000 or 16% of credit enrollments were at one of the many private, non-profit colleges and universities across the state (mostly 4-year programs) and just over 15,000 or 3.3% were enrolled in a 2-year or 4-year program at a private, for-profit institution.

Figure 7. Two- and four-year credit enrollments by institutional type, 2015



Sources: NCCCS, UNC-GA, IPEDS

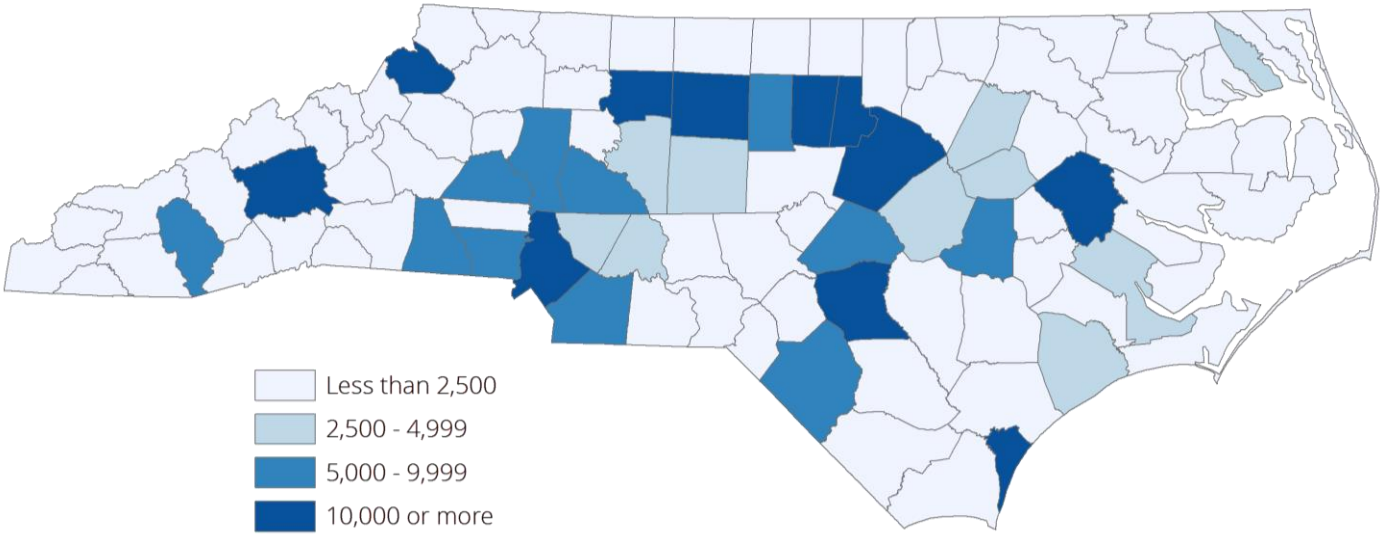
Geographic Variation

Thirty percent of postsecondary credit enrollments were in three urban counties: Wake (11%), Mecklenburg (10%), and Guilford (9%). Between 2011 and 2015, these three counties had an average of 145,000 enrollments in 2- and 4-year institutions each fall. In total, eleven counties averaged more than 10,000 postsecondary credit enrollments over this period, accounting for 62% of all enrollments in the state.[15] In contrast, 45% of the state's adult working-age population lives in these eleven counties. Apart from Watauga County (Appalachian State University), these counties are all core metropolitan counties.

Figure 8. Largest numbers of postsecondary credit seekers in metro areas

Number of NC adults (18-64) in credit program at 2- or 4-year institution, Fall 2011-15

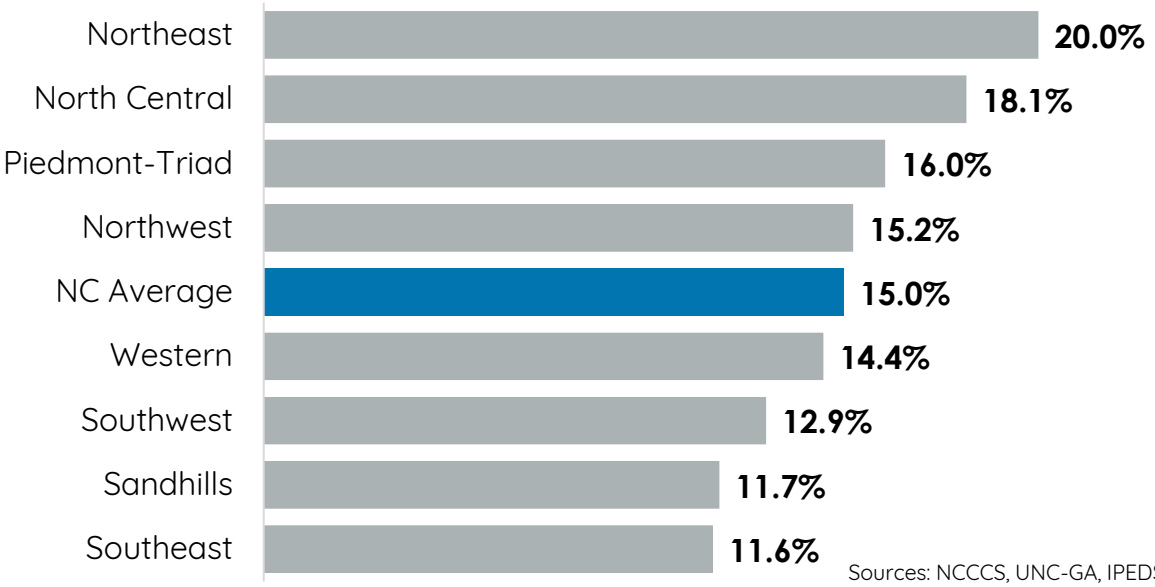
Sources: NCCCS, UNC-GA, IPEDS



Over this same period, 36 counties averaged 1,000 or fewer prime working-age adults enrolled in postsecondary credit programs. In six counties—Tyrrell, Hyde, Alleghany, Gates, Perquimans, and Camden—there were fewer than 250 fall credit enrollments in 2- and 4-year postsecondary institutions.

Statewide, an average of 15% of adults who lack a college degree enrolled in a credit program at a 2- or 4-year institution between 2011 and 2015. This proportion varied significantly across the state, ranging from a low of 11.6% in the Southeastern Prosperity Zone[16] to a high of 20% in the Northeast. The northern prosperity zones—Northeast, North Central, Piedmont-Triad, and Northwest—had enrollment rates that exceeded the state average. The southern and western zones—Western, Southwest, Sandhills, and Southeast—had enrollment rates below the state average.

Figure 9. Share of adults without college degree enrolled in postsecondary credit program by Prosperity Zone, 2011-15



Sources: NCCCS, UNC-GA, IPEDS, ACS

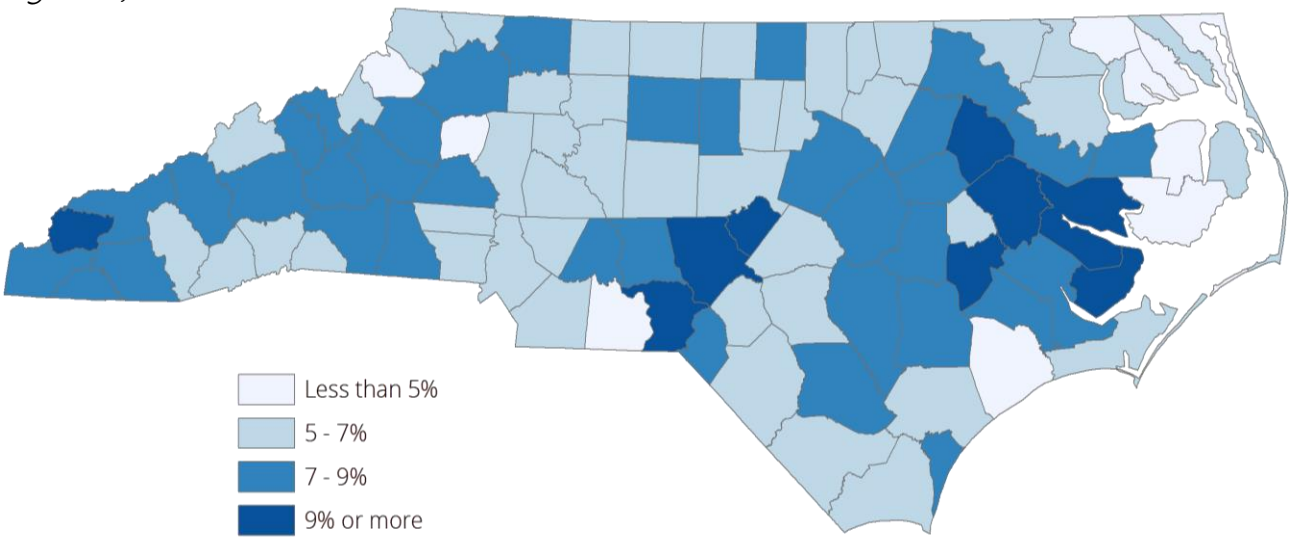
NCCC Enrollments

Like broad population trends, the largest numbers of community college students come from the largest urban counties: Wake, Mecklenburg, Guilford, Forsyth, and Cumberland. These five largest counties contain 29% of both the state's prime target population for postsecondary recruitment and curriculum enrollments.

Statewide, 7% of adults who lacked a college degree were enrolled in a community college curriculum program between 2011 and 2015. Curriculum enrollments ranged from a low of 4% of adults without a college degree in Watauga to a high of 10% in Lee.

Figure 10. Highest rates of CC-CU enrollments in rural areas

Share of NC adults (18-64) with HS/GED or some college enrolled in CC-CU programs, Fall 2011-15



Sources: NCCCS, ACS

Age

Fifteen percent of all North Carolina adults without a college degree were enrolled in a postsecondary credit program in Fall 2015. Enrollment rates by age ranged significantly, with young adults enrolling in credit programs at significantly higher rates than other ages. In 2015:

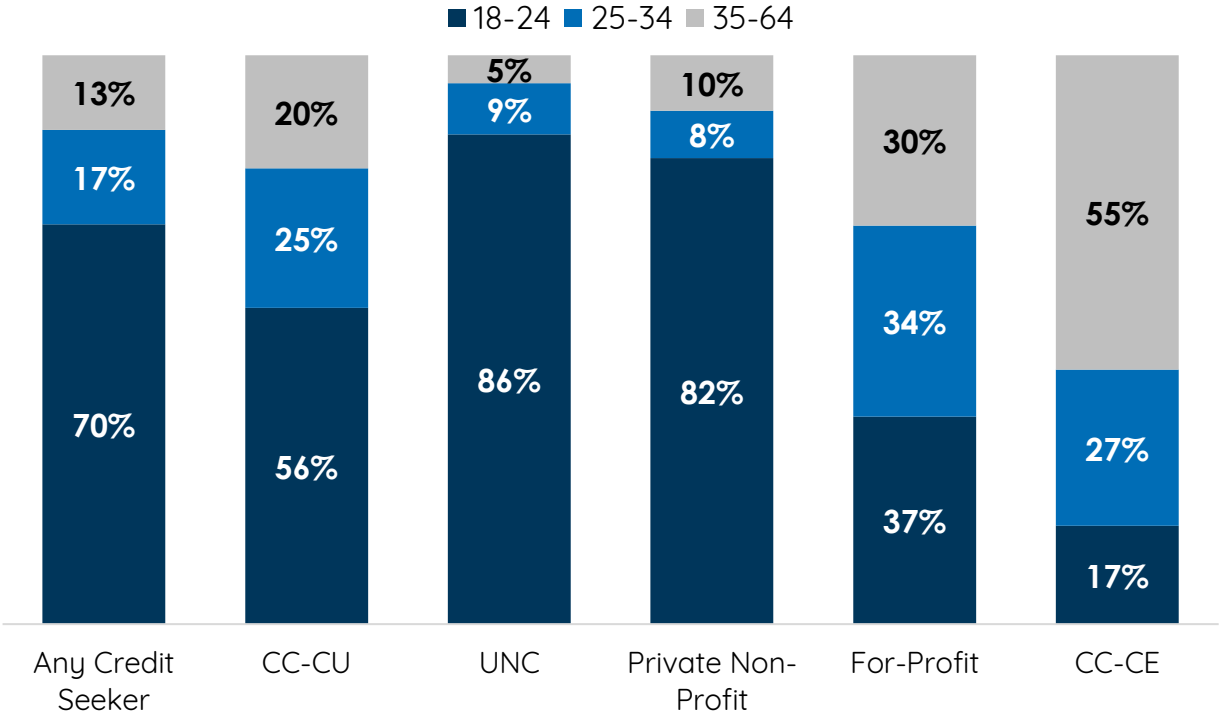
- 46% of 18-24 year-olds;
- 13% of 25-34 year-olds; and
- 3% of 35-64 year-olds were enrolled in a postsecondary credit program at a 2- or 4-year institution.

Another 6% of 18-24 year-olds, 10% of 25-34 year-olds, and 7% of 35-64 year-olds were enrolled in a non-credit postsecondary program such as continuing education.

Reflecting these credit-seeking enrollment patterns, seven of every ten (70%) of students enrolled in a postsecondary credit program in Fall 2015 were prime college-age (ages 18-24), 17% were 25-34, and the remaining 13% were 35-64. This overall pattern is driven by the concentration of young adults in UNC and private, non-profit enrollments: 86% of enrollments at UNC and 82% of those at private, non-profits are traditional college-age students. The age structure of enrollments varies significantly across other institutional types.

Figure 11. Community colleges serve broad age range

Age composition of enrollments by program type, Fall 2015



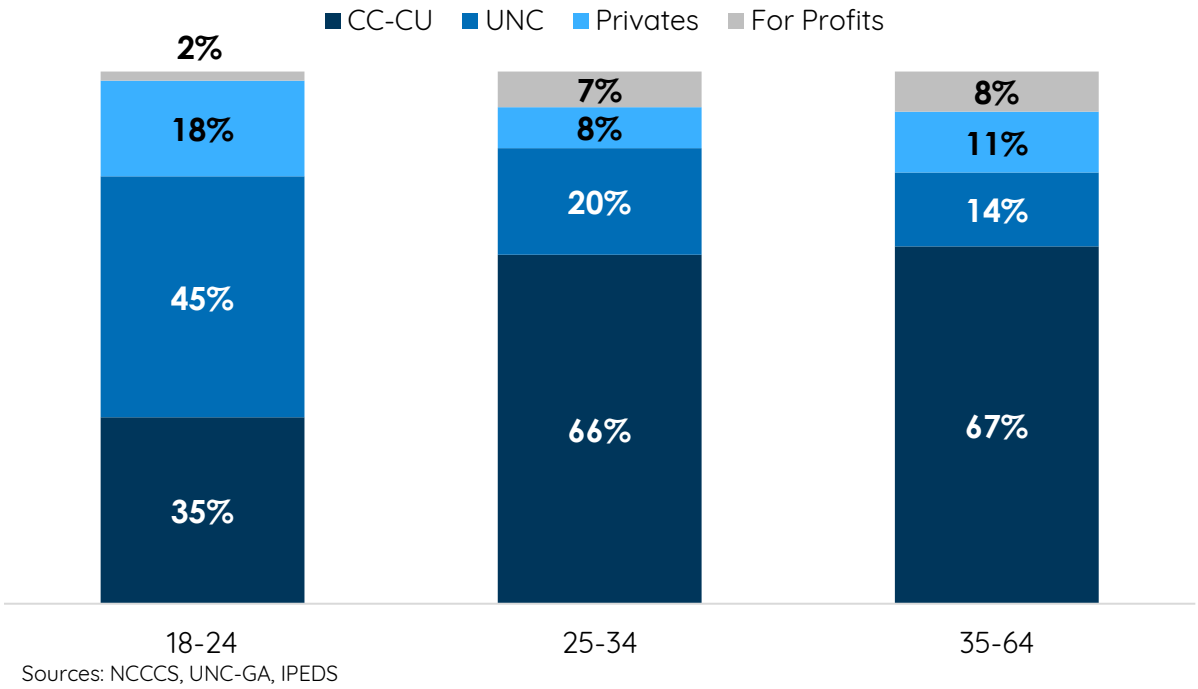
Note: This graph does not include the small number of non-credit seeking enrollments (9K) at UNC and private institutions. Including these non-credit enrollments has minimal impacts on the age patterns depicted. | Sources: NCCS, UNC-GA, IPEDS

While over half of curriculum enrollments (56%) are at ages 18-24, much greater shares are at ages 25-34 (25%) and 35-64 (20%) compared to 4-year institutions. The proportion of for-profit credit program enrollments is even more heavily concentrated at these ages (64% aged 25-64 vs. 30% of all degree seekers). In contrast to credit enrollments, most continuing education enrollments are at older ages (55% at ages 35-64) and just 17% are aged 18-24.

The chart below highlights the institution of enrollment by the age of the individual enrolled. Of the 324,000 traditional college-age students—individuals aged 18-24—enrolled in a postsecondary credit program at a 2- or 4-year degree institution in Fall 2015, most were in a 4-year program: 45% were enrolled at UNC and 18% were enrolled at a private, non-profit (predominantly 4-year) institution, representing 63% of all Fall 2015 enrollments for this age group. In contrast, two-thirds of adults 25-34 and adults 35-64 enrolled in a postsecondary credit program are attending a community college. For these age groups, enrollments at UNC and private non-profits comprise a much smaller share of enrollments while enrollment at for-profit institutions is more common.

Figure 12. Two-thirds of older (25+) credit seekers enrolled at NCCC

Institution of Enrollment for Postsecondary Credit Seekers by Age, Fall 2015



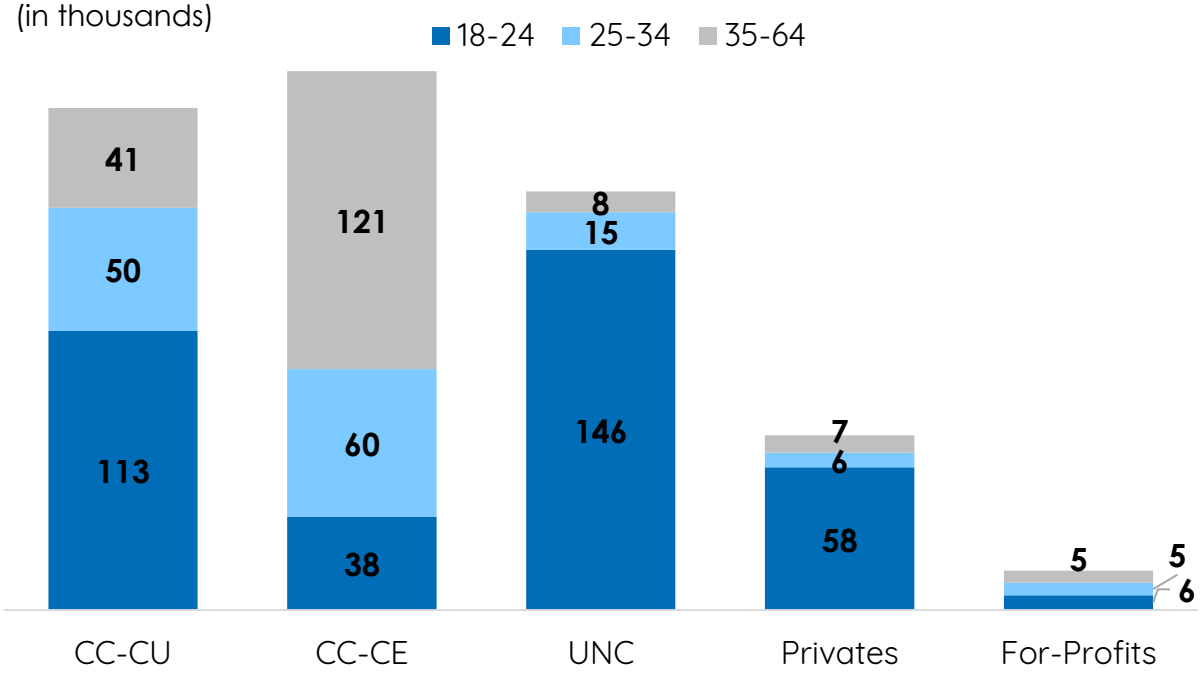
Sources: NCCCS, UNC-GA, IPEDS

Looking at the total number of enrollments for both postsecondary credit and continuing education programs highlights the broader reach of North Carolina's community colleges. From an institutional perspective, most enrollments at UNC and non-profit privates are of traditional college age (18-24). UNC enrolled 146,000 18-24 year-olds in Fall 2015, nearly equivalent to the total young adult enrollments of both curriculum (113K) and continuing education (38K) programs combined. While more than half of community college curriculum enrollments are young adults, the community colleges also serve a large pool of older students in these programs. Including enrollment in non-credit programs, such as continuing education, further highlights the wider age range served by the North Carolina Community College System.

Figure 13. 88% of non-traditional students are in NCCC CU or CE

Number Enrolled by Age, Institution, and Program of Enrollment, Fall 2015

(in thousands)



Sources: NCCCS, UNC-GA, IPEDS

Non-Traditional Students

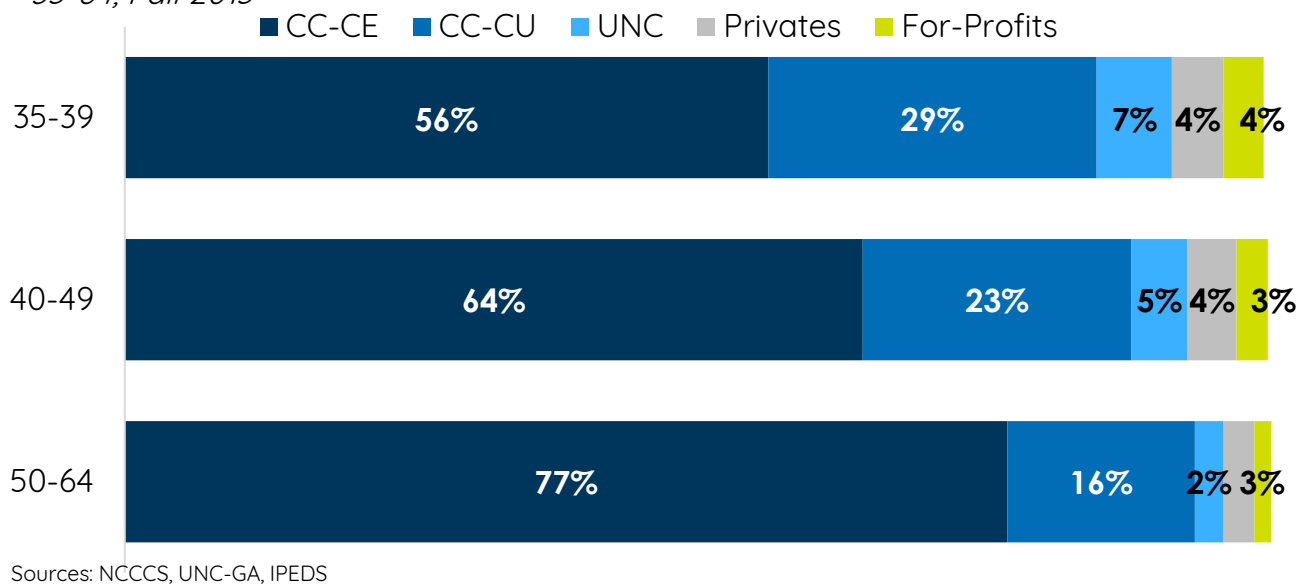
In 2015, just over 60,000 North Carolina adults aged 35-64 were enrolled in a postsecondary credit program. The majority—two of every three (67%)—were enrolled in a community college curriculum program. Another 121,000 adults aged 35-64 were enrolled in a community college continuing education program. In total, there were 182,000 North Carolina adults aged 35-64 in a postsecondary credit or continuing education program in Fall 2015; 88% of those enrolled were at a North Carolina Community College.

In Fall 2015:

- 45,500 adults aged 35-39 were enrolled in a postsecondary program. Eighty-five percent were enrolled at a community college: 56% in continuing education and 29% in curriculum.
- 75,500 adults aged 40-49 were enrolled in a postsecondary program. Of these, 87% were enrolled at a community college: 64% in continuing education and 23% in curriculum.
- 61,000 adults aged 50-64 were enrolled in a postsecondary program. Of these, 93% were enrolled at a community college: 77% in continuing education and 16% in curriculum.

Figure 14. Older students increasingly concentrated in CC-CE

Share of Postsecondary Enrollments by Institution and Program Type for Ages 35-64, Fall 2015



Sources: NCCCS, UNC-GA, IPEDS

Sex

Fifty-eight percent (58%) of North Carolina adults enrolled in a postsecondary credit program in Fall 2015 were female. While men make up 51% of the adult population without a college degree, they made up just 42% of credit-seeking enrollments in 2015.

The gap in male and female enrollment patterns persists across institution types. In Fall 2015:

- UNC students were 56% female and 44% male
- Private non-profit students were 58% female and 42% male
- Community college curriculum students were 60% female and 40% male
- For-profit degree students were 65% female and 35% male

While there is a heavy skew towards female enrollments at all institutions, for-profit degree program enrollments had the highest proportion of female enrollments.

In contrast to postsecondary credit program enrollments, men made up 60% of continuing education enrollments at community colleges while women made up just 40%. This may reflect different industries of employment for men and women with different demands for postsecondary credit completion (curriculum) versus third-party licenses and certificates (continuing education). Among all postsecondary enrollments (credit and non-credit), 53% of students were female and 47% were male in 2015.

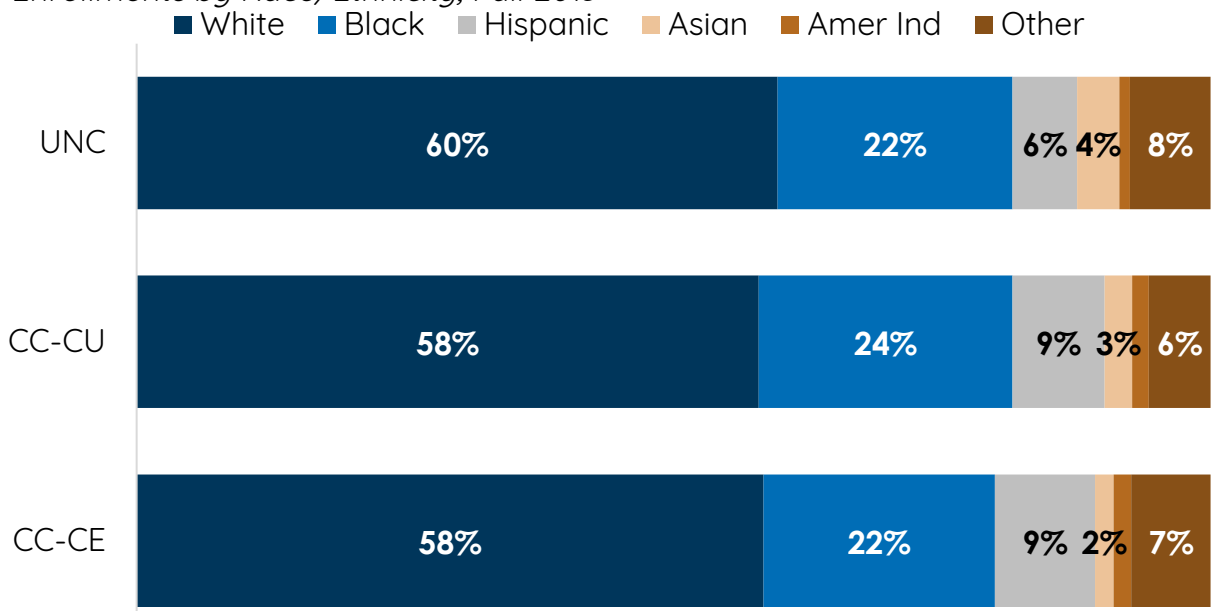
Race/Ethnicity

Despite differences in enrollments by age and sex, there were few differences in the characteristics of fall enrollments by race and ethnicity.[17] Three-fifths (60%) of UNC Fall 2015

enrollments were white; among NCCCS students, 58% of both curriculum and continuing education students were white. The largest share of black or African-American enrollments was in community college curriculum programs (24%); 22% of UNC and continuing education students were black.

Figure 15. Higher share of Hispanic students in NCCC

Enrollments by Race/Ethnicity, Fall 2015



Sources: NCCCS, UNC-GA

The greatest difference in enrollments across programs is among three smaller groups: Hispanic, Asian, and American Indian students. A much larger share of students in the North Carolina Community College System are Hispanic than at UNC—9% versus 6%. While American Indian enrollments contribute an overall small share, American Indian students made up 1.6% of Fall 2015 enrollments in both continuing education and curriculum programs. These students were just 1% of UNC Fall enrollments. In contrast, UNC has a greater share of Asian students (4%) than both curriculum (3%) and continuing education (2%) programs.

Enrollment Trends, 2001-2015

Credit-Seeking Enrollments

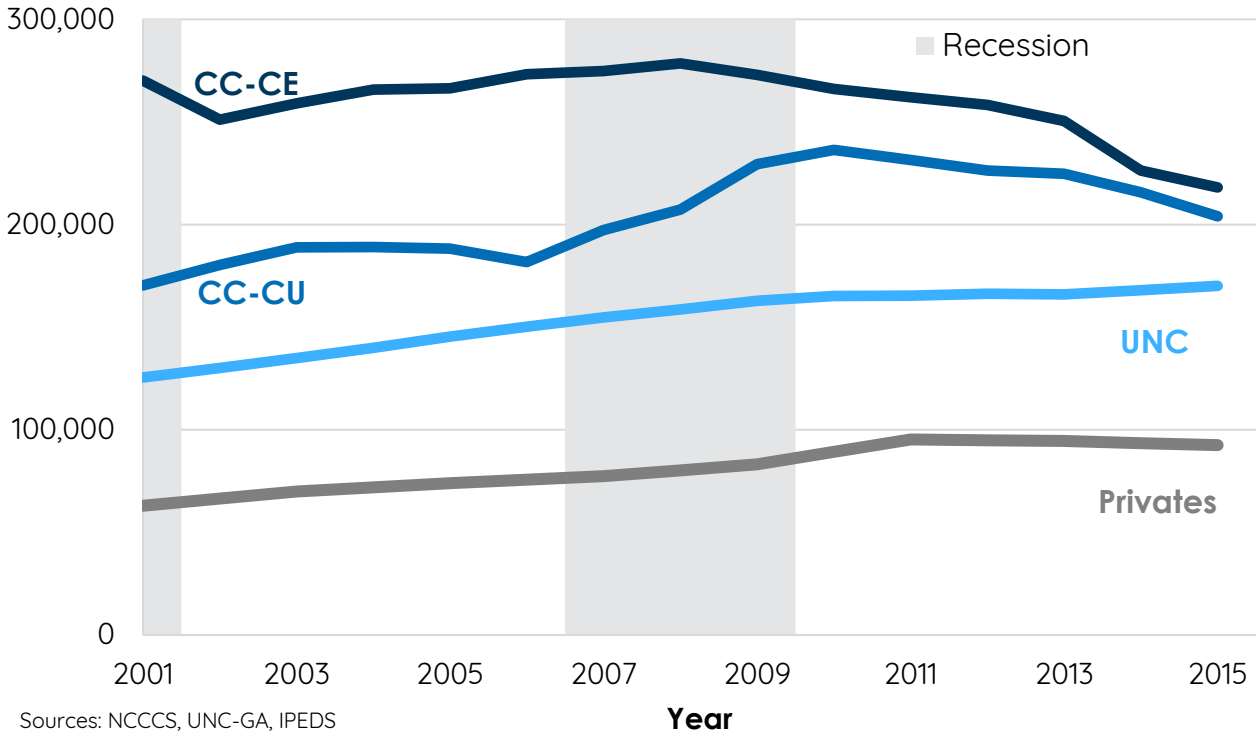
In 2001, just under 357,000 individuals were enrolled in a credit-seeking program in North Carolina, representing 13.2% of the adult population without a college degree. By 2011, this number had climbed to 488,000 or 15.2% of all adults aged 18-64 without a degree. It has since steadily declined. There were 462,000 North Carolina working-age adults enrolled in a postsecondary credit-seeking program in Fall 2015, or 14.5% of the adult population lacking a college degree. This was 26,000 fewer working-age adults enrolled in a postsecondary credit program compared to 2011, a decline of -5.3% from peak enrollments.

Declines in total credit-seeking enrollments were primarily driven by declines in curriculum enrollments. While 2015 was the highest year of UNC enrollments since 2001, fall curriculum enrollments were down -32,000 or -14% from peak enrollments in 2010. Private enrollments

were down slightly, dropping to 87,800 from a high of 91,100 in 2011, driven largely by a decrease in for-profit enrollments.

Figure 16. Enrollments in 4-year institutions stable while NCCC curriculum and continuing education enrollments decline

Total Fall enrollments by institution type, 2001-2015[18]



Sources: NCCCS, UNC-GA, IPEDS

Continuing Education Enrollments

Continuing education enrollments saw a slight uptick during the height of the Great Recession, but then continued a steady, downward trend. In 2015, continuing education enrollments hit a 15-year low, down 62,000 or -23% from their 2001 peak. While the large decline observed between 2013 and 2014 may be due to institutional changes in the classification of Small Business Center clients, the overall trend since 2008 has been steadily declining enrollments.

Part III. Post-Graduation Intentions

In 2015, nearly 99,000 individuals graduated from North Carolina public high schools. Most students —84%—reported plans to continue their education: 45% reported intentions to attend a 4-year college or university and 39% reported intentions to attend a community college or technical school. Sixteen percent of graduates reported other plans, with just under 10% specifying plans to move immediately into employment and nearly 5% intending to enlist in the military.

Geographic Variation

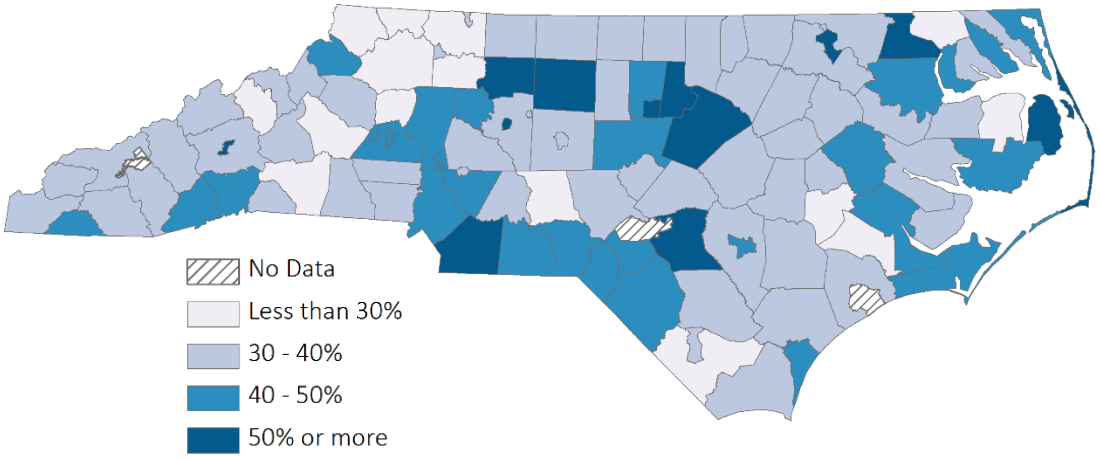
There is significant variation in post-graduation intentions across counties. In general, high school graduates from the state's urban areas—Charlotte, the Triad, and the Triangle—are the most likely to report intentions to attend a 4-year college or university. Seventy-six percent of graduates from Chapel Hill-Carrboro Schools reported intentions to attend a 4-year college or university in 2015, the highest rate statewide. Weldon City Schools in Halifax County has the second highest rate (66%), followed by Asheville City Schools (65%), Wake County Schools (60%), and Union County Schools (57%).

In contrast, intentions to attend community college or technical programs are higher in rural areas, particularly in the northwest portion of the state near the Virginia border and in the regions west of Winston-Salem and Charlotte. Graduates of Rutherford County Schools had the highest proportion of graduates—64%—reporting plans to attend community college or technical programs in 2015, followed by graduates from Wilkes County Schools (59%) and Columbus County Schools (59%).

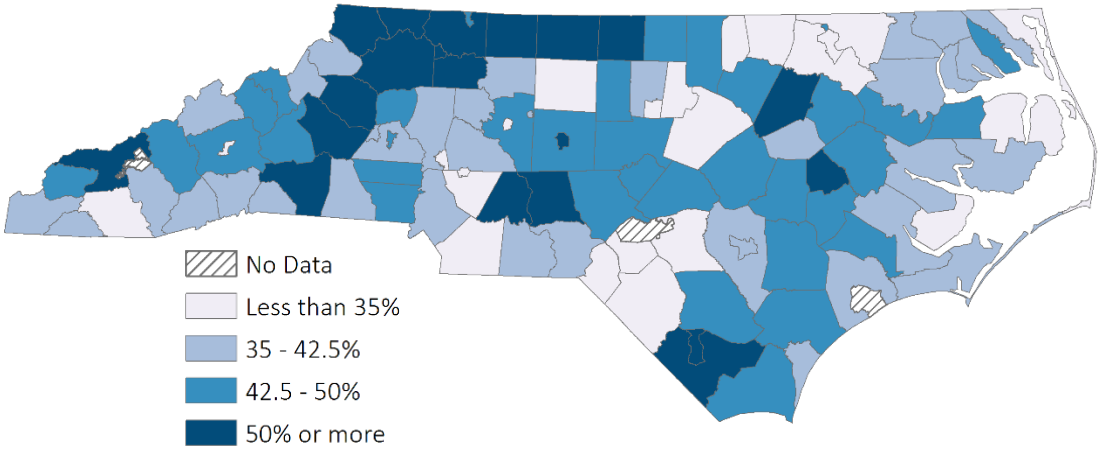
Students from LEAs in the northeastern and eastern portions of the state were more likely to report plans to go directly into the military, the workforce, or other plans after graduation. Forty percent of graduates from Jones County Schools reported such plans in 2015, the highest rate in the state. More than a third of graduates reported intentions to enlist, go directly into employment, or pursue other non-postsecondary training plans in Tyrrell County Schools (38%), Northampton County Schools (35%), Pamlico County Schools (35%), and Vance County Schools (34%).

Figure 17. Detailed NC High School Graduate Intentions by LEA, 2015

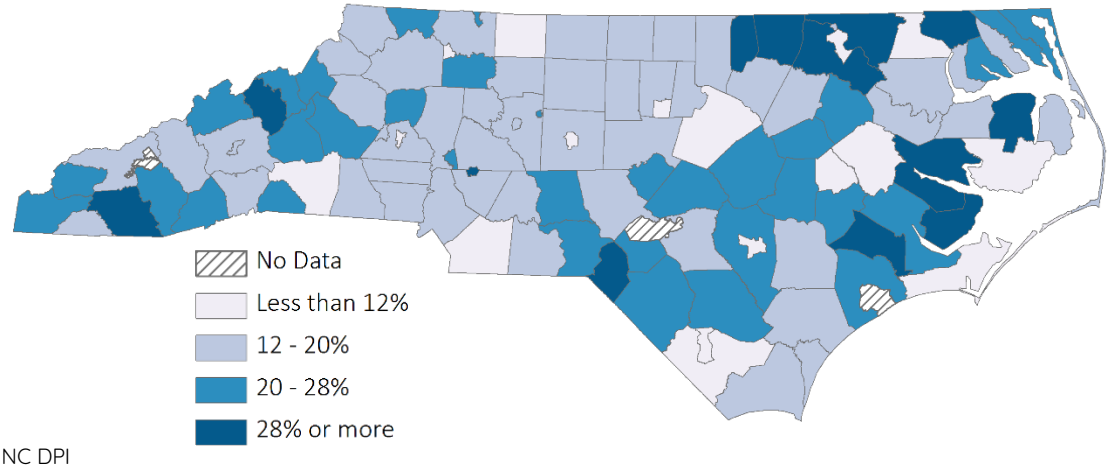
4-year College or University



Community College or Technical Program



Military, Employment, or Other Non-School Intention



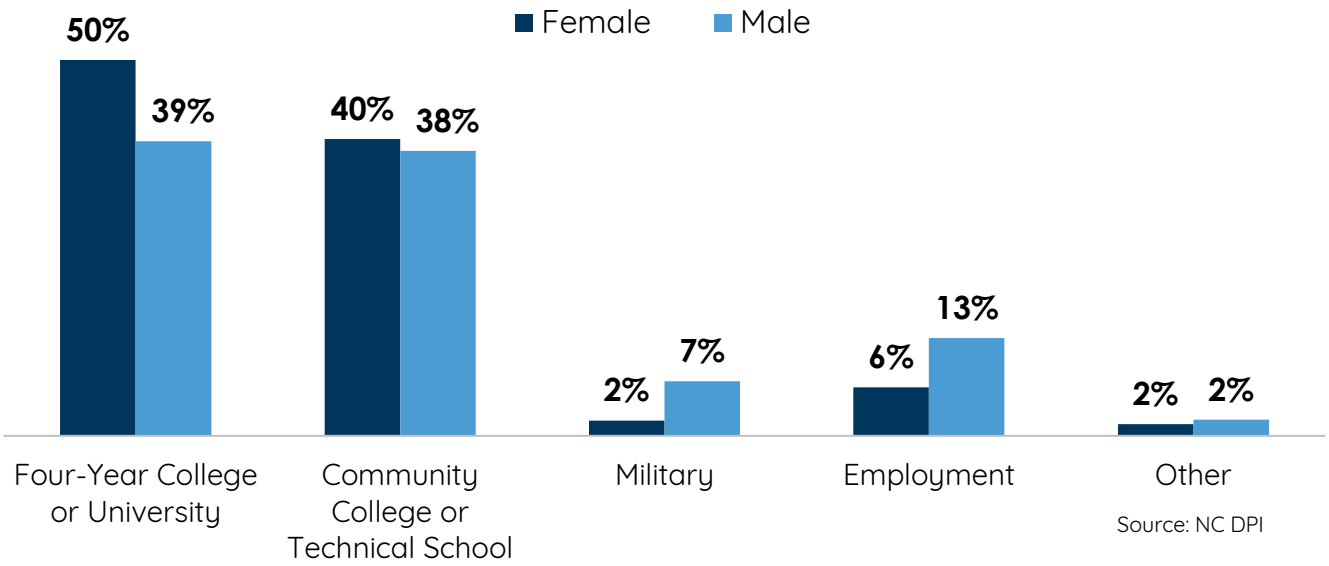
Source: NC DPI

Sex

North Carolina's female high school graduates are more likely to report intentions to continue their education than their male counterparts. In 2015, 90% of female high school graduates reported intentions to attend a 4-year college or university, community college, or technical school compared to 77% of male graduates, a difference of 13 percentage points. Large sex differences exist for all racial/ethnic subgroups.

Figure 18. Women more likely than men to state 4-year intent

High school graduate intentions by sex, 2015



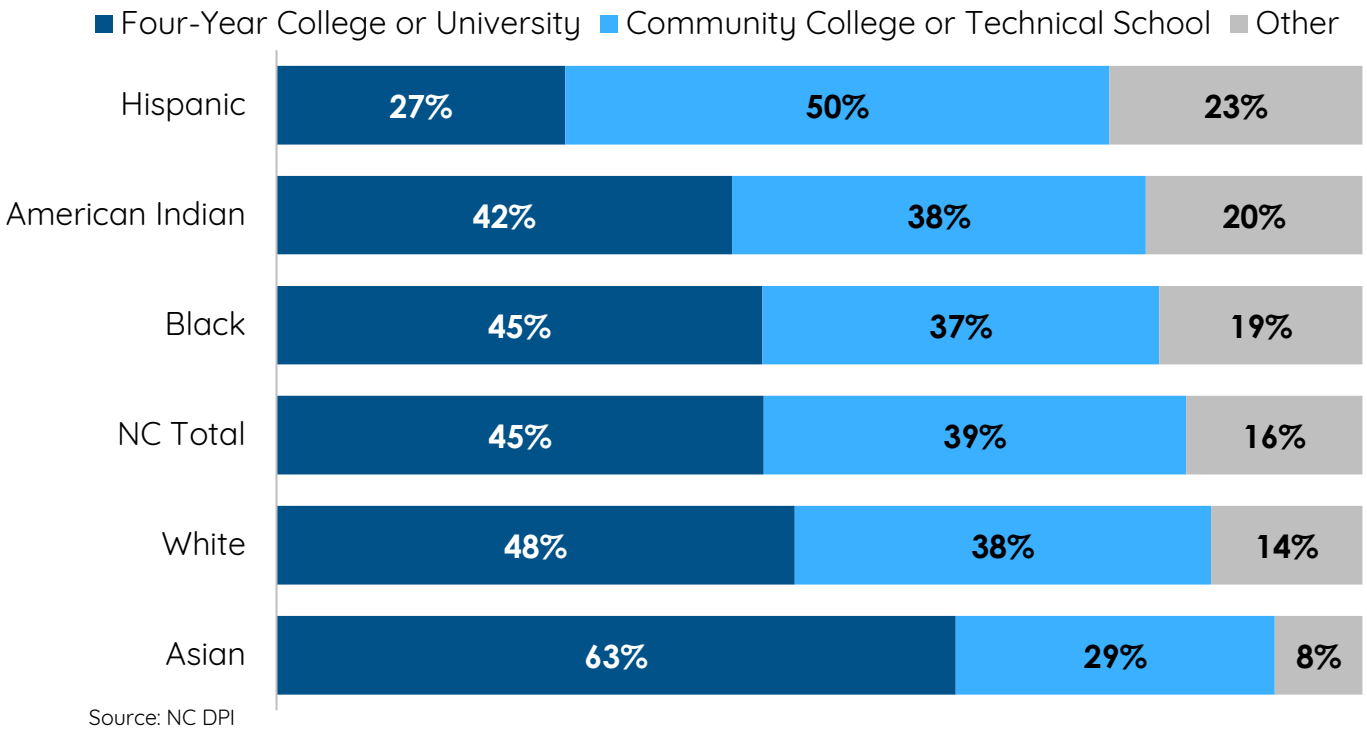
Source: NC DPI

The largest difference in intentions is for intent to attend a 4-year college or university: half of female graduate's report plans to go to a 4-year college or university compared to 39% of male graduates. A similar proportion of graduates report intentions to attend a community college or technical school, with a slightly higher proportion of women (40%) reporting these intentions than men (38%). In contrast, male graduates are more likely to report intentions to enter the military (7% vs. 2% of women) or directly into employment (13% vs. 6% of women).

Race/Ethnicity

Across all racial/ethnic groups, most students reported intent to continue their education after high school graduation. Asian high school graduates reported the highest intentions to attend postsecondary in 2015 (92%), followed by white (86%), black (81%), American Indian (80%), and Hispanic (77%) students. Across groups, there were significant differences in the types of institutions graduates planned to attend.

Figure 19. NC High School Graduate Intentions by Race/Ethnicity, 2015



Source: NC DPI

In 2015, nearly two-thirds of Asian graduates (63%) reported intentions to attend a 4-year college or university after graduation, 18 percentage points higher than the statewide average of 45%. In contrast, just 27% of Hispanic graduates reported intentions to attend a 4-year institution, 18 percentage points lower than the statewide average. Differences from the state average were less pronounced among other groups. Compared to all high school graduates, white graduates were slightly more likely to report intentions to attend a 4-year institution (48%), American Indian graduates were slightly less likely to report these intentions (42%), and the proportion of black high school graduates intending to go on to a 4-year college or university (45%) did not differ from the state average.

Hispanic graduates were the most likely to report plans to attend community colleges or technical schools: 50% in 2015, higher than the state average of 39%. Asian graduates were the least likely to report plans to attend a community college or technical schools (29%), while other racial/ethnic subgroups showed minimal differences from the state average.

Hispanic graduates were also the most likely to report plans to enlist in the military, start employment, or pursue some other plan: 23% vs. 16% of graduates statewide in 2015. American Indian (20%) and black graduates (19%) were also more likely to report non-education-related plans. White (14%) and Asian (8%) graduates were less likely to report them.

Part IV. Projections

Between 2016 and 2036, North Carolina is projected to grow by 22%, gaining nearly 2.3 million new residents to grow from just under 10.2 million residents to 12.4 million.[19] During this time, the prime working-age population (18-64) is projected to grow by 870,000 individuals to 7.2 million, a growth rate of just 14%, slower than overall population growth.

Age Projections

Not all age groups are projected to grow at the same rate over the next two decades. Between 2016 and 2036:

- the population aged 18-24 is projected to grow by 8%, a numeric gain of 83,000;
- the population aged 25-34 is projected to grow by 20%, a numeric gain of 262,000; and
- the population aged 35-64 is projected to grow by 13%, a numeric gain of 522,000.

The population aged 25-34 is projected to grow the fastest, as the large Millennial generation will be aging into this category over this period. By 2036, the population share at ages 25-34 will be 22% of working-age adults, a one-percentage point increase from this group's current share (21%). With slower growth rates over the next two decades, younger adults (18-24) will be a smaller share of the working-age population in 2036 than they are today: 15% versus 16%.

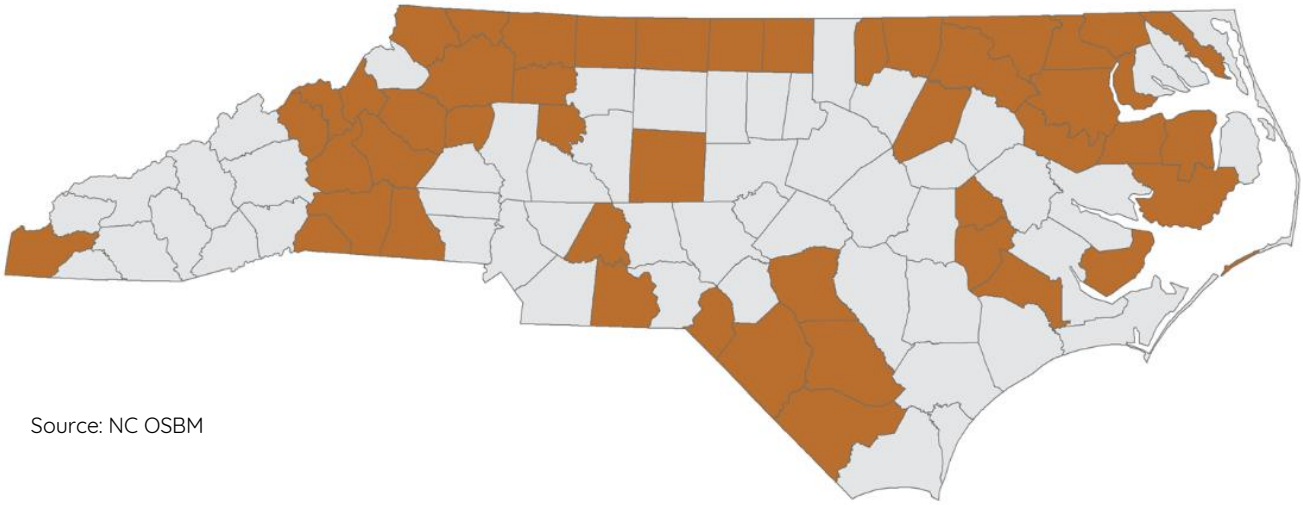
Geographic Variation

Population growth will be uneven across the state. Eight counties are projected to see their prime working-age population increase by more than 30% by 2036, including Mecklenburg (37%) and Wake (35%). These two large, fast-growing counties will account for more than half of the state's total working-age population growth over this period, with Mecklenburg projected to gain 252,000 more 18-64 year-olds and Wake projected to gain an additional 236,000. The largest percentage increases in the prime working-age population are projected to occur in Hoke (50%), Brunswick (43%), and Johnston (38%) counties.

Meanwhile, 58 of the state's 100 counties are projected to have fewer working-age adults in 2036 than they do today. In some communities, the projected losses are small. Dare, Carteret, and Stanly counties, for example, are each projected to lose less than 1% of their prime working-age population. More than a dozen communities, however, are projected to see marked declines: 15 counties are projected to lose more than 10% of their prime working-age population between 2016 and 2036, with the largest percentage declines projected in Halifax (-23%), Washington (-22%), and Chowan (-21%). Numerically, the largest losses in the prime working-age group are projected to occur in Cumberland (-13K), Nash (-7.2K), and Halifax (-7.2K).

These losses will be most heavily concentrated in the slower-growing youngest age group (18-24). Sixty-four of the state's counties are projected to have fewer 18-24 year-olds in 2036 than they do today. Another 27 are projected to have fewer 25-34 year-olds. Taken together, these groups comprise 80% of the North Carolina Community College System's curriculum enrollments and 44% of continuing education enrollments. By 2036, nearly half of the state's counties—47—will have fewer 18-34 year-olds than they do today.

Figure 20. 47 counties projected to have fewer 18-34 year-olds in 2036 than in 2016



Source: NC OSBM

These trends have the potential to affect the North Carolina Community College System significantly. Young adult population declines are projected to occur in areas of the state where high school graduates typically report greater intent to attend community colleges; a larger share of the adult population lacks college degrees, and a higher share of those adults without college degrees tend to participate in community college programs.

Target Population Projections

Holding current educational attainment and enrollment patterns constant highlights the potential impact of population aging and uneven population growth patterns (see **Appendix D** for projections methodology). Future population growth is projected to occur primarily in the state's largest urban areas. In these areas, most adults already hold a postsecondary degree (associate degree or higher). If nothing changed in educational attainment between now and 2036, the state's total prime working-age population will increase by 14% while the population that already has a degree is projected to increase by 18%. Meanwhile, the target population of adults who need a postsecondary degree is projected to grow by just 12% or 374,000.

Most of the growth in the target population will be at older ages: 54% of this increase will be at ages 35-64. Just 16% of this increase will be among young adults (18-24) and 30% at ages 35-64.

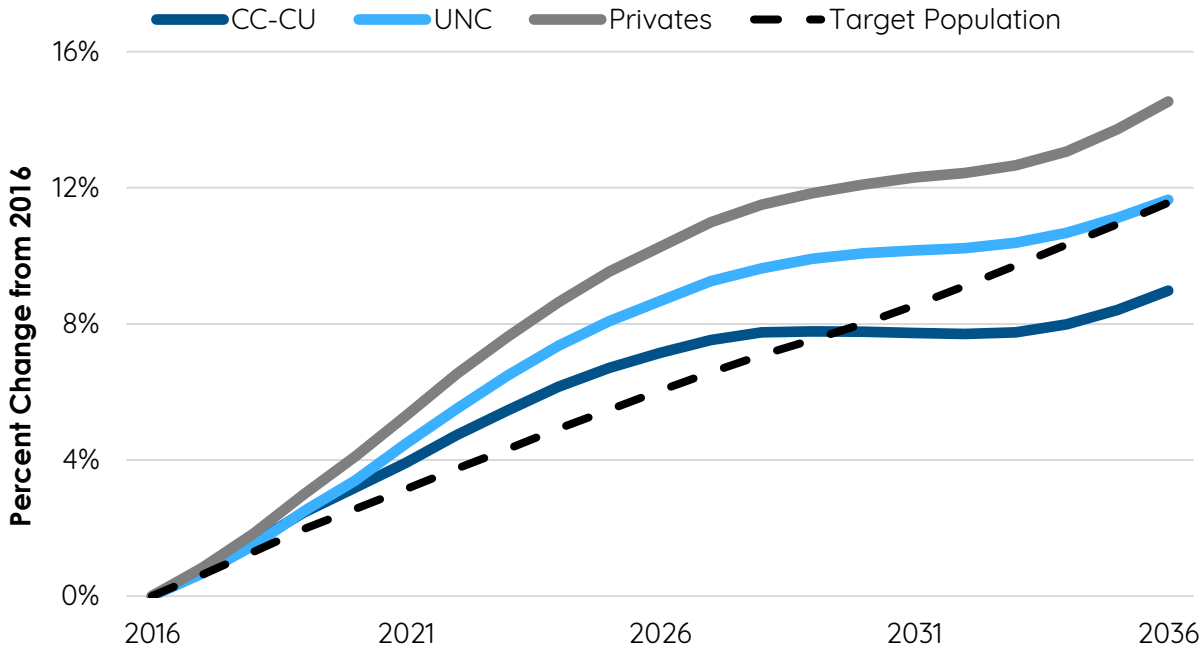
Degree Program Enrollment Projections

Historically, older populations enroll in postsecondary institutions at lower rates than younger populations, and more urban populations are less likely to enroll at community colleges than rural populations. The combined impact of projected geographic shifts in population distribution and population aging means that curriculum enrollments in the North Carolina Community College System are projected to grow more slowly than the target population.

Assuming both educational attainment and enrollment rates remain constant at current levels, curriculum enrollments at the state's community colleges are projected to increase by 20,300 students between 2016 and 2036, a growth rate of 9%. Under the current projection model, statewide curriculum enrollments will match their 2010 peak by 2022 and will continue to grow slowly over the next 14 years.

Projected growth in North Carolina Community College System curriculum enrollments is slower than the projected growth for all other institutional types. Over this period, enrollments in all other 2- and 4-year programs are projected to keep pace with or grow faster than the projected increase in the target population. Between 2016 and 2036, UNC enrollments are projected to increase by 12% while enrollments in private colleges and institutions are expected to increase by nearly 15%. These differing trajectories reflect the increasing concentration of the state's population in urban areas where the target population is currently more likely to enroll in 4-year institutions.

Figure 21. Projected Percent Change (vs. 2016) in Target Population and Credit-Seeking Fall Enrollments by Institution Type



These projections do not adjust for future economic changes and business cycle shifts that may significantly impact enrollment.

Geographic Variation

Projected growth differs widely across the state. **Table 2** (below) highlights the projected percent change in the total working-age population (18-64), the target population, and total enrollments in either curriculum or continuing education programs between 2016 and 2036. The table highlights change at the state level and by Prosperity Zone and sub-Prosperity Zone.

Three large, faster-growing urban areas are projected to drive overall population growth: Raleigh-Durham, Charlotte, and Wilmington are projected to see growth rates more than

double the statewide rate. Raleigh-Durham and Wilmington are each projected to see curriculum enrollments increase by 24%, the highest growth rate in the state.

The state's other large metropolitan regions are also projected to gain population and enrollments over the next two decades, albeit at a slower pace. Asheville and Jacksonville-New Bern regions are projected to grow close to the state average, while the Piedmont-Triad Prosperity Zone (Greensboro and Winston-Salem) is projected to grow more slowly than the state.

Table 2. Projected change in selected populations (18-64) by Prosperity Zone (PZ) and sub-PZ, 2016-2036

	18-64 Year-Olds		CC-CU Fall Enrollments (18-64)
	Total Population	Target Population	
North Carolina	**14%**	**12%**	**9%**
North Central	**23%**	**21%**	**20%**
Raleigh-Durham	26%	24%	24%
Rocky Mount-Wilson	-5%	-5%	-8%
Northeast	**-4%**	**-5%**	**-5%**
Elizabeth City	-1%	-1%	-4%
Greenville	-6%	-6%	-5%
Northwest	**-4%**	**-5%**	**-8%**
Boone-Wilkesboro	-0.2%	-1%	-7%
Hickory	-7%	-7%	-9%
Piedmont-Triad	**4%**	**3%**	**1%**
Greensboro	3%	2%	1%
Winston-Salem	5%	4%	2%
Sandhills	**-2%**	**-2%**	**-2%**
Fayetteville-Lumberton	-3%	-3%	-4%
Pinehurst-Rockingham	5%	4%	6%
Southeast	**14%**	**14%**	**13%**
Goldsboro-Kinston	-0.4%	-0.5%	-2%
Jacksonville-New Bern	8%	10%	13%
Wilmington	29%	28%	24%
Southwest	**26%**	**24%**	**19%**
Charlotte	26%	24%	19%
Western	**11%**	**10%**	**7%**
Asheville	12%	11%	8%
Waynesville-Franklin	8%	8%	5%

All sub-Prosperity Zones within the Northeast and Northwest Prosperity Zones are projected to see across the board declines between 2016 and 2036. The largest projected percentage decline in curriculum enrollments is in the Hickory sub-PZ (-9%) followed by the Rocky Mount-Wilson sub-PZ (-8%) in the North Central region.

Reflecting the concentration of future population and enrollment growth in the state's core urban areas, most of the service areas of the 58 community colleges within the NC Community College System are projected to have fewer enrollments in 2036 than they do today (see **Table A2**).

Part V. Opportunities and Challenges

The North Carolina Community College System has seen steadily declining enrollments since 2010. While this partly reflects the improving economy - and while population projections suggest that the System may recover some of these enrollments - many individual community colleges face demographic headwinds that may bring increased recruitment challenges in coming decades. Overall population growth is down compared to prior decades in both absolute numbers and growth rates. Moreover, the target population—adults without a degree (associate or higher)–has decreased since 2010.

In addition to these fundamental demographic challenges, the North Carolina Community College System faces challenges and opportunities in four other key areas: 1) the institutional landscape (for-profit institutions); 2) the transition from high school into postsecondary; 3) widening attainment and enrollment gaps between men and women; and 4) growing diversity in the child population. Successfully addressing these challenges will help North Carolina ensure sufficient levels of education and training to remain competitive in the changing economy.

Demographic Headwinds

Challenge: Population aging & urbanization

In the next 20 years, the young adult age group (18-24) is projected to grow more slowly than any other age group. By 2036, nearly two-thirds of North Carolina counties—64—are projected to have fewer 18-24 year-olds than they do today. These declining young adult populations are heavily concentrated in regions of the state where high school seniors report the greatest intent to attend community colleges, where a larger share of the adult population lacks a degree, and where a higher share of adults without degrees tend to participate in community college programs.

Different projected growth trends across age groups and geography mean that the community colleges' target demographic (adults without a college degree) is projected to grow more slowly than the overall population of 18-64 year-olds (12% vs. 14%). While overall enrollments in the North Carolina Community College System are projected to grow, their projected growth lags the projected growth in the adult population without a college degree by three percentage points (9% vs. 12%).

Opportunity: 78% of adults without a college degree are not enrolled anywhere

Though demand for workers with postsecondary credentials has increased, just 22% of North Carolina adults without a college degree were enrolled in a 2- or 4-year degree program or in an NCCCS continuing education program in the Fall of 2015. The other 78% of adults without a degree—2.5 million working-age North Carolinians—were not pursuing additional education and training. Most of these individuals are between the ages of 35 and 64 (1.7 million in 2015) and 25-34 (nearly 0.5 million). Successfully enrolling these individuals in postsecondary degree, credential, and licensing programs may offer opportunities for career advancement for these individuals while simultaneously meeting the state's need for an increasingly educated workforce.

Institutional Landscape and the Impact of For-Profits

Challenge: Growth of for-profits

For-profit institutions have attracted a growing share of degree seekers with significant impacts on the market share of the state's community colleges. In 2001, nearly half (48%) of all prime working-age adults enrolled in a degree-seeking program were in a curriculum program at NCCCS. In contrast, just over 1,000 students were enrolled in a for-profit degree program, representing only 0.3% of all statewide degree-seekers. By 2015, the share of degree-seekers enrolled in community colleges had declined by nearly four percentage points to 44%. This decline in market share was nearly mirrored by growth in the for-profit sector. In 2015, for-profit enrollments comprised 3.3% of all degree-seeking enrollments, a three-percentage point increase over this period.

The impacts of for-profit institutions on community college market share are most evident among students at older ages. Between 2001 and 2015:

- the NCCCS share of 18-24 year-old degree-seeking enrollments grew from 34% to 35%, an increase of one percentage point. Growth for this age group in the for-profit share of enrollments outpaced community college growth, rising 1.4 percentage points over this period (from 0.3% to 1.7%).

- the NCCCS share of 25-34 year-old enrollments declined from 70% to 66%. Meanwhile, the for-profit share of this age group increased from 0.5% to 7%.

- the NCCCS share of 35-64 year-old degree-seeking enrollments declined from 78% to 67%, a decline of 11 percentage points. For-profit enrollment grew from 0.2% to 8% by 2015.

Opportunity: Regain market share from for-profit institutions

Although for-profit enrollments have declined slightly since their 2011 peak, they continue to draw students who may otherwise be prime targets for community colleges. Barring broader changes in the institutional landscape of the state, for-profit institutions will pose continued challenges to community college enrollments as the population shifts to older ages where for-profit enrollments are more common. Students in for-profit institutions tend to have higher debt loads and higher loan default rates.

If the North Carolina Community College System could regain half of the market share currently held by for-profit institutions, it would significantly impact system enrollments, especially for curriculum programs. In 2015, converting half of for-profit enrollments into the community colleges would have increased curriculum enrollments by 7,600 and continuing education enrollments by nearly 2,500.

Transition from High School to Postsecondary

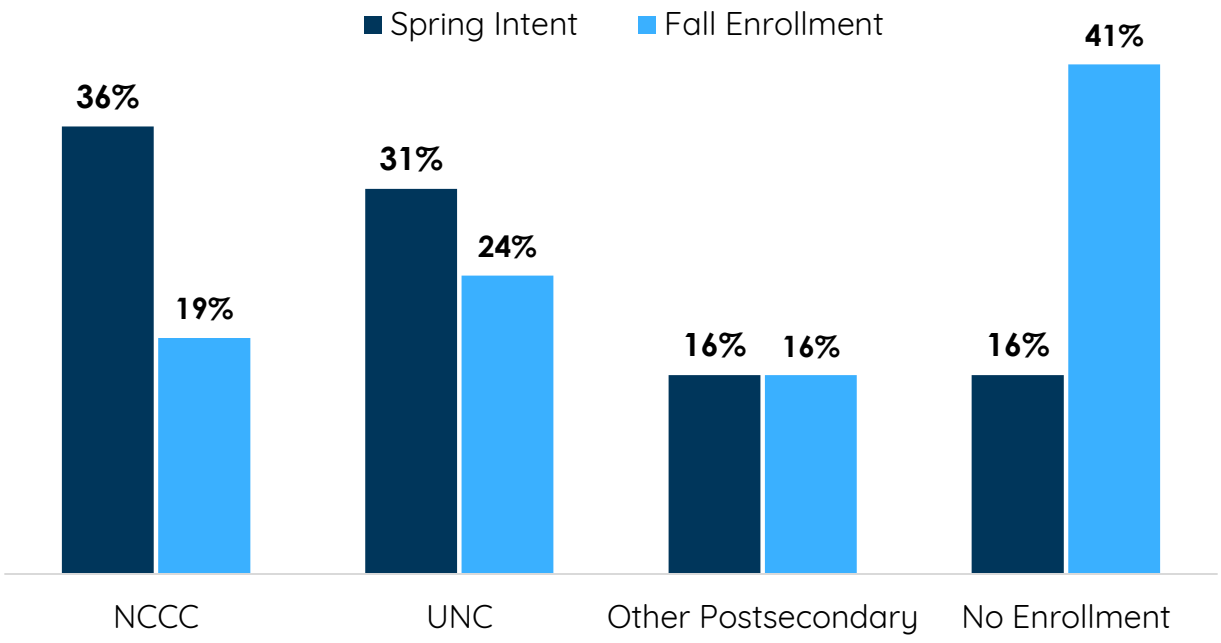
Challenge: Students with interest in postsecondary do not enroll in fall

Most North Carolina high school graduating seniors report some intention to continue their education following graduation, but actual enrollments do not align with stated intentions. In 2015, for example, 83% of graduates reported intentions to continue their education in a 4-

year or 2-year program, but just 62% of recent NC high school graduates were enrolled at a degree-granting institution in the fall semester following high school graduation. Specifically:

- 36% stated intent to enroll in a North Carolina community college vs. 19% who were enrolled at NCCC in the following fall semester, 17 percentage points lower than stated intent;
- 31% stated intent to enroll at UNC vs. 24% who were enrolled in the fall, 7 percentage points below stated intent;
- 16% stated intent to enroll in a program other than UNC or NCCC in the spring of graduation; in Fall 2015, one percentage point more—16%—were enrolled at a degree-granting institution that was not UNC or NCCC[20]; and
- 16% of recent graduates reported intentions to pursue non-postsecondary activities (e.g., work), but more than twice as many graduates—41%—were not enrolled in a postsecondary institution in the subsequent fall.

Figure 22. NC public high school graduates' spring semester intentions and fall semester enrollments, 2015



Sources: NCCCS, UNC-GA, IPEDS, NC DPI

In total, one in four (25%) recent high school graduates reported intentions to continue their education but were not enrolled in a 2- or 4-year institution in the following fall. Some of these students may ultimately enroll in a postsecondary program but will choose not to start in the fall semester immediately after high school. Approximately 10% of graduates will enroll in community colleges between spring and the following fall, but many of them never transition to postsecondary.[21]

Opportunity: Improve alignment between intentions and enrollment

In 2015, nearly 25,000 high school graduates stated an explicit interest in enrolling in a postsecondary institution but did not show up in the following fall semester. Improving the alignment between stated intentions and ultimate enrollment could help many more North Carolinians take their first steps towards education and training that will pay dividends in the labor market for years into the future.

Attainment and Enrollment Gaps

Challenge: Growing achievement gap between men and women

There is a large and growing sex gap in educational attainment and enrollment. Compared to women, North Carolina men are less likely to have graduated high school (86% vs. 90%) and less likely to have completed a postsecondary degree (47% vs. 51%), meaning more men need postsecondary education and training programs. Among those without a college degree, men enroll in postsecondary programs at lower rates than women and are much less likely than women to enroll in curriculum programs. Just five percent of men without a college degree are enrolled in North Carolina Community College System curriculum programs compared to eight percent of eligible women.[22]

Opportunity: Close sex gaps among young adults (18-24).

Young adults are the key target of opportunity because both men and women aged 18-24 are more likely to enroll in curriculum programs.

Impact of closing the high school attainment gap

One option is to increase young men's (18-24) high school completion rates (including via Community College Basic Skills) to equal those of young women. While this is important for the future success of these individuals, it exerts a minimal influence on projected enrollments, adding less than 750 curriculum enrollments and less than 300 continuing education enrollments system-wide in any given fall semester. While a gap exists in high school completion, it is smallest among young adults. The bigger margin between men and women is in postsecondary enrollment rates following high school graduation.

Impact of closing community college enrollment gaps

Bringing young men's enrollment rates in alignment with those of young women represents a major opportunity for enrollment growth. Because there are significant sex differences in patterns of CU and CE enrollment, shifting young men to patterns shown by young women would increase curriculum enrollments by 21,000 but decrease continuing education enrollments slightly (-4,000). System-wide, the community colleges would gain a net increase of more than 17,000 Curriculum or Continuing Education enrollments.[23]

Rising Diversity

Opportunity: Growing Hispanic population

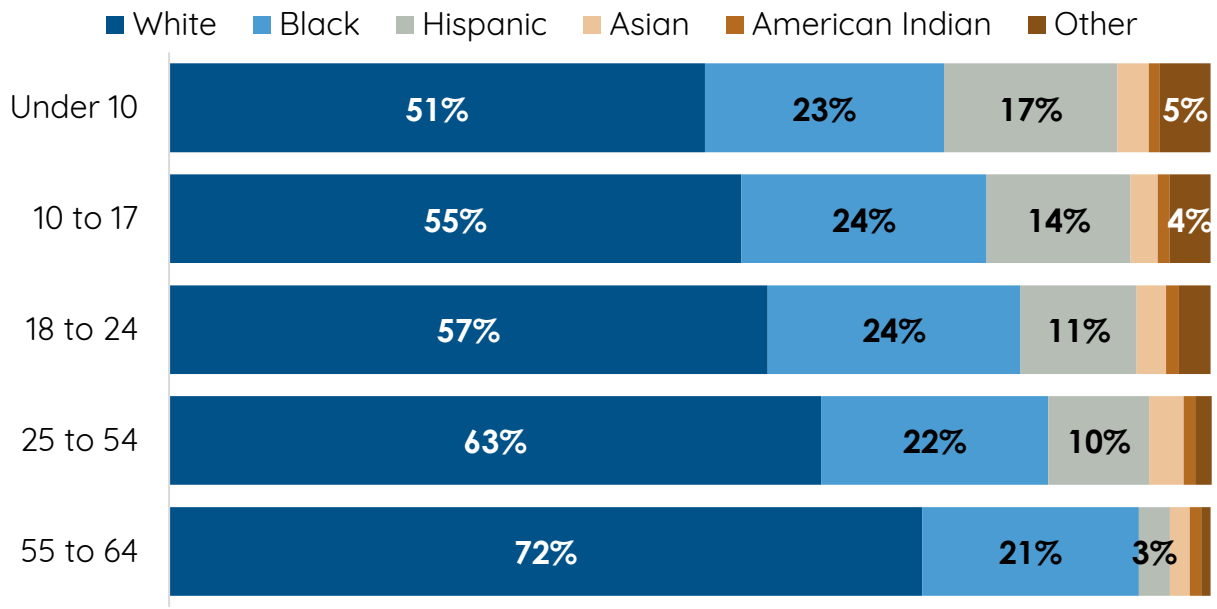
Among recent high school graduates,[24] Hispanic students are much more likely than other students to report intentions to enroll in a community college or technical institute following graduation. Half of North Carolina's Hispanic high school graduates intend to continue their education at a community college or technical institute, 11 percentage points higher than the state average (39%) and the highest of any racial/ethnic group. Among young adults enrolled in a public degree program, Hispanic students are much more likely to be enrolled

at a community college (58%) compared to white (44%), black (40%), and Asian students (35%).

Nearly 355,000 North Carolina children are Hispanic or Latino. While a sizable number of their parents may be immigrants, more than ninety percent (92%) of these children are U.S.-born; most were born in North Carolina. Hispanic children comprise 14% of children aged 10-17 and 17% of children under age 10. These individuals will be a growing source of students for the North Carolina Community College System.

Figure 23. 1 in 7 NC children is Hispanic

Racial/ethnic composition of NC population by selected age groups, 2015



Source: American Community Survey

Challenge: Connecting intentions to enrollment

Though Hispanic students report relatively high levels of interest in postsecondary education, just 34% of Hispanic young adults without a college degree were enrolled at either UNC or an NC community college in 2015.[25] This is significantly lower than the enrollment rates of their Asian (52%) and white (44%) peers. There are fewer differences when examining just enrollment in community colleges:

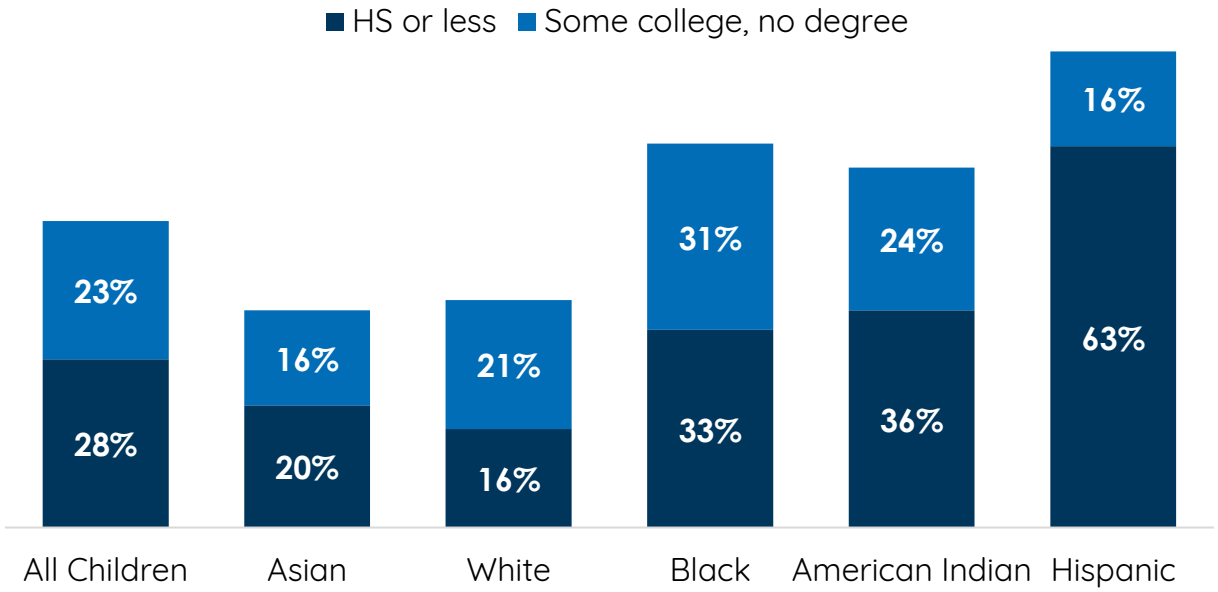
- 16% of Hispanic young adults without a college degree were in a curriculum program vs. 17% of white and Asian young adults;
- 5.4% of Hispanic young adults without a college degree were in a continuing education program vs. 4.6% of white and 3.4% of Asian young adults.

Overall, 22% of Hispanic 18-24 year-olds without a degree were attending a North Carolina Community College system school in Fall 2015, a rate comparable to that of white young adults (22%) and slightly higher than Asian young adults (20%). These rates would likely be even higher if Hispanic youth increased overall enrollment in postsecondary education programs.

One reason for the gap between postsecondary intentions and enrollment may be that many Hispanic and minority youth would be first-generation college students. In 2015, nearly two-thirds of Hispanic children—63%—were living in a household in which neither parent had exposure to any education or training beyond high school. Another 16% of Hispanic children lived in a household where the highest educational attainment of their parent or guardian was some college, no degree.

Figure 24. Many North Carolina children live in households with limited exposure to postsecondary education

Highest parental attainment for North Carolina children in households, 2015



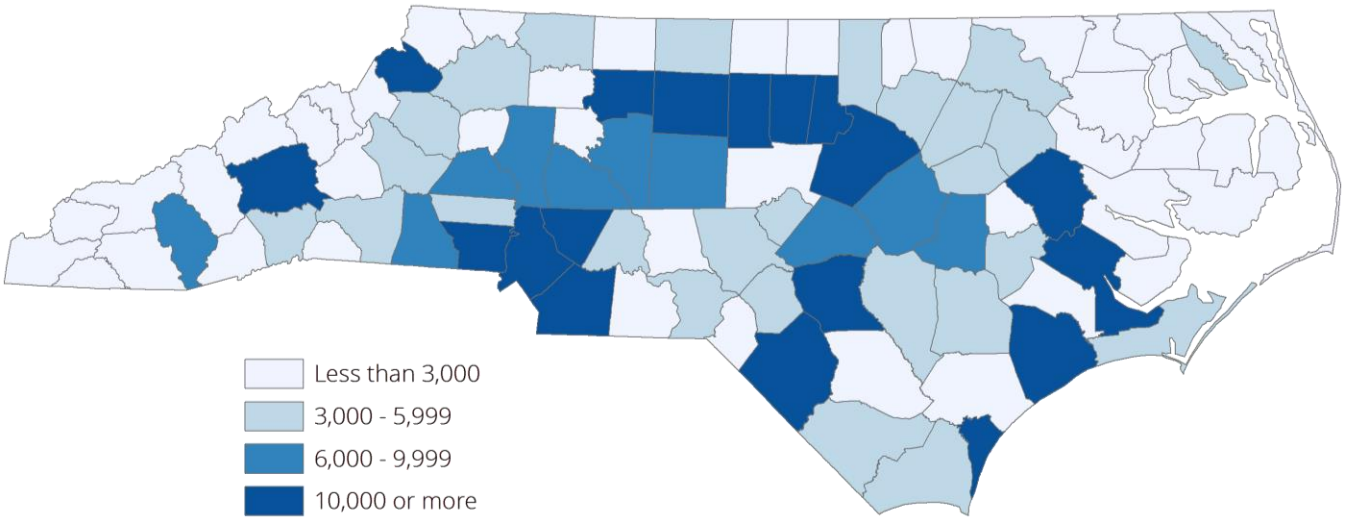
Source: 2015 American Community Survey

Overall, 89% of North Carolina's Hispanic children live in a household with no degree completion and minimal experience with the postsecondary education system. For these children, parental language ability and literacy may also be a barrier to successful enrollment. Black and American Indian children are also likely to live in households without a parent with a postsecondary degree. New programs may be necessary for community colleges to reach, engage, and successfully enroll these future students.

Appendix A: Additional Tables and Figures

Figure A1. Urban areas, military bases, and college towns have large numbers of young adults without a college degree

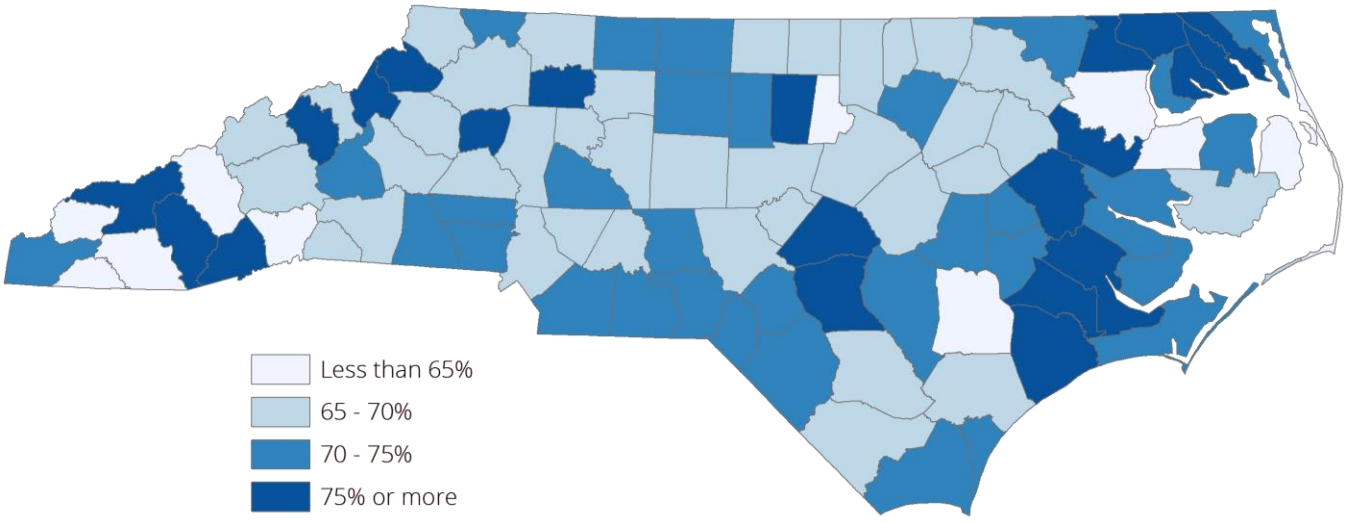
Number of adults (18-24) with HS/GED or some college, no degree by county, 2011-15



Source: 2015 5-year American Community Survey

Figure A2. Most young adults lack a college degree

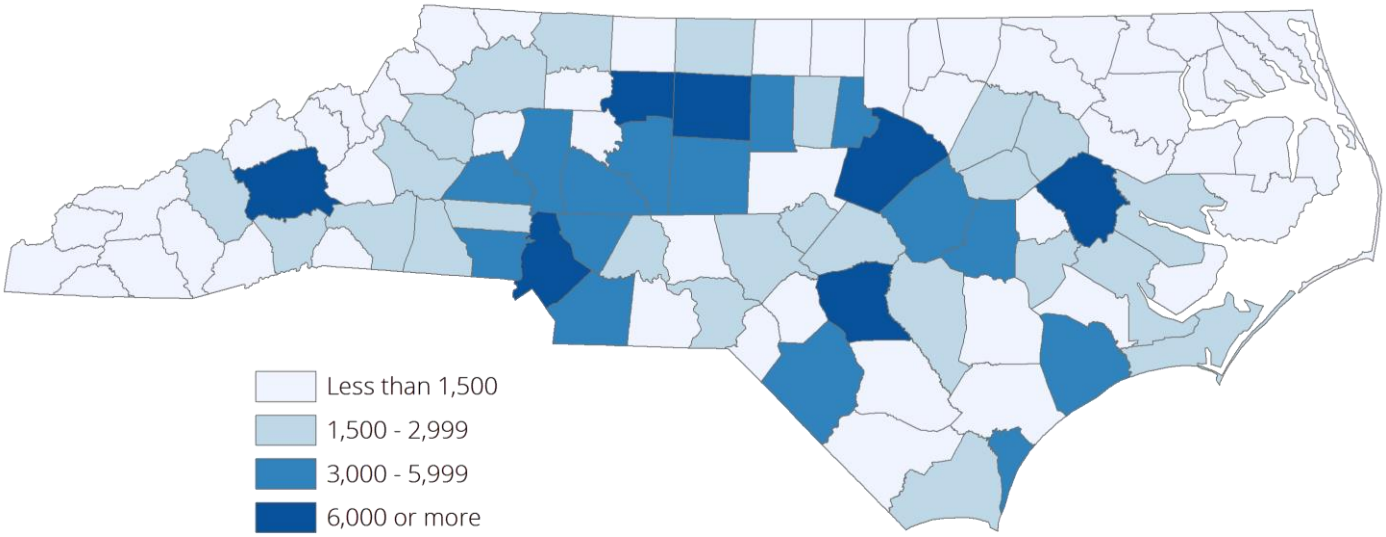
Percentage of adults (18-24) with HS/GED or some college, no degree by county, 2011-15



Source: 2015 5-year American Community Survey

Figure A3. Size of curriculum enrollments aligns with adult population without a degree

Number of adults (18-64) enrolled in NCCC Curriculum program, Fall 2011-2015



Source: 2015 5-year American Community Survey

Table A1. Targets for NCCCS Curriculum and Continuing Education Programs: Number and Percent of Adults with HS/GED or Some College, No Degree by County and Age, ACS 2011-15

	Ages 18-64		18-24		25-34		35-64	
County	#	%	#	%	#	%	#	%
Alamance	52,306	55%	11,489	72%	8,837	49%	31,980	52%
Alexander	14,695	65%	2,408	79%	2,676	64%	9,611	63%
Alleghany	3,616	57%	612	72%	443	51%	2,561	55%
Anson	10,830	65%	1,883	74%	1,944	56%	7,003	66%
Ashe	8,943	56%	1,287	69%	1,750	60%	5,906	52%
Avery	6,821	60%	1,360	76%	1,214	58%	4,247	57%
Beaufort	15,885	58%	2,719	72%	2,343	52%	10,823	56%
Bertie	7,923	62%	1,213	62%	1,500	61%	5,210	62%
Bladen	12,127	58%	2,051	66%	1,908	57%	8,168	56%
Brunswick	35,389	54%	4,852	70%	5,672	49%	24,865	52%
Buncombe	74,646	48%	14,374	69%	15,398	46%	44,874	44%
Burke	29,760	54%	5,385	65%	5,279	55%	19,096	51%
Cabarrus	61,602	53%	10,599	70%	11,148	49%	39,855	51%
Caldwell	28,488	57%	4,587	68%	5,157	61%	18,744	53%
Camden	3,330	54%	719	83%	365	41%	2,246	50%
Carteret	22,689	55%	3,499	72%	3,892	52%	15,298	53%
Caswell	8,942	62%	1,256	69%	1,633	63%	6,053	61%
Catawba	50,747	54%	9,069	69%	9,240	53%	32,438	51%
Chatham	17,474	46%	2,987	70%	2,998	49%	11,489	41%
Cherokee	8,843	58%	1,235	72%	1,389	60%	6,219	56%
Chowan	4,920	59%	721	70%	962	59%	3,237	56%
Clay	3,342	58%	463	65%	490	59%	2,389	56%
Cleveland	35,141	59%	6,812	73%	6,433	62%	21,896	56%
Columbus	20,697	60%	3,351	67%	4,135	64%	13,211	57%
Craven	37,716	60%	10,647	79%	8,386	59%	18,683	52%
Cumberland	125,107	61%	32,322	79%	32,583	60%	60,202	54%
Currituck	9,088	58%	1,262	71%	1,481	59%	6,345	56%
Dare	11,991	55%	1,289	56%	2,157	55%	8,545	54%
Davidson	55,889	56%	8,773	68%	9,169	51%	37,947	55%
Davie	13,164	53%	2,024	69%	2,010	53%	9,130	51%
Duplin	18,971	53%	3,328	64%	3,092	45%	12,551	53%
Durham	75,958	39%	20,055	64%	15,352	29%	40,551	37%
Edgecombe	20,233	61%	3,326	66%	3,891	61%	13,016	60%
Forsyth	109,964	49%	24,873	68%	19,399	42%	65,692	46%
Franklin	21,640	56%	3,939	72%	3,649	53%	14,052	53%
Gaston	75,279	58%	13,108	72%	13,810	56%	48,361	56%
Gates	4,568	64%	727	78%	839	70%	3,002	60%

County	Ages 18-64		18-24		25-34		35-64	
	#	%	#	%	#	%	#	%
Graham	3,091	62%	527	64%	505	67%	2,059	60%
Granville	21,095	57%	3,531	65%	3,393	55%	14,171	56%
Greene	7,641	56%	1,366	71%	1,508	53%	4,767	53%
Guilford	163,075	50%	41,509	73%	30,434	44%	91,132	46%
Halifax	19,216	60%	3,229	68%	3,555	62%	12,432	57%
Harnett	45,358	59%	9,201	75%	10,005	54%	26,152	57%
Haywood	18,236	53%	2,766	64%	3,201	54%	12,269	50%
Henderson	32,060	52%	4,657	64%	5,549	51%	21,854	50%
Hertford	9,758	64%	2,101	78%	1,740	63%	5,917	60%
Hoke	18,289	57%	3,232	71%	4,950	52%	10,107	56%
Hyde	2,441	66%	338	68%	490	64%	1,613	66%
Iredell	53,293	52%	9,507	68%	9,680	52%	34,106	49%
Jackson	16,499	61%	6,650	86%	2,608	52%	7,241	51%
Johnston	59,459	54%	9,880	69%	11,121	52%	38,458	52%
Jones	3,897	64%	562	78%	732	61%	2,603	63%
Lee	18,559	52%	3,539	68%	3,277	44%	11,743	51%
Lenoir	20,301	58%	3,549	71%	3,730	58%	13,022	55%
Lincoln	27,612	56%	4,544	72%	4,374	54%	18,694	53%
Macon	10,086	54%	1,338	60%	1,715	53%	7,033	53%
Madison	7,065	55%	1,509	67%	920	45%	4,636	54%
Martin	8,893	64%	1,465	79%	1,511	65%	5,917	60%
McDowell	16,919	62%	2,551	71%	3,043	62%	11,325	60%
Mecklenburg	273,431	42%	60,991	65%	59,236	36%	153,204	39%
Mitchell	5,029	56%	830	66%	812	53%	3,387	54%
Montgomery	8,785	54%	1,623	73%	1,591	56%	5,571	50%
Moore	24,104	48%	4,282	70%	4,317	45%	15,505	44%
Nash	33,850	58%	5,603	67%	6,312	59%	21,935	56%
New Hanover	69,326	50%	20,495	74%	12,658	43%	36,173	44%
Northampton	7,308	59%	1,290	73%	1,237	61%	4,781	56%
Onslow	84,598	70%	33,070	85%	22,290	66%	29,238	60%
Orange	39,343	41%	19,928	77%	4,602	26%	14,813	28%
Pamlico	4,576	60%	697	73%	744	56%	3,135	59%
Pasquotank	15,450	61%	3,648	80%	3,055	56%	8,747	57%
Pender	18,794	56%	2,879	66%	3,414	56%	12,501	54%
Perquimans	4,691	62%	657	83%	759	56%	3,275	61%
Person	14,759	62%	2,147	68%	2,519	62%	10,093	60%
Pitt	64,941	56%	25,748	78%	10,358	44%	28,835	48%
Polk	5,947	53%	922	69%	917	55%	4,108	49%
Randolph	49,549	57%	7,899	68%	8,283	52%	33,367	57%

County	Ages 18-64		18-24		25-34		35-64	
	#	%	#	%	#	%	#	%
Richmond	17,084	61%	3,120	71%	3,083	58%	10,881	60%
Robeson	48,566	59%	10,524	71%	9,110	54%	28,932	57%
Rockingham	34,427	61%	5,303	72%	5,694	59%	23,430	59%
Rowan	47,994	57%	9,146	72%	8,739	53%	30,109	54%
Rutherford	22,498	56%	3,386	65%	3,684	52%	15,428	56%
Sampson	21,951	58%	3,939	73%	3,669	50%	14,343	57%
Scotland	13,005	59%	2,716	74%	2,226	55%	8,063	57%
Stanly	21,667	59%	3,925	70%	3,612	55%	14,130	57%
Stokes	17,195	60%	2,474	71%	2,504	53%	12,217	60%
Surry	23,358	54%	3,986	67%	3,695	49%	15,677	52%
Swain	4,820	58%	825	80%	942	54%	3,053	55%
Transylvania	10,082	55%	2,202	77%	1,704	59%	6,176	49%
Tyrrell	1,571	59%	233	72%	215	50%	1,123	59%
Union	63,257	49%	13,044	72%	10,705	51%	39,508	44%
Vance	15,886	59%	2,820	67%	2,643	53%	10,423	59%
Wake	242,627	38%	63,421	68%	48,169	33%	131,037	33%
Warren	7,307	60%	1,158	65%	1,150	54%	4,999	60%
Washington	4,398	61%	691	63%	657	62%	3,050	60%
Watauga	23,420	62%	14,263	87%	2,337	43%	6,820	42%
Wayne	43,718	57%	9,163	72%	8,835	54%	25,720	54%
Wilkes	22,616	55%	3,638	68%	3,507	52%	15,471	54%
Wilson	27,683	56%	4,939	67%	5,230	55%	17,514	54%
Yadkin	13,272	58%	2,301	76%	2,042	54%	8,929	56%
Yancey	6,069	59%	956	77%	983	58%	4,130	57%

Data Source: 2011-15 American Community Survey

Table A2. Projected Percent Change in Working-Age Population, Postsecondary Degree Eligible, and NCCC Enrollments by County, 2016-2036

Note: *These projections reflect changes in the anticipated Fall enrollments coming from the counties that the system college officially serves. It does not reflect where students enrolled from those counties are most likely to attend.*

	Working-Age Population	Target Population	CU Enrollments
North Carolina	**9%**	**7%**	**2%**
Alamance	18%	17%	17%
Alexander	-8%	-8%	-12%
Alleghany	7%	5%	-6%
Anson	-4%	-5%	-16%
Ashe	-10%	-10%	-10%
Avery	-8%	-9%	-14%
Beaufort	-7%	-7%	-7%
Bertie	-18%	-18%	-29%
Bladen	-5%	-6%	-11%
Brunswick	43%	43%	40%
Buncombe	18%	18%	14%
Burke	-7%	-7%	-10%
Cabarrus	35%	34%	31%
Caldwell	-8%	-8%	-13%
Camden	-14%	-17%	-35%
Carteret	-1%	-1%	-2%
Caswell	-10%	-10%	-13%
Catawba	-5%	-5%	-5%
Chatham	22%	22%	20%
Cherokee	-4%	-4%	-10%
Chowan	-21%	-21%	-27%
Clay	4%	4%	0%
Cleveland	-7%	-7%	-9%
Columbus	-5%	-5%	-11%
Craven	-4%	-2%	8%
Cumberland	-6%	-5%	-4%
Currituck	31%	30%	28%
Dare	-1%	-1%	4%
Davidson	1%	0%	-4%
Davie	0%	-1%	-10%
Duplin	-5%	-6%	-5%
Durham	24%	25%	29%
Edgecombe	-11%	-11%	-9%
Forsyth	15%	15%	17%

	Working-Age Population	Target Population	CU Enrollments
Franklin	13%	13%	11%
Gaston	12%	12%	12%
Gates	-12%	-13%	-28%
Graham	-5%	-5%	-6%
Granville	1%	1%	-3%
Greene	-9%	-9%	-11%
Guilford	3%	3%	2%
Halifax	-23%	-23%	-25%
Harnett	19%	19%	20%
Haywood	8%	8%	5%
Henderson	12%	12%	13%
Hertford	-7%	-7%	-8%
Hoke	50%	51%	54%
Hyde	-17%	-17%	-17%
Iredell	26%	25%	17%
Jackson	13%	12%	10%
Johnston	38%	37%	35%
Jones	-6%	-6%	-13%
Lee	-7%	-7%	-3%
Lenoir	-9%	-9%	-13%
Lincoln	15%	14%	7%
Macon	12%	12%	13%
Madison	4%	4%	4%
Martin	-17%	-17%	-20%
McDowell	-7%	-7%	-8%
Mecklenburg	37%	36%	32%
Mitchell	-6%	-6%	-12%
Montgomery	-3%	-4%	-6%
Moore	15%	15%	19%
Nash	-13%	-13%	-16%
New Hanover	21%	20%	17%
Northampton	-11%	-12%	-25%
Onslow	19%	20%	29%
Orange	12%	9%	10%
Pamlico	-8%	-9%	-18%
Pasquotank	-5%	-5%	1%
Pender	33%	32%	28%
Perquimans	12%	11%	2%
Person	-5%	-5%	-10%
Pitt	3%	3%	5%
Polk	-5%	-6%	-19%

	Working-Age Population	Target Population	CU Enrollments
Randolph	-7%	-8%	-8%
Richmond	-9%	-9%	-7%
Robeson	-8%	-9%	-10%
Rockingham	-10%	-10%	-13%
Rowan	4%	4%	5%
Rutherford	-6%	-7%	-13%
Sampson	-8%	-9%	-3%
Scotland	-19%	-19%	-21%
Stanly	-1%	-1%	-4%
Stokes	-14%	-15%	-29%
Surry	-8%	-9%	-14%
Swain	15%	15%	20%
Transylvania	10%	10%	7%
Tyrrell	-12%	-12%	0%
Union	23%	22%	12%
Vance	-6%	-7%	-8%
Wake	35%	34%	32%
Warren	-6%	-6%	-14%
Washington	-22%	-21%	-26%
Watauga	16%	13%	14%
Wayne	7%	8%	9%
Wilkes	-9%	-9%	-14%
Wilson	9%	9%	5%
Yadkin	-13%	-14%	-22%
Yancey	-3%	-4%	-10%

Appendix B. Data Sources and Limitations

American Community Survey (U.S. Census Bureau)

The U.S. Census Bureau's American Community Survey (ACS) collects demographic, economic, and employment information from about 3.5 million housing unit addresses annually. This yields an annual sample of nearly 100,000 individuals in North Carolina, enabling detailed estimates of educational attainment by demographic characteristics and at sub-state geographic levels.

The educational attainment data included in this report are based on the Census Bureau's annual microdata files and were extracted from IPUMS-USA. The county-level data are based on the 2011-2015 5-year American Community Survey summary files and were accessed at Social Explorer.

The ACS is nationally representative and includes all population members, including individuals currently living in institutional group quarters, such as prisons, and individuals in the military.

High School Graduate Intentions

High school graduate intentions for post-graduation schooling or employment data were retrieved from NC DPI's Statistical Profile Online.[26] This data comes from school-conducted surveys of post-graduation intentions. Prior to graduation, all graduating high school seniors provide detail on their post-graduation education or employment plans.

UNC Enrollment

Data on discrepancies between enrollment intentions and actual enrollment were obtained from UNC General Administration's Institutional Research and Analysis division.[27]

Public Enrollments

Statistics on fall enrollments in public institutions were obtained directly from the North Carolina Community College System and UNC's Institutional Research and Analysis Division.

Private Enrollments

Statistics on fall enrollments in private, not-for-profit and private, for-profit institutions were obtained from the Integrated Postsecondary Education Data System (IPEDS).[28] Analysis was limited to mandatory reporting years (odd years).

County of Residence

Community Colleges

Community college students were assigned to the county they reported as their county of residence in the NCCC data, regardless of which of the 58 institutions they were attending. Individuals who reported an "out-of-state" address were not included in the analysis.

University of North Carolina

UNC students were assigned to the county in which the institution they were attending is located. The information from the Census and ACS used to understand the size of the population eligible for enrollments and actual enrollments is heavily influenced by the presence of institutions. Allocating individuals to their stated county of residence yields inaccurate results for these large 4-year institutions.

Private Enrollments

The IPEDS data reports on the fall enrollments in private not-for-profit and private for-profit institutions. The private not-for-profit institutions are primarily 4-year institutions at which most individuals live on or near campus. In the absence of information on the residence of the student, they were assigned to the home county of institutions. A similar approach was taken for enrollments in private for-profit institutions; students were assigned to the county in which the institution was located. Many of these for-profit institutions offer online courses that can be taken by individuals regardless of county of residence, but there was no way to refine this allocation further.

Limitations

Licenses and Certificates

Neither ACS nor the Current Population Survey (CPS) provide state-level information about vocational credentials/workforce training and certificates that might be considered postsecondary training but occur outside of the formal school system/traditional pathway. Because this training typically occurs within the for-profit sector, this type of information is also not available from state-level databases.

Although the CPS introduced a series of questions about certifications and licenses in its 2015 survey modules, the Bureau of Labor Statistics does not plan to release subnational estimates due to the small sample sizes in most states.[29]

Military Bases

Four North Carolina Community Colleges serve heavily military communities:

- Coastal Carolina CC (Onslow)
- Fayetteville TCC (Cumberland)
- Craven CC (Craven)
- Sandhills CC (Hoke, Moore)

In these service areas, a disproportionately large number of enrolled students report “Out of State” residence, which means they are not assigned to a North Carolina county for the purposes of this analysis. For Coastal Carolina, 33% of Curriculum enrollments for 2011-15 were from out-of-state. This proportion was 18% for Fayetteville TCC, 16% for Craven CC, and 10% for Sandhills CC.

While out-of-state students are among the top five sources of students for multiple colleges in the NC Community College System, they typically represent a smaller proportion of Curriculum enrollments (0.4% at Isothermal CC to 6.4% at Cape Fear CC). Most of the other colleges with a greater presence of out-of-state students are located on the state border and attract students from neighboring South Carolina, Virginia, Tennessee, or Georgia.

These patterns suggest that the county of residence data captured in the NCCCS database may capture current place of residence less well for individuals in heavily military communities. Consequently, the estimates for these communities may underestimate NCCC penetration/overestimate the gaps. At Coastal Carolina CC, for example, 1,480 Curriculum enrollments reported an address "Out of State." If these individuals are not truly out-of-state residents, adding them to the Onslow residents enrolled in 2- or 4-year degree-seeking program in 2011-15 would increase county enrollment from 3,770 to 5,259, an increase of 39%. This would not change the broad findings reported in the preceding analysis—including these individuals in Onslow County increases the share of the target population enrolled in a degree program to just 6.2%, a large increase from 4.5% but still far below the state average of 15%—but could have implications for local decision-making and evaluation that must be considered.

Appendix C. High School Graduation Rates

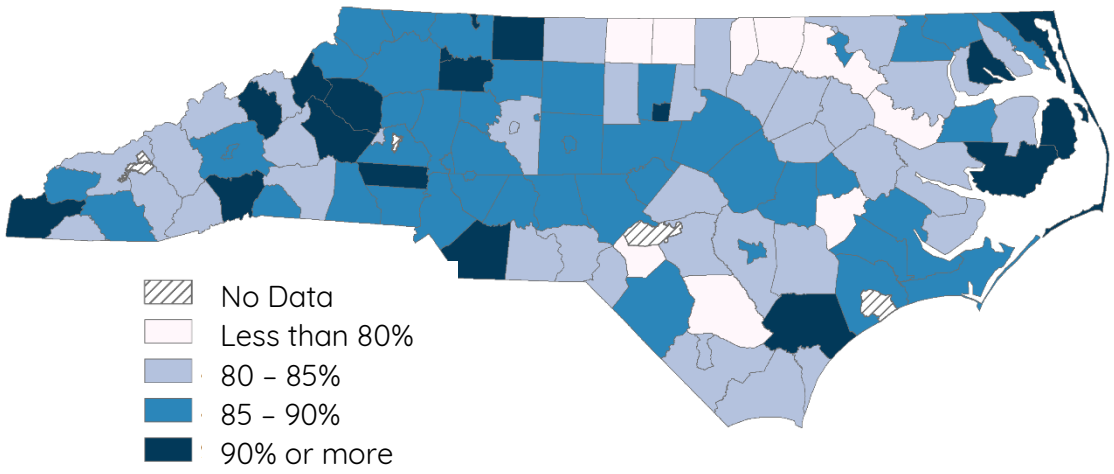
Since 2006, the percentage of students graduating from high school in four years or less has risen 17.3 percentage points—from 68.3% in 2006 to 85.6% in 2015.[30] The state's public high school 4-year graduation rate is above the national average. For school year 2013-14, the national 4-year graduation rate was 82% compared to the state rate of 84%.[31]

Geographic Variation

Hyde County Schools had the highest 4-year graduation rate (95%) while Warren County Schools had the lowest (72%).

Among Local Education Agencies (LEA) with larger student populations—1,000 or more individuals in the high school cohort—Union County Public Schools had the highest 4-year graduation rate (93%) and Durham Public Schools had the lowest (81%).

Figure B1. NC 4-year Graduation Rate by Local Education Agency (LEA), 2014-2015



Source: NC DPI. Data presented are the 4-year graduation rate for individuals who began 9th grade in the 2010-11 school year.

Wake County Schools, the largest school district in the state, had a 4-year graduation rate of 86%, just above the statewide rate in 2015. The second largest school district, Charlotte-Mecklenburg Schools, had a higher 4-year graduation rate: 88%.

Sex

Female students graduate at higher rates than male students do. In 2015, 89% of female students graduated high school in four years or less compared to 82% of males, a gap of 7 percentage points. The graduation rate gap between female and male students has been slowly shrinking since its peak of 9.5 percentage points in 2009. The 2015 data had the smallest gap between female and male students of any year reported since 2006.

Race/Ethnicity

In 2015, Asian students had the highest percentage of students graduating from high school in four years or less (92%), followed by white (88%), black (82%), American Indian (82%), and Hispanic (80%) students. Each group has seen significant increases in the 4-year cohort graduation rate since 2006, with the largest percentage point increases occurring among American Indian (31 percentage points), Hispanic (28 percentage points), and black (22 percentage points) students.

Appendix D. Enrollment Projections Methodology

Projections of future enrollment in the North Carolina Community College System were made using the following approach:

1) **Project future population by age and sex.** County population projections by age and sex were obtained from the North Carolina Office of State Budget and Management.

2) **Project future population by educational attainment.** County-level educational attainment rates for each age and sex group were obtained from the 2011-15 5-Year American Community Survey. These rates were applied to the NC OSBM county projections for the corresponding age and sex groups.

    a. The **Basic Skills Eligible** population was projected by multiplying the number of individuals in each age/sex group by the proportion of that group with less than a high school diploma/GED.

    b. The **target population** (population without a college degree) was projected by multiplying the number of individuals in each age/sex group by the population proportion of that group with a high school diploma/GED or some college, no degree.

3) **Project fall enrollments.** Projections for the future enrolled population were calculated by multiplying the projected target population for the observed county by the county-specific enrollment rates for each age/sex group calculated for 2011-15.

    For example, if there were 100 men aged 25-34 in a county who were in the target population in 2025 and that county had 5% enrollment rates in community college curriculum programs in the most recent data (2011-15 average), the projected enrollment would be 5 men aged 25-34 in curriculum programs in Fall 2025.

4) **Group totals** for "All Sexes" were made by summing the separate projections for men and women. Projections for individual age groups (18-24, 25-34, and 35-64) were made separately and then combined to create projections for "All Ages 18-64."

5) **State, Prosperity Zone, and sub-Prosperity Zone** projections were calculated by summing projections of their component counties.

These projections do not adjust for future economic changes and business cycle shifts that may significantly impact enrollment.

Works Cited

Bureau of Labor Statistics. 2017. "Table 2. Employment Status of the civilian noninstitutional population by certification and licensing status and selected characteristics, 2016 annual averages." *2016 data on certifications and licenses*. U.S. Bureau of Labor Statistics: Washington, DC. Retrieved from https://www.bls.gov/cps/certifications-and-licenses.htm.

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National Center for Education Statistics: Integrated Postsecondary Data System. U.S. Department of Education, Institute of Education Sciences. Retrieved from https://nces.ed.gov/ipeds/Home/UseTheData.

Endnotes

[1] Carnevale, Anthony P., Nicole Smith, and Jeff Strohl. 2013. *Recovery: Job Growth and Education Requirements through 2020 - State Report*. Washington, DC: Georgetown University Center on Education and the Workforce. https://cew.georgetown.edu/wp-content/uploads/StateProjections_6.1.15_agc_v2.pdf.

[2] Carolina Demography analysis of 2015 American Community Survey microdata retrieved from IPUMS-USA.

[3] Carnevale, Anthony P., Nicole Smith, and Jeff Strohl. 2013. *Recovery: Job Growth and Education Requirements through 2020 - State Report*. Washington, DC: Georgetown University Center on Education and the Workforce. https://cew.georgetown.edu/wp-content/uploads/StateProjections_6.1.15_agc_v2.pdf.

[4] Carolina Demography analysis of 2015 American Community Survey microdata retrieved from IPUMS-USA.

[5] For many individuals, lack of a postsecondary degree (associate degree or higher) may not indicate the lack of a credential of workplace value. Individuals can hold alternative credentials, such as certifications or licenses, which confer workplace benefits. While most certifications and licenses are held by individuals who also hold a postsecondary degree (69% in recent BLS survey), these alternative credentials yield real and meaningful economic returns for individuals. Among individuals in the labor force, those who hold a certificate or license have lower unemployment rates (BLS 2017, Table 2) and earn wage premiums (BLS 2017, Table 6), with some of the largest wage premiums accruing to individuals with less than a high school diploma (Ewert and Kominski 2014).

Among North Carolina prime working-age adults (18-64) in 2015, 12% reported that they had less than a high school diploma; 26% reported that they had a high school diploma or GED, and 25% reported "some college, no degree." Some of these individuals may have non-degree alternative credentials, such as certificates or licenses, but this data is not systematically collected and is not currently estimated at the state and sub-state level. Recent national-level data collections provide detailed estimates of the share of the adult population with a professional certification or license. Ewert and Kominski (2014) report information on adults (18+) who responded to the 2012 Survey of Income and Program Participation (SIPP). The U.S. Bureau of Labor Statistics (BLS) recently began collecting information on the prevalence of certifications and licenses among the labor force, beginning with the 2015 Current Population Survey (CPS). They provide detail on the rate of certification/licensure by educational attainment for the adult 25+ population as well as just these adults currently in the labor force (may more closely align with 25-64).

Table A3. Estimates of U.S. Population with Professional Certifications and Licenses by Educational Attainment

Data Source	Ewert and Kominski (2014 analysis of 2012 SIPP)	BLS (2017 analysis of 2016 CPS)	
Population Universe	18+	25+	25+ in Labor Force
Share with Certification or License by Educational Attainment			
Total Population	22%	20%	27%
Less than a high school diploma	6%	4%	8%
High school graduate, no college	14%	10%	16%
Some college, no degree	19%	16%	22%
Associate degree	30%	28%	35%
Bachelor's degree or more	33%	31%	37%

Reflecting their different underlying populations, the estimated share of U.S. adults with a certificate or licensure ranges from 4-8% among individuals without a high school diploma; 10-16% among adults with a high school diploma or equivalent; and 16-22% among adults with some college but no degree. If similar distributions are found in North Carolina, then a reasonable estimate of the share of the 2015 adult population with a workplace credential but no degree likely ranges between 7.3% and 10.6%.

[6] "North Carolina's Talent Pipeline: An Education and Workforce Vision Benchmark/Goal Setting." Internal correspondence provided by NC Commerce.

[7] Statistics presented by NC Commerce Labor and Economic Analysis Division (LEAD) to NC Community College System Board.

DeBellis, Jeff, and Meihui Bodane. 2017. "LEAD Pipes: Role of NC's Labor & Economic Analysis Division in Workforce & Education Pipelines." Labor and Economic Analysis Division (LEAD), NC Department of Commerce. Presentation provided by NC Community College System.

[8] Some of these individuals may hold a certificate or license, but this detail is not captured in the current data available to understand postsecondary education and training at the state level.

[9] Older male Asian residents have higher educational attainment than older female Asian residents, reflecting some of the influences of immigration on the educational attainment of this population.

[10] In 1990, just 34% of North Carolina's prime working-age population had been born in another state or country. This proportion increased to 51% as of 2015. Reflecting the significant attainment differences in these groups (43% of non-NC born adults have an associate degree or higher versus NC-born adults), 60% of the state's adults with a postsecondary degree were born elsewhere.

[11] In 1990, North Carolina's adult population without a degree was 51% female. As of 2015, the population without a degree was 51% male.

[12] Enrollment data for fall semesters from 2000-2015 was provided by both the NC Community College System and UNC. Information on private enrollments was obtained for odd years (in which reporting is mandatory) from the Integrated Postsecondary Education Database (IPEDS). IPEDS was used to understand enrollment trends in 4-year non-profit privates and all for-profit institutions.

[13] In 2006, changes in the NCCCS data collection process caused discrepancies in the share of continuing education students who were reported to have an "Out of State" residence. To produce a more likely estimate of the North Carolina state residents enrolled in NCCCS continuing education programs, we adjusted the state total data to reflect the average out-of-state share of CE enrollments for 2001-2004 for all years for 2006-2015. The age distribution of CE enrollments was proportionally allocated to the new state total estimate. Due to significant county-level discrepancies in address reporting, this report is unable to evaluate county patterns in CE enrollments.

[14] This includes all enrollments at private less than 2-year institutions (both non-profit and for-profit), as well as non-degree-seeking enrollments at UNC.

[15] In most of these 11 counties, the county share of the state's total degree-seeking enrollments was far greater than its share of all adults without a degree. Pitt County, for example, had 5.7% of fall degree-seeking enrollments but just 2% of the state's population without a degree. Cumberland and Buncombe counties were exceptions. Cumberland had 3.9% of the adult population without a degree but just 3.5% of degree-seeking enrollments. In Buncombe, the county share of both adults without a degree and degree-seeking enrollments was 2.3%.

[16] Eight Collaboration for Prosperity Zones were created in 2014 through NC HB 1031, the legislation that created the public-private partnership EDPNC (Economic Development Partnership of North Carolina). The purpose of the prosperity zones is "to enhance collaboration and cooperation between State agencies, local governmental agencies and other regional entities and to facilitate administrative efficiencies within state government." These zones range in size from 10 to 17 counties. More information about the purpose and function of prosperity zones is available in a recent report (January 11, 2018) from the Department of Commerce to the Joint Legislative Economic Development and Global Engagement Oversight Committee at https://www.ncleg.net/DocumentSites/Committees/JLEDGEOC/2017-2018/January%2011,%202018/002%20Commerce_Prosperity_Zone_Presentation_2018-01-11.pdf.

[17] Data on the racial/ethnic characteristics of students enrolled in postsecondary programs is limited to UNC and NCCC enrollments.

[18] IPEDS data for private enrollments is only available for odd years. The even years displayed on this graph are the average enrollments in the fall of the preceding and following years. For example, Fall 2008 enrollments are estimated as the average of Fall 2007 and Fall 2009 enrollments.

[19] North Carolina Office of State Budget and Management. "County/State Population Projections." Retrieved from https://www.osbm.nc.gov/demog/county-projections.

[20] Data Sources: NCCCS and UNC-GA reported enrollments of recent high school graduates; U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary

Education Data System (IPEDS), Fall Enrollment files (2014 and 2016); Private School Universe Survey (PSS), 2013-14 private school graduates by state.

[21] Nationally, the share of students enrolled in a postsecondary program increases by 4-6% when examining enrollments that occur during the winter, spring, and summer terms in the first year following graduation. The share of students enrolling in a postsecondary degree-granting institution increases by another 4-6% when including students who enroll within 12-24 months after graduation. Most of these additional enrollments are to 2-year institutions such as the North Carolina Community College System. Source: National Student Clearinghouse Research Center. 2014. "High School Benchmarks 2014: National College Progression Rates." Accessed at https://nscresearchcenter.org/hsbenchmarks2014/.

[22] Among men and women enrolled in curriculum programs, there are significant sex differences in program of enrollment. Understanding patterns in the specific types of programs of enrollment—e.g., STEM—were beyond the scope of this study.

[23] Gains in system-wide enrollment will be most effectively achieved by increasing curriculum enrollments among younger men. Older students are increasingly likely to be enrolled in continuing education (CE) programs and men are more likely to be enrolled in CE than women. Increases in curriculum enrollments by aligning male 25-34 year-old enrollment patterns with female 25-34 enrollment patterns is entirely offset by a corresponding decline in CE enrollments for that age group. Similar patterns are seen at older ages (35-64).

[24] Though Hispanic high school graduation rates still lag the state average, this gap has been steadily narrowing. Among North Carolina's 2004-05 entering 9th graders, the 4-year cohort graduation rate for Hispanic students was 56.4% compared to 70.3% among all students, a difference of 14 percentage points. By 2016-17, these gaps had closed substantially. Among 2013-14 entering ninth graders, 80.5% of Hispanic students graduated in 4 years, just 6 percentage points less than the 4-year cohort graduation rate among all students (86.5%). Over this period, the state cohort graduation rate improved by 16.2 percentage points for all students and by 24.1 percentage points for Hispanic students. Retrieved at http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate.

[25] In 2015, 34% of Hispanic North Carolinians aged 18-24 without a degree were enrolled at UNC (12%) or in an NCCCS curriculum (16%) or continuing education (5%) program.

[26] North Carolina Department of Public Instruction. *Statistical Profile*. http://apps.schools.nc.gov/pls/apex/f?p=1:1:0. Statewide intention data was found in "Table 12.1: High School Graduates by Intentions." Local education agency (LEA) data (Part II of the Statistical Profile Online) was extracted from "Table A4.6: High School Graduate by Intentions."

[27] UNC Freshman Measures for freshman applications for selected fall semesters (2010, 2011, and 2012) from all North Carolina public high schools were retrieved on June 25, 2016, from http://old.northcarolina.edu/ira/ir/analytics/fresh.htm.

[28] Private undergraduate enrollments in 4-year, 2-year, and less than 2-year institutions were obtained for 2001, 2003, 2005, 2007, 2009, 2011, 2013, and 2015. Fall enrollment data contained information on age and sex characteristics of students and were retrieved using the "Compare Institutions" data extraction tool from the Integrated Postsecondary Education Data System (IPEDS) (https://nces.ed.gov/ipeds/Home/UseTheData).

[29] Bureau of Labor Statistics. *Frequently asked questions about data on certifications and licenses*. http://www.bls.gov/cps/certifications-and-licenses-faqs.htm, visited on August 8, 2016.

[30] North Carolina Department of Public Instruction. *Cohort Graduation Rates*. Retrieved June 28, 2016, at http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate.

[31] National Center for Education Statistics. 2015. *Common Core of Data*. Washington, DC: U.S. Department of Education. Statistics were drawn from: "Table 1: Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographics for the United States, the 50 states, and the District of Columbia: School year 2013-14." Retrieved June 28, 2016, at https://nces.ed.gov/ccd/tables/ACGR_RE_and_characteristics_2013-14.asp.