

The North Carolina **COMMON FOLLOW-UP SYSTEM** Evaluation Report



2023



**NC DEPARTMENT
of COMMERCE**
LABOR & ECONOMIC
ANALYSIS



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THE NORTH CAROLINA COMMON FOLLOW-UP SYSTEM (CFS)

2023 EVALUATION REPORT

JANUARY 2023

Background

The purpose of the Common Follow-up System (CFS) is to provide information on the educational and employment outcomes of publicly supported educational, employment, and training programs for use in policy making, program evaluation, resource allocation, and career planning.

[Chapter 96 Article 4 of the North Carolina General Statute](#) requires the North Carolina Department of ¹Commerce's Labor and Economic Analysis Division (LEAD) to develop, implement, and maintain a common follow-up information management system for tracking performance measures related to current and former participants in State job training, education, and placement programs. LEAD is also charged with evaluating the effectiveness of programs and determining if specific program goals and objectives are attained, determining placement rates for each program, and with making recommendations regarding programs evaluated. Information about CFS operational activities is available on the [CFS website](#)².

Evaluation Highlights

The Common Follow-up System provides the mechanism for carrying out longitudinal analyses that can be utilized to develop measures of program performance and effectiveness. As part of its responsibility for evaluating programs contained in the CFS, LEAD has performed a series of analyses to measure the educational and employment outcomes of individuals participating in several North Carolina public education, employment, and training programs. The goal is to develop key evaluative performance indicators related to employment and wage outcomes, as well as to further participation in education and employment programs. It is intended that these measures can be utilized in concert with other programmatic information to aid in the assessment of program effectiveness.

Analyses focus on addressing four key questions:

- What percentage of former participants and completers of publicly supported education, employment, and training programs are employed in North Carolina during the years following their participation in these programs?
- What are the wage outcomes of these individuals?
- How do employment and wage outcomes vary by industry?
- To what extent do these individuals enroll in subsequent education, employment, or training programs?

¹ https://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_96/Article_4.html

² <https://tools.nccareers.org/cfs/>

The outcome measures are calculated for five year-based cohort groups for each program and include outcome measures for up to five years post-exit/graduation. Relevant employment and wage statistics include the number and percent employed in North Carolina, median and average wages for each program, summary employment and wage statistics by industry. Post-enrollment measures include participation in education, employment, and training programs.

» Methodology

Data from the CFS is utilized to perform a series of longitudinal analyses that focus on assessing the educational and employment outcomes of individuals participating in publicly supported education, employment, or training-related programs. Each year, the participating agencies supply data files for the program year. For example, for the 2021-2022 year, the participating agencies submitted data files covering the time period July 1, 2021 through June 30, 2022. These formatted files are created from existing information systems at each of the entities and contain demographic and program-related information for individuals participating in programs and services operated by each of the contributing entities. In addition to the agency data, the CFS contains information provided by the Division of Employment Security including quarterly unemployment insurance (UI) wage files and unemployment insurance claims-related information.

Analyses are accomplished by matching individual program participant data across programs and agencies to information in the unemployment insurance wage file. Specifically, CFS data is used to compile outcome information for five program-year cohorts. Each participating agency operates a diverse set of programs and services. These programs vary in terms of participant characteristics, operational guidelines and procedures, and program goals. As a result, program definitions - including participation, exit and completion - can differ across programs. These operational differences provide some inherent challenges when assessing outcomes across programs. This report includes outcome information for exit and completion cohorts, utilizing definitions specific to each of the assessed programs. Therefore, the specific definitions of participant, exiter, and/or completer are provided in each of the corresponding program sections of this report.

Employment and wage outcomes are derived for each program exiter/completer cohort. Information from the quarterly UI wage data is utilized to develop employment and wage statistics. Wage data for each exiter is summed across the four quarters immediately following the exit/completion quarter to produce a one year post-exit/completion wage. Wage information from the subsequent four quarters are summed to produce a two-year post-exit/completion wage. Successive four quarters are summed to produce subsequent post-exit/completion annual wage statistics. If an individual has wages in any of the four quarters of the corresponding year, they are counted as employed. Employment and wage outcomes are compiled separately for each cohort.

Further analyses of industry employment and wage patterns are also undertaken. Each employer covered by the state's unemployment insurance laws is assigned a North American Industry Classification (NAICS) code. Codes are assigned to each employer based on the primary industry function of the employing unit. The NAICS coding system provides a hierarchical coding scheme that allows for the grouping of codes into broader industry sectors. Post-employment statistics are calculated for each program exit/completion cohort by 13 different industry sectors. Individuals can be employed in more than one industry within a year or even within a quarter. In those instances where an individual is found to be employed in more than one industry sector, they are counted separately in each sector but only once in the total employment statistics.

Analysis of post participation in additional education, employment, and training is completed by cross-matching the information across entities and programs. Three measures are developed; the first measure includes the number and percentage of individuals who participated in public higher education. This is compiled by cross-matching the exit/completion cohort to records from the North Carolina Community College System and from the University of North Carolina System. If individuals are found to be participating in any program in either System, they are counted as enrolled in public higher education. The second post-participation measure is compiled by cross-matching each exit/completion cohort to data from the rest of the participating entities. If an individual is found to be enrolled or receiving services from them, they are counted as being enrolled in further public education, employment, or training. The third measure integrates the second measure along with the employment-related information. The result is a measure of whether individuals are either employed or enrolled in further public education, employment, or training programs.

» Limitations

While the CFS provides a rich source of information regarding the participation of individuals in various education, employment, and training programs, the data is not without limitations. Information supplied by participating agencies comes from existing systems within each agency. Any data limitations that exist in those source systems, data repositories, and corresponding data elements are necessarily transferred along with the data to the CFS. Also, CFS does not include information from North Carolina's private educational institutions, out-of-state colleges and universities, or non-participating employment and training-related service providers.

The unemployment insurance wage data has its own strengths and limitations. Wage files only include information on individuals working in jobs covered by North Carolina's unemployment insurance laws. Employment-related information includes: total quarterly wages paid to an individual, size of the employing firm, and the NAICS code of the firm. Wage information is not available for workers outside of North Carolina, workers employed in North Carolina but not covered by North Carolina's unemployment insurance laws (e.g., the self-employed, church and religious organization employees, summer camp employees, federal government employees, military service members, and other non-covered workers. Employment-related data that cannot be determined include: the start date of employment, the employment type (i.e., permanent, temporary, part- or full-time), length of time worked during the quarter, the number of hours worked, and the person's occupation.

Additionally, the CFS relies on the use of Social Security Numbers (SSNs) to match program participation with employment-related information. If SSNs are not available, the matching of data across agency and employment sources is problematic. LEAD continues to work with the NC Department of Information Technology's Government Data Analytics Center (GDAC) to enhance system capability to match data utilizing additional identity resolution methodologies, which will assist in future analytical efforts.

The 2023 CFS Evaluation Report provides information on the state's educational and workforce development training activities throughout the COVID-19 pandemic and the subsequent recovery.

» Programs Assessed

The Common Follow-up System contains information on a diverse set of education, employment, and training programs and services. Analyses included in this report focus on 17 programs across four agencies. Included are the following:

THE DEPARTMENT OF COMMERCE

Division of Workforce Solutions:

1. Workforce Innovation and Opportunity Act (WIOA) Title I Adult Program
2. Workforce Innovation and Opportunity Act (WIOA) Title I Dislocated Worker Program
3. Workforce Innovation and Opportunity Act (WIOA) Title I Youth Program
4. Wagner-Peyser Program

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES

5. Division of Social Services - Work First - Temporary Assistance for Needy Families (TANF)
6. Division of Vocational Rehabilitation Services
7. Division of Services for the Blind

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

8. Career and Technical Education Programs
9. Workforce Continuing Education Training
10. Human Resources Development Programs
11. Basic Skills Programs
12. Customized Training Program
13. Apprenticeship Program

UNIVERSITY OF NORTH CAROLINA SYSTEM

14. Bachelor's Programs
15. Master's Programs
16. Doctoral (Research) Programs
17. Doctoral (Professional Practice) Programs

The Department of Commerce

Division of Workforce Solutions

» Overview of WIA and WIOA Title I Programs

The Workforce Investment Act (WIA) of 1998 authorized the nation's federally funded workforce development system and provided funding for services to employers and job seekers. WIA Title I programs consisted of three distinct funding streams: Adult, Dislocated Workers, and Youth. In July of 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law and superseded WIA. WIOA took effect on July 1, 2015 and is designed to help job seekers access the employment, education, training, and support services they need to succeed in the labor market, and to match employers with the skilled workers they need to compete in the global economy. Part of the goal of WIOA is to provide opportunity for reforms of local service centers, known as the American Job Center system, and to ensure that the system is responding to the local demand of employers and preparing workers for jobs that are available now and in the future.³

WIOA Title I Adult⁴ and Dislocated Worker⁵ programs were designed to increase employment and retention, increase earnings of dislocated workers, and enhance customer satisfaction for both participants and employers. Both WIOA and WIA Adult and Dislocated Worker programs provide a variety of education, employment-related, and training services to eligible customers. Changes implemented with WIOA include the provision of both career and training services, replacing the WIA service levels of core, intensive, and training services.⁶ The Adult and Dislocated Worker programs provide comprehensive assessments, career and labor market information, job search and placement assistance, counseling, and occupational and basic skills training. Additional supportive services, including assistance with transportation, childcare, dependent care, housing, and other needs-related payments, are available to help facilitate program participation. Dislocated worker allotments also support Rapid Response services that assist employers and workers in the event of company layoffs, closings, natural disasters, and other events.

The WIOA Title I Youth program is designed to serve low-income youth who face barriers to continued education and employment. Specific services that are made available include case management, tutoring, alternative secondary school offerings, the provision of work experience, occupational skills training, leadership development opportunities, mentoring, guidance, counseling, and support. Eligibility is defined separately for out-of-school youth aged 16-24 and in-school youth aged 14-21. Funds for youth services are allocated to states and local areas based on a formula. At least 75% of state and local youth funding must be allocated for out-of-school youth, and a minimum of 20% of local youth formula funds must be used for work

³ U.S. Department of Labor Employment and Training Administration website, <http://www.doleta.gov/wioa/>

⁴ U.S. Department of Labor Employment and Training Administration website, <https://www.dol.gov/agencies/eta/workforce-investment/adult>

⁵ U.S. Department of Labor Employment and Training Administration website, <https://www.dol.gov/agencies/eta/workforce-investment/dislocated-workers>

⁶ Congressional Research Service report, <https://crsreports.congress.gov/product/pdf/R/R44252>

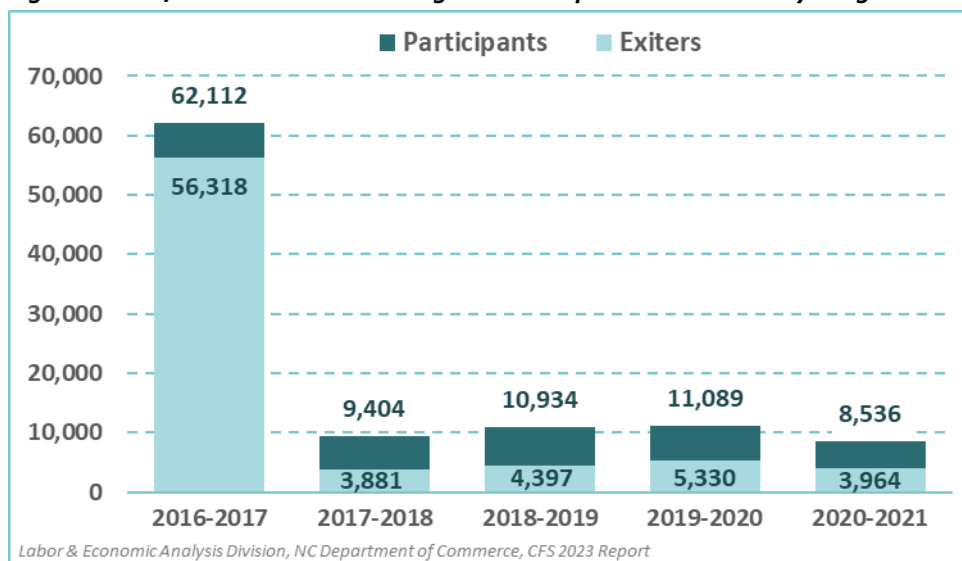
experiences that have an academic and occupational education component, such as summer and year-round employment, pre-apprenticeship, on-the-job training, or internships and job shadowing.⁷

» WIA/WIOA Title I Adult Program Outcomes

Analyses of program participant counts revealed that the number of WIA and WIOA Adult program participants peaked in the 2016-2017 program year and has since dropped significantly due to transition from WIA to WIOA program (Figure 1). Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

WIOA was implemented (replacing WIA) in July 2015, therefore post-exit wage and employment statistics represent participants who received WIOA services in the program years from 2016-2017 through 2020-2021. Employment and wage outcomes were derived for each cohort of WIA/WIOA program exiters. These included analyses of post-exit employment rates (Figure 2) and wages (Figure 3) for up to five years after exit (also see Table 1). These measures include only those individuals who were employed in North Carolina in jobs covered by the state's unemployment insurance laws.

Figure 1. WIA/WIOA Title I Adult Program Participants and Exiters by Program Year



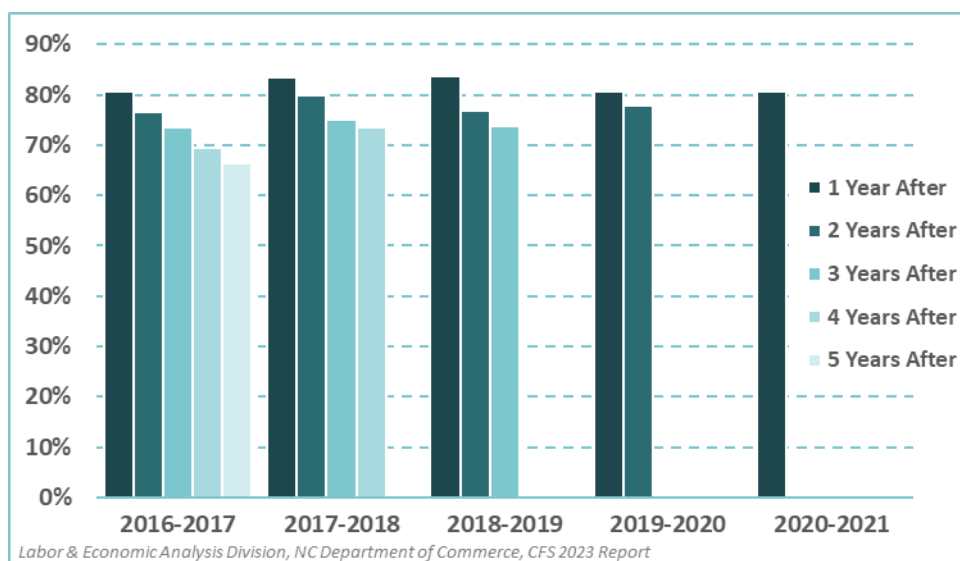
One year post-exit employment rates increased up until the 2018-2019 program year and then slightly declined, hovering around 81% for the last two program years (Figure 2). One year post-exit enrollment in North Carolina public higher education steadily increased throughout the five program years of the study period 2016-2017 to 2020-2021 program years; however, this increase may be due to a smaller cohort size since the 2017-2018 program year (Table 1).

As shown in Figure 2, longer term post-exit employment measures show a slight decline in the percentage of WIA/WIOA Title I Adult exiters employed in North Carolina. This is common across most workforce training

⁷ U.S. Department of Labor Employment and Training Administration website, <https://www.dol.gov/agencies/eta/youth/wioa-formula>

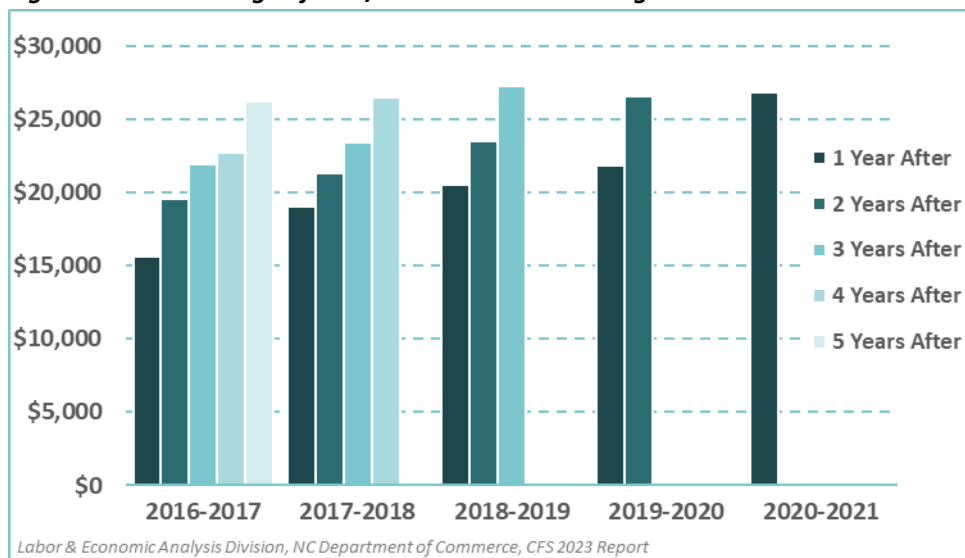
and education programs and may be due in part to former participants leaving the state or entering employment not covered by unemployment insurance.

Figure 2. Percentage of WIA/WIOA Title I Adult Exiters Employed in North Carolina After Exit, by Year of Exit



One year post-exit median annual wages ranged from \$15,619 for the 2016-2017 program year exiters to a high of \$26,681 for the 2020-2021 program year exiters (Figure 3 and Table 1). For all cohorts, the median wages of former participants rose consistently in each subsequent year following program exit. For example, the median wages of participants who exited in program year 2016-2017 increased from \$15,619 one year after exit to \$26,184 five years after exit.

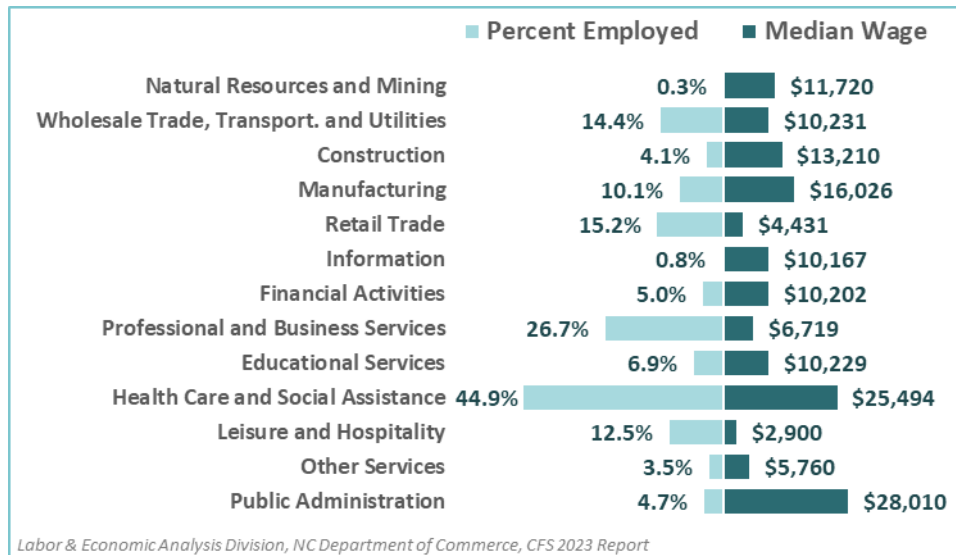
Figure 3. Median Wage of WIA/WIOA Title I Adult Program Exiters in North Carolina, by Year of Exit



Employment outcomes by industry one year after exit for the 2020-2021 cohort show 45% of WIA/WIOA Adult program exiters were employed in the Health Care and Social Assistance industry, earning a median annual wage of \$25,494. Other top employing industries for the 2020-2021 exiting cohort include Professional and Business Services (27%); Retail Trade (15%); Wholesale Trade, Transport, and Utilities (14%); and Leisure and

Hospitality (13%). Of these industries, Health Care and Social Assistance had the highest median annual wage (\$25,494), followed by Wholesale Trade, Transport, and Utilities (\$10,231) (Figure 4 and Table 1).

Figure 4. 2020-2021 WIA/WIOA Title I Adult Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



Overall short-term wages for exiters have risen over time and employing industries have shifted. The median wage of the 2016-2017 WIA Adult exiters was \$15,619 during the first year after exit while the comparable wage for 2020-2021 exiters was \$26,681. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.⁸ The two most recent program years (2019-2020 and 2020-2021) show an increase in the share of WIOA exiters who later found employment in the Health Care and Social Assistance industry. For each of the 3 prior program years (2016-2017, 2017-2018, and 2018-2019) approximately 16% of exiters were employed in this industry one year after completion. While for the 2019-2020 and 2020-2021 program years, approximately 43% of WIOA exiters were employed in Health Care and Social Assistance one year after program completion. This increase in the share of Health Care and Social Assistance employment was accompanied by a marginal decrease in the share of Manufacturing and Whole Trade, Transportation, and Utilities employment for the 2019-2020 and 2020-2021 program years.

⁸ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Table 1. WIA/WIOA Title I Adult Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

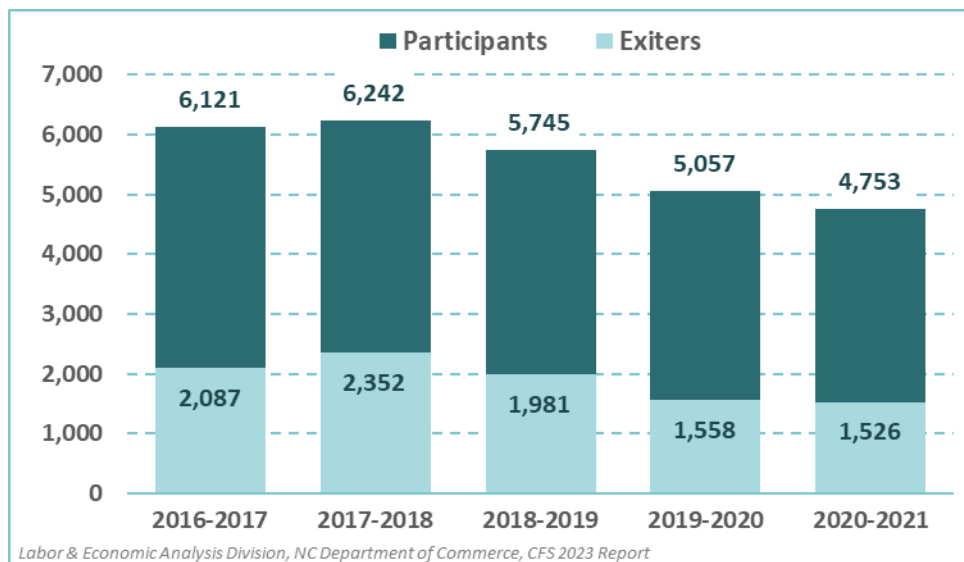
North Carolina Department of Commerce, Division of Workforce Solutions										Common Follow-up System: Evaluative Measures, 2023 Report							
Workforce Innovation and Opportunity Act - Adult Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce							
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		62,112	9,404	10,934	11,089	8,536	62,112	9,404	10,934	11,089	62,112	9,404	10,934	62,112	9,404	62,112	
Exiters		56,318	3,881	4,397	5,330	3,964	56,318	3,881	4,397	5,330	56,318	3,881	4,397	56,318	3,881	56,318	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N %	45,496 81%	3,241 84%	3,677 84%	4,296 81%	3,193 81%	43,200 77%	3,101 80%	3,375 77%	4,149 78%	41,451 74%	2,911 75%	3,250 74%	39,154 70%	2,852 73%	37,343 66%
Exiters' Wages in North Carolina		Mean Median	\$19,991 \$15,619	\$21,722 \$19,076	\$23,067 \$20,516	\$25,169 \$21,814	\$30,185 \$26,861	\$24,283 \$19,550	\$24,361 \$21,296	\$26,757 \$23,534	\$30,344 \$26,581	\$26,820 \$21,948	\$26,516 \$23,391	\$31,072 \$27,240	\$27,884 \$22,677	\$30,045 \$26,470	\$31,475 \$26,184
Exiters Enrolled in NC Public Higher Education		N %	8,211 15%	869 22%	933 21%	1,291 24%	1,040 26%	6,203 11%	730 19%	739 17%	1,171 22%	5,521 10%	593 15%	667 15%	3,869 7%	558 14%	3,792 7%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	25,204 45%	2,992 77%	2,830 64%	2,870 54%	2,024 51%	22,582 40%	2,918 75%	2,688 61%	2,894 54%	22,542 40%	2,850 73%	2,702 61%	21,690 39%	2,858 74%	24,030 43%
Exiters Enrolled or Employed in NC		N %	48,936 87%	3,712 96%	4,121 94%	4,811 90%	3,537 89%	46,372 82%	3,653 94%	3,949 90%	4,705 88%	45,133 80%	3,581 92%	3,901 89%	43,708 78%	3,552 92%	43,373 77%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			1.1%	0.6%	0.5%	0.3%	0.3%	0.8%	0.4%	0.3%	0.2%	0.7%	0.5%	0.4%	0.7%	0.4%	0.6%
Wholesale Trade, Transport. and Utilities			10.3%	12.0%	14.7%	15.2%	14.4%	10.3%	12.3%	15.3%	15.1%	11.2%	13.6%	15.6%	12.4%	13.9%	13.6%
Construction			6.0%	4.4%	4.9%	4.8%	4.1%	5.8%	4.5%	4.4%	3.9%	5.7%	4.4%	3.7%	5.1%	4.0%	5.0%
Manufacturing			20.3%	12.7%	10.8%	10.9%	10.1%	20.8%	12.6%	10.9%	11.3%	21.5%	12.7%	11.1%	20.8%	13.3%	21.4%
Retail Trade			17.5%	15.3%	15.4%	15.0%	15.2%	16.1%	14.0%	14.8%	14.7%	15.9%	13.3%	15.3%	15.1%	14.6%	16.3%
Information			1.4%	1.3%	1.4%	1.0%	0.8%	1.6%	1.3%	1.3%	1.4%	1.6%	1.4%	1.6%	1.3%	1.6%	1.6%
Financial Activities			4.3%	3.9%	4.1%	3.6%	5.0%	4.7%	4.0%	5.1%	4.7%	5.2%	4.5%	5.9%	5.3%	4.8%	6.5%
Professional and Business Services			40.8%	29.5%	28.2%	26.4%	26.7%	34.9%	25.2%	26.5%	26.4%	31.5%	25.2%	28.6%	29.5%	28.5%	29.7%
Educational Services			4.9%	4.2%	5.4%	4.3%	6.9%	4.8%	4.3%	4.8%	5.2%	4.9%	3.8%	5.4%	4.6%	4.9%	4.8%
Health Care and Social Assistance			16.6%	39.8%	39.3%	41.2%	44.9%	17.0%	39.7%	38.5%	40.8%	17.4%	39.0%	37.6%	17.3%	37.4%	17.8%
Leisure and Hospitality			18.9%	15.4%	14.3%	11.7%	12.5%	17.2%	14.7%	10.3%	10.4%	16.6%	11.2%	10.3%	14.0%	11.2%	13.9%
Other Services			3.0%	2.8%	2.7%	2.8%	3.5%	3.0%	2.5%	2.9%	3.1%	3.1%	3.0%	3.1%	2.8%	2.8%	3.1%
Public Administration			3.1%	4.3%	4.0%	4.2%	4.7%	3.3%	4.6%	4.9%	4.9%	3.7%	5.0%	5.4%	3.9%	5.4%	4.0%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$3,189	\$5,583	\$3,916	\$4,455	\$11,720	\$5,665	\$8,616	\$10,830	\$10,792	\$7,947	\$2,049	\$2,867	\$10,358	\$8,875	\$11,793
Wholesale Trade, Transport. and Utilities			\$8,953	\$13,076	\$12,006	\$10,332	\$10,231	\$14,056	\$14,481	\$13,346	\$14,127	\$15,894	\$16,223	\$16,559	\$13,672	\$14,045	\$13,942
Construction			\$10,461	\$14,717	\$12,482	\$17,289	\$13,210	\$14,534	\$18,270	\$12,721	\$20,335	\$17,763	\$11,134	\$17,613	\$20,090	\$17,404	\$22,732
Manufacturing			\$11,605	\$15,100	\$13,430	\$14,672	\$16,026	\$18,017	\$18,030	\$15,777	\$20,196	\$21,370	\$19,947	\$18,977	\$22,577	\$21,928	\$24,537
Retail Trade			\$4,568	\$3,380	\$3,865	\$4,259	\$4,431	\$6,171	\$4,053	\$4,654	\$5,329	\$6,502	\$4,460	\$5,267	\$6,928	\$5,130	\$6,685
Information			\$11,440	\$9,534	\$12,179	\$15,985	\$10,167	\$19,619	\$10,832	\$15,831	\$9,103	\$22,814	\$26,724	\$12,137	\$29,672	\$22,385	\$24,444
Financial Activities			\$12,940	\$8,415	\$11,741	\$10,145	\$10,202	\$19,161	\$13,952	\$13,909	\$13,944	\$22,759	\$9,860	\$15,177	\$28,398	\$17,117	\$22,463
Professional and Business Services			\$5,774	\$4,960	\$5,012	\$5,282	\$6,719	\$6,440	\$5,185	\$6,100	\$7,907	\$7,017	\$5,820	\$8,577	\$6,767	\$7,690	\$8,158
Educational Services			\$8,730	\$6,354	\$9,498	\$10,479	\$10,229	\$12,137	\$7,713	\$11,352	\$15,026	\$14,456	\$11,907	\$13,697	\$19,341	\$12,697	\$22,685
Health Care and Social Assistance			\$10,721	\$15,918	\$18,410	\$21,541	\$25,494	\$14,347	\$18,865	\$22,268	\$25,475	\$16,134	\$21,819	\$23,963	\$18,422	\$24,070	\$18,906
Leisure and Hospitality			\$3,744	\$3,035	\$3,214	\$2,637	\$2,900	\$4,614	\$3,318	\$2,259	\$2,999	\$4,674	\$3,455	\$3,108	\$4,032	\$3,287	\$4,558
Other Services			\$4,948	\$4,606	\$7,601	\$7,299	\$5,760	\$7,269	\$6,244	\$6,526	\$6,979	\$7,991	\$5,491	\$8,157	\$10,033	\$5,453	\$10,264
Public Administration			\$15,414	\$16,398	\$16,385	\$22,969	\$28,010	\$23,415	\$24,702	\$27,728	\$31,232	\$26,539	\$29,282	\$28,295	\$31,702	\$27,002	\$33,298
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$9,324	\$15,227	\$8,486	\$15,185	\$14,958	\$13,267	\$17,622	\$12,295	\$18,943	\$16,319	\$14,586	\$7,461	\$18,486	\$15,271	\$20,273
Wholesale Trade, Transport. and Utilities			\$15,897	\$17,150	\$17,821	\$17,205	\$18,067	\$20,603	\$19,143	\$20,188	\$20,715	\$22,946	\$20,348	\$23,449	\$22,910	\$21,671	\$23,753
Construction			\$16,324	\$17,795	\$17,099	\$19,850	\$17,558	\$20,478	\$21,204	\$18,148	\$24,190	\$23,756	\$17,959	\$24,831	\$26,031	\$23,513	\$28,740
Manufacturing			\$16,731	\$18,183	\$18,666	\$22,016	\$21,380	\$22,965	\$21,296	\$21,196	\$26,455	\$25,051	\$23,236	\$24,092	\$25,999	\$25,725	\$28,426
Retail Trade			\$8,565	\$7,637	\$8,126	\$9,182	\$9,906	\$10,979	\$8,490	\$9,977	\$11,133	\$12,127	\$10,177	\$11,360	\$13,216	\$11,065	\$14,142
Information			\$20,960	\$15,667	\$16,087	\$21,551	\$20,797	\$29,212	\$21,542	\$23,695	\$19,825	\$33,960	\$27,978	\$19,610	\$38,170	\$26,391	\$37,510
Financial Activities			\$20,477	\$14,359	\$18,809	\$18,300	\$21,029	\$26,004	\$20,118	\$24,598	\$21,791	\$29,865	\$20,748	\$26,139	\$36,226	\$23,210	\$34,496
Professional and Business Services			\$11,902	\$9,935	\$10,856	\$10,457	\$14,218	\$14,097	\$11,233	\$12,744	\$15,637	\$15,611	\$12,442	\$17,767	\$16,673	\$16,293	\$19,196
Educational Services			\$13,564	\$11,275	\$13,479	\$14,898	\$15,387	\$17,402	\$13,647	\$15,825	\$18,414	\$19,290	\$16,699	\$17,428	\$22,072	\$16,616	\$25,056
Health Care and Social Assistance			\$14,870	\$20,041	\$21,833	\$25,160	\$29,362	\$18,146	\$22,560	\$25,830	\$28,567	\$20,001	\$24,984	\$27,778	\$21,868	\$27,265	\$23,273
Leisure and Hospitality			\$6,932	\$5,935	\$5,594	\$5,894	\$6,938	\$8,230	\$6,710	\$6,269	\$7,492	\$8,705	\$6,481	\$7,511	\$8,426	\$7,351	\$9,879
Other Services			\$10,497	\$7,358	\$10,469	\$12,457	\$13,130	\$13,888	\$10,462	\$12,735	\$12,513	\$15,470	\$9,543	\$13,957	\$17,736	\$11,647	\$18,280
Public Administration			\$18,090	\$20,178	\$19,049	\$22,766	\$27,478	\$23,085	\$25,590	\$24,906	\$27,648	\$25,326	\$27,419	\$26,029	\$28,584	\$26,734	\$30,629

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» WIA/WIOA Title I Dislocated Worker Program Outcomes

As shown in Figure 5, the number of participants in the WIA/WIOA Dislocated Worker program between the 2016-2017 and 2020-2021 program years has declined. Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

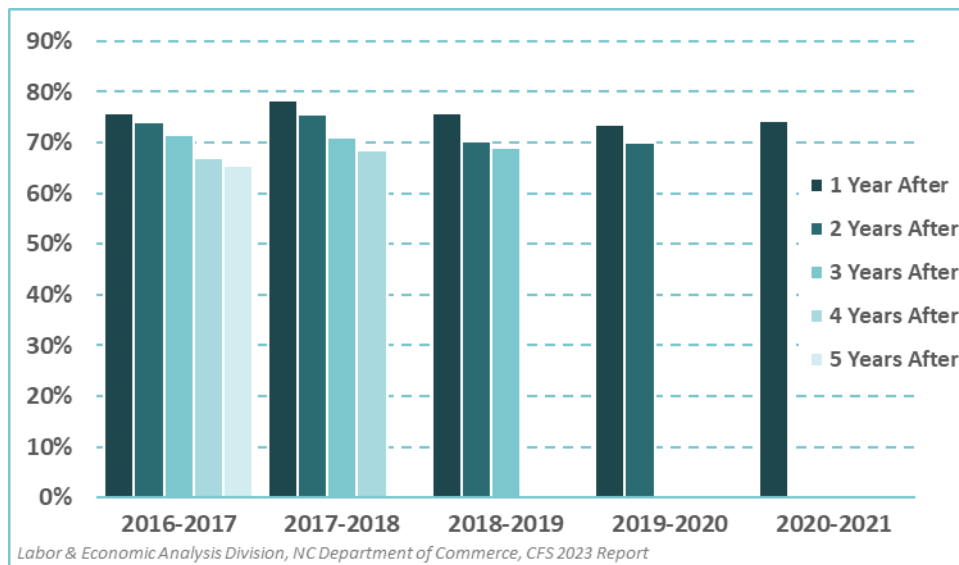
Figure 5. WIA/WIOA Title I Dislocated Worker Program Participants and Exiters by Program Year



WIOA was implemented (replacing WIA) in July 2015, therefore post-exit wage and employment statistics represent participants who received WIOA services in the program years from 2016-2017 through 2020-2021. Employment and wage outcomes were derived for each WIA/WIOA Title I Dislocated Worker exit cohort between 2016-2017 and 2020-2021. These included measures of post-exit employment rates (Figure 6) and wages (Figure 7) for up to five years after exit (also see Table 2). These measures include only those individuals who were employed in North Carolina in jobs covered by the state's unemployment insurance laws.

One year post-exit employment rates were relatively stable across the five cohorts, ranging from a high of 78% for 2017-2018 exiters to a low of 73% for 2019-2020 exiters (Figure 6 and Table 2). One year post-exit enrollment in NC public higher education ranged from 13% for the 2020-2021 cohort to 17% for the 2017-2018 cohort (Table 2). Longer term post-exit employment measures indicate that five years after exit, 65% of the 2016-2017 exiting cohort were employed in North Carolina, earning a median salary of \$37,365. Post-exit employment rates were relatively steady across cohorts for a given post-exit year.

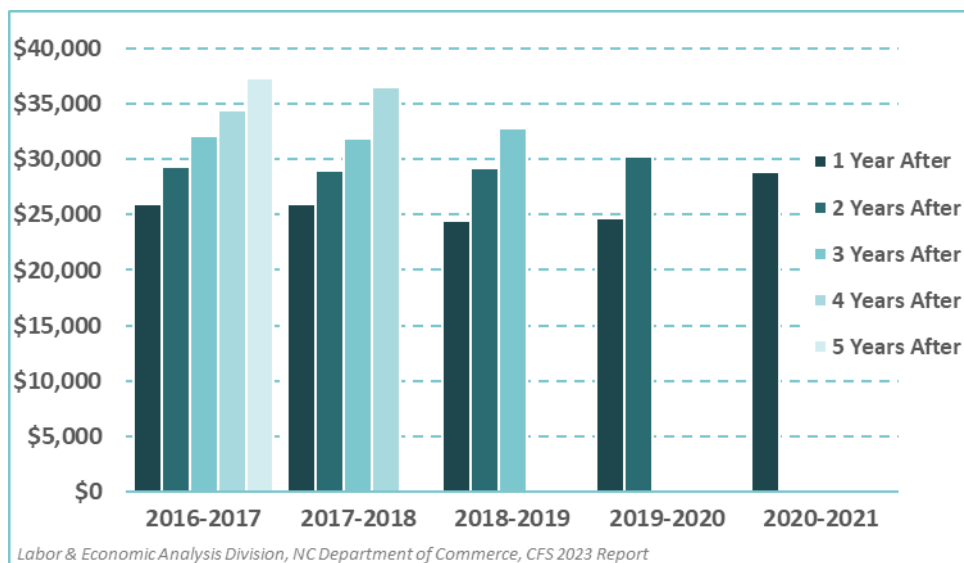
Figure 6. Percentage of WIA/WIOA Title I Dislocated Worker Program Exiters Employed in North Carolina After Completion, by Year of Exit



One year post-exit median wages rose from \$25,957 in the 2016-2017 cohort to \$28,848 for the 2020-2021 cohort (Figure 7 and Table 2).

However, median post-exit wages increased over time within all cohorts. The 2016-2017 exiters experienced growth in median wages from \$25,957 one year after exit to \$32,078 three years after exit and \$37,365 at the five-year mark, while the 2018-2019 exiters saw median wages grow from \$24,483 one year post-exit to \$32,752 three years post-exit.

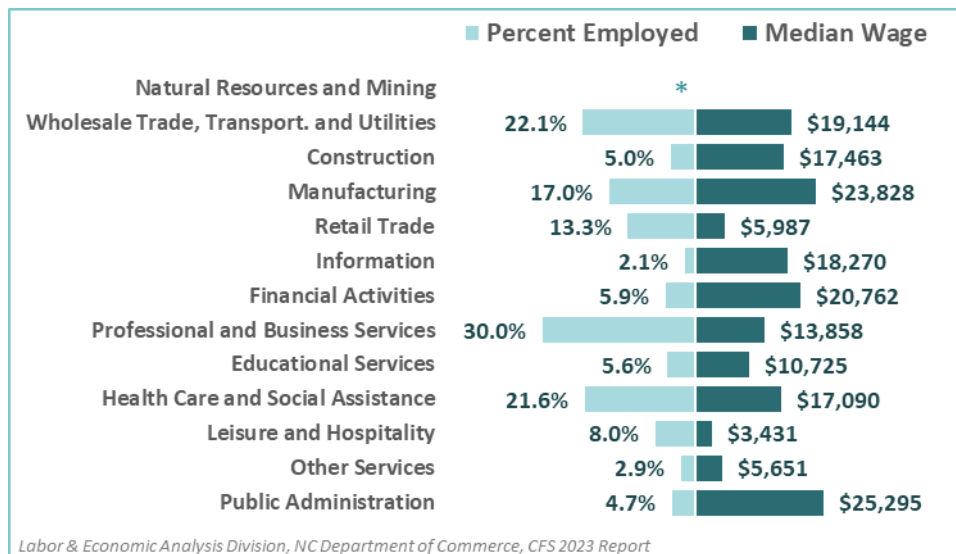
Figure 7. Median Wage of WIA/WIOA Title I Dislocated Worker Program Exiters in North Carolina, by Year of Exit



As shown in Figure 8 and Table 2, one-year employment outcomes by industry for the 2020-2021 exiting cohort indicate that 30% of WIOA Dislocated Worker program participants were subsequently employed in

the Professional and Business Services industry, earning a median annual wage of \$13,858. Other industries frequently employing this 2020-2021 cohort one year after exiting the program include Health Care and Social Assistance (22%); Wholesale Trade, Transport, and Utilities (22%); Manufacturing (17%); and Retail Trade (13%). Of these top employing industries, Manufacturing was associated with the highest median annual wage (\$23,828).

Figure 8. 2020-2021 WIA/WIOA Title I Dislocated Worker Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



Overall, there has been a slight drop in short-term employment rates for WIA/WIOA Dislocated Worker program exiters. This is indicated by the one year post-employment trends. When exiting cohorts are followed over time, the employment rate tends to decline somewhat, while the median wages rise. The median wage of WIA/WIOA Dislocated Worker participants who exited in the 2016-2017 program year was \$37,365 five years after exit. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.⁹

⁹ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Table 2. WIA/WIOA Title I Dislocated Worker Program Participants and Exitors, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

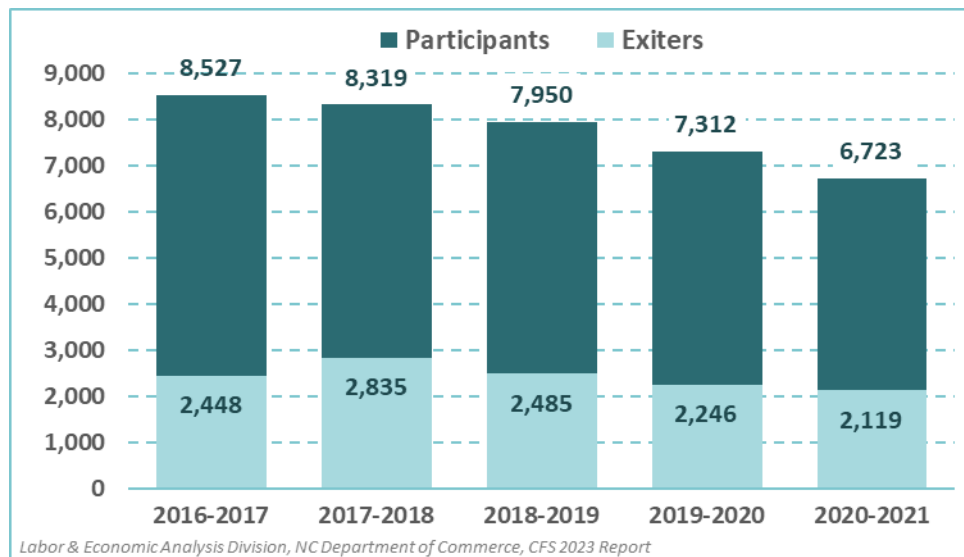
North Carolina Department of Commerce, Division of Workforce Solutions										Common Follow-up System: Evaluative Measures, 2023 Report							
Workforce Innovation and Opportunity Act - Dislocated Worker Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce							
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		6,121	6,242	5,745	5,057	4,753	6,121	6,242	5,745	5,057	6,121	6,242	5,745	6,121	6,242	6,121	
Exiters		2,087	2,352	1,981	1,558	1,526	2,087	2,352	1,981	1,558	2,087	2,352	1,981	2,087	2,352	2,087	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N %	1,581 76%	1,843 78%	1,502 76%	1,145 73%	1,133 74%	1,545 74%	1,776 76%	1,393 70%	1,092 70%	1,491 71%	1,671 71%	1,366 69%	1,399 67%	1,613 69%	1,366 65%
Exiters' Wages in North Carolina		Mean Median	\$29,451 \$25,957	\$29,645 \$25,958	\$28,684 \$24,483	\$28,153 \$24,723	\$34,299 \$28,848	\$32,840 \$29,358	\$33,546 \$28,951	\$33,173 \$29,199	\$33,463 \$30,294	\$35,752 \$32,078	\$36,271 \$31,832	\$37,857 \$32,752	\$38,407 \$34,377	\$41,954 \$36,544	\$41,725 \$37,365
Exiters Enrolled in NC Public Higher Education		N %	340 16%	405 17%	295 15%	232 15%	201 13%	276 13%	318 14%	215 11%	193 12%	217 10%	237 10%	166 8%	171 8%	221 9%	158 8%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	962 46%	1,675 71%	1,183 60%	766 49%	704 46%	958 46%	1,590 68%	1,123 57%	752 48%	947 45%	1,523 65%	1,103 56%	943 45%	1,529 65%	994 48%
Exiters Enrolled or Employed in NC		N %	1,739 83%	2,171 92%	1,766 89%	1,345 86%	1,285 84%	1,704 82%	2,109 90%	1,693 85%	1,299 83%	1,655 79%	2,075 88%	1,670 84%	1,615 77%	2,051 87%	1,614 77%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		0.8% * * *					* 0.7% * *				* * *			* *		*	
Wholesale Trade, Transport. and Utilities		13.9% 13.0% 14.5% 17.0% 22.1%					13.3% 12.8% 13.8% 17.9%				14.4% 13.9% 13.0%			13.9% 14.4%		14.2%	
Construction		6.5% 5.6% 6.1% 6.3% 5.0%					5.4% 5.4% 5.4% 5.8%				5.0% 5.4% 4.4%			4.4% 5.8%		4.6%	
Manufacturing		16.5% 17.4% 12.8% 16.2% 17.0%					17.2% 17.4% 12.2% 16.3%				16.6% 15.9% 14.9%			17.1% 15.9%		16.8%	
Retail Trade		13.9% 12.5% 14.2% 14.9% 13.3%					12.6% 12.8% 11.8% 13.6%				12.3% 10.2% 10.2%			11.7% 10.4%		11.6%	
Information		2.1% 2.5% 2.5% 1.5% 2.1%					2.2% 3.2% 2.9% 1.8%				2.1% 2.9% 3.1%			2.1% 3.2%		2.0%	
Financial Activities		5.1% 5.8% 6.7% 5.0% 5.9%					4.9% 6.2% 7.8% 6.0%				5.9% 7.0% 8.3%			6.4% 7.7%		8.3%	
Professional and Business Services		36.7% 40.0% 34.8% 33.4% 30.0%					32.2% 34.5% 31.4% 34.6%				29.7% 31.0% 32.3%			27.7% 31.6%		27.0%	
Educational Services		8.1% 6.0% 7.2% 5.2% 5.6%					7.4% 5.6% 5.8% 5.2%				7.5% 5.8% 6.3%			6.7% 6.1%		6.7%	
Health Care and Social Assistance		18.2% 19.0% 22.8% 19.5% 21.6%					19.3% 18.7% 22.3% 21.1%				18.7% 19.2% 22.0%			18.8% 19.7%		19.2%	
Leisure and Hospitality		7.8% 8.4% 7.6% 9.3% 8.0%					7.3% 7.8% 6.3% 8.4%				7.8% 5.6% 5.7%			5.8% 6.4%		6.2%	
Other Services		3.2% 2.7% 3.2% 3.4% 2.9%					3.2% 2.7% 2.9% 4.5%				2.5% 2.7% 3.7%			2.7% 2.4%		2.7%	
Public Administration		6.2% 5.5% 5.7% 4.9% 4.7%					6.4% 5.9% 6.8% 4.7%				6.6% 5.9% 6.8%			7.1% 5.7%		7.8%	
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$3,283 * * *					* \$13,459 * *				* * *			* *		*	
Wholesale Trade, Transport. and Utilities		\$17,799 \$12,748 \$16,125 \$14,039 \$19,144					\$24,111 \$21,742 \$20,675 \$14,796				\$25,474 \$23,043 \$21,325			\$26,050 \$27,160		\$25,626	
Construction		\$12,990 \$17,381 \$12,669 \$12,357 \$17,463					\$16,796 \$26,224 \$22,806 \$16,184				\$19,709 \$23,487 \$26,311			\$30,152 \$23,766		\$26,104	
Manufacturing		\$26,938 \$26,464 \$22,922 \$21,018 \$23,828					\$35,447 \$29,582 \$29,436 \$27,063				\$39,042 \$35,695 \$30,882			\$38,014 \$40,070		\$43,735	
Retail Trade		\$6,549 \$4,998 \$4,550 \$4,293 \$5,987					\$7,300 \$4,399 \$6,139 \$6,421				\$8,754 \$9,828 \$8,369			\$12,437 \$9,450		\$12,007	
Information		\$25,221 \$32,820 \$30,053 \$28,138 \$18,270					\$35,544 \$36,811 \$44,516 \$19,256				\$40,160 \$42,636 \$44,133			\$38,926 \$50,244		\$34,081	
Financial Activities		\$23,443 \$21,385 \$26,766 \$14,629 \$20,762					\$36,247 \$23,399 \$32,484 \$28,192				\$34,862 \$31,243 \$35,638			\$43,298 \$32,569		\$35,050	
Professional and Business Services		\$12,951 \$11,537 \$13,045 \$11,046 \$13,858					\$15,167 \$13,983 \$17,039 \$13,921				\$17,040 \$17,285 \$17,120			\$20,220 \$21,256		\$19,158	
Educational Services		\$14,434 \$12,929 \$10,137 \$13,871 \$10,725					\$12,282 \$15,390 \$19,096 \$22,066				\$10,845 \$24,609 \$22,380			\$16,800 \$28,407		\$24,307	
Health Care and Social Assistance		\$15,816 \$16,911 \$15,373 \$19,886 \$17,090					\$19,421 \$20,101 \$21,160 \$21,467				\$22,624 \$22,862 \$24,030			\$26,941 \$22,736		\$29,392	
Leisure and Hospitality		\$3,247 \$3,278 \$3,623 \$3,413 \$3,431					\$3,978 \$2,362 \$3,186 \$3,665				\$3,011 \$5,079 \$6,470			\$3,822 \$5,919		\$2,751	
Other Services		\$8,248 \$7,897 \$10,405 \$14,825 \$5,651					\$6,760 \$7,731 \$10,753 \$9,338				\$18,220 \$9,405 \$16,701			\$11,936 \$12,874		\$18,984	
Public Administration		\$24,831 \$24,563 \$22,538 \$27,198 \$25,295					\$30,473 \$26,092 \$29,302 \$34,802				\$31,489 \$31,806 \$32,290			\$35,143 \$35,978		\$38,537	
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$14,613 * * *					* \$21,810 * *				* * *			* *		*	
Wholesale Trade, Transport. and Utilities		\$23,229 \$21,120 \$21,066 \$19,732 \$27,568					\$27,365 \$25,251 \$24,266 \$22,159				\$29,786 \$27,119 \$26,411			\$30,896 \$33,135		\$31,956	
Construction		\$19,328 \$20,977 \$19,045 \$18,700 \$19,034					\$21,666 \$31,279 \$26,949 \$22,205				\$24,319 \$32,683 \$30,840			\$30,568 \$33,454		\$28,919	
Manufacturing		\$27,872 \$28,807 \$27,242 \$26,235 \$29,648					\$34,616 \$31,672 \$32,127 \$30,785				\$38,533 \$36,926 \$33,024			\$39,012 \$41,768		\$45,255	
Retail Trade		\$10,605 \$10,226 \$10,402 \$10,738 \$13,400					\$12,787 \$11,273 \$11,900 \$13,903				\$14,099 \$16,585 \$15,301			\$17,545 \$16,754		\$18,615	
Information		\$31,616 \$36,897 \$33,491 \$55,706 \$38,193					\$44,503 \$45,475 \$42,610 \$53,146				\$48,614 \$51,028 \$54,874			\$51,409 \$55,294		\$49,777	
Financial Activities		\$29,023 \$27,673 \$31,761 \$24,006 \$38,150					\$42,691 \$33,030 \$36,204 \$28,387				\$42,612 \$37,090 \$42,563			\$51,457 \$40,090		\$45,471	
Professional and Business Services		\$21,531 \$20,783 \$22,316 \$20,837 \$26,390					\$23,591 \$24,330 \$26,732 \$24,360				\$27,372 \$27,348 \$27,736			\$29,857 \$31,636		\$31,257	
Educational Services		\$18,205 \$17,684 \$16,606 \$17,926 \$20,106					\$17,327 \$21,088 \$24,039 \$23,223				\$18,113 \$25,446 \$25,951			\$21,493 \$28,800		\$26,662	
Health Care and Social Assistance		\$18,641 \$19,667 \$18,256 \$21,408 \$23,031					\$21,858 \$22,998 \$23,078 \$24,190				\$23,748 \$25,266 \$26,855			\$26,766 \$28,273		\$28,923	
Leisure and Hospitality		\$8,064 \$7,371 \$7,479 \$6,561 \$10,111					\$8,258 \$7,693 \$8,278 \$7,096				\$7,469 \$8,640 \$10,889			\$9,407 \$11,091		\$10,686	
Other Services		\$16,098 \$13,547 \$15,963 \$23,650 \$14,151					\$15,404 \$16,870 \$20,444 \$20,832				\$23,045 \$16,635 \$22,390			\$21,965 \$21,660		\$25,158	
Public Administration		\$22,318 \$23,834 \$22,443 \$25,365 \$26,781					\$27,871 \$25,708 \$25,716 \$32,020				\$29,354 \$29,486 \$28,959			\$32,122 \$34,880		\$35,380	

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» WIA/WIOA Title I Youth Program Outcomes

Analyses show a steady decline in the number of WIOA Youth program participants from the 2016-2017 to 2020-2021 program years (Figure 9). Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

Figure 9. WIA/WIOA Title I Youth Program Participants and Exiters by Program Year



WIOA was implemented (replacing WIA) in July 2015, therefore post-exit wage and employment statistics represent participants who WIOA services in the program years from 2016-2017 through 2020-2021. Employment and wage outcomes were derived for each WIA/WIOA Title I Youth program exit cohort and included post-exit employment rates (Figure 10) and wages (Figure 11) for up to five years after exit (Table 3).

One year post-participation employment rates reflect a marginal increase across the five exiting cohorts. Employment rates across the five program years rose from 79% for the 2016-2017 program year exiters to 81% for the 2020-2021 program year exiters (Figure 10 and Table 3). At the same time, rates of one year post-exit enrollment in NC public higher education declined across all cohorts from 27% to 23% (Table 3) but are still among the highest of any workforce development program.

One year post-exit median wages have increased overall across cohorts, from \$7,997 for the 2016-2017 exiters, to \$12,033 for the 2020-2021 completers (Figure 11). It is important to note that WIA/WIOA Title I Youth participants range in age from 14 to 21 and are more likely to be in high school or higher education, and less likely to be working full time than older workers.

Longer term post-exit employment and wage measures for the WIA/WIOA Title I Youth program indicate that employment rates were relatively stable over time within each cohort, while wages rose over time within each cohort. For example, median wages for the 2016-2017 cohort started at \$7,997 one year post-exit and increased to \$15,272 at five years post-exit.

Figure 10. Percentage of WIA/WIOA Title I Youth Program Exiters Employed in North Carolina After Exit, by Year of Exit

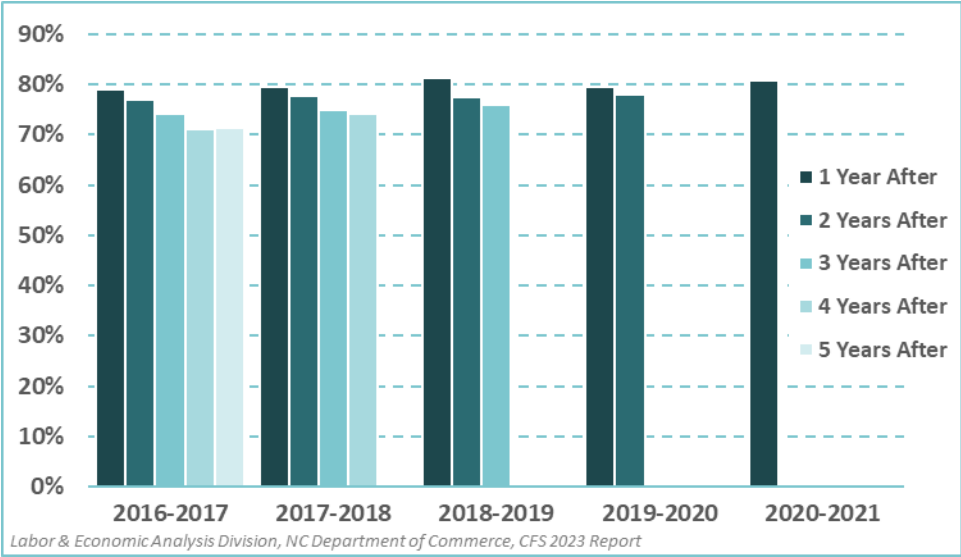
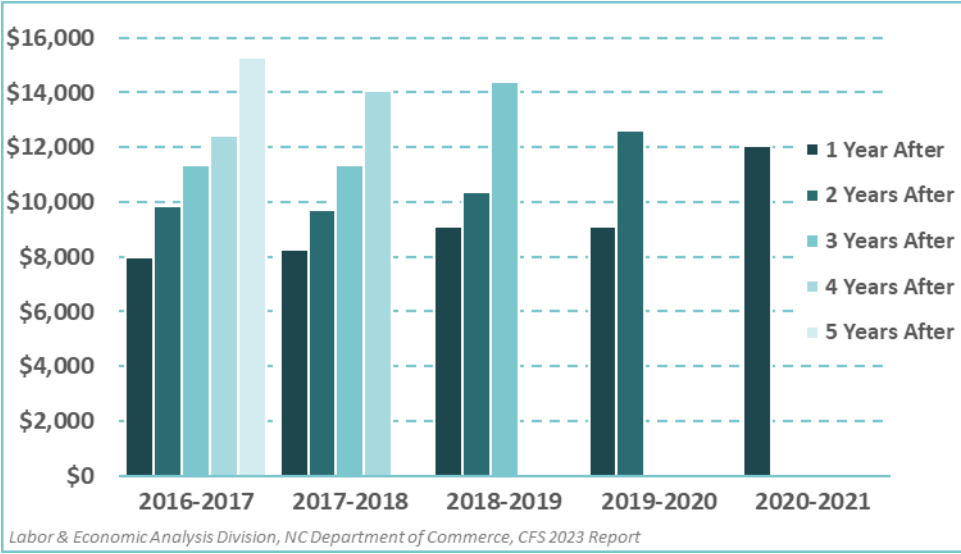
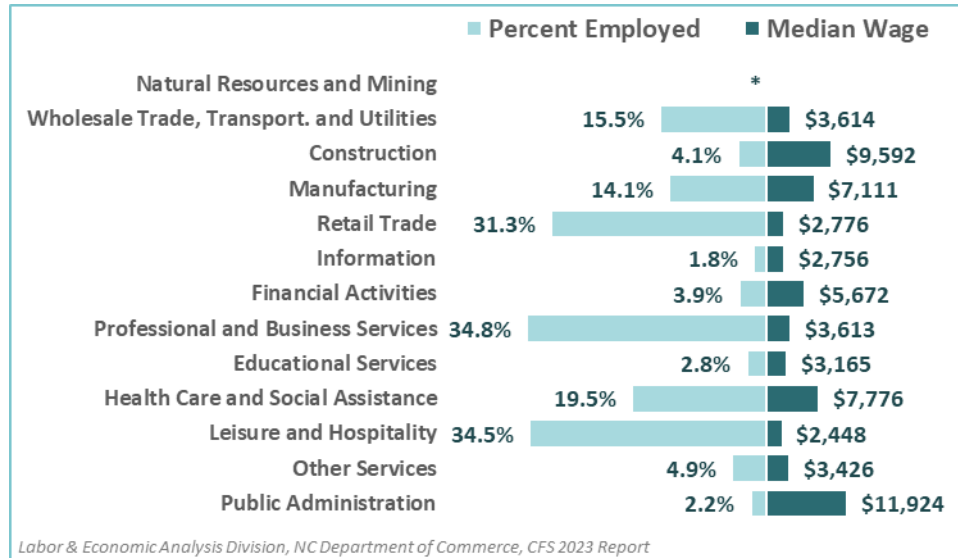


Figure 11. Median Wage of WIA/WIOA Title I Youth Program Exiters in North Carolina, by Year of Exit



As shown in Figure 12 and Table 3, one-year employment outcomes by industry for the 2020-2021 cohort exiters indicate that 35% of the Youth program exiters found employment in the Professional and Business Services industry, earning a median wage of \$3,613. Other top employing industries include Leisure and Hospitality (35%), Retail Trade (31%), and Health Care and Social Assistance (20%).

Figure 12. 2020-2021 WIA/WIOA Title I Youth Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry



Overall, the results show that there have been increasing short-term employment rates and short-term median wages for the WIA/WIOA Youth program exiters. This is indicated by the one year post-employment and wage trends. When exiting cohorts are followed over time, the employment rate tends to be stable. In addition, while the median wages of WIA/WIOA Youth exiters are low, they continue to rise over time. It is important to keep in mind that the WIA/WIOA Youth program serves individuals aged 14 to 21 and are more likely to be in school and less likely to be working full time.

Table 3. WIA/WIOA Title I Youth Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Department of Commerce, Division of Workforce Solutions										Common Follow-up System: Evaluative Measures, 2023 Report						
Workforce Innovation and Opportunity Act - Youth Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce						
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Participants		8,527	8,319	7,950	7,312	6,723	8,527	8,319	7,950	7,312	8,527	8,319	7,950	8,527	8,319	8,527
Exiters		2,448	2,835	2,485	2,246	2,119	2,448	2,835	2,485	2,246	2,448	2,835	2,485	2,448	2,835	2,448
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Exiters Employed In North Carolina	N	1,931	2,256	2,018	1,787	1,712	1,886	2,200	1,928	1,753	1,818	2,126	1,884	1,742	2,100	1,746
	%	79%	80%	81%	80%	81%	77%	78%	78%	78%	74%	75%	76%	71%	74%	71%
Exiters' Wages in North Carolina	Mean	\$10,490	\$11,045	\$12,170	\$12,272	\$15,495	\$12,484	\$12,878	\$14,277	\$15,798	\$14,269	\$14,685	\$17,652	\$15,609	\$17,917	\$19,153
	Median	\$7,997	\$8,277	\$9,122	\$9,103	\$12,033	\$9,871	\$9,730	\$10,349	\$12,595	\$11,343	\$11,364	\$14,394	\$12,442	\$14,068	\$15,272
Exiters Enrolled in NC Public Higher Education	N	652	770	609	524	478	519	631	469	443	445	500	417	385	420	315
	%	27%	27%	25%	23%	23%	21%	22%	19%	20%	18%	18%	17%	16%	15%	13%
Exiters Enrolled in NC Public Education, Employment, or Training Program	N	1,667	2,396	1,656	1,190	1,004	1,686	2,309	1,582	1,171	1,636	2,182	1,568	1,571	2,149	1,565
	%	68%	85%	67%	53%	47%	69%	81%	52%	52%	67%	77%	63%	64%	76%	64%
Exiters Enrolled or Employed in NC	N	2,244	2,717	2,295	2,006	1,879	2,221	2,691	2,240	1,962	2,169	2,632	2,225	2,145	2,622	2,132
	%	92%	96%	92%	89%	89%	91%	95%	90%	87%	89%	93%	90%	88%	92%	87%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		0.8%	0.7%	0.6%	0.6%	*	1.0%	*	0.6%	*	1.0%	*	0.5%	0.6%	*	0.6%
Wholesale Trade, Transport. and Utilities		7.7%	7.8%	9.9%	15.6%	15.5%	8.0%	10.0%	13.8%	18.2%	9.6%	13.1%	15.4%	13.4%	14.2%	16.5%
Construction		4.1%	3.4%	5.6%	5.1%	4.1%	4.7%	3.9%	5.3%	6.2%	5.0%	3.5%	5.8%	4.0%	4.2%	4.4%
Manufacturing		11.5%	11.5%	11.4%	11.6%	14.1%	13.8%	12.6%	11.8%	12.7%	14.7%	13.5%	14.3%	14.5%	14.2%	14.5%
Retail Trade		28.3%	29.0%	28.9%	31.7%	31.3%	27.0%	28.1%	28.2%	30.3%	25.6%	27.0%	29.8%	26.3%	28.5%	27.7%
Information		1.8%	1.0%	1.4%	1.1%	1.8%	1.7%	1.1%	1.0%	1.0%	1.8%	1.1%	1.3%	1.1%	1.4%	1.7%
Financial Activities		2.4%	2.7%	2.7%	2.0%	3.9%	2.3%	3.0%	3.7%	3.0%	3.2%	4.4%	4.9%	3.9%	5.3%	5.4%
Professional and Business Services		32.6%	37.3%	32.3%	34.8%	34.8%	34.6%	34.9%	35.4%	35.5%	33.4%	38.1%	35.7%	37.2%	36.3%	36.4%
Educational Services		2.3%	2.4%	2.2%	1.9%	2.8%	2.8%	2.7%	1.9%	2.6%	2.6%	2.5%	2.4%	2.0%	2.8%	2.5%
Health Care and Social Assistance		16.7%	17.6%	21.1%	17.5%	19.5%	17.9%	18.9%	21.6%	19.6%	19.6%	20.2%	22.5%	20.0%	20.1%	19.2%
Leisure and Hospitality		42.1%	40.3%	37.9%	35.5%	34.5%	38.7%	36.1%	31.0%	31.9%	35.0%	30.2%	29.1%	29.4%	29.1%	29.2%
Other Services		3.0%	3.8%	3.9%	4.1%	4.9%	3.0%	3.6%	3.6%	3.8%	3.4%	3.2%	4.0%	3.2%	4.5%	4.4%
Public Administration		1.8%	2.0%	2.1%	2.0%	2.2%	2.1%	2.2%	2.6%	1.9%	2.3%	2.5%	2.9%	2.9%	3.1%	2.8%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$1,766	\$1,288	\$5,555	\$3,367	*	\$583	*	\$3,622	*	\$2,229	*	\$2,444	\$2,046	*	\$5,802
Wholesale Trade, Transport. and Utilities		\$2,975	\$3,545	\$2,552	\$2,615	\$3,614	\$3,482	\$3,629	\$2,885	\$3,781	\$5,377	\$3,404	\$3,400	\$4,329	\$5,204	\$4,300
Construction		\$3,919	\$6,227	\$10,498	\$9,620	\$9,592	\$6,325	\$8,081	\$6,848	\$7,852	\$9,966	\$5,937	\$7,021	\$9,622	\$7,654	\$11,691
Manufacturing		\$3,659	\$4,786	\$5,082	\$3,479	\$7,111	\$5,834	\$4,901	\$5,225	\$5,404	\$6,066	\$5,853	\$6,685	\$5,862	\$7,154	\$7,087
Retail Trade		\$2,626	\$2,752	\$3,032	\$2,752	\$2,776	\$3,273	\$3,500	\$3,540	\$3,561	\$3,552	\$4,388	\$3,406	\$3,608	\$3,739	\$3,843
Information		\$4,882	\$2,047	\$2,574	\$2,039	\$2,756	\$5,802	\$4,638	\$3,960	\$4,492	\$6,135	\$4,916	\$5,745	\$5,844	\$5,784	\$13,867
Financial Activities		\$4,206	\$5,097	\$6,957	\$4,141	\$5,672	\$4,817	\$8,253	\$4,179	\$4,803	\$6,012	\$6,212	\$6,540	\$3,996	\$8,669	\$8,875
Professional and Business Services		\$2,357	\$2,708	\$2,772	\$2,575	\$3,613	\$2,541	\$2,720	\$2,744	\$3,350	\$3,002	\$3,412	\$4,317	\$3,018	\$3,727	\$3,918
Educational Services		\$3,044	\$4,824	\$5,275	\$8,891	\$3,165	\$3,006	\$5,284	\$10,609	\$4,955	\$4,379	\$5,214	\$4,680	\$12,851	\$8,046	\$10,761
Health Care and Social Assistance		\$6,947	\$7,286	\$7,504	\$8,177	\$7,776	\$7,161	\$6,904	\$8,106	\$8,886	\$8,681	\$7,063	\$10,783	\$7,995	\$8,868	\$10,103
Leisure and Hospitality		\$2,790	\$2,479	\$2,815	\$2,451	\$2,448	\$3,193	\$3,066	\$2,591	\$2,904	\$3,269	\$2,795	\$2,985	\$2,813	\$3,006	\$3,494
Other Services		\$2,350	\$1,633	\$2,352	\$3,862	\$3,426	\$3,288	\$2,742	\$1,859	\$2,604	\$2,461	\$2,291	\$2,883	\$3,332	\$3,423	\$3,305
Public Administration		\$10,592	\$16,020	\$12,889	\$17,325	\$11,924	\$12,977	\$22,491	\$22,280	\$16,473	\$16,432	\$22,748	\$22,909	\$18,566	\$16,258	\$24,271
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$4,603	\$4,092	\$6,783	\$7,279	*	\$4,366	*	\$6,948	*	\$7,486	*	\$4,671	\$9,219	*	\$10,904
Wholesale Trade, Transport. and Utilities		\$7,751	\$7,991	\$7,528	\$7,512	\$8,563	\$7,975	\$7,876	\$8,388	\$9,930	\$10,868	\$8,414	\$9,363	\$9,918	\$11,505	\$11,400
Construction		\$9,983	\$10,529	\$13,800	\$13,117	\$15,287	\$12,127	\$12,046	\$14,000	\$14,712	\$15,100	\$13,530	\$13,976	\$15,994	\$13,104	\$20,005
Manufacturing		\$9,221	\$9,282	\$10,968	\$7,440	\$12,851	\$10,953	\$10,274	\$12,731	\$12,351	\$11,931	\$11,277	\$14,881	\$12,809	\$13,523	\$14,834
Retail Trade		\$5,372	\$5,358	\$5,653	\$5,408	\$6,500	\$6,439	\$6,373	\$6,928	\$7,106	\$6,977	\$7,929	\$7,714	\$7,917	\$8,550	\$8,795
Information		\$10,246	\$4,068	\$6,502	\$9,457	\$7,502	\$13,672	\$7,891	\$7,166	\$12,619	\$12,442	\$13,094	\$11,902	\$14,074	\$10,776	\$17,746
Financial Activities		\$10,600	\$12,113	\$10,332	\$7,713	\$12,560	\$12,621	\$14,838	\$14,468	\$11,703	\$13,557	\$14,100	\$14,677	\$14,912	\$15,766	\$16,691
Professional and Business Services		\$5,013	\$5,514	\$5,563	\$5,767	\$7,475	\$5,751	\$6,142	\$6,213	\$6,869	\$6,527	\$6,716	\$8,222	\$6,948	\$8,377	\$8,675
Educational Services		\$6,578	\$7,988	\$9,637	\$11,723	\$9,871	\$6,382	\$9,381	\$14,385	\$11,162	\$7,552	\$10,056	\$14,469	\$14,070	\$14,200	\$14,778
Health Care and Social Assistance		\$9,695	\$10,226	\$11,092	\$12,497	\$12,997	\$10,654	\$11,735	\$12,562	\$13,471	\$11,993	\$12,732	\$14,628	\$13,382	\$14,624	\$15,228
Leisure and Hospitality		\$4,566	\$4,548	\$4,568	\$4,523	\$5,618	\$5,279	\$5,433	\$4,760	\$5,793	\$5,786	\$5,459	\$5,687	\$5,706	\$6,639	\$7,098
Other Services		\$4,755	\$4,545	\$4,834	\$7,467	\$9,230	\$5,986	\$5,176	\$5,130	\$7,922	\$5,222	\$7,671	\$6,796	\$8,571	\$8,163	\$9,593
Public Administration		\$13,976	\$16,647	\$15,831	\$18,971	\$17,420	\$15,284	\$21,117	\$20,679	\$20,409	\$18,592	\$20,478	\$23,315	\$19,973	\$20,782	\$24,649

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Wagner-Peyser Program Overview

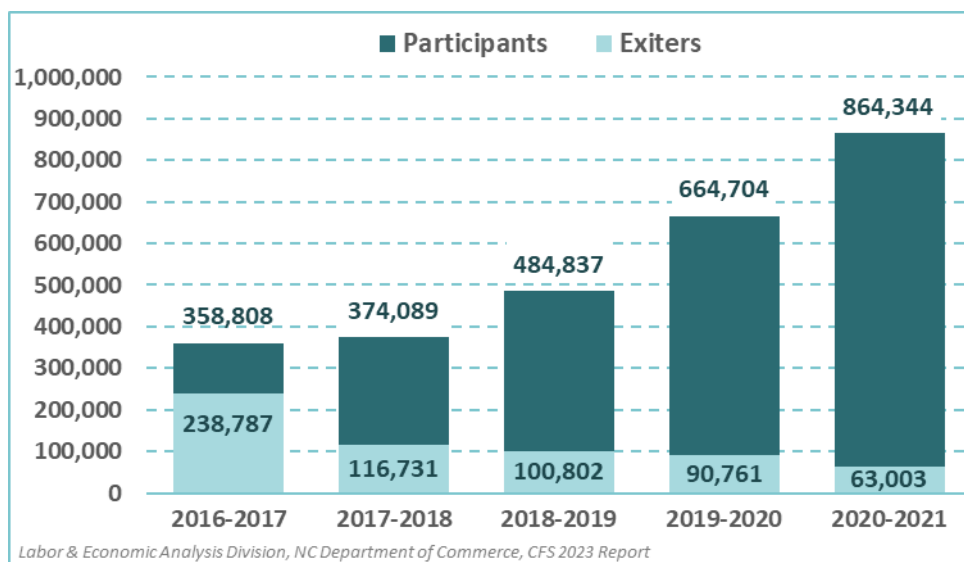
The Wagner-Peyser Act of 1933 established a nationwide system of public employment offices known as the Employment Service. In North Carolina, the Division of Workforce Solutions provides oversight and operational responsibility for the state's Wagner-Peyser Act program. This program provides labor exchange services such as job search assistance, job referral, and placement assistance for job seekers; re-employment services for unemployment insurance claimants; and job recruitment assistance for employers. Specialized services are offered to veterans, individuals with disabilities, migrant and seasonal farmworkers, ex-offenders, youth, minorities, and older workers. A range of other services are also available to meet the needs of both job seekers and employers, including skill, ability, and aptitude assessments; career guidance; assistance with job restructuring; and helping employers deal with layoffs.¹⁰

In 2015, the Workforce Innovation and Opportunity Act (WIOA) took effect, with the Wagner-Peyser Program designated as a core program participant providing services at American Job Centers. The WIOA integrated service delivery model emphasizes co-enrollment of customers in both Wagner-Peyser and WIA/WIOA Adult program when eligibility criteria permit.

» Wagner-Peyser Program Outcomes

As shown in Figure 13, the number of program participants in the Wagner-Peyser program has increased significantly between the 2016-2017 and 2020-2021 program years. Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

Figure 13. Wagner-Peyser Program Participants and Exiters by Program Year

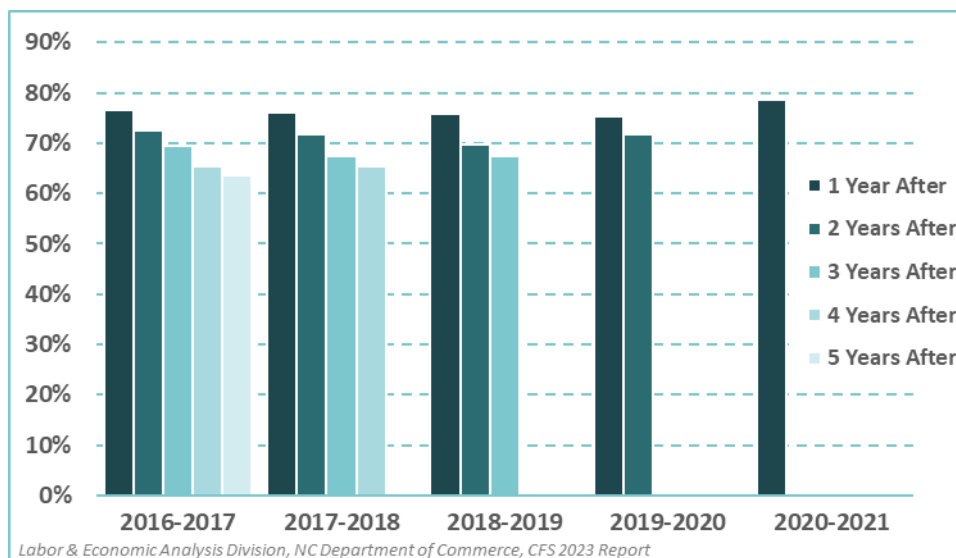


¹⁰ U.S. Department of Labor Employment and Training Administration, www.doleta.gov/wioa/

Employment and wage outcomes were derived for each cohort of Wagner-Peyser program exiters. Analyses included the post-exit employment rates (Figure 14) and wages (Figure 15) for up to five years after exit (also see Table 4).

One year post-exit employment rates were stable across cohorts, ranging from a low of 75% for the 2020-2021 program year exiters to a high of 79% for the 2020-2021 program year exiters (Figure 14 and Table 4). The percentage of exiters subsequently enrolling in NC public higher education one year after exiting the program also remained stable at 9-11% for each of the five cohorts (Table 4). Longer term post-exit employment measures indicate that each exiting cohort had decreasing percentages of employment in North Carolina over time, which is common to almost all workforce and education programs.

Figure 14. Percentage of Wagner-Peyser Exiters Employed in North Carolina After Exit, by Year of Exit



One year post-exit median wages peaked for the most recent 2020-2021 cohort at \$25,863 (Figure 15 and Table 4). Within all cohorts, median annual wages increased over time. For example, the 2016-2017 cohort experienced wage growth from \$18,766 to \$29,363 between the first and fifth post-exit years.

As shown in Figure 16, one-year employment outcomes by industry indicate that 31% of 2020-2021 Wagner-Peyser program exiters were employed in the Professional and Business Services industry, earning a median annual wage of \$9,775. Other top employing industries include Manufacturing (20%), Leisure and Hospitality (18%), Retail Trade (17%), Health Care and Social Assistance (17%), and Wholesale Trade, Transportation, and Utilities (14%). Of these industries, Manufacturing accounted for the highest median annual wage (\$24,055).

Figure 15. Median Wage of Wagner-Peyser Program Exiters in North Carolina, by Year of Exit

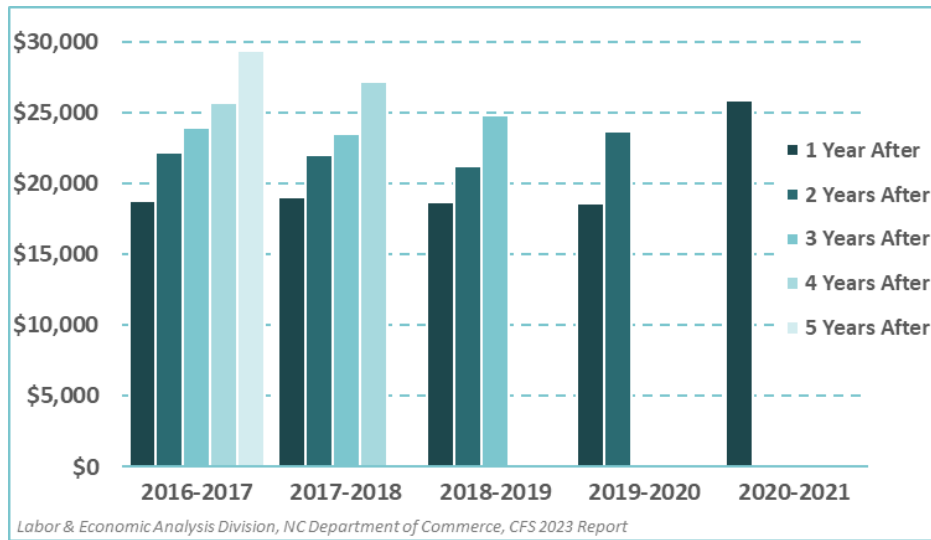
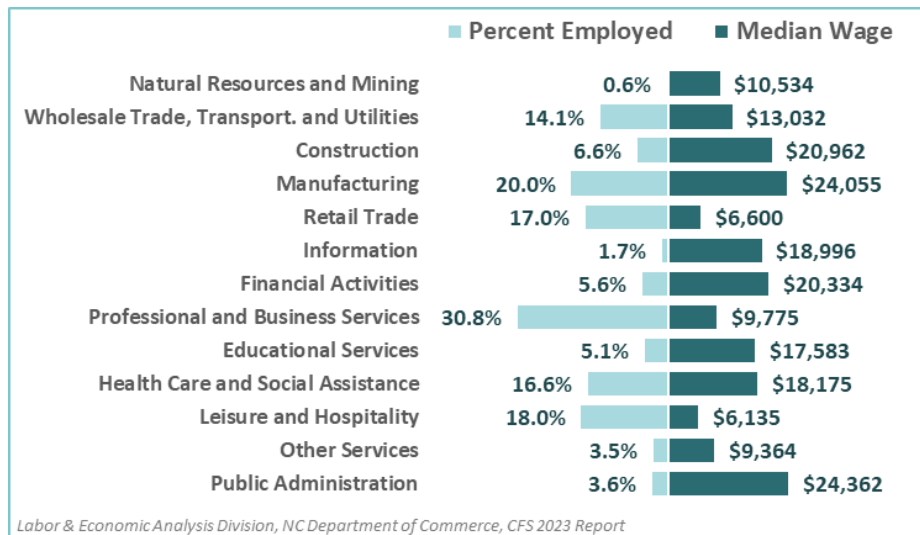


Figure 16. 2020-2021 Wagner-Peyser Exiters One Year Post-Exit: Employment and Median Wage by Industry



Overall, one year post-exit employment rates and median wages remained stable for Wagner-Peyser participants. When individual cohorts are followed over time, employment rates tend to decline, while median wages rise. The median wage of Wagner-Peyser participants exiting in the 2016-2017 program year was \$18,766 one year after exit and \$29,363 after five years. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.¹¹¹²

¹¹ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

¹² Source of wage data: Common Follow-up System. For comparison, the 2019 median annual wage in North Carolina for all wage-earning residents was \$33,205 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/2019-poverty-guidelines>

Table 4. Wagner-Peyser Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Department of Commerce, Division of Workforce Solutions										Common Follow-up System: Evaluative Measures, 2023 Report							
Wagner-Peyser Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce							
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		358,808	374,089	484,837	664,704	864,344	358,808	374,089	484,837	664,704	358,808	374,089	484,837	358,808	374,089	358,808	
Exiters		238,787	116,731	100,802	90,761	63,003	238,787	116,731	100,802	90,761	238,787	116,731	100,802	238,787	116,731	238,787	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N %	182,586 76%	88,871 76%	76,421 76%	68,431 75%	49,490 79%	173,136 73%	83,733 72%	70,274 70%	65,207 72%	165,615 69%	78,592 67%	68,045 68%	156,085 65%	76,410 65%	152,042 64%
Exiters' Wages in North Carolina		Mean Median	\$23,174 \$18,766	\$23,464 \$19,019	\$22,671 \$18,692	\$23,282 \$18,605	\$31,277 \$25,863	\$26,896 \$22,180	\$27,060 \$22,000	\$25,968 \$21,195	\$28,372 \$23,691	\$28,998 \$23,946	\$28,944 \$23,474	\$29,645 \$24,851	\$30,931 \$25,646	\$32,783 \$27,182	\$34,647 \$29,363
Exiters Enrolled in NC Public Higher Education		N %	26,284 11%	11,979 10%	9,685 10%	8,485 9%	5,878 9%	23,125 10%	10,560 9%	7,330 7%	7,274 8%	19,979 8%	8,087 7%	6,789 7%	15,595 7%	7,510 6%	14,701 6%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	33,076 14%	15,374 13%	12,662 13%	11,324 12%	7,028 11%	58,968 25%	27,447 24%	22,583 22%	21,843 24%	64,481 27%	29,786 26%	27,378 27%	68,532 29%	33,953 29%	75,466 32%
Exiters Enrolled or Employed in NC		N %	188,904 79%	91,752 79%	78,848 78%	70,605 78%	50,507 80%	181,952 76%	87,782 75%	74,735 74%	69,599 77%	176,115 74%	84,571 72%	73,887 73%	170,899 72%	83,835 72%	169,698 71%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			0.9%	0.9%	0.9%	0.9%	0.6%	0.8%	0.9%	0.9%	0.8%	0.7%	0.8%	0.7%	0.7%	0.7%	0.6%
Wholesale Trade, Transport. and Utilities			9.6%	9.5%	10.1%	12.5%	14.1%	9.9%	10.5%	11.7%	14.1%	10.6%	11.9%	13.3%	11.9%	13.1%	13.3%
Construction			6.4%	6.7%	6.2%	5.7%	6.6%	6.4%	6.5%	5.9%	5.6%	6.3%	6.1%	5.8%	6.0%	6.1%	5.9%
Manufacturing			17.8%	18.5%	21.0%	21.3%	20.0%	19.2%	19.6%	21.5%	22.2%	19.4%	19.4%	22.5%	19.3%	20.3%	20.0%
Retail Trade			18.0%	17.8%	17.4%	18.5%	17.0%	16.6%	16.8%	16.5%	18.4%	16.2%	16.3%	17.7%	15.7%	17.0%	16.4%
Information			1.6%	1.9%	1.6%	1.2%	1.7%	1.7%	1.9%	1.4%	1.5%	1.7%	1.7%	1.6%	1.6%	2.0%	1.8%
Financial Activities			4.9%	5.0%	4.6%	4.2%	5.6%	5.3%	5.5%	5.2%	5.3%	5.6%	5.9%	5.8%	5.9%	6.8%	6.6%
Professional and Business Services			34.1%	36.1%	34.1%	35.2%	30.8%	29.7%	30.0%	30.1%	31.8%	27.6%	29.1%	30.4%	26.7%	29.3%	27.1%
Educational Services			5.5%	4.7%	4.5%	3.6%	5.1%	5.4%	4.8%	4.3%	4.0%	5.4%	4.6%	4.7%	5.1%	4.9%	5.5%
Health Care and Social Assistance			14.9%	14.1%	14.6%	15.2%	16.6%	15.3%	14.6%	15.0%	15.9%	15.7%	14.7%	15.6%	15.8%	15.3%	16.1%
Leisure and Hospitality			18.5%	18.9%	18.9%	18.2%	18.0%	16.7%	17.1%	15.5%	17.2%	15.8%	14.5%	15.8%	13.5%	14.6%	13.7%
Other Services			3.1%	3.1%	3.1%	3.0%	3.5%	3.2%	3.0%	3.0%	3.1%	3.1%	2.9%	3.0%	3.0%	3.0%	3.1%
Public Administration			4.1%	4.0%	3.8%	3.9%	3.6%	4.4%	4.3%	4.3%	4.2%	4.6%	4.6%	4.4%	4.9%	4.7%	5.0%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$6,624	\$8,447	\$7,150	\$8,040	\$10,534	\$8,467	\$9,761	\$8,050	\$9,449	\$12,228	\$14,163	\$12,054	\$13,138	\$14,631	\$15,334
Wholesale Trade, Transport. and Utilities			\$12,855	\$12,664	\$11,684	\$9,696	\$13,032	\$17,032	\$16,054	\$12,035	\$11,821	\$18,278	\$14,315	\$12,185	\$16,676	\$14,691	\$16,584
Construction			\$14,086	\$14,376	\$14,734	\$14,434	\$20,962	\$18,307	\$19,070	\$17,591	\$17,430	\$20,613	\$19,919	\$20,240	\$23,055	\$21,938	\$25,232
Manufacturing			\$19,682	\$17,658	\$17,705	\$12,923	\$24,055	\$23,468	\$20,957	\$19,985	\$19,078	\$24,883	\$21,754	\$21,639	\$25,855	\$23,860	\$28,650
Retail Trade			\$6,003	\$5,912	\$5,573	\$5,454	\$6,600	\$7,793	\$7,213	\$6,807	\$6,411	\$8,280	\$7,762	\$6,474	\$8,892	\$7,679	\$8,320
Information			\$15,171	\$20,566	\$18,200	\$22,816	\$18,996	\$22,152	\$27,181	\$29,028	\$19,442	\$24,961	\$35,347	\$25,399	\$30,964	\$32,441	\$27,705
Financial Activities			\$18,989	\$19,626	\$19,517	\$17,114	\$20,334	\$24,523	\$27,359	\$24,195	\$18,561	\$28,238	\$31,044	\$25,078	\$31,772	\$29,408	\$30,471
Professional and Business Services			\$6,690	\$6,553	\$6,107	\$5,996	\$9,775	\$7,348	\$7,348	\$6,382	\$7,125	\$7,790	\$7,487	\$7,667	\$8,283	\$8,960	\$9,817
Educational Services			\$13,009	\$12,035	\$12,449	\$14,756	\$17,583	\$16,575	\$16,560	\$18,022	\$18,189	\$19,715	\$20,870	\$19,901	\$22,731	\$23,910	\$25,709
Health Care and Social Assistance			\$13,680	\$13,576	\$13,600	\$14,735	\$18,175	\$16,632	\$16,272	\$16,486	\$17,402	\$18,295	\$18,112	\$17,173	\$20,283	\$18,920	\$21,596
Leisure and Hospitality			\$4,108	\$3,871	\$3,640	\$3,240	\$6,135	\$4,837	\$4,421	\$3,575	\$4,185	\$5,084	\$3,941	\$4,058	\$4,528	\$4,663	\$5,214
Other Services			\$6,322	\$6,075	\$6,535	\$6,735	\$9,364	\$8,143	\$8,397	\$6,705	\$8,703	\$9,727	\$9,102	\$8,124	\$10,725	\$9,600	\$11,505
Public Administration			\$24,401	\$25,287	\$25,366	\$26,271	\$24,362	\$29,506	\$30,243	\$30,790	\$28,851	\$31,931	\$32,853	\$32,738	\$34,440	\$34,625	\$36,409
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$14,037	\$14,067	\$13,707	\$14,708	\$16,983	\$16,460	\$16,608	\$15,730	\$16,759	\$22,696	\$19,630	\$18,651	\$23,023	\$21,497	\$23,291
Wholesale Trade, Transport. and Utilities			\$19,958	\$19,704	\$18,253	\$17,612	\$22,254	\$24,007	\$23,028	\$20,570	\$20,853	\$25,639	\$23,419	\$21,542	\$25,473	\$24,805	\$26,764
Construction			\$19,699	\$20,298	\$20,067	\$20,475	\$26,551	\$23,526	\$24,247	\$23,353	\$24,138	\$25,664	\$25,962	\$26,055	\$28,106	\$28,297	\$30,656
Manufacturing			\$22,393	\$21,414	\$20,893	\$18,951	\$28,041	\$26,180	\$24,341	\$23,749	\$24,063	\$27,636	\$25,513	\$25,936	\$28,771	\$28,188	\$31,289
Retail Trade			\$10,646	\$10,701	\$10,440	\$10,921	\$13,132	\$12,934	\$12,684	\$12,890	\$12,867	\$14,032	\$14,265	\$13,502	\$15,572	\$15,189	\$16,318
Information			\$24,923	\$28,877	\$24,799	\$31,868	\$35,173	\$32,282	\$36,262	\$36,243	\$33,379	\$36,084	\$45,553	\$38,034	\$41,660	\$45,209	\$42,281
Financial Activities			\$25,259	\$26,243	\$26,116	\$25,402	\$29,508	\$31,114	\$33,950	\$32,943	\$28,665	\$35,530	\$39,201	\$34,764	\$39,509	\$39,534	\$42,801
Professional and Business Services			\$14,273	\$14,368	\$13,416	\$13,673	\$21,122	\$16,500	\$17,251	\$15,325	\$16,950	\$18,160	\$18,229	\$17,642	\$19,801	\$20,765	\$22,666
Educational Services			\$17,941	\$17,263	\$16,890	\$18,598	\$22,592	\$20,959	\$20,420	\$21,306	\$22,020	\$23,088	\$23,591	\$23,612	\$26,028	\$26,526	\$28,385
Health Care and Social Assistance			\$17,253	\$17,524	\$17,355	\$19,290	\$22,940	\$20,099	\$20,050	\$20,486	\$22,100	\$21,634	\$21,951	\$22,007	\$23,621	\$23,560	\$25,364
Leisure and Hospitality			\$7,536	\$7,303	\$6,961	\$7,390	\$11,950	\$8,767	\$8,292	\$7,440	\$9,344	\$9,193	\$8,331	\$8,679	\$9,211	\$9,844	\$10,810
Other Services			\$12,509	\$12,067	\$12,616	\$13,795	\$17,285	\$14,968	\$15,336	\$14,437	\$16,808	\$16,864	\$16,970	\$15,718	\$18,741	\$18,115	\$19,591
Public Administration			\$23,582	\$24,167	\$24,137	\$24,644	\$25,564	\$27,347	\$28,020	\$28,130	\$27,606	\$29,886	\$30,521	\$30,289	\$32,301	\$32,553	\$34,236

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Summary and Recommendations

The Division of Workforce Solutions (DWS) offers a broad spectrum of services to several customer groups, and programs described in this section provide different types of services to different customers. Although there is some overlap of services or customer groups between programs, and some common trends indicating their interrelationship, caution should be exercised when comparing the outcome measures of these programs.

The number of participants served under the WIA/WIOA Adult program peaked at more than 62,000 participants in the 2016-2017 program year and has since declined to around 10,000 participants per program year. Likewise, the WIA/WIOA Dislocated Worker program saw the largest number of participants in the 2017-2018 program year, and then declined to lower levels the following years. These sharp changes in program participation likely reflect transition from WIA to WIOA programs including efforts to integrate service delivery and leverage resources across the multiple programs that a given customer may be eligible for, as well as changes in how DWS measures “participation” for WIOA reporting purposes.

Changes in program participation occurred alongside shifts in the outcomes of program exiters, particularly for the WIA/WIOA Adult program. This program saw a gradual increase in the share of exiters subsequently enrolling in public higher education in the post-2017 cohorts. The shift in outcomes was also apparent in these exiters’ industry of employment: while earlier cohorts were concentrated in Manufacturing and lower-paying Professional and Business Services jobs (a sector which includes temporary help agencies), post-2017 cohorts were more likely to be employed in the Health Care and Social Assistance sector.

More research is needed to determine whether these shifts in outcomes reflect changes in services provided, a different composition of program participants after service integration, changes in reporting, or changes in the overall economy of North Carolina. Further study of service integration is recommended, including changes in the types of services provided and customers served, and the relative performance of different types of services (or combinations thereof). The shift in industries employing WIA Adult program exiters away from the Manufacturing sector also suggests that an examination of the alignment between workforce programs and the needs of the labor market may be merited particularly since Manufacturing provides higher wages to program exiters than some other industries.

The WIA/WIOA Youth and Adult programs exhibited outcome trends that were consistent with a tightening labor market in 2017-2021. These programs saw continuous increases in wage earnings, increasing rates of employment in the state, and fluctuating rates of enrollment in public higher education between the 2016-2017 and 2020-2021 cohorts, which may be due in part to the gradual expansion of employment opportunities for young, unemployed, and underemployed workers and those with other barriers to employment.

Further study of the services received by WIA/WIOA Adult and WIA/WIOA Dislocated Worker participants, as well as other DWS customer groups that are underemployed or unemployed, may be beneficial. The current economic recovery from the COVID-19 pandemic is rearranging North Carolina’s labor market. Maintaining and analyzing up to date data on program participation and industry employment needs will be critical to support recovery for North Carolina residents and businesses.

The Department of Health and Human Services

Division of Social Services

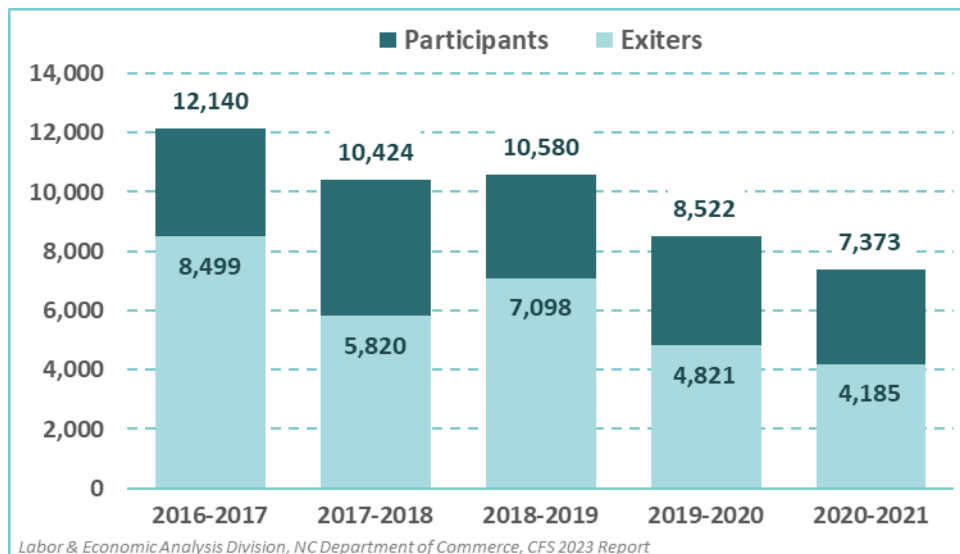
» Work First Program Overview

North Carolina's Temporary Assistance for Needy Families (TANF) program is called Work First. Work First provides time-limited cash assistance (up to 24 months) to needy families with children who meet eligibility requirements. Work First is based on the foundational premise that parents have a responsibility to support themselves and their children. Through Work First, parents can receive short-term training and other related services that can help them become employed and self-sufficient.¹³ Work First emphasizes three strategies: diversion, work, and retention. Diversion strategies focus on keeping families off cash assistance by helping them with unexpected emergencies and setbacks. Work strategies include signing a Mutual Responsibility Agreement (MRA)/Outcome Plan, making work or work-related activities mandatory, and limiting the time a family can receive assistance. Retention strategies are designed to help keep families off public assistance; encourage savings; and provide employment-related services, such as transportation assistance, financial counseling short-term skills training, and family enrichment services.¹⁴ With the implementation of WIOA, Work First became a required partner in the One-Stop career centers.

» Work First Program Outcomes

The number of individuals participating in or exiting Work First trended downward between the 2016-2017 and 2020-2021 program years (Figure 17). Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

Figure 17. Work First Program Participants and Exiters by Program Year



Figures 18 and 19 show employment and wage outcomes for Work First program participants by year of exit (also see Table 5). One year post-exit employment rates increased for the first two program years, from 73%

¹³ North Carolina Division of Social Services, <http://www.ncdhhs.gov/dss/workfirst/index.htm>

¹⁴ Ibid.

for the 2016-2017 program year exiters to 74% for the 2017-2018 program year exiters before dropping to around 67% for subsequent program year exiters. One year post-exit median wages increased over the program years from \$8,546 in the 2016-2017 program year exiters to \$9,551 in 2020-2021 with a slight dip in 2019-2020 to \$8,213.

Figure 18. Percentage of Work First Program Exiters Employed in North Carolina After Exit, by Year of Exit

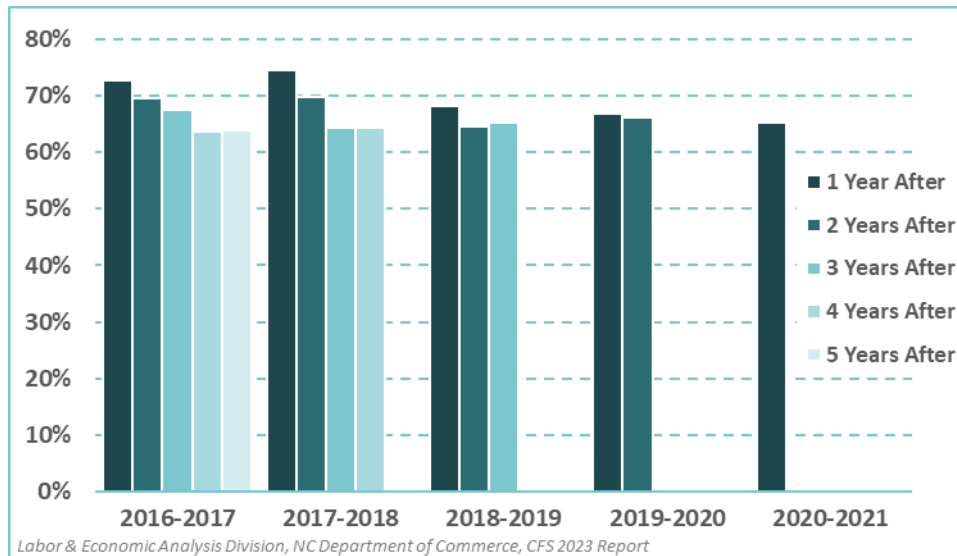
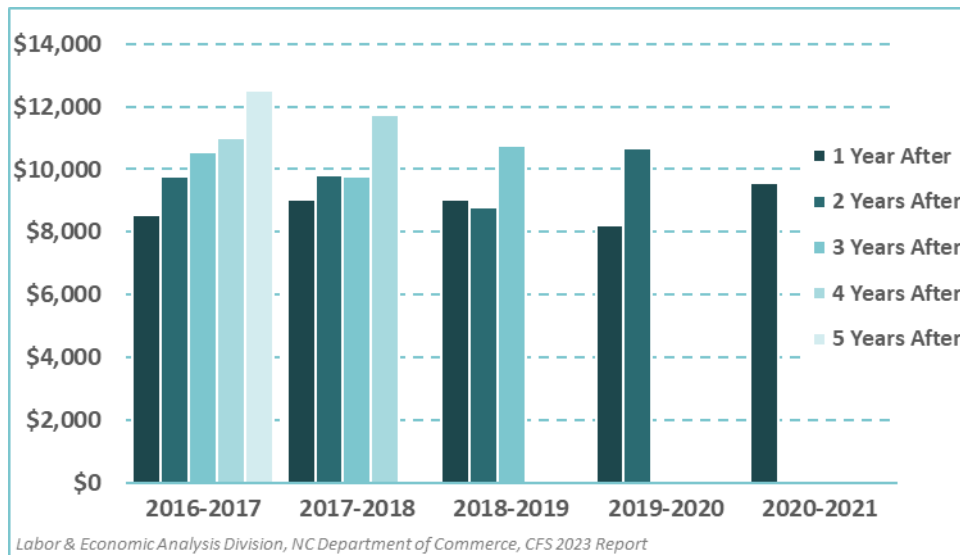


Figure 19. Median Wage of Work First Program Exiters in North Carolina, by Year of Exit

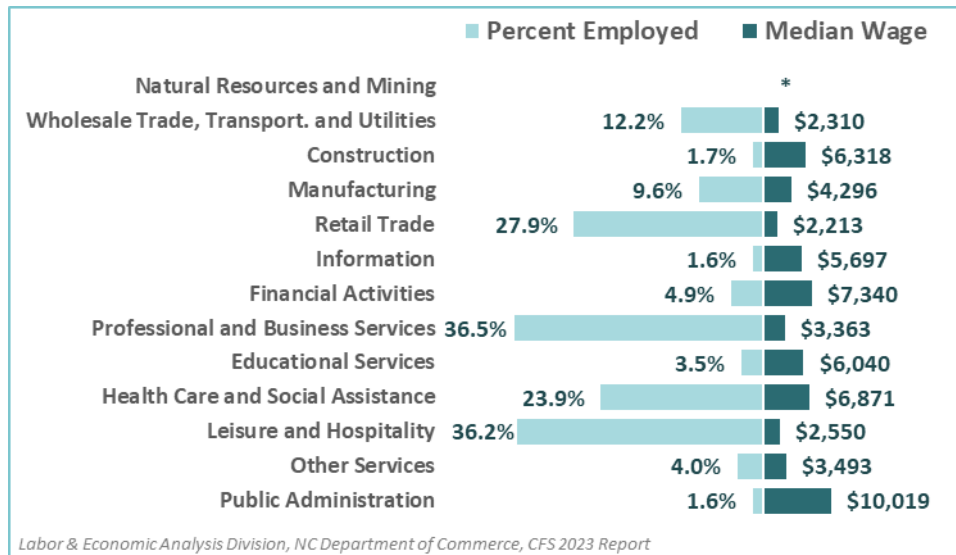


Within cohorts, employment rates decreased while median wages increased over time, a phenomenon common to almost all workforce programs. For example, the employment rates of the 2016-2017 cohort dropped from 73% one year after exit to 64% five years after exit, while their median annual wages increased from \$8,546 one year after exit to \$12,528 in year five.

Work First program exiters earned low wages across all industries. Figure 20 and Table 5 show that 37% of 2020-2021 exiters were employed in Professional and Business Services, followed by Leisure and Hospitality

(36%), Retail Trade (28%), Health Care and Social Assistance (24%), and Manufacturing (10%). Of these industries, Health Care and Social Assistance paid the highest median annual wage (\$6,871).

Figure 20. 2020-2021 Work First Program Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

Overall, the findings reported above are consistent with some elements of a growing economy and tightening labor market. The data show a decrease in the number of Work First participants through the 2020-2021 program year and a corresponding increase in median wages for program exiters across cohorts. However, short-term employment rates exhibit some declines over successive program years.

A stated goal of the Work First program is to assist individuals in becoming economically self-sufficient. We find that Work First program exiters experience low employment and wage outcomes, with wages below established federal poverty guidelines and employment rates well below the statewide average. More research is needed to establish the impact of the Work First program on participants, who might have barriers to employment that precede their time in the program.

Table 5. Work First Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

Department of Health and Human Services										Common Follow-up System: Evaluative Measures, 2023 Report						
Work First - Employment and Training Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce						
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Participants		12,140	10,424	10,580	8,522	7,373	12,140	10,424	10,580	8,522	12,140	10,424	10,580	12,140	10,424	12,140
Exiters		8,499	5,820	7,098	4,821	4,185	8,499	5,820	7,098	4,821	8,499	5,820	7,098	8,499	5,820	8,499
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Exiters Employed In North Carolina	N	6,173	4,334	4,835	3,216	2,734	5,915	4,062	4,574	3,192	5,744	3,745	4,634	5,416	3,750	5,421
	%	73%	74%	68%	67%	65%	70%	70%	64%	66%	68%	64%	65%	64%	64%	64%
Exiters' Wages in North Carolina	Mean	\$10,904	\$11,417	\$11,903	\$12,283	\$13,303	\$12,572	\$12,995	\$12,618	\$14,949	\$14,007	\$13,773	\$14,701	\$14,962	\$16,034	\$17,097
	Median	\$8,546	\$9,017	\$9,028	\$8,213	\$9,551	\$9,750	\$9,795	\$8,789	\$10,664	\$10,552	\$9,773	\$10,758	\$10,992	\$11,751	\$12,528
Exiters Enrolled in NC Public Higher Education	N	1,168	803	924	566	524	1,029	691	767	538	894	541	785	711	543	776
	%	14%	14%	13%	12%	13%	12%	12%	11%	11%	11%	9%	11%	8%	9%	9%
Exiters Enrolled in NC Public Education, Employment, or Training Program	N	3,447	3,241	4,078	2,791	2,544	3,681	3,275	4,210	2,882	3,803	3,392	4,437	4,024	3,585	4,435
	%	41%	56%	57%	58%	61%	43%	56%	59%	60%	45%	58%	63%	47%	62%	52%
Exiters Enrolled or Employed in NC	N	6,737	4,900	5,725	3,880	3,360	6,537	4,747	5,734	3,960	6,463	4,663	5,885	6,402	4,717	6,505
	%	79%	84%	81%	80%	80%	77%	82%	81%	82%	76%	80%	83%	75%	81%	77%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		0.4%	0.3%	0.4%	*	*	0.2%	0.3%	0.3%	0.3%	0.3%	*	*	0.3%	*	0.2%
Wholesale Trade, Transport. and Utilities		5.7%	6.8%	8.4%	10.8%	12.2%	6.4%	7.4%	11.3%	12.9%	7.6%	10.7%	12.1%	9.9%	12.7%	12.3%
Construction		1.4%	1.2%	1.5%	1.8%	1.7%	1.8%	1.4%	1.3%	2.2%	1.8%	1.5%	1.9%	1.7%	1.9%	1.6%
Manufacturing		10.4%	11.7%	10.2%	8.9%	9.6%	11.5%	12.6%	11.0%	9.6%	12.2%	12.4%	10.8%	11.8%	12.6%	11.5%
Retail Trade		23.6%	23.6%	24.1%	24.8%	27.9%	22.6%	23.4%	22.8%	25.7%	22.4%	22.9%	25.4%	21.4%	24.5%	24.5%
Information		1.1%	1.1%	1.2%	1.1%	1.6%	1.2%	1.3%	1.0%	1.8%	1.4%	1.4%	1.7%	1.1%	1.8%	1.5%
Financial Activities		3.6%	3.9%	4.5%	4.0%	4.9%	4.0%	5.0%	4.7%	4.6%	4.9%	5.2%	5.8%	4.8%	5.6%	6.1%
Professional and Business Services		37.8%	40.9%	35.9%	35.6%	36.5%	36.7%	36.5%	35.9%	35.2%	34.3%	37.6%	36.3%	34.8%	37.8%	35.3%
Educational Services		3.6%	3.1%	3.4%	3.0%	3.5%	3.3%	3.0%	2.7%	3.8%	3.3%	2.5%	3.2%	3.0%	3.2%	3.2%
Health Care and Social Assistance		21.5%	22.1%	23.5%	23.8%	23.9%	22.4%	23.8%	23.2%	23.8%	24.2%	23.3%	23.9%	24.6%	24.7%	24.9%
Leisure and Hospitality		39.0%	39.0%	38.9%	34.1%	36.2%	37.4%	35.9%	32.4%	33.1%	34.6%	28.5%	33.4%	28.4%	30.4%	29.3%
Other Services		3.5%	3.0%	3.3%	3.0%	4.0%	3.4%	3.0%	3.2%	3.1%	3.3%	3.2%	3.0%	3.1%	3.7%	3.3%
Public Administration		1.5%	1.5%	1.6%	1.5%	1.6%	1.8%	1.6%	1.8%	1.4%	2.1%	1.8%	2.0%	2.3%	2.0%	2.2%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$1,074	\$1,831	\$2,118	*	*	\$1,467	\$799	\$1,240	\$627	\$5,099	*	*	\$2,504	*	\$3,930
Wholesale Trade, Transport. and Utilities		\$2,597	\$2,504	\$3,185	\$2,746	\$2,310	\$3,061	\$4,032	\$2,880	\$2,843	\$3,353	\$3,587	\$2,828	\$3,517	\$2,919	\$3,271
Construction		\$5,158	\$5,987	\$6,970	\$6,912	\$6,318	\$5,980	\$7,348	\$6,680	\$5,608	\$8,202	\$5,858	\$4,939	\$5,171	\$5,038	\$6,550
Manufacturing		\$5,117	\$4,707	\$3,993	\$3,420	\$4,296	\$4,687	\$4,469	\$4,067	\$4,558	\$4,926	\$5,486	\$4,797	\$5,858	\$5,611	\$7,627
Retail Trade		\$2,506	\$2,598	\$2,898	\$2,456	\$2,213	\$2,861	\$2,733	\$2,247	\$2,375	\$3,068	\$2,759	\$2,355	\$2,758	\$2,678	\$2,825
Information		\$7,903	\$7,415	\$7,111	\$7,998	\$5,697	\$6,484	\$7,253	\$5,603	\$7,017	\$7,180	\$6,189	\$7,017	\$4,945	\$5,405	\$6,465
Financial Activities		\$3,503	\$3,875	\$4,200	\$7,176	\$7,340	\$4,535	\$5,070	\$4,341	\$9,684	\$4,228	\$5,147	\$6,072	\$9,058	\$8,067	\$7,521
Professional and Business Services		\$2,731	\$2,729	\$3,121	\$2,873	\$3,363	\$2,776	\$2,841	\$3,051	\$3,900	\$2,902	\$3,315	\$3,479	\$3,221	\$3,931	\$3,867
Educational Services		\$6,929	\$6,399	\$7,040	\$10,092	\$6,040	\$10,432	\$8,517	\$12,616	\$8,145	\$11,594	\$14,351	\$15,048	\$15,306	\$9,666	\$17,565
Health Care and Social Assistance		\$6,606	\$7,246	\$6,985	\$7,039	\$6,871	\$7,805	\$7,339	\$7,243	\$8,839	\$8,283	\$6,628	\$7,811	\$9,257	\$7,662	\$9,189
Leisure and Hospitality		\$2,791	\$2,952	\$2,740	\$2,522	\$2,550	\$2,802	\$2,877	\$2,356	\$2,661	\$3,000	\$2,471	\$2,525	\$2,721	\$2,732	\$2,877
Other Services		\$2,611	\$3,266	\$2,791	\$3,002	\$3,493	\$2,851	\$4,003	\$3,825	\$7,432	\$4,052	\$4,685	\$2,959	\$4,189	\$4,168	\$3,099
Public Administration		\$17,244	\$17,911	\$16,983	\$13,343	\$10,019	\$19,877	\$18,611	\$21,373	\$10,039	\$19,970	\$25,125	\$22,798	\$27,514	\$17,792	\$26,770
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$4,347	\$5,689	\$4,511	*	*	\$7,573	\$6,187	\$3,374	\$5,155	\$8,550	*	*	\$10,610	*	\$13,025
Wholesale Trade, Transport. and Utilities		\$6,691	\$7,247	\$7,547	\$6,898	\$6,623	\$7,950	\$9,038	\$7,604	\$7,988	\$8,623	\$7,821	\$7,980	\$9,073	\$9,045	\$8,962
Construction		\$10,436	\$12,362	\$12,261	\$15,709	\$12,814	\$10,897	\$15,853	\$12,646	\$17,085	\$13,168	\$14,732	\$10,369	\$12,907	\$12,926	\$14,051
Manufacturing		\$8,926	\$8,319	\$8,508	\$8,563	\$8,704	\$9,813	\$9,874	\$9,066	\$10,694	\$11,059	\$10,624	\$10,837	\$11,761	\$12,171	\$14,001
Retail Trade		\$5,067	\$5,303	\$5,472	\$5,471	\$5,893	\$6,118	\$6,021	\$5,756	\$5,856	\$6,336	\$6,307	\$6,045	\$6,815	\$6,808	\$7,066
Information		\$12,947	\$10,704	\$10,177	\$21,839	\$13,597	\$11,199	\$12,941	\$10,453	\$15,062	\$12,098	\$15,665	\$11,265	\$14,291	\$11,944	\$15,748
Financial Activities		\$9,383	\$10,719	\$10,813	\$15,800	\$12,708	\$12,319	\$13,250	\$13,319	\$17,003	\$12,806	\$15,698	\$14,343	\$17,332	\$16,819	\$17,006
Professional and Business Services		\$5,847	\$5,859	\$6,365	\$6,407	\$6,799	\$6,245	\$6,299	\$6,590	\$8,109	\$6,891	\$7,169	\$7,722	\$7,620	\$8,456	\$8,514
Educational Services		\$10,694	\$9,825	\$10,209	\$14,707	\$12,510	\$13,547	\$12,165	\$13,920	\$15,792	\$15,828	\$15,179	\$16,104	\$17,734	\$15,092	\$21,165
Health Care and Social Assistance		\$9,615	\$10,174	\$10,953	\$11,632	\$11,454	\$11,511	\$11,327	\$12,047	\$13,698	\$12,578	\$12,158	\$12,882	\$13,690	\$13,280	\$14,826
Leisure and Hospitality		\$4,876	\$4,903	\$4,852	\$4,507	\$5,587	\$5,227	\$5,317	\$4,882	\$5,617	\$5,605	\$5,230	\$5,706	\$5,605	\$5,783	\$6,529
Other Services		\$6,009	\$6,410	\$6,152	\$7,774	\$8,665	\$6,886	\$8,192	\$7,272	\$12,044	\$8,557	\$9,424	\$8,761	\$9,270	\$9,438	\$8,892
Public Administration		\$17,736	\$18,300	\$17,825	\$17,646	\$17,072	\$21,871	\$21,624	\$22,426	\$18,860	\$23,503	\$24,423	\$24,050	\$26,540	\$21,093	\$25,740

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

Division of Vocational Rehabilitation Services

» Program Overview

The North Carolina Division of Vocational Rehabilitation Services (DVRS) is responsible for the general state vocational rehabilitation services program under Title I, Part B of the Rehabilitation Act of 1973 as amended. It is also responsible for the state supported employment services program under Title VI, Part B, of this same act. The Rehabilitation Act of 1973, as amended, was part of the Workforce Information Act. In July of 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law and made significant changes to Title I of the Act that affects the Vocational Rehabilitation (VR) program. WIOA strengthened the alignment of the VR program with other core components of the workforce development system and emphasized the achievement of competitive integrated employment as well as the provision of services to students and youth with disabilities.

The Division of Vocational Rehabilitation Services provides counseling, training, education, transportation, job placement, assistive technology, and other support services to people with disabilities through seventy-three local offices, three vocational rehabilitation regional offices, and several public school systems throughout North Carolina.¹⁵ These services are provided to people with a wide range of physical, psychiatric, or intellectual disabilities, deafness or auditory impairment, and other communicative disorders. Employment services are provided to individuals to assist them with finding a job and staying on the job. Some services are provided based on economic need, while others are provided regardless of income.

For a person to be eligible for Vocational Rehabilitation services they must have a physical, mental, or intellectual impairment that limits their opportunities to find or keep a job, and require Vocational Rehabilitation program services for job preparation, search, or retention. Individuals who are receiving Social Security Disability Insurance or Supplemental Security Income benefits are presumed eligible for Vocational Rehabilitation program services if they intend to get or keep a job.¹⁶

» Vocational Rehabilitation Program Outcomes

As shown in Figure 21, the number of individuals exiting the Vocational Rehabilitation program fluctuated between a high of 51,275 in the 2016-2017 program year to a low of 34,512 in the 2020-2021.

Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

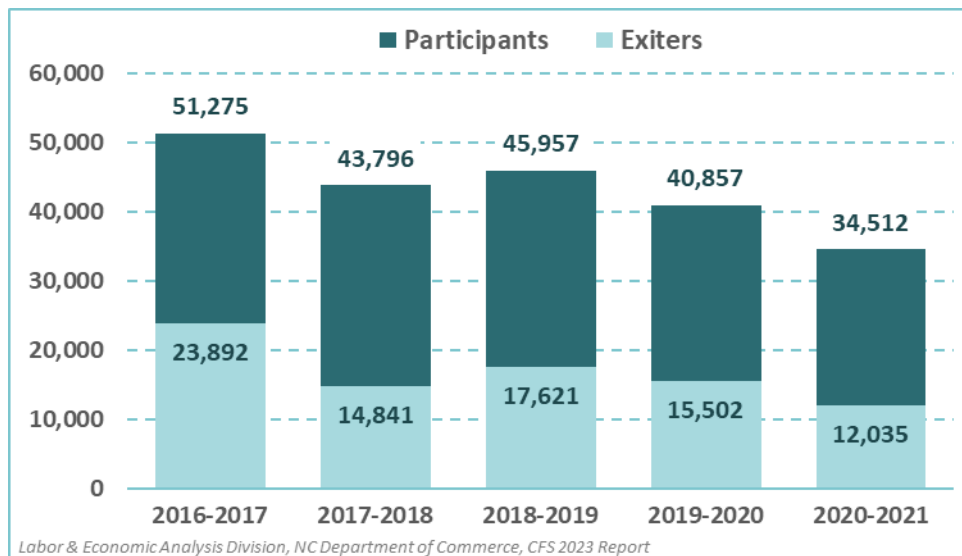
Employment (Figure 22) and wage outcomes (Figure 23) were examined separately for each cohort exiting the Vocational Rehabilitation program, for up to five years after exit (also see Table 6). One year post-exit employment rates fluctuated across cohorts, ranging from a low of 52% for 2016-2017 program year exiters to a high of 55% for 2020-2021 program year exiters. One year post-exit median annual wages saw persistent

¹⁵ North Carolina Division of Vocational Rehabilitation Services, <https://www.ncdhhs.gov/divisions/vocational-rehabilitation-services/vocational-rehabilitation-local-offices>

¹⁶ North Carolina Division of Vocational Rehabilitation Services, Employment Services for People with Disabilities, <https://www.ncdhhs.gov/assistance/disability-services/employment-services-for-people-with-disabilities>

gains throughout the program years, increasing from \$7,864 for 2016-2017 exiters to \$11,856 for 2020-2021 exiters.

Figure 21. Vocational Rehabilitation Program Participants and Exiters by Program Year



Longer term post-exit employment and wage measures indicate a slight decrease in the percentage of each exiting cohort who were employed in North Carolina over time. Wages, however, increased over time within each exiting cohort. The 2016-2017 exiters saw median annual wages increase from \$7,864 at one year post-exit to \$10,292 and \$14,093 at three- and five-years post-exit, respectively. The 2018-2019 exiters had an increase in median wages from \$9,004 one year after exit to \$12,353 in year three.

Figure 22. Percentage of Vocational Rehabilitation Program Exiters Employed in North Carolina After Exit, by Year of Exit

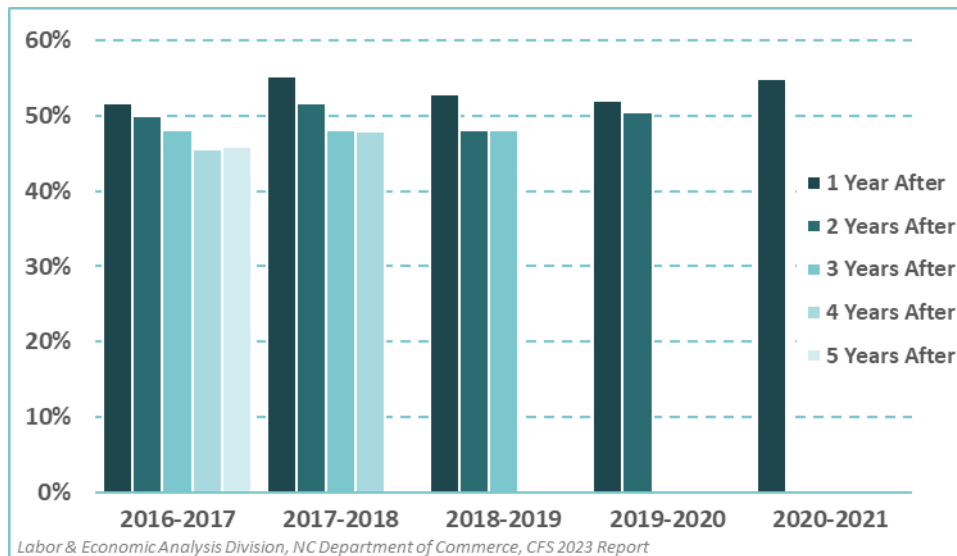
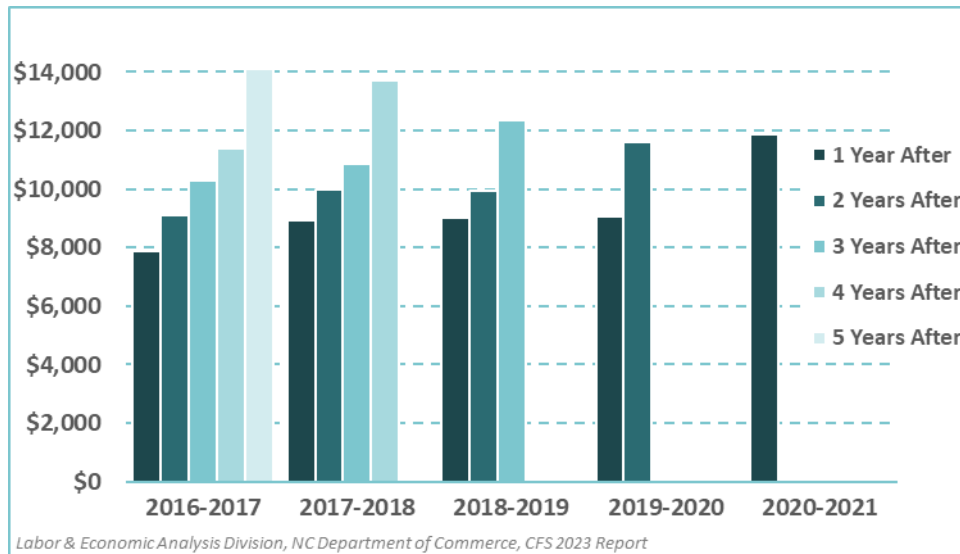
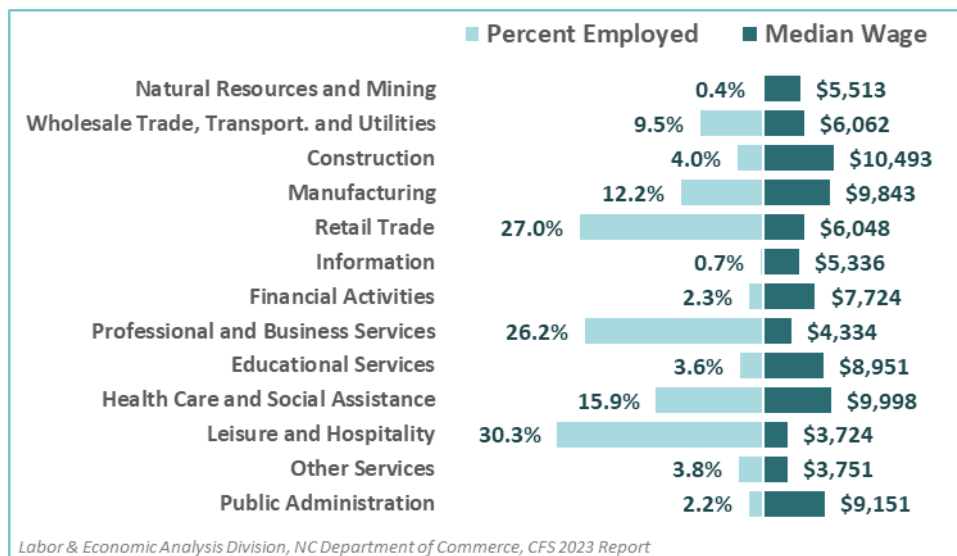


Figure 23. Median Wage of Vocational Rehabilitation Program Exiters in North Carolina, by Year of Exit



For one year post-exit wage and employment outcomes by industry (Figure 24) for the 2020-2021 Vocational Rehabilitation program exiters, the top employing industries include Leisure and Hospitality (30%), Retail Trade (27%), Professional and Business Services (26%), Health Care and Social Assistance (16%), and Manufacturing (12%). Of these, Health Care and Social Assistance has the highest median wage at \$9,998.

Figure 24. 2020-2021 Vocational Rehabilitation Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

Overall, the results indicate that there have been relatively stable short-term employment rates and rising median wages for Vocational Rehabilitation program exiters, as indicated by the one year post employment and wage trends. However, when exiters are followed over time, the employment rate declines somewhat between the 2017-2018 and 2019-2020 program years. This decline could be attributable to several factors including people not sustaining employment, moving out of state, or finding employment in jobs not covered

by North Carolina's unemployment insurance laws. There are a variety of reasons why individuals are not found in UI-covered employment including retirement, death, and inability to find employment, or leaving the labor force. The COVID-19 pandemic likely affected employment outcomes for participants; however, by 2021, the swift economic recovery may have helped boost employment opportunities in a tight labor market.

The 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.¹⁷ Median wages for DVRS program exiters are shown in Table 6 and range from a low of \$7,864 for 2016-2017 program exiters one year after exit, to a high of \$11,856 for 2020-2021 exiters. These are well below the typical annual income in North Carolina and near or below the U.S. poverty line.

It is important to keep in mind that individuals participating in rehabilitation services through the DVRS have disabilities or communicative disorders that may impact the number of hours they can work and their ability to maintain employment. These factors may contribute to the low post-exit wage rates for this program. Further analyses are recommended to assess the various disability categories to determine if there are differential outcomes by type or severity of disability. In addition, further analyses by region are needed to determine if there are geographical disparities in outcomes.

A requirement of WIOA is the development of an Integrated Service Delivery plan that coordinates service delivery between WIOA, Wagner-Peyser, Adult Basic Education and Vocational Rehabilitation programs. It is recommended that North Carolina's plan and its implementation focuses on leveraging resources and services across programs and achieving both higher employment and wage outcomes and acquiring increased occupational skills and educational credentials for all participants.

¹⁷ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Table 6. Vocational Rehabilitation Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

Department of Health and Human Services											Common Follow-up System: Evaluative Measures, 2023 Report					
Vocational Rehabilitation - Employment and Training Program											Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce					
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Participants		51,275	43,796	45,957	40,857	34,512	51,275	43,796	45,957	40,857	51,275	43,796	45,957	51,275	43,796	51,275
Exiters		23,892	14,841	17,621	15,502	12,035	23,892	14,841	17,621	15,502	23,892	14,841	17,621	23,892	14,841	23,892
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Exiters Employed in North Carolina	N	12,333	8,191	9,307	8,070	6,604	11,946	7,665	8,467	7,809	11,482	7,128	8,479	10,862	7,111	10,965
	%	52%	55%	53%	52%	55%	50%	52%	48%	50%	48%	48%	48%	45%	48%	46%
Exiters' Wages in North Carolina	Mean	\$11,025	\$12,165	\$12,391	\$12,572	\$15,552	\$12,636	\$13,522	\$13,808	\$15,568	\$13,988	\$14,908	\$16,454	\$15,510	\$17,844	\$18,235
	Median	\$7,864	\$8,925	\$9,004	\$9,073	\$11,856	\$9,128	\$9,998	\$9,933	\$11,600	\$10,292	\$10,874	\$12,353	\$11,410	\$13,730	\$14,093
Exiters Enrolled in NC Public Higher Education	N	2,874	1,709	1,815	1,470	1,013	2,480	1,434	1,329	1,228	2,029	1,015	1,168	1,453	889	1,308
	%	12%	12%	10%	9%	8%	10%	10%	8%	8%	8%	7%	7%	6%	6%	5%
Exiters Enrolled in NC Public Education, Employment, or Training Program	N	6,000	4,083	5,244	4,841	3,876	7,621	4,410	5,496	5,313	7,351	4,403	5,805	6,928	4,568	6,946
	%	25%	28%	30%	31%	32%	32%	30%	31%	34%	31%	30%	33%	29%	31%	29%
Exiters Enrolled or Employed in NC	N	14,299	9,375	10,964	9,818	7,876	14,650	9,089	10,505	9,800	14,035	8,737	10,533	13,424	8,723	13,449
	%	60%	63%	62%	63%	65%	61%	61%	60%	63%	59%	59%	60%	56%	59%	56%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		0.8%	0.7%	0.8%	0.7%	0.4%	0.8%	0.7%	0.7%	0.6%	0.7%	0.7%	0.5%	0.7%	0.6%	0.6%
Wholesale Trade, Transport. and Utilities		6.1%	7.0%	6.7%	7.3%	9.5%	6.5%	7.6%	9.0%	9.4%	7.6%	9.1%	10.2%	9.0%	10.6%	10.5%
Construction		4.5%	4.8%	4.0%	3.9%	4.0%	5.1%	4.9%	4.0%	4.0%	4.9%	5.0%	4.1%	4.8%	5.1%	4.5%
Manufacturing		10.4%	11.0%	9.7%	10.8%	12.2%	11.7%	11.9%	11.1%	12.0%	12.7%	13.1%	13.0%	13.5%	14.1%	14.8%
Retail Trade		21.7%	22.7%	22.0%	24.0%	27.0%	21.5%	22.3%	22.7%	26.1%	21.1%	23.6%	24.0%	22.0%	24.6%	23.7%
Information		1.0%	1.1%	1.0%	0.8%	0.7%	1.1%	1.2%	0.9%	1.0%	1.0%	0.9%	1.2%	0.7%	0.8%	1.0%
Financial Activities		2.1%	2.1%	2.0%	2.0%	2.3%	2.1%	2.2%	2.3%	2.2%	2.2%	2.3%	2.8%	2.9%	2.9%	2.8%
Professional and Business Services		29.1%	27.4%	25.4%	26.3%	26.2%	28.8%	25.5%	26.0%	25.9%	27.0%	27.2%	26.4%	27.4%	27.1%	26.7%
Educational Services		3.8%	4.0%	3.6%	3.3%	3.6%	3.7%	4.3%	3.5%	3.3%	3.8%	3.8%	3.6%	3.5%	4.0%	3.7%
Health Care and Social Assistance		14.6%	15.0%	16.4%	14.9%	15.9%	14.6%	15.3%	16.5%	15.6%	15.4%	15.3%	17.5%	15.2%	16.1%	16.0%
Leisure and Hospitality		31.8%	33.0%	32.4%	30.8%	30.3%	30.9%	31.6%	29.0%	30.8%	29.6%	27.4%	29.6%	27.0%	28.8%	27.6%
Other Services		3.6%	3.6%	3.7%	3.5%	3.8%	4.0%	3.7%	3.8%	3.5%	3.7%	3.6%	3.8%	3.6%	3.8%	3.9%
Public Administration		2.2%	2.2%	2.0%	2.5%	2.2%	2.3%	2.4%	2.3%	2.8%	2.6%	2.9%	2.3%	2.8%	2.9%	2.6%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$3,004	\$6,023	\$8,740	\$4,042	\$5,513	\$3,644	\$6,073	\$6,340	\$4,189	\$8,756	\$4,204	\$7,337	\$7,163	\$17,600	\$10,962
Wholesale Trade, Transport. and Utilities		\$4,504	\$6,514	\$7,239	\$4,513	\$6,062	\$6,196	\$7,097	\$6,321	\$5,885	\$6,553	\$6,702	\$7,435	\$7,342	\$7,473	\$7,167
Construction		\$7,633	\$7,527	\$8,791	\$9,298	\$10,493	\$9,007	\$10,800	\$10,844	\$9,432	\$11,656	\$11,764	\$11,174	\$13,386	\$11,952	\$15,014
Manufacturing		\$6,630	\$8,697	\$9,163	\$7,600	\$9,843	\$9,424	\$9,265	\$9,359	\$10,879	\$10,135	\$8,883	\$10,816	\$10,311	\$9,245	\$12,328
Retail Trade		\$4,608	\$5,144	\$5,385	\$5,318	\$6,048	\$5,078	\$5,603	\$5,733	\$4,952	\$5,449	\$5,853	\$5,626	\$5,604	\$5,491	\$5,722
Information		\$5,771	\$6,299	\$5,081	\$2,823	\$5,336	\$6,514	\$6,803	\$2,931	\$4,495	\$7,103	\$5,177	\$5,186	\$10,364	\$8,628	\$9,595
Financial Activities		\$5,928	\$5,421	\$5,542	\$4,923	\$7,724	\$7,561	\$9,528	\$5,060	\$8,687	\$7,769	\$7,569	\$4,788	\$3,685	\$11,232	\$8,851
Professional and Business Services		\$3,232	\$3,284	\$3,462	\$3,803	\$4,334	\$3,415	\$3,324	\$3,682	\$4,621	\$3,579	\$3,479	\$4,550	\$3,989	\$4,594	\$5,356
Educational Services		\$6,833	\$7,776	\$7,490	\$6,339	\$8,951	\$8,470	\$8,852	\$7,968	\$11,593	\$8,980	\$13,606	\$12,312	\$11,273	\$13,938	\$14,154
Health Care and Social Assistance		\$6,223	\$7,663	\$8,190	\$8,250	\$9,998	\$7,385	\$8,554	\$9,531	\$9,512	\$8,348	\$9,139	\$9,570	\$10,047	\$9,827	\$10,256
Leisure and Hospitality		\$3,034	\$3,521	\$3,607	\$3,109	\$3,724	\$3,175	\$3,491	\$3,264	\$3,788	\$3,571	\$3,113	\$3,775	\$3,444	\$3,833	\$4,366
Other Services		\$4,478	\$3,578	\$5,563	\$3,389	\$3,751	\$3,971	\$4,441	\$4,448	\$4,422	\$3,862	\$4,694	\$4,432	\$4,297	\$5,060	\$4,856
Public Administration		\$8,442	\$9,297	\$9,477	\$16,098	\$9,151	\$10,311	\$15,694	\$11,327	\$18,233	\$13,854	\$13,760	\$14,639	\$14,666	\$19,136	\$16,776
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$8,923	\$10,011	\$11,903	\$10,249	\$11,390	\$10,291	\$11,686	\$10,353	\$13,582	\$13,939	\$12,856	\$12,428	\$15,187	\$18,606	\$17,614
Wholesale Trade, Transport. and Utilities		\$9,280	\$12,315	\$12,677	\$10,312	\$12,701	\$11,374	\$12,556	\$12,342	\$11,479	\$12,283	\$13,474	\$13,626	\$13,395	\$14,742	\$14,126
Construction		\$13,025	\$13,106	\$14,752	\$14,821	\$16,638	\$13,922	\$15,462	\$15,850	\$16,405	\$17,201	\$16,965	\$17,406	\$18,479	\$18,711	\$20,835
Manufacturing		\$11,787	\$12,746	\$13,382	\$13,524	\$14,898	\$13,934	\$14,065	\$14,464	\$15,630	\$15,043	\$14,162	\$16,154	\$15,897	\$16,005	\$18,349
Retail Trade		\$7,428	\$7,699	\$8,371	\$8,149	\$9,250	\$8,284	\$8,577	\$9,392	\$9,087	\$8,920	\$9,403	\$9,947	\$9,973	\$10,008	\$10,302
Information		\$12,137	\$8,376	\$11,054	\$10,951	\$12,260	\$13,429	\$9,508	\$13,447	\$12,737	\$13,587	\$9,939	\$13,147	\$19,847	\$14,273	\$18,791
Financial Activities		\$10,770	\$10,806	\$13,059	\$13,614	\$15,014	\$13,535	\$16,257	\$14,405	\$18,071	\$15,121	\$16,681	\$15,020	\$12,839	\$17,465	\$17,387
Professional and Business Services		\$6,513	\$6,617	\$7,201	\$7,555	\$8,812	\$7,070	\$7,191	\$7,649	\$8,846	\$7,768	\$7,521	\$8,864	\$8,404	\$8,952	\$9,762
Educational Services		\$11,737	\$12,449	\$13,023	\$12,656	\$16,182	\$13,097	\$13,970	\$14,370	\$16,880	\$14,010	\$17,179	\$17,671	\$16,040	\$18,796	\$19,413
Health Care and Social Assistance		\$9,669	\$11,454	\$11,481	\$12,415	\$14,528	\$11,038	\$12,555	\$13,155	\$14,163	\$12,480	\$14,115	\$14,063	\$14,567	\$15,517	\$15,700
Leisure and Hospitality		\$5,119	\$5,704	\$5,780	\$5,532	\$6,585	\$5,610	\$5,945	\$5,788	\$6,829	\$6,048	\$5,944	\$7,010	\$6,327	\$7,429	\$7,774
Other Services		\$8,135	\$7,763	\$8,637	\$8,121	\$8,584	\$8,225	\$8,575	\$8,955	\$8,921	\$9,241	\$9,453	\$9,132	\$10,358	\$11,146	\$11,451
Public Administration		\$15,852	\$17,123	\$16,658	\$19,949	\$16,100	\$17,530	\$19,933	\$18,399	\$22,178	\$18,985	\$20,851	\$20,164	\$19,455	\$23,000	\$21,400

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

Division of Services for the Blind

» Program Overview

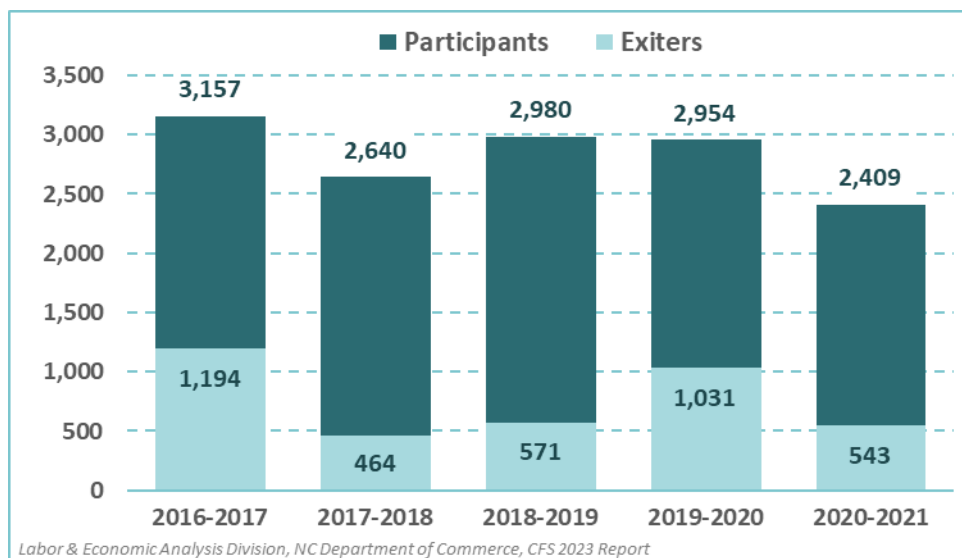
The Division of Services for the Blind (DSB) provides vocational rehabilitation services to help individuals who are blind, have low vision, or who are deaf-blind reach their goals of independence and employment.¹⁸ Together with DVRS, DSB is responsible for the state vocational rehabilitation services program under Title I, Part B of the Rehabilitation Act of 1973; for the state-supported employment services program under Title VI, Part B of this act; and for providing partner services under WIOA.

DSB services help individuals find a job, keep a job, return to work, and advance in employment, and are tailored to the unique vocational assistance needs of those with vision loss or impairment. Individuals can choose from an array of programs and services that best suit their individual vocational needs.¹⁹ DSB vocational services include but are not limited to career assessments and counseling, educational and job training, job development and placement assistance. The services can also encompass a wide range of job and mobility trainings, coaching services, and assistive technologies. Some services are provided based on economic need, while others are provided regardless of income. Services are provided through staff located in seven district offices and the DSB Career and Training Center, and through third-party agreements with local school districts.

» DSB Vocational Rehabilitation Program Outcomes

As shown in Figure 25, the number of individuals receiving vocational rehabilitation services through DSB fluctuated from a low of 2,409 in the 2020-2021 program year to a high of 3,157 in the 2016-2017 program year.

Figure 25. DSB Vocational Rehabilitation Program Participants and Exiters by Program Year



¹⁸ Division of Services for the Blind, <http://www.ncdhhs.gov/dsb>

¹⁹ Division of Services for the Blind, Vocational Rehabilitation for the Blind, <https://www.ncdhhs.gov/assistance/vision-loss/vocational-rehabilitation-for-blind>

Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit. Analyses included the development of post-exit employment rates (Figure 26) and wage statistics (Figure 27) for up to five years after exit (also see Table 7). One year post-exit employment rates ranged from a low of 35% for the 2019-2020 exiters to a high of 60% for the 2017-2018 exiters. One year post-exit median wages also fluctuated over time, ranging from \$15,073 for the 2016-2017 program year exiters to a high of \$21,359 for the 2020-2021 exiters.

Figure 26. Percentage of DSB Vocational Rehabilitation Program Exiters Employed in North Carolina After Exit, by Year of Exit

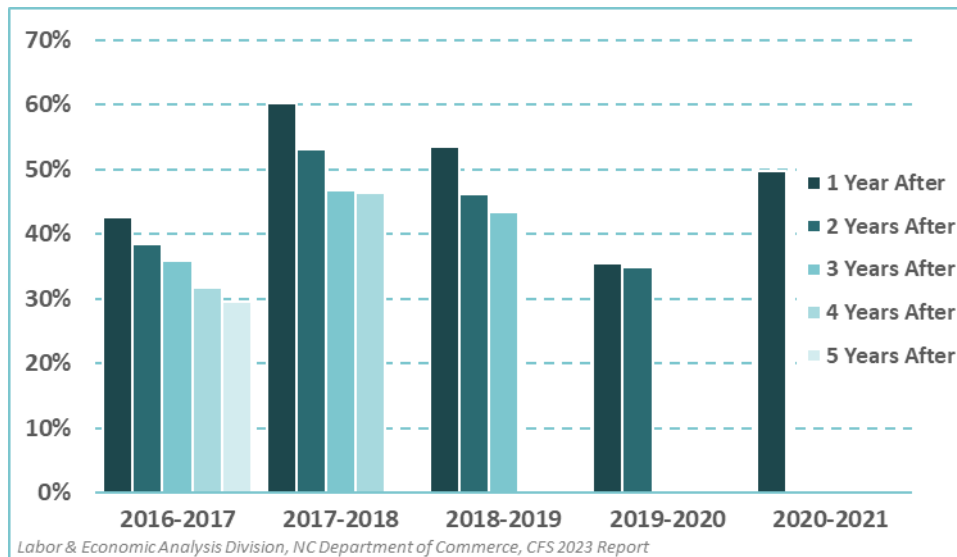
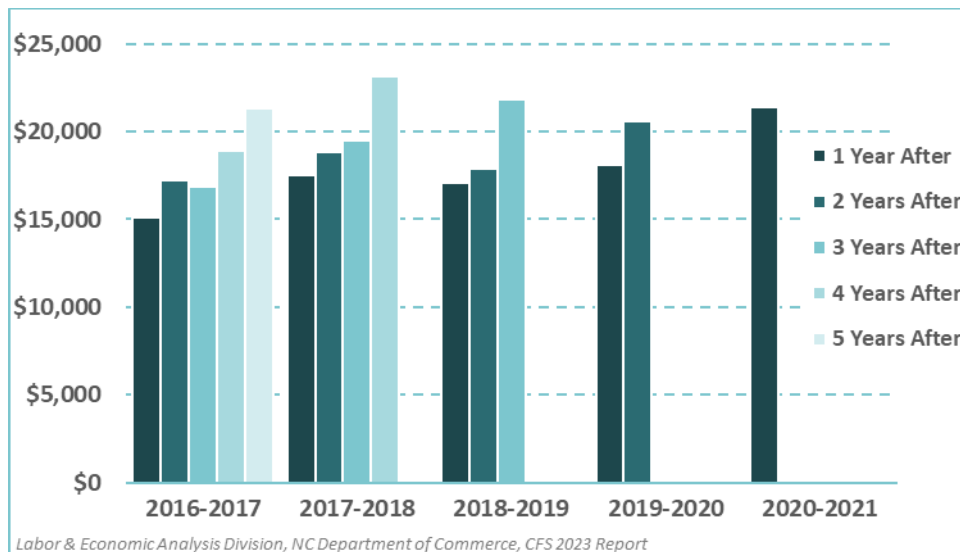


Figure 27. Median Wage of DSB Vocational Rehabilitation Program Exiters in North Carolina, by Year of Exit

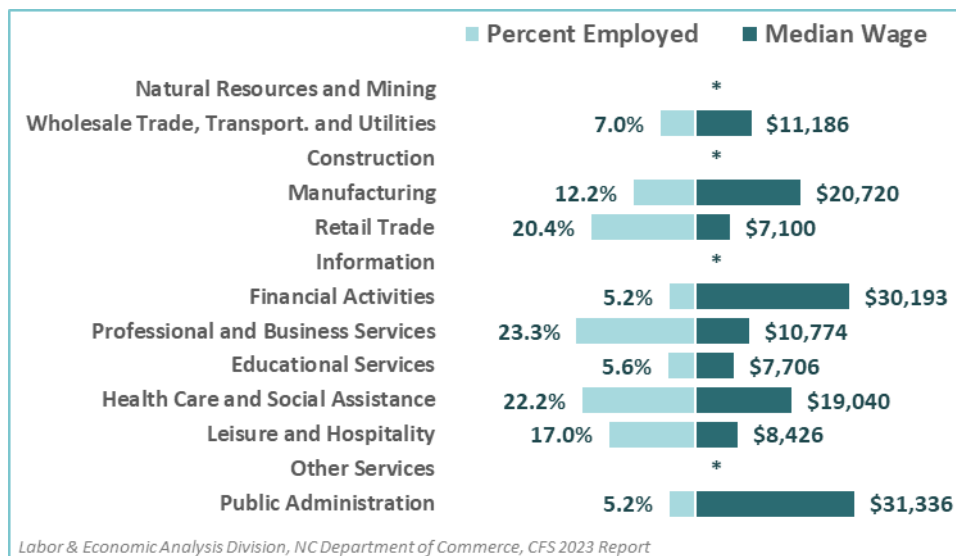


Longer term post-exit employment and wage measures show decreasing employment rates, combined with increasing wages over time, for all cohorts, a pattern common to all workforce development programs. While

decreases in post-exit employment follow a similar trend for all cohorts, there was generally no consistent pattern for wage fluctuations across cohorts.

One year post-exit wage and employment outcomes by industry (Figure 28) for the 2020-2021 cohort of Services for the Blind Vocational Rehabilitation program exiters shows Professional and Business Services is the largest employing industry for exiters (23%), followed by Health Care and Social Assistance (22%), Retail Trade (20%), Leisure and Hospitality (17%), and Manufacturing (12%). Of these, Manufacturing has the highest annual median wage at \$20,720.

Figure 28. 2020-2021 DSB Vocational Rehabilitation Program Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

Overall, the results show fluctuations in the short-term employment rates and median wages for DSB program exiters. This is indicated by the one year post-exit employment and wage trends. However, when exiters are followed over longer periods of time the employment rate tends to decline. This is a common trend to many other workforce training and education programs and could be attributable to several factors, including people not sustaining employment, moving out of state, or finding employment in jobs not covered by North Carolina's unemployment insurance laws. The COVID-19 pandemic may have also played a role in declining employment outcomes, as evidenced by the low employment rate for the 2019-2020 cohort.

Over time, the median wages of DSB exiters increased within each cohort. For example, the 2016-2017 cohort saw one year post-exit median wages of \$15,073 increase to \$21,317 five years post-exit. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.²⁰ While the annual median post-exit wage of DSB clients is below

²⁰ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey).
Source of poverty guidelines: U.S. Department of Health & Human Services,

the state's annual median, it exceeds the federal poverty guidelines each year for a one-person household and for the two-person household by year five, and shows annual growth for those individuals who are employed after exit.

As previously noted, an important WIOA requirement is the development of an Integrated Service Delivery plan that includes the coordination between WIOA, Wagner-Peyser, Adult Basic Education and Vocational Rehabilitation programs. It is recommended that North Carolina's integrated service delivery plan and implementation continue to focus on the leveraging of resources and services across these programs and focus on achieving higher employment and wage outcomes for all participants and the acquisition of increased occupational skills and educational credentials.

Table 7. DSB Vocational Rehabilitation Program Participants and Exiters, Outcomes One Through Five Years After Exit, Overall and By Industry

Department of Health and Human Services										Common Follow-up System: Evaluative Measures, 2023 Report							
Services for the Blind - Employment and Training Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce							
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		3,157	2,640	2,980	2,954	2,409	3,157	2,640	2,980	2,954	3,157	2,640	2,980	3,157	2,640	3,157	
Exiters		1,194	464	571	1,031	543	1,194	464	571	1,031	1,194	464	571	1,194	464	1,194	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N 43%	280 60%	305 53%	366 35%	270 50%	459 38%	246 53%	264 46%	360 35%	429 36%	217 47%	248 43%	379 32%	215 46%	353 30%	
Exiters' Wages in North Carolina		Mean Median	\$18,166 \$15,073	\$21,033 \$17,539	\$21,325 \$17,060	\$21,899 \$18,078	\$24,973 \$21,359	\$20,083 \$17,243	\$22,863 \$18,860	\$23,029 \$17,912	\$23,326 \$20,572	\$20,472 \$16,883	\$23,450 \$19,500	\$25,646 \$21,845	\$21,738 \$18,909	\$26,510 \$23,146	\$25,113 \$21,317
Exiters Enrolled in NC Public Higher Education		N %	72 6%	27 6%	21 4%	31 3%	17 3%	59 5%	12 3%	24 4%	27 3%	60 5%	12 3%	16 3%	42 4%	9 2%	42 4%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	203 17%	84 18%	123 22%	178 17%	115 21%	323 27%	91 20%	156 27%	207 20%	314 26%	102 22%	156 27%	285 24%	121 26%	284 24%
Exiters Enrolled or Employed in NC		N %	582 49%	302 65%	339 59%	433 42%	304 56%	605 51%	274 59%	323 57%	439 43%	569 48%	251 54%	316 55%	519 43%	261 56%	492 41%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		*					*				*			*		*	
Wholesale Trade, Transport. and Utilities		5.7%	6.4%	3.9%	8.5%	7.0%	5.9%	7.3%	4.9%	8.6%	8.2%	6.9%	6.5%	8.2%	6.0%	8.8%	
Construction		4.1%	5.7%	3.6%	4.1%	*	4.1%	*	4.2%	4.4%	4.0%	*	*	5.0%	*	4.8%	
Manufacturing		15.5%	12.1%	12.5%	13.7%	12.2%	15.9%	13.8%	11.7%	14.4%	15.6%	13.8%	12.9%	15.6%	12.6%	17.6%	
Retail Trade		14.7%	18.6%	22.0%	18.6%	20.4%	13.5%	17.1%	18.6%	18.3%	12.4%	19.8%	19.8%	13.7%	19.1%	14.4%	
Information		*					*				*			*		*	
Financial Activities		3.5%	3.6%	5.2%	3.3%	5.2%	3.9%	*	5.3%	3.9%	3.3%	5.1%	5.6%	4.2%	5.1%	4.5%	
Professional and Business Services		17.3%	18.2%	16.1%	20.8%	23.3%	18.5%	16.3%	15.5%	18.6%	15.6%	14.7%	20.2%	13.2%	13.5%	13.6%	
Educational Services		7.3%	5.4%	6.9%	8.5%	5.6%	7.4%	6.5%	7.2%	6.7%	7.7%	6.5%	8.9%	5.8%	6.5%	6.5%	
Health Care and Social Assistance		20.2%	19.3%	20.0%	21.0%	22.2%	19.6%	18.7%	16.7%	25.6%	19.3%	20.3%	20.2%	19.3%	22.3%	21.2%	
Leisure and Hospitality		19.4%	19.6%	20.0%	11.2%	17.0%	20.0%	21.5%	18.2%	10.3%	19.6%	18.0%	16.9%	16.6%	18.1%	18.4%	
Other Services		3.7%	5.0%	*	5.2%	*	3.5%	5.3%	*	5.3%	4.4%	*	*	4.2%	*	5.1%	
Public Administration		3.5%	*	3.6%	4.9%	5.2%	3.5%	*	5.3%	6.1%	3.7%	*	4.4%	4.0%	*	4.5%	
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		*					*				*			*		*	
Wholesale Trade, Transport. and Utilities		\$11,688	\$20,241	\$31,147	\$6,716	\$11,186	\$19,854	\$23,394	\$25,624	\$10,049	\$17,473	\$9,534	\$17,311	\$12,145	\$24,959	\$13,700	
Construction		\$13,575	\$14,596	\$17,020	\$22,924	*	\$16,199	*	\$17,151	\$25,756	\$27,772	*	*	\$23,911	*	\$28,577	
Manufacturing		\$17,342	\$16,173	\$19,283	\$19,400	\$20,720	\$17,727	\$15,528	\$22,270	\$17,383	\$19,074	\$19,479	\$22,671	\$20,608	\$23,230	\$19,182	
Retail Trade		\$8,050	\$10,137	\$8,810	\$13,471	\$7,100	\$12,152	\$13,540	\$10,408	\$14,356	\$12,676	\$11,291	\$8,577	\$7,541	\$10,978	\$15,071	
Information		*					*				*			*		*	
Financial Activities		\$19,002	\$14,829	\$31,019	\$2,881	\$30,193	\$13,510	*	\$34,378	\$13,615	\$25,381	\$9,737	\$34,290	\$16,862	\$36,080	\$28,262	
Professional and Business Services		\$6,108	\$13,665	\$7,264	\$9,468	\$10,774	\$5,057	\$13,328	\$6,702	\$11,504	\$3,552	\$10,406	\$7,722	\$4,797	\$9,625	\$12,145	
Educational Services		\$18,461	\$22,991	\$19,307	\$16,700	\$7,706	\$21,520	\$16,993	\$18,330	\$25,728	\$15,710	\$19,690	\$15,921	\$23,272	\$26,626	\$18,240	
Health Care and Social Assistance		\$12,024	\$20,149	\$14,966	\$15,050	\$19,040	\$15,061	\$24,629	\$19,046	\$14,186	\$16,672	\$26,250	\$15,937	\$19,701	\$22,478	\$17,952	
Leisure and Hospitality		\$5,514	\$10,004	\$8,294	\$4,623	\$8,426	\$7,946	\$5,896	\$6,873	\$5,676	\$7,358	\$8,104	\$6,923	\$5,886	\$9,118	\$10,449	
Other Services		\$10,359	\$13,185	*	\$10,943	*	\$12,781	\$13,800	*	\$18,663	\$11,242	*	*	\$15,869	*	\$12,971	
Public Administration		\$18,945	*	\$16,061	\$28,739	\$31,336	\$29,948	*	\$26,774	\$25,842	\$31,966	*	\$27,154	\$28,756	*	\$28,501	
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		*					*				*			*		*	
Wholesale Trade, Transport. and Utilities		\$17,439	\$24,270	\$36,010	\$12,004	\$15,447	\$21,644	\$28,324	\$34,249	\$19,154	\$15,611	\$23,179	\$25,275	\$16,927	\$29,234	\$20,635	
Construction		\$24,309	\$22,462	\$28,365	\$25,346	*	\$27,557	*	\$19,459	\$27,893	\$29,997	*	*	\$29,685	*	\$28,358	
Manufacturing		\$19,208	\$16,274	\$21,996	\$21,573	\$19,967	\$19,592	\$15,302	\$23,183	\$18,433	\$21,389	\$19,495	\$23,698	\$24,283	\$22,950	\$21,806	
Retail Trade		\$10,802	\$12,109	\$12,940	\$18,109	\$13,202	\$13,398	\$13,543	\$16,089	\$18,561	\$14,520	\$13,849	\$15,349	\$14,019	\$14,018	\$16,685	
Information		*					*				*			*		*	
Financial Activities		\$22,070	\$20,743	\$24,828	\$9,330	\$41,569	\$21,148	*	\$29,728	\$13,182	\$28,343	\$18,982	\$29,502	\$24,937	\$31,219	\$28,830	
Professional and Business Services		\$13,827	\$15,847	\$11,931	\$15,419	\$16,344	\$12,013	\$17,244	\$16,471	\$15,677	\$10,242	\$16,939	\$19,135	\$10,870	\$20,928	\$16,042	
Educational Services		\$24,927	\$25,654	\$20,476	\$21,200	\$20,272	\$25,153	\$20,543	\$21,362	\$28,169	\$22,318	\$21,081	\$21,134	\$26,938	\$28,740	\$24,864	
Health Care and Social Assistance		\$13,680	\$23,323	\$18,172	\$19,538	\$20,800	\$16,654	\$27,701	\$22,334	\$17,898	\$18,743	\$28,343	\$20,418	\$20,268	\$27,229	\$20,815	
Leisure and Hospitality		\$8,334	\$10,836	\$10,556	\$7,692	\$12,581	\$9,987	\$9,357	\$9,451	\$10,153	\$9,991	\$10,703	\$10,272	\$9,896	\$12,518	\$13,650	
Other Services		\$13,586	\$11,810	*	\$16,919	*	\$14,083	\$14,022	*	\$20,732	\$12,750	*	*	\$16,173	*	\$14,908	
Public Administration		\$25,774	*	\$27,434	\$29,844	\$25,746	\$34,696	*	\$29,718	\$22,575	\$37,472	*	\$35,281	\$36,024	*	\$33,010	

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

North Carolina Community College System (NCCCS)

Career and Technical Education (CTE) Programs

» Overview of CTE Programs

North Carolina's Community Colleges offer a diverse set of programs aimed at minimizing barriers to high-quality postsecondary education and developing a skilled workforce. Curriculum programs range in length from one semester to two years and include a wide variety of programs offered within the area of Applied Sciences, as well as College Transfer and General Education programs in areas including Arts and Sciences.

Academic credentials conferred by curriculum programs may include certificates, diplomas, or associate degrees, depending on the specific area and program.²¹ Certificate programs are curriculum programs designed to provide entry-level, employment-related training, ranging from 12 to 18 semester credit hours, and with full-time enrollment can usually be completed within one semester by a full-time student. Diploma programs are longer curriculum programs also designed to provide entry-level employment-related training. They range from 36 to 48 semester credit hours and, with full-time enrollment, can usually be completed within two semesters and one summer session. Associate degree programs are planned academic curriculum programs designed to provide students with employment-related training or academic preparation for college transfer to a four-year institution. Associate degree programs typically include 60 to 76 semester credit hours and can usually be completed within four semesters by a full-time student.

This report focuses on Career and Technical Education (CTE) programs as they are related to employment and workforce training. CTE programs are a subset of Applied Science curriculum programs.

All of North Carolina's community colleges offer applied science programs. More than 275 certificate, diploma, and associate degree programs are offered in applied sciences, with each of these courses of study falling into one of ten broad fields: agricultural and natural resource technologies, biological and chemical technologies, business technologies, commercial and artistic production technologies, construction technologies, engineering technologies, health sciences, industrial technologies, public service technologies, and transport systems technologies.²²

Nearly all curriculum programs in the applied sciences receive funding through the U.S. Department of Education's Carl D. Perkins Career and Technical Educational Act of 2006; in this report, these are referred to as Career and Technical Education programs.²³ The Perkins Act is intended to more fully develop the academic, vocational, and technical skills of secondary and postsecondary students who elect to enroll in vocational and technical education programs. The North Carolina Department of Public Instruction (DPI) is the recipient of the Federal Perkins Act funds and works in collaboration with the North Carolina Community College System to

²¹ North Carolina Community College System, <http://www.ncccommunitycolleges.edu/academic-programs/nc-community-college-system-catalog>

²² North Carolina Community College System, Curriculum Standards, <https://www.ncccommunitycolleges.edu/academic-programs/curriculum-standards>

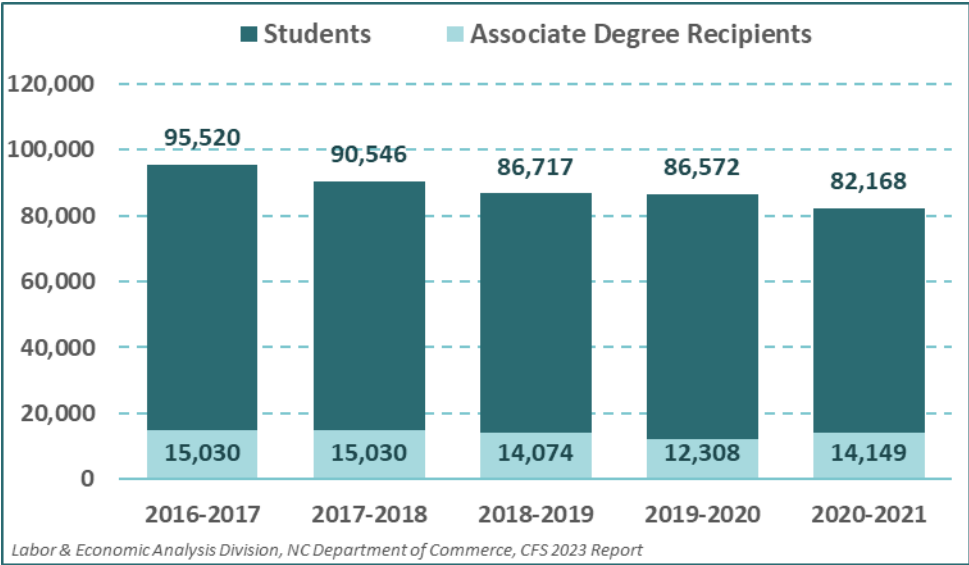
²³ The Strengthening Career and Technical Education for the 21st Century (Perkins V) Act replaces the Perkins Act of 2006 (Perkins IV). This went into effect on July 1, 2019.

implement and deliver the programs and activities required under the Perkins Act. Funding is split between DPI and NCCCS. Perkins Act programs are also required partners under WIOA.

» CTE Associate Degree Program Outcomes

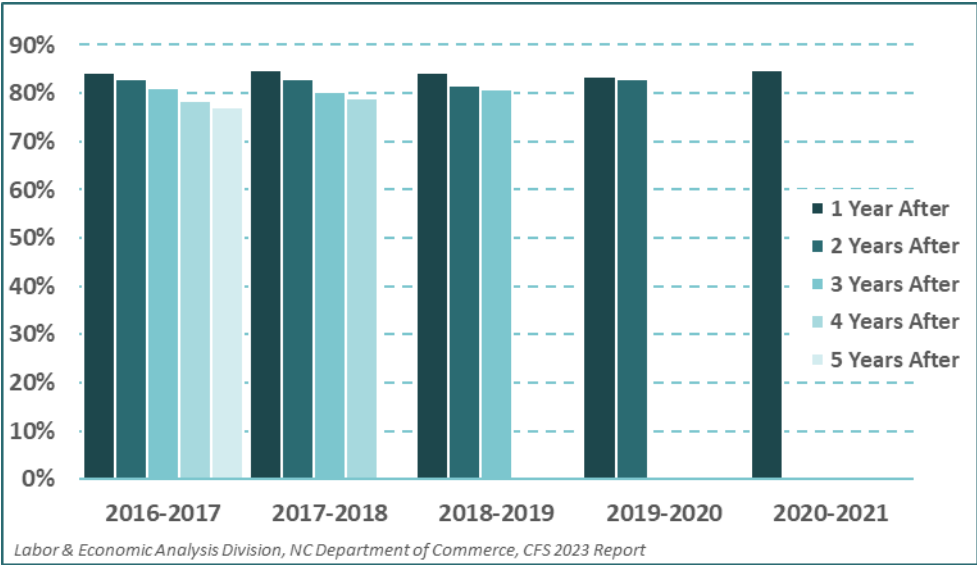
As shown in Figure 29, participation in CTE associate degree programs declined steadily throughout the period studied, with the number of students decreasing from 95,920 in the 2016-2017 program year to 82,168 in the 2020-2021 program year. Students who were recorded as having graduated from an associate degree program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. The number of CTE associate degree program completers dropped slightly throughout the study period.

Figure 29. NCCCS CTE Associate Degree Program Participants and Completers by Program Year



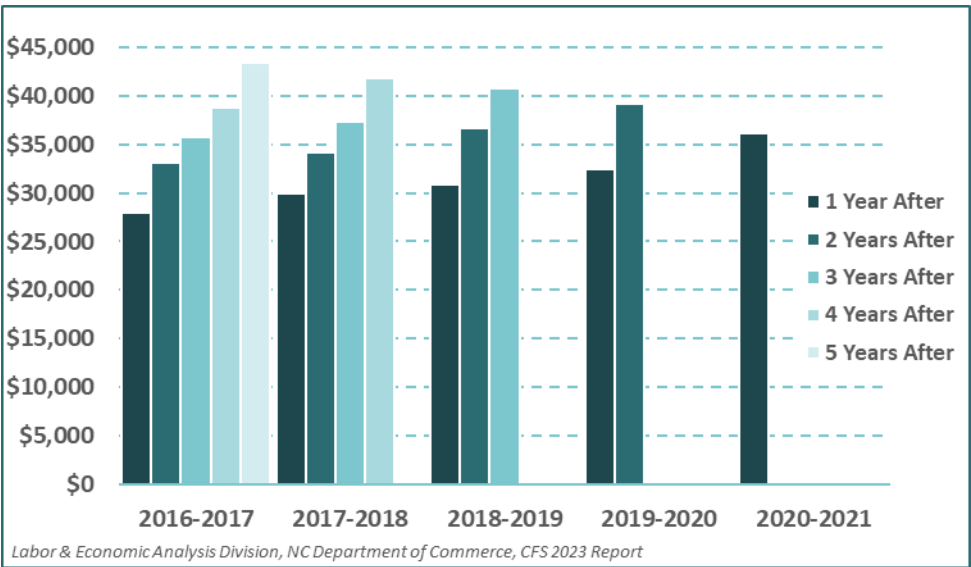
The rate of employment in North Carolina one year after graduation consistently stayed at 84% to 85% across all cohorts, while the rate of subsequent enrollment in public higher education programs remained steady between 27% and 30% (Figure 30 and Table 8). Both employment rates and subsequent enrollment one year after graduation showed minimal fluctuation across cohorts.

Figure 30. Percentage of NCCCS CTE Associate Degree Completers Employed in North Carolina After Degree Conferral, by Year of Graduation



Wage earnings at one year after graduation increased with each successive cohort (Figure 31). Median wage earnings increased from \$28,019 for the cohort graduating in 2016-2017 to \$36,128 for the cohort graduating in 2020-2021 (Table 8).

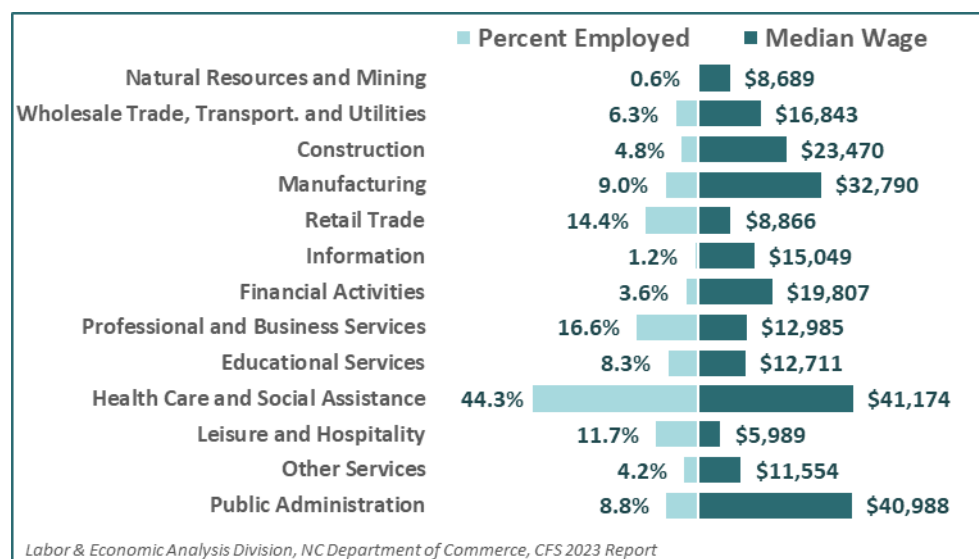
Figure 31. Median Wage of NCCCS CTE Associate Degree Completers in North Carolina, by Year of Graduation



In all cohorts examined here, the share of CTE associate degree recipients employed in North Carolina declined slightly when followed over time. For instance, the employment rate for 2016-2017 graduates declined from 84% after one year to 77% after five years (Table 8). This decline could be attributable to several factors including people not sustaining employment, moving out of state, or finding employment in jobs not covered by North Carolina’s unemployment insurance laws. Those who were employed in North Carolina saw their wages continue

to increase in each year after graduation. For example, the annual median wage for the 2016-2017 cohort increased by 55% (from \$28,019 to \$43,427) over five years. CTE associate degree program graduates were by far most likely to be employed in the Health Care and Social Assistance sector, due in part to the large number of students graduating from health science programs (see Appendix Tables 1, 2, 3, and 4); this was also one of the top-paying industry sectors for graduates across all cohorts (Figure 32).

Figure 32. 2020-2021 NCCCS CTE Associate Degree Completers One Year After Graduation: Percentage Employed and Median Wage by Industry



The outcomes for CTE associate degree recipients varied by the program of study (see Appendix Tables 1, 2, 3, and 4). One year after graduation, the 2016-2017 cohort saw median wages ranging from \$14,764 for commercial and artistic production technologies majors to \$40,334 for health sciences majors (Appendix Table 1). By the fifth year after graduation, health sciences majors earned a median wage of \$54,228, the highest of all programs of study. NCCCS graduates earning an associate degree in health sciences consistently had the highest rate of employment within North Carolina one year after graduation (ranging from 91% to 92%). This is consistent with the relatively higher employment rates and wages for associate degree recipients working in the Health Care and Social Assistance industry, as shown above in Figure 32 for the most recent cohort (also see Table 8).

Graduates of the largest CTE program area, business technologies, had relatively high employment rates around 80% in the first year for all cohorts, and their median earnings showed a steady increase (Appendix Tables 1-4). For the 2016-2017 graduating cohort, median wages increased from \$28,019 one year after graduation to \$43,427 in year five (Appendix Table 1).

Table 8. NCCCS CTE Associate Degree Participants and Completers, Outcomes One Through Five Years After Graduation, Overall and By Industry

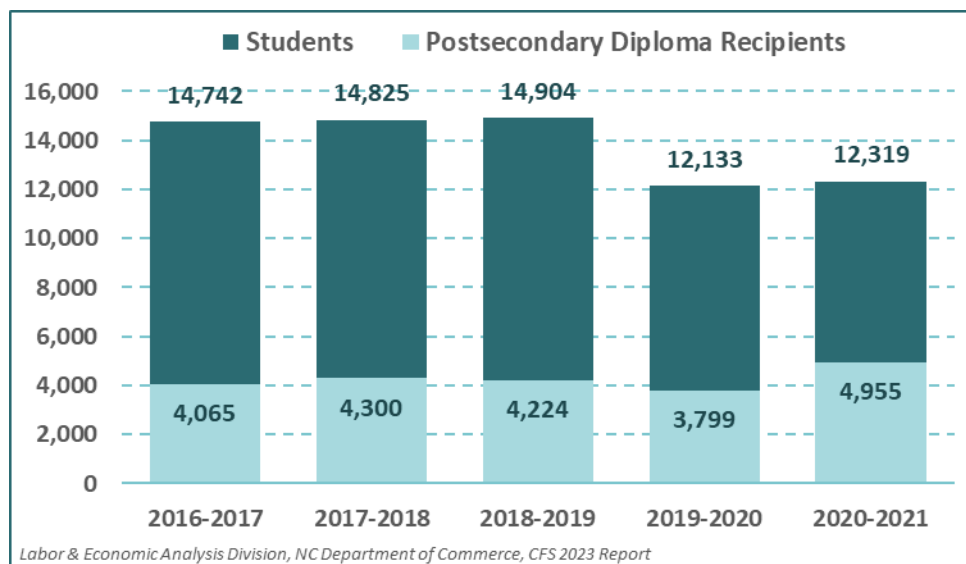
North Carolina Community College System										Common Follow-up System: Evaluative Measures, 2023 Report									
Associate Degree																			
All Programs										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017			
Students		95,520	90,546	86,717	86,572	82,168	95,520	90,546	86,717	86,572	95,520	90,546	86,717	95,520	90,546	95,520			
Associate Degree Recipients		15,030	15,030	14,074	12,308	14,149	15,030	15,030	14,074	12,308	15,030	15,030	14,074	15,030	15,030	15,030			
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Associate Degree Recipients Employed in North Carolina	N	12,682	12,754	11,877	10,280	11,989	12,459	12,453	11,475	10,200	12,181	12,079	11,393	11,791	11,876	11,599			
	%	84%	85%	84%	84%	85%	83%	83%	82%	83%	81%	80%	81%	78%	79%	77%			
Associate Degree Recipients' Wages in North Carolina	Mean	\$29,859	\$31,959	\$32,844	\$35,129	\$38,441	\$35,379	\$36,458	\$39,027	\$42,804	\$37,888	\$40,140	\$44,260	\$41,764	\$45,581	\$47,030			
	Median	\$28,019	\$29,922	\$30,850	\$32,526	\$36,128	\$33,152	\$34,249	\$36,652	\$39,157	\$35,725	\$37,361	\$40,833	\$38,876	\$41,870	\$43,427			
Graduates Enrolled in NC Public Higher Education	N	4,450	4,505	4,115	3,692	3,815	3,922	3,942	3,647	3,184	3,300	3,347	2,965	2,743	2,674	2,219			
	%	30%	30%	29%	30%	27%	26%	26%	26%	26%	22%	22%	21%	18%	18%	15%			
Graduates Enrolled in NC Public Education, Employment, or Training Program	N	5,730	5,935	5,746	5,334	5,781	5,303	5,629	5,481	4,824	5,016	5,454	4,981	4,856	4,983	4,488			
	%	38%	39%	41%	43%	41%	35%	37%	39%	39%	33%	36%	35%	32%	33%	30%			
Graduates Enrolled or Employed in NC	N	13,477	13,596	12,693	11,116	12,811	13,138	13,201	12,320	10,873	12,827	12,878	12,090	12,518	12,599	12,305			
	%	90%	90%	90%	90%	91%	87%	88%	88%	88%	85%	86%	86%	83%	84%	82%			
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		0.5%	0.5%	0.5%	0.6%	0.6%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	0.4%	0.5%			
Wholesale Trade, Transport, and Utilities		5.6%	5.4%	5.7%	5.9%	6.3%	5.8%	5.6%	6.3%	6.4%	6.1%	6.6%	7.0%	6.9%	7.2%	7.2%			
Construction		4.1%	4.4%	4.0%	4.4%	4.8%	4.1%	4.0%	3.9%	4.5%	4.0%	4.3%	4.0%	4.2%	4.4%	4.4%			
Manufacturing		9.0%	9.1%	8.9%	8.5%	9.0%	9.3%	9.2%	8.9%	8.8%	9.1%	9.3%	9.5%	9.4%	10.0%	10.1%			
Retail Trade		16.7%	15.5%	16.0%	16.0%	14.4%	13.7%	13.1%	12.6%	13.0%	12.2%	11.8%	11.6%	11.2%	11.3%	10.7%			
Information		1.3%	1.2%	1.4%	1.1%	1.2%	1.4%	1.1%	1.4%	1.3%	1.3%	1.1%	1.4%	1.2%	1.4%	1.4%			
Financial Activities		3.3%	3.3%	3.5%	3.4%	3.6%	3.5%	3.6%	3.5%	3.9%	3.7%	3.8%	4.1%	4.0%	4.3%	4.4%			
Professional and Business Services		16.8%	16.8%	15.1%	16.9%	16.6%	15.9%	15.5%	16.1%	19.0%	15.2%	16.9%	19.2%	16.0%	19.8%	18.8%			
Educational Services		9.7%	8.3%	8.3%	7.3%	8.3%	8.7%	8.6%	7.9%	8.1%	8.9%	8.6%	8.6%	9.1%	9.4%	9.9%			
Health Care and Social Assistance		41.4%	42.1%	43.3%	43.6%	44.3%	41.2%	41.5%	43.1%	43.0%	40.8%	40.5%	41.5%	39.9%	39.5%	38.8%			
Leisure and Hospitality		13.9%	13.9%	12.6%	11.4%	11.7%	10.2%	10.2%	8.5%	8.7%	9.0%	7.9%	8.0%	7.3%	7.5%	6.8%			
Other Services		3.6%	3.6%	3.7%	3.7%	4.2%	3.4%	3.1%	3.2%	3.5%	3.1%	3.1%	3.2%	2.8%	3.0%	3.0%			
Public Administration		7.8%	8.1%	8.0%	8.5%	8.8%	8.5%	8.5%	8.6%	9.1%	9.3%	8.9%	9.1%	9.6%	9.2%	9.7%			
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		\$9,752	\$8,934	\$11,661	\$10,330	\$8,689	\$15,489	\$16,600	\$22,812	\$16,776	\$23,833	\$17,537	\$29,508	\$23,400	\$32,026	\$23,686			
Wholesale Trade, Transport, and Utilities		\$15,487	\$19,160	\$19,521	\$14,160	\$16,843	\$24,872	\$26,825	\$22,533	\$21,099	\$28,349	\$24,763	\$27,215	\$29,360	\$27,991	\$32,999			
Construction		\$20,079	\$19,547	\$22,077	\$22,036	\$23,470	\$24,356	\$28,647	\$27,772	\$28,115	\$31,466	\$31,006	\$34,120	\$36,240	\$34,422	\$37,009			
Manufacturing		\$27,189	\$30,256	\$31,002	\$28,925	\$32,790	\$34,060	\$35,748	\$36,863	\$36,671	\$38,191	\$38,059	\$38,897	\$40,814	\$41,964	\$44,830			
Retail Trade		\$7,981	\$8,015	\$7,014	\$8,392	\$8,866	\$10,652	\$10,874	\$12,387	\$11,612	\$12,149	\$14,134	\$14,032	\$15,157	\$15,267	\$17,464			
Information		\$14,841	\$12,112	\$16,401	\$13,985	\$15,049	\$22,550	\$22,050	\$29,716	\$21,009	\$25,046	\$32,630	\$32,040	\$37,682	\$27,040	\$36,651			
Financial Activities		\$14,383	\$22,251	\$18,819	\$21,202	\$19,807	\$22,673	\$25,205	\$25,650	\$23,320	\$27,893	\$28,008	\$24,351	\$30,408	\$32,289	\$34,850			
Professional and Business Services		\$10,934	\$11,170	\$12,310	\$11,423	\$12,985	\$14,028	\$16,113	\$17,383	\$20,153	\$19,229	\$19,099	\$25,017	\$22,293	\$26,566	\$27,821			
Educational Services		\$10,558	\$9,990	\$12,040	\$10,913	\$12,711	\$13,549	\$16,305	\$17,497	\$17,635	\$18,788	\$20,118	\$23,420	\$21,864	\$23,634	\$25,736			
Health Care and Social Assistance		\$30,868	\$34,824	\$36,542	\$39,380	\$41,174	\$38,245	\$39,270	\$41,952	\$43,938	\$38,183	\$40,444	\$41,209	\$40,705	\$40,722	\$41,499			
Leisure and Hospitality		\$5,615	\$5,178	\$4,498	\$4,786	\$5,989	\$7,319	\$6,287	\$6,139	\$6,846	\$7,630	\$7,091	\$7,187	\$7,909	\$8,103	\$9,435			
Other Services		\$8,203	\$8,852	\$10,825	\$10,365	\$11,554	\$10,762	\$12,068	\$17,137	\$16,919	\$15,682	\$14,736	\$15,646	\$20,022	\$19,043	\$21,635			
Public Administration		\$30,902	\$32,885	\$33,732	\$40,113	\$40,988	\$36,382	\$38,171	\$39,887	\$42,730	\$38,238	\$40,546	\$42,021	\$41,342	\$43,651	\$44,335			
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		\$15,605	\$19,794	\$18,076	\$17,656	\$18,834	\$20,315	\$22,390	\$26,241	\$22,003	\$23,601	\$26,282	\$29,277	\$24,537	\$34,801	\$26,178			
Wholesale Trade, Transport, and Utilities		\$22,435	\$23,867	\$24,330	\$21,257	\$24,729	\$29,700	\$29,341	\$27,621	\$26,748	\$33,282	\$29,535	\$31,352	\$33,217	\$33,431	\$38,639			
Construction		\$21,663	\$22,266	\$23,343	\$24,428	\$25,123	\$26,698	\$29,169	\$28,171	\$31,601	\$32,505	\$31,786	\$34,434	\$36,607	\$36,769	\$38,123			
Manufacturing		\$29,035	\$32,183	\$31,651	\$31,250	\$34,889	\$34,908	\$37,100	\$37,329	\$37,832	\$39,285	\$39,842	\$40,709	\$41,971	\$43,190	\$45,572			
Retail Trade		\$12,020	\$12,820	\$12,408	\$13,767	\$14,279	\$15,140	\$15,982	\$17,643	\$18,399	\$17,204	\$19,372	\$20,559	\$20,013	\$21,046	\$22,536			
Information		\$19,314	\$19,649	\$21,730	\$24,215	\$25,007	\$26,945	\$26,793	\$30,742	\$28,874	\$32,183	\$34,194	\$34,565	\$40,068	\$35,286	\$45,941			
Financial Activities		\$18,340	\$25,416	\$21,813	\$24,605	\$24,947	\$23,345	\$28,437	\$27,181	\$28,329	\$28,022	\$30,753	\$28,642	\$30,092	\$34,099	\$35,188			
Professional and Business Services		\$16,278	\$16,802	\$18,127	\$17,504	\$19,809	\$20,074	\$21,312	\$22,693	\$26,673	\$23,695	\$24,581	\$31,498	\$27,310	\$33,062	\$34,224			
Educational Services		\$14,541	\$14,788	\$16,466	\$15,802	\$17,390	\$17,046	\$18,292	\$19,526	\$20,233	\$19,703	\$20,659	\$23,921	\$22,064	\$24,210	\$25,719			
Health Care and Social Assistance		\$31,460	\$33,937	\$35,083	\$38,265	\$41,080	\$37,890	\$38,859	\$41,313	\$44,623	\$38,591	\$41,336	\$43,348	\$41,818	\$43,624	\$44,397			
Leisure and Hospitality		\$9,399	\$9,105	\$8,606	\$8,724	\$10,835	\$11,726	\$10,808	\$11,739	\$12,003	\$12,476	\$12,974	\$14,292	\$14,269	\$15,494	\$16,086			
Other Services		\$12,808	\$13,471	\$15,231	\$15,411	\$17,643	\$16,010	\$16,882	\$20,555	\$21,168	\$18,936	\$20,049	\$22,944	\$23,315	\$23,384	\$26,776			
Public Administration		\$29,846	\$32,222	\$33,580	\$37,058	\$38,328	\$34,552	\$36,700	\$38,191	\$41,109	\$36,924	\$39,656	\$41,458	\$40,153	\$42,331	\$42,905			

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» CTE Diploma Program Outcomes

As shown in Figure 33, participation in CTE diploma programs remained at the relatively steady level between 2016-2017 and 2018-2019 program years, then declined to a range between 12,133 and 12,319 in subsequent years. Students who were recorded as having graduated from a diploma program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. The number of CTE diploma program completers fluctuated from year to year, ranging from 3,799 to 4,955.

Figure 33. NCCCS CTE Diploma Program Participants and Completers by Program Year



The rate of employment in North Carolina one year after earning a CTE diploma ranged from 83% to 85% (Figure 34 and Table 9). The rate of subsequent enrollment in public higher education programs ranged from 37% to 40%, with both employment and subsequent enrollment outcomes fluctuating from cohort to cohort (Table 9).

Wage earnings one year after graduation generally trended upward with each successive cohort (Figure 35 and Table 9), except for a slight drop for the 2017-2018 graduating class. Median wage earnings rose from \$25,704 for the cohort graduating in 2016-2017 to \$29,761 for the 2020-2021 graduates.

Figure 34. Percentage of NCCCS CTE Diploma Recipients Employed in North Carolina After Completion, by Year of Graduation

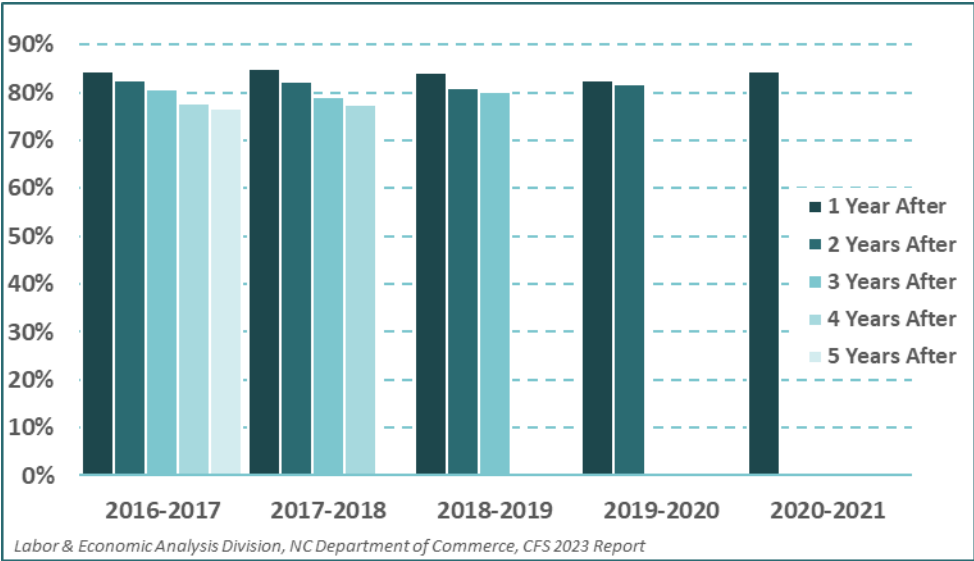
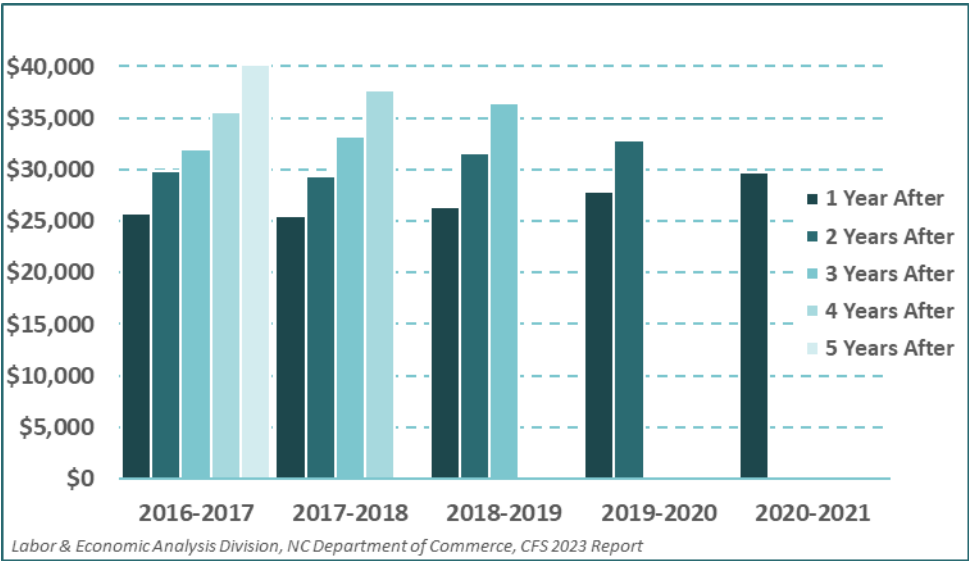


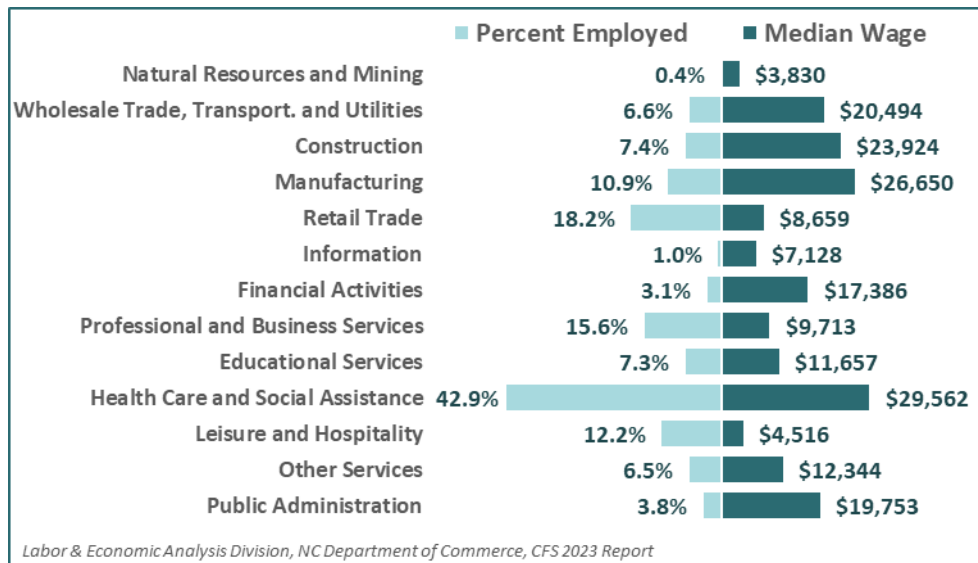
Figure 35. Median Wage of NCCCS CTE Diploma Recipients in North Carolina, by Year of Graduation



The share of CTE diploma recipients from each cohort employed in North Carolina declined slightly over time, a common pattern across workforce training programs. For instance, the employment rate for 2016-2017 graduates declined from 84% after one year to 77% after five years. Of those CTE Diploma recipients who were employed, wages increased each year after graduation, another pattern shared across many workforce programs.

These graduates were by far most likely to be employed in the Health Care and Social Assistance sector (Figure 36), due in part to the large number of students graduating from health science programs. This was also one of the top-paying industries for graduates across all cohorts.

Figure 36. 2020-2021 NCCCS CTE Diploma Recipients One Year After Graduation: Percentage Employed and Median Wage by Industry



The outcomes of CTE diploma recipients varied widely by the program of study (see Appendix Tables 5, 6, 7, and 8). In the first year after graduation, the 2016-2017 cohort saw median wages ranging from \$11,924 for commercial and artistic production technologies majors to \$29,010 for health sciences majors (Appendix Table 5). By the fifth year after graduation, engineering technologies majors had the highest earnings with a median wage of \$48,701. Health sciences majors' earnings were at \$41,731, and artistic and production technologies graduates earned \$18,622. For all cohorts, health sciences graduates also had the highest employment rate within North Carolina, with one-year employment rates of 90% to 92% depending on the cohort. This is consistent with the much higher employment rate and relatively higher wages for CTE diploma recipients working in the Health Care and Social Assistance industry, as shown above in Figure 36 for the most recent cohort (also see Table 9).

Table 9. NCCCS CTE Diploma Program Participants and Completers, Outcomes One Through Five Years After Graduation, Overall and By Industry

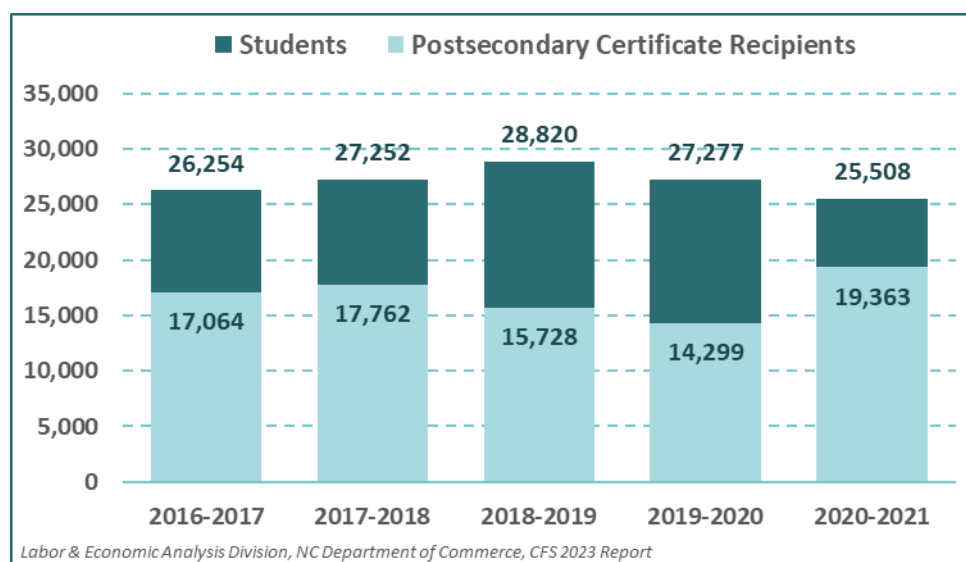
North Carolina Community College System										Common Follow-up System: Evaluative Measures, 2023 Report									
Postsecondary Diploma																			
All Programs										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017			
Students		14,742	14,825	14,904	12,133	12,319	14,742	14,825	14,904	12,133	14,742	14,825	14,904	14,742	14,825	14,742			
Postsecondary Diploma Recipients		4,065	4,300	4,224	3,799	4,955	4,065	4,300	4,224	3,799	4,065	4,300	4,224	4,065	4,300	4,065			
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Postsecondary Diploma Recipients Employed in North Carolina	N %	3,429 84%	3,656 85%	3,556 84%	3,136 83%	4,189 85%	3,361 83%	3,535 82%	3,425 81%	3,109 82%	3,279 81%	3,400 79%	3,390 80%	3,162 78%	3,337 78%	3,118 77%			
Postsecondary Diploma Recipients' Wages in North Carolina	Mean Median	\$26,515 \$25,704	\$26,460 \$25,452	\$27,477 \$26,418	\$28,116 \$27,905	\$30,999 \$29,761	\$30,906 \$29,806	\$30,053 \$29,394	\$32,488 \$31,572	\$33,819 \$32,855	\$33,550 \$31,910	\$34,471 \$33,245	\$37,964 \$36,443	\$37,550 \$35,583	\$39,905 \$37,667	\$42,463 \$40,168			
Graduates Enrolled in NC Public Higher Education	N %	1,547 38%	1,728 40%	1,593 38%	1,480 39%	1,815 37%	1,106 27%	1,181 27%	1,118 26%	801 21%	887 22%	967 22%	687 16%	707 17%	655 15%	521 13%			
Graduates Enrolled in NC Public Education, Employment, or Training Program	N %	1,872 46%	2,074 48%	2,079 49%	1,884 50%	2,470 50%	1,510 37%	1,691 39%	1,704 40%	1,348 35%	1,435 35%	1,562 36%	1,374 33%	1,367 34%	1,358 32%	1,223 30%			
Graduates Enrolled or Employed in NC	N %	3,692 91%	3,972 92%	3,844 91%	3,442 91%	4,564 92%	3,529 87%	3,747 87%	3,692 87%	3,298 87%	3,443 85%	3,628 84%	3,578 85%	3,374 83%	3,550 83%	3,308 81%			
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		0.6%	0.4%	0.5%	0.7%	0.4%	0.6%	0.3%	0.4%	0.5%	0.6%	0.4%	0.5%	0.4%	0.4%	0.6%			
Wholesale Trade, Transport, and Utilities		5.2%	4.2%	5.3%	5.9%	6.6%	5.4%	4.6%	6.4%	6.2%	5.8%	5.6%	7.2%	6.7%	6.7%	6.8%			
Construction		6.9%	7.0%	6.3%	7.4%	7.4%	7.2%	6.8%	6.3%	7.5%	6.6%	6.8%	6.2%	5.8%	7.0%	6.1%			
Manufacturing		10.3%	10.3%	9.9%	9.7%	10.9%	10.8%	10.2%	10.0%	10.2%	10.7%	10.6%	10.4%	10.7%	10.5%	11.2%			
Retail Trade		15.1%	16.5%	15.9%	17.4%	18.2%	12.0%	13.4%	13.0%	14.9%	11.5%	11.9%	12.1%	9.9%	11.3%	9.9%			
Information		0.7%	0.8%	0.8%	0.4%	1.0%	0.7%	0.7%	0.7%	0.8%	0.6%	0.6%	0.9%	0.7%	0.9%	1.1%			
Financial Activities		2.3%	2.5%	2.9%	2.7%	3.1%	2.5%	2.9%	2.7%	3.4%	2.5%	2.9%	3.2%	2.5%	3.1%	2.5%			
Professional and Business Services		14.1%	13.5%	11.4%	15.4%	15.6%	14.2%	13.0%	12.9%	17.3%	13.1%	13.6%	14.6%	14.7%	14.5%	16.0%			
Educational Services		7.2%	6.6%	7.1%	5.2%	7.3%	6.3%	6.8%	6.1%	6.2%	6.5%	6.6%	7.0%	7.1%	7.5%	8.2%			
Health Care and Social Assistance		45.9%	44.6%	45.7%	44.6%	42.9%	45.6%	44.9%	46.1%	44.0%	45.2%	45.1%	45.2%	44.9%	44.2%	44.8%			
Leisure and Hospitality		12.5%	13.5%	11.8%	12.4%	12.2%	9.1%	9.3%	7.7%	9.4%	7.9%	7.6%	7.4%	6.6%	7.4%	6.2%			
Other Services		8.0%	7.8%	8.4%	7.1%	6.5%	7.0%	6.8%	7.5%	5.9%	6.5%	6.7%	7.2%	6.0%	5.7%	5.5%			
Public Administration		3.3%	3.6%	3.2%	3.7%	3.8%	3.8%	4.2%	3.4%	4.1%	4.4%	4.7%	3.8%	5.0%	5.1%	5.2%			
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		\$11,704	\$9,407	\$12,125	\$22,275	\$3,830	\$12,589	\$16,092	\$21,658	\$29,670	\$24,000	\$18,783	\$25,272	\$34,782	\$29,399	\$26,980			
Wholesale Trade, Transport, and Utilities		\$16,209	\$15,600	\$19,245	\$9,356	\$20,494	\$28,643	\$24,247	\$23,723	\$18,142	\$28,320	\$21,317	\$28,605	\$27,764	\$23,078	\$29,356			
Construction		\$18,998	\$20,026	\$23,721	\$21,787	\$23,924	\$22,218	\$28,505	\$30,779	\$29,034	\$28,840	\$31,007	\$35,481	\$36,472	\$34,972	\$31,768			
Manufacturing		\$25,224	\$26,857	\$26,442	\$23,352	\$26,650	\$32,746	\$35,565	\$32,945	\$30,851	\$36,477	\$37,845	\$34,954	\$39,602	\$44,037	\$44,767			
Retail Trade		\$5,747	\$6,855	\$6,742	\$7,326	\$8,659	\$9,846	\$8,513	\$11,085	\$10,276	\$10,897	\$12,300	\$13,495	\$16,280	\$15,883	\$15,478			
Information		\$9,924	\$7,671	\$11,013	\$22,889	\$7,128	\$11,897	\$18,272	\$26,617	\$11,847	\$43,029	\$24,780	\$28,339	\$40,408	\$22,801	\$33,568			
Financial Activities		\$10,022	\$10,673	\$17,010	\$15,687	\$17,386	\$14,008	\$18,487	\$28,693	\$14,408	\$24,720	\$23,757	\$28,604	\$24,315	\$29,060	\$28,969			
Professional and Business Services		\$8,775	\$8,372	\$8,666	\$9,291	\$9,713	\$11,450	\$10,259	\$9,175	\$14,497	\$13,198	\$12,436	\$16,983	\$13,783	\$18,465	\$17,846			
Educational Services		\$7,731	\$8,091	\$9,648	\$10,913	\$11,657	\$14,185	\$18,898	\$19,383	\$16,816	\$21,715	\$22,389	\$19,260	\$22,522	\$25,183	\$28,158			
Health Care and Social Assistance		\$26,095	\$26,250	\$26,622	\$28,593	\$29,562	\$28,614	\$27,911	\$30,492	\$31,176	\$30,072	\$32,239	\$34,516	\$34,283	\$35,547	\$37,000			
Leisure and Hospitality		\$4,234	\$4,476	\$3,439	\$4,164	\$4,516	\$5,092	\$4,860	\$4,569	\$6,152	\$5,054	\$4,994	\$5,805	\$5,367	\$6,083	\$6,930			
Other Services		\$9,017	\$9,969	\$11,346	\$9,373	\$12,344	\$15,152	\$15,675	\$17,851	\$19,448	\$18,153	\$16,431	\$21,475	\$19,434	\$22,544	\$23,904			
Public Administration		\$22,670	\$22,322	\$26,866	\$26,647	\$19,753	\$32,486	\$32,233	\$33,897	\$34,142	\$34,734	\$35,241	\$34,819	\$36,777	\$37,734	\$39,732			
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After			
Natural Resources and Mining		\$17,057	\$17,309	\$15,750	\$22,880	\$11,181	\$21,939	\$21,695	\$24,719	\$30,377	\$24,893	\$20,551	\$25,736	\$31,571	\$27,437	\$30,651			
Wholesale Trade, Transport, and Utilities		\$21,402	\$21,983	\$24,387	\$17,658	\$25,220	\$29,607	\$25,728	\$28,034	\$24,418	\$29,833	\$25,988	\$32,075	\$31,618	\$31,619	\$37,855			
Construction		\$20,164	\$21,733	\$22,144	\$23,121	\$24,639	\$23,992	\$27,198	\$29,685	\$28,296	\$28,711	\$30,996	\$34,104	\$35,667	\$36,002	\$34,045			
Manufacturing		\$27,595	\$28,004	\$29,043	\$25,679	\$29,509	\$33,944	\$34,430	\$34,021	\$33,064	\$37,253	\$37,597	\$37,359	\$40,347	\$43,087	\$45,427			
Retail Trade		\$10,711	\$10,772	\$11,142	\$11,900	\$13,870	\$14,143	\$13,200	\$15,537	\$15,713	\$15,930	\$17,450	\$18,142	\$20,461	\$20,122	\$21,812			
Information		\$18,261	\$15,028	\$19,538	\$34,786	\$15,904	\$30,641	\$21,837	\$29,426	\$24,143	\$53,742	\$30,199	\$34,352	\$53,664	\$27,640	\$46,706			
Financial Activities		\$16,526	\$15,245	\$20,608	\$21,991	\$23,320	\$21,280	\$21,160	\$27,050	\$21,080	\$26,494	\$24,977	\$28,411	\$28,454	\$29,497	\$33,175			
Professional and Business Services		\$14,030	\$13,549	\$14,169	\$14,325	\$16,500	\$17,675	\$16,848	\$16,628	\$20,747	\$20,624	\$20,334	\$22,981	\$22,011	\$25,324	\$26,104			
Educational Services		\$12,361	\$14,631	\$15,680	\$15,650	\$16,292	\$17,161	\$20,503	\$20,302	\$20,287	\$21,824	\$23,307	\$22,380	\$23,403	\$25,786	\$26,242			
Health Care and Social Assistance		\$25,388	\$25,677	\$26,496	\$27,791	\$29,947	\$28,453	\$27,703	\$30,576	\$30,945	\$30,820	\$32,296	\$35,535	\$35,028	\$37,077	\$38,750			
Leisure and Hospitality		\$7,583	\$7,996	\$6,651	\$8,091	\$9,328	\$9,144	\$9,002	\$9,307	\$11,800	\$9,284	\$10,632	\$11,807	\$10,922	\$13,057	\$14,195			
Other Services		\$13,045	\$13,498	\$14,789	\$15,454	\$17,266	\$18,127	\$18,055	\$20,640	\$23,519	\$19,953	\$20,315	\$25,464	\$22,918	\$25,552	\$27,749			
Public Administration		\$23,859	\$25,235	\$26,722	\$27,539	\$25,860	\$29,139	\$30,995	\$32,633	\$33,328	\$33,321	\$32,292	\$32,870	\$34,649	\$33,877	\$37,308			

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» CTE Certificate Program Outcomes

As shown in Figure 37, participation in CTE certificate programs increased through the 2018-2019 program year then slightly declined the next two program year, with the number of students reaching 28,820 in the 2018-2019 program year and then declining to 25,508 in 2020-2021. Students who were recorded as having graduated from a certificate program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. The number of CTE certificate program recipients fluctuated by program year from a low of 14,299 in 2019-2020 to a peak in 2020-2021 of 19,363.

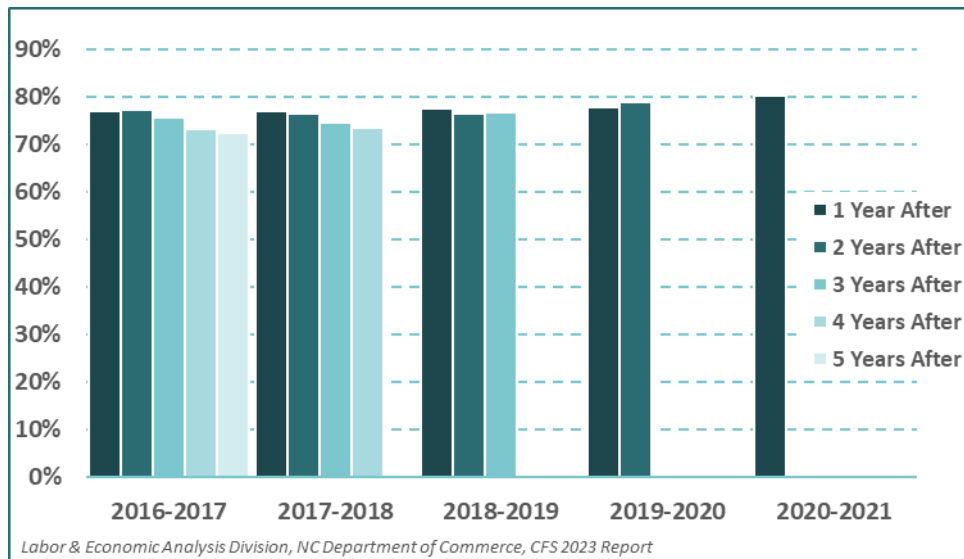
Figure 37. NCCCS CTE Certificate Program Participants and Completers by Program Year



The rate of employment in North Carolina one year after graduation ranged from 77% to 80%, while the rate of subsequent enrollment in public higher education programs ranged from 61% to 64% (Figure 38 and Table 10). Both outcomes fluctuated from cohort to cohort, showing no clear trend.

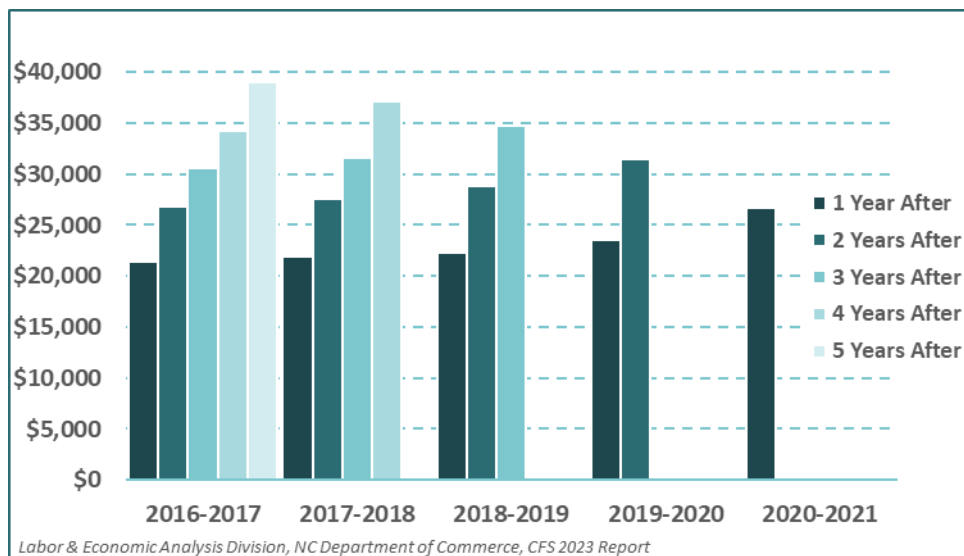
The share of CTE certificate recipients employed in North Carolina tended to decrease slightly over time for each graduating cohort, although this trend was neither as strong nor consistent as most other programs. For instance, the employment rate for 2016-2017 graduates decreased from 77% one year after graduation to 72% five years after graduation (Figure 38 and Table 10).

Figure 38. Percentage of NCCCS CTE Certificate Recipients Employed in North Carolina After Completion, by Year of Graduation



Wage earnings one year after graduation fluctuated across cohorts, with median wage earnings ranging from \$21,387 for the cohort graduating in 2016-2017 to \$26,735 for the 2020-2021 graduates (Figure 39 and Table 10). CTE certificate recipients employed in North Carolina saw their wages increase in each year after graduation for all years examined in this report (Figure 39 and Table 10).

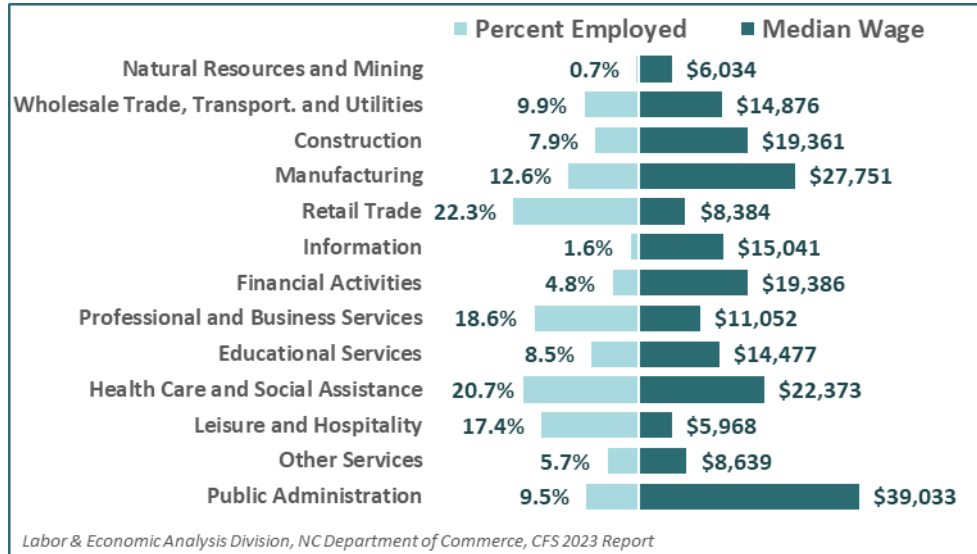
Figure 39. Median Wage of NCCCS CTE Certificate Recipients in North Carolina, by Year of Graduation



For the most recent cohort (2020-2021), CTE certificate recipients' top industries of employment one year after graduation were Retail Trade (22%), Health Care and Social Assistance (21%), Professional and Business Services (19%), and Leisure and Hospitality (17%) (Figure 40). Recipients employed in Retail Trade had some of the lowest median earnings (\$8,384) of graduates in any sector. However, over time for each cohort, the percentage of CTE certificate recipients employed in Leisure and Hospitality and Retail Trade declined while more found jobs in the relatively higher-paying Manufacturing and Public Administration sectors. For

example, employment rates for the 2016-2017 cohort fell from 21% to 15% in the Retail Trade sector and from 19% to 10% in the Leisure and Hospitality sector after five years and rose from 11% to 13% in Manufacturing and from 12% to 13% in Public Administration by four years. Although median wages generally rise over time for these cohorts, the Retail Trade and Leisure and Hospitality sectors have the lowest median wages by year five of \$13,616 and \$8,097, respectively. The two highest median wage rates by year five are Public Administration at \$46,982 and Manufacturing at \$42,175.

Figure 40. 2020-2021 NCCCS CTE Certificate Recipients One Year After Graduation: Percentage Employed and Median Wage by Industry



The outcomes of CTE certificate recipients varied by the program of study (Appendix Tables 9, 10, 11, and 12). The 2016-2017 cohort saw one year post-graduation median wages ranging from \$13,456 for commercial and artistic production technologies majors to \$32,708 for biological and chemical technologies majors. Graduates of the largest two programs offered by NCCCS for the 2018-2019 program year — business technologies and public service technologies — earned \$22,265 and \$21,423, respectively, in their first year after completion. Biological and chemical technologies, while the smallest NCCCS certificate program in terms of enrollment, is one of the top-earning program areas, with first-year median wages reaching \$32,078 for the 2016-2017 cohort of certificate recipients.

Table 10. NCCCS CTE Certificate Program Participants and Completers, Outcomes One Through Five Years After Graduation, Overall and By Industry

North Carolina Community College System						Common Follow-up System: Evaluative Measures, 2023 Report									
Postsecondary Certificate						Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
All Programs						2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Program Year						2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Students						26,254	27,252	28,820	27,277	25,508	26,254	27,252	28,820	27,277	25,508
Postsecondary Certificate Recipients						17,064	17,762	15,728	14,299	19,363	17,064	17,762	15,728	14,299	19,363
Post-Completion Outcome Measures						1 Year After					2 Years After				
Postsecondary Certificate Recipients Employed in North Carolina						13,118	13,670	12,213	11,132	15,516	13,179	13,588	12,041	11,273	12,895
						77%	77%	78%	78%	80%	77%	77%	77%	79%	76%
Postsecondary Certificate Recipients' Wages in North Carolina						\$25,556	\$26,835	\$26,929	\$28,064	\$30,878	\$30,747	\$31,938	\$32,532	\$35,342	\$34,374
						\$21,387	\$21,907	\$22,323	\$23,487	\$26,735	\$26,804	\$27,533	\$28,861	\$31,440	\$30,538
Graduates Enrolled in NC Public Higher Education						10,590	11,293	9,569	9,072	12,355	6,808	7,027	6,057	5,480	4,967
						62%	64%	61%	63%	64%	40%	40%	39%	38%	29%
Graduates Enrolled in NC Public Education, Employment, or Training Program						11,349	12,224	10,590	10,033	13,834	8,147	8,736	7,878	7,117	6,848
						67%	69%	67%	70%	71%	48%	49%	50%	50%	40%
Graduates Enrolled or Employed in NC						15,583	16,333	14,530	13,348	18,177	14,601	15,251	13,665	12,565	14,023
						91%	92%	92%	93%	94%	86%	86%	87%	88%	82%
Graduates' Employment by Industry†						1 Year After					2 Years After				
Natural Resources and Mining						0.9%	0.8%	0.8%	0.9%	0.7%	0.8%	0.7%	0.7%	0.8%	0.8%
Wholesale Trade, Transport. and Utilities						7.9%	7.0%	8.8%	10.0%	9.9%	8.0%	7.8%	10.4%	10.9%	8.6%
Construction						6.7%	7.4%	7.0%	8.4%	7.9%	7.1%	7.5%	7.7%	8.9%	7.4%
Manufacturing						11.4%	12.5%	11.1%	11.9%	12.6%	12.4%	12.8%	12.2%	12.9%	12.6%
Retail Trade						21.1%	21.4%	22.1%	23.2%	22.3%	18.7%	18.8%	19.6%	20.1%	16.6%
Information						1.8%	1.4%	1.8%	1.5%	1.6%	1.9%	1.6%	1.9%	1.9%	1.7%
Financial Activities						4.1%	3.8%	4.2%	4.0%	4.8%	4.3%	4.5%	4.7%	4.7%	4.6%
Professional and Business Services						19.6%	19.2%	18.1%	18.5%	18.6%	20.1%	18.7%	19.2%	20.3%	18.9%
Educational Services						9.0%	8.7%	8.1%	7.2%	8.5%	9.0%	9.0%	8.0%	8.2%	8.9%
Health Care and Social Assistance						19.1%	18.3%	17.9%	17.6%	20.7%	19.2%	18.3%	18.0%	18.0%	19.3%
Leisure and Hospitality						19.0%	19.4%	18.0%	17.3%	17.4%	15.9%	15.4%	13.4%	13.8%	13.7%
Other Services						5.2%	5.8%	5.5%	5.8%	5.7%	4.8%	5.1%	5.1%	5.4%	4.6%
Public Administration						12.2%	11.8%	12.3%	11.6%	9.5%	12.3%	12.2%	12.6%	11.9%	12.6%
Graduates' Median Wages by Industry of Employment						1 Year After					2 Years After				
Natural Resources and Mining						\$7,295	\$5,868	\$9,694	\$9,506	\$6,034	\$14,806	\$13,180	\$14,563	\$10,158	\$21,167
Wholesale Trade, Transport. and Utilities						\$13,738	\$14,755	\$17,959	\$13,229	\$14,876	\$22,073	\$17,805	\$20,102	\$19,534	\$25,598
Construction						\$15,601	\$16,158	\$17,509	\$19,255	\$19,361	\$22,097	\$26,528	\$24,369	\$26,231	\$27,108
Manufacturing						\$21,535	\$25,080	\$25,305	\$21,748	\$27,751	\$31,855	\$32,169	\$31,424	\$31,351	\$35,679
Retail Trade						\$7,225	\$7,215	\$7,204	\$7,804	\$8,384	\$8,517	\$7,788	\$8,972	\$9,251	\$9,997
Information						\$10,854	\$10,752	\$17,249	\$18,598	\$15,041	\$18,289	\$18,386	\$20,589	\$21,632	\$28,347
Financial Activities						\$16,811	\$21,458	\$21,281	\$21,365	\$19,386	\$23,280	\$22,810	\$25,770	\$25,069	\$29,212
Professional and Business Services						\$8,452	\$9,051	\$10,393	\$9,276	\$11,052	\$10,434	\$12,516	\$12,306	\$13,625	\$14,392
Educational Services						\$10,501	\$10,757	\$9,916	\$10,651	\$14,477	\$16,395	\$15,290	\$15,115	\$16,702	\$21,514
Health Care and Social Assistance						\$16,610	\$16,189	\$16,600	\$17,780	\$22,373	\$19,953	\$20,527	\$20,896	\$21,798	\$22,049
Leisure and Hospitality						\$5,417	\$5,176	\$4,875	\$5,166	\$5,968	\$5,790	\$5,430	\$5,719	\$6,659	\$5,987
Other Services						\$7,469	\$8,051	\$7,653	\$9,226	\$8,639	\$9,069	\$12,192	\$11,862	\$11,874	\$12,026
Public Administration						\$34,246	\$35,547	\$36,291	\$38,473	\$39,033	\$39,735	\$40,134	\$41,350	\$43,875	\$41,979
Graduates' Average Wages by Industry of Employment						1 Year After					2 Years After				
Natural Resources and Mining						\$13,828	\$13,907	\$14,551	\$16,799	\$14,172	\$21,513	\$19,587	\$19,315	\$21,657	\$28,384
Wholesale Trade, Transport. and Utilities						\$21,661	\$22,473	\$24,575	\$25,331	\$22,567	\$28,786	\$26,462	\$27,213	\$31,242	\$31,333
Construction						\$20,890	\$22,147	\$21,794	\$24,371	\$24,779	\$27,067	\$29,977	\$28,635	\$31,421	\$31,157
Manufacturing						\$27,293	\$31,504	\$29,436	\$28,035	\$32,453	\$34,554	\$37,586	\$34,502	\$35,090	\$38,399
Retail Trade						\$11,535	\$12,116	\$12,262	\$12,706	\$13,877	\$13,859	\$14,162	\$15,709	\$16,102	\$15,914
Information						\$21,145	\$23,084	\$26,074	\$30,683	\$27,859	\$28,597	\$27,800	\$30,235	\$32,880	\$38,345
Financial Activities						\$24,109	\$27,545	\$27,742	\$27,261	\$27,568	\$27,677	\$30,159	\$30,472	\$30,433	\$32,212
Professional and Business Services						\$15,466	\$16,720	\$18,020	\$17,275	\$19,336	\$18,920	\$21,031	\$21,680	\$22,512	\$23,437
Educational Services						\$17,813	\$17,696	\$16,038	\$18,028	\$20,521	\$20,988	\$21,017	\$19,765	\$22,424	\$24,101
Health Care and Social Assistance						\$19,012	\$19,746	\$19,995	\$21,112	\$25,603	\$21,690	\$23,158	\$23,438	\$24,484	\$23,815
Leisure and Hospitality						\$9,309	\$8,782	\$8,624	\$8,997	\$10,875	\$10,454	\$10,038	\$10,753	\$11,741	\$11,400
Other Services						\$12,456	\$13,682	\$12,937	\$14,211	\$14,760	\$14,874	\$18,377	\$17,311	\$18,573	\$17,792
Public Administration						\$32,009	\$32,798	\$33,773	\$35,286	\$35,787	\$37,328	\$37,723	\$39,092	\$40,864	\$40,032

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Summary and Recommendations

The outcomes of CTE program graduates were generally positive. CTE associate degree, diploma, and certificate recipients have seen their wages increase in each year after graduation, and each cohort tended to earn more in each year than the prior cohort.

Since the 2018-2019 program year, CTE certificate, associate degree, and diploma programs have experienced a gradual decline in enrollment. This could possibly be attributed to some effects of the COVID-19 pandemic and the tightening labor market, with more individuals choosing to pursue employment opportunities rather than taking a year or more to upgrade their education and skills.

There is still a sizeable gap between the number of students participating in CTE associate degree programs each year and the fewer number of students graduating each year. This may reflect in part the large number of associate degree students who attend part time and thus have a longer time to completion. Additionally, given the tight labor market conditions throughout the evaluation period, it could be that greater numbers of community college program participants were being hired prior to receiving their credential as the economy improved and employers struggled to find qualified talent.

Although this report examines only outcomes of program completers, it is possible that students who complete some coursework but do not attain credentials have an advantage in the labor market over those who take no coursework at all.

It is important to keep in mind that the variation in outcomes between different areas of study and different degree levels should be interpreted with caution as the student body may vary significantly in terms of demographics, employment history, and other socioeconomic characteristics across different community colleges programs and geographic regions.

Continuing Education

Continuing education programs operated by the North Carolina Community Colleges include non-credit courses related to a diverse set of occupation-specific training, workforce development training, community service training, and business and industry training programs. Courses are designed to assist individuals in gaining short-term training and skill enhancement including occupational skills, entrepreneurial skills, and personal growth and development. Organized within the North Carolina Community College System's continuing education programs are several programmatic areas including Workforce Continuing Education training and Human Resources Development.²⁴

» Overview of Workforce Continuing Education Programs

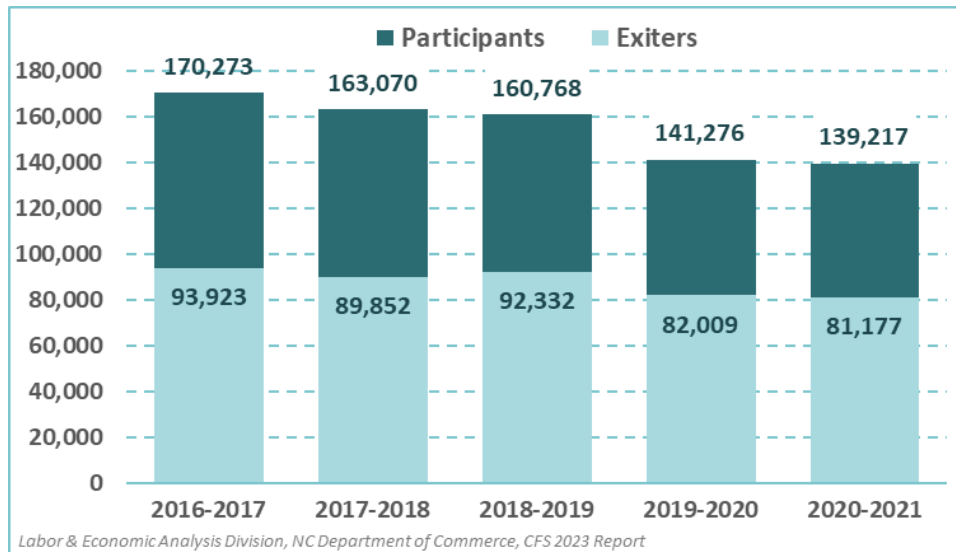
Workforce Continuing Education training programs provide a variety of non-credit courses organized under several topical areas. These areas include: agricultural and natural resources; business and computer training; construction; education and language; health; industrial/manufacturing; public safety; transport technology; and service occupations. Workforce Continuing Education programs consist of one or more courses designed to train an individual for full- or part-time employment, upgrade the skills of incumbent workers, or retrain individuals for new employment in a different occupation or industry. Course and program offerings provide instruction focused on skill competencies that may lead to a recognized credential (licensure, certification, renewal, registry listing) and meet local workforce needs.

» Workforce Continuing Education Program Outcomes

Analyses revealed a steady decline in the number of Workforce Continuing Education participants across the program years (Figure 41 and Table 11). Enrollment in these programs was at a five-year high of 170,273 during the 2016-2017 program year and declined slowly each year to 139,217 in 2020-2021. Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit. The number of exiters across this period reflected a similar decline across the five-year period.

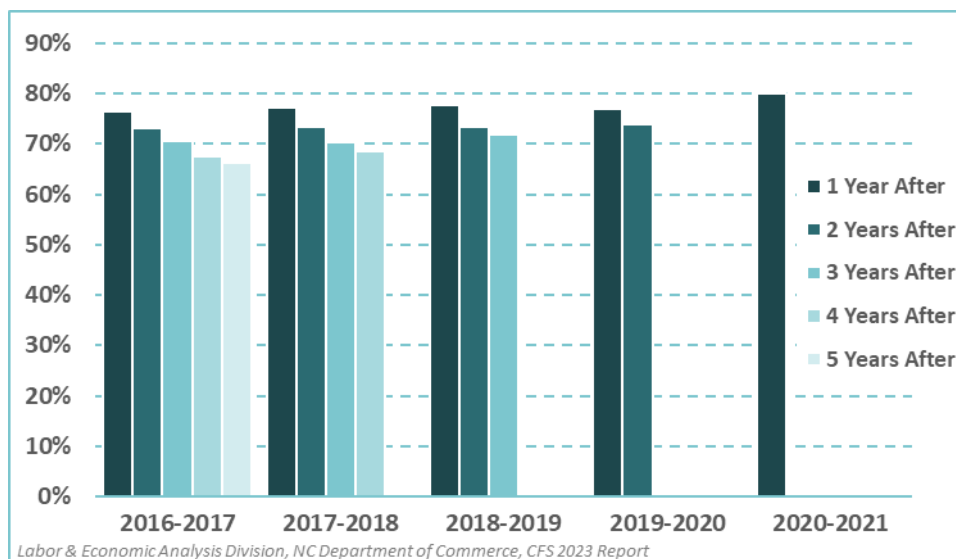
²⁴ North Carolina Community College System, Workforce Continuing Education, <https://www.nccommunitycolleges.edu/workforce>

Figure 41. NCCCS Workforce Continuing Education Program Participants and Exiters by Program Year



Employment and wage outcomes were derived for each cohort of Workforce Continuing Education program year exiters for up to five years after exit. As shown in Figure 42, one year post-exit employment rates for Workforce Continuing Education program participants increased across the five years, ranging from 77% for the 2016-2017 program year exiters to a high of 80% for the 2020-2021 program year exiters. When considering a longer time horizon for a cohort, this percentage showed a slight decline, a trend common to most workforce programs. For example, while 77% of 2016-2017 program year completers were employed after one year, only 66% were employed in North Carolina after five years.

Figure 42. Percentage of NCCCS Workforce Continuing Education Program Exiters Employed in North Carolina, by Year of Exit



One year post-exit median wages are higher for each successive cohort from a low of \$28,232 for the 2016-2017 program year exiters to a high of \$35,024 for the 2020-2021 program year exiters (Figure 43). Over time, median post-exit earnings exhibited steady progress for all Workforce Continuing Education exiter

cohorts. For example, for the 2016-2017 program year cohort, median wages rose each year, from \$28,232 in their first year after completion to \$40,500 in year five.

Figure 43. Median Wage of NCCCS Workforce Continuing Education Program Exiters in North Carolina, by Year of Exit

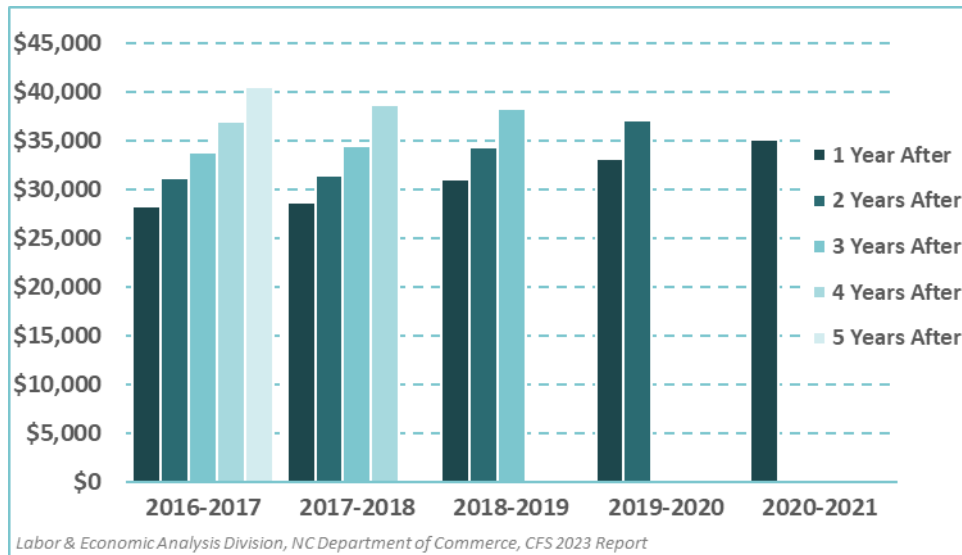
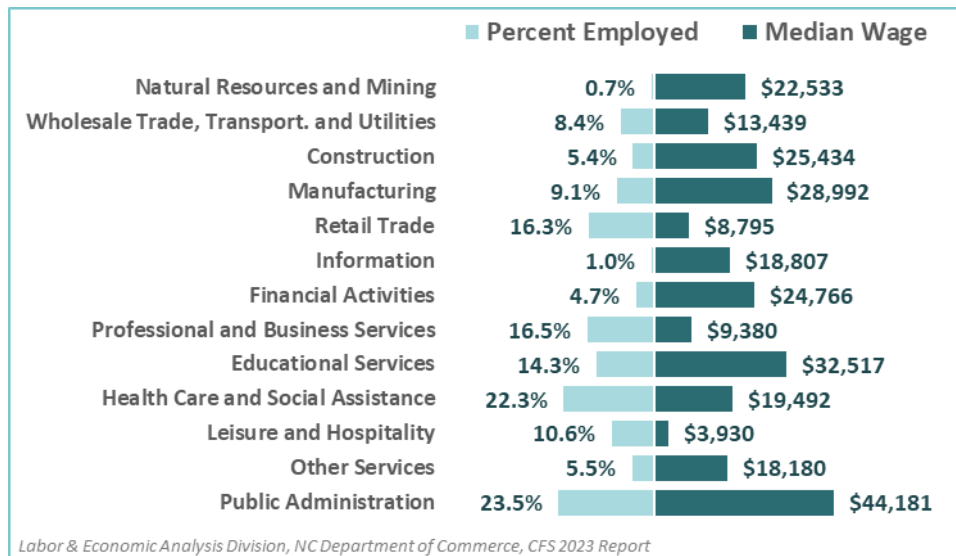


Figure 44 summarizes one-year outcomes by industry for the most recent cohort of exiters (2020-2021). It shows that Public Administration (24%) and Health Care and Social Assistance (22%) were the two most common industries of employment for Workforce Continuing Education participants. Public Administration provides the highest pay (median annual wage of \$44,181), placing it 36% more than Educational Services, the second highest paying industry. For comparison, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.²⁵

²⁵ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey). Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Figure 44. 2020-2021 Workforce Continuing Education Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

Overall, the results indicate that there have been rising one year post-exit employment rates and median wages for Workforce Continuing Education program exiters. When exiters are followed over time, the employment rate tends to decline somewhat. This decline could be attributable to several factors including people not sustaining employment, moving out of state, or finding employment in jobs not covered by North Carolina's unemployment insurance laws. There are a variety of reasons why individuals are not found in covered employment, including retirement, death, inability to find employment, leaving the labor force, or taking non-UI covered employment. However, the median wages of Workforce Continuing Education program exiters continue to rise over time.

One suggested area for further investigation is the examination of industrial and occupational credentials obtained by participants in Workforce Continuing Education and other workforce development programs. While Workforce Continuing Education programs do not typically offer an academic credential, they do provide critical training that can lead to occupational or industry certifications. At the present time, there is no central repository of information regarding industry and occupational credentials by individual. It is recommended that the North Carolina Community College System work with the Department of Commerce and local community colleges to determine if this information exists at the local colleges or could be accessed through other informational resources such as North Carolina's Licensing Boards. Information regarding occupational and industrial credentials is needed to further study the role that the Workforce Continuing Education and other workforce development programs play in helping workers access key skills and credentials.

Table 11. NCCCS Workforce Continuing Education Participants and Exiters, Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Community College System										Common Follow-up System: Evaluative Measures, 2023 Report							
Workforce Continuing Education Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce							
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		170,273	163,070	160,768	141,276	139,217	170,273	163,070	160,768	141,276	170,273	163,070	160,768	170,273	163,070	170,273	
Exiters		93,923	89,852	92,332	82,009	81,177	93,923	89,852	92,332	82,009	93,923	89,852	92,332	93,923	89,852	93,923	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N %	71,904 77%	69,427 77%	71,854 78%	63,066 77%	64,979 80%	68,707 73%	65,922 73%	67,823 73%	60,668 74%	66,365 71%	63,181 70%	66,271 72%	63,515 68%	61,682 69%	62,318 66%
Exiters' Wages in North Carolina		Mean Median	\$32,680 \$28,232	\$33,542 \$28,658	\$35,504 \$30,995	\$37,056 \$33,096	\$39,520 \$35,024	\$35,510 \$31,175	\$36,008 \$31,380	\$38,468 \$34,250	\$41,053 \$37,075	\$37,975 \$33,775	\$38,963 \$34,496	\$42,591 \$38,188	\$41,194 \$36,976	\$43,195 \$38,637	\$45,195 \$40,500
Exiters Enrolled in NC Public Higher Education		N %	16,952 18%	16,875 19%	15,756 17%	13,344 16%	13,231 16%	27,003 29%	24,561 27%	24,229 26%	22,782 28%	19,526 21%	18,301 20%	19,295 21%	17,832 19%	17,110 19%	14,020 15%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	24,073 26%	25,730 29%	26,185 28%	23,751 29%	24,825 31%	34,096 36%	33,887 38%	34,970 38%	32,873 40%	28,308 30%	29,352 33%	31,436 34%	28,525 30%	29,416 33%	26,052 28%
Exiters Enrolled or Employed in NC		N %	76,214 81%	73,836 82%	76,169 82%	67,469 82%	68,608 85%	74,265 79%	71,600 80%	73,817 80%	66,037 81%	71,114 76%	68,701 76%	71,708 78%	68,989 73%	67,359 75%	67,428 72%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	0.6%
Wholesale Trade, Transport. and Utilities		6.0%	6.3%	6.5%	7.0%	8.4%	6.4%	6.9%	7.5%	8.0%	8.0%	6.8%	7.9%	8.3%	7.5%	8.6%	8.4%
Construction		4.9%	5.3%	5.0%	5.1%	5.4%	5.3%	5.4%	5.0%	5.2%	5.2%	5.3%	5.5%	5.4%	5.3%	5.6%	5.5%
Manufacturing		9.1%	9.8%	8.5%	7.8%	9.1%	9.6%	9.9%	9.0%	8.7%	8.7%	9.6%	9.9%	9.6%	9.6%	10.4%	10.1%
Retail Trade		16.2%	16.0%	14.9%	15.0%	16.3%	14.9%	14.9%	14.0%	14.5%	14.5%	14.0%	14.3%	13.6%	13.1%	13.9%	12.9%
Information		1.1%	0.9%	0.9%	0.7%	1.0%	1.1%	0.9%	0.8%	1.0%	1.0%	1.1%	0.9%	1.0%	1.1%	1.1%	1.2%
Financial Activities		5.0%	4.3%	4.0%	4.0%	4.7%	5.1%	4.6%	4.3%	4.5%	4.5%	5.3%	4.8%	4.8%	5.4%	5.2%	5.7%
Professional and Business Services		15.5%	15.3%	14.5%	14.9%	16.5%	15.6%	14.9%	14.8%	16.0%	16.0%	15.0%	15.5%	16.0%	15.3%	16.5%	16.3%
Educational Services		16.3%	13.7%	15.7%	13.4%	14.3%	15.4%	13.4%	14.7%	13.5%	13.5%	15.2%	12.6%	14.9%	14.5%	12.8%	14.7%
Health Care and Social Assistance		20.8%	22.1%	21.2%	20.7%	22.3%	21.5%	22.8%	21.8%	21.5%	21.5%	21.9%	22.9%	22.1%	22.0%	23.2%	21.9%
Leisure and Hospitality		11.8%	12.3%	11.4%	10.2%	10.6%	10.5%	10.5%	9.0%	9.7%	9.7%	9.6%	8.3%	8.7%	7.8%	8.3%	7.8%
Other Services		5.3%	5.3%	5.0%	4.5%	5.5%	5.1%	5.0%	4.7%	4.5%	4.5%	4.8%	4.7%	4.5%	4.6%	4.7%	4.6%
Public Administration		19.4%	20.3%	22.9%	27.5%	23.5%	17.0%	18.0%	21.1%	25.1%	25.1%	16.9%	17.9%	20.6%	17.0%	17.7%	16.7%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$16,504	\$14,200	\$14,703	\$15,618	\$22,533	\$19,114	\$17,276	\$19,195	\$18,113	\$18,113	\$24,454	\$25,798	\$22,728	\$28,101	\$26,360	\$32,842
Wholesale Trade, Transport. and Utilities		\$17,162	\$16,970	\$17,878	\$12,346	\$13,439	\$21,272	\$21,181	\$17,840	\$15,033	\$15,033	\$24,263	\$20,715	\$20,409	\$23,708	\$22,500	\$24,430
Construction		\$23,021	\$20,761	\$22,381	\$23,809	\$25,434	\$25,405	\$25,945	\$26,000	\$28,666	\$28,666	\$29,088	\$28,986	\$28,318	\$31,970	\$31,143	\$34,970
Manufacturing		\$28,090	\$29,952	\$29,698	\$26,608	\$28,992	\$32,152	\$33,186	\$32,286	\$29,694	\$29,694	\$33,827	\$34,432	\$34,393	\$36,836	\$37,468	\$37,833
Retail Trade		\$9,047	\$9,098	\$8,229	\$8,383	\$8,795	\$11,020	\$10,724	\$10,718	\$9,575	\$9,575	\$12,516	\$12,377	\$11,414	\$15,180	\$13,757	\$16,174
Information		\$16,241	\$15,826	\$14,158	\$16,188	\$18,807	\$24,416	\$21,108	\$26,382	\$16,402	\$16,402	\$29,059	\$24,613	\$21,349	\$32,969	\$22,769	\$29,626
Financial Activities		\$28,759	\$27,166	\$28,209	\$24,293	\$24,766	\$31,482	\$30,021	\$29,651	\$26,151	\$26,151	\$33,647	\$32,491	\$30,215	\$37,085	\$33,533	\$38,172
Professional and Business Services		\$7,439	\$6,761	\$7,586	\$7,147	\$9,380	\$8,587	\$8,618	\$8,899	\$9,354	\$9,354	\$10,350	\$9,265	\$10,935	\$11,293	\$11,736	\$14,421
Educational Services		\$24,277	\$23,351	\$26,121	\$27,489	\$32,517	\$27,905	\$25,998	\$30,777	\$31,476	\$31,476	\$30,052	\$29,826	\$34,425	\$34,467	\$33,161	\$36,730
Health Care and Social Assistance		\$16,133	\$16,961	\$18,078	\$18,543	\$19,492	\$19,684	\$20,663	\$21,853	\$22,391	\$22,391	\$23,008	\$24,518	\$25,555	\$27,148	\$28,340	\$30,598
Leisure and Hospitality		\$3,658	\$3,398	\$3,524	\$3,225	\$3,930	\$4,145	\$3,760	\$3,554	\$4,028	\$4,028	\$4,160	\$3,763	\$4,320	\$4,150	\$4,334	\$4,859
Other Services		\$14,329	\$14,000	\$14,921	\$14,422	\$18,180	\$15,936	\$16,671	\$17,256	\$16,709	\$16,709	\$19,015	\$19,489	\$19,836	\$22,481	\$22,208	\$23,559
Public Administration		\$37,463	\$39,880	\$43,386	\$45,600	\$44,181	\$41,719	\$43,593	\$47,075	\$48,934	\$48,934	\$43,593	\$45,562	\$50,059	\$45,518	\$48,042	\$47,849
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$24,616	\$22,336	\$23,788	\$25,873	\$29,024	\$26,099	\$24,737	\$26,302	\$28,070	\$28,070	\$29,818	\$29,393	\$28,676	\$31,502	\$31,449	\$35,270
Wholesale Trade, Transport. and Utilities		\$26,494	\$27,095	\$28,599	\$23,673	\$24,926	\$29,944	\$29,779	\$28,379	\$26,372	\$26,372	\$31,710	\$30,487	\$31,211	\$32,327	\$32,565	\$33,703
Construction		\$28,349	\$27,217	\$27,623	\$29,064	\$30,841	\$30,871	\$30,440	\$31,474	\$33,642	\$33,642	\$34,022	\$33,665	\$33,971	\$37,339	\$36,800	\$40,696
Manufacturing		\$34,259	\$36,140	\$35,726	\$34,744	\$35,750	\$36,716	\$38,437	\$37,454	\$37,295	\$37,295	\$38,578	\$39,328	\$39,561	\$40,664	\$41,882	\$41,909
Retail Trade		\$17,615	\$17,951	\$17,246	\$17,122	\$19,959	\$20,224	\$19,901	\$20,301	\$19,655	\$19,655	\$22,115	\$22,407	\$22,370	\$24,849	\$24,929	\$27,065
Information		\$28,833	\$30,795	\$29,452	\$32,930	\$34,219	\$34,249	\$34,128	\$35,434	\$33,285	\$33,285	\$38,489	\$37,188	\$35,772	\$44,292	\$36,486	\$44,738
Financial Activities		\$32,946	\$29,774	\$32,740	\$30,780	\$32,097	\$36,229	\$33,145	\$35,649	\$33,578	\$33,578	\$39,126	\$35,854	\$37,470	\$43,325	\$38,215	\$46,026
Professional and Business Services		\$16,874	\$16,147	\$17,341	\$17,140	\$19,111	\$19,116	\$18,747	\$19,689	\$20,256	\$20,256	\$21,241	\$20,219	\$22,414	\$23,252	\$23,321	\$26,611
Educational Services		\$28,325	\$28,195	\$30,662	\$31,343	\$35,451	\$31,176	\$30,410	\$33,924	\$35,008	\$35,008	\$32,663	\$33,412	\$37,450	\$35,439	\$36,174	\$38,614
Health Care and Social Assistance		\$21,391	\$22,696	\$23,168	\$24,668	\$25,057	\$24,232	\$25,273	\$26,106	\$27,871	\$27,871	\$27,154	\$28,901	\$29,799	\$31,446	\$32,957	\$35,176
Leisure and Hospitality		\$7,699	\$7,151	\$7,331	\$7,132	\$8,779	\$8,692	\$8,006	\$8,406	\$9,088	\$9,088	\$9,120	\$8,789	\$10,256	\$9,903	\$10,418	\$11,773
Other Services		\$20,292	\$20,326	\$21,073	\$22,088	\$25,081	\$22,063	\$22,886	\$24,146	\$24,609	\$24,609	\$24,399	\$25,443	\$26,647	\$27,163	\$27,806	\$29,227
Public Administration		\$36,534	\$39,196	\$42,794	\$44,882	\$43,006	\$41,075	\$43,909	\$47,258	\$48,112	\$48,112	\$43,527	\$46,296	\$49,364	\$45,801	\$48,306	\$47,493

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Overview of Human Resources Development Programs

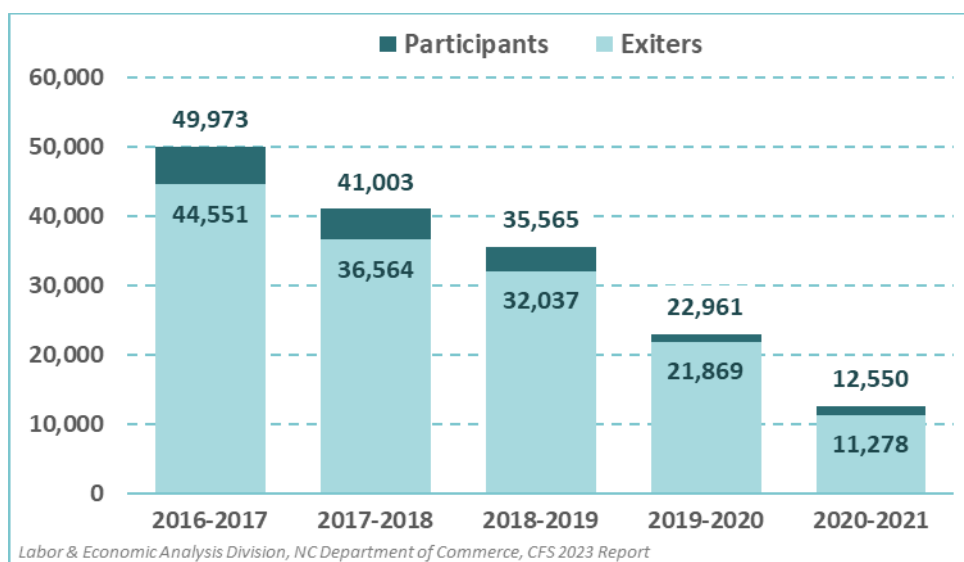
Human Resources Development (HRD) programs operated by the North Carolina Community Colleges consist of instructional programs to unemployed and underemployed adults. HRD training focuses on the assessment and development of employability competency skills identified as “essential” for the workplace. Skill development is accomplished through a variety of training-related activities and services, including self-esteem and goal-setting activities, career exploration and planning of educational and employment opportunities, resume and job application preparation, interviewing techniques, job referral and placement services, basic skills review, placement test review, and study skills strategies. Some community college HRD programs focus on short-term skills training, computer literacy, clerical skills, word processing, customer service, childcare, home health care, hospitality, tourism training, or other skills training matched to local workforce needs.²⁶

HRD programs are often provided in conjunction with, or as a part of, a participant’s enrollment in other workforce development programs. For example, some WIA or WIOA participants who receive career services receive part of these services through their enrollment in HRD programs. HRD programs often provide an initial opportunity for students who have not participated in educational or training programs for many years. This initial participation may lead to further enrollment in other educational and training programs.

» Human Resources Development Programs Outcomes

As shown in Figure 45, analyses revealed substantial decline in the number of participants in HRD programs between the 2016-2017 and 2020-2021.

Figure 45. NCCCS Human Resources Development Program Participants and Exiters by Program Year



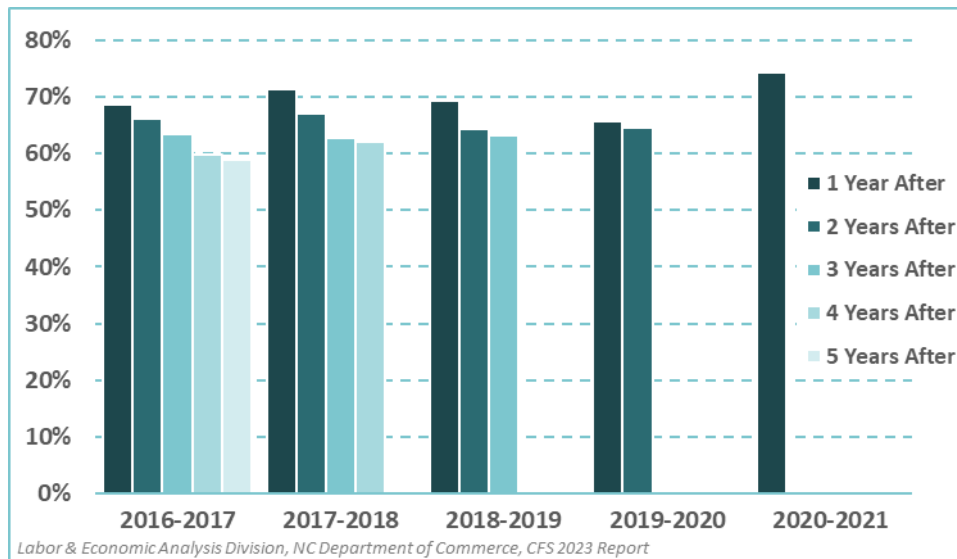
Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit, for each cohort. These included measures of post-exit employment rates (Figure 46) and wage statistics

²⁶ North Carolina Community College System, <http://www.nccommunitycolleges.edu/academic-programs/nc-community-college-system-catalog>

(Figure 47) for up to five years after exit (also see Table 12). These measures include only those individuals who were employed in North Carolina in jobs covered by the state’s unemployment insurance laws.

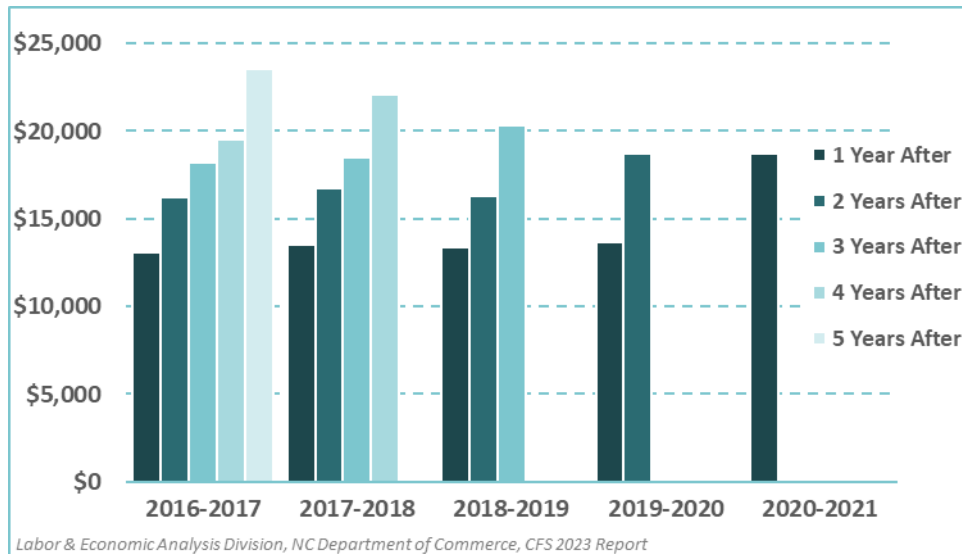
One year post-exit employment varied across the five cohorts, ranging from 66% in 2020-2021 to 74% in 2020-2021 (Figure 46 and Table 12). One year post-exit median wages ranged across all cohorts from \$13,086 for the 2016-2017 cohort to \$18,716 for the 2020-2021 cohort.

Figure 46. Percentage of NCCCS Human Resources Program Exiters Employed in North Carolina After Exit, by Year of Exit



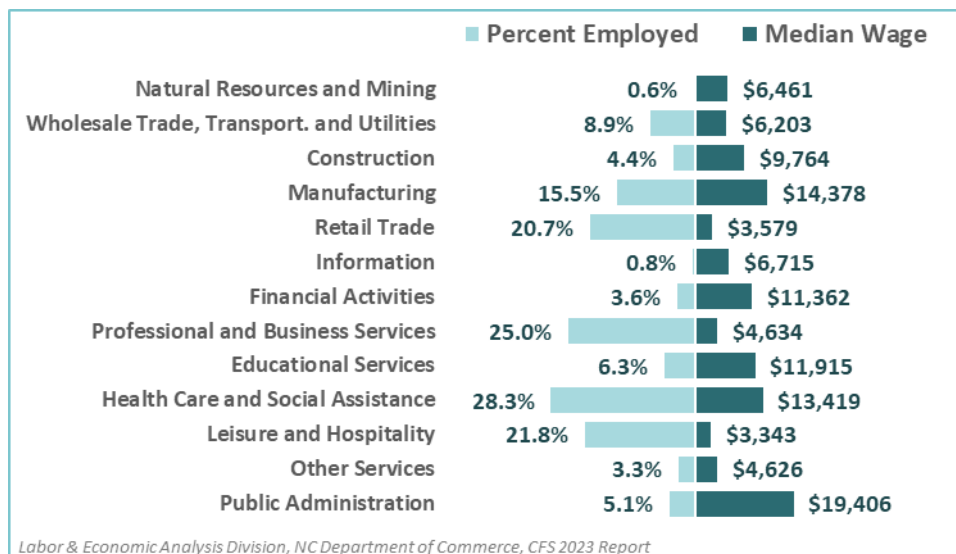
Longer term post-exit employment and wage measures indicate that five years after exit, 59% of the 2016-2017 exiting cohort were employed in North Carolina. Post-exit employment rates were relatively stable across cohorts for a given post-exit year, while the median post-exit wage increased over time across all cohorts. The 2016-2017 exiters experienced a growth in median wages from \$13,086 one year after exit to \$18,215 in year three and \$23,500 at the five-year mark, while the 2018-2019 exiters saw median wages grow from \$13,350 one year after exit to \$20,335 in year three.

Figure 47. Median Wage of NCCCS Human Resources Program Exiters in North Carolina, by Year of Exit



Analyzing one-year outcomes by industry for the most recent cohort of exiters (2020-2021 program year), the largest group (28%) of HRD program exiters found employment in the Health Care and Social Assistance industry, earning a median wage of \$13,419 (Figure 48 and Table 12). Other top industries employing this cohort one year post-exit include Professional and Business Services (25%), Leisure and Hospitality (22%), Retail Trade (21%), and Manufacturing (16%). Of these, Manufacturing was associated with the highest median annual wage (\$14,378).

Figure 48. 2020-2021 NCCCS Human Resources Development Program Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



Overall, the results indicate that there have been fluctuations in short-term employment rates and short-term wage outcomes for HRD program exiters. This is indicated by the one year post-employment and wage trends. When exiting cohorts are followed over time, the employment rate decreases while the median wages rise. The median wage of program participants who exited in the 2016-2017 program year was \$13,086

one year after exit, rising to \$23,500 five years after exit. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.²⁷

» Summary and Recommendations

The post-exit outcomes of NCCCS HRD program participants trended to move in a favorable direction for the years examined and, for the fifth year, measured outcomes exceeded previous years. For the 2020-2021 cohort, one year post-exit median wages (\$18,716) and employment rates (74%) were higher than previous cohorts; however, some of the apparent variation could be explained by notably fewer participants and exiters in the most recent 2020-2021 program year.

The rate of subsequent enrollment by HRD exiters in public higher education programs fluctuated over the study period from 22% to 34%. HRD exiters show greater levels of enrollment in higher education than participants of many other training programs, suggesting that many HRD program participants are subsequently pursuing pathways to further skill development.

To the extent that HRD programming varies by campus, additional analysis might be merited to assess whether the services offered through local HRD programs are aligned with the needs of the local labor markets.

²⁷ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey).
Source of poverty guidelines: U.S. Department of Health & Human Services,
<https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Table 12. NCCCS Human Resources Development Participants and Exiters, Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Community College System							Common Follow-up System: Evaluative Measures, 2023 Report										
Human Resources Development Program							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce										
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		49,973	41,003	35,565	22,961	12,550	49,973	41,003	35,565	22,961	49,973	41,003	35,565	49,973	41,003	49,973	
Exiters		44,551	36,564	32,037	21,869	11,278	44,551	36,564	32,037	21,869	44,551	36,564	32,037	44,551	36,564	44,551	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N %	30,537 69%	26,081 71%	22,224 69%	14,387 66%	8,371 74%	29,439 66%	24,489 67%	20,588 64%	14,103 64%	28,228 63%	22,926 63%	20,266 63%	26,648 60%	22,684 62%	26,215 59%
Exiters' Wages in North Carolina		Mean Median	\$16,639 \$13,086	\$16,971 \$13,514	\$17,011 \$13,350	\$17,757 \$13,699	\$21,935 \$18,716	\$19,898 \$16,240	\$20,029 \$16,722	\$20,388 \$16,330	\$22,662 \$18,711	\$21,702 \$18,215	\$22,115 \$18,524	\$24,168 \$20,335	\$23,410 \$19,525	\$25,517 \$22,091	\$26,876 \$23,500
Exiters Enrolled in NC Public Higher Education		N %	9,785 22%	8,509 23%	7,743 24%	5,569 25%	3,787 34%	7,482 17%	6,053 17%	4,766 15%	3,533 16%	5,916 13%	4,254 12%	4,011 13%	4,022 9%	3,690 10%	3,598 8%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	20,835 47%	20,603 56%	18,171 57%	11,879 57%	6,822 60%	17,439 39%	17,513 48%	14,853 46%	10,353 47%	16,770 38%	16,600 45%	14,731 46%	15,978 36%	16,694 46%	16,466 37%
Exiters Enrolled or Employed in NC		N %	35,382 79%	30,695 84%	26,449 83%	17,572 80%	9,771 87%	33,271 75%	28,650 78%	24,390 76%	16,802 77%	31,970 72%	27,525 75%	24,145 75%	30,797 69%	27,385 75%	30,665 69%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			0.8%	0.8%	1.0%	0.6%	0.6%	0.8%	0.7%	0.7%	0.6%	0.7%	0.5%	0.7%	0.5%	0.5%	0.5%
Wholesale Trade, Transport. and Utilities			7.8%	7.7%	8.4%	10.0%	8.9%	8.3%	8.7%	10.4%	11.6%	9.2%	10.2%	12.0%	10.3%	11.4%	12.0%
Construction			5.6%	5.5%	4.9%	5.1%	4.4%	5.8%	5.1%	4.9%	5.4%	5.6%	4.8%	4.8%	5.3%	5.0%	5.1%
Manufacturing			19.1%	17.7%	17.9%	17.5%	15.5%	20.2%	18.1%	17.7%	18.5%	20.4%	18.4%	19.5%	20.3%	19.1%	21.5%
Retail Trade			17.9%	18.5%	19.2%	20.0%	20.7%	16.8%	17.5%	18.3%	19.7%	16.3%	17.3%	19.1%	16.2%	17.9%	17.1%
Information			0.9%	1.0%	0.9%	0.9%	0.8%	0.9%	1.0%	0.9%	1.0%	0.9%	0.9%	1.2%	0.9%	1.1%	1.0%
Financial Activities			3.1%	3.5%	3.4%	3.1%	3.6%	3.4%	3.6%	3.8%	3.8%	3.3%	4.2%	4.3%	3.6%	4.6%	4.3%
Professional and Business Services			36.2%	35.6%	32.2%	32.4%	25.0%	31.4%	29.5%	29.8%	30.2%	28.3%	28.8%	29.8%	28.0%	28.9%	28.1%
Educational Services			5.0%	5.6%	5.5%	5.2%	6.3%	4.9%	5.3%	4.8%	5.1%	4.8%	5.0%	5.0%	4.5%	5.3%	4.7%
Health Care and Social Assistance			18.5%	19.8%	19.7%	20.1%	28.3%	18.5%	20.2%	19.5%	21.0%	18.8%	20.4%	20.5%	19.1%	21.0%	19.5%
Leisure and Hospitality			23.9%	24.2%	24.2%	22.6%	21.8%	21.5%	22.0%	20.0%	21.1%	20.1%	18.8%	20.1%	17.6%	19.1%	18.1%
Other Services			3.2%	3.2%	3.1%	3.0%	3.3%	3.1%	3.0%	3.0%	3.5%	3.1%	3.2%	3.2%	3.0%	3.3%	3.2%
Public Administration			3.8%	4.0%	3.7%	4.3%	5.1%	3.9%	4.4%	4.4%	4.4%	4.2%	4.8%	4.7%	4.5%	5.0%	4.6%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$4,151	\$3,540	\$6,148	\$2,907	\$6,461	\$4,134	\$5,376	\$8,576	\$6,395	\$7,401	\$8,516	\$7,961	\$7,295	\$13,550	\$10,686
Wholesale Trade, Transport. and Utilities			\$7,501	\$8,282	\$7,021	\$6,051	\$6,203	\$11,438	\$11,105	\$8,117	\$7,844	\$13,424	\$9,834	\$9,295	\$12,488	\$10,971	\$11,329
Construction			\$7,743	\$8,815	\$9,107	\$10,534	\$9,764	\$11,138	\$13,890	\$12,085	\$14,656	\$13,939	\$14,904	\$15,057	\$14,582	\$14,780	\$16,623
Manufacturing			\$12,641	\$11,821	\$10,885	\$10,238	\$14,378	\$17,994	\$17,437	\$14,478	\$15,905	\$20,796	\$18,508	\$17,482	\$21,004	\$20,926	\$24,245
Retail Trade			\$4,184	\$4,042	\$4,155	\$3,960	\$3,579	\$5,381	\$4,934	\$5,272	\$4,658	\$5,970	\$5,120	\$4,957	\$6,342	\$5,400	\$6,597
Information			\$5,976	\$7,609	\$9,877	\$6,463	\$6,715	\$9,333	\$9,925	\$12,994	\$9,077	\$12,802	\$14,425	\$11,251	\$15,367	\$12,877	\$16,464
Financial Activities			\$10,776	\$10,593	\$10,813	\$8,448	\$11,362	\$13,144	\$17,037	\$12,517	\$10,566	\$18,982	\$18,682	\$15,612	\$19,271	\$18,876	\$17,208
Professional and Business Services			\$4,473	\$4,612	\$4,344	\$4,419	\$4,634	\$4,811	\$4,899	\$4,513	\$5,489	\$5,080	\$4,974	\$5,645	\$5,335	\$6,141	\$6,063
Educational Services			\$7,428	\$8,475	\$8,041	\$11,920	\$11,915	\$10,254	\$13,266	\$14,066	\$17,125	\$12,958	\$18,152	\$16,870	\$17,447	\$20,888	\$20,194
Health Care and Social Assistance			\$9,439	\$10,121	\$10,102	\$10,701	\$13,419	\$12,653	\$13,520	\$14,214	\$14,730	\$15,246	\$15,727	\$15,467	\$17,295	\$18,078	\$19,013
Leisure and Hospitality			\$3,014	\$3,169	\$3,151	\$2,668	\$3,343	\$3,571	\$3,659	\$3,128	\$3,390	\$3,866	\$3,317	\$3,541	\$3,389	\$4,065	\$3,925
Other Services			\$4,027	\$4,272	\$4,239	\$4,082	\$4,626	\$4,899	\$5,951	\$5,274	\$5,473	\$6,474	\$5,592	\$5,595	\$6,463	\$6,751	\$6,736
Public Administration			\$17,040	\$15,288	\$17,264	\$17,069	\$19,406	\$26,143	\$24,342	\$25,624	\$25,280	\$29,417	\$29,961	\$27,207	\$31,799	\$31,011	\$33,012
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			\$9,912	\$9,536	\$10,823	\$10,458	\$13,980	\$11,263	\$12,169	\$14,493	\$15,417	\$14,325	\$15,460	\$14,952	\$15,798	\$19,411	\$17,315
Wholesale Trade, Transport. and Utilities			\$13,775	\$14,220	\$12,807	\$12,334	\$12,626	\$17,553	\$17,618	\$15,066	\$15,687	\$19,227	\$17,953	\$16,844	\$19,654	\$19,515	\$20,163
Construction			\$13,473	\$14,335	\$14,721	\$15,747	\$15,281	\$17,235	\$18,646	\$17,558	\$20,277	\$19,226	\$20,900	\$20,057	\$20,995	\$22,120	\$23,314
Manufacturing			\$17,174	\$16,763	\$15,897	\$16,244	\$19,816	\$21,605	\$20,675	\$19,732	\$21,307	\$23,072	\$22,290	\$22,575	\$24,003	\$24,844	\$26,731
Retail Trade			\$7,660	\$7,948	\$7,909	\$8,269	\$7,668	\$9,551	\$9,613	\$10,204	\$10,034	\$10,773	\$10,731	\$10,701	\$12,154	\$11,515	\$12,951
Information			\$14,048	\$16,002	\$19,961	\$16,484	\$13,051	\$19,234	\$19,551	\$26,744	\$18,385	\$22,897	\$26,264	\$24,475	\$27,943	\$26,566	\$26,461
Financial Activities			\$17,590	\$16,193	\$18,027	\$16,070	\$17,795	\$20,895	\$22,117	\$21,730	\$19,761	\$24,310	\$24,193	\$23,684	\$25,880	\$25,366	\$25,808
Professional and Business Services			\$8,839	\$8,772	\$9,018	\$9,689	\$10,144	\$9,938	\$10,242	\$10,498	\$12,164	\$11,032	\$10,811	\$12,351	\$11,953	\$12,741	\$13,982
Educational Services			\$11,810	\$12,850	\$13,434	\$14,837	\$18,063	\$14,637	\$16,734	\$17,544	\$19,218	\$17,122	\$19,657	\$20,973	\$19,727	\$22,290	\$22,687
Health Care and Social Assistance			\$12,626	\$13,553	\$13,796	\$14,574	\$17,468	\$15,837	\$16,567	\$17,566	\$18,421	\$18,050	\$18,964	\$19,832	\$20,565	\$21,440	\$22,995
Leisure and Hospitality			\$5,627	\$5,850	\$5,786	\$5,663	\$6,756	\$6,663	\$6,594	\$6,713	\$7,150	\$7,062	\$6,983	\$8,082	\$7,193	\$8,379	\$8,433
Other Services			\$8,928	\$8,816	\$9,254	\$9,551	\$9,760	\$10,641	\$11,882	\$11,069	\$11,391	\$11,894	\$12,240	\$12,228	\$13,109	\$14,001	\$14,104
Public Administration			\$18,395	\$18,476	\$19,644	\$20,396	\$23,328	\$23,144	\$23,224	\$23,877	\$24,999	\$25,875	\$26,898	\$25,667	\$27,836	\$28,285	\$29,417

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Overview of Basic Skills Programs

The Basic Skills programs operated by the North Carolina Community Colleges include a group of education programs designed to assist adults with the acquisition of basic educational skills. Programs offered under the Basic Skills designation include Adult Basic Education (ABE); Adult Secondary Education (ASE), including High School Equivalency and Adult High School Diploma programs; and English Language Acquisition (ELA).²⁸ In July of 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law. The WIOA supersedes the Workforce Investment Act of 1998 and amends the Adult Education and Family Literacy Act, which authorizes programs offered through North Carolina's Basic Skills programs.

Adult Basic Education (ABE) is a program of instruction designed to assist adults 16 or older who are no longer enrolled in high school and function below the high school level. The program's major objective is to provide instruction in reading, writing, mathematics, and technology. Adults with intellectual disabilities are also served by the ABE program provided they have a formal diagnosis and show progress in the program.

The Adult Secondary Education (ASE) program is designed to prepare adults, 18 or older, for further education or transition toward skill obtainment and employment and includes both the Adult High School (AHS) and the High School Equivalency (HSE) Diploma programs.²⁹ The AHS program consists of classroom instruction, learning laboratory courses, and distance education to assist adults with obtaining an Adult High School Diploma. The HSE program offers instruction to assist learners who are preparing to take a high school equivalency exam such as GED®, HiSET®, or TASC.

The English Language Acquisition (ELA) program assists adults who have limited English proficiency, and includes instruction in English language listening, speaking, reading, writing, and comprehension.³⁰ The ELA program leads to the attainment of a secondary school diploma (or recognized equivalent) and transition to postsecondary education or training; or to employment.

» Program Outcomes

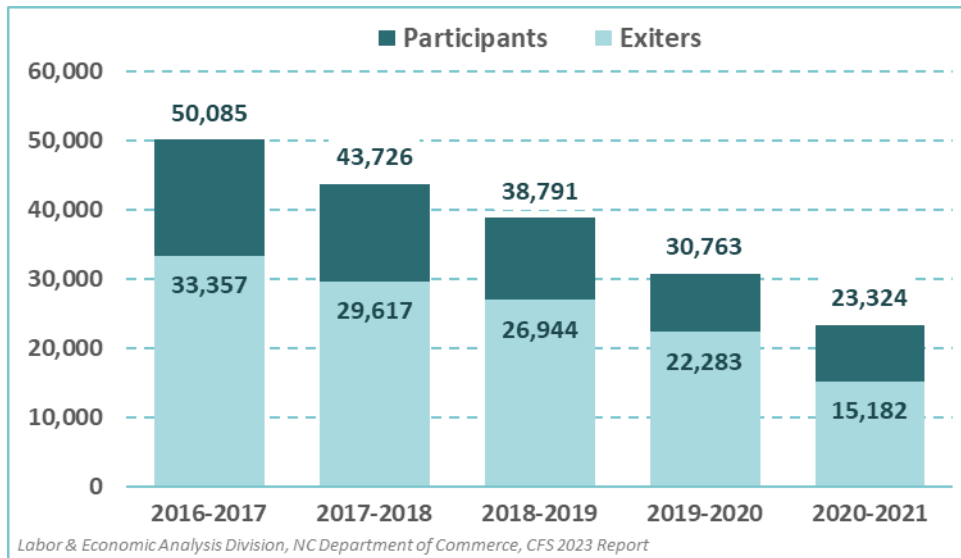
Employment and wage outcome measures were calculated for each cohort of participants exiting the Basic Skills programs. Participants who were not enrolled in a Basic Skills program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit. Results indicated that the number of Basic Skills participants and exiters declined noticeably over the five-year period (Figure 49).

²⁸ North Carolina Community College System, <http://www.nccommunitycolleges.edu/academic-programs/nc-community-college-system-catalog>

²⁹ <http://www.nccommunitycolleges.edu/college-and-career-readiness/adult-secondary-education>

³⁰ <http://www.nccommunitycolleges.edu/academic-programs/nc-community-college-system-catalog>

Figure 49. NCCCS Basic Skills Program Participants and Exiters by Program Year



Figures 50 and 51 show the employment and wage outcomes for Basic Skills program exiters by program year (also see Table 13). Short-term outcomes at one year after program exit show increases in employment rates and median wages across cohorts. One year post-exit employment increased from 57% for the 2016-2017 exiting cohort to 63% for the 2020-2021. One year post-completion median wages for Basic Skills program completers rose from \$9,118 for the 2016-2017 cohort to \$12,553 for program year 2020-2021 exiters.

Longer-term post-exit employment measures show decreasing employment rates within the same cohort and increasing employment rates across different cohorts (Figure 50), trends that are common to most workforce training and education programs. Longer-term wage outcomes show wage increases both within and across cohorts (Figure 51). While the median post-completion wages were fairly low, all showed significant and regular increases over time for all cohorts. For all cohorts, median wages rose by 16% to 35% between the first and second post-exit years. In the later post-exit years, median wages for all cohorts kept growing at annual rates ranging from 9% to 26%.

Figure 50. Percentage of NCCCS Basic Skills Exiters Employed in North Carolina After Exit, by Year of Exit

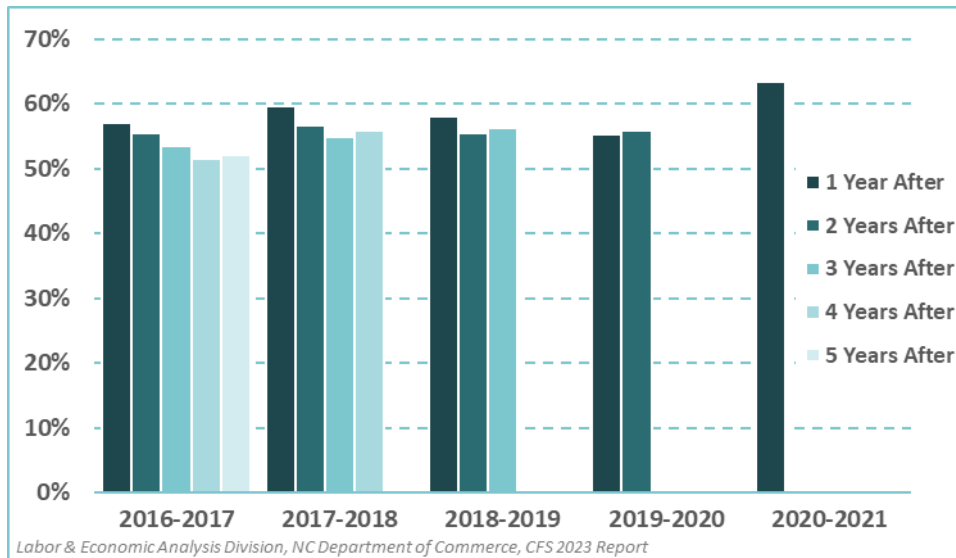
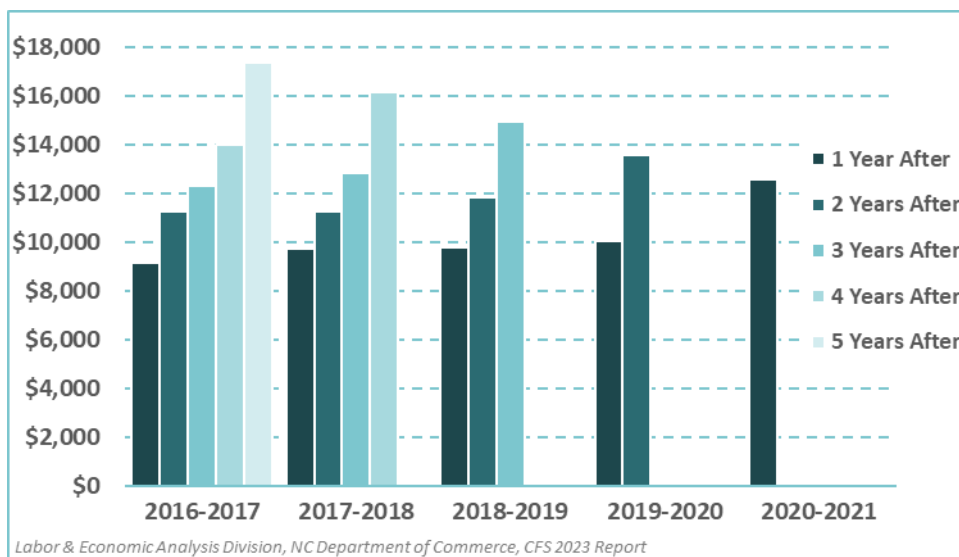
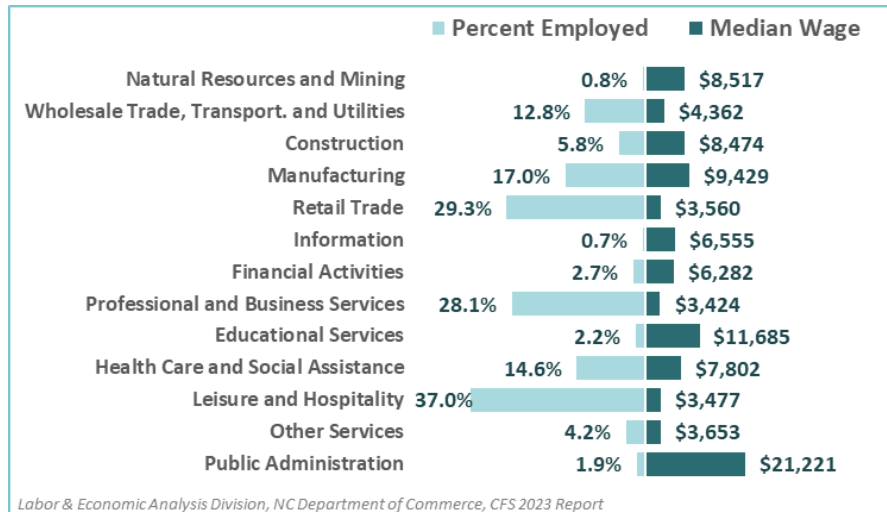


Figure 51. Median Wage of NCCCS Basic Skills Program Exiters in North Carolina, by Year of Exit



Further analysis of one-year outcomes for the 2020-2021 exiting cohort (Figure 52) reveals that the largest percentage of Basic Skills program exiters were employed in Leisure and Hospitality (37%) and Retail Trade (29%) paying median annual wages of \$3,477 and \$3,560, respectively. While these are among the lowest-paid median wages for this cohort, they often represent temporary or part-time employment. The Public Administration sector provided the highest median wage (\$21,221) but employed few Basic Skills exiters (1.9%). The next highest-paid industries were Educational Services and Manufacturing, paying \$11,685 and \$9,429 in median annual wages, respectively.

Figure 52. 2020-2021 NCCCS Basic Skills Program Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

Overall, the results indicate that there have been stable employment rates across Basic Skills program year cohorts and participants over time. The post-exit median wage rates of Basic Skills participants are low; however, there are some increases over time. For example, the median wage for the 2016-2017 program year cohort was \$9,118 one year after exit, increasing to \$17,340 by year five. By contrast, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance was \$32,650, while the 2021 federal poverty guideline was \$12,880 for a one-person household and \$17,420 for a two-person household.³¹

While post-exit wages are low, stable employment rates demonstrate a positive outcome for Basic Skills program credential recipients. In addition, the subsequent enrollment of Basic Skills programs exiters in further education is a positive outcome for the program. Between 9% and 15% of the participants were enrolled in additional public higher educational programs during the five years after exiting the program. This indicates that some individuals are continuing in additional skill development after gaining their high school credential.

As previously noted, part of the requirement of WIOA is the development of an integrated service delivery plan that includes the coordination between WIOA, Wagner-Peyser, Adult Basic Education and Vocational Rehabilitation programs. It is recommended that North Carolina's integrated service delivery plan and implementation continue to focus on the leveraging of resources and services across these programs and focus on achieving higher employment and wage outcomes for all participants and for increasing occupational skills and educational credentials.

³¹ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey).

Source of poverty guidelines: U.S. Department of Health & Human Services, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

Table 13. NCCCS Basic Skills Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Community College System										Common Follow-up System: Evaluative Measures, 2023 Report						
Basic Skills Program										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce						
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Participants		50,085	43,726	38,791	30,763	23,324	50,085	43,726	38,791	30,763	50,085	43,726	38,791	50,085	43,726	50,085
Exiters		33,357	29,617	26,944	22,283	15,182	33,357	29,617	26,944	22,283	33,357	29,617	26,944	33,357	29,617	33,357
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Exiters Employed In North Carolina	N	19,010	17,661	15,669	12,314	9,616	18,543	16,806	14,951	12,455	17,830	16,262	15,156	17,179	16,527	17,377
	%	57%	60%	58%	55%	63%	56%	57%	55%	56%	53%	55%	56%	52%	56%	52%
Exiters' Wages in North Carolina	Mean	\$13,176	\$13,881	\$14,221	\$14,844	\$17,407	\$15,222	\$15,465	\$16,384	\$18,287	\$16,501	\$17,344	\$19,602	\$18,415	\$20,536	\$21,745
	Median	\$9,118	\$9,720	\$9,745	\$10,010	\$12,553	\$11,255	\$11,241	\$11,817	\$13,544	\$12,283	\$12,827	\$14,915	\$13,982	\$16,166	\$17,340
Exiters Enrolled in NC Public Higher Education	N	4,052	4,003	3,634	2,088	1,773	4,975	4,308	3,687	3,043	3,956	3,342	3,194	3,069	2,884	2,738
	%	12%	14%	13%	9%	12%	15%	15%	14%	14%	12%	11%	12%	9%	10%	8%
Exiters Enrolled in NC Public Education, Employment, or Training Program	N	8,300	8,868	8,627	6,359	5,099	9,202	9,351	8,982	7,118	8,833	9,229	8,803	8,975	9,156	9,087
	%	25%	30%	32%	29%	34%	28%	32%	33%	32%	26%	31%	33%	27%	31%	27%
Exiters Enrolled or Employed in NC	N	21,297	20,121	18,106	14,180	10,848	21,021	19,480	17,570	14,545	20,239	18,891	17,526	19,745	19,052	19,763
	%	64%	68%	67%	64%	71%	63%	66%	65%	65%	61%	64%	65%	59%	64%	59%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		0.9%	1.0%	0.9%	0.7%	0.8%	0.9%	0.8%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%	0.6%	0.7%
Wholesale Trade, Transport. and Utilities		7.3%	7.7%	8.1%	11.0%	12.8%	8.3%	9.1%	11.7%	13.0%	9.2%	11.9%	13.5%	12.1%	13.7%	13.4%
Construction		6.2%	6.7%	6.0%	6.3%	5.8%	6.9%	6.8%	6.6%	7.0%	7.0%	6.7%	6.7%	6.9%	7.0%	6.6%
Manufacturing		15.9%	15.9%	17.6%	18.1%	17.0%	17.7%	16.6%	19.2%	19.6%	17.9%	17.7%	19.8%	19.3%	19.0%	19.7%
Retail Trade		22.7%	23.1%	23.2%	25.8%	29.3%	22.4%	22.0%	23.8%	26.5%	21.6%	22.7%	24.7%	22.1%	23.5%	23.4%
Information		0.7%	0.7%	0.6%	0.5%	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.8%	0.7%	0.8%	0.9%
Financial Activities		2.0%	2.1%	2.0%	2.1%	2.7%	2.2%	2.1%	2.7%	2.6%	2.6%	2.8%	2.9%	3.1%	3.0%	3.4%
Professional and Business Services		30.4%	30.3%	27.1%	30.4%	28.1%	30.6%	27.7%	30.2%	29.2%	28.0%	30.2%	29.8%	29.7%	29.8%	28.7%
Educational Services		2.2%	2.3%	2.1%	1.7%	2.2%	2.3%	2.5%	1.9%	2.0%	2.4%	2.3%	2.1%	2.2%	2.6%	2.5%
Health Care and Social Assistance		11.9%	12.4%	13.1%	13.0%	14.6%	12.4%	13.4%	13.6%	14.1%	13.3%	14.0%	14.6%	13.7%	15.0%	14.9%
Leisure and Hospitality		37.0%	37.5%	35.7%	33.3%	37.0%	34.4%	33.6%	30.1%	32.0%	31.2%	28.8%	30.3%	26.8%	29.1%	27.6%
Other Services		3.7%	4.0%	3.5%	3.8%	4.2%	4.0%	4.2%	3.4%	4.7%	3.9%	4.3%	4.0%	3.6%	4.1%	4.2%
Public Administration		1.5%	1.9%	1.9%	1.6%	1.9%	1.7%	2.1%	2.1%	1.8%	1.8%	2.2%	2.3%	1.8%	2.3%	2.0%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$2,776	\$3,183	\$4,823	\$7,217	\$8,517	\$4,081	\$4,097	\$6,273	\$6,492	\$6,335	\$5,878	\$7,014	\$7,000	\$6,195	\$7,694
Wholesale Trade, Transport. and Utilities		\$5,651	\$5,428	\$4,404	\$3,751	\$4,362	\$6,091	\$6,257	\$4,824	\$4,962	\$6,567	\$6,010	\$5,462	\$6,442	\$6,490	\$7,810
Construction		\$7,657	\$9,080	\$9,926	\$9,169	\$8,474	\$8,719	\$11,977	\$12,126	\$9,818	\$12,390	\$15,117	\$12,190	\$13,637	\$15,168	\$15,764
Manufacturing		\$9,551	\$8,956	\$10,432	\$8,809	\$9,429	\$11,106	\$10,470	\$10,182	\$12,674	\$13,479	\$10,207	\$12,762	\$12,901	\$12,114	\$16,603
Retail Trade		\$3,830	\$3,386	\$3,680	\$3,594	\$3,560	\$4,417	\$4,115	\$3,725	\$3,790	\$4,903	\$4,060	\$4,023	\$4,531	\$4,496	\$4,970
Information		\$3,607	\$6,222	\$4,517	\$3,777	\$6,555	\$3,260	\$6,469	\$5,120	\$4,767	\$7,242	\$6,062	\$4,505	\$5,418	\$6,984	\$7,939
Financial Activities		\$4,862	\$5,387	\$4,656	\$3,692	\$6,282	\$5,974	\$6,611	\$4,149	\$6,442	\$7,549	\$4,603	\$5,914	\$5,833	\$9,177	\$8,810
Professional and Business Services		\$2,776	\$2,758	\$2,816	\$2,772	\$3,424	\$2,983	\$2,975	\$3,142	\$3,598	\$3,140	\$3,407	\$3,786	\$3,626	\$4,123	\$4,214
Educational Services		\$7,872	\$9,540	\$8,597	\$14,565	\$11,685	\$9,260	\$12,049	\$12,625	\$17,188	\$10,230	\$14,814	\$13,129	\$15,969	\$17,063	\$15,405
Health Care and Social Assistance		\$6,701	\$8,316	\$8,111	\$7,387	\$7,802	\$8,375	\$9,581	\$9,581	\$8,628	\$8,886	\$10,328	\$10,231	\$10,709	\$10,272	\$11,730
Leisure and Hospitality		\$2,955	\$3,021	\$2,904	\$2,720	\$3,477	\$3,144	\$3,229	\$2,791	\$3,149	\$3,511	\$3,068	\$3,229	\$3,107	\$3,679	\$4,013
Other Services		\$2,805	\$3,361	\$3,181	\$3,929	\$3,653	\$3,500	\$4,416	\$3,420	\$4,306	\$4,215	\$4,120	\$4,105	\$5,122	\$5,317	\$5,325
Public Administration		\$17,136	\$21,495	\$26,476	\$26,683	\$21,221	\$22,142	\$28,690	\$27,656	\$26,366	\$28,579	\$31,353	\$28,237	\$31,530	\$32,127	\$30,709
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$8,310	\$9,160	\$10,880	\$14,799	\$13,762	\$10,126	\$10,813	\$12,918	\$14,828	\$13,601	\$13,356	\$13,131	\$15,090	\$13,726	\$17,271
Wholesale Trade, Transport. and Utilities		\$11,931	\$12,066	\$11,214	\$10,954	\$11,325	\$13,168	\$13,312	\$11,464	\$12,472	\$13,742	\$13,568	\$12,896	\$13,551	\$14,597	\$15,628
Construction		\$13,808	\$16,031	\$16,384	\$15,193	\$16,894	\$15,804	\$18,439	\$17,741	\$17,842	\$18,405	\$20,614	\$19,743	\$19,782	\$21,485	\$22,841
Manufacturing		\$15,684	\$15,146	\$16,153	\$15,671	\$17,155	\$16,983	\$16,502	\$17,245	\$18,939	\$18,241	\$17,371	\$19,864	\$19,129	\$19,517	\$22,144
Retail Trade		\$7,375	\$7,035	\$7,525	\$7,798	\$8,451	\$8,489	\$8,219	\$8,437	\$8,806	\$9,317	\$8,971	\$9,306	\$9,873	\$10,002	\$10,832
Information		\$10,494	\$11,778	\$12,042	\$8,270	\$11,871	\$11,126	\$13,428	\$12,654	\$10,837	\$16,092	\$15,417	\$13,145	\$15,980	\$16,712	\$17,670
Financial Activities		\$14,283	\$12,755	\$13,076	\$13,963	\$14,895	\$15,663	\$14,310	\$12,543	\$15,784	\$18,443	\$13,628	\$14,753	\$17,484	\$16,749	\$19,870
Professional and Business Services		\$6,018	\$6,081	\$6,744	\$6,559	\$8,073	\$6,723	\$6,832	\$7,264	\$7,966	\$7,336	\$7,499	\$8,842	\$8,169	\$9,306	\$9,682
Educational Services		\$12,234	\$12,763	\$13,497	\$17,390	\$17,547	\$13,622	\$15,346	\$15,659	\$20,431	\$14,624	\$16,581	\$18,599	\$17,360	\$19,278	\$19,237
Health Care and Social Assistance		\$10,818	\$12,385	\$12,672	\$12,687	\$13,937	\$12,461	\$13,690	\$14,186	\$14,249	\$13,582	\$15,202	\$16,462	\$15,484	\$16,804	\$17,396
Leisure and Hospitality		\$5,623	\$5,820	\$5,568	\$5,517	\$7,054	\$6,248	\$6,121	\$6,158	\$6,926	\$6,578	\$6,588	\$7,270	\$6,863	\$7,869	\$8,354
Other Services		\$7,189	\$8,204	\$7,266	\$8,400	\$8,738	\$8,122	\$9,268	\$8,480	\$9,282	\$9,545	\$10,872	\$9,449	\$11,736	\$12,107	\$11,751
Public Administration		\$19,906	\$22,610	\$25,016	\$25,867	\$24,527	\$22,623	\$25,986	\$25,905	\$27,581	\$26,457	\$28,475	\$27,718	\$29,083	\$29,835	\$29,126

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Overview of Customized Training Program

The Customized Training (CT) Program began in 1958 as the New and Expanding Industry Training Program. In 2008, legislation was passed to combine the New and Expanding Industry Training Program, the Focused Industry Training Program, and the Customized Industry Training Program into one. The CT program was developed in recognition of the fact that a critical consideration for a business or industry considering locating, expanding, or remaining in North Carolina is the ability of the state to ensure the presence of a well-trained workforce.

The Customized Training Program supports the economic development efforts of the state by providing education, training, and support services for eligible new, expanding, and existing businesses and industries in North Carolina through the state's network of 58 community colleges serving all 100 counties. The program also provides services to individuals who are employed or seeking employment by an eligible business or industry. Those businesses and industries eligible for support include: manufacturing, technology intensive (i.e., information technology, life sciences), regional or national warehousing and distribution centers, customer support centers, air courier services, national headquarters with operations outside North Carolina, or civil service employees providing technical support to US military installations located in North Carolina.

Eligible businesses and industries must also demonstrate two or more of the following criteria: the business is making an appreciable capital investment; deploying new technology; creating jobs, expanding the existing workforce, or improving the productivity and profitability of the operation in the state; or enhancing workers' skills. Resources may support training assessment, instructional design, instructional costs, and training delivery for personnel involved in the direct production of goods and services, as well as those in production and technology support. Full-time probationary employees of qualified companies are also eligible for training. The use of Customized Training funds requires that trainees must be paid by the company for all training hours.³²

» Customized Training Program Outcomes

As shown in Figure 53, the number of participants in CT programs increased from program years 2016-2017 to 2018-2019 before decreasing up to the 2020-2021 program year. Participants who were not enrolled in the program during any part of the year following enrollment were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

Figures 54 and 55 show the program employment and wage outcomes during the period studied (also see Table 14). The rate of employment in North Carolina one year after exit fluctuated from 92% for the 2016-2017 cohort to 94% for exiters of all the other program years. Over time the employment rate declined slowly for all cohorts, a pattern common to almost all workforce training and education programs. For example, employment rates in North Carolina for the 2016-2017 exiting cohort decreased from 92% one year after exit to 78% five years after exit (Figure 54).

Median wages one year after exit fluctuated from a low of \$46,404 for the 2016-2017 cohort to a high of \$52,900 for the 2020-2021 program year. Longer-term wage outcomes, however, generally showed moderate wage growth within cohorts. For the 2016-2017 cohort, wages rose each year after exit.

³² Customized Training Program Expenditures Report, https://www.nccommunitycolleges.edu/sites/default/files/state-board/program/prog_01_-_customized_training_annual_expenditures_report_2021-2022.pdf

Figure 53. NCCCS Customized Training Program Participants and Exiters by Program Year

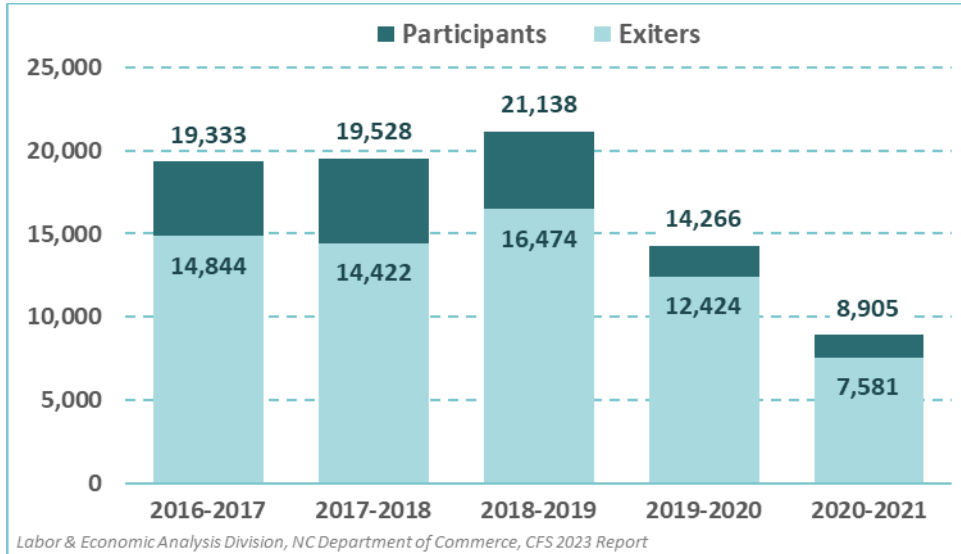
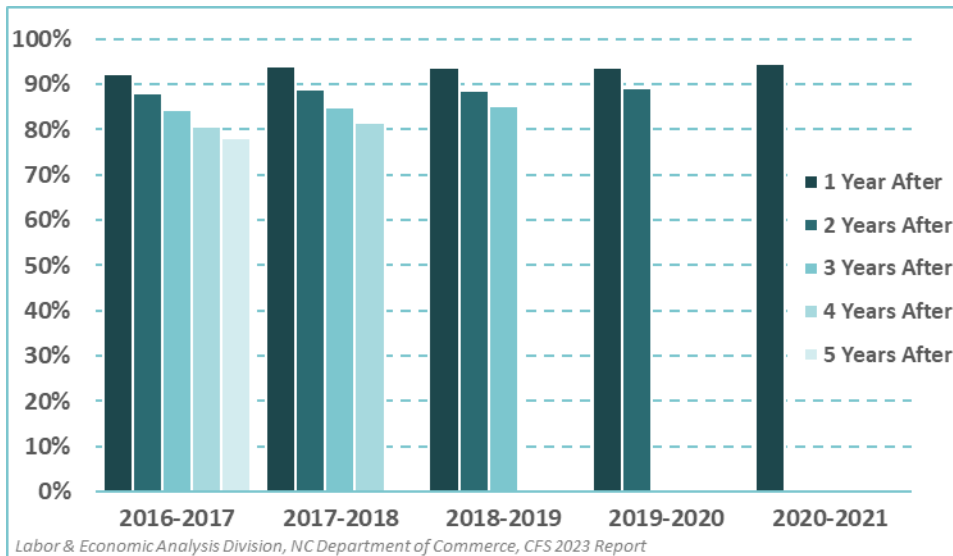


Figure 54. Percentage of NCCCS Customized Training Program Exiters Employed in North Carolina After Exit, by Year of Exit



The post-participation industries of employment for CT program exiters indicate that Manufacturing was the dominant employment industry, with both the largest number of employees and some of the highest wages with 73% of employment and a median wage of \$52,190 for the 2020-2021 cohort. As shown in Figure 56, Manufacturing was distantly followed by Wholesale Trade, Transport, and Utilities (15%; median wage of \$42,612); Professional and Business Services industry (13%; median wage of \$10,650); and Retail Trade (6%; median wage of \$10,875). Both three- and five-year post-exit industry employment rates reflect a similar trend (see Table 14).³³

³³ Source of wage data: Common Follow-up System. For comparison, the 2019 median annual wage in North Carolina for all wage-earning residents was \$33,205 (American Community Survey).

Figure 55. Median Wage of NCCCS Customized Training Program Exiters in North Carolina, by Year of Exit

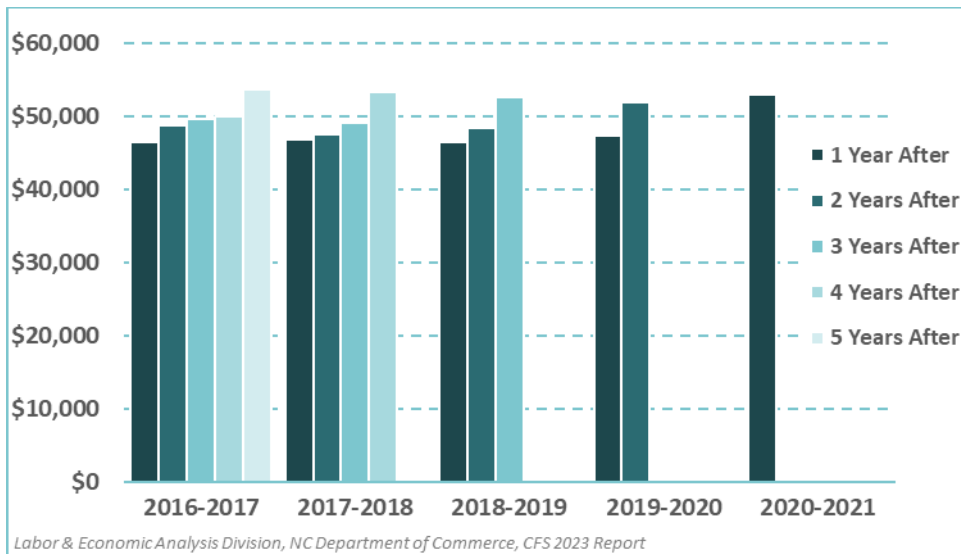
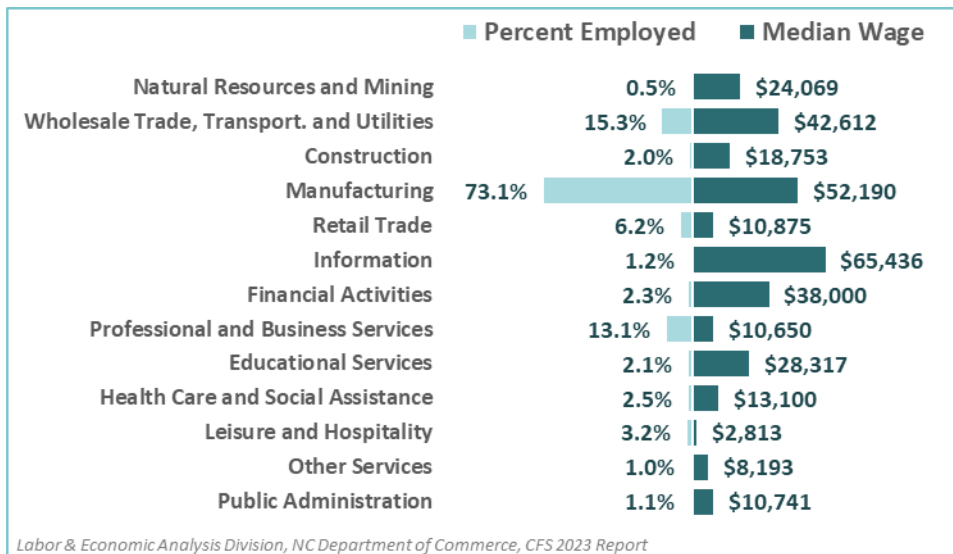


Figure 56. 2020-2021 NCCCS Customized Training Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



» Summary and Recommendations

The outcome measures for Customized Training program exiters indicate high post-exit employment rates (ranging from 92% to 94% in the first year after exit) as compared to other workforce training programs examined in this report. While the annual median wages had slight fluctuations across program years, CT program exiters earned higher wages relative to exiters in other workforce training programs. Overall, the progressive growth in employment rates and wages demonstrate a positive outcome for the program.

When exiters are followed over longer periods of time, the employment rate tends to decline, as is common with most workforce programs. This may be due to several factors, including individuals leaving the state to work in other states or finding employment in jobs not covered by North Carolina's unemployment insurance. This is evidenced by the declining employment rate for CT program exiters, down 14 percentage points five years after exit for the 2016-2017 cohort. However, employment retention rate for the program completers remains at 78% after five years, a rate that is much higher than most other workforce programs. In addition, the median wages for CT program exiters reveal a stable increase over time, representing some of the highest wage outcomes among other workforce training programs. The elevated wages are likely because eligible CT program participants were already employed during training.

The dominant industry of employment for CT program exiters reflects a heavy concentration on the high-paying Manufacturing industry, one of the eligible industry clusters for the CT program. Plastic Product, Motor Vehicle Parts, as well as Pharmaceutical and Medicine Manufacturing represented the top three Manufacturing subsectors employing CT program exiters. This demonstrates alignment of North Carolina's workforce and economic development efforts.

Table 14. NCCCS Customized Training Participants and Exiters, Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Community College System							Common Follow-up System: Evaluative Measures, 2023 Report										
Customized Training Program							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce										
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		19,333	19,528	21,138	14,266	8,905	19,333	19,528	21,138	14,266	19,333	19,528	21,138	19,333	19,528	19,333	
Exiters		14,844	14,422	16,474	12,424	7,581	14,844	14,422	16,474	12,424	14,844	14,422	16,474	14,844	14,422	14,844	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N 92%	13,687 94%	13,541 94%	15,441 94%	11,646 94%	7,162 94%	13,055 88%	12,810 89%	14,588 89%	11,063 89%	12,530 84%	12,244 85%	14,041 85%	11,993 81%	11,778 82%	11,582 78%
Exiters' Wages in North Carolina		Mean Median	\$52,103 \$46,404	\$53,331 \$46,824	\$52,500 \$46,407	\$52,795 \$47,368	\$58,595 \$52,900	\$53,972 \$48,684	\$54,076 \$47,548	\$54,190 \$48,451	\$57,461 \$51,945	\$55,439 \$49,615	\$56,201 \$49,150	\$58,335 \$52,574	\$56,742 \$49,895	\$61,136 \$53,241	\$60,748 \$53,715
Exiters Enrolled in NC Public Higher Education		N %	1,836 12%	1,447 10%	1,588 10%	946 8%	792 10%	3,510 24%	2,795 19%	2,365 14%	2,170 17%	2,818 19%	1,708 12%	1,777 11%	1,707 11%	1,481 10%	1,249 8%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	2,853 19%	2,866 20%	3,633 22%	2,855 23%	2,007 26%	4,595 31%	4,424 31%	4,818 29%	4,144 33%	4,254 29%	3,813 26%	4,500 27%	3,683 25%	3,799 26%	3,478 23%
Exiters Enrolled or Employed in NC		N %	13,758 93%	13,605 94%	15,516 94%	11,754 95%	7,214 95%	13,231 89%	13,073 91%	14,962 91%	11,364 91%	12,781 86%	12,611 87%	14,521 88%	12,357 83%	12,236 85%	12,022 81%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		0.6%0.6%0.3%0.3%0.5%					0.5%0.7%0.3%0.4%				0.4%0.7%0.3%			0.5%0.6%		0.5%	
Wholesale Trade, Transport. and Utilities		10.4%10.4%11.0%10.0%15.3%					9.8%10.9%12.4%11.6%				9.8%11.7%13.2%			10.8%13.1%		11.4%	
Construction		1.7%2.0%1.7%1.6%2.0%					2.1%2.4%2.0%2.1%				2.1%2.6%2.3%			2.1%2.6%		2.5%	
Manufacturing		79.4%75.4%76.3%78.2%73.1%					75.4%71.9%72.5%73.9%				73.4%70.1%69.4%			71.8%67.6%		69.8%	
Retail Trade		3.8%6.4%6.7%5.5%6.2%					4.7%6.4%6.7%6.5%				5.1%6.5%7.2%			5.3%7.0%		6.0%	
Information		1.2%1.0%1.1%1.3%1.2%					0.9%1.0%1.0%1.3%				0.8%1.0%1.1%			0.8%1.1%		0.9%	
Financial Activities		1.3%1.3%3.1%2.6%2.3%					1.5%1.5%3.3%2.6%				1.8%1.6%3.5%			2.1%2.0%		2.4%	
Professional and Business Services		12.5%14.7%11.2%11.2%13.1%					12.8%13.9%11.5%12.0%				12.0%13.9%12.3%			11.7%13.7%		12.0%	
Educational Services		0.9%1.3%1.1%1.2%2.1%					1.1%1.3%1.2%1.5%				1.2%1.4%1.5%			1.2%1.6%		1.4%	
Health Care and Social Assistance		2.1%2.1%2.0%1.8%2.5%					2.5%2.5%2.2%2.2%				3.0%2.9%2.8%			3.3%3.4%		3.6%	
Leisure and Hospitality		2.5%2.9%2.8%2.7%3.2%					2.6%3.4%2.5%3.3%				2.8%2.9%3.0%			2.5%3.3%		2.8%	
Other Services		0.9%1.6%0.9%0.9%1.0%					1.1%1.7%1.1%1.1%				1.1%1.6%1.0%			1.2%1.8%		1.4%	
Public Administration		0.7%0.8%1.0%0.8%1.1%					0.9%1.0%1.2%1.0%				1.2%1.4%1.5%			1.4%1.4%		1.7%	
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$22,743\$37,827\$26,081\$16,543\$24,069					\$30,832\$40,672\$38,204\$20,678				\$33,104\$47,756\$29,806			\$32,260\$56,959		\$42,508	
Wholesale Trade, Transport. and Utilities		\$34,764\$34,245\$32,380\$35,591\$42,612					\$37,512\$36,233\$33,477\$37,135				\$38,857\$34,378\$36,482			\$37,171\$39,913		\$41,313	
Construction		\$9,677\$16,747\$17,824\$15,431\$18,753					\$14,795\$20,178\$22,604\$21,531				\$23,512\$19,594\$23,533			\$26,900\$31,271		\$31,002	
Manufacturing		\$46,444\$47,499\$46,919\$46,672\$52,190					\$49,946\$49,446\$50,189\$52,293				\$51,314\$51,343\$54,251			\$51,938\$55,466		\$55,728	
Retail Trade		\$5,103\$11,741\$11,088\$7,353\$10,875					\$9,458\$13,760\$13,031\$8,523				\$10,785\$14,780\$13,344			\$13,343\$13,452		\$11,282	
Information		\$35,708\$42,882\$46,459\$51,961\$65,436					\$37,140\$42,906\$48,260\$50,998				\$40,471\$46,860\$49,068			\$42,427\$49,221		\$45,534	
Financial Activities		\$30,393\$23,394\$42,908\$42,795\$38,000					\$35,071\$33,330\$45,168\$50,166				\$33,604\$33,288\$46,234			\$37,431\$30,816		\$40,100	
Professional and Business Services		\$11,177\$11,787\$8,606\$13,915\$10,650					\$12,533\$14,102\$11,424\$14,074				\$14,272\$16,488\$14,512			\$16,635\$19,020		\$18,462	
Educational Services		\$4,712\$7,438\$8,566\$20,586\$28,317					\$8,280\$13,704\$14,940\$19,679				\$17,785\$23,427\$15,349			\$19,891\$22,475		\$18,253	
Health Care and Social Assistance		\$19,043\$10,366\$9,607\$11,000\$13,100					\$24,668\$15,737\$12,641\$16,725				\$23,281\$14,951\$15,083			\$26,263\$20,707		\$26,654	
Leisure and Hospitality		\$2,604\$2,229\$2,104\$2,095\$2,813					\$2,799\$3,123\$2,769\$3,540				\$3,205\$3,222\$3,328			\$3,658\$3,971		\$5,890	
Other Services		\$8,492\$16,728\$10,136\$7,442\$8,193					\$10,612\$18,547\$8,967\$13,284				\$12,762\$22,748\$15,606			\$17,620\$20,869		\$14,100	
Public Administration		\$10,400\$10,731\$15,641\$14,869\$10,741					\$15,611\$21,303\$28,993\$26,372				\$23,306\$22,925\$27,222			\$27,173\$24,728		\$27,938	
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$28,025\$48,677\$36,282\$27,683\$27,820					\$34,794\$49,903\$42,469\$30,857				\$37,589\$51,029\$38,856			\$39,557\$62,869		\$44,167	
Wholesale Trade, Transport. and Utilities		\$39,368\$40,815\$36,947\$39,972\$46,760					\$42,026\$42,376\$37,082\$43,357				\$43,016\$41,345\$40,581			\$43,142\$46,727		\$46,691	
Construction		\$17,362\$24,716\$26,838\$27,992\$29,438					\$22,811\$26,084\$30,564\$31,201				\$28,377\$27,186\$31,249			\$30,598\$34,076		\$32,732	
Manufacturing		\$50,841\$52,414\$51,876\$50,966\$56,220					\$54,210\$54,187\$54,467\$56,356				\$55,943\$56,516\$58,644			\$56,991\$61,015		\$60,939	
Retail Trade		\$12,075\$26,266\$22,077\$23,362\$22,916					\$19,233\$25,259\$24,625\$23,964				\$21,790\$25,485\$25,651			\$23,364\$26,324		\$23,011	
Information		\$39,882\$46,886\$60,495\$59,597\$80,299					\$41,908\$51,760\$56,164\$61,078				\$48,852\$58,972\$61,585			\$54,865\$67,755		\$57,092	
Financial Activities		\$35,115\$37,108\$46,182\$48,799\$45,351					\$39,394\$42,102\$47,078\$55,338				\$42,134\$45,175\$50,085			\$47,074\$44,051		\$50,613	
Professional and Business Services		\$28,594\$25,609\$21,971\$28,983\$27,015					\$29,514\$29,011\$27,471\$32,476				\$33,573\$34,611\$30,729			\$37,035\$42,184		\$41,730	
Educational Services		\$14,988\$19,953\$18,303\$28,612\$31,371					\$17,419\$23,196\$22,763\$28,725				\$21,373\$26,923\$23,855			\$25,164\$27,656		\$26,000	
Health Care and Social Assistance		\$26,178\$15,355\$16,505\$22,341\$27,280					\$28,943\$19,831\$20,305\$24,044				\$30,339\$22,124\$23,119			\$31,831\$25,768		\$34,059	
Leisure and Hospitality		\$5,540\$6,634\$6,061\$5,783\$7,280					\$6,827\$7,692\$7,045\$8,877				\$8,441\$8,335\$8,155			\$9,203\$9,353		\$11,873	
Other Services		\$19,545\$21,310\$19,790\$17,692\$17,311					\$21,490\$24,223\$19,215\$20,942				\$26,461\$26,645\$23,737			\$30,612\$24,412		\$27,132	
Public Administration		\$16,797\$17,218\$20,514\$26,234\$24,421					\$20,456\$23,939\$26,869\$29,503				\$23,925\$24,286\$28,060			\$26,850\$26,991		\$27,131	

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Overview of Apprenticeship Programs

ApprenticeshipNC (formerly known as NCWorks Apprenticeship) is a State Approving Agency for the US Department of Labor for workforce training program certification. The purpose of the apprenticeship program is to provide individuals the opportunity to obtain occupational training and practical skills that will address the skills gap while providing an educational opportunity to obtain a fundamental understanding of an occupation. ApprenticeshipNC assists North Carolina's employers in developing their own specialized, fully trained, and productive workforce to compete in a global economy.

The Fitzgerald Act of 1937 established a national apprenticeship program, and North Carolina's apprenticeship programs are authorized by and operate under the requirements and guidelines outlined under North Carolina General Statute Article 1 of Chapter 115D. In North Carolina, apprenticeship is a voluntary system of employer-driven employee training. Employers who agree to sponsor apprenticeship programs take on the responsibilities and obligations of the program. Employers who participate are required to have an approved plan that includes on-the-job training requirements, technical instruction requirements, defined training hours, and wage scale progression for participation to reward increased employee capability and skill. Wage rates for apprentices typically begin at about half the rate of experienced journey workers, then rise as the apprentice gains skills and competencies through the program. At the successful completion of on-the-job as well as instructional learning, apprentices receive an industry and federally recognized Journey-worker certificate that certifies occupational proficiency.

Apprenticeship programs typically take four years to complete and are established in almost 1,300 jobs and 700 employers in North Carolina. Apprenticeship programs are provided in a diverse set of industries and occupations, from advanced manufacturing to network maintenance to public administration.

On November 1, 2017, the Apprenticeship program was transferred from the North Carolina Department of Commerce to the North Carolina Community College System Office. As a result, the staff and resources of the Apprenticeship program and the advisory Apprenticeship Council were transitioned to the System Office.³⁴ The NC Community College System now oversees the development and maintenance of Registered Apprenticeship programs throughout North Carolina under the guidance of the US Department of Labor. The Apprenticeship Council, an advisory group of professionals from across the state, provides guidance to the State Board of Community Colleges and helps formulate policy for the statewide Apprenticeship program.

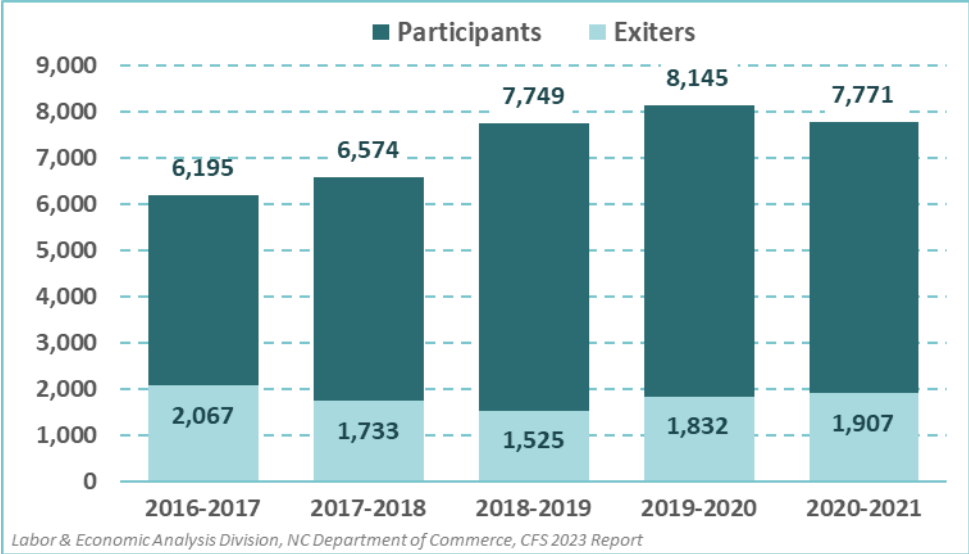
» Apprenticeship Program Outcomes

As shown in Figure 57, participation in the ApprenticeshipNC program steadily increased throughout the study period and then slightly declined in the latest 2020-2021 program year. This growth over the study period was likely achieved in part by the elimination of an earlier fee requirement for program participation in addition to efforts to expand outreach through regional partnerships with colleges, workforce boards, and employers.

³⁴ See NC Session Law 2017-57, Senate Bill 257, Section 15.13. (a), <http://www.ncoah.com/rules/rrc/meetings/Agendas/August%202017/04%20NCAC%2022.pdf>

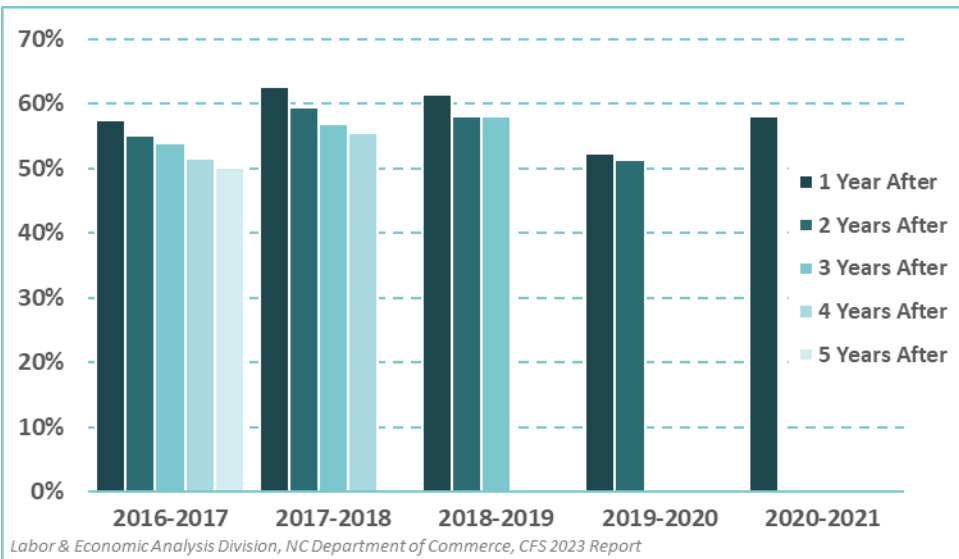
An important aspect of the apprenticeship program is that participation statistics can only be fully measured by a voluntarily shared SSN; thus, numbers produced from the CFS may differ from those reported by the US Department of Labor.

Figure 57. Apprenticeship Program Participants and Exiters by Program Year



Participants who exited the apprenticeship program were defined as program exiters, and their subsequent wages and employment outcomes were tracked post exit.

Figure 58. Percentage of Apprenticeship Program Exiters Employed in North Carolina After Exit, by Year of Exit

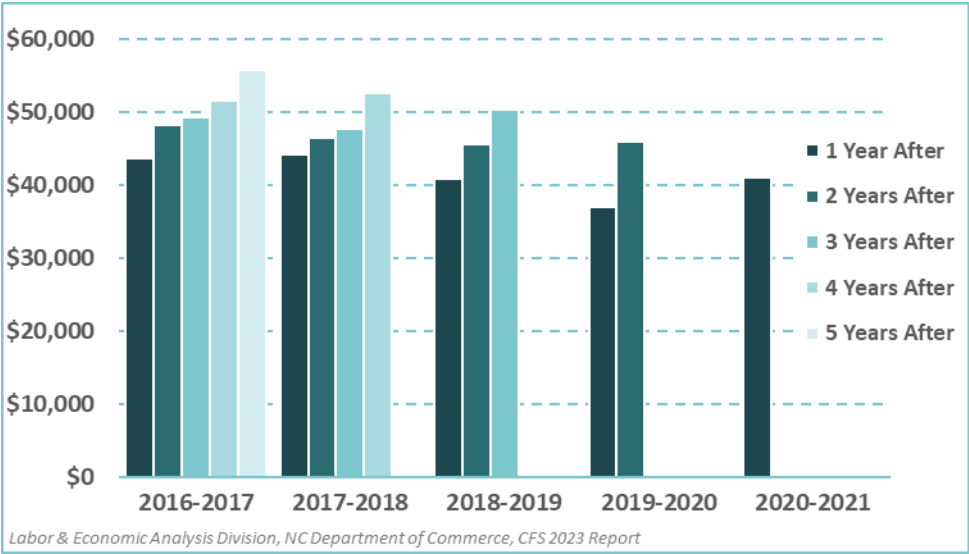


One year post-exit employment rates, shown in Figure 58 and Table 15, fluctuated between a low of 52% for exiters in the 2019-2020 program year to a high of 63% for exiters in the 2017-2018 program year. When the exiting cohorts were followed over multiple years, the cohort employment rates generally showed slight declines

(Figure 58). Of the 2016-2017 exiters, 58% were employed in the first year after exit, while 50% were employed after year five.

As shown in Figure 59, one year post-exit median wages remained gradually declined for the first four cohorts, decreasing from \$43,702 for the 2016-2017 program year to \$36,930 for 2019-2020. Wages generally increased over time within each cohort. For the 2016-2017 cohort, post-exit wages increased by 28%, from \$43,702 one year after exit to \$55,796 five years after exit. This is well above \$32,650, the 2021 median annual wage in North Carolina for all wage earners covered by unemployment insurance³⁵.

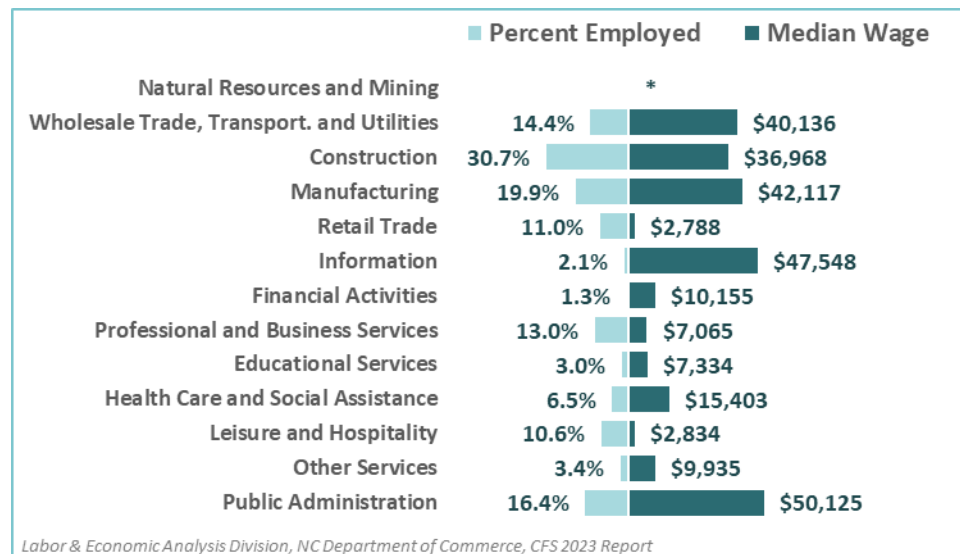
Figure 59. Median Wage of Apprenticeship Program Exiters in North Carolina, by Year of Exit



Analysis of industries of employment for program exiters shows that for all cohorts, Construction was the largest employer, followed by Manufacturing; Public Administration; Wholesale Trade, Transportation, and Utilities; and Professional and Business Services. Figure 60 shows that one year after exit, 31% of the 2020-2021 cohort exiters were employed in Construction, followed by 20% in Manufacturing; 16% in Public Administration; 14% in Wholesale Trade, Transportation, and Utilities; and 13% in Professional and Business Services.

³⁵ Source of wage data: Common Follow-up System (CFS). For comparison, the 2021 median annual wage in North Carolina for all wage-earning residents was \$34,209 (American Community Survey).

Figure 60. 2020-2021 Apprenticeship Exiters One Year After Exit: Percentage Employed and Median Wage by Industry



Post-exit participation in public higher education (Table 15) for the completers of the Apprenticeship program was among the highest for exiters of any workforce program. One year post-exit enrollment in public higher education ranged from 19% for the 2019-2020 cohort to 26% for the 2017-2018 cohort.

» Summary and Recommendations

Overall, outcome measures for Apprenticeship program exiters show increasing participation and fluctuations in both short- and long-term employment and wage outcomes.

As is common in most workforce and education programs, when exiters are followed over longer periods of time, the rate of employment in North Carolina tends to decline. This decline could be attributed to several factors including individuals not sustaining employment, moving out of state, or finding employment in jobs not covered by North Carolina's unemployment insurance laws. Median wages were some of the highest wage outcomes of any workforce development programs examined in this report. This is not unexpected, as participants are employed during program participation and thus have already built a relationship with an employer prior to program completion in addition to achieving skill gains through the training. It is worth mentioning that eliminating the fee requirement for program participation in 2014-2015 likely had a significant positive effect on program participation in subsequent years.

It is recommended that additional analyses of the Registered Apprenticeship program be undertaken to further the understanding of the specific jobs that lead to the greatest wage progressions and employment stability.

Table 15. Apprenticeship Program Participants and Exiters, Showing Outcomes One Through Five Years After Exit, Overall and By Industry

North Carolina Community College System							Common Follow-up System: Evaluative Measures, 2023 Report										
Apprenticeship Program							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce										
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Participants		6,195	6,574	7,749	8,145	7,771	6,195	6,574	7,749	8,145	6,195	6,574	7,749	6,195	6,574	6,195	
Exiters		2,067	1,733	1,525	1,832	1,907	2,067	1,733	1,525	1,832	2,067	1,733	1,525	2,067	1,733	2,067	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Exiters Employed In North Carolina		N	1,189 58%	1,084 63%	937 61%	957 52%	1,140 55%	1,031 59%	885 58%	939 51%	1,114 54%	985 57%	886 58%	1,065 52%	962 56%	1,035 50%	
Exiters' Wages in North Carolina		Mean Median	\$47,027 \$43,702	\$47,630 \$44,105	\$45,099 \$40,823	\$43,532 \$36,930	\$44,805 \$41,056	\$52,749 \$48,221	\$49,417 \$46,498	\$50,473 \$45,614	\$51,441 \$45,994	\$53,545 \$49,174	\$51,826 \$47,727	\$55,098 \$50,348	\$56,748 \$51,607	\$57,400 \$52,537	\$60,225 \$55,796
Exiters Enrolled in NC Public Higher Education		N %	468 23%	457 26%	361 24%	357 19%	457 24%	413 20%	368 21%	280 18%	303 17%	346 17%	280 16%	255 17%	266 13%	242 14%	224 11%
Exiters Enrolled in NC Public Education, Employment, or Training Program		N %	545 26%	566 33%	479 31%	514 28%	574 30%	503 24%	507 29%	420 28%	467 25%	478 23%	450 26%	406 27%	430 21%	432 25%	406 20%
Exiters Enrolled or Employed in NC		N %	1,280 62%	1,156 67%	1,018 67%	1,089 59%	1,201 63%	1,217 59%	1,107 64%	968 63%	1,033 56%	1,185 57%	1,059 61%	953 62%	1,141 55%	1,043 60%	1,109 54%
Exiters' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			*	*	1.3%	1.0%	*	*	*	1.1%	1.2%	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities			11.4%	9.4%	11.0%	14.3%	14.4%	10.7%	11.3%	12.9%	14.9%	11.6%	12.0%	14.3%	10.8%	12.8%	13.1%
Construction			27.9%	30.5%	40.4%	43.5%	30.7%	27.1%	27.4%	35.4%	38.8%	25.4%	25.8%	34.8%	26.0%	25.8%	25.0%
Manufacturing			26.4%	20.8%	23.2%	25.0%	19.9%	27.7%	22.2%	24.6%	25.2%	27.0%	21.8%	24.2%	28.0%	22.6%	27.1%
Retail Trade			6.2%	5.7%	6.4%	9.7%	11.0%	5.9%	6.6%	6.6%	8.7%	5.8%	6.5%	6.8%	6.7%	7.5%	6.8%
Information			3.8%	4.4%	3.0%	2.8%	2.1%	4.2%	4.8%	2.0%	3.0%	3.6%	3.7%	3.0%	3.1%	3.6%	2.9%
Financial Activities			2.0%	1.8%	1.4%	1.6%	1.3%	2.4%	1.7%	1.6%	1.8%	2.3%	1.7%	1.9%	2.0%	1.7%	1.4%
Professional and Business Services			14.8%	12.8%	13.1%	12.0%	13.0%	14.1%	13.2%	11.6%	12.5%	13.6%	14.2%	12.6%	13.3%	15.0%	13.2%
Educational Services			2.0%	3.0%	2.5%	*	3.0%	2.7%	3.2%	2.3%	1.1%	2.8%	2.8%	2.8%	1.8%	2.7%	2.8%
Health Care and Social Assistance			2.1%	2.4%	2.9%	2.3%	6.5%	3.2%	2.4%	2.9%	2.7%	2.6%	2.2%	3.5%	2.3%	3.6%	2.7%
Leisure and Hospitality			5.1%	5.1%	6.7%	7.2%	10.6%	5.0%	5.3%	4.2%	6.5%	5.1%	4.7%	4.5%	4.4%	3.5%	4.5%
Other Services			1.5%	1.6%	1.9%	2.7%	3.4%	2.0%	2.1%	1.7%	2.6%	2.5%	1.9%	1.1%	1.7%	2.3%	1.7%
Public Administration			23.7%	28.9%	14.2%	7.5%	16.4%	21.3%	26.4%	14.1%	8.0%	20.0%	24.2%	13.7%	19.2%	22.6%	19.0%
Exiters' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			*	*	\$20,457	\$32,835	*	*	*	\$34,590	\$34,179	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities			\$40,652	\$42,314	\$37,346	\$28,877	\$40,136	\$48,641	\$39,214	\$42,657	\$44,737	\$28,958	\$45,062	\$44,339	\$44,788	\$46,335	\$47,445
Construction			\$35,527	\$41,816	\$37,282	\$32,088	\$36,968	\$42,769	\$43,418	\$42,769	\$40,638	\$46,620	\$43,140	\$48,199	\$43,293	\$52,363	\$49,451
Manufacturing			\$54,161	\$52,038	\$38,487	\$47,669	\$42,117	\$60,397	\$54,076	\$42,563	\$56,631	\$62,433	\$55,177	\$48,713	\$63,066	\$62,112	\$67,235
Retail Trade			\$4,253	\$4,058	\$4,165	\$3,712	\$2,788	\$5,678	\$5,831	\$5,324	\$7,407	\$14,882	\$11,068	\$4,689	\$12,690	\$10,489	\$10,886
Information			\$40,392	\$43,175	\$26,531	\$51,607	\$47,548	\$35,253	\$36,908	\$51,183	\$54,645	\$45,700	\$54,519	\$41,123	\$51,607	\$60,310	\$53,098
Financial Activities			\$4,672	\$12,406	\$10,911	\$7,653	\$10,155	\$5,355	\$19,247	\$23,358	\$5,778	\$10,254	\$19,344	\$14,731	\$8,917	\$22,815	\$18,069
Professional and Business Services			\$8,617	\$9,230	\$8,010	\$6,627	\$7,065	\$9,617	\$9,535	\$11,761	\$7,766	\$9,319	\$8,273	\$12,967	\$11,912	\$10,073	\$14,643
Educational Services			\$4,503	\$3,873	\$3,675	*	\$7,334	\$5,740	\$7,252	\$7,153	\$9,603	\$2,493	\$6,450	\$4,518	\$13,811	\$13,441	\$4,941
Health Care and Social Assistance			\$21,273	\$4,208	\$27,654	\$9,866	\$15,403	\$10,649	\$9,152	\$29,364	\$13,760	\$19,185	\$19,844	\$26,579	\$26,366	\$16,146	\$18,862
Leisure and Hospitality			\$1,654	\$2,273	\$2,359	\$2,654	\$2,834	\$2,754	\$1,869	\$3,309	\$2,382	\$2,710	\$1,540	\$3,632	\$1,601	\$5,525	\$2,180
Other Services			\$3,082	\$7,420	\$5,148	\$5,342	\$9,935	\$11,047	\$9,413	\$15,722	\$6,525	\$14,990	\$23,455	\$38,891	\$24,461	\$3,841	\$16,883
Public Administration			\$40,395	\$42,714	\$46,291	\$43,079	\$50,125	\$45,013	\$45,033	\$49,050	\$45,999	\$47,548	\$48,569	\$51,878	\$51,080	\$51,888	\$54,874
Exiters' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining			*	*	\$26,272	\$29,303	*	*	*	\$37,554	\$30,130	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities			\$51,116	\$53,165	\$53,797	\$40,821	\$54,272	\$56,633	\$49,756	\$56,400	\$52,751	\$50,931	\$55,684	\$58,709	\$59,107	\$59,437	\$59,921
Construction			\$38,316	\$42,932	\$37,368	\$35,430	\$39,178	\$49,194	\$45,676	\$42,374	\$45,118	\$53,064	\$47,135	\$47,282	\$52,724	\$55,137	\$56,597
Manufacturing			\$54,291	\$56,156	\$46,270	\$50,232	\$46,788	\$58,701	\$57,759	\$49,933	\$58,102	\$60,429	\$62,618	\$55,775	\$62,004	\$66,408	\$66,999
Retail Trade			\$9,802	\$10,352	\$7,528	\$7,792	\$7,525	\$15,592	\$11,284	\$12,116	\$14,714	\$19,491	\$15,741	\$15,261	\$20,519	\$16,446	\$19,730
Information			\$34,055	\$39,443	\$29,538	\$45,261	\$41,573	\$31,693	\$33,725	\$47,408	\$50,410	\$38,059	\$47,209	\$40,661	\$47,017	\$57,306	\$51,099
Financial Activities			\$7,274	\$14,701	\$15,135	\$21,020	\$17,397	\$12,398	\$20,170	\$22,716	\$17,715	\$17,724	\$19,065	\$23,365	\$17,387	\$25,317	\$23,864
Professional and Business Services			\$14,985	\$13,188	\$14,741	\$13,112	\$15,533	\$16,941	\$15,591	\$20,277	\$13,982	\$17,745	\$15,421	\$22,577	\$20,698	\$18,195	\$22,222
Educational Services			\$12,933	\$10,570	\$13,344	*	\$21,496	\$13,481	\$15,879	\$20,279	\$27,155	\$10,462	\$16,509	\$16,935	\$19,302	\$21,180	\$13,886
Health Care and Social Assistance			\$25,127	\$11,156	\$25,369	\$13,210	\$16,138	\$16,410	\$12,859	\$28,769	\$16,857	\$21,939	\$21,424	\$28,242	\$27,245	\$16,909	\$26,471
Leisure and Hospitality			\$3,633	\$3,466	\$5,389	\$4,917	\$5,867	\$4,343	\$4,472	\$6,873	\$5,847	\$6,712	\$5,609	\$6,264	\$6,749	\$8,076	\$6,955
Other Services			\$11,282	\$13,219	\$16,912	\$9,753	\$14,318	\$18,744	\$17,959	\$30,366	\$15,718	\$17,908	\$21,175	\$35,391	\$32,330	\$21,547	\$27,579
Public Administration			\$39,756	\$40,800	\$42,430	\$41,036	\$47,355	\$44,437	\$43,233	\$48,239	\$46,388	\$47,230	\$47,048	\$48,740	\$51,349	\$48,463	\$54,227

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

University of North Carolina System (UNC)

» Overview of Degree Programs

North Carolina's public university system offers an array of higher education programs through 16 campuses around the state.³⁶ Each year, more than 55,000 degrees³⁷ are awarded to students graduating from more than 200 academic degree programs offered by the UNC system.³⁸ Most UNC curriculum program participants are enrolled in academic degree programs; fewer are working toward other post-master's, post-baccalaureate, or post-secondary credentials. This evaluation report focuses on the outcomes of UNC's bachelor's, master's, and doctoral degree programs.

Bachelor's programs are designed to be completed within four years of matriculation by full-time students. While many bachelor's program enrollees begin their studies shortly after completing secondary education, other students are enrolled as sophomores or juniors after transferring from another institution of higher education or enter higher education later in life. Master's programs are typically completed in one to two years by full-time students, depending on the program. Most students enroll in master's programs after obtaining a bachelor's degree; however, some UNC campuses offer dual-degree programs that allow students to satisfy some master's degree requirements while working towards their bachelor's degree.

Doctoral programs fall under two categories: research and professional practice. Research programs lead to the attainment of a Doctor of Philosophy (PhD) degree and prepare students to conduct academic research in their respective field of study. Professional practice programs lead to the attainment of a credential in fields such as law (JD) and medicine (MD) and prepare students for professional employment in their field; however, individuals often need to satisfy additional requirements, such as passing an examination or completing an internship, to receive a license to practice.

» UNC Bachelor's Degree Program Outcomes

As shown in Figure 61, enrollment in bachelor's degree programs showed steady growth during the period studied, with the number of students increasing from 184,628 in the 2016-2017 program year to 191,296 in 2020-2021. Students who were recorded as having graduated from a bachelor's program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. The number of bachelor's program completers also trended upward during this period.

Figures 62 and 63 show employment and wage outcomes at one through five years after graduation, for all graduating cohorts from 2016-2017 to 2020-2021. The rate of employment in North Carolina one year after graduation remained stable across cohorts, ranging from 77% to 78%. The rate at which bachelor's graduates subsequently enrolled in public education, employment, or training programs was also stable, averaging 17% for all cohorts one year after graduation (Table 16). Wage earnings one year following graduation increased across

³⁶ UNC also operates the NC School of Science of Mathematics, a residential high school with two campuses across the state, and offers a high school program through the UNC School of the Arts. Neither the School of Science and Math nor the high school portion of the School of Arts are included in this report.

³⁷ The number of degrees conferred reached 63,405 in 2020-2021,

https://myinsight.northcarolina.edu/t/Public/views/db_degrees/DegreesAwardedByLevel

³⁸ The University of North Carolina System website, <https://www.northcarolina.edu/>

cohorts, with median wage earnings increasing from \$23,588 for the cohort graduating in 2016-2017 to \$29,357 for the 2020-2021 cohort.

Figure 61. UNC Bachelor’s Degree Program Participants and Completers by Program Year

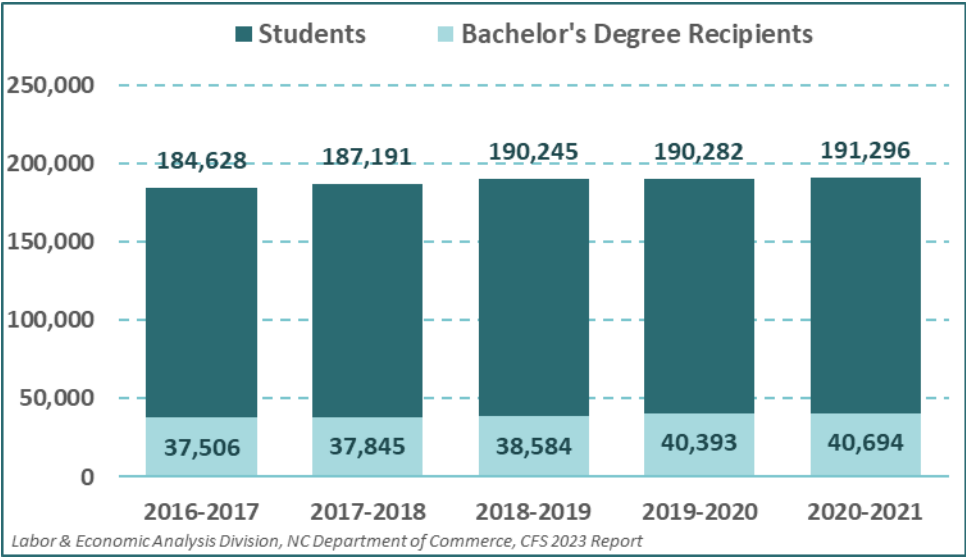
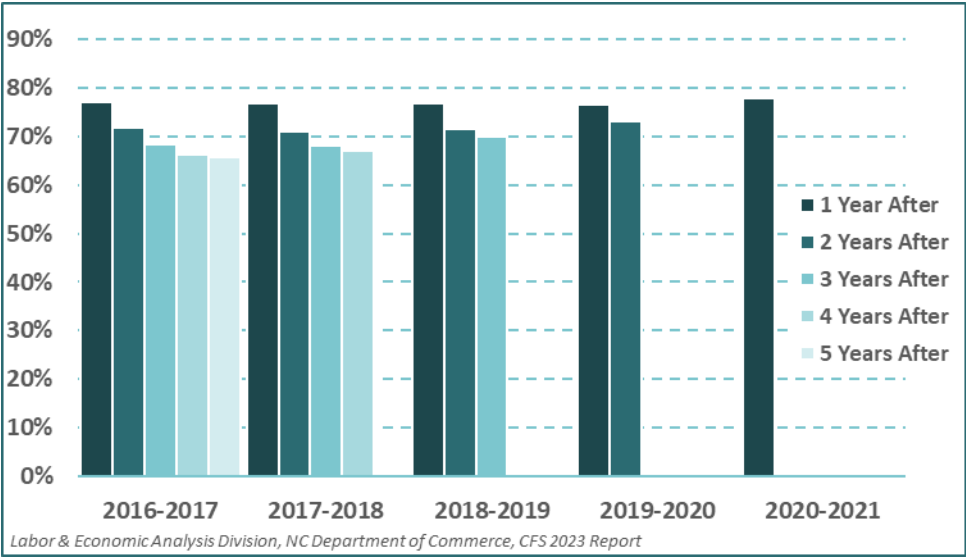
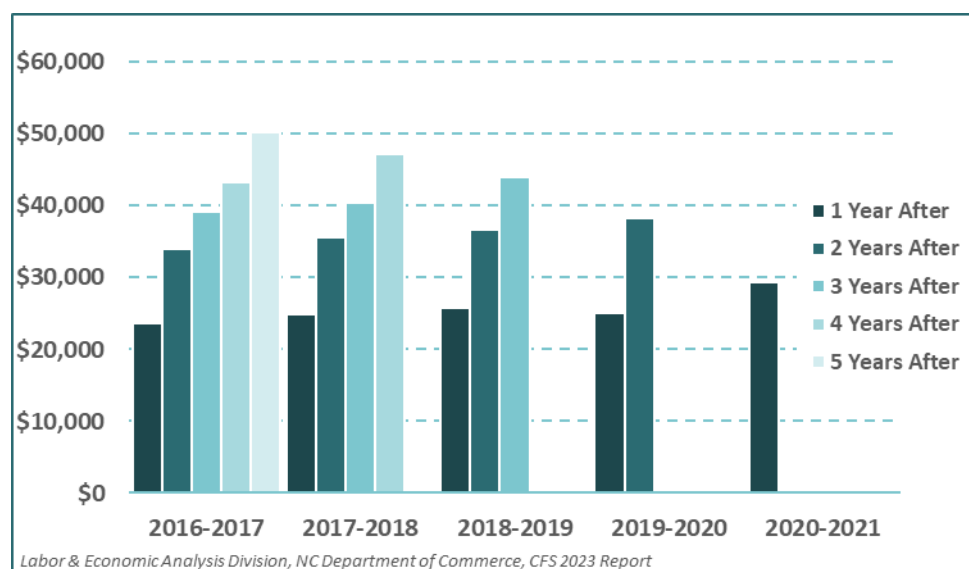


Figure 62. Percentage of UNC Bachelor’s Program Completers Employed in North Carolina After Degree Conferal, by Year of Graduation



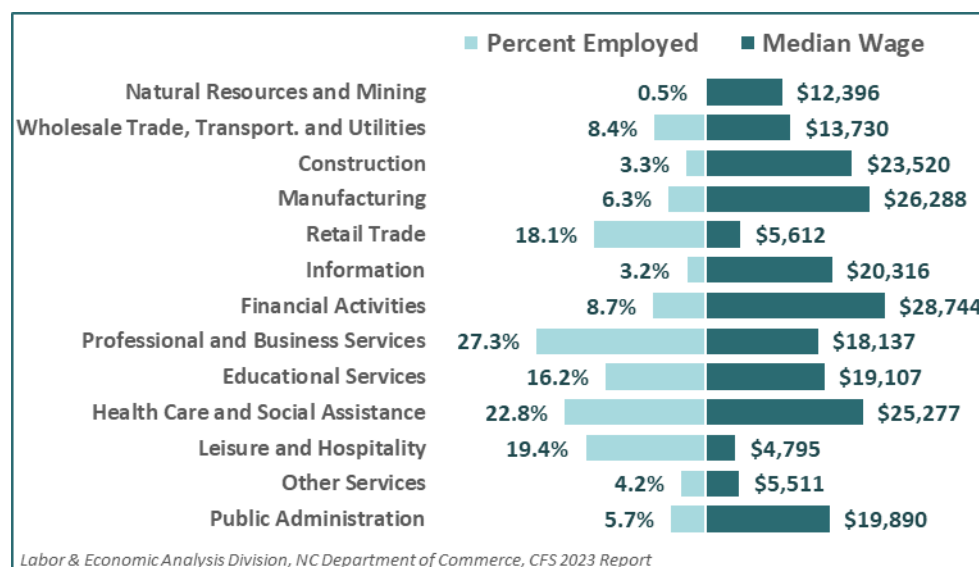
Bachelor’s recipients saw their wages increase in each year after graduation, while the share employed in North Carolina declined. For instance, the median wages for 2016-2017 graduates rose from \$23,588 after one year to \$50,202 after five years. Concurrently, their employment rate declined from 77% to 66%. This decline could be attributable to several factors including people not sustaining employment, moving out of state, or finding employment in jobs not covered by North Carolina’s unemployment insurance laws.

Figure 63. Median Wage of UNC Bachelor's Program Completers in North Carolina, by Year of Graduation



Bachelor's graduates in 2020-2021 saw high rates of employment in the Professional and Business Services (\$18,137) and Health Care and Social Assistance (\$25,277) industries in their first year after graduation, as well as in industries paying relatively lower wages, such as Leisure and Hospitality (\$4,795), Retail Trade (\$5,612), and Educational Services (\$19,107) (Figure 64).

Figure 64. 2020-2021 UNC Bachelor's Program Completers One Year After Graduation: Percentage Employed and Median Wage by Industry



Wage and employment outcomes also varied widely by program of study. After one year, 2020-2021 graduates saw median wages ranging from \$15,294 for philosophy and religious studies majors to \$50,719 for science technologies/technicians majors (see Appendix Table 16). For longer term wage outcomes, five year post-graduation median earnings for the 2016-2017 graduating class ranged from \$33,569 for visual and performing

arts majors to \$86,091 for Computer and Information Services and Support Services majors (see Appendix Table 13).

Overall, graduates of UNC bachelor's programs showed steady rates of employment and positive wage growth over time. However, wages varied considerably by major and industry.

Table 16. UNC Bachelor's Degree Program Participants and Completers, Outcomes One Through Five Years After Exit, Overall and By Industry

University Of North Carolina System							Common Follow-up System: Evaluative Measures, 2023 Report										
Bachelor's Degree																	
All Programs							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce										
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017	
Students		184,628	187,191	190,245	190,282	191,296	184,628	187,191	190,245	190,282	184,628	187,191	190,245	184,628	187,191	184,628	
Bachelor's Degree Recipients		37,506	37,845	38,584	40,393	40,694	37,506	37,845	38,584	40,393	37,506	37,845	38,584	37,506	37,845	37,506	
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Bachelor's Degree Recipients Employed in North Carolina	N %	28,907 77%	29,054 77%	29,685 77%	30,907 77%	31,638 78%	26,879 72%	26,917 71%	27,638 72%	29,520 73%	25,657 68%	25,725 68%	26,975 70%	24,840 66%	25,362 67%	24,620 66%	
Bachelor's Degree Recipients' Wages in North Carolina	Mean Median	\$27,017 \$23,588	\$28,093 \$24,823	\$29,323 \$25,837	\$29,450 \$25,122	\$32,971 \$29,357	\$34,996 \$34,056	\$36,460 \$35,520	\$37,934 \$36,611	\$40,635 \$38,198	\$40,503 \$39,204	\$42,142 \$40,460	\$46,444 \$43,938	\$46,124 \$43,324	\$50,110 \$47,188	\$54,158 \$50,202	
Graduates Enrolled in NC Public Higher Education	N %	6,508 17%	6,456 17%	6,615 17%	7,175 18%	7,053 17%	6,491 17%	6,276 17%	6,455 17%	6,598 16%	5,428 14%	5,257 14%	5,229 14%	4,489 12%	4,419 12%	3,718 10%	
Graduates Enrolled in NC Public Education, Employment, or Training Program	N %	7,966 21%	8,109 21%	8,811 23%	10,364 26%	10,227 25%	8,047 21%	8,589 23%	9,430 24%	10,246 25%	7,553 20%	8,419 22%	8,678 22%	7,324 20%	7,923 21%	6,947 19%	
Graduates Enrolled or Employed in NC	N %	30,097 80%	30,284 80%	31,084 81%	32,855 81%	33,517 82%	28,019 75%	28,266 75%	29,312 76%	31,372 78%	26,783 71%	27,198 72%	28,483 74%	26,117 70%	26,765 71%	25,843 69%	
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		0.3%	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%	0.3%	0.4%	0.3%	
Wholesale Trade, Transport. and Utilities		6.2%	6.3%	6.8%	8.3%	8.4%	6.4%	6.6%	7.3%	8.5%	6.9%	7.2%	8.0%	7.3%	7.6%	7.8%	
Construction		2.6%	2.7%	2.9%	3.5%	3.3%	2.8%	2.9%	3.3%	3.8%	2.8%	3.1%	3.6%	3.0%	3.4%	3.3%	
Manufacturing		6.0%	6.2%	6.1%	5.9%	6.3%	6.6%	6.5%	6.7%	6.7%	6.7%	6.8%	7.1%	6.8%	7.1%	7.2%	
Retail Trade		19.3%	18.5%	18.4%	20.2%	18.1%	13.5%	13.0%	13.2%	13.8%	11.1%	10.8%	10.5%	9.6%	9.2%	8.7%	
Information		3.5%	3.5%	3.2%	2.9%	3.2%	3.8%	3.7%	3.6%	3.8%	3.7%	3.8%	4.0%	3.6%	4.3%	4.1%	
Financial Activities		8.2%	8.3%	8.6%	8.5%	8.7%	9.3%	9.5%	9.7%	10.0%	9.8%	9.9%	10.4%	10.0%	10.9%	10.7%	
Professional and Business Services		24.1%	25.1%	24.2%	25.4%	27.3%	23.5%	23.7%	25.3%	27.6%	22.8%	24.2%	27.7%	23.3%	26.5%	25.3%	
Educational Services		19.7%	17.7%	16.7%	14.7%	16.2%	17.8%	16.8%	15.9%	15.5%	17.6%	16.7%	16.5%	17.0%	16.9%	17.2%	
Health Care and Social Assistance		22.3%	22.8%	22.5%	22.7%	22.8%	23.4%	23.3%	23.3%	23.4%	23.8%	23.4%	23.1%	23.9%	23.7%	24.0%	
Leisure and Hospitality		22.9%	22.3%	21.9%	19.2%	19.4%	15.2%	14.7%	12.3%	13.2%	12.0%	10.4%	10.3%	8.9%	9.1%	8.2%	
Other Services		4.3%	4.5%	4.4%	4.3%	4.2%	3.7%	3.6%	3.2%	3.5%	3.1%	3.3%	2.9%	2.9%	3.0%	2.8%	
Public Administration		5.7%	5.7%	5.7%	5.6%	5.7%	6.4%	6.2%	6.2%	6.2%	6.7%	6.6%	6.5%	6.9%	6.8%	7.0%	
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$8,810	\$12,000	\$10,229	\$9,532	\$12,396	\$12,552	\$16,382	\$14,062	\$15,217	\$15,970	\$23,998	\$25,190	\$15,120	\$23,098	\$22,003	
Wholesale Trade, Transport. and Utilities		\$13,929	\$14,336	\$14,720	\$10,824	\$13,730	\$25,416	\$24,834	\$23,384	\$21,185	\$31,725	\$28,060	\$29,620	\$33,755	\$34,024	\$36,549	
Construction		\$18,373	\$20,321	\$27,309	\$21,765	\$23,520	\$29,814	\$34,287	\$36,466	\$35,741	\$36,197	\$39,355	\$41,825	\$40,876	\$43,342	\$45,088	
Manufacturing		\$26,894	\$27,705	\$31,916	\$23,950	\$26,288	\$41,276	\$43,573	\$43,710	\$36,975	\$48,639	\$48,579	\$45,924	\$53,518	\$51,206	\$54,584	
Retail Trade		\$4,806	\$4,791	\$4,871	\$5,496	\$5,612	\$6,764	\$6,551	\$7,561	\$8,601	\$7,969	\$7,747	\$9,834	\$10,026	\$10,347	\$12,826	
Information		\$14,035	\$15,962	\$19,848	\$16,441	\$20,316	\$24,685	\$29,376	\$31,719	\$26,836	\$34,972	\$37,885	\$38,046	\$43,107	\$39,875	\$44,575	
Financial Activities		\$25,606	\$25,195	\$28,064	\$25,606	\$28,744	\$35,609	\$36,504	\$38,533	\$37,206	\$41,662	\$42,463	\$43,586	\$46,699	\$45,982	\$50,007	
Professional and Business Services		\$12,233	\$13,489	\$15,560	\$14,391	\$18,137	\$21,208	\$25,037	\$25,577	\$26,804	\$29,854	\$32,108	\$33,640	\$36,550	\$37,913	\$41,997	
Educational Services		\$16,125	\$15,115	\$15,879	\$17,871	\$19,107	\$29,025	\$30,807	\$32,170	\$28,951	\$35,543	\$37,512	\$36,964	\$39,512	\$39,654	\$42,834	
Health Care and Social Assistance		\$22,018	\$23,501	\$24,987	\$24,269	\$25,277	\$28,868	\$30,363	\$31,315	\$30,563	\$33,372	\$35,242	\$35,358	\$38,285	\$38,819	\$43,204	
Leisure and Hospitality		\$3,977	\$4,187	\$4,285	\$4,072	\$4,795	\$5,062	\$5,595	\$5,343	\$5,636	\$5,459	\$5,742	\$6,899	\$5,875	\$7,308	\$6,500	
Other Services		\$4,231	\$4,017	\$3,997	\$4,761	\$5,511	\$6,189	\$7,699	\$7,909	\$8,295	\$10,080	\$10,000	\$10,449	\$15,442	\$16,316	\$15,946	
Public Administration		\$15,058	\$16,036	\$16,629	\$19,888	\$19,890	\$30,398	\$32,721	\$33,662	\$33,214	\$36,071	\$38,301	\$37,735	\$40,165	\$41,297	\$43,120	
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After	
Natural Resources and Mining		\$15,307	\$17,619	\$17,567	\$19,314	\$19,558	\$19,614	\$22,297	\$21,485	\$24,562	\$22,671	\$25,252	\$28,446	\$24,224	\$27,760	\$27,281	
Wholesale Trade, Transport. and Utilities		\$19,611	\$21,198	\$21,625	\$19,179	\$22,162	\$28,813	\$29,664	\$29,110	\$28,700	\$34,874	\$33,854	\$35,966	\$38,298	\$40,714	\$44,203	
Construction		\$24,507	\$27,205	\$30,357	\$27,322	\$29,515	\$32,470	\$36,211	\$37,084	\$37,362	\$38,141	\$40,912	\$42,322	\$43,300	\$45,960	\$48,023	
Manufacturing		\$31,088	\$32,141	\$35,323	\$31,893	\$33,366	\$40,304	\$42,852	\$43,313	\$40,783	\$47,662	\$47,755	\$47,786	\$52,547	\$52,213	\$55,042	
Retail Trade		\$9,047	\$9,126	\$9,174	\$10,084	\$11,076	\$13,036	\$12,793	\$13,641	\$15,410	\$15,391	\$15,785	\$18,481	\$19,016	\$20,284	\$24,278	
Information		\$19,973	\$22,913	\$25,670	\$26,321	\$28,320	\$29,755	\$33,330	\$35,531	\$34,635	\$38,049	\$41,439	\$42,603	\$46,859	\$46,910	\$53,943	
Financial Activities		\$28,432	\$29,138	\$31,498	\$31,107	\$33,356	\$36,935	\$38,276	\$40,259	\$40,629	\$43,679	\$45,016	\$47,767	\$50,131	\$51,083	\$56,250	
Professional and Business Services		\$18,396	\$20,003	\$21,897	\$21,474	\$24,647	\$26,399	\$29,419	\$30,066	\$32,574	\$33,351	\$35,190	\$38,128	\$38,944	\$42,271	\$46,228	
Educational Services		\$18,875	\$18,571	\$19,007	\$20,062	\$22,388	\$24,687	\$25,131	\$26,157	\$27,440	\$27,856	\$28,831	\$31,330	\$31,860	\$33,252	\$36,282	
Health Care and Social Assistance		\$28,259	\$29,272	\$30,755	\$30,900	\$32,175	\$33,583	\$34,661	\$35,570	\$36,081	\$36,510	\$37,947	\$39,499	\$40,948	\$42,000	\$46,484	
Leisure and Hospitality		\$7,711	\$7,865	\$8,071	\$7,850	\$9,646	\$10,133	\$10,346	\$10,676	\$11,652	\$11,592	\$11,940	\$14,594	\$13,058	\$14,945	\$16,093	
Other Services		\$8,479	\$9,462	\$9,710	\$10,314	\$11,496	\$12,534	\$14,947	\$14,983	\$15,139	\$17,508	\$18,345	\$18,904	\$21,903	\$23,172	\$24,745	
Public Administration		\$19,621	\$20,583	\$21,992	\$24,064	\$25,161	\$27,734	\$29,922	\$31,217	\$31,459	\$32,842	\$34,718	\$34,802	\$36,872	\$37,682	\$39,716	

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» UNC Master's Degree Program Outcomes

As shown in Figure 65, enrollment in UNC master's programs showed an increase in enrollment and graduation between the 2016-2017 and 2020-2021 program years. Students who were recorded as having graduated from a master's program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion.

Figure 65. UNC Master's Degree Program Participants and Completers by Program Year

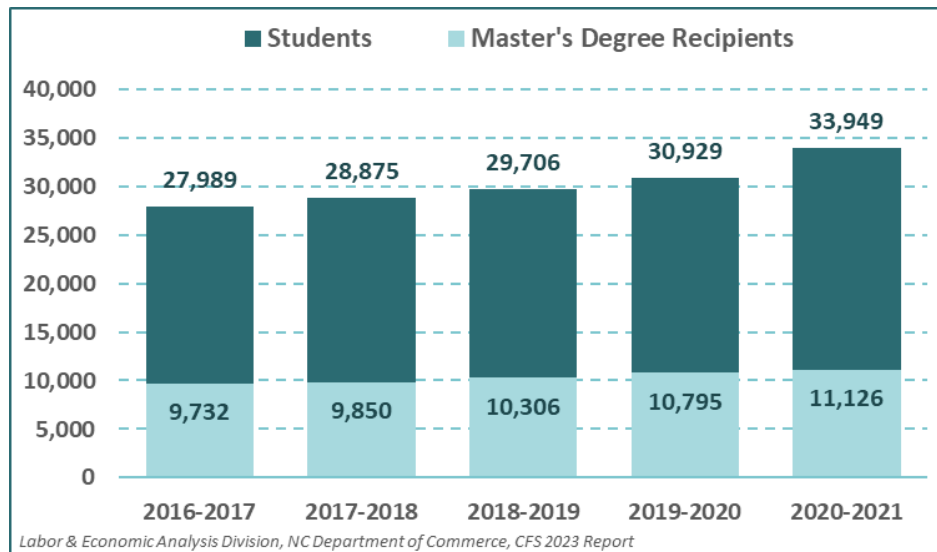
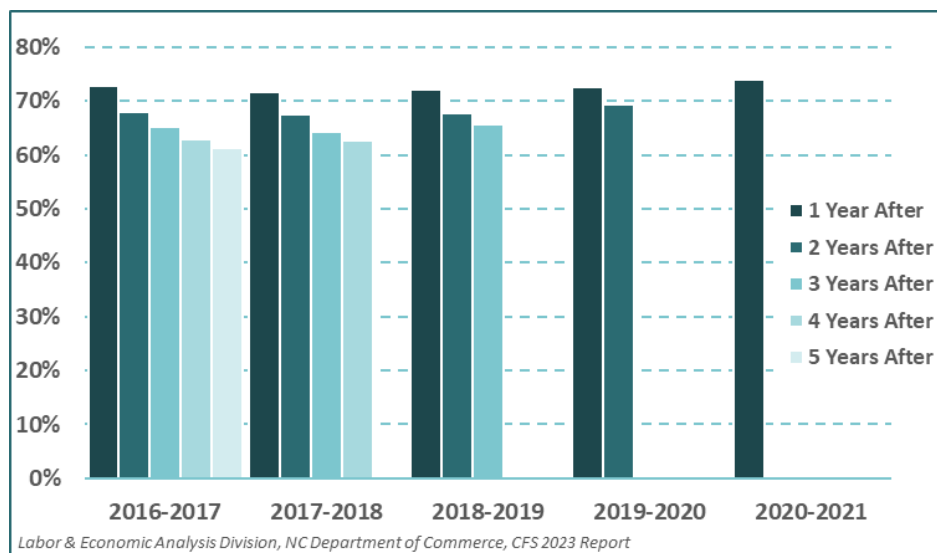


Figure 66. UNC Master's Graduates Employed in North Carolina After Degree Conferral, by Year of Graduation

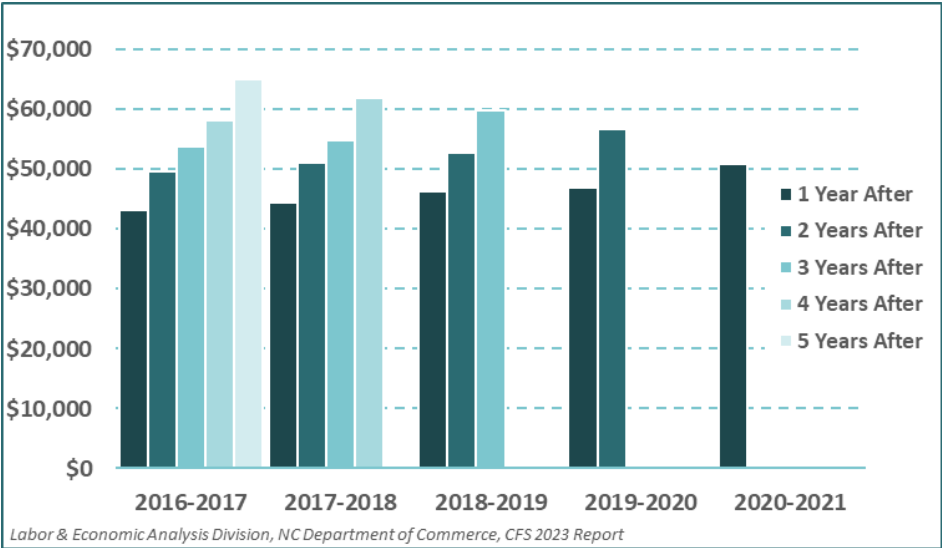


Post-master's employment in North Carolina at one year following completion remained stable across the cohorts examined, with only small fluctuations (72%-74%). However, these employment rates declined within a cohort for each year after graduation (Figure 66), a common pattern across most workforce training and

education programs. Post-graduation enrollment in higher education stayed stable across cohorts at 9%-10% one year after degree completion and declined slightly over time within each cohort (Table 17).

Median wages following degree conferral show only small cohort differences (Figure 67 and Table 17). One year post-graduation wages increased overall from the 2016-2017 to 2020-2021 graduates. These one year post-exit median wages ranged from \$43,144 (2016-2017 graduates) to \$50,900 (2020-2021 graduates). For all cohorts, wages increased steadily over time.

Figure 67. Median Wage of UNC Master’s Program Completers in North Carolina, by Year of Graduation



Recent master’s recipients (2020-2021 cohort) were most likely to be employed in Educational Services (37%), followed by Health Care and Social Assistance (27%), and Professional and Business Services (23%) (Figure 68). Overall, UNC master’s graduates showed wage growth over time, but wages varied considerably by industry, with graduates employed in manufacturing earning the most (\$67,570), placing them far above the second highest paying industry financial activities (\$54,202).

Figure 68. 2020-2021 UNC Master’s Program Completers One Year After Graduation: Percentage Employed and Median Wage by Industry

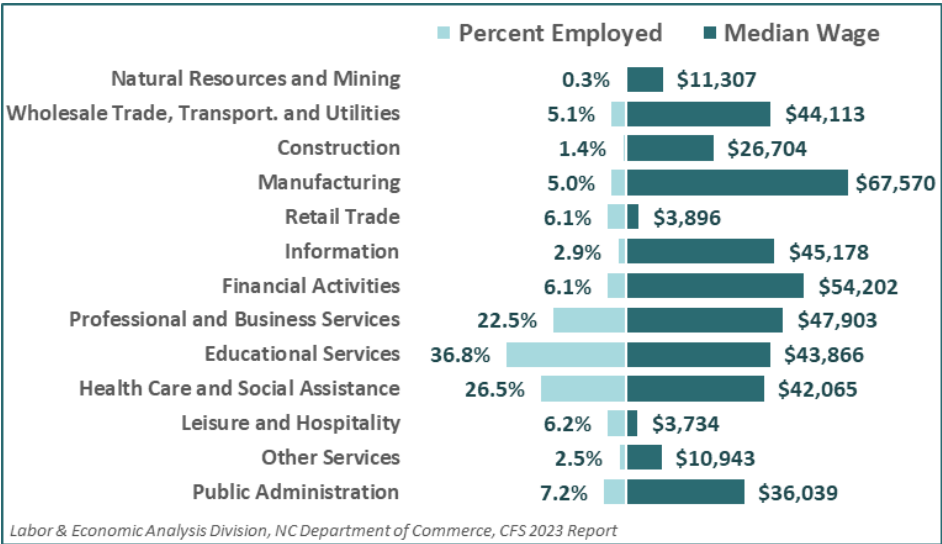


Table 17. UNC Master's Degree Program Participants and Completers, Outcomes One Through Five Years After Exit, Overall and By Industry

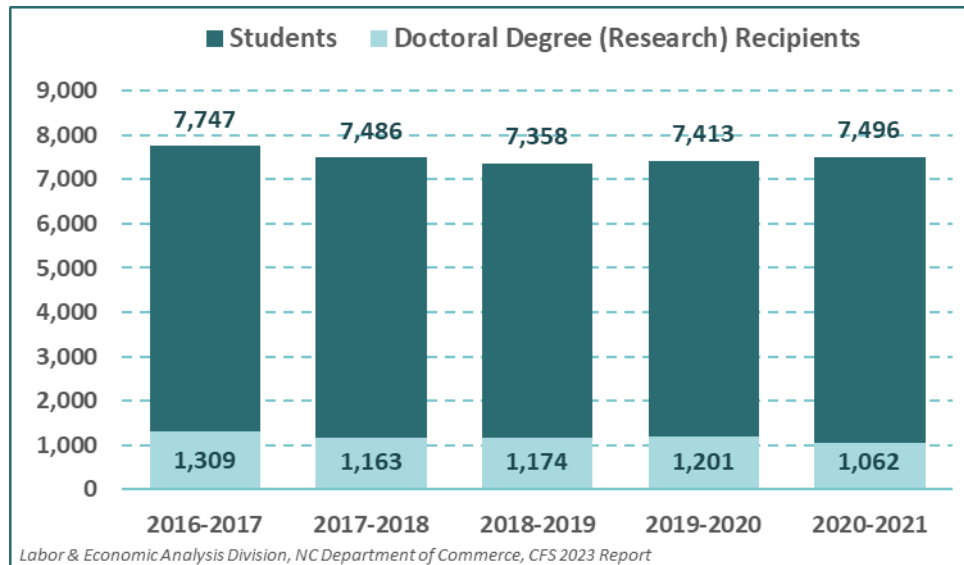
University Of North Carolina System							Common Follow-up System: Evaluative Measures, 2023 Report									
Master's Degree																
All Programs							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Students		27,989	28,875	29,706	30,929	33,949	27,989	28,875	29,706	30,929	27,989	28,875	29,706	27,989	28,875	27,989
Master's Degree Recipients		9,732	9,850	10,306	10,795	11,126	9,732	9,850	10,306	10,795	9,732	9,850	10,306	9,732	9,850	9,732
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Master's Degree Recipients Employed in North Carolina		N 73%	7,087 72%	7,058 72%	7,435 73%	7,837 74%	6,610 68%	6,645 67%	6,985 68%	7,499 69%	6,340 65%	6,327 64%	6,772 66%	6,113 63%	6,171 63%	5,969 61%
Master's Degree Recipients' Wages in North Carolina		Mean Median	\$46,782 \$43,144	\$50,259 \$44,377	\$52,335 \$46,349	\$54,583 \$46,975	\$55,858 \$49,631	\$58,838 \$51,087	\$61,538 \$52,718	\$65,463 \$56,735	\$60,751 \$53,757	\$65,227 \$54,906	\$69,213 \$59,914	\$66,761 \$58,083	\$74,312 \$61,816	\$74,901 \$65,118
Graduates Enrolled in NC Public Higher Education		N %	998 10%	958 10%	915 9%	934 9%	972 10%	910 9%	851 8%	854 8%	906 9%	846 9%	811 8%	760 8%	741 8%	631 6%
Graduates Enrolled in NC Public Education, Employment, or Training Program		N %	1,288 13%	1,324 13%	1,392 14%	1,670 15%	1,296 13%	1,387 14%	1,447 14%	1,663 15%	1,296 13%	1,441 15%	1,435 14%	1,247 13%	1,379 14%	1,182 12%
Graduates Enrolled or Employed in NC		N %	7,298 75%	7,299 74%	7,671 74%	8,151 76%	8,559 77%	6,836 70%	6,903 70%	7,265 70%	7,826 72%	6,612 68%	6,620 67%	7,067 69%	6,376 66%	6,444 65%
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	*	0.4%	0.1%	0.2%	*	0.3%	0.3%	0.2%	0.3%
Wholesale Trade, Transport. and Utilities		3.1%	3.1%	3.4%	4.1%	5.1%	3.3%	3.2%	3.8%	4.1%	3.3%	3.7%	4.0%	3.4%	4.2%	3.8%
Construction		0.9%	1.2%	1.0%	1.1%	1.4%	1.2%	1.1%	1.2%	1.2%	1.2%	1.1%	1.5%	1.2%	1.5%	1.2%
Manufacturing		4.9%	4.8%	4.9%	4.3%	5.0%	5.0%	5.1%	5.1%	4.7%	4.8%	5.2%	5.3%	5.1%	5.3%	5.3%
Retail Trade		5.7%	6.3%	5.5%	5.7%	6.1%	4.2%	4.7%	3.6%	4.0%	3.5%	3.9%	3.6%	3.4%	3.6%	3.2%
Information		2.0%	2.6%	2.3%	2.3%	2.9%	2.2%	2.9%	2.5%	2.7%	2.4%	3.0%	2.9%	2.7%	3.4%	3.2%
Financial Activities		5.0%	5.2%	6.1%	5.4%	6.1%	5.4%	5.9%	6.1%	6.1%	6.1%	6.0%	7.0%	6.1%	6.8%	6.7%
Professional and Business Services		18.6%	17.8%	19.2%	20.7%	22.5%	19.0%	17.4%	19.1%	21.8%	19.0%	17.6%	21.2%	18.5%	18.9%	19.7%
Educational Services		43.9%	41.9%	37.5%	37.4%	36.8%	39.6%	39.1%	34.9%	36.0%	38.5%	37.9%	35.0%	37.0%	37.3%	36.8%
Health Care and Social Assistance		24.1%	25.2%	28.7%	26.5%	26.5%	25.2%	25.2%	28.5%	26.8%	25.0%	25.1%	27.3%	24.6%	25.2%	24.3%
Leisure and Hospitality		7.5%	7.6%	7.6%	6.2%	6.2%	5.5%	5.2%	4.3%	4.5%	4.5%	3.7%	3.9%	3.0%	3.8%	3.4%
Other Services		2.5%	2.8%	2.5%	2.8%	2.5%	2.4%	2.1%	2.2%	2.5%	2.1%	2.3%	2.4%	2.1%	2.0%	2.3%
Public Administration		7.5%	8.0%	7.7%	7.7%	7.2%	7.4%	8.1%	7.7%	7.8%	7.7%	7.5%	7.9%	8.0%	7.7%	8.0%
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$24,969	\$11,063	\$12,145	\$11,354	\$11,307	\$38,851	*	\$5,113	\$6,014	\$49,359	*	\$32,600	\$50,952	\$35,000	\$56,356
Wholesale Trade, Transport. and Utilities		\$33,714	\$35,372	\$42,888	\$40,592	\$44,113	\$43,479	\$50,064	\$50,108	\$56,930	\$56,148	\$54,244	\$52,190	\$64,400	\$60,000	\$62,498
Construction		\$32,432	\$27,912	\$38,003	\$39,420	\$26,704	\$35,483	\$39,854	\$42,445	\$44,147	\$51,207	\$51,075	\$39,107	\$65,127	\$45,847	\$68,332
Manufacturing		\$62,802	\$70,765	\$70,816	\$74,056	\$67,570	\$71,107	\$77,098	\$77,685	\$74,973	\$77,793	\$83,995	\$83,702	\$84,198	\$82,114	\$84,758
Retail Trade		\$3,307	\$3,078	\$2,744	\$4,211	\$3,896	\$4,767	\$3,775	\$5,060	\$5,835	\$6,017	\$5,122	\$6,645	\$8,148	\$7,067	\$9,402
Information		\$36,146	\$37,649	\$39,856	\$35,640	\$45,178	\$42,237	\$43,296	\$49,967	\$44,803	\$51,306	\$54,287	\$55,289	\$68,803	\$62,401	\$68,161
Financial Activities		\$49,255	\$56,222	\$57,043	\$63,717	\$54,202	\$60,857	\$64,818	\$71,731	\$67,452	\$65,942	\$81,615	\$71,140	\$77,209	\$83,021	\$83,185
Professional and Business Services		\$42,864	\$42,459	\$46,450	\$46,884	\$47,903	\$52,818	\$53,520	\$56,192	\$56,376	\$57,727	\$58,719	\$60,003	\$64,807	\$61,500	\$69,690
Educational Services		\$37,336	\$38,770	\$39,424	\$41,048	\$43,866	\$42,865	\$43,628	\$44,359	\$47,641	\$45,827	\$46,960	\$49,959	\$49,194	\$51,751	\$55,016
Health Care and Social Assistance		\$36,677	\$38,278	\$40,162	\$39,973	\$42,065	\$44,835	\$44,799	\$47,246	\$49,383	\$47,612	\$49,313	\$52,083	\$52,424	\$53,470	\$56,877
Leisure and Hospitality		\$3,075	\$3,311	\$3,093	\$3,217	\$3,734	\$3,273	\$3,551	\$4,923	\$4,083	\$3,627	\$4,790	\$4,568	\$4,562	\$5,781	\$4,361
Other Services		\$5,573	\$8,981	\$6,700	\$14,638	\$10,943	\$17,791	\$25,034	\$28,253	\$23,019	\$29,788	\$30,587	\$21,599	\$33,498	\$40,554	\$35,349
Public Administration		\$34,553	\$34,099	\$33,036	\$36,774	\$36,039	\$42,422	\$41,895	\$42,851	\$44,019	\$46,285	\$47,295	\$44,155	\$49,968	\$49,977	\$52,391
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		\$42,661	\$44,914	\$39,171	\$28,906	\$25,493	\$49,034	*	\$46,904	\$22,264	\$64,524	*	\$57,355	\$59,471	\$47,614	\$56,917
Wholesale Trade, Transport. and Utilities		\$46,787	\$50,979	\$48,234	\$57,967	\$59,736	\$54,213	\$62,384	\$54,519	\$70,208	\$66,325	\$63,973	\$62,130	\$72,053	\$72,953	\$77,774
Construction		\$36,289	\$40,306	\$46,011	\$55,810	\$39,724	\$42,741	\$47,712	\$53,291	\$56,364	\$56,076	\$56,607	\$56,025	\$67,094	\$58,882	\$76,783
Manufacturing		\$67,357	\$72,977	\$73,752	\$80,400	\$74,104	\$75,581	\$83,586	\$80,560	\$82,639	\$85,543	\$90,916	\$87,127	\$90,896	\$95,204	\$93,442
Retail Trade		\$11,752	\$10,245	\$11,277	\$13,991	\$14,413	\$16,921	\$13,265	\$18,963	\$19,628	\$19,390	\$17,947	\$25,671	\$23,646	\$26,072	\$27,719
Information		\$47,238	\$48,917	\$54,597	\$51,335	\$58,647	\$54,095	\$52,230	\$71,322	\$63,714	\$61,286	\$62,772	\$68,164	\$71,964	\$77,872	\$76,169
Financial Activities		\$58,913	\$66,370	\$66,034	\$70,432	\$66,957	\$68,869	\$74,496	\$77,517	\$77,494	\$72,534	\$88,611	\$84,565	\$85,181	\$93,726	\$92,274
Professional and Business Services		\$44,053	\$44,244	\$46,984	\$48,477	\$53,316	\$55,007	\$55,133	\$57,789	\$60,143	\$56,324	\$62,782	\$63,914	\$65,456	\$73,343	\$75,693
Educational Services		\$32,136	\$34,581	\$34,852	\$37,337	\$38,974	\$38,899	\$41,166	\$41,596	\$44,600	\$42,385	\$44,526	\$46,384	\$46,420	\$49,182	\$51,543
Health Care and Social Assistance		\$42,444	\$46,816	\$47,547	\$48,524	\$50,519	\$51,677	\$55,414	\$56,493	\$58,535	\$55,872	\$60,283	\$61,305	\$60,403	\$64,676	\$64,899
Leisure and Hospitality		\$8,832	\$9,774	\$10,050	\$9,771	\$10,584	\$11,572	\$13,085	\$14,270	\$13,822	\$14,177	\$15,425	\$15,012	\$19,850	\$19,601	\$20,352
Other Services		\$16,377	\$20,989	\$20,836	\$26,554	\$21,741	\$24,199	\$32,628	\$33,615	\$33,155	\$31,455	\$35,639	\$33,147	\$35,200	\$44,534	\$38,613
Public Administration		\$33,924	\$34,623	\$32,987	\$36,653	\$36,160	\$40,800	\$40,774	\$40,357	\$43,084	\$45,286	\$47,204	\$44,059	\$49,588	\$50,060	\$52,094

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» UNC Doctoral (Research) Degree Program Outcomes

As shown in Figure 69, enrollment in research-focused doctoral programs remained rather consistent over time around 7,500 from the 2016-2017 to 2020-2021 program years,

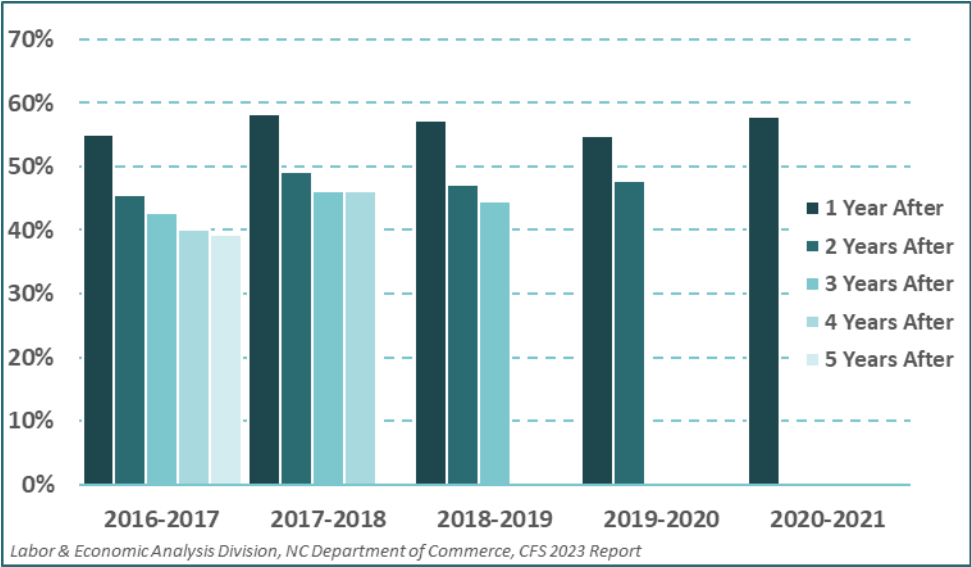
Figure 69. UNC Doctoral (Research) Degree Program Participants and Completers by Program Year



Students who were recorded as having graduated from a doctoral research program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. As measured by one year post-graduation outcomes, employment rates of research doctorate recipients in North Carolina generally increased across the cohorts from 55% to 58% (Figure 70). These rates are low compared to graduates from bachelor's and master's programs, which may be due to the unique employment circumstances of doctoral recipients.

Many short-term academic jobs are not covered by unemployment insurance, which would exclude them from the statistics presented. Additionally, many research doctorate recipients leave the state for academic employment, as academic hiring guidelines typically require universities to conduct a national search. Even for institutions with no such requirement, doctoral research degrees focus on extremely narrow areas and, any such focused area is likely to have very few, if any, job openings in a particular region. Thus, students trained by UNC institutions may leave the state for jobs in their focus area, while the same trend is likely to work in reverse where students trained at out-of-state universities come to North Carolina for jobs in their respective focus area. The second year after graduation shows a noticeable drop in employment within North Carolina, followed by much smaller declines in subsequent years. This unique employment outcome may be due to recipients of doctoral degrees finding out-of-state employment following a transitional post-graduate year (another phenomenon common among doctoral students/graduates).

Figure 70. Percentage of UNC Doctoral (Research) Program Completers Employed in North Carolina After Degree Conferal, by Year of Graduation



Short-term wage outcomes one year after graduation show an increase across the first two cohorts of research doctorates, then a decline for the 2018-2019 graduating class (Figure 71). Within each cohort, wages increase considerably over time. The vast majority of those completing doctoral research programs were employed in Educational Services (70%) followed distantly by Professional and Business Services (18%) and Health Care and Social Assistance (12%) (Table 18).

Figure 71. Median Wage of UNC Doctoral (Research) Program Completers in North Carolina, by Year of Graduation

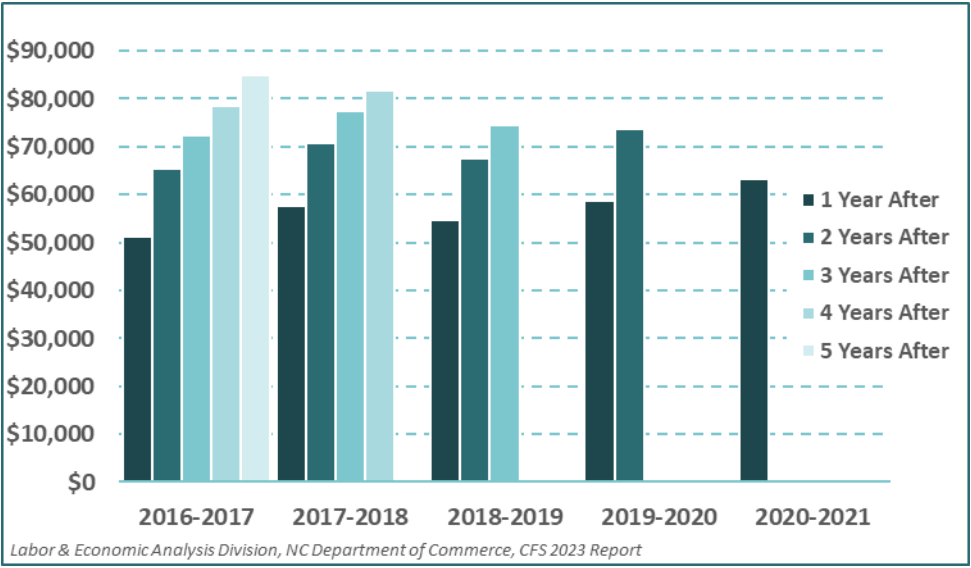
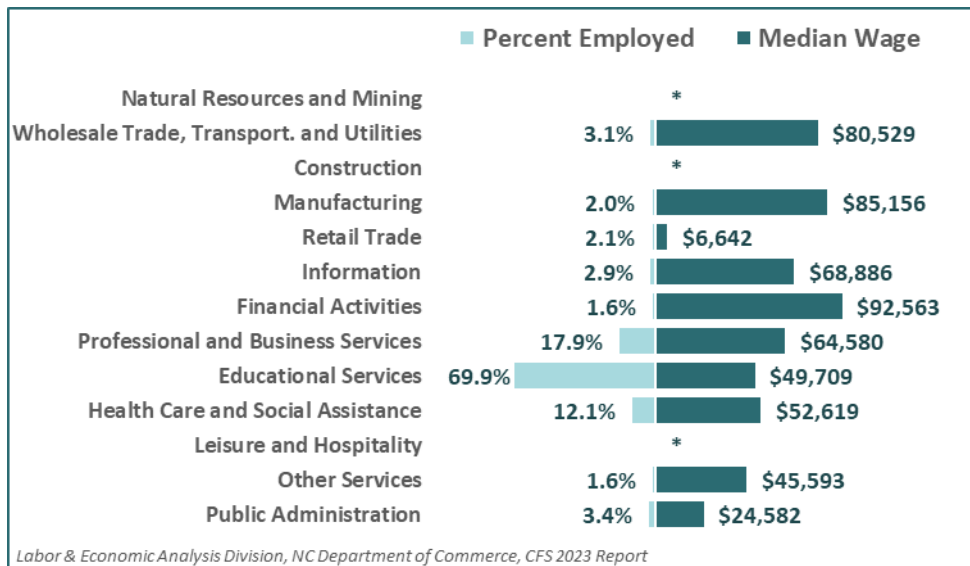


Figure 72. 2020-2021 UNC Doctoral (Research) Program Completers One Year After Graduation: Percentage Employed and Median Wage by Industry



Overall, UNC doctoral research programs saw wage increases over time across graduating cohorts, as well as larger median wage growth within each graduating cohort.

Table 18. UNC Doctoral (Research) Degree Program Participants and Completers, One Through Five Years After Exit, Overall and By Industry

University Of North Carolina System							Common Follow-up System: Evaluative Measures, 2023 Report									
Doctoral Degree (Research)																
All Programs							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Students		7,747	7,486	7,358	7,413	7,496	7,747	7,486	7,358	7,413	7,747	7,486	7,358	7,747	7,486	7,747
Doctoral Degree (Research) Recipients		1,309	1,163	1,174	1,201	1,062	1,309	1,163	1,174	1,201	1,309	1,163	1,174	1,309	1,163	1,309
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Doctoral Degree (Research) Recipients Employed in North Carolina		N	721	677	673	658	596	573	554	574	560	537	522	526	537	514
		%	55%	58%	57%	55%	58%	46%	49%	47%	48%	43%	46%	44%	40%	46%
Doctoral Degree (Research) Recipients' Wages in North Carolina		Mean	\$52,260	\$58,094	\$55,691	\$62,207	\$65,702	\$71,992	\$69,303	\$76,896	\$73,132	\$82,133	\$77,812	\$81,266	\$93,935	\$91,345
		Median	\$51,255	\$57,641	\$54,688	\$58,587	\$63,282	\$65,305	\$70,629	\$67,648	\$73,702	\$72,379	\$77,363	\$74,578	\$78,615	\$81,715
Graduates Enrolled in NC Public Higher Education		N	33	37	31	26	38	32	28	33	22	20	27	21	16	23
		%	3%	3%	3%	2%	3%	3%	3%	2%	3%	2%	2%	2%	2%	1%
Graduates Enrolled in NC Public Education, Employment, or Training Program		N	40	54	52	64	50	54	56	75	33	46	63	37	50	50
		%	3%	5%	4%	5%	5%	4%	5%	5%	6%	3%	4%	5%	3%	4%
Graduates Enrolled or Employed in NC		N	708	676	680	668	608	584	565	597	562	545	534	534	547	525
		%	54%	58%	58%	56%	58%	46%	50%	48%	50%	43%	47%	45%	41%	47%
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		*	2.7%	1.8%	1.7%	3.1%	*	3.0%	1.8%	2.6%	*	2.8%	3.1%	*	3.2%	2.9%
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		3.2%	3.2%	3.0%	3.0%	2.0%	3.9%	3.8%	3.8%	3.3%	3.8%	3.9%	4.2%	3.8%	4.1%	4.7%
Retail Trade		1.4%	1.5%	*	*	2.1%	*	*	*	*	*	*	*	*	*	*
Information		3.2%	3.5%	1.6%	2.4%	2.9%	2.3%	3.5%	*	3.1%	2.1%	4.5%	*	1.9%	5.0%	2.9%
Financial Activities		2.1%	*	1.6%	1.5%	1.6%	2.5%	*	*	2.4%	3.8%	*	*	4.2%	*	3.5%
Professional and Business Services		14.1%	14.9%	14.1%	16.7%	17.9%	16.6%	16.8%	17.7%	21.3%	19.1%	19.2%	20.5%	19.2%	21.2%	19.6%
Educational Services		79.6%	73.1%	74.6%	69.5%	69.9%	69.3%	65.1%	68.2%	63.8%	64.5%	62.8%	64.4%	62.9%	61.5%	60.7%
Health Care and Social Assistance		7.4%	9.0%	12.5%	12.6%	12.1%	9.9%	10.6%	12.6%	14.3%	10.4%	11.2%	13.2%	9.7%	11.0%	10.1%
Leisure and Hospitality		2.1%	1.8%	2.1%	*	*	2.0%	1.7%	*	*	2.0%	*	*	*	*	*
Other Services		*	*	1.6%	1.7%	1.6%	*	*	*	*	*	*	1.9%	*	*	*
Public Administration		1.4%	2.2%	2.2%	*	3.4%	2.0%	2.4%	2.5%	2.4%	2.0%	3.0%	3.8%	2.7%	2.0%	3.1%
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		*	\$66,531	\$39,754	\$62,384	\$80,529	*	\$85,873	\$76,947	\$83,960	*	\$86,813	\$65,622	*	\$73,920	\$86,492
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		\$80,417	\$75,498	\$77,236	\$87,119	\$85,156	\$87,639	\$97,466	\$86,222	\$83,530	\$93,042	\$105,614	\$85,713	\$112,354	\$108,098	\$103,248
Retail Trade		\$3,745	\$7,005	*	*	\$6,642	*	*	*	*	*	*	*	*	*	*
Information		\$20,919	\$61,825	\$35,750	\$56,249	\$68,886	\$100,381	\$109,611	*	\$77,039	\$95,410	\$103,165	*	\$91,115	\$110,522	\$88,205
Financial Activities		\$55,943	*	\$38,754	\$86,039	\$92,563	\$103,533	*	*	\$80,264	\$111,238	*	*	\$115,819	*	\$140,045
Professional and Business Services		\$55,201	\$67,512	\$61,690	\$73,282	\$64,580	\$73,503	\$86,185	\$72,224	\$84,912	\$76,639	\$88,861	\$78,839	\$91,750	\$98,964	\$102,531
Educational Services		\$41,659	\$48,000	\$47,866	\$50,584	\$49,709	\$54,418	\$63,700	\$60,934	\$59,956	\$63,776	\$69,772	\$67,020	\$68,206	\$72,840	\$72,469
Health Care and Social Assistance		\$22,624	\$48,076	\$45,328	\$51,354	\$52,619	\$36,799	\$56,048	\$51,255	\$62,429	\$54,028	\$59,051	\$53,706	\$63,113	\$66,296	\$67,125
Leisure and Hospitality		\$1,875	\$4,549	\$2,195	*	*	\$4,918	\$3,089	*	*	\$3,652	*	*	*	*	*
Other Services		*	*	\$20,891	\$8,681	\$45,593	*	*	*	*	*	*	\$32,586	*	*	*
Public Administration		\$43,446	\$57,727	\$45,520	*	\$24,582	\$46,109	\$65,577	\$67,289	\$10,558	\$75,659	\$63,531	\$56,330	\$77,352	\$68,656	\$80,561
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		*	\$72,014	\$47,996	\$68,998	\$79,012	*	\$83,024	\$75,127	\$79,892	*	\$87,197	\$76,355	*	\$99,893	\$100,498
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		\$81,237	\$76,230	\$68,723	\$84,629	\$80,223	\$87,863	\$91,933	\$93,356	\$86,350	\$102,949	\$107,526	\$86,364	\$117,756	\$122,603	\$112,245
Retail Trade		\$16,878	\$13,761	*	*	\$20,210	*	*	*	*	*	*	*	*	*	*
Information		\$45,594	\$57,112	\$50,991	\$63,352	\$67,758	\$83,428	\$81,856	*	\$77,690	\$82,882	\$87,588	*	\$77,813	\$112,277	\$76,064
Financial Activities		\$53,947	*	\$63,444	\$87,503	\$87,700	\$83,592	*	*	\$84,889	\$74,304	*	*	\$94,333	*	\$137,966
Professional and Business Services		\$59,561	\$67,669	\$62,053	\$71,358	\$66,043	\$75,859	\$80,525	\$72,795	\$77,781	\$73,970	\$91,132	\$80,027	\$85,746	\$117,723	\$99,894
Educational Services		\$42,795	\$46,250	\$45,991	\$49,571	\$47,986	\$54,249	\$61,076	\$58,131	\$58,529	\$61,386	\$67,965	\$65,023	\$65,596	\$68,792	\$70,507
Health Care and Social Assistance		\$29,097	\$52,286	\$44,952	\$54,735	\$56,752	\$44,501	\$59,320	\$52,499	\$70,829	\$59,115	\$64,442	\$56,683	\$70,492	\$73,043	\$75,690
Leisure and Hospitality		\$5,790	\$11,650	\$8,201	*	*	\$7,968	\$13,419	*	*	\$8,141	*	*	*	*	*
Other Services		*	*	\$27,162	\$26,574	\$52,770	*	*	*	*	*	*	\$38,024	*	*	*
Public Administration		\$52,795	\$59,419	\$47,636	*	\$46,512	\$50,926	\$67,508	\$65,214	\$34,678	\$71,574	\$53,674	\$53,742	\$74,766	\$63,689	\$81,695

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» UNC Doctoral (Professional Practice) Degree Program Outcomes

As shown in Figure 73, enrollment in professional doctoral programs in the UNC system stayed rather consistent around 4,740 between 2016-2017 and 2019-2020 before increasing slightly during the 2020-2021 program year (also see Table 19). Numbers of graduates also increased somewhat during this period.

Figure 73. UNC Doctoral (Professional Practice) Degree Program Participants and Completers by Program Year

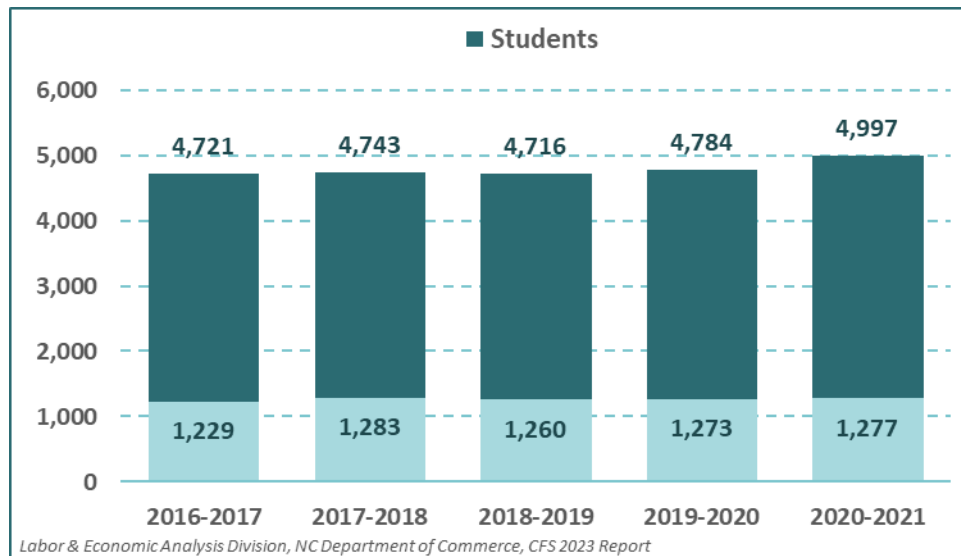
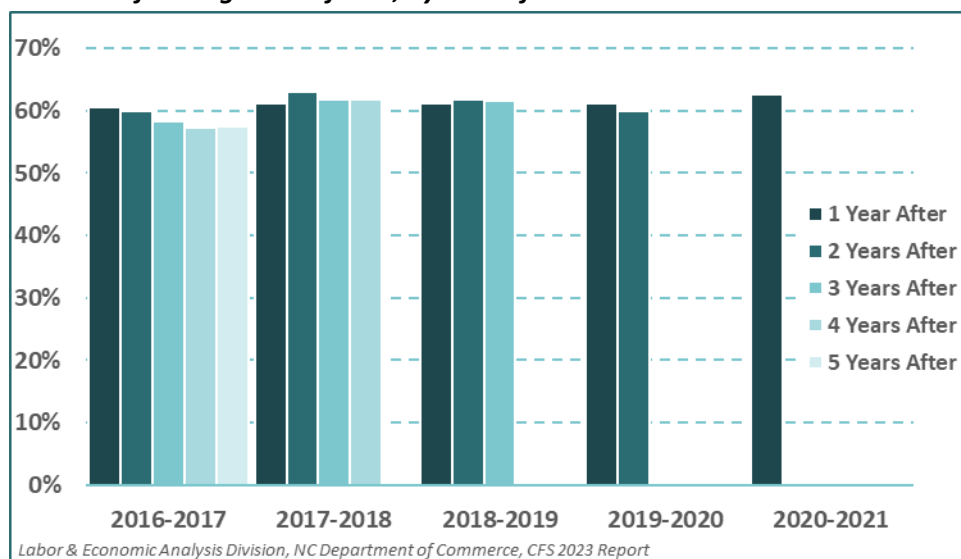


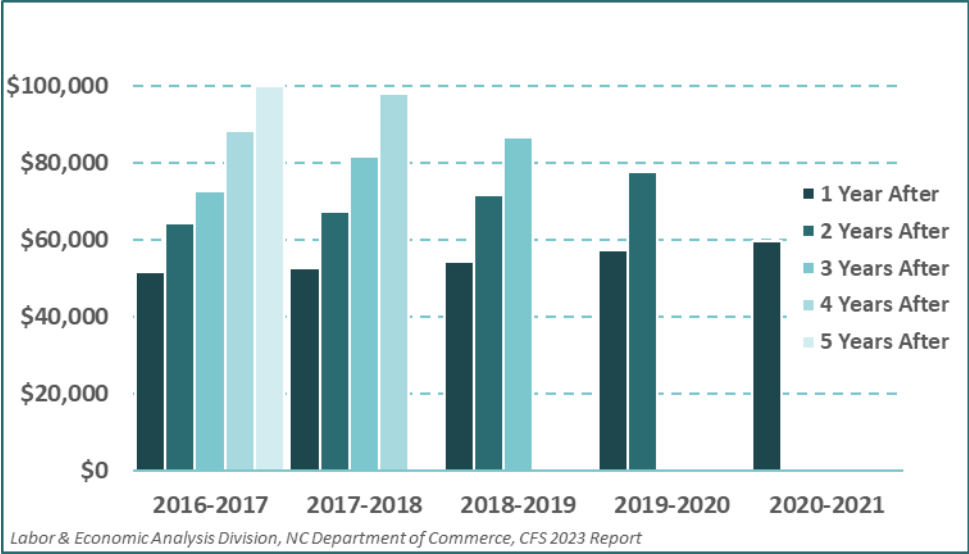
Figure 74. Percentage of UNC Doctoral (Professional Practice) Program Completers Employed in North Carolina After Degree Conferral, by Year of Graduation



Students who were recorded as having graduated from a doctoral program were defined as program completers/graduates, and their subsequent wages and employment outcomes were tracked post completion. Employment rates for professional doctoral graduates are somewhat low compared to other programs below the doctoral level, which may be due in part to graduates of professional practice doctoral programs finding employment out-of-state (Figure 74), joining a partnership (or becoming self-employed), making them ineligible

for UI benefits. Employment rates and median wages for professional doctoral graduates within North Carolina show an increase across cohorts and show high wage growth within cohorts (Figure 75).

Figure 75. Median Wage of UNC Professional Doctorate Program Completers in North Carolina, by Year of Graduation



Recent graduates of doctoral practice programs were most likely to be employed within the Health Care and Social Assistance (62%) and Professional and Business Services industries (27%), fields that include medical doctors and attorneys-at-law (Figure 76). Overall, UNC professional practice doctoral graduates show steady employment and positive wage outcomes.

Figure 76. 2020-2021 UNC Doctoral (Professional Practice) Program Completers One Year After Graduation: Percentage Employed and Median Wage by Industry

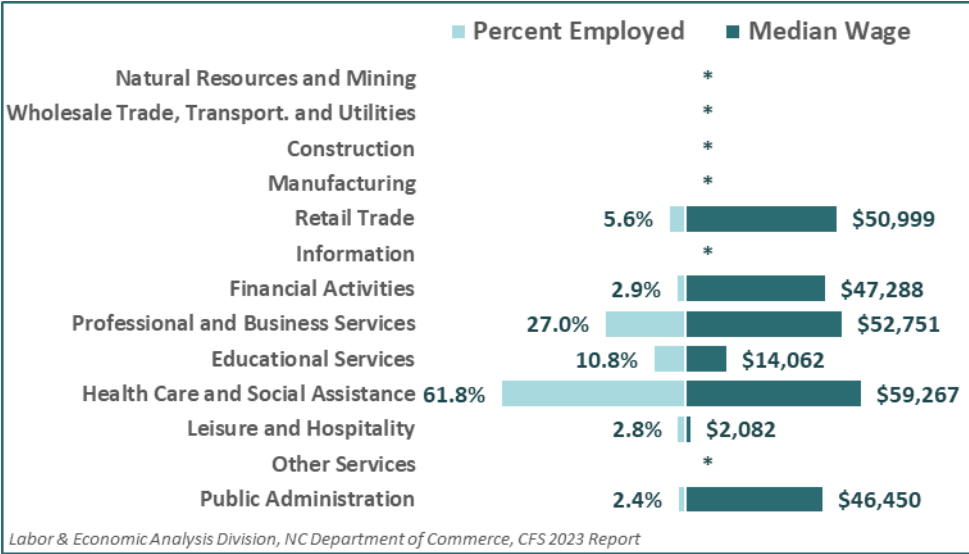


Table 19. UNC Doctoral (Professional) Degree Program Participants and Completers, One Through Five Years After Exit, Overall and By Industry

University Of North Carolina System							Common Follow-up System: Evaluative Measures, 2023 Report									
Doctoral Degree (Professional Practice)																
All Programs							Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Program Year		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2016-2017	2017-2018	2018-2019	2019-2020	2016-2017	2017-2018	2018-2019	2016-2017	2017-2018	2016-2017
Students		4,721	4,743	4,716	4,784	4,997	4,721	4,743	4,716	4,784	4,721	4,743	4,716	4,721	4,743	4,721
Doctoral Degree (Professional Practice) Recipients		1,229	1,283	1,260	1,273	1,277	1,229	1,283	1,260	1,273	1,229	1,283	1,260	1,229	1,283	1,229
Post-Completion Outcome Measures		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Doctoral Degree (Professional Practice) Recipients	N	744	786	770	778	800	737	810	779	762	716	792	776	704	794	707
Employed in North Carolina	%	61%	61%	61%	61%	63%	60%	63%	62%	60%	58%	62%	62%	57%	62%	58%
Doctoral Degree (Professional Practice) Recipients' Wages in North Carolina	Mean	\$62,274	\$66,495	\$68,592	\$72,514	\$77,207	\$79,232	\$82,223	\$88,785	\$94,712	\$88,257	\$99,204	\$103,994	\$105,293	\$112,418	\$117,231
	Median	\$51,643	\$52,787	\$54,371	\$57,430	\$59,734	\$64,423	\$67,462	\$71,745	\$77,731	\$72,646	\$81,676	\$86,841	\$88,532	\$98,192	\$100,131
Graduates Enrolled in NC Public Higher Education	N	31	31	27	30	27	39	32	26	30	28	28	23	20	21	14
	%	3%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	1%
Graduates Enrolled in NC Public Education, Employment, or Training Program	N	43	45	56	61	52	53	66	61	66	57	73	60	62	73	62
	%	3%	4%	4%	5%	4%	4%	5%	5%	5%	5%	6%	5%	5%	6%	5%
Graduates Enrolled or Employed in NC	N	749	794	774	791	808	743	817	785	773	721	798	782	710	804	713
	%	61%	62%	61%	62%	63%	60%	64%	62%	61%	59%	62%	62%	58%	63%	58%
Graduates' Employment by Industry†		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		1.3%	*	*	1.9%	*	1.6%	*	*	*	2.0%	*	1.3%	1.8%	*	2.1%
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade		10.2%	6.5%	3.4%	5.3%	5.6%	7.6%	5.3%	2.8%	3.9%	7.4%	5.2%	2.7%	6.5%	4.7%	5.9%
Information		*	*	2.3%	3.1%	*	*	*	2.1%	1.3%	1.4%	*	*	1.7%	*	2.3%
Financial Activities		2.0%	1.8%	1.7%	2.6%	2.9%	2.7%	2.3%	1.9%	2.2%	3.4%	1.6%	2.6%	2.8%	2.0%	2.7%
Professional and Business Services		30.2%	27.9%	28.4%	28.5%	27.0%	29.7%	27.9%	27.7%	28.6%	27.9%	28.8%	28.9%	27.6%	30.2%	29.8%
Educational Services		13.8%	9.7%	10.3%	11.2%	10.8%	8.8%	8.9%	8.1%	10.1%	8.4%	7.4%	6.7%	9.8%	7.7%	9.2%
Health Care and Social Assistance		50.5%	57.9%	59.1%	57.7%	61.8%	53.5%	58.5%	60.3%	59.1%	54.2%	59.5%	60.6%	55.5%	59.4%	55.2%
Leisure and Hospitality		2.8%	2.4%	2.6%	1.8%	2.8%	1.9%	*	*	1.6%	1.7%	*	*	*	*	1.7%
Other Services		1.3%	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Administration		6.6%	4.3%	5.3%	5.3%	2.4%	7.5%	4.2%	6.4%	6.0%	7.4%	5.2%	6.6%	7.2%	5.0%	6.2%
Graduates' Median Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		\$17,564	*	*	\$6,400	*	\$29,714	*	*	*	\$17,996	*	\$31,115	\$71,600	*	\$48,178
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade		\$32,518	\$43,335	\$4,707	\$40,665	\$50,999	\$110,253	\$86,079	\$56,660	\$83,555	\$106,602	\$88,213	\$114,505	\$103,538	\$110,575	\$98,711
Information		*	*	\$4,355	\$3,263	*	*	*	\$16,695	\$6,851	\$22,369	*	*	\$28,277	*	\$27,607
Financial Activities		\$45,270	\$29,500	\$54,111	\$31,572	\$47,288	\$61,422	\$23,023	\$53,708	\$51,794	\$64,642	\$83,078	\$76,739	\$88,310	\$68,367	\$105,953
Professional and Business Services		\$30,768	\$39,396	\$37,560	\$44,625	\$52,751	\$52,176	\$62,782	\$65,929	\$73,067	\$65,497	\$75,804	\$81,034	\$81,064	\$89,574	\$78,436
Educational Services		\$28,572	\$15,178	\$32,786	\$22,750	\$14,062	\$28,653	\$23,257	\$16,700	\$35,217	\$35,028	\$22,440	\$22,582	\$35,682	\$31,612	\$45,614
Health Care and Social Assistance		\$51,643	\$57,056	\$56,607	\$57,329	\$59,267	\$63,653	\$67,097	\$69,216	\$72,153	\$69,367	\$72,903	\$79,210	\$78,922	\$97,579	\$102,262
Leisure and Hospitality		\$990	\$1,697	\$1,068	\$1,906	\$2,082	\$1,835	*	*	\$1,229	\$2,683	*	*	*	*	\$4,121
Other Services		\$2,256	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Administration		\$31,775	\$34,671	\$34,712	\$29,590	\$46,450	\$44,564	\$52,475	\$48,866	\$51,538	\$49,851	\$49,074	\$52,685	\$53,394	\$57,306	\$60,855
Graduates' Average Wages by Industry of Employment		1 Year After					2 Years After				3 Years After			4 Years After		5 Years After
Natural Resources and Mining		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade, Transport. and Utilities		\$26,846	*	*	\$37,522	*	\$36,352	*	*	*	\$37,090	*	\$69,170	\$61,490	*	\$67,408
Construction		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade		\$49,444	\$47,613	\$38,098	\$41,348	\$47,964	\$87,752	\$69,497	\$61,906	\$66,411	\$88,229	\$74,877	\$99,260	\$89,009	\$87,748	\$78,256
Information		*	*	\$7,874	\$6,618	*	*	*	\$18,316	\$12,178	\$30,623	*	*	\$33,545	*	\$58,882
Financial Activities		\$60,254	\$46,613	\$58,882	\$82,588	\$69,072	\$71,199	\$40,456	\$63,908	\$115,822	\$71,358	\$89,982	\$67,560	\$93,492	\$83,646	\$104,261
Professional and Business Services		\$44,542	\$48,267	\$48,833	\$55,200	\$63,628	\$64,228	\$70,500	\$72,297	\$83,218	\$77,379	\$86,780	\$93,968	\$92,716	\$104,095	\$100,263
Educational Services		\$31,356	\$27,287	\$34,429	\$34,598	\$28,676	\$35,337	\$31,172	\$35,629	\$42,747	\$36,537	\$35,537	\$39,088	\$41,765	\$40,018	\$53,334
Health Care and Social Assistance		\$66,418	\$73,172	\$74,733	\$75,337	\$78,908	\$79,927	\$84,940	\$92,049	\$92,855	\$88,357	\$96,375	\$103,523	\$103,329	\$110,057	\$119,633
Leisure and Hospitality		\$2,559	\$6,198	\$4,639	\$9,508	\$10,520	\$4,806	*	*	\$9,970	\$12,518	*	*	*	*	\$25,287
Other Services		\$21,449	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Administration		\$31,061	\$39,498	\$38,486	\$31,627	\$42,899	\$38,275	\$50,240	\$46,147	\$49,774	\$44,992	\$45,473	\$49,138	\$52,248	\$56,663	\$62,573

† Employment percentages by industry total more than 100% due to individuals who were employed, and receiving wages, in more than one industry. See methodology for more information.

» Summary and Recommendations

The outcomes of UNC graduates were generally positive and improved over time. Bachelor's, master's, and doctoral degree recipients have seen their wages increase in each year after graduation, and each cohort tended to earn more in each year than the prior cohort. Higher-level credentials were associated with better wage outcomes: master's degree recipients earned more than bachelor's degree recipients, and doctoral degree recipients earned more than master's degree recipients, in each year after graduation across all the cohorts examined here.

The share of graduates employed in North Carolina typically declined in each year after graduation, but this was not necessarily a negative outcome. Individuals not employed in North Carolina might be unemployed but could also be out of the labor force (e.g. full-time parents); employed in a role, including self-employment or partnership, not covered by North Carolina's unemployment insurance laws; or employed in another state.

The wide variation in outcomes between different areas of study and different degree levels may suggest that some programs lead to better labor market outcomes than others. However, more research is needed to determine whether the degree programs themselves caused these outcomes, or if other factors were at play (such as differences in the types of students graduating from these programs). Even if some programs lead to higher wages after graduation, the highest earning programs are likely to shift over time as North Carolina's economy changes over time. Furthermore, at higher degree levels, the population of graduates shrinks substantially, making such fine-grained comparisons unreliable because, in such a small population, a difference of a few individuals could cause large shifts in the population measures. Any such interpretation, especially for smaller programs, requires a deeper analysis, such as combining multiple graduation cohorts and statistical techniques suitable for smaller populations. Information about the causal returns to degree programs and/or the variation in these returns could then be used to determine which programs provide the best return on investment for UNC students and to strengthen existing program offerings.

Appendices

North Carolina Community College System Appendix

Table 1. CTE Associate Degree Program Outcomes by Program Area, 2016-2017 Graduates

North Carolina Community College System Associate Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce											
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2016-2017											
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	1,500	319	248	78%	\$19,629	229	72%	\$25,500	216	68%	\$27,022	206	65%	\$32,000
Biological and Chemical Technologies	536	87	75	86%	\$20,185	67	77%	\$26,851	71	82%	\$29,547	63	72%	\$36,257
Business Technologies	36,619	4,525	3,606	80%	\$22,987	3,577	79%	\$28,383	3,478	77%	\$30,944	3,379	75%	\$34,223
Commercial and Artistic Production Technologies	2,710	397	299	75%	\$14,764	297	75%	\$17,796	274	69%	\$22,507	262	66%	\$24,998
Construction Technologies	2,829	444	362	82%	\$32,077	359	81%	\$38,453	352	79%	\$43,287	343	77%	\$46,757
Engineering Technologies	4,674	677	577	85%	\$31,511	560	83%	\$38,929	552	82%	\$42,864	531	78%	\$46,849
Health Sciences	19,988	4,756	4,352	92%	\$40,334	4,290	90%	\$46,538	4,208	88%	\$46,717	4,066	85%	\$50,220
Industrial Technologies	3,587	619	529	85%	\$34,755	498	80%	\$41,800	482	78%	\$45,796	473	76%	\$47,549
Public Service Technologies	20,135	2,608	2,129	82%	\$20,071	2,086	80%	\$23,681	2,057	79%	\$26,266	1,999	77%	\$29,473
Transportation Systems Technologies	4,114	633	532	84%	\$28,426	523	83%	\$33,242	517	82%	\$38,278	495	78%	\$41,474

Table 2. CTE Associate Degree Program Outcomes by Program Area, 2017-2018 Graduates

North Carolina Community College System Associate Degree Programs			Common Follow-up System: Evaluative Measures Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce											
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2017-2018											
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	1,465	282	224	79%	\$20,566	212	75%	\$26,430	202	72%	\$32,080	191	68%	\$35,610
Biological and Chemical Technologies	506	74	67	91%	\$25,301	64	86%	\$30,961	61	82%	\$35,965	60	81%	\$43,516
Business Technologies	34,372	4,383	3,488	80%	\$24,252	3,448	79%	\$28,870	3,375	77%	\$32,408	3,371	77%	\$36,537
Commercial and Artistic Production Technologies	2,660	433	315	73%	\$15,325	311	72%	\$17,335	291	67%	\$23,812	299	69%	\$29,871
Construction Technologies	2,779	451	371	82%	\$33,249	360	80%	\$38,287	356	79%	\$41,479	353	78%	\$46,740
Engineering Technologies	4,458	681	600	88%	\$31,722	572	84%	\$39,170	571	84%	\$41,503	545	80%	\$49,049
Health Sciences	19,724	5,050	4,633	92%	\$42,139	4,531	90%	\$46,679	4,359	86%	\$49,950	4,232	84%	\$52,858
Industrial Technologies	3,498	610	524	86%	\$36,072	510	84%	\$41,731	501	82%	\$42,960	481	79%	\$49,705
Public Service Technologies	18,502	2,478	2,047	83%	\$21,586	1,989	80%	\$24,201	1,918	77%	\$27,020	1,911	77%	\$32,745
Transportation Systems Technologies	3,762	625	519	83%	\$28,221	491	79%	\$33,899	478	76%	\$37,725	464	74%	\$43,183

Table 3. CTE Associate Degree Program Outcomes by Program Area, 2018-2019 Graduates

North Carolina Community College System Associate Degree Programs						Common Follow-up System: Evaluative Measures					
Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce											
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2018-2019										
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	1,375	298	231	78%	\$21,906	220	74%	\$27,294	210	70%	\$33,202
Biological and Chemical Technologies	497	92	74	80%	\$22,755	72	78%	\$27,657	70	76%	\$31,943
Business Technologies	32,895	4,144	3,266	79%	\$25,822	3,162	76%	\$30,529	3,201	77%	\$35,000
Commercial and Artistic Production Technologies	2,570	375	280	75%	\$15,936	260	69%	\$21,384	267	71%	\$27,005
Construction Technologies	2,774	381	308	81%	\$33,902	293	77%	\$39,666	290	76%	\$46,830
Engineering Technologies	4,308	601	520	87%	\$36,022	504	84%	\$41,847	502	84%	\$47,803
Health Sciences	19,341	4,821	4,408	91%	\$43,474	4,292	89%	\$50,604	4,202	87%	\$53,876
Industrial Technologies	3,449	573	476	83%	\$36,340	445	78%	\$41,241	444	77%	\$48,260
Public Service Technologies	17,183	2,273	1,891	83%	\$21,619	1,820	80%	\$25,836	1,807	79%	\$31,090
Transportation Systems Technologies	3,444	539	444	82%	\$29,176	425	79%	\$35,467	417	77%	\$41,872

Table 4. CTE Associate Degree Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

North Carolina Community College System Associate Degree Programs			Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>										
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020									Program Year 2020-2021			
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			Parti cipants	Degree Recipients	1 Year After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage			Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	1,388	222	173	78%	\$20,955	169	76%	\$27,115	1,398	247	190	77%	\$24,095
Biological and Chemical Technologies	468	70	58	83%	\$23,336	56	80%	\$30,804	453	74	65	88%	\$27,588
Business Technologies	32,299	3,583	2,792	78%	\$26,533	2,789	78%	\$32,613	30,937	4,041	3,197	79%	\$29,774
Commercial and Artistic Production Technologies	2,576	362	272	75%	\$16,271	276	76%	\$24,346	2,414	384	277	72%	\$17,077
Construction Technologies	3,040	385	293	76%	\$35,206	292	76%	\$42,324	2,831	424	348	82%	\$36,666
Engineering Technologies	4,141	541	448	83%	\$31,299	457	84%	\$39,631	3,696	603	526	87%	\$39,035
Health Sciences	19,472	4,223	3,854	91%	\$48,409	3,782	90%	\$56,432	19,647	5,098	4,663	91%	\$49,835
Industrial Technologies	3,516	454	393	87%	\$34,468	393	87%	\$42,883	3,064	516	447	87%	\$39,890
Public Service Technologies	17,288	2,061	1,661	81%	\$22,970	1,662	81%	\$29,626	15,610	2,308	1,888	82%	\$27,309
Transportation Systems Technologies	3,457	443	358	81%	\$30,055	350	79%	\$37,575	3,047	486	411	85%	\$33,362

Table 5. CTE Diploma Program Outcomes by Program Area, 2016-2017 Graduates

North Carolina Community College System Postsecondary Diploma Programs										Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>									
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2016-2017																		
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion				
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage		
Agricultural & Natural Resources Technologies	184	34	25	74%	\$16,051	23	68%	\$23,949	26	76%	\$15,635	24	71%	\$33,864	23	68%	\$43,436		
Biological and Chemical Technologies	326	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Business Technologies	2,235	652	505	77%	\$22,043	508	78%	\$27,491	507	78%	\$29,840	500	77%	\$32,554	489	75%	\$36,756		
Commercial and Artistic Production Technologies	271	53	34	64%	\$11,924	35	66%	\$19,238	33	62%	\$18,974	27	51%	\$20,116	31	58%	\$18,622		
Construction Technologies	1,145	342	256	75%	\$27,366	261	76%	\$34,451	258	75%	\$35,101	248	73%	\$39,758	244	71%	\$44,126		
Engineering Technologies	421	67	56	84%	\$24,768	59	88%	\$31,507	55	82%	\$44,846	56	84%	\$42,254	53	79%	\$48,701		
Health Sciences	4,851	1,704	1,563	92%	\$29,010	1,528	90%	\$31,520	1,492	88%	\$33,027	1,426	84%	\$37,139	1,394	82%	\$41,731		
Industrial Technologies	2,111	415	348	84%	\$25,981	339	82%	\$34,073	326	79%	\$37,863	314	76%	\$41,107	320	77%	\$46,868		
Public Service Technologies	2,433	538	437	81%	\$16,050	413	77%	\$20,485	398	74%	\$22,902	390	72%	\$25,314	386	72%	\$29,399		
Transportation Systems Technologies	954	258	203	79%	\$23,625	195	76%	\$30,591	184	71%	\$34,428	177	69%	\$36,855	176	68%	\$45,614		

Table 6. CTE Diploma Program Outcomes by Program Area, 2017-2018 Graduates

North Carolina Community College System Postsecondary Diploma Programs						Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>											
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2017-2018																
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion					
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage			
Agricultural & Natural Resources Technologies	252	27	21	78%	\$24,709	19	70%	\$19,165	13	48%	\$30,069	15	56%	\$36,332			
Biological and Chemical Technologies	371	*	*	*	*	*	*	*	*	*	*	*	*	*			
Business Technologies	2,186	766	613	80%	\$21,828	604	79%	\$26,783	592	77%	\$31,158	592	77%	\$34,390			
Commercial and Artistic Production Technologies	206	36	27	75%	\$16,442	24	67%	\$14,296	21	58%	\$15,162	19	53%	\$25,346			
Construction Technologies	1,134	353	277	78%	\$29,255	271	77%	\$34,327	254	72%	\$38,396	255	72%	\$45,171			
Engineering Technologies	505	109	85	78%	\$28,008	81	74%	\$34,446	86	79%	\$39,651	79	72%	\$46,996			
Health Sciences	5,184	1,721	1,584	92%	\$29,195	1,548	90%	\$30,740	1,487	86%	\$35,204	1,460	85%	\$39,524			
Industrial Technologies	1,830	406	350	86%	\$28,691	336	83%	\$35,729	326	80%	\$38,899	314	77%	\$44,283			
Public Service Technologies	2,485	636	509	80%	\$15,618	472	74%	\$18,775	446	70%	\$21,159	434	68%	\$26,170			
Transportation Systems Technologies	915	249	193	78%	\$23,922	183	73%	\$30,710	178	71%	\$34,053	172	69%	\$42,520			

Table 7. CTE Diploma Program Outcomes by Program Area, 2018-2019 Graduates

North Carolina Community College System Postsecondary Diploma Programs						Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>					
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2018-2019										
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	310	46	32	70%	\$19,349	31	67%	\$25,287	31	67%	\$30,000
Biological and Chemical Technologies	169	*	*	*	*	*	*	*	*	*	*
Business Technologies	2,605	793	629	79%	\$24,133	611	77%	\$28,627	638	80%	\$32,153
Commercial and Artistic Production Technologies	250	60	43	72%	\$17,368	44	73%	\$20,927	44	73%	\$22,924
Construction Technologies	1,116	301	247	82%	\$29,762	240	80%	\$37,125	243	81%	\$40,996
Engineering Technologies	492	124	108	87%	\$30,991	102	82%	\$41,330	100	81%	\$44,712
Health Sciences	4,826	1,681	1,529	91%	\$29,221	1,477	88%	\$34,157	1,444	86%	\$38,874
Industrial Technologies	1,695	340	275	81%	\$29,497	258	76%	\$35,048	256	75%	\$39,003
Public Service Technologies	2,707	621	485	78%	\$16,556	463	75%	\$20,304	433	70%	\$26,570
Transportation Systems Technologies	905	261	213	82%	\$27,662	204	78%	\$32,384	206	79%	\$37,530

Table 8. CTE Diploma Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

North Carolina Community College System Postsecondary Diploma Programs						Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>					
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020						Program Year 2020-2021				
	Parti cipants	Degree Recipients	1 Year After Completion			Med. Wage	Parti cipants	Degree Recipients	1 Year After Completion		
			Employed	%	Med. Wage				Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	126	51	38	75%	\$16,541	\$25,105	134	80	61	76%	\$19,343
Biological and Chemical Technologies	30	*	*	*	*	*	29	10	*	*	*
Business Technologies	2,042	773	610	79%	\$24,482	\$30,799	2,247	1,102	884	80%	\$27,934
Commercial and Artistic Production Technologies	149	28	19	68%	\$12,787	\$17,324	193	89	72	81%	\$14,492
Construction Technologies	1,121	286	225	79%	\$29,074	\$36,281	1,108	331	268	81%	\$31,267
Engineering Technologies	219	82	63	77%	\$29,050	\$38,184	205	100	83	83%	\$31,788
Health Sciences	3,676	1,401	1,267	90%	\$31,479	\$35,347	3,805	1,673	1,540	92%	\$33,737
Industrial Technologies	1,689	338	266	79%	\$27,778	\$35,633	1,612	423	351	83%	\$34,147
Public Service Technologies	2,316	584	437	75%	\$17,183	\$23,914	2,236	790	620	78%	\$21,091
Transportation Systems Technologies	809	250	206	82%	\$27,032	\$33,364	792	365	307	84%	\$31,639

Table 9. CTE Certificate Program Outcomes by Program Area, 2016-2017 Graduates

North Carolina Community College System Postsecondary Certificate Programs									Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>									
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2016-2017																	
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion			
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	
Agricultural & Natural Resources Technologies	453	246	184	75%	\$16,510	177	72%	\$20,049	156	63%	\$26,424	149	61%	\$30,955	152	62%	\$33,031	
Biological and Chemical Technologies	86	78	64	82%	\$32,708	63	81%	\$39,521	67	86%	\$37,402	61	78%	\$51,973	61	78%	\$56,404	
Business Technologies	8,041	6,207	4,555	73%	\$22,265	4,635	75%	\$26,826	4,551	73%	\$30,806	4,452	72%	\$34,329	4,425	71%	\$38,767	
Commercial and Artistic Production Technologies	650	539	372	69%	\$13,456	376	70%	\$19,409	362	67%	\$22,556	342	63%	\$24,720	354	66%	\$30,574	
Construction Technologies	1,508	1,252	830	66%	\$23,732	852	68%	\$32,599	848	68%	\$35,563	820	65%	\$39,304	811	65%	\$46,159	
Engineering Technologies	910	640	527	82%	\$23,004	531	83%	\$34,620	524	82%	\$40,884	509	80%	\$43,976	503	79%	\$48,519	
Health Sciences	2,991	1,063	885	83%	\$17,213	875	82%	\$21,992	858	81%	\$24,343	826	78%	\$27,811	812	76%	\$32,862	
Industrial Technologies	2,652	1,430	1,142	80%	\$22,129	1,145	80%	\$32,966	1,102	77%	\$36,517	1,073	75%	\$40,356	1,077	75%	\$46,197	
Public Service Technologies	7,928	4,740	3,794	80%	\$21,423	3,770	80%	\$25,793	3,703	78%	\$27,893	3,555	75%	\$31,315	3,491	74%	\$35,904	
Transportation Systems Technologies	1,446	1,118	878	79%	\$21,360	866	77%	\$28,792	832	74%	\$34,292	803	72%	\$36,844	775	69%	\$43,213	

Table 10. CTE Certificate Program Outcomes by Program Area, 2017-2018 Graduates

North Carolina Community College System Postsecondary Certificate Programs									Common Follow-up System: Evaluative Measures								
Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce																	
Post-Completion Outcome Employment and Wage Measures by Program Area		Program Year 2017-2018															
		Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion				
				Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage		
Agricultural & Natural Resources Technologies		430	276	191	69%	\$14,800	192	70%	\$21,106	177	64%	\$27,121	177	64%	\$32,035		
Biological and Chemical Technologies		130	75	57	76%	\$29,305	62	83%	\$28,859	68	91%	\$34,455	66	88%	\$51,175		
Business Technologies		8,410	6,656	4,986	75%	\$22,805	4,995	75%	\$27,951	4,922	74%	\$32,118	4,877	73%	\$37,464		
Commercial and Artistic Production Technologies		754	570	372	65%	\$13,889	377	66%	\$16,674	370	65%	\$23,201	366	64%	\$29,608		
Construction Technologies		1,475	1,278	878	69%	\$30,382	879	69%	\$37,297	865	68%	\$40,371	856	67%	\$47,436		
Engineering Technologies		1,075	711	580	82%	\$24,138	573	81%	\$34,173	569	80%	\$40,113	558	78%	\$46,319		
Health Sciences		2,958	1,119	880	79%	\$15,799	884	79%	\$20,698	855	76%	\$25,232	843	75%	\$29,061		
Industrial Technologies		2,725	1,581	1,291	82%	\$21,946	1,279	81%	\$31,974	1,246	79%	\$35,798	1,216	77%	\$41,631		
Public Service Technologies		8,169	4,614	3,686	80%	\$21,706	3,631	79%	\$25,004	3,483	75%	\$28,723	3,440	75%	\$34,166		
Transportation Systems Technologies		1,523	1,131	860	76%	\$22,749	831	73%	\$29,630	803	71%	\$33,998	778	69%	\$39,785		

Table 11. CTE Certificate Program Outcomes by Program Area, 2018-2019 Graduates

North Carolina Community College System Postsecondary Certificate Programs						Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>					
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2018-2019										
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	553	290	211	73%	\$15,535	213	73%	\$21,413	209	72%	\$28,183
Biological and Chemical Technologies	126	50	41	82%	\$26,816	41	82%	\$41,755	42	84%	\$45,510
Business Technologies	9,144	5,940	4,483	75%	\$24,177	4,489	76%	\$29,093	4,559	77%	\$34,265
Commercial and Artistic Production Technologies	638	405	278	69%	\$13,593	264	65%	\$18,419	262	65%	\$25,088
Construction Technologies	1,638	1,113	773	69%	\$29,027	764	69%	\$37,059	781	70%	\$42,680
Engineering Technologies	1,173	656	538	82%	\$22,896	525	80%	\$34,029	532	81%	\$40,515
Health Sciences	2,816	1,042	833	80%	\$17,197	809	78%	\$23,624	822	79%	\$29,881
Industrial Technologies	2,925	1,334	1,052	79%	\$22,414	1,057	79%	\$32,112	1,054	79%	\$38,954
Public Service Technologies	8,483	3,905	3,166	81%	\$21,108	3,049	78%	\$26,694	3,000	77%	\$32,191
Transportation Systems Technologies	1,679	1,144	920	80%	\$23,456	907	79%	\$31,655	888	78%	\$39,135

Table 12. CTE Certificate Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

North Carolina Community College System Postsecondary Certificate Programs			Common Follow-up System: Evaluative Measures <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>										
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020									Program Year 2020-2021			
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			Parti cipants	Degree Recipients	1 Year After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage			Employed	%	Med. Wage
Agricultural & Natural Resources Technologies	524	235	168	71%	\$17,155	178	76%	\$21,531	478	337	253	75%	\$17,157
Biological and Chemical Technologies	80	38	29	76%	\$24,639	32	84%	\$37,216	76	395	337	85%	\$26,451
Business Technologies	8,858	5,392	4,069	75%	\$24,530	4,163	77%	\$31,167	9,299	7,631	5,873	77%	\$27,631
Commercial and Artistic Production Technologies	643	391	258	66%	\$14,931	273	70%	\$23,657	768	619	440	71%	\$17,183
Construction Technologies	1,773	1,180	915	78%	\$32,764	919	78%	\$41,954	1,441	1,249	1,034	83%	\$29,799
Engineering Technologies	1,055	582	470	81%	\$24,881	488	84%	\$36,695	838	700	563	80%	\$30,486
Health Sciences	2,162	866	728	84%	\$17,866	722	83%	\$26,951	2,008	1,470	1,261	86%	\$24,928
Industrial Technologies	2,883	1,278	1,012	79%	\$21,799	1,016	79%	\$33,153	2,592	1,803	1,483	82%	\$26,974
Public Service Technologies	8,006	3,457	2,778	80%	\$23,249	2,781	80%	\$29,596	6,843	4,407	3,644	83%	\$25,644
Transportation Systems Technologies	1,611	1,003	795	79%	\$23,220	803	80%	\$35,024	1,427	1,099	913	83%	\$27,352

University of North Carolina System Appendix

Table 13. UNC Bachelor's Degree Program Outcomes by Program Area, 2016-2017 Graduates

University Of North Carolina System Bachelor's Degree Programs										Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>							
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2016-2017																
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	2,249	471	373	79%	\$22,265	363	77%	\$32,549	348	74%	\$37,120	326	69%	\$43,135	323	69%	\$48,200
Natural Resources and Conservation	2,520	544	394	72%	\$15,361	361	66%	\$23,782	323	59%	\$36,247	326	60%	\$39,660	322	59%	\$45,973
Architecture and Related Services	454	116	89	77%	\$17,585	79	68%	\$41,973	78	67%	\$49,791	79	68%	\$50,975	72	62%	\$58,940
Area, Ethnic, Cultural, Gender, and Group Studies	919	243	153	63%	\$15,039	136	56%	\$19,267	132	54%	\$21,260	113	47%	\$34,387	122	50%	\$37,263
Communication, Journalism, and Related Programs	9,944	2,427	1,771	73%	\$18,919	1,606	66%	\$28,653	1,521	63%	\$34,039	1,454	60%	\$39,003	1,442	59%	\$45,691
Computer and Information Sciences and Support Services	7,007	1,127	839	74%	\$42,078	797	71%	\$58,982	773	69%	\$67,613	767	68%	\$75,674	763	68%	\$86,091
Education	10,793	2,036	1,802	89%	\$35,767	1,733	85%	\$39,000	1,672	82%	\$40,421	1,609	79%	\$42,827	1,574	77%	\$49,582
Engineering	11,198	2,088	1,425	68%	\$45,192	1,324	63%	\$58,012	1,277	61%	\$65,130	1,248	60%	\$69,988	1,254	60%	\$76,979
Engineering Technologies and Engineering-Related Fields	3,535	613	495	81%	\$41,880	476	78%	\$51,454	462	75%	\$57,813	443	72%	\$60,481	445	73%	\$69,605
Foreign Languages, Literatures, and Linguistics	1,163	410	314	77%	\$14,133	273	67%	\$20,907	262	64%	\$25,451	236	58%	\$35,117	245	60%	\$42,472
Family and Consumer Sciences/Human Sciences	2,766	555	474	85%	\$20,153	441	79%	\$25,903	416	75%	\$29,408	404	73%	\$31,868	397	72%	\$38,404
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	2,851	739	570	77%	\$15,601	521	71%	\$22,442	516	70%	\$27,043	501	68%	\$32,200	505	68%	\$37,326
Liberal Arts and Sciences, General Studies, and Humanities	19,682	657	517	79%	\$21,749	484	74%	\$27,341	475	72%	\$31,001	460	70%	\$34,936	449	68%	\$37,291
Library Science	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	14,845	2,604	1,991	76%	\$17,088	1,790	69%	\$23,886	1,621	62%	\$28,593	1,540	59%	\$37,015	1,543	59%	\$45,119
Mathematics and Statistics	2,164	467	321	69%	\$24,349	300	64%	\$38,980	291	62%	\$42,887	279	60%	\$48,080	280	60%	\$52,933
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	1,936	484	325	67%	\$18,102	299	62%	\$26,556	277	57%	\$30,383	271	56%	\$38,851	260	54%	\$45,403
Parks, Recreation, Leisure, and Fitness Studies	9,640	2,024	1,573	78%	\$15,662	1,413	70%	\$22,802	1,349	67%	\$27,217	1,316	65%	\$33,915	1,297	64%	\$41,563
Philosophy and Religious Studies	624	164	121	74%	\$14,301	104	63%	\$21,935	95	58%	\$26,280	90	55%	\$29,011	91	55%	\$36,067
Physical Sciences	4,724	910	625	69%	\$15,980	543	60%	\$26,335	499	55%	\$36,260	475	52%	\$42,464	482	53%	\$50,075
Science Technologies/Technicians	43	12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Psychology	10,119	2,385	1,816	76%	\$16,436	1,668	70%	\$22,557	1,606	67%	\$27,407	1,540	65%	\$33,118	1,531	64%	\$39,653
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	5,635	1,268	1,046	82%	\$22,989	993	78%	\$33,966	966	76%	\$38,440	949	75%	\$41,456	934	74%	\$46,467
Public Administration and Social Service Professions	3,883	856	659	77%	\$17,775	649	76%	\$27,507	630	74%	\$34,860	622	73%	\$39,446	603	70%	\$44,081
Social Sciences	10,059	2,528	1,854	73%	\$18,130	1,692	67%	\$26,659	1,586	63%	\$32,592	1,547	61%	\$38,720	1,536	61%	\$45,006
Transportation and Materials Moving	49	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	8,437	1,633	1,099	67%	\$12,912	948	58%	\$20,199	853	52%	\$25,464	804	49%	\$29,420	818	50%	\$33,569
Health Professions and Related Programs	20,303	4,427	3,804	86%	\$45,729	3,577	81%	\$52,794	3,464	78%	\$54,346	3,390	77%	\$57,604	3,316	75%	\$63,613
Business, Management, Marketing, and Related Support Services	28,553	5,919	4,573	77%	\$28,844	4,407	74%	\$40,252	4,228	71%	\$47,563	4,097	69%	\$52,326	4,070	69%	\$60,135
History	1,999	531	407	77%	\$16,554	380	72%	\$25,399	381	72%	\$31,127	369	69%	\$36,161	368	69%	\$40,784

Table 14. UNC Bachelor's Degree Program Outcomes by Program Area, 2017-2018 Graduates

University Of North Carolina System Bachelor's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce											
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2017-2018											
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	2,356	513	423	82%	\$24,362	393	77%	\$32,721	375	73%	\$36,730	354	69%	\$41,685
Natural Resources and Conservation	2,688	627	453	72%	\$16,236	405	65%	\$26,728	385	61%	\$33,042	379	60%	\$39,557
Architecture and Related Services	455	118	83	70%	\$27,645	81	69%	\$44,666	79	67%	\$49,965	75	64%	\$55,686
Area, Ethnic, Cultural, Gender, and Group Studies	843	220	145	66%	\$12,904	120	55%	\$20,555	118	54%	\$24,316	105	48%	\$32,642
Communication, Journalism, and Related Programs	9,983	2,506	1,878	75%	\$19,699	1,689	67%	\$29,210	1,609	64%	\$34,242	1,568	63%	\$41,275
Computer and Information Sciences and Support Services	8,144	1,410	1,111	79%	\$44,149	1,073	76%	\$60,897	1,039	74%	\$68,284	1,040	74%	\$75,805
Education	10,609	1,831	1,608	88%	\$36,070	1,558	85%	\$38,941	1,509	82%	\$41,608	1,489	81%	\$48,413
Engineering	11,211	2,094	1,365	65%	\$48,281	1,279	61%	\$60,523	1,239	59%	\$65,653	1,250	60%	\$73,003
Engineering Technologies and Engineering-Related Fields	3,765	645	529	82%	\$46,104	503	78%	\$55,515	490	76%	\$60,093	486	75%	\$67,402
Foreign Languages, Literatures, and Linguistics	1,106	397	296	75%	\$18,181	276	70%	\$20,989	250	63%	\$31,760	243	61%	\$38,298
Family and Consumer Sciences/Human Sciences	2,608	567	457	81%	\$22,310	424	75%	\$28,526	409	72%	\$31,450	412	73%	\$38,135
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	2,837	745	570	77%	\$17,123	532	71%	\$25,917	505	68%	\$31,394	506	68%	\$36,570
Liberal Arts and Sciences, General Studies, and Humanities	19,499	737	548	74%	\$22,430	510	69%	\$28,900	487	66%	\$34,484	475	64%	\$39,166
Library Science	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	15,016	2,431	1,842	76%	\$18,293	1,619	67%	\$25,269	1,486	61%	\$30,546	1,440	59%	\$38,185
Mathematics and Statistics	2,210	564	396	70%	\$25,642	374	66%	\$40,233	349	62%	\$45,532	357	63%	\$55,017
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	1,936	495	369	75%	\$18,055	329	66%	\$28,322	301	61%	\$35,487	303	61%	\$41,300
Parks, Recreation, Leisure, and Fitness Studies	9,729	2,027	1,570	77%	\$16,696	1,425	70%	\$23,442	1,317	65%	\$29,299	1,311	65%	\$37,388
Philosophy and Religious Studies	664	168	109	65%	\$15,297	97	58%	\$26,321	98	58%	\$30,009	103	61%	\$36,576
Physical Sciences	4,690	835	578	69%	\$17,971	494	59%	\$31,273	462	55%	\$36,971	443	53%	\$45,151
Science Technologies/Technicians	49	16	14	88%	\$49,642	16	100%	\$55,043	16	100%	\$65,722	15	94%	\$73,026
Psychology	10,186	2,378	1,851	78%	\$16,921	1,649	69%	\$23,977	1,583	67%	\$28,054	1,546	65%	\$35,257
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	5,538	1,227	1,000	81%	\$22,744	937	76%	\$34,828	898	73%	\$39,712	870	71%	\$43,667
Public Administration and Social Service Professions	3,942	923	715	77%	\$18,829	703	76%	\$30,502	679	74%	\$38,750	662	72%	\$43,339
Social Sciences	10,427	2,656	1,887	71%	\$18,395	1,719	65%	\$27,526	1,667	63%	\$32,990	1,670	63%	\$40,180
Transportation and Materials Moving	56	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	8,638	1,683	1,153	69%	\$13,846	971	58%	\$21,899	864	51%	\$25,486	855	51%	\$31,840
Health Professions and Related Programs	20,321	4,323	3,708	86%	\$47,319	3,512	81%	\$53,668	3,406	79%	\$56,520	3,324	77%	\$62,126
Business, Management, Marketing, and Related Support Services	29,096	5,939	4,571	77%	\$29,411	4,345	73%	\$41,105	4,213	71%	\$47,762	4,189	71%	\$55,352
History	2,044	525	393	75%	\$18,215	368	70%	\$22,993	353	67%	\$30,769	343	65%	\$40,633

Table 15. UNC Bachelor's Degree Program Outcomes by Program Area, 2018-2019 Graduates

University Of North Carolina System Bachelor's Degree Programs				Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>							
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2018-2019										
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	2,484	509	402	79%	\$25,318	388	76%	\$33,554	375	74%	\$38,918
Natural Resources and Conservation	2,780	644	454	70%	\$17,826	408	63%	\$26,691	394	61%	\$35,976
Architecture and Related Services	476	114	82	72%	\$17,586	77	68%	\$45,151	79	69%	\$52,027
Area, Ethnic, Cultural, Gender, and Group Studies	806	211	150	71%	\$12,761	124	59%	\$25,952	122	58%	\$28,957
Communication, Journalism, and Related Programs	9,801	2,419	1,777	73%	\$20,744	1,595	66%	\$30,651	1,575	65%	\$38,657
Computer and Information Sciences and Support Services	9,123	1,609	1,210	75%	\$46,171	1,181	73%	\$62,940	1,191	74%	\$70,621
Education	10,485	1,840	1,619	88%	\$35,997	1,582	86%	\$40,215	1,546	84%	\$47,341
Engineering	11,443	2,143	1,484	69%	\$50,052	1,407	66%	\$59,876	1,387	65%	\$68,725
Engineering Technologies and Engineering-Related Fields	3,936	738	595	81%	\$48,082	578	78%	\$55,830	564	76%	\$62,873
Foreign Languages, Literatures, and Linguistics	1,095	423	311	74%	\$16,471	272	64%	\$24,959	258	61%	\$34,728
Family and Consumer Sciences/Human Sciences	2,608	614	514	84%	\$21,187	477	78%	\$28,176	453	74%	\$36,216
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	2,898	738	554	75%	\$16,089	514	70%	\$23,182	496	67%	\$31,079
Liberal Arts and Sciences, General Studies, and Humanities	18,478	720	545	76%	\$22,738	509	71%	\$31,170	503	70%	\$38,256
Library Science	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	15,578	2,571	1,942	76%	\$17,388	1,714	67%	\$25,970	1,591	62%	\$34,124
Mathematics and Statistics	2,175	535	363	68%	\$25,397	342	64%	\$38,809	332	62%	\$49,105
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	2,241	508	370	73%	\$20,806	335	66%	\$27,894	323	64%	\$37,827
Parks, Recreation, Leisure, and Fitness Studies	9,817	1,917	1,499	78%	\$16,887	1,335	70%	\$22,951	1,256	66%	\$32,238
Philosophy and Religious Studies	688	191	138	72%	\$15,466	126	66%	\$20,951	117	61%	\$31,666
Physical Sciences	4,654	801	551	69%	\$18,698	484	60%	\$29,306	464	58%	\$39,608
Science Technologies/Technicians	56	16	16	100%	\$61,074	15	94%	\$64,032	15	94%	\$67,316
Psychology	10,551	2,379	1,839	77%	\$17,014	1,644	69%	\$23,538	1,609	68%	\$31,202
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	5,635	1,129	939	83%	\$23,644	886	78%	\$35,104	869	77%	\$40,116
Public Administration and Social Service Professions	3,906	907	677	75%	\$18,242	678	75%	\$31,786	669	74%	\$39,644
Social Sciences	10,404	2,672	1,927	72%	\$19,133	1,765	66%	\$28,315	1,741	65%	\$35,047
Transportation and Materials Moving	71	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	8,907	1,708	1,192	70%	\$14,423	1,048	61%	\$20,987	1,010	59%	\$29,388
Health Professions and Related Programs	21,174	4,585	3,932	86%	\$48,750	3,754	82%	\$55,464	3,672	80%	\$59,386
Business, Management, Marketing, and Related Support Services	29,789	6,193	4,785	77%	\$31,528	4,547	73%	\$43,020	4,498	73%	\$52,747
History	2,068	504	373	74%	\$16,173	356	71%	\$24,886	350	69%	\$32,739

Table 16. UNC Bachelor's Degree Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

University Of North Carolina System Bachelor's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>											
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020									Program Year 2020-2021				
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion				Parti cipants	Degree Recipients	1 Year After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage				Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	2,451	536	434	81%	\$22,902	392	73%	\$36,053		2,486	531	430	81%	\$27,731
Natural Resources and Conservation	2,814	636	453	71%	\$16,371	404	64%	\$28,627		2,862	682	501	73%	\$19,424
Architecture and Related Services	499	147	118	80%	\$14,865	118	80%	\$44,811		503	115	83	72%	\$16,157
Area, Ethnic, Cultural, Gender, and Group Studies	776	210	152	72%	\$15,816	138	66%	\$23,054		663	179	123	69%	\$25,059
Communication, Journalism, and Related Programs	9,710	2,514	1,843	73%	\$19,651	1,705	68%	\$33,248		9,046	2,390	1,767	74%	\$24,104
Computer and Information Sciences and Support Services	9,126	1,792	1,346	75%	\$40,401	1,341	75%	\$59,940		9,429	1,929	1,489	77%	\$42,806
Education	10,168	1,892	1,620	86%	\$36,979	1,579	83%	\$45,656		10,166	1,993	1,755	88%	\$42,704
Engineering	11,347	2,149	1,425	66%	\$41,491	1,361	63%	\$62,100		11,724	2,245	1,552	69%	\$48,781
Engineering Technologies and Engineering-Related Fields	3,966	835	692	83%	\$45,946	677	81%	\$58,099		3,815	838	671	80%	\$49,328
Foreign Languages, Literatures, and Linguistics	1,021	407	301	74%	\$17,577	288	71%	\$26,832		884	349	262	75%	\$17,959
Family and Consumer Sciences/Human Sciences	2,386	589	474	80%	\$22,789	451	77%	\$31,640		2,196	535	431	81%	\$25,090
Legal Professions and Studies	*	*	*	*	*	*	*	*		*	*	*	*	*
English Language and Literature/Letters	2,835	750	563	75%	\$15,263	538	72%	\$26,725		2,657	737	559	76%	\$17,325
Liberal Arts and Sciences, General Studies, and Humanities	16,276	790	586	74%	\$23,773	573	73%	\$31,929		14,176	628	460	73%	\$30,398
Library Science	*	*	*	*	*	*	*	*		*	*	*	*	*
Biological and Biomedical Sciences	15,704	2,734	2,016	74%	\$20,282	1,875	69%	\$28,714		16,474	2,933	2,253	77%	\$22,794
Mathematics and Statistics	2,128	523	377	72%	\$23,351	372	71%	\$40,366		2,082	516	361	70%	\$26,345
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*		*	*	*	*	*
Multi/Interdisciplinary Studies	2,593	679	493	73%	\$21,446	476	70%	\$33,030		3,163	1,064	787	74%	\$25,288
Parks, Recreation, Leisure, and Fitness Studies	9,674	2,064	1,591	77%	\$16,895	1,460	71%	\$25,338		9,361	1,977	1,542	78%	\$19,533
Philosophy and Religious Studies	675	193	141	73%	\$14,252	125	65%	\$23,711		610	190	126	66%	\$15,294
Physical Sciences	4,460	814	528	65%	\$20,303	473	58%	\$36,270		4,311	798	571	72%	\$18,808
Science Technologies/Technicians	60	16	12	75%	\$39,403	10	63%	\$56,246		49	14	14	100%	\$50,719
Psychology	11,062	2,426	1,844	76%	\$17,898	1,748	72%	\$26,313		11,650	2,304	1,794	78%	\$21,486
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	5,772	1,270	1,037	82%	\$23,878	999	79%	\$36,171		5,870	1,331	1,101	83%	\$27,996
Public Administration and Social Service Professions	4,045	942	721	77%	\$20,099	736	78%	\$33,113		4,227	933	741	79%	\$24,989
Social Sciences	10,484	2,748	1,946	71%	\$19,704	1,871	68%	\$30,768		10,392	2,758	2,055	75%	\$23,266
Transportation and Materials Moving	104	17	*	*	*	10	59%	\$21,951		138	15	11	73%	\$17,052
Visual and Performing Arts	9,036	1,769	1,257	71%	\$15,340	1,171	66%	\$24,344		8,968	1,712	1,217	71%	\$17,966
Health Professions and Related Programs	21,559	4,804	4,121	86%	\$48,986	3,944	82%	\$57,414		22,099	4,906	4,167	85%	\$50,383
Business, Management, Marketing, and Related Support Services	30,103	6,443	4,999	78%	\$28,806	4,847	75%	\$44,595		30,829	6,399	5,038	79%	\$35,118
History	2,034	584	428	73%	\$18,102	418	72%	\$31,118		1,933	519	373	72%	\$18,550

Table 17. UNC Master's Degree Program Outcomes by Program Area, 2016-2017 Graduates

University Of North Carolina System Master's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>														
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2016-2017																
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	259	87	50	57%	\$36,613	49	56%	\$40,979	50	57%	\$48,654	47	54%	\$56,909	44	51%	\$62,779
Natural Resources and Conservation	222	89	54	61%	\$28,822	44	49%	\$39,063	43	48%	\$43,363	42	47%	\$50,238	37	42%	\$54,689
Architecture and Related Services	275	111	71	64%	\$44,625	67	60%	\$53,860	64	58%	\$58,430	60	54%	\$59,884	60	54%	\$66,682
Area, Ethnic, Cultural, Gender, and Group Studies	69	21	17	81%	\$17,609	14	67%	\$31,306	11	52%	\$41,460	11	52%	\$43,143	11	52%	\$48,994
Communication, Journalism, and Related Programs	176	68	57	84%	\$35,062	46	68%	\$48,592	46	68%	\$51,087	45	66%	\$56,024	45	66%	\$63,592
Computer and Information Sciences and Support Services	828	354	241	68%	\$64,123	219	62%	\$80,220	213	60%	\$88,307	203	57%	\$96,698	209	59%	\$106,558
Education	5,675	1,975	1,699	86%	\$42,835	1,595	81%	\$46,403	1,556	79%	\$48,898	1,507	76%	\$51,543	1,487	75%	\$58,003
Engineering	1,071	395	221	56%	\$53,691	198	50%	\$67,053	197	50%	\$70,646	184	47%	\$78,738	180	46%	\$87,828
Engineering Technologies and Engineering-Related Fields	300	79	54	68%	\$55,927	50	63%	\$65,946	49	62%	\$73,355	51	65%	\$75,734	50	63%	\$81,074
Foreign Languages, Literatures, and Linguistics	105	56	38	68%	\$16,113	36	64%	\$29,161	28	50%	\$35,760	28	50%	\$37,633	25	45%	\$40,000
Family and Consumer Sciences/Human Sciences	235	70	49	70%	\$33,333	48	69%	\$40,217	47	67%	\$45,690	47	67%	\$47,866	48	69%	\$53,406
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	502	162	101	62%	\$27,385	92	57%	\$35,506	82	51%	\$40,151	80	49%	\$43,661	73	45%	\$48,851
Liberal Arts and Sciences, General Studies, and Humanities	239	59	41	69%	\$31,798	40	68%	\$36,522	37	63%	\$41,269	36	61%	\$41,518	37	63%	\$53,353
Library Science	935	267	221	83%	\$43,296	201	75%	\$47,527	197	74%	\$50,081	185	69%	\$53,634	186	70%	\$59,491
Biological and Biomedical Sciences	843	302	217	72%	\$27,255	185	61%	\$36,144	165	55%	\$42,715	157	52%	\$49,954	147	49%	\$62,301
Mathematics and Statistics	320	145	112	77%	\$36,124	101	70%	\$49,613	88	61%	\$66,656	81	56%	\$81,042	73	50%	\$92,495
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	548	183	119	65%	\$31,430	99	54%	\$42,229	92	50%	\$46,602	94	51%	\$49,624	89	49%	\$53,970
Parks, Recreation, Leisure, and Fitness Studies	427	149	96	64%	\$30,902	87	58%	\$39,551	85	57%	\$42,212	83	56%	\$43,528	82	55%	\$49,518
Philosophy and Religious Studies	33	24	21	88%	\$7,594	19	79%	\$10,754	12	50%	\$14,348	13	54%	\$7,500	12	50%	\$6,619
Physical Sciences	467	185	111	60%	\$26,246	98	53%	\$42,106	92	50%	\$43,165	82	44%	\$51,987	83	45%	\$55,612
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Psychology	397	170	104	61%	\$28,874	89	52%	\$40,832	81	48%	\$52,878	85	50%	\$56,739	82	48%	\$70,594
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	228	67	54	81%	\$29,071	42	63%	\$38,773	44	66%	\$41,733	45	67%	\$43,887	41	61%	\$49,044
Public Administration and Social Service Professions	2,523	979	797	81%	\$38,563	784	80%	\$43,716	772	79%	\$46,605	736	75%	\$51,044	704	72%	\$55,536
Social Sciences	457	200	121	61%	\$16,032	116	58%	\$25,947	94	47%	\$34,286	84	42%	\$46,815	84	42%	\$52,282
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	448	157	88	56%	\$10,889	79	50%	\$21,864	66	42%	\$25,223	59	38%	\$26,846	55	35%	\$31,118
Health Professions and Related Programs	3,980	1,377	1,063	77%	\$53,293	995	72%	\$63,079	963	70%	\$66,633	924	67%	\$72,583	888	64%	\$77,266
Business, Management, Marketing, and Related Support Services	6,232	1,971	1,249	63%	\$53,250	1,198	61%	\$60,327	1,147	58%	\$70,944	1,126	57%	\$78,479	1,117	57%	\$89,363
History	293	91	63	69%	\$25,188	57	63%	\$34,594	56	62%	\$42,016	55	60%	\$46,591	56	62%	\$47,716

Table 18. UNC Master's Degree Program Outcomes by Program Area, 2017-2018 Graduates

University Of North Carolina System Master's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>											
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2017-2018											
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	226	75	50	67%	\$31,478	47	63%	\$42,089	44	59%	\$45,859	43	57%	\$46,700
Natural Resources and Conservation	216	71	50	70%	\$23,800	43	61%	\$34,558	35	49%	\$40,013	36	51%	\$47,340
Architecture and Related Services	257	95	52	55%	\$46,443	47	49%	\$52,406	43	45%	\$54,048	43	45%	\$59,755
Area, Ethnic, Cultural, Gender, and Group Studies	70	31	21	68%	\$25,539	20	65%	\$26,851	19	61%	\$35,480	19	61%	\$32,109
Communication, Journalism, and Related Programs	198	63	51	81%	\$44,727	48	76%	\$52,583	48	76%	\$58,711	45	71%	\$59,849
Computer and Information Sciences and Support Services	898	378	260	69%	\$71,898	250	66%	\$84,441	242	64%	\$93,270	245	65%	\$104,951
Education	5,581	1,825	1,580	87%	\$44,022	1,525	84%	\$46,750	1,458	80%	\$50,277	1,421	78%	\$56,725
Engineering	1,030	374	177	47%	\$53,219	165	44%	\$67,000	158	42%	\$72,816	157	42%	\$81,525
Engineering Technologies and Engineering-Related Fields	300	100	74	74%	\$63,492	70	70%	\$71,641	71	71%	\$76,107	70	70%	\$83,591
Foreign Languages, Literatures, and Linguistics	96	53	43	81%	\$22,726	35	66%	\$34,616	32	60%	\$37,248	29	55%	\$39,994
Family and Consumer Sciences/Human Sciences	248	92	70	76%	\$34,734	71	77%	\$38,862	64	70%	\$43,575	67	73%	\$49,940
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	493	206	145	70%	\$29,997	124	60%	\$36,491	115	56%	\$43,504	123	60%	\$44,935
Liberal Arts and Sciences, General Studies, and Humanities	243	78	53	68%	\$38,072	54	69%	\$42,728	52	67%	\$50,863	48	62%	\$47,564
Library Science	984	294	238	81%	\$42,228	223	76%	\$45,881	214	73%	\$48,876	212	72%	\$52,409
Biological and Biomedical Sciences	839	311	215	69%	\$27,866	167	54%	\$41,034	150	48%	\$46,598	145	47%	\$52,016
Mathematics and Statistics	352	142	99	70%	\$44,332	95	67%	\$60,620	87	61%	\$65,488	83	58%	\$80,500
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	527	155	91	59%	\$31,914	79	51%	\$45,001	76	49%	\$47,545	73	47%	\$53,073
Parks, Recreation, Leisure, and Fitness Studies	459	172	111	65%	\$30,366	94	55%	\$38,325	93	54%	\$43,247	94	55%	\$45,463
Philosophy and Religious Studies	33	17	12	71%	\$7,434	10	59%	\$9,904	10	59%	\$13,722	12	71%	\$9,833
Physical Sciences	461	188	114	61%	\$32,246	97	52%	\$50,707	92	49%	\$55,750	86	46%	\$59,462
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Psychology	366	160	90	56%	\$18,822	82	51%	\$40,057	75	47%	\$51,989	72	45%	\$58,036
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	220	62	55	89%	\$38,984	46	74%	\$43,613	41	66%	\$48,088	42	68%	\$51,148
Public Administration and Social Service Professions	2,550	962	788	82%	\$37,807	750	78%	\$43,868	723	75%	\$48,044	679	71%	\$53,217
Social Sciences	458	204	120	59%	\$22,972	107	52%	\$37,890	102	50%	\$43,085	95	47%	\$51,216
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	449	195	107	55%	\$16,707	92	47%	\$24,153	81	42%	\$23,221	80	41%	\$32,461
Health Professions and Related Programs	4,263	1,471	1,102	75%	\$54,014	1,054	72%	\$62,123	998	68%	\$66,789	958	65%	\$71,958
Business, Management, Marketing, and Related Support Services	6,888	2,035	1,258	62%	\$57,870	1,225	60%	\$65,096	1,182	58%	\$76,216	1,171	58%	\$88,059
History	283	96	63	66%	\$15,190	53	55%	\$31,158	49	51%	\$27,761	48	50%	\$37,452

Table 19. UNC Master's Degree Program Outcomes by Program Area, 2018-2019 Graduates

University Of North Carolina System Master's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>								
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2018-2019								
			1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	258	68	47	69%	\$43,743	45	66%	\$49,582	40	59%	\$53,737
Natural Resources and Conservation	228	80	48	60%	\$23,001	35	44%	\$40,867	30	38%	\$47,924
Architecture and Related Services	254	104	76	73%	\$49,735	69	66%	\$54,191	68	65%	\$57,603
Area, Ethnic, Cultural, Gender, and Group Studies	46	20	16	80%	\$24,259	15	75%	\$35,661	14	70%	\$30,681
Communication, Journalism, and Related Programs	206	100	74	74%	\$30,919	64	64%	\$45,062	59	59%	\$52,839
Computer and Information Sciences and Support Services	965	419	304	73%	\$67,225	291	69%	\$75,951	294	70%	\$84,998
Education	5,533	1,832	1,561	85%	\$44,347	1,500	82%	\$47,377	1,473	80%	\$54,523
Engineering	1,008	391	198	51%	\$64,264	189	48%	\$71,418	186	48%	\$79,281
Engineering Technologies and Engineering-Related Fields	304	90	60	67%	\$57,992	59	66%	\$65,782	59	66%	\$79,643
Foreign Languages, Literatures, and Linguistics	103	41	28	68%	\$29,553	25	61%	\$39,968	23	56%	\$47,588
Family and Consumer Sciences/Human Sciences	218	78	61	78%	\$37,043	59	76%	\$38,886	56	72%	\$46,291
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	455	159	111	70%	\$27,846	104	65%	\$33,641	95	60%	\$42,692
Liberal Arts and Sciences, General Studies, and Humanities	221	72	51	71%	\$49,988	43	60%	\$56,816	46	64%	\$54,472
Library Science	1,072	292	212	73%	\$43,511	201	69%	\$47,592	191	65%	\$52,552
Biological and Biomedical Sciences	846	319	225	71%	\$27,241	192	60%	\$40,593	180	56%	\$49,654
Mathematics and Statistics	372	174	121	70%	\$40,818	114	66%	\$65,825	112	64%	\$68,508
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	550	166	103	62%	\$36,466	96	58%	\$45,836	90	54%	\$52,225
Parks, Recreation, Leisure, and Fitness Studies	464	168	109	65%	\$34,434	93	55%	\$39,054	87	52%	\$42,271
Philosophy and Religious Studies	22	11	11	100%	\$6,320	*	*	*	*	*	*
Physical Sciences	436	147	92	63%	\$41,120	79	54%	\$50,207	70	48%	\$55,172
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*
Psychology	356	188	108	57%	\$29,888	97	52%	\$47,100	93	49%	\$53,600
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	189	67	52	78%	\$35,494	51	76%	\$43,300	52	78%	\$46,868
Public Administration and Social Service Professions	2,703	1,019	851	84%	\$40,179	799	78%	\$45,267	756	74%	\$49,027
Social Sciences	446	194	124	64%	\$23,720	107	55%	\$39,677	95	49%	\$50,068
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	433	167	89	53%	\$11,974	68	41%	\$17,413	71	43%	\$19,348
Health Professions and Related Programs	4,433	1,546	1,224	79%	\$59,233	1,161	75%	\$68,919	1,125	73%	\$74,987
Business, Management, Marketing, and Related Support Services	7,403	2,342	1,433	61%	\$58,549	1,388	59%	\$65,474	1,365	58%	\$77,730
History	289	104	79	76%	\$19,404	66	63%	\$33,955	66	63%	\$40,907

Table 20. UNC Master's Degree Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

University Of North Carolina System Master's Degree Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>											
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020								Program Year 2020-2021					
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			Parti cipants	Degree Recipients	1 Year After Completion			
			Employed	%	Med. Wage	Employed	%	Med. Wage			Employed	%	Med. Wage	
Agriculture, Agriculture Operations, and Related Sciences	266	73	39	53%	\$30,700	39	53%	\$43,583	269	80	52	65%	\$34,079	
Natural Resources and Conservation	201	84	49	58%	\$25,000	37	44%	\$45,391	269	81	61	75%	\$36,902	
Architecture and Related Services	275	99	76	77%	\$48,405	66	67%	\$55,642	294	116	83	72%	\$48,541	
Area, Ethnic, Cultural, Gender, and Group Studies	38	13	*	*	*	10	77%	\$34,301	37	14	10	71%	\$28,565	
Communication, Journalism, and Related Programs	250	86	63	73%	\$33,244	57	66%	\$49,017	335	109	80	73%	\$46,061	
Computer and Information Sciences and Support Services	1,035	440	315	72%	\$69,313	311	71%	\$83,036	1,119	470	338	72%	\$73,158	
Education	5,846	1,972	1,677	85%	\$45,493	1,621	82%	\$52,193	6,396	1,958	1,654	84%	\$50,450	
Engineering	1,045	393	213	54%	\$65,386	207	53%	\$74,973	1,131	430	237	55%	\$64,665	
Engineering Technologies and Engineering-Related Fields	292	79	43	54%	\$62,755	43	54%	\$64,813	338	88	60	68%	\$74,627	
Foreign Languages, Literatures, and Linguistics	90	50	42	84%	\$19,028	32	64%	\$29,619	117	40	27	68%	\$36,014	
Family and Consumer Sciences/Human Sciences	219	85	58	68%	\$39,398	64	75%	\$36,698	211	73	59	81%	\$39,390	
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	
English Language and Literature/Letters	502	162	108	67%	\$22,956	101	62%	\$35,655	545	188	135	72%	\$31,750	
Liberal Arts and Sciences, General Studies, and Humanities	193	59	38	64%	\$48,869	42	71%	\$46,912	173	62	46	74%	\$41,278	
Library Science	1,152	330	250	76%	\$41,757	242	73%	\$48,873	1,201	382	272	71%	\$45,192	
Biological and Biomedical Sciences	797	321	230	72%	\$30,365	197	61%	\$46,152	799	279	217	78%	\$35,451	
Mathematics and Statistics	341	133	86	65%	\$39,304	80	60%	\$57,421	375	152	107	70%	\$37,799	
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	
Multi/Interdisciplinary Studies	505	183	115	63%	\$33,191	109	60%	\$42,532	434	172	109	63%	\$36,786	
Parks, Recreation, Leisure, and Fitness Studies	480	223	156	70%	\$30,018	150	67%	\$42,195	517	169	99	59%	\$38,913	
Philosophy and Religious Studies	35	15	*	*	*	*	*	*	46	16	11	69%	\$14,066	
Physical Sciences	428	171	97	57%	\$29,295	87	51%	\$43,969	422	200	111	56%	\$41,411	
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	
Psychology	365	141	87	62%	\$21,069	81	57%	\$41,270	399	150	92	61%	\$35,514	
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	189	55	42	76%	\$42,570	39	71%	\$49,091	228	51	33	65%	\$38,072	
Public Administration and Social Service Professions	2,808	1,060	866	82%	\$38,309	840	79%	\$47,327	2,955	1,093	905	83%	\$43,686	
Social Sciences	441	195	125	64%	\$23,863	112	57%	\$41,773	510	173	118	68%	\$22,527	
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	
Visual and Performing Arts	423	156	90	58%	\$14,767	73	47%	\$27,929	442	147	81	55%	\$17,713	
Health Professions and Related Programs	4,682	1,694	1,341	79%	\$58,239	1,273	75%	\$71,090	5,158	1,671	1,301	78%	\$57,473	
Business, Management, Marketing, and Related Support Services	7,859	2,499	1,607	64%	\$61,061	1,573	63%	\$71,625	9,114	2,723	1,905	70%	\$63,969	
History	280	86	49	57%	\$13,303	43	50%	\$30,167	302	96	58	60%	\$30,433	

Table 21. UNC Doctoral (Research) Degree Program Outcomes by Program Area, 2016-2017 Graduates

University Of North Carolina System			Common Follow-up System: Evaluative Measures, 2023 Report														
Doctoral Degree (Research) Programs			Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce														
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2016-2017														
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	98	23	12	52%	\$75,477	11	48%	\$97,426	11	48%	\$92,375	10	43%	\$94,408	*	*	*
Natural Resources and Conservation	144	32	16	50%	\$47,183	14	44%	\$51,099	13	41%	\$52,496	10	31%	\$42,725	*	*	*
Architecture and Related Services	44	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Area, Ethnic, Cultural, Gender, and Group Studies	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Communication, Journalism, and Related Programs	66	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Computer and Information Sciences and Support Services	246	45	18	40%	\$77,366	15	33%	\$81,218	11	24%	\$111,158	11	24%	\$107,024	12	27%	\$116,764
Education	1,593	230	190	83%	\$71,613	183	80%	\$74,758	175	76%	\$78,194	170	74%	\$80,555	168	73%	\$85,565
Engineering	707	136	66	49%	\$46,165	48	35%	\$71,061	48	35%	\$76,181	48	35%	\$83,421	43	32%	\$101,753
Engineering Technologies and Engineering-Related Fields	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Foreign Languages, Literatures, and Linguistics	110	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Family and Consumer Sciences/Human Sciences	27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	192	21	16	76%	\$39,268	14	67%	\$45,621	12	57%	\$52,327	11	52%	\$56,059	10	48%	\$58,259
Liberal Arts and Sciences, General Studies, and Humanities	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Library Science	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	1,200	204	106	52%	\$42,812	75	37%	\$48,183	71	35%	\$55,359	66	32%	\$68,331	66	32%	\$83,724
Mathematics and Statistics	301	55	27	49%	\$36,239	19	35%	\$60,698	16	29%	\$73,037	16	29%	\$75,815	17	31%	\$83,856
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	330	46	34	74%	\$37,370	30	65%	\$55,695	31	67%	\$55,634	28	61%	\$65,492	25	54%	\$78,227
Parks, Recreation, Leisure, and Fitness Studies	94	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Philosophy and Religious Studies	72	14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Physical Sciences	685	124	52	42%	\$39,470	33	27%	\$62,227	33	27%	\$60,923	30	24%	\$80,733	30	24%	\$81,630
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Psychology	405	65	28	43%	\$47,418	29	45%	\$50,283	26	40%	\$68,452	25	38%	\$74,520	26	40%	\$67,121
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Administration and Social Service Professions	101	17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Social Sciences	386	59	26	44%	\$50,565	18	31%	\$61,159	18	31%	\$53,510	16	27%	\$58,881	12	20%	\$80,315
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	120	24	15	63%	\$4,827	12	50%	\$18,335	*	*	*	*	*	*	*	*	*
Health Professions and Related Programs	616	115	60	52%	\$62,244	55	48%	\$72,612	52	45%	\$82,250	50	43%	\$93,313	54	47%	\$101,989
Business, Management, Marketing, and Related Support Services	65	15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
History	133	24	12	50%	\$28,881	*	*	*	*	*	*	*	*	*	*	*	*

Table 22. UNC Doctoral (Research) Degree Program Outcomes by Program Area, 2017-2018 Graduates

University Of North Carolina System Doctoral Degree (Research) Programs			Common Follow-up System: Evaluative Measures, 2023 Report Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce											
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2017-2018											
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	99	21	13	62%	\$66,043	11	52%	\$82,934	10	48%	\$79,797	*	*	*
Natural Resources and Conservation	137	17	*	*	*	*	*	*	*	*	*	*	*	*
Architecture and Related Services	38	*	*	*	*	*	*	*	*	*	*	*	*	*
Area, Ethnic, Cultural, Gender, and Group Studies	18	*	*	*	*	*	*	*	*	*	*	*	*	*
Communication, Journalism, and Related Programs	66	13	*	*	*	*	*	*	*	*	*	*	*	*
Computer and Information Sciences and Support Services	219	37	18	49%	\$103,725	16	43%	\$118,772	16	43%	\$121,760	15	41%	\$146,738
Education	1,566	262	214	82%	\$68,852	200	76%	\$76,114	189	72%	\$79,189	191	73%	\$82,224
Engineering	681	99	45	45%	\$65,848	42	42%	\$82,638	38	38%	\$94,717	38	38%	\$105,198
Engineering Technologies and Engineering-Related Fields	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Foreign Languages, Literatures, and Linguistics	104	*	*	*	*	*	*	*	*	*	*	*	*	*
Family and Consumer Sciences/Human Sciences	22	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	181	20	11	55%	\$38,162	*	*	*	*	*	*	*	*	*
Liberal Arts and Sciences, General Studies, and Humanities	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Library Science	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	1,165	202	120	59%	\$47,691	85	42%	\$67,791	89	44%	\$75,582	90	45%	\$80,189
Mathematics and Statistics	305	42	14	33%	\$55,387	11	26%	\$92,304	12	29%	\$83,522	12	29%	\$95,364
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	314	45	30	67%	\$55,619	28	62%	\$63,569	25	56%	\$69,765	26	58%	\$69,077
Parks, Recreation, Leisure, and Fitness Studies	108	23	12	52%	\$61,719	10	43%	\$80,480	10	43%	\$84,919	10	43%	\$75,253
Philosophy and Religious Studies	68	13	*	*	*	*	*	*	*	*	*	*	*	*
Physical Sciences	611	94	41	44%	\$48,600	32	34%	\$66,427	34	36%	\$69,506	33	35%	\$87,377
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Psychology	412	54	25	46%	\$56,936	23	43%	\$61,039	19	35%	\$73,496	17	31%	\$78,708
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Administration and Social Service Professions	89	13	*	*	*	*	*	*	*	*	*	*	*	*
Social Sciences	364	52	29	56%	\$28,848	15	29%	\$51,726	12	23%	\$64,315	11	21%	\$82,136
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	111	15	*	*	*	*	*	*	*	*	*	*	*	*
Health Professions and Related Programs	614	95	52	55%	\$60,985	48	51%	\$78,151	44	46%	\$88,249	45	47%	\$85,798
Business, Management, Marketing, and Related Support Services	63	13	*	*	*	*	*	*	*	*	*	*	*	*
History	137	14	10	71%	\$25,239	10	71%	\$21,490	*	*	*	*	*	*

Table 23. UNC Doctoral (Research) Degree Program Outcomes by Program Area, 2018-2019 Graduates

University Of North Carolina System Doctoral Degree (Research) Programs			Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>								
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2018-2019								
			1 Year After Completion			2 Years After Completion			3 Years After Completion		
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage
Agriculture, Agriculture Operations, and Related Sciences	86	21	13	62%	\$56,299	*	*	*	*	*	*
Natural Resources and Conservation	128	19	*	*	*	*	*	*	*	*	*
Architecture and Related Services	47	*	*	*	*	*	*	*	*	*	*
Area, Ethnic, Cultural, Gender, and Group Studies	17	*	*	*	*	*	*	*	*	*	*
Communication, Journalism, and Related Programs	62	*	*	*	*	*	*	*	*	*	*
Computer and Information Sciences and Support Services	195	34	12	35%	\$67,578	11	32%	\$72,496	*	*	*
Education	1,527	259	206	80%	\$72,483	196	76%	\$75,009	191	74%	\$81,715
Engineering	683	101	46	46%	\$50,165	38	38%	\$77,731	35	35%	\$87,167
Engineering Technologies and Engineering-Related Fields	*	*	*	*	*	*	*	*	*	*	*
Foreign Languages, Literatures, and Linguistics	93	13	10	77%	\$21,849	*	*	*	*	*	*
Family and Consumer Sciences/Human Sciences	22	*	*	*	*	*	*	*	*	*	*
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*
English Language and Literature/Letters	180	27	17	63%	\$22,802	11	41%	\$47,090	*	*	*
Liberal Arts and Sciences, General Studies, and Humanities	*	*	*	*	*	*	*	*	*	*	*
Library Science	*	*	*	*	*	*	*	*	*	*	*
Biological and Biomedical Sciences	1,157	181	106	59%	\$47,866	79	44%	\$55,248	72	40%	\$68,272
Mathematics and Statistics	312	40	22	55%	\$40,440	14	35%	\$61,502	12	30%	\$68,565
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*
Multi/Interdisciplinary Studies	301	41	23	56%	\$46,410	18	44%	\$68,239	19	46%	\$36,849
Parks, Recreation, Leisure, and Fitness Studies	116	24	13	54%	\$50,309	11	46%	\$61,612	10	42%	\$46,332
Philosophy and Religious Studies	66	*	*	*	*	*	*	*	*	*	*
Physical Sciences	579	114	45	39%	\$46,537	34	30%	\$65,727	35	31%	\$72,446
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*
Psychology	411	52	23	44%	\$61,878	24	46%	\$69,668	18	35%	\$76,074
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	*	*	*	*	*	*	*	*	*	*	*
Public Administration and Social Service Professions	85	14	*	*	*	*	*	*	*	*	*
Social Sciences	358	51	16	31%	\$23,410	*	*	*	*	*	*
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*
Visual and Performing Arts	104	20	14	70%	\$19,308	*	*	*	*	*	*
Health Professions and Related Programs	637	110	66	60%	\$62,255	53	48%	\$76,787	52	47%	\$86,990
Business, Management, Marketing, and Related Support Services	62	*	*	*	*	*	*	*	*	*	*
History	135	18	10	56%	\$30,327	*	*	*	*	*	*

Table 24. UNC Doctoral (Research) Degree Program Outcomes by Program Area, 2019-2020 and 2020-2021 Graduates

University Of North Carolina System Doctoral Degree (Research) Programs						Common Follow-up System: Evaluative Measures, 2023 Report <i>Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce</i>								
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020									Program Year 2020-2021				
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			Parti cipants	Degree Recipients	1 Year After Completion			
			Employed	%	Med. Wage	Employed	%	Med. Wage			Employed	%	Med. Wage	
Agriculture, Agriculture Operations, and Related Sciences	96	15	*	*	*	*	*	*	159	30	16	53%	\$54,510	
Natural Resources and Conservation	122	23	15	65%	\$48,719	10	43%	\$46,938	110	11	*	*	*	
Architecture and Related Services	47	*	*	*	*	*	*	*	49	*	*	*	*	
Area, Ethnic, Cultural, Gender, and Group Studies	19	*	*	*	*	*	*	*	20	*	*	*	*	
Communication, Journalism, and Related Programs	65	10	*	*	*	*	*	*	68	*	*	*	*	
Computer and Information Sciences and Support Services	179	31	14	45%	\$77,704	14	45%	\$97,079	186	18	11	61%	\$71,084	
Education	1,573	244	188	77%	\$70,887	177	73%	\$81,067	1,655	243	190	78%	\$73,143	
Engineering	694	103	47	46%	\$70,556	38	37%	\$87,686	675	112	56	50%	\$64,693	
Engineering Technologies and Engineering-Related Fields	*	*	*	*	*	*	*	*	*	*	*	*	*	
Foreign Languages, Literatures, and Linguistics	91	12	*	*	*	*	*	*	93	10	*	*	*	
Family and Consumer Sciences/Human Sciences	20	*	*	*	*	*	*	*	23	*	*	*	*	
Legal Professions and Studies	*	*	*	*	*	*	*	*	*	*	*	*	*	
English Language and Literature/Letters	167	31	15	48%	\$49,507	11	35%	\$56,129	165	*	*	*	*	
Liberal Arts and Sciences, General Studies, and Humanities	*	*	*	*	*	*	*	*	*	*	*	*	*	
Library Science	*	*	*	*	*	*	*	*	*	*	*	*	*	
Biological and Biomedical Sciences	1,130	187	97	52%	\$51,354	80	43%	\$58,699	1,146	156	85	54%	\$50,873	
Mathematics and Statistics	299	40	16	40%	\$53,284	15	38%	\$67,189	290	48	14	29%	\$91,935	
Military Technologies and Applied Sciences	*	*	*	*	*	*	*	*	*	*	*	*	*	
Multi/Interdisciplinary Studies	295	48	25	52%	\$59,030	24	50%	\$64,123	297	54	32	59%	\$56,210	
Parks, Recreation, Leisure, and Fitness Studies	112	22	11	50%	\$67,243	*	*	*	115	14	*	*	*	
Philosophy and Religious Studies	57	*	*	*	*	*	*	*	62	*	*	*	*	
Physical Sciences	625	96	46	48%	\$50,322	34	35%	\$75,028	656	87	45	52%	\$53,760	
Science Technologies/Technicians	*	*	*	*	*	*	*	*	*	*	*	*	*	
Psychology	441	71	29	41%	\$51,548	23	32%	\$88,176	448	71	34	48%	\$59,925	
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	*	*	*	*	*	*	*	*	*	*	*	*	*	
Public Administration and Social Service Professions	99	20	14	70%	\$53,283	11	55%	\$63,572	98	14	*	*	*	
Social Sciences	356	53	18	34%	\$56,333	15	28%	\$60,693	338	30	13	43%	\$53,662	
Transportation and Materials Moving	*	*	*	*	*	*	*	*	*	*	*	*	*	
Visual and Performing Arts	92	20	12	60%	\$15,406	12	60%	\$23,816	78	12	*	*	*	
Health Professions and Related Programs	635	121	72	60%	\$66,988	66	55%	\$75,132	557	97	63	65%	\$68,550	
Business, Management, Marketing, and Related Support Services	77	12	*	*	*	*	*	*	79	*	*	*	*	
History	137	21	*	*	*	*	*	*	132	12	*	*	*	

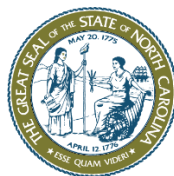
Table 25. UNC Doctoral (Professional) Degree Program Outcomes by Program Area

University Of North Carolina System										Common Follow-up System: Evaluative Measures, 2023 Report									
Doctoral Degree (Professional Practice) Programs										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Post-Completion Outcome Employment and Wage Measures by Program Area		Program Year 2016-2017																	
		Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion			5 Years After Completion			
				Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	
Legal Professions and Studies		1,186	366	231	63%	\$34,245	228	62%	\$50,738	218	60%	\$60,263	211	58%	\$67,732	211	58%	\$71,699	
Health Professions and Related Programs		3,535	863	513	59%	\$56,547	509	59%	\$70,795	498	58%	\$81,026	493	57%	\$97,264	496	57%	\$112,671	

University Of North Carolina System		Common Follow-up System: Evaluative Measures, 2023 Report														
Doctoral Degree (Professional Practice) Programs		Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce														
Post-Completion Outcome Employment and Wage Measures by Program Area	Parti cipants	Degree Recipients	Program Year 2017-2018													
			1 Year After Completion			2 Years After Completion			3 Years After Completion			4 Years After Completion				
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage		
Legal Professions and Studies	1,101	344	208	60%	\$37,257	209	61%	\$53,394	203	59%	\$62,977	205	60%	\$82,257		
Health Professions and Related Programs	3,624	939	578	62%	\$58,817	601	64%	\$78,955	589	63%	\$95,066	589	63%	\$107,909		

University Of North Carolina System					Common Follow-up System: Evaluative Measures, 2023 Report									
Doctoral Degree (Professional Practice) Programs					Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2018-2019													
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			3 Years After Completion					
			Employed	%	Med. Wage	Employed	%	Med. Wage	Employed	%	Med. Wage			
Legal Professions and Studies	997	330	203	62%	\$37,058	209	63%	\$56,531	211	64%	\$73,428			
Health Professions and Related Programs	3,682	930	567	61%	\$59,665	570	61%	\$77,254	565	61%	\$93,856			

University Of North Carolina System										Common Follow-up System: Evaluative Measures, 2023 Report									
Doctoral Degree (Professional Practice) Programs										Data prepared by the Labor & Economic Analysis Division, NC Department of Commerce									
Post-Completion Outcome Employment and Wage Measures by Program Area	Program Year 2019-2020									Program Year 2020-2021									
	Parti cipants	Degree Recipients	1 Year After Completion			2 Years After Completion			Parti cipants	Degree Recipients	1 Year After Completion								
			Employed	%	Med. Wage	Employed	%	Med. Wage			Employed	%	Med. Wage						
Agriculture, Agriculture Operations, and Related Sciences	94	100	46	46%	\$90,143	49	49%	\$103,978	393	94	50	53%	\$87,955						
Legal Professions and Studies	982	310	183	59%	\$39,558	180	58%	\$60,914	1,020	284	177	62%	\$50,481						
Health Professions and Related Programs	3,748	850	538	63%	\$60,389	521	61%	\$82,467	3,501	881	558	63%	\$61,053						
Business, Management, Marketing, and Related Support Services	54	13	11	85%	\$203,992	12	92%	\$155,454	64	18	15	83%	\$120,748						



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