

NC DEPARTMENT
of COMMERCE
LABOR & ECONOMIC
ANALYSIS



A Report on the Operations of the North Carolina **COMMON FOLLOW-UP SYSTEM**

**May
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A REPORT ON THE OPERATIONS OF THE NORTH CAROLINA COMMON FOLLOW-UP SYSTEM

May 1, 2019

The 2019 Common Follow-up System (CFS) Operational Report provides information on CFS activities over the past calendar year. This report includes information related to education, employment and training programs for which data were reported by state agencies under the requirements of the North Carolina General Statute Chapter 96 Article 4.

WHAT IS THE COMMON FOLLOW-UP SYSTEM?

The Common Follow-up System provides information on the educational and employment outcomes of participants in publicly supported educational, employment, and training programs. CFS grew out of the recognition by a group of state agencies that quality outcome information was needed on the participants of educational, employment, and training programs. This data was essential for program planning, evaluation, and resource management.

Although each of the agencies conducted independent follow-up studies to fulfill specific programmatic, regulatory, or other requirements, information content and collection procedures were specific to each agency. Existing collection methods were often expensive and no mechanism was available to share information among agencies, review outcomes across programs and agencies, study the relationships among programs and agencies, or to examine results for the system as a whole. In short, there was no consistent method that allowed for the examination of North Carolina's education, employment, and training community. CFS was developed as a cost-effective response to these limitations.

HISTORY OF THE COMMON FOLLOW-UP SYSTEM

The CFS was developed in 1992 as a cooperative venture of the participating agencies under the auspices of the North Carolina State Occupational Information Coordinating Committee (NCSOICC). The original participating agencies were:

- **the University of North Carolina System (UNC System);**
- **the North Carolina Community College System (NCCCS);**
- **the North Carolina Department of Public Instruction (DPI), Workforce Development Education;**
- **the Employment Security Commission (ESC) of North Carolina;**
- **the Division of Employment and Training (DET);**
- **the North Carolina Department of Human Resources, Division of Vocational Rehabilitation Services (DVRs); and**
- **the North Carolina Department of Labor (DOL).**

The participating agencies chose the former Employment Security Commission as the system operator, due to its expertise with large data sets and its responsibility for the unemployment insurance wage file. In the initial year, a prototype matching system was developed. This matching system provided a mechanism whereby data submitted by an individual participating agency were matched to data submitted by each of the other agencies and to employment and wage information in the Unemployment Insurance wage file.

CFS YEARS 1992-2000: CFS CONVERTED TO A LONGITUDINAL DATABASE

Over the first few years of operation, the CFS evolved in terms of processing procedures and system expansion. The system was converted from a single year matching system to a longitudinal database. The longitudinal database structure provided a mechanism for following an individual's progress across education, employment and training programs across time as well as supporting comparisons at specific intervals or points in time. This conversion also provided the opportunity to study the long-term impact of programs, to examine the interrelationships among agencies in the overall provision of services, and to gain a better understanding of the paths individuals follow while utilizing these services. The system grew in terms of both records and individuals processed. The number of individuals processed per year increased from 330,045 in 1992 to over 1.7 million in 1995, while the number of agencies grew from six to eight over the same period.

In 1995, the General Assembly enacted legislation that amended Chapter 96 of the North Carolina General Statutes and established CFS by statute. The legislation defined system participation, established and assigned operational and evaluative responsibilities, mandated data integrity and confidentiality and outlined reporting requirements and schedules. The former ESC was assigned operational responsibility for CFS while the Office of State Budget and Management (OSBM) was charged with analysis and evaluation.

Over the next several years, there was increased interest in the data contained in the CFS due initiatives as the state and federal levels that focused on the collection, calculation, and reporting of performance information related to education, employment and training programs.

The Workforce Investment Act (WIA) of 1998 stimulated further interest and attention to the data contained in CFS. WIA mandated the collection, calculation and reporting of performance and accountability measures for workforce training programs operated throughout the state. ESC worked in collaboration with the Division of Workforce Development (DWD) on the development of procedures for the processing, calculation and reporting of the state's WIA performance measures.

These initiatives led to continued expansion and refinement of the CFS data collection procedures. To help meet the reporting requirements for WIA, additional data elements were added to the CFS. These elements were utilized in the calculation of performance measures required under WIA. In addition, ESC staff worked with the partner agencies to assist in several performance, analytical and reporting requests and requirements.

CFS YEARS 2001-2015: CFS EXPANSION AND ENHANCEMENT

During the 2001 Legislative Session, the North Carolina General Assembly transferred the evaluative responsibility for the CFS from the Office of State Budget and Management (OSBM) to the Employment Security Commission (ESC). Over the next several years data from CFS continued to be utilized to help meet several state and federal assessment, performance and reporting initiatives.

In July of 2011, the North Carolina General Assembly enacted legislation that transferred the Employment Security Commission of North Carolina to the North Carolina Department of Commerce. Responsibility for the CFS was moved to the Department of Commerce's Labor and Economic Analysis Division (LEAD).

In 2012, the North Carolina General Assembly enacted Session Law 2012-131 to reform the state's workforce development system. Part of the law called for the Department of Commerce to improve and strengthen the CFS and to work in collaboration with the Commission on Workforce Development to utilize information from CFS in the creation of performance measures for North Carolina's Workforce Development System.

As part of its efforts to improve and strengthen the CFS, the North Carolina Department of Commerce began several initiatives. These included enhancing the technology processes for system processing and storage, enhancing data integrity, updating system documentation regarding agency and programmatic information, and enhancing system outputs.

The Department of Commerce began work on a system upgrade focused on enhancing the system capacity by migrating CFS from its mainframe computing environment to a server-based platform. The goal for the new technology infrastructure was to provide the core mechanisms needed for storing, updating, securing, maintaining, processing, analyzing, and reporting effectively and efficiently from the CFS.

The Department of Commerce continued to work with partner agencies in their efforts to expand the state's capacity to utilize longitudinal data in the assessment, reporting and evaluation of education, employment and training programs. In 2012, the North Carolina Department of Public Instruction was awarded a grant from the U.S. Department of Education to build a State Longitudinal Data System (SLDS). While NCDPI is the lead on the SLDS grant, the project is a collaborative effort of several entities including: the NCDPI, the North Carolina Community College System (NCCCS), the University of North Carolina General Administration (UNC GA), the North Carolina Independent Colleges and Universities (NCICU), and the North Carolina Department of Commerce (NCDOC). The goal of the system was to provide a mechanism to follow individuals across North Carolina's K-12 education system, Higher Education, and into the workforce. This information can be utilized to evaluate student achievement and progress as well as carry out institutional and program assessment. One of the goals of the SLDS grant project was to establish a link between the SLDS system and the employment-related data in CFS, which was completed through a joint effort between Commerce and the Government Data Analytics Center.

As part of its ongoing efforts to improve CFS, the Department of Commerce applied for and received a competitive grant with the U.S. Department of Labor's Employment and Training Administration through the Workforce Data Quality Initiative (WDQI) program. The grant was used to enhance the technology capabilities of CFS, to carry out additional research, and to fund the development of the North Carolina Tool for Online Workforce and Education Reporting (NC TOWER). NC TOWER is an online reporting system that provides employment and wage outcomes by program, degree and institution for North Carolina's public higher education systems. The WDQI grant period was completed in June 2017.

To enhance the CFS system outputs, Commerce's Labor and Economic Analysis Division staff worked in collaboration the Division of Workforce Solutions and the NCWorks Commission in the development of a set of performance measures for North Carolina's Workforce Development System. The Commission's Evaluation and Performance Task Force and Advisory Group is charged with assisting the Commission with the development of the performance system. LEAD staff worked closely with the Task Force and Advisory Group members and carried out the data analyses to support the Commission's performance measures project. This work resulted in the development of a set of performance measures for the state's Workforce Development programs. The Commission's report "Measuring the Performance of North Carolina's Workforce Development System: A First Look" was completed in January 2014 and the "Measuring the Performance of North Carolina's Workforce Development System" report was completed in January 2015.

During the 2014 Session, the North Carolina Legislature enacted Session Law 2014-100 which required the Department of Commerce to develop a plan for the transfer of the information and capabilities of CFS to the Government Data Analytics Center (GDAC) within the Office of Information Technology Services. Commerce worked in collaboration with GDAC to develop the business and system requirements for the new system, including enhancing the technology utilized for system processing and storage, improving data integrity, updating system documentation, and enhancing system outputs. In 2015, LEAD and GDAC migrated the historical CFS data from its mainframe computing environment into the GDAC server-based environment. This included the migration of over 100 gigabytes of data as well as an inventory and classification of all historical data files and elements.

LEAD staff worked together with GDAC and the CFS contributing agencies on the development and enhancement of the new CFS. These efforts included the development of new and expanded data file structures for each of the contributing agencies, new data submission processes, new data validation processes, new storage structures including data warehouses and implementation of a new technology infrastructure for carrying out data management and analysis.

Beginning with the 2015 program year and continuing today, contributor data submittals and processing has been completed in the GDAC environment. This includes the submission of data by contributing agencies, automated data validation processes within the GDAC environment, review of data validation results, contributor data approval through a new GDAC contributor portal, automated load processes into the new contributor warehouses and analysis of data in the GDAC environment.

CFS CURRENT OPERATION (2018)

Over the past year, LEAD staff have continued to work with GDAC and the contributing agencies to enhance the CFS content and infrastructure as well as make improvements to the contributor data portal. These efforts have included additional refinement of file structures and formats for some of the contributing agencies. In addition, LEAD staff have provided technical assistance and trainings including technical guidance, convening of contributor meetings, as well as the delivery of customized on-site trainings for several agencies.

LEAD staff also have worked closely with GDAC on further enhancements to the contributor data portal interface. These efforts have focused on improved usability for examining data issues within the portal, including enhanced data validity checks to compare current submission record counts to prior years, development of a submission status dashboard and an integrated scheduler for setting and tracking automated reminders regarding submission deadlines. In a continued effort to work toward optimal data quality and enhanced analyses over the coming year, LEAD and GDAC will be continuing to work on efforts regarding individual identity resolution. These efforts are needed for the improvement of analytical accuracy as well as improved program performance information.

ENHANCING SYSTEM OUTPUTS

In addition to its work on system and technology improvements, LEAD has undertaken several efforts to enhance system outputs. These have included development and expansion of on-line data delivery tools, enhanced research and reporting, consultation as well trainings and presentations.

North Carolina's Tool for Online Workforce and Education Reporting (NC TOWER), initially launched in 2014, is a comprehensive, public-facing, web-based system using CFS data to report employment and wage outcomes for graduates from the University of North Carolina system schools and the North Carolina Community College System. In late 2017 LEAD staff updated and enhanced the data calculations for NC TOWER and included additional graduate cohorts and additional years of outcome measures. The outcome measures presented in NC TOWER include post-graduation employment and wage statistics and enrollment in further education for up to 15 years after graduation. These measures include employment rates, average and median wages for each program, employment and wage measures by industry of employment, and rates of re-enrollment in higher education programs. NCTOWER also displays information for each college/university, degree type, and academic subject area. LEAD is continuing to work on the enhancement of NC TOWER to improve usability and visual appeal.

LEAD also provided support to the NCWorks Commission in the calculation of a set of performance measures that were utilized to assess North Carolina Workforce Development System programs. The NCWorks Commission has now issued six annual performance reports focusing on the performance of North Carolina's workforce development system and programs. The [sixth report](#) was released in January 2019.

LEAD continued to expand and enhance additional research and analytical products utilizing data from CFS. These products included a series of data stories focused on specific programs and cohorts with graduation, employment, and wage outcomes for community college and university students, ex-prisoners, and workforce training participants. These data stories are available on the [CFS website](#).

In 2018, LEAD refined and launched an online labor market information product, the Labor Supply/Demand Analyzer. This online tool provides information regarding labor supply and demand in North Carolina and the alignment of North Carolina's higher education system to the needs of the labor market. Data from the CFS were utilized to compile information for North Carolina's educational pipeline. This new online tool has been utilized to generate information to help inform budget planning and policy-making. LEAD has also provided technical assistance to organizations in other states interested in developing their own labor supply and demand tools.

Further research, analytical and reporting efforts have included support to Governor Cooper's Education Cabinet, collaborating with the NC SchoolWorks partner agencies as well as the delivery of several presentations at state and national meetings. LEAD staff integrated information from the CFS in presentations related to education, workforce development, and the economy. These informative sessions included presentations at various stakeholder meetings including NCWorks Commission meetings; North Carolina Community College System state conference; local community college meetings; UNC's ncIMPACT Workforce Summit; and the national Council for Community and Economic Research conference.

HOW IS THE COMMON FOLLOW-UP SYSTEM OPERATED?

The participating agencies supply data files based on their operational and reporting periods, which can be a calendar quarter, federal fiscal year, state fiscal year, academic term or school year. The enhanced CFS is designed to receive and align information across varying reporting schedules. The number of submitted data files and corresponding file structures are customized for each agency and align to contributing agency's existing information systems. The submitted files are created from administrative records that are maintained by each of the contributors and contain a wealth of information specific to each contributor, including demographic data, program enrollment information, program completion, course participation, services received, and other agency-specific information.

HOW ARE CFS DATA PROCESSED?

Each contributing agency has defined reporting time lines customized to their specific program and agency operations. These reporting time lines are developed in collaboration with the contributing agencies and are catalogued in the GDAC contributor portal. The enhanced CFS provides an automated email notification to each contributor with a reminder of their reporting deadlines. In addition, LEAD works closely with the contributing agencies to track reporting time lines and identify any reporting delays. The contributing agencies transmit their data files to the secure GDAC environment, once received, information is subject to an automated data validation process. The validation process generates edit reports for each submitted data file and the reports are available to the contributing agencies through the

GDAC contributor portal. Contributors review the edit reports and consult with staff at LEAD to determine if updates or corrections are needed. Agencies are responsible for reviewing and approving their final data submissions. Once approved the data are loaded to individual contributor warehouses in the GDAC environment.

In addition to the information supplied by the education, employment and training agencies, the Department of Commerce's Division of Employment Security provides employment and wage information as well as information on Unemployment Insurance claims and benefit recipients. These data are processed monthly and quarterly and loaded to specific tables within the GDAC environment.

Following the completion of the data loading process, LEAD analyzes data from contributing agencies in conjunction with employment and wage data. The resulting information are utilized in the development and production of reports, files and other related research products.

The confidential nature of information contained in the CFS mandates the use of strict safeguards in the collection, storage, and use of the data. CFS data are stored within the secure GDAC environment. Access to the systems requires individual user data access profiles, as well as individual user ID's and passwords. At the time of system enrollment and with every data release, contributors and staff are informed of the confidential nature of the data and the legal restrictions on its use. All informational products are subject to a set of data suppression procedures to prevent the disclosure of personally-identifying information.

Is the CFS Cost-Effective?

The CFS is an efficient and cost-effective method for collecting follow-up information for education, employment and training program participants. The extensive use of administrative records and automated matching systems allows the costs to be held below that of any system that would rely upon phone or mail surveys to collect similar data.

The cost-effectiveness of the CFS can also be evaluated in terms of the benefit that the data provide to the participating entities. The system generates employment and wage data without the use of telephone or mail surveys. Benefits include time saved not having to produce mail and analyze responses from program participants, making the return on investment invaluable.

Several of the contributing agencies have utilized the information available through CFS to help meet a variety of state and federal performance, policy and evaluation initiatives. The North Carolina Community College System has utilized the information to help in meeting federal performance requirements for the U.S. Department of Education including the National Reporting System for Adult Education programs and the Perkins IV core indicators. In addition, the Community College System utilized data from CFS in the development of performance measures system for North Carolina's 58 Community Colleges. This includes the development of an employment measure that will be utilized as part of the NCCCS' performance system to assess post-completion employment outcomes.

The University of North Carolina have utilized information from CFS to support internal analyses, assist in strategic planning and to provide relevant employment related information to the UNC Board of Governors (UNC BOG). The information is being utilized by the UNC BOG in its program review process. The UNC web-based electronic dashboard contains a variety of enrollment and graduation statistics including a link to the employment and wage outcomes available through the NC TOWER web portal.

In addition, information from the CFS is utilized by agency partners in meeting state and federal performance and evaluation initiatives. These efforts have included the use of CFS data in assessing the provision of services to participants as well as the evaluation of employment and wage outcomes. CFS data is often utilized to support economic development activities in the state and assist stakeholders to make informed decisions for business recruitment and expansion.

WHAT ARE THE STRENGTHS AND LIMITATIONS OF CFS DATA?

The scope of the CFS is extensive in terms of the number of contributing entities, the number of individuals included in the system as well as the breadth of program and service coverage. Review of follow-up systems in other states reveals that North Carolina's CFS offers the most comprehensive coverage of education and workforce programs of any state longitudinal data system. Many states and governmental entities with similar missions and mandates view the CFS as a model for delivering follow-up information and have sought the advice of agency staff on implementing similar systems in their jurisdictions. The CFS is an efficient and cost-effective tool for long-term follow-up due to the reliance on automated matching of administrative records. However, since much of the data utilized in the CFS were originally gathered for different purposes, the resultant output possesses both inherent strengths and limitations. Several of the most significant areas are described below:

Wage information includes information on individuals:

- **working in jobs covered under North Carolina Unemployment Insurance Laws;**

Available employment-related data includes:

- **the employment status of the individual;**
- **the size of the employing firm; and**
- **the North American Industry Classification System (NAICS) code of the firm.**

Wage information reflects total quarterly earnings; hourly or weekly wages are not available.

Wage information is not available for individuals who:

- **work outside of North Carolina, or**
- **are employed in North Carolina, but not covered by unemployment insurance (e.g., the self-employed, church and religious organization employees, summer camp employees, and other non-covered workers).**

Employment-related information that cannot be determined includes:

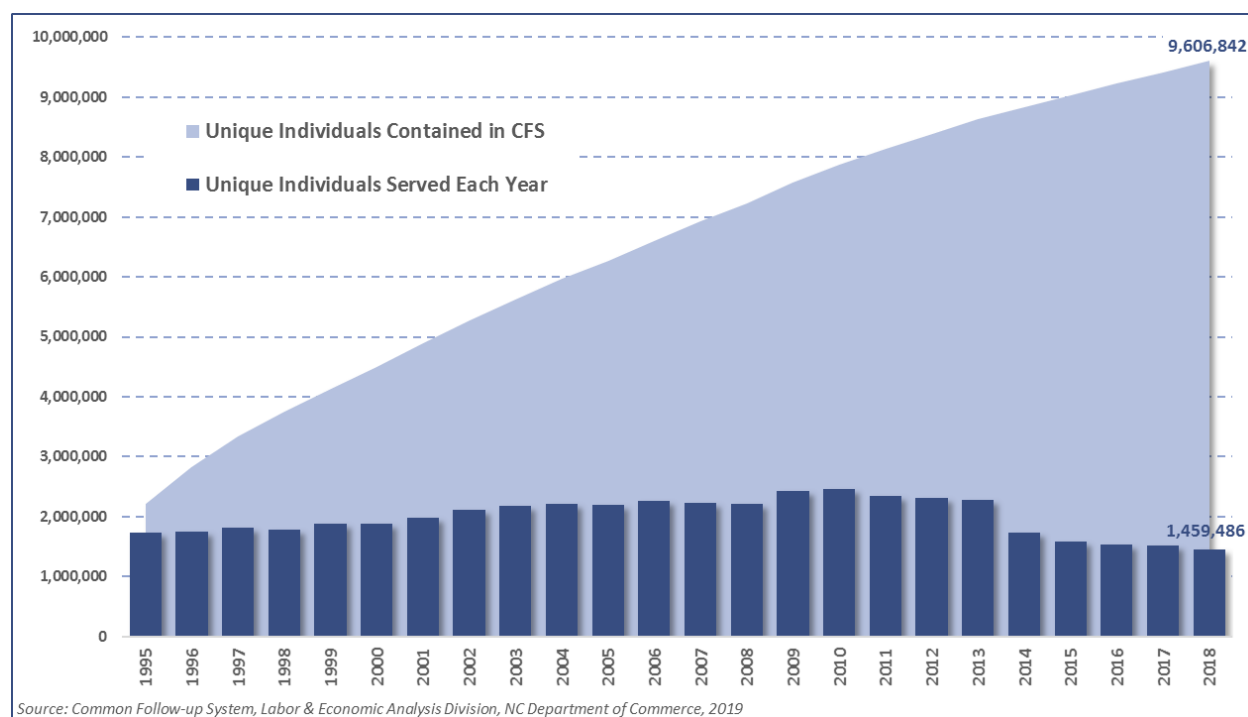
- **the entry-on-duty date of employment for the individual;**
- **the employment type (i.e., permanent, temporary, part- or full-time);**
- **whether the person worked at all during the quarter;**
- **the number of hours worked for the quarter; and**
- **the person's occupation.**

PARTICIPATION SUMMARY ACROSS THE YEARS

Since its inception, the system has experienced tremendous growth. LEAD and the contributing agencies have made concerted efforts to incorporate information regarding additional programs and the individuals they serve, as well as to solicit the participation of other divisions or agencies. The analyses that are included in the following sections reflect data supplied by the contributing entities for services that were provided through June 2018.

The CFS has expanded dramatically since its inception in the early 1990's. Figure 1 shows the total number of unique individuals included in the system between the 1994-1995 and 2017-2018 CFS program years, as well as the number of individuals served each year by publicly funded education and workforce training programs tracked in CFS. The system currently contains information on over 9.6 million unique individuals.

Figure 1. Growth and Scope of the Common Follow-up System Since Inception, 1995 to 2018¹



The total number of unique individuals within the Common Follow-up System was obtained by performing a total unique count of all validated SSNs contained in the system across all contributing agencies by CFS year. Analyses of data by CFS year indicate that the number of individuals who received services through one or more of the contributing entities ranged from the high of 2.3 million in CFS Year 2010-2011 to 1.5 million in the most recent 2017-2018 CFS Year.

The following entities provided information on individuals enrolled in education and training programs during the 2017-2018 program year.

- **The North Carolina Department of Public Safety**
 - **Division of Adult Correction (DAC);**
- **The North Carolina Department of Public Instruction (DPI);**
- **The North Carolina Department of Commerce's**
 - **Division of Workforce Solutions (DWS);**
- **The North Carolina Department of Health and Human Services**
 - **Division of Services for the Blind (DSB);**
 - **Division of Social Services (DSS);**
 - **Division of Vocational Rehabilitation Services (DVRS);**
 - **Division of Mental Health, Developmental Disability, and Substance Abuse (DMH);**
 - **Division of Aging and Adult Services (DAAS);**
- **The North Carolina Community College System (NCCCS); and**
- **The University of North Carolina (UNC)**

In addition to the information supplied by the education, employment and training agencies, the Department of Commerce's Division of Employment Security provided a wealth of employment and wage information as well as information on Unemployment Insurance claims and benefit recipients to the CFS.

Analyses of agency's historical data in CFS provide an understanding of the scope of the system, as well as an overview of service provision by contributing agencies over time. Table 1 presents information regarding the number of individuals served by each of the contributing agencies by year as well as the number of individuals served across the contributing agencies. Counts of the number of individuals by agency were obtained by performing a unique count of individuals with Social Security Numbers (SSNs) submitted by each agency by program year. The agency totals across the ten-year time period are counts of unique individuals across multiple years. Individuals can receive services from a given agency across multiple program years. The unique count of individuals across all agencies within a given year are unique counts of individuals across agencies. Individuals may be served by more than one agency in a given year or across years.

TABLE 1. Individuals Served by Agency and by CFS Program Year

Agency	CFS year										Individuals served per agency, 2009-2018
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	
NC Division of Aging and Adult Services	--	--	--	--	--	--	--	303	321	293	486
NC Division of Mental Health, Developmental Disability, and Substance Abuse	--	--	--	--	--	--	--	6,343	6,832	7,990	11,168
NC Division of Adult Correction	222,349	234,082	227,934	213,939	183,614	191,292	183,066	192,864	188,557	151,570	598,489
NC Department of Public Instruction	344,527	323,173	280,398	262,385	240,739	183,636	201,036	206,098	197,877	189,673	928,648
NC Division of Services for the Blind	3,207	3,441	3,479	3,580	3,737	3,656	3,213	3,249	3,164	2,856	10,191
NC Division of Social Services	242,304	235,745	268,309	309,359	345,524	291,181	18,169	23,033	48,006	10,831	941,122
NC Division of Vocational Rehabilitation Services	52,453	57,377	60,343	61,132	60,105	57,854	48,642	57,289	51,270	47,354	190,639
NC Division of Workforce Solutions	1,076,505	1,173,304	1,043,088	1,011,781	986,408	422,222	469,488	420,211	404,201	427,684	2,918,468
NC Community College System	881,906	777,446	779,848	749,649	739,673	691,121	652,635	612,491	591,859	567,560	3,048,763
University of North Carolina System	231,080	235,463	235,428	232,738	236,332	233,399	233,382	234,631	236,406	239,089	806,391
Individuals served per CFS year across all agencies	2,436,804	2,465,479	2,354,128	2,309,623	2,277,862	1,728,563	1,584,660	1,539,147	1,515,463	1,459,486	5,807,475

Source: Common Follow-up System, Labor & Economic Analysis Division, NC Department of Commerce 2019

Over the ten-year period spanning July 1, 2008 through June 30, 2018 over 5.8 million individuals received services through the contributing agencies. This includes 2.9 million individuals who received a variety of workforce services through the Division of Workforce Solutions and over three million who participated in education and training programs through the North Carolina Community College System. While DWS and NCCCS delivered services to large numbers of individuals, North Carolina's public school system provides the building blocks upon which other education, employment and training services rely. During the same period, more than 928,000 individuals were enrolled in public high school programs. UNC is the state's publicly supported university system and provided educational programs to over 806,000 individuals.

Several agencies provide services to very specific sub-populations. The Division of Social Services provided employment and supportive services to more than 941,000 Work First and Food Stamp Employment and Training Program participants over the ten-year time period, while the Department of Public Safety provided services to over 598,000 offenders in prison, on probation or parole. The Division of Vocational Rehabilitation Services provided rehabilitation services to over 190,000 individuals with physical and mental disabilities, and DSB provided vocational rehabilitation services to more than 10,000 blind, visually-impaired and multi-handicapped individuals.

It is important to keep in mind that some entities are authorized to provide services to large segments of the population (e.g., DWS and NCCCS), while others are authorized to provide services to very specific sub-populations based on stringent eligibility criteria including occupational goal, income, disability type, severity of disability, and educational requirements (e.g., DSS, DVR, DSB and UNC).

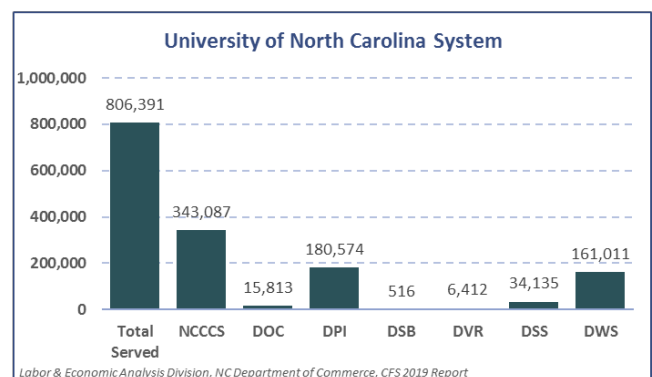
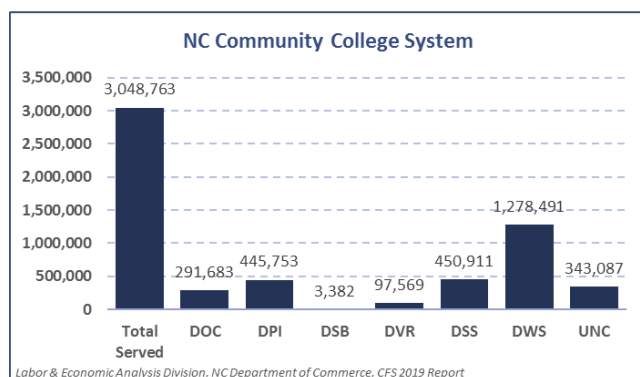
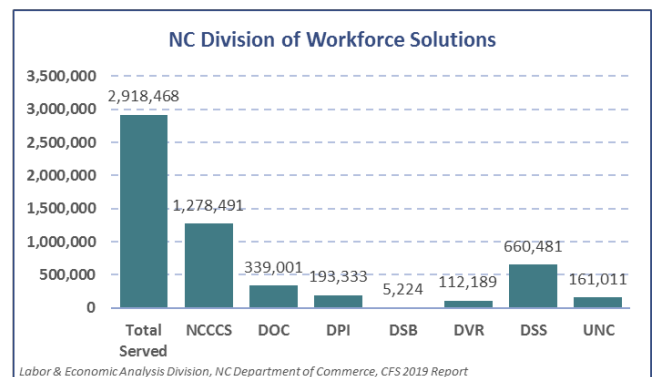
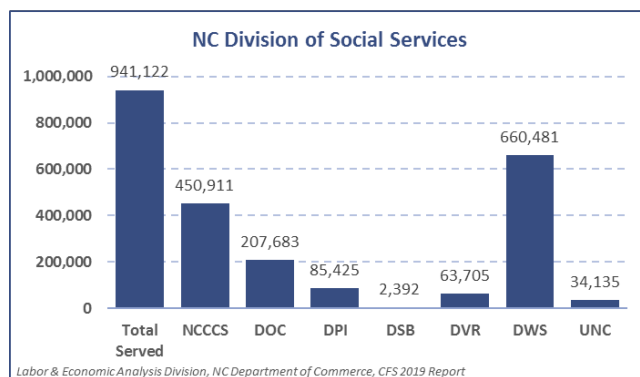
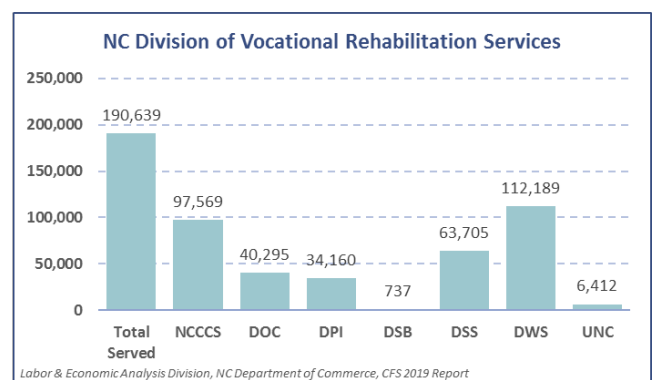
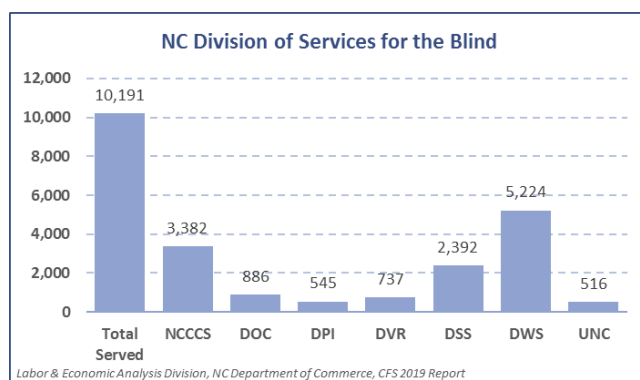
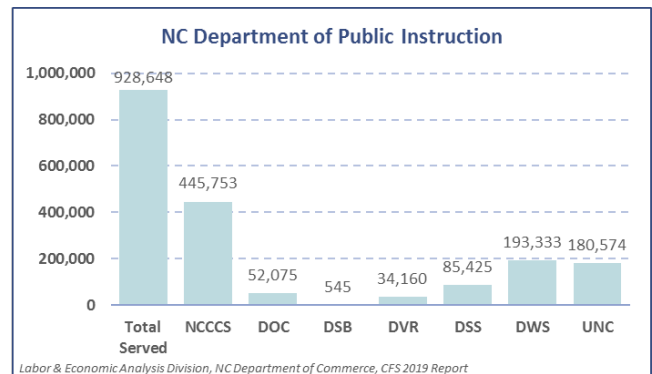
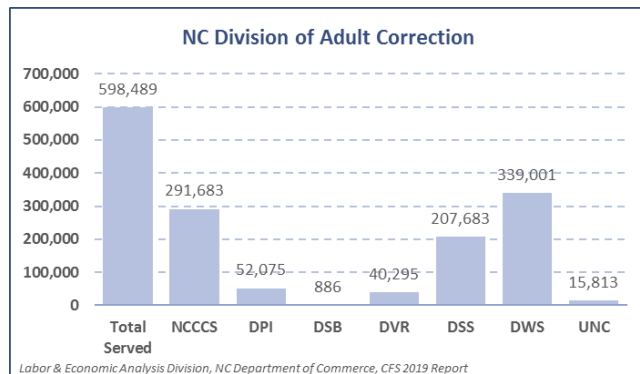
INTERRELATIONSHIPS AMONG AGENCIES IN THE PROVISION OF SERVICES

A significant feature of the CFS is its longitudinal structure, which fosters the examination of the interrelationships among entities in the overall provision of services and an understanding of the paths individuals follow while utilizing these services. Several initiatives at both the State and National level have called for the coordination, collaboration and integration of services to individuals across education, employment and training programs. These initiatives include the NCWorks Career Center System, Workforce Investment Act (WIA), Workforce Innovation and Opportunity Act (WIOA), as well as endeavors by the education, employment and training agencies themselves.

To provide an understanding of the interrelationships among entities in the provision of services, data were analyzed both within and across the last ten program years (July 1, 2008 through June 30, 2018). These analyses utilized data from each of the contributing agencies. These agencies vary in terms of their organizational structure. That is, some of the agencies encompass several divisions within a given agency, others encompass a single division within a given agency and others encompass the combined work of staff across multiple agencies and programs. The data provided by each of these agencies includes information regarding one to several programs and/or services.

Analyses focused on determining the unique number of individuals who received services through each agency, the unique number of individuals who received services across agencies and the number of individuals found in common among the agencies. Graphs with the results of the analysis are provided in Figure 2.

Figure 2. Total Unique Individuals Served by Each Agency and Number of Individuals Also Served by One or More of Other Agencies, CFS Program Years: 2008 – 2009 through 2017 – 2018

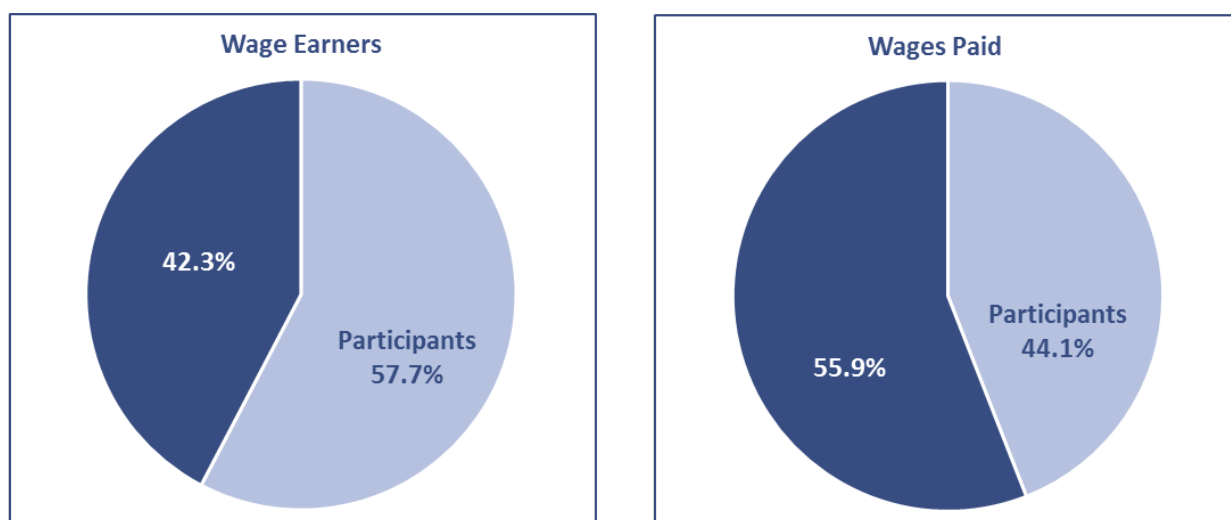


RELATIONSHIP OF INDIVIDUALS SERVED TO THE NORTH CAROLINA ECONOMY

In addition to providing information regarding the number of participants served by each agency, CFS may also be utilized to provide an understanding of the relationship between participants of the state's education, employment and training programs and the overall economy.

Over the ten-year period from July 1, 2008 to June 30, 2018, more than 5.8 million unique individuals participated in educational, employment and training programs through the participating agencies. During the 2017-2018 program year, there were nearly 5.2 million unique individuals with wages reported to the Division of Employment Security. These individuals earned over \$212 billion in total wages. Analyses of the information supplied by the participating agencies to the CFS demonstrate that of the nearly 5.2 million wage earners, approximately three million (or 58%) participated in education, employment and training programs through one of participating agencies during the same period. These individuals earned \$93.6 billion in total wages or 44% of all wages paid in the 2017-2018 program year.

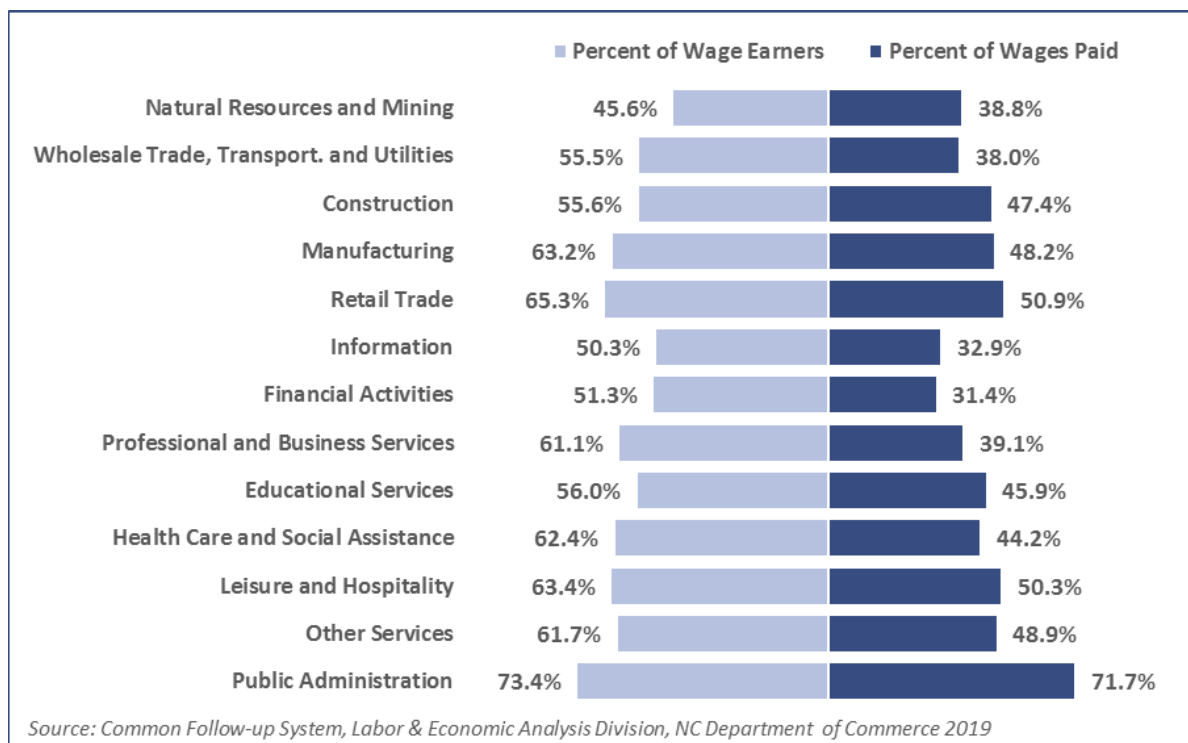
Figure 3. Ratio of Participants of North Carolina's Education, Employment and Training Programs (July 1, 2008 – June 30, 2018) to All Wage Earners and Wages Paid During the 2017-2018 Program Year



Source: Common Follow-up System, Labor & Economic Analysis Division, NC Department of Commerce 2019

Further analyses by industry sector demonstrate that more than 50% of individuals employed in each of the state's major industry sectors (except for Nature Resources and Mining; with 46%) participated in programs and services provided by one of the participating agencies in the last ten years. In addition, more than 6 out of every 10 individuals employed in the following major industry sectors have been participants of the contributing agencies in the last ten years: Manufacturing; Retail Trade; Professional and Business Services; Health Care; Leisure and Hospitality, Public Administration, and Other Services.

Figure 4. Ratio of Participants of North Carolina’s Education, Employment and Training Programs (July 1, 2008 – June 30, 2018) to All Wage Earners and to All Wages Paid by Industry Sector During the 2017-2018 Program Year



Analyses of the wages paid in each industry revealed that at least 30% of the wages paid in all major industry sectors, and more than half of the wages paid in Public Administration; Retail Trade and Leisure and Hospitality, were paid to individuals who had participated in programs and services through one of the contributing agencies in the last ten years. These results clearly indicate the connection between education, employment, and training programs and the state’s economy as well as the continued need for coordination among education, workforce development and economic development efforts.

OPERATION SUMMARY

The Common Follow-up System (CFS) is an effective mechanism for providing information regarding the agencies, programs, and participants that comprise North Carolina’s education, employment and training system. The CFS is a valuable resource for understanding the educational and employment outcomes of individuals who participate in services as well as an understanding of the paths individuals follow while utilizing these services.

The scope of the CFS is extensive in terms of the number of entities and individuals processed as well as the breadth of program and service coverage. Analyses of data from the CFS indicate that over the ten-year period from July 1, 2008 through June 30, 2018 over 5.8 million individuals received services through

the contributing agencies. During the same period, the North Carolina Community College System and the Division of Workforce Solutions each provided services to close to three million individuals.

Further interpretation of the data presented in this report indicates that there is substantial collaboration among agencies in the overall provision of education, employment and training services. Over the ten-year period, about 1.3 million North Carolinians received both education and training services through the North Carolina Community College System and employment and training services through the Division of Workforce Solutions. In addition, these two agencies provided services to large percentages of individuals from each of the other participating agencies.

While these two agencies form the cornerstone of North Carolina's education, employment and training system, each of the participating entities plays a fundamental role in the overall mission of developing and promoting highly skilled workforce, improving the quality of life for North Carolinians, and preparing the state and its communities to compete in the global economy.

There is a significant relationship between the individuals receiving services through the state's education and workforce partners and the North Carolina economy. More than half of all wage earners in the state in the 2017-2018 program year received services through the participating agencies during the previous ten program years. In addition, these individuals earned 44% of all wages during the same program year. These findings help demonstrate the integral relationship that exists between the services provided by the state's education and workforce partners and the state's economy and the continued need for coordination among education, workforce development and economic development efforts.