



Labor & Economic Analysis
COMMERCE



NORTH CAROLINA
COMMON FOLLOW-UP SYSTEM

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

**May
2016**

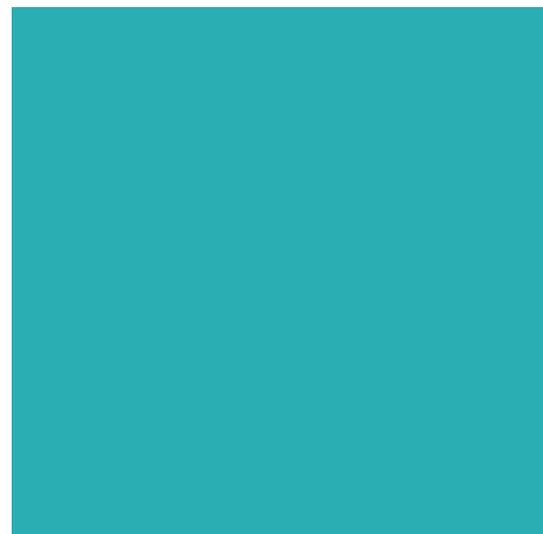
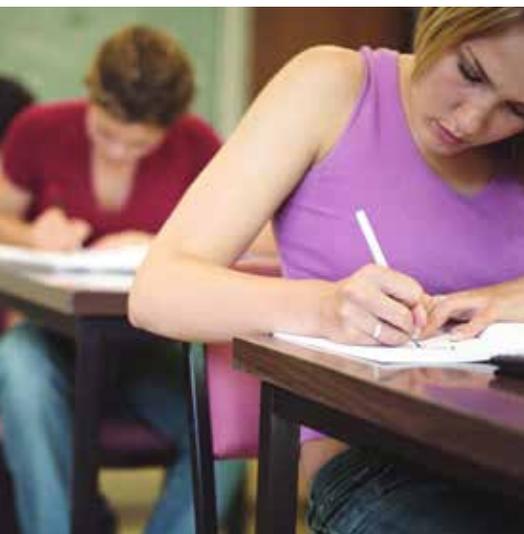


TABLE OF CONTENTS

THE PURPOSE OF THE COMMON FOLLOW-UP SYSTEM	1
WHY A COMMON FOLLOW-UP SYSTEM	1
HISTORY OF THE COMMON FOLLOW-UP SYSTEM	1
CFS YEARS 1992-1995	2
CFS YEARS 1996-2014	3
CFS YEAR 2014-2015	5
ENHANCING TECHNOLOGY PROCESSES	6
ENSURING DATA INTEGRITY AND UPDATING SYSTEM DOCUMENTATION	6
EXPANDING DATA COVERAGE	7
ENHANCING SYSTEM OUTPUTS	7
HOW IS THE COMMON FOLLOW-UP SYSTEM OPERATED?	8
HOW ARE CFS DATA PROCESSED?	8
IS THE CFS COST EFFECTIVE?	9
WHAT ARE THE STRENGTHS AND LIMITATIONS OF CFS DATA?	10
PARTICIPATION SUMMARY ACROSS THE YEARS	11
ANALYSES OF INDIVIDUALS SERVED BY EACH AGENCY OVER TIME	13
INTERRELATIONSHIPS AMONG AGENCIES IN THE PROVISION OF SERVICES	14
RELATIONSHIP OF INDIVIDUALS SERVED TO THE NORTH CAROLINA ECONOMY	19
OPERATIONAL SUMMARY	22
EVALUATION HIGHLIGHTS	23
PROGRAMS ASSESSED	23
METHODOLOGY	24
LIMITATIONS	25
WORK FIRST – TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF)	26
PROGRAM OVERVIEW	26
PROGRAM OUTCOMES	26
SUMMARY AND RECOMMENDATIONS	27

DIVISION OF VOCATIONAL REHABILITATION SERVICES (DVRS) 30

PROGRAM OVERVIEW 30

PROGRAM OUTCOMES 30

SUMMARY AND RECOMMENDATIONS 31

DIVISION OF SERVICES FOR THE BLIND (DSB) 35

PROGRAM OVERVIEW 35

PROGRAM OUTCOMES 35

SUMMARY AND RECOMMENDATIONS 36

WAGNER PEYSER PROGRAM 39

PROGRAM OVERVIEW 39

PROGRAM OUTCOMES 40

SUMMARY AND RECOMMENDATIONS 40

WORKFORCE INVESTMENT ACT TITLE I PROGRAMS (WIA)..... 44

PROGRAM OVERVIEW 44

WIA TITLE I ADULT PROGRAM OUTCOMES..... 45

SUMMARY AND RECOMMENDATIONS 46

WIA TITLE I DISLOCATED WORKER PROGRAM OUTCOMES 49

SUMMARY AND RECOMMENDATIONS 49

WIA TITLE I YOUTH PROGRAM OUTCOMES 53

SUMMARY AND RECOMMENDATIONS 53

CAREER AND TECHNICAL EDUCATION PROGRAMS (CTE)..... 56

PROGRAM OVERVIEW 56

CTE ASSOCIATE DEGREE PROGRAM OUTCOMES..... 57

PROGRAM OUTCOMES BY ASSOCIATE DEGREE PROGRAM AREA..... 57

CTE DIPLOMA PROGRAM OUTCOMES 61

PROGRAM OUTCOMES BY DIPLOMA PROGRAM AREA 61

CTE CERTIFICATE PROGRAM OUTCOMES..... 64

PROGRAM OUTCOMES BY CERTIFICATE PROGRAM AREA 64

SUMMARY AND RECOMMENDATIONS	64
WORKFORCE CONTINUING EDUCATION TRAINING.....	68
PROGRAM OVERVIEW	68
PROGRAM OUTCOMES	68
PROGRAM OUTCOMES BY PROGRAM AREA	69
SUMMARY AND RECOMMENDATIONS	70
SMALL BUSINESS CENTER (SBC)	73
PROGRAM OVERVIEW	73
PROGRAM OUTCOMES	73
SUMMARY AND RECOMMENDATIONS	74
HUMAN RESOURCES DEVELOPMENT PROGRAMS (HRD)	77
PROGRAM OVERVIEW	77
PROGRAM OUTCOMES	77
SUMMARY AND RECOMMENDATIONS	78
BASIC SKILLS PROGRAMS.....	81
PROGRAM OVERVIEW	81
PROGRAM OUTCOMES	81
SUMMARY AND RECOMMENDATIONS	82

LIST OF TABLES

TABLE 1.	INFORMATION REGARDING THE NUMBER OF INDIVIDUALS CONTAINED IN THE COMMON FOLLOW-UP SYSTEM (CFS) 2004 – 2005 PROGRAM YEAR THROUGH THE 2013 – 2014 PROGRAM YEAR	11
TABLE 2.	NUMBER AND PERCENTAGE OF RECORDS AND INDIVIDUALS PROCESSED SINCE INCEPTION BY PARTICIPATING AGENCY AND SYSTEM WIDE	12
TABLE 3.	UNIQUE NUMBER OF INDIVIDUALS BY AGENCY AND SYSTEM WIDE ACROSS THE 10-YEAR TIME PERIOD JULY 1, 2004 THROUGH JUNE 30, 2014	13
TABLE 4.	NUMBER OF INDIVIDUALS BY PARTICIPATING AGENCY CFS YEARS: 2004 – 2005 THROUGH 2013 – 2014	16
TABLE 5.	NUMBER OF INDIVIDUALS SERVED BY EACH AGENCY AND THE NUMBER AND PERCENT OF INDIVIDUALS IN COMMON AMONG AGENCIES CFS YEAR: 2013 – 2014	17
TABLE 6.	NUMBER OF INDIVIDUALS SERVED BY EACH AGENCY AND THE NUMBER AND PERCENT OF INDIVIDUALS IN COMMON AMONG AGENCIES CFS YEARS: 2004-2005 THROUGH 2013 – 2014	18

LIST OF FIGURES

FIGURE 1.	RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2004 – JUNE 30, 2014 TO ALL WAGE EARNERS AND TO ALL WAGES PAID DURING THE 2013-2014 PROGRAM YEAR	19
FIGURE 2.	RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2004 – JUNE 30, 2014 TO ALL WAGE EARNERS AND TO ALL WAGES PAID DURING THE 2013-2014 PROGRAM YEAR BY INDUSTRIAL SECTOR	20
FIGURE 3.	RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2004 – JUNE 30, 2014 TO ALL WAGE EARNERS DURING THE 2013-2014 PROGRAM YEAR BY INDUSTRIAL SECTOR	21
FIGURE 4.	RATIO OF WAGES PAID TO PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2004 – JUNE 30, 2014 TO ALL WAGES PAID DURING THE 2013-2014 PROGRAM YEAR BY INDUSTRIAL SECTOR	21
FIGURE 5.	DIVISION OF SOCIAL SERVICES – WORK FIRST - PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES	28
FIGURE 6	DIVISION OF SOCIAL SERVICES – WORK FIRST - PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES	29
FIGURE 7.	DIVISION OF VOCATIONAL REHABILITATION SERVICES - PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES	33

FIGURE 8. DIVISION OF VOCATIONAL REHABILITATION SERVICES - PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES..... 34

FIGURE 9. DIVISION OF SERVICES FOR THE BLIND - PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES..... 37

FIGURE 10. DIVISION OF SERVICES FOR THE BLIND - PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES..... 38

FIGURE 11. WAGNER PEYSER – WORK FIRST - PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES 42

FIGURE 12. WAGNER PEYSER – WORK FIRST - PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES 43

FIGURE 13. WORKFORCE INVESTMENT ACT – ADULT PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES..... 47

FIGURE 14. WORKFORCE INVESTMENT ACT – ADULT PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES..... 48

FIGURE 15. WORKFORCE INVESTMENT ACT – DISLOCATED WORKER PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES 51

FIGURE 16. WORKFORCE INVESTMENT ACT – DISLOCATED WORKER PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES 52

FIGURE 17. WORKFORCE INVESTMENT ACT – YOUTH PROGRAM EXITERS 1 YEAR POST EXIT OUTCOMES..... 54

FIGURE 18. WORKFORCE INVESTMENT ACT – YOUTH PROGRAM EXITERS 3 YEARS POST EXIT OUTCOMES..... 55

FIGURE 19. CAREER AND TECHNICAL EDUCATION ASSOCIATE DEGREE RECIPIENTS 1 YEAR POST COMPLETION OUTCOMES..... 59

FIGURE 20. CAREER AND TECHNICAL EDUCATION ASSOCIATE DEGREE RECIPIENTS 3 YEARS POST COMPLETION OUTCOMES..... 60

FIGURE 21. CAREER AND TECHNICAL EDUCATION DIPLOMA RECIPIENTS 1 YEAR POST COMPLETION OUTCOMES 62

FIGURE 22. CAREER AND TECHNICAL EDUCATION DIPLOMA RECIPIENTS 3 YEARS POST COMPLETION OUTCOMES 63

FIGURE 23. CAREER AND TECHNICAL EDUCATION CERTIFICATE RECIPIENTS 1 YEAR POST COMPLETION OUTCOMES 66

FIGURE 24. CAREER AND TECHNICAL EDUCATION CERTIFICATE RECIPIENTS 3 YEARS POST COMPLETION OUTCOMES 67

FIGURE 25. WORKFORCE CONTINUING EDUCATION TRAINING EXITERS 1 YEAR POST EXIT OUTCOMES 71

**FIGURE 26. WORKFORCE CONTINUING EDUCATION TRAINING EXITERS 3 YEARS POST EXIT
OUTCOMES 72**

FIGURE 27. SMALL BUSINESS CENTERS EXITERS 1 YEAR POST EXIT OUTCOMES 75

FIGURE 28. SMALL BUSINESS CENTERS EXITERS 3 YEARS POST EXIT OUTCOMES 76

FIGURE 29. HUMAN RESOURCES DEVELOPMENT EXITERS 1 YEAR POST EXIT OUTCOMES 79

FIGURE 30. HUMAN RESOURCES DEVELOPMENT EXITERS 3 YEARS POST EXIT OUTCOMES..... 80

**FIGURE 31. BASIC SKILLS HIGH SCHOOL EQUIVALENCY AND ADULT HIGH SCHOOL DIPLOMA
RECIPIENTS 1 YEAR POST COMPLETION OUTCOMES 83**

**FIGURE 32. BASIC SKILLS HIGH SCHOOL EQUIVALENCY AND ADULT HIGH SCHOOL DIPLOMA
RECIPIENTS 3 YEARS POST COMPLETION OUTCOMES..... 84**

A REPORT ON THE OPERATIONS OF
THE NORTH CAROLINA COMMON FOLLOW-UP SYSTEM (CFS)
MAY 1, 2016

THE PURPOSE OF THE COMMON FOLLOW-UP SYSTEM

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

WHY A COMMON FOLLOW-UP SYSTEM?

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 often were expensive and no mechanism was available for the sharing of information among agencies. No process existed to review outcomes across programs and agencies, to 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 the education, employment and training community. The 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, General Administration (UNC);**
- **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 each of the participating agencies 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 1992-1995

Over the first four 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 allowed the tracking of an individual's progress through the workforce system across time, in addition to 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 increased from 674,305 in 1992 to over 2 million in 1995, while the number of agencies grew from 6 to 8 over the same time period.

During the 1995 session, the General Assembly initiated a new chapter in the history of the CFS by enacting legislation that placed new requirements on the system. Chapter 96 of the North Carolina General Statutes was amended to:

- **establish the CFS by statute;**
- **define system participation;**
- **establish operational responsibility with the ESC;**
- **establish programmatic evaluative responsibility with the Office of State Budget and Management (OSBM);**
- **mandate data integrity and confidentiality; and**
- **outline reporting and schedules.**

The ESC was designated as the host agency for the system with the following responsibilities:

- **collection of the required data;**
- **operation, update and maintenance of the system;**
- **provision of assistance to participating entities with the development of seed files and analysis of the enhanced records;**
- **determination, in cooperation with OSBM, of any additional state agencies and other entities not currently participating in the system and a time frame for their inclusion;**
- **determination, in cooperation with OSBM, of any additional data elements required for the system; and**
- **delivery of a system status and operations report to the legislature on or before May 1 each year.**

The North Carolina OSBM was charged with using system outputs in the evaluation of agencies and programs receiving state or federal funds in support of education, employment and training activities. In addition to the changes mandated by the new legislation, the ESC began work with other groups interested in incorporating CFS information into their program evaluation efforts.

CFS YEARS 1996-2014

Over the next several years, there was increased interest in the data contained in the CFS. Several groups turned to the CFS as a valuable source of quality outcome information for education, employment and training programs. The increased interest was due to initiatives at both the state and national levels regarding the collection, calculation and reporting of performance information throughout the education, employment and training system. These initiatives included the development of reports for the Commission on Workforce Development, SOICC and Work First Business Council.

The Workforce Investment Act (WIA) of 1998 stimulated further interest and attention to the data contained in CFS. WIA mandates 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. Information from the CFS along with information from other administrative systems was utilized in meeting the informational needs regarding target populations, systems of delivery, accountability, long-term planning and governance structures that were the keystone of the Act.

These initiatives led to continued expansion and refinement of the CFS data collection procedures. System refinement included the initiation of a biannual data collection cycle and system expansion in terms of data elements, system participation, individuals processed, as well as program and service coverage for existing entities. In order to help meet the reporting requirements for WIA, additional data elements were added to the CFS. These new data elements were added to aid in the calculation of performance data required under WIA. During the 2001 Legislative Session the North Carolina General Assembly transferred the evaluative responsibility previously housed in the OSBM to ESC.

In July 2003, North Carolina experienced the largest mass layoff event in the state's history when Pillowtex Corporation closed. Information from the CFS, have been utilized to follow the re-employment and provision of education, employment and training services to former Pillowtex workers. This information has proved to be critical in helping to respond to informational requests from the Governor's office, North Carolina legislature, United States Department of Labor and other stakeholders.

In 2004, the JobLink Management Information System (JobLink MIS) became operational. This system is utilized to collect analyze and report information on JobLink Career Center customers

and the services provided to these customers. Beginning with the 2004-2005 CFS year, data from the JobLink MIS was integrated into the CFS.

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. The law became effective November 1, 2011. As such, responsibility for the CFS was transferred to the Department of Commerce's Labor and Economic Analysis Division (LEAD).

During the 2012 legislative session the North Carolina Legislature enacted Session Law 2012-131: which focused on reforming the state's workforce development laws. 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 data from CFS in the development 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 data from its current mainframe computing environment to a server base platform. The goal for the new technology infrastructure is to help provide the core mechanisms for storing, updating, securing, maintaining, processing, analyzing, and reporting effectively and efficiently from the CFS.

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 project is nearing completion. One of the goals of the grant is to establish a link between the proposed SLDS to the employment related data contained in the CFS.

As part of its efforts to improve the CFS, the Department of Commerce applied for a competitive grant with the U.S. Department of Labor's Employment and Training Administration through their Workforce Data Quality Initiative (WDQI). The Department received notification in June of 2013 that North Carolina had been awarded a WDQI grant.

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 the CFS to the Government Data Analytics Center (GDAC) within the Office of

Information Technology Services. Work on the business and system requirements for the new system were initiated.

As part of its efforts to enhance system outputs, 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. In collaboration with the Task Force and Advisory Group members, LEAD staff completed analyses in support of 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 Division of Workforce Solutions 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.

In July of 2014, as part of its responsibility for analyzing and evaluating agencies and programs, LEAD launched a powerful online information delivery tool – the North Carolina Tool for Online Workforce and Education Reporting (NC TOWER). This web based data delivery tool facilitates the use and delivery of information from CFS and helps in achieving its program performance and evaluation requirements.

The goal of this tool provides a mechanism for the electronic delivery and display of performance measures for educational programs for each of the University of North Carolina's 16 universities and for all Curriculum programs at each of the 58 colleges of the North Carolina Community College System. The outcome measures include post-graduation employment and wage statistics and enrollment in further education for up to 10 years after graduation. These measures include employment rates, average wages and median wages for each program as well as employment and wage measures by industrial sector of employment. The NC TOWER displays information for each college/university, degree type, and academic subject area.

In addition to these efforts, information from the system continued to assist 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 YEAR 2014-2015

Processing of data for the 2014-2015 CFS year included the addition of over 7.1 million program records for over 1.6 million individuals. This increased the total number of individuals in the system to over 9 million and the total number of program records to over 219 million.

Over the past year, the Department of Commerce in collaboration with the Government Data Analytics Center has been working to develop and implement an enhanced CFS within the GDAC environment. This has included the enhancement of the technology processes utilized for system processing and storage, enhancement of data integrity validation, developing and updating system documentation regarding agency and programmatic information, expanding data coverage, and enhancing system outputs. During the last year, LEAD and the GDAC team moved the historical data into the GDAC environment. This included the migration of over 100 gigabytes of data as well as an inventory and classification of data files and elements. In addition system processing for the 2015 program year was completed in the GDAC environment. LEAD and GDAC are continuing its efforts on the development of the enhanced system, the work that has been undertaken will help to bring the system to full operational capacity and to ensure that the system is flexible to grow to meet future needs.

Enhancing Technology Processes

Work on the business, technical and system requirements for the new database structure were continued. These requirements will help to further define the final technology solution for the system. The planned solution will be comprised of an analytical data mart and supporting contributor marts that will be supported by business intelligence software applications and web-based information delivery applications. This new technology infrastructure will provide the core mechanisms for effectively and efficiently storing, updating, securing, maintaining, processing, analyzing, and reporting from CFS.

Ensuring Data Integrity and Updating System Documentation

Work has continued towards enhancing data integrity and system documentation. Staff completed analysis and documentation of participating agencies existing data structures and agency specific information and codes. Commerce and GDAC staff met with contributors to collect and document requirements and data structures for new agency data submittals. These data structures and codes are being utilized to develop an enhanced data dictionary includes field definitions, formats, and meta-data descriptions.

Work continued on the development of an enhanced data validation process including the development of new data load and edit processing. This new process will validate agency data submissions dynamically by comparing the data submissions from the agencies to the data structures and definitions in the dictionary. When completed this new process will facilitate the validation of data, assist in the loading of new data from the agencies and help to ensure data integrity.

Expanding Data Coverage

While the CFS contains a wealth of information regarding North Carolina's education, employment and training programs and employment and wage information, data expansion, efforts are needed to enhance the system. As part of its efforts to improve and strengthen the CFS, the LEAD and GDAC team continued working with participating agencies to revise and expand data submittals from existing participating agencies and divisions as well the expansion of workforce development programs not previously reported to the CFS.

In addition to the expansion of programmatic information, the Department of Commerce is continuing to working towards the expansion of employment and wage information that is available through the CFS. The state UI wage information includes only those wages paid by employers who are subject to North Carolina's UI laws. It does not include information regarding the self-employed, those employed in other states or wages paid by federal employers. In order to expand the employment and wage coverage in the CFS, the Department of Commerce has executed an agreement through the U.S. Department of Labor for the exchange of out of state wages through a voluntary data sharing system called the Wage Record Interchange System 2 (WRIS2). In addition, the Department of Commerce is finalizing an agreement that will allow for the integration of employment and wage information from the Federal Data Exchange System (FEDES). This will provide access to employment and wage information from the U.S. Postal Service, U.S. Department of Defense and U.S. Office of Personnel Management. While these efforts will expand the available employment and wage information, there are limitations on the allowable uses of these data in performance and evaluative efforts.

Enhancing System Outputs

As part of its efforts to enhance system outputs, Labor and Economic Analysis Division staff continued its work in collaboration with Division of Workforce Solutions and the NCWorks Commission in the development of performance measures for North Carolina's Workforce Development System. This included continued collaboration with the Commission's Evaluation and Performance Task Force and Advisory Group in the development and enhancement of the performance system. LEAD staff completed updated analyses on the state's Workforce Development programs. Performance measures include the employment, wages, and subsequent enrollment in education and workforce development programs. The NC Works Commission released the 2016 report "Measuring the Performance of North Carolina's Workforce Development System" in January of 2016.

In addition to the work with the NC Works Commission the Labor and Economic Analysis Division released a report on the evaluation of the State's Workforce Programs. This report included employment and wage outcomes for 12 of the state's workforce development programs included longitudinal outcome measures for up to 5 years after program completion or exit. Results from this work are also included in the Evaluation Highlights sections of this report.

HOW IS THE COMMON FOLLOW-UP SYSTEM OPERATED?

The participating entities supply biannual data files, which encompass the most current CFS year. For example, for the 2014-2015 CFS year, each entity submitted data files covering the time periods of July 1 through December 31, 2014 and January 1 through June 30, 2015. These formatted input files were created from existing administrative records and contain demographic data, program enrollment information, and completion information for individuals participating in education, employment and training programs operated by each of the entities.

The records from each entity were matched against data from:

- **all participating entities;**
- **Unemployment Insurance wage records; and**
- **Unemployment Insurance files.**

HOW ARE CFS DATA PROCESSED?

Each year CFS staff issue a request for data to each of the participating entities. The entities submit data files containing the following information:

- **agency identification (e.g., UNC, DPI, etc.);**
- **institution identification and name (e.g., the name of the Community College attended);**
- **Social Security Number, name, sex, race, date of birth, educational attainment, veteran status;**
- **program code and name (e.g., course of study number, course of study name);**
- **program entry and program exit date;**
- **termination status (e.g., completer, non-completer);**
- **enrollment status (e.g., continuing enrollment, new enrollment);**
- **special status (e.g., transferred, dropped out, deceased, etc.);**
- **classification of instructional program code;**
- **WIA participant indicator; and**
- **provider type.**

After the files have been submitted, the data are put through a series of edit checks to ensure compatibility and accuracy. After the edit checking process is completed, the data are loaded to the system data files.

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 on the Department of Information Technology's mainframe, Local Area Network (LAN) and within the GDAC environment. Security on these 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, participants are informed of the confidential nature of the data and the legal restrictions on its use. Following the completion of the data loading process, CFS staff analyzes the data, and the resulting analyses are utilized in the development and production of reports and files.

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 computerized 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 provides for the generation of 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 participating agencies have utilized the information available through CFS to help meet several 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 college employment outcomes.

The University of North Carolina continued to utilize information from CFS to help complete internal analyses, help in strategic planning and to provide relevant 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, several of the agencies have utilized the information to respond to legislative inquiries regarding education, workforce development, and economic development initiatives. These inquiries have included requests for information regarding educational and workforce development programmatic outcomes as well as legislative inquiries regarding Unemployment Insurance recipients.

WHAT ARE THE STRENGTHS AND LIMITATIONS OF CFS DATA?

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. Review of follow-up systems in other states reveals that North Carolina's CFS offers the most comprehensive coverage in terms of both tracking duration and breadth of participants. Many states and governmental entities with similar missions and mandates view the CFS as a model for delivering follow-up information. Many of these entities 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. This is 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;**

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 data which 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. CFS staff and the participating entities have made concerted efforts to incorporate information regarding additional programs and individuals from existing entities and to solicit the participation of other entities. The analyses that are included in the following sections reflect data supplied by the participating entities for services that were provided through June 2015.

The CFS has expanded dramatically since its inception in the early 1990’s. Table 1 provides a summary of the number of individuals contained in the system from across the last 10 program years. The system currently contains information on over 9 million individuals.

TABLE 1. INFORMATION REGARDING THE NUMBER OF INDIVIDUALS CONTAINED IN THE COMMON FOLLOW-UP SYSTEM (CFS) 2005 – 2006 PROGRAM YEAR THROUGH THE 2014 – 2015 PROGRAM YEAR	
Year	Individuals
2006	6,736,374
2007	7,079,373
2008	7,382,619
2009	7,740,593
2010	8,049,440
2011	8,328,397
2012	8,592,027
2013	8,830,117
2014	9,044,703
2015	9,231,914

During the 2015-2016 CFS Year, the following entities provided data to the system:

- **The North Carolina Department of Public Safety’s**
 - **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);**
- **The North Carolina Community College System (NCCCS); and**
- **The University of North Carolina (UNC)**

Analyses of historical data contained in CFS provide an understanding of the scope of the system. Table 2 presents the cumulative number of records and individuals processed by the CFS as well as the number of entities participating in CFS. During the 2014-2015 CFS year the number of unique individuals included in the system increased to 9,231,914.

TABLE 2. NUMBER AND PERCENTAGE OF RECORDS AND INDIVIDUALS PROCESSED SINCE INCEPTION BY PARTICIPATING AGENCY AND SYSTEM WIDE				
AGENCY	Number of Records	Percentage of Total Records	Number of Individuals	Percentage of Total Individuals
DIVISION OF ADULT CORRECTION ¹	13,639,631	6.2%	897,930	9.7%
DEPARTMENT OF PUBLIC INSTRUCTION	7,137,362	3.2%	2,291,910	24.8%
DIVISION OF SERVICES FOR THE BLIND	113,071	<0.1%	18,915	0.2%
DIVISION OF SOCIAL SERVICES	7,471,147	3.4%	1,401,744	15.2%
DIVISION OF VOCATIONAL REHABILITATION SERVICES	3,383,519	1.5%	385,272	4.2%
DIVISION OF WORKFORCE SOLUTIONS ¹	153,427,645	69.8%	5,107,302	55.3%
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM	25,688,385	11.7%	5,529,813	59.9%
UNIVERSITY OF NORTH CAROLINA	9,076,769	4.1%	1,423,307	15.4%
TOTAL	219,937,529	100.0%	9,231,914	100.0%

ANALYSES OF INDIVIDUALS SERVED BY EACH AGENCY OVER TIME

The numbers of individuals served by each agency and across all agencies over the past 10 program years are displayed in Table 3 and Table 4. The number of individuals was obtained by performing a unique count of the Social Security Numbers (SSNs) submitted by each agency. The unique number of individuals across all agencies was obtained by performing a total unique count of the SSNs contained in the system across all agencies by CFS year. Analyses of data by CFS year indicate that the number of individuals who received services through the participating entities ranged from 2.2 million in CFS Year 2005-2006 to almost 2.6 million in CFS Year 2009-2010.

TABLE 3: UNIQUE NUMBER OF INDIVIDUALS BY AGENCY AND SYSTEM WIDE ACROSS THE 10-YEAR TIME PERIOD JULY 1, 2005 THROUGH JUNE 30, 2015	
AGENCY	Number of Individuals Across the 10 Year Time Period
DIVISION OF ADULT CORRECTION	613,268
DEPARTMENT OF PUBLIC INSTRUCTION	1,200,018
DIVISION OF SERVICES FOR THE BLIND	10,902
DIVISION OF SOCIAL SERVICES	1,056,373
DIVISION OF VOCATIONAL REHABILITATION SERVICES	199,049
DIVISION OF WORKFORCE SOLUTIONS¹	3,233,715
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM	3,269,612
UNIVERSITY OF NORTH CAROLINA	786,822
TOTAL	6,166,252

Over the 10 Year period July 1, 2005 through June 30, 2015 over 6.1 million individuals received services through the participating agencies. This includes over 3.2 million individuals who received a variety of workforce services through the Division of Workforce Solutions and over 3.2 million who participated in education and training programs through the North Carolina Community College System. While DWS and NCCCS provide 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. Over the 10-year time period more than 1.2 million individuals were enrolled in public high school programs. UNC is the state's publicly supported university system. Over the 10-year time period, UNC provided educational programs to more than 780,000 individuals.

Several agencies provide services to very specific sub-populations. The DSS provided employment and supportive services to over 1.0 million Work First and Food Stamp Employment Program participants, while DAC provided services to more than 613,000 offenders in prison, on probation or parole. The DVR provided rehabilitation services to more than 199,000 individuals with physical and mental disabilities, and DSB provided vocational rehabilitation services to almost 11,000 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 criteria (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 attention from the education, employment and training agencies themselves.

In order to provide an understanding of the interrelationships among entities in the provision of services data were analyzed both within and across the last 10 program years (July 1, 2005 through June 30, 2015). Data from the participating agencies were utilized in these analyses. 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, the number of agencies from which individuals received services and the number of individuals found in common among the agencies. This analysis is presented in Tables 5 and 6.

TABLE 4. NUMBER OF INDIVIDUALS BY PARTICIPATING AGENCY CFS YEARS: 2005 – 2006 THROUGH 2014 – 2015

AGENCY	CFS YEAR									
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
DIVISION OF ADULT CORRECTION	214,738	220,353	226,246	224,201	236,117	229,992	215,927	183,614	191,292	183,066
DEPARTMENT OF PUBLIC INSTRUCTION	364,797	406,522	332,133	365,196	346,328	309,093	290,835	240,739	183,636	201,036
DIVISION OF SERVICES FOR THE BLIND	3,151	3,118	3,073	3,207	3,441	3,479	3,581	3,737	3,656	3,213
DIVISION OF SOCIAL SERVICES	150,541	176,230	194,708	242,369	235,823	268,394	309,691	345,523	290,035	10,058
DIVISION OF VOCATIONAL REHABILITATION SERVICES	65,164	50,077	48,282	52,598	57,473	60,421	61,207	60,105	57,854	48,642
DIVISION OF WORKFORCE SOLUTIONS ¹	962,214	875,661	911,089	1,080,310	1,175,807	1,044,628	1,013,587	986,408	422,222	469,488
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM	861,880	852,384	856,629	881,906	868,563	858,305	835,416	819,156	776,587	722,579
UNIVERSITY OF NORTH CAROLINA	220,331	225,477	230,759	235,431	239,812	240,236	238,348	236,332	233,399	233,382
UNIQUE INDIVIDUALS ACROSS ALL AGENCIES	2,278,582	2,258,311	2,244,651	2,466,869	2,550,064	2,436,947	2,398,296	2,325,350	1,787,207	1,629,862

TABLE 5. NUMBER OF INDIVIDUALS SERVED BY EACH AGENCY AND THE NUMBER AND PERCENT OF INDIVIDUALS IN COMMON AMONG AGENCIES CFS YEAR: 2014 – 2015									
AGENCY	TOTAL	DAC	DPI	DSB	DSS	DVRS	DWS	NCCCS	UNC
DIVISION OF ADULT CORRECTION	183,066	183,066 100.0%	713 0.4%	83 <0.1%	722 0.4%	3,654 2.0%	26,267 14.3%	33,670 18.4%	815 0.4%
DEPARTMENT OF PUBLIC INSTRUCTION	201,036	713 0.4%	201,036 100.0%	57 0.0%	350 0.2%	2,937 1.5%	2,838 1.4%	22,319 11.1%	1,032 0.5%
DIVISION OF SERVICES FOR THE BLIND	3,213	83 2.6%	57 1.8%	3,213 100.0%	* *	44 1.4%	348 10.8%	341 10.6%	117 3.6%
DIVISION OF SOCIAL SERVICES	10,058	722 7.2%	350 3.5%	* *	10,058 100.0%	477 4.7%	4,737 47.1%	3,158 31.4%	96 1.0%
DIVISION OF VOCATIONAL REHABILITATION SERVICES	48,642	3,654 7.5%	2,937 6.0%	44 <0.1%	477 1.0%	48,642 100.0%	9,759 20.1%	9,578 19.7%	761 1.6%
DIVISION OF WORKFORCE SOLUTIONS¹	469,488	26,267 5.6%	2,838 0.6%	348 <0.1%	4,737 1.0%	9,759 2.1%	469,488 100.0%	102,150 21.8%	6,295 1.3%
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM	722,579	33,670 4.7%	22,319 3.1%	341 <0.1%	3,158 0.4%	9,578 1.3%	102,150 14.1%	722,579 100.0%	26,559 3.7%
UNIVERSITY OF NORTH CAROLINA	233,382	815 0.3%	1,032 0.4%	117 <0.1%	96 <0.1%	761 0.3%	6,295 2.7%	26,559 11.4%	233,382 100.0%

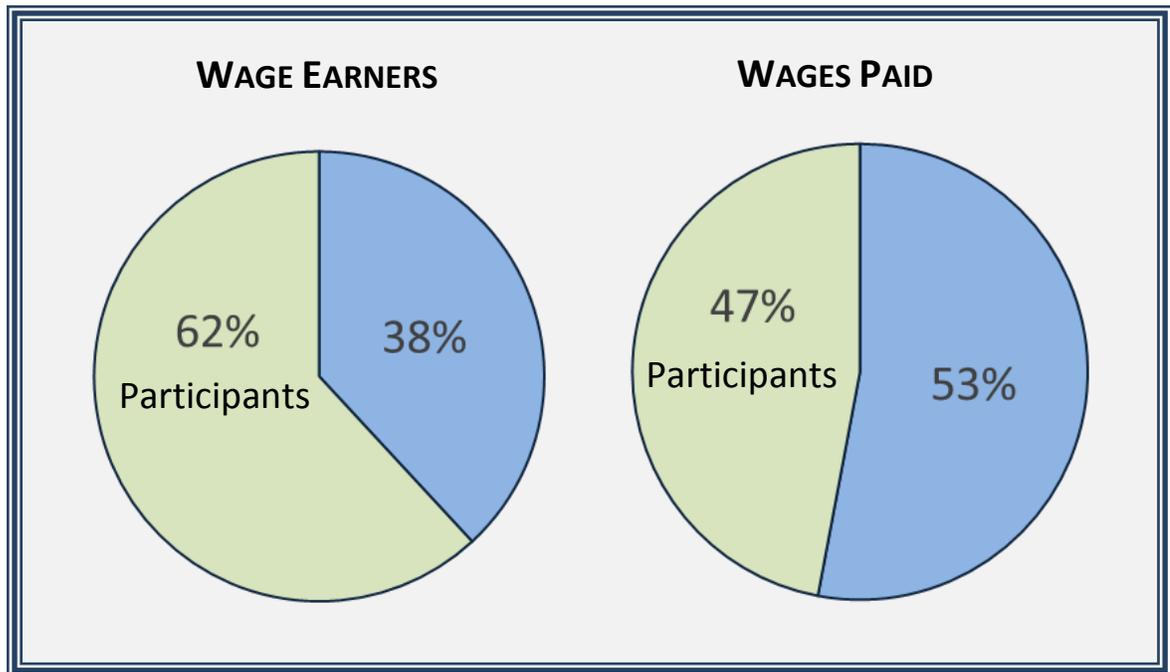
TABLE 6. NUMBER OF INDIVIDUALS SERVED BY EACH AGENCY AND THE NUMBER AND PERCENT OF INDIVIDUALS IN COMMON AMONG AGENCIES CFS YEARS: 2005 – 2006 THROUGH 2014 – 2015									
AGENCY	TOTAL	DAC	DPI	DSB	DSS	DVRS	DWS	NCCCS	UNC
DIVISION OF ADULT CORRECTION	613,268	613,268 100.0%	75,448 12.3%	984 0.2%	236,963 38.6%	44,009 7.2%	375,226 61.2%	317,897 51.8%	17,697 2.9%
DEPARTMENT OF PUBLIC INSTRUCTION	1,200,018	75,448 6.3%	1,200,018 100.0%	652 0.1%	159,072 13.3%	40,840 3.4%	302,169 25.2%	559,632 46.6%	229,056 19.1%
DIVISION OF SERVICES FOR THE BLIND	10,902	984 9.0%	652 6.0%	10,902 100.0%	2,630 24.1%	806 7.4%	5,991 55.0%	3,881 35.6%	523 4.8%
DIVISION OF SOCIAL SERVICES	1,056,373	236,963 22.4%	159,072 15.1%	2,630 0.2%	1,056,373 100.0%	73,857 7.0%	794,050 75.2%	554,918 52.5%	39,727 3.8%
DIVISION OF VOCATIONAL REHABILITATION SERVICES	199,049	44,009 22.1%	40,840 20.5%	806 0.4%	73,857 37.1%	199,049 100.0%	126,910 63.8%	107,527 54.0%	7,448 3.7%
DIVISION OF WORKFORCE SOLUTIONS¹	3,233,715	375,226 11.6%	302,169 9.3%	5,991 0.2%	794,050 24.6%	126,910 3.9%	3,233,715 100.0%	1,501,878 46.4%	188,451 5.8%
NORTH CAROLINA COMMUNITY COLLEGE SYSTEM	3,269,612	317,897 9.7%	559,632 17.1%	3,881 0.1%	554,918 17.0%	107,527 3.3%	1,501,878 45.9%	3,269,612 100.0%	339,139 10.4%
UNIVERSITY OF NORTH CAROLINA	786,822	17,697 2.2%	229,056 29.1%	523 0.1%	39,727 5.0%	7,448 0.9%	188,451 24.0%	339,139 43.1%	786,822 100.0%

RELATIONSHIP OF INDIVIDUALS SERVED TO THE NORTH CAROLINA ECONOMY

In addition to providing valuable information regarding the number of participants served by each agency, information from 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 July 1, 2005 to June 30, 2015, over 6.1 million unique individuals participated in educational, employment and training programs through the participating agencies. During the 2014-2015 program year (2014 Q3, 2014 Q4, 2015 Q1 and 2015 Q2), there were over 4.8 million unique individuals with wages reported to the Division of Employment Security. These 4.8 million individuals earned \$182.8 Billion in total wages. Analyses of the information supplied by the participating agencies to CFS demonstrate that of the 4.8 million wage earners, 2.9 million (or 62%) participated in education, employment and training programs through one of participating agencies during the 10-year period (July 1, 2005 – June 30, 2015). These individuals earned \$85.9 Billion in total wages or 47% of all wages paid in the year.

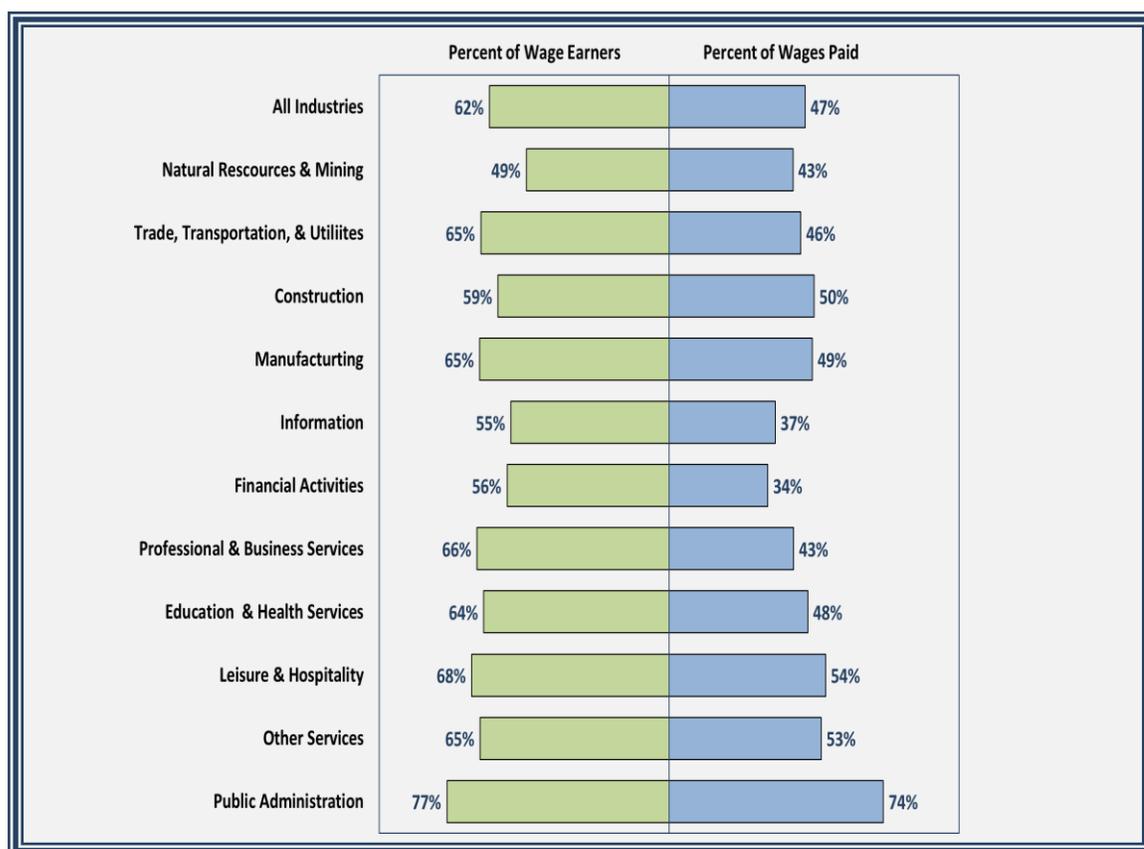
FIGURE 1. RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2005– JUNE 30, 2015 TO ALL WAGE EARNERS AND WAGES PAID DURING THE 2014-2015 PROGRAM YEAR



These results indicate that more than 6 out every 10 individuals employed in jobs covered by the State’s Unemployment Insurance Laws during the 2014-2015 program year had been participants of one of the participating agencies in last 10 years. In addition, almost half of all wages paid in the state were paid to individuals who had been participants of one of the participating agencies in last 10 years.

Further analyses by industrial sector demonstrate that at least half of all individuals employed in each of the state’s major industrial sectors participated in programs and services through one of the participating agencies in the last 10 years. In addition, approximately more than 6 out of every 10 individuals employed in the following major industrial sectors: Trade Transportation & Utilities, Manufacturing, Professional & Business Services; Education & Health Services; Leisure & Hospitality; Other Services; Public Administration have been participants of these agencies in the last 10 years.

FIGURE 2. RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2005 – JUNE 30, 2015 TO ALL WAGE EARNERS AND TO ALL WAGES PAID DURING THE 2014-2015 PROGRAM YEAR BY INDUSTRIAL SECTOR



Analyses of the wages paid in each industry revealed that more than a third of the wages paid in each major industrial sector were paid to individuals who had participated in programs and services through one of the participating agencies in the last 10 years. In addition, at least 40% of the wages paid in nine of the major industrial sectors had been paid to participants. These results clearly demonstrate the connection between education, employment and training programs and the state’s economy and the need for continued coordination and enhancement of North Carolina’s education, workforce development and economic development.

FIGURE 3. RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2005– JUNE 30, 2015 TO ALL WAGE EARNERS DURING THE 2014-2015 PROGRAM YEAR BY INDUSTRIAL SECTOR

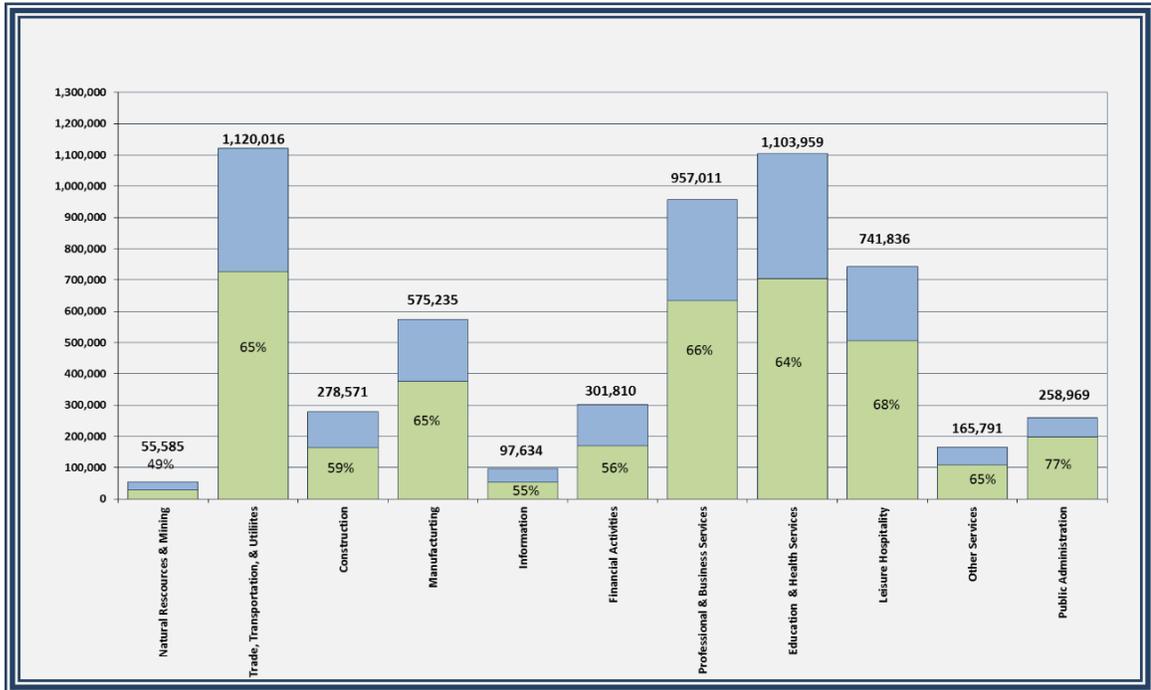
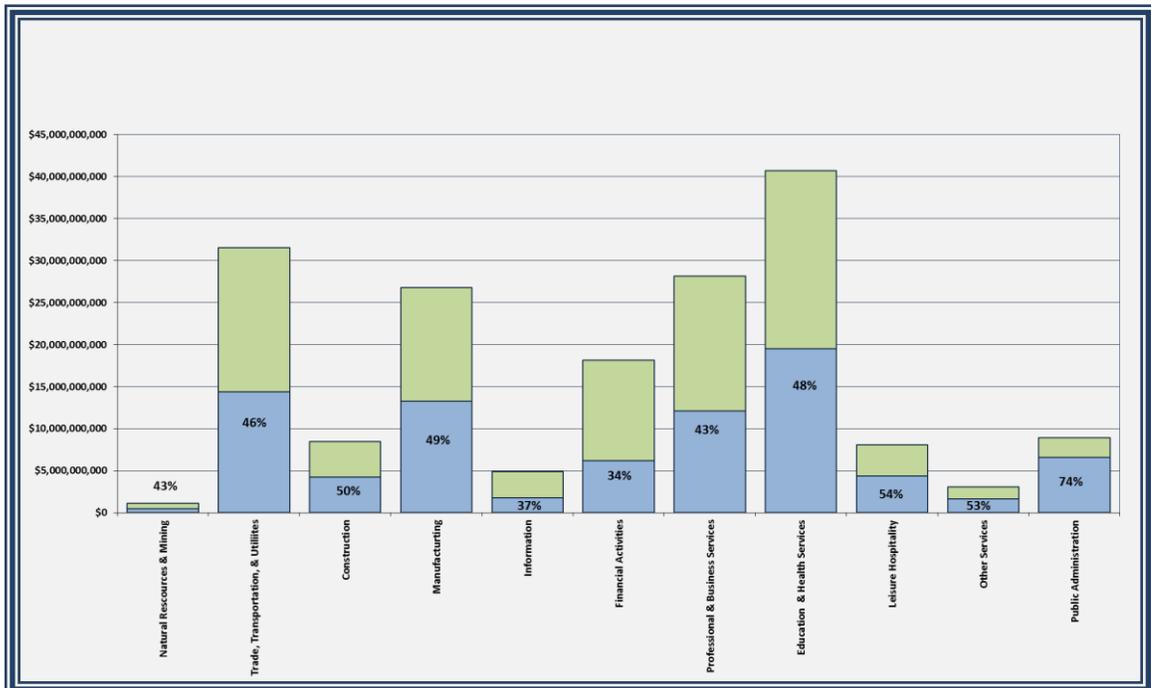


FIGURE 4. RATIO OF PARTICIPANTS OF NORTH CAROLINA’S EDUCATION, EMPLOYMENT AND TRAINING PROGRAMS JULY 1, 2005 – JUNE 30, 2015 TO ALL WAGES PAID DURING THE 2014-2015 PROGRAM YEAR BY INDUSTRIAL SECTOR



OPERATIONAL 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 provides 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 10-year time period, July 1, 2005 through June 30, 2015 over 6.1 million individuals received services through the participating agencies.*

Over the last program year extensive efforts have been undertaken to improve and enhance the CFS. This includes enhancement to the system processing, data storage, system operations and system outputs. Over the 10-year time period the North Carolina Community College System provided services to over 3.2 million individuals, while the Division of Workforce Solutions provided services to 3.2 million individuals. These numbers indicate that *over the 10-year time period approximately 1 out of every 3 North Carolinians were enrolled in education and training programs through the North Carolina Community College System and approximately 1 out of every 3 North Carolinians received employment and training services through the Division of Workforce Solutions.*

Further interpretation of the data presented in this report indicates that there is substantial coordination and collaboration among agencies in the overall provision of education, employment and training services. *Over the 10-year time period, 1.5 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 NCCCS and DWS 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 preparing, developing and promoting a highly skilled workforce, improving the quality of life for North Carolinians and developing and sustaining a world class economy for the state and its communities.

There is a significant relationship between the individuals receiving services through the state's education and workforce partners and the North Carolina economy. Almost two thirds of all wage earners in the state in the 2014-2015 program year received services through the participating agencies during the previous 10 program years. In addition, these individuals earned 47% of all wages. 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.

EVALUATION HIGHLIGHTS

The Common Follow-up System provides a mechanism for carrying out longitudinal analyses that can be utilized to develop measures of program performance. As part of its responsibility for evaluating programs contained in the CFS, the North Carolina Department of Commerce's Labor and Economic Analysis Division (LEAD) undertook a series of analyses that focused on assessing the educational and employment outcomes of individuals participating in several of North Carolina's public education, employment and training programs. The goal was to develop performance indicators related to employment and wage outcomes as well as measures related to further participation in education and employment programs. These measures can be utilized in concert with other programmatic information to aid in the assessment of program effectiveness. A full evaluation report was issued in May of 2015. The following sections provide a summary of the programmatic descriptions and evaluation findings.

Analyses focused on addressing several questions:

- **Are former participants of publicly supported education, employment and training programs employed in North Carolina?**
- **Are graduates of North Carolina Community College programs employed in North Carolina after graduation?**
- **What are the wages of former participants and graduates?**
- **In what industries are former participants and graduates employed?**
- **What are the employment and wage outcomes for different academic majors and degree areas?**
- **Do individuals who exit or graduate from programs participate or enroll in additional education, employment and training programs after participation?**

The outcome measures that were developed include employment and wage statistics and measures of further participation in other education, employment and training programs. Measures were calculated for 5 program year based cohort groups for each program and include outcome measures for up to 5 years post exit/graduates. Relevant employment and wage statistics include the number and percent employed in North Carolina and the average and median wages for each program as well as employment and wage measures by industrial sector of employment.

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 focused on assessing the effectiveness of 12 programs across three agencies. These included the following:

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES

- **Division of Social Services**
 1. **Work First – Temporary Assistance for Needy Families (TANF)**
- **Division of Vocational Rehabilitation Services**
 2. **Rehabilitation Services**
- **Division of Services for the Blind**
 3. **Rehabilitation Services**

THE DEPARTMENT OF COMMERCE

- **Division of Workforce Solutions**
 4. **Wagner Peyser Program**
 5. **Workforce Investment Act (WIA) Title I Adult Program**
 6. **Workforce Investment Act (WIA) Title I Dislocated Worker Program**
 7. **Workforce Investment Act (WIA) Title I Youth Program**

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

8. **Career and Technical Education Programs**
9. **Workforce Continuing Education Training**
10. **Small Business Center**
11. **Human Resources Development Program**
12. **Basic Skills Programs**

METHODOLOGY

Analyses focused on the development of longitudinal educational, employment and wage employment outcomes of individuals participating in publicly supported, education, employment or training related programs. Each year participating entities supply two six month data files which encompass a program year. These formatted files are created from existing information systems at each of the entities and contain demographic data, program enrollment, and completion information for individuals participating in programs and services operated by each of the participating entities.

Each quarter, employers in the state who are covered by North Carolina's Unemployment Insurance laws are required to submit quarterly information on the wages paid to individuals on their payroll to the Division of Employment Security (DES). These data provide critical employer and worker related information that is utilized for the operation of the state's Unemployment Insurance system.

Analyses completed were accomplished by matching information supplied by each of the participating entities to data from each of the other entities and to the quarterly wage information maintained in the historical UI wage file. Specifically information regarding individuals participation in and exit from programs and related services was utilized to compile counts of individual participants/students, exiters and where applicable graduates (or credential recipients) by program and degree level.

Employment and wage outcomes were derived for each program exit/completion cohort. Information from the quarterly UI wage data was utilized to develop employment and wage statistics. Wage information for each exiter was 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 were summed to produce a two year post exit/completion wage. Successive four quarters were summed to produce subsequent post exit/completion wage statistics. If an individual had wages in any of the four quarters of the corresponding year they were counted as employed. Employment and wage outcomes were compiled separately for each cohort.

LIMITATIONS

It is important to note that 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 each of the participating entities has its own limitations. These data come from existing information systems within each of those entities. Any data limitations that exist in those source systems, data repositories and corresponding data elements are transferred along with the data to the CFS. At the present time the CFS relies on the use of SSN for accomplishing the matching of program participation and employment related information. The reliance on the use of SSN for analysis and matching can lead to limitations in program and data coverage. This includes the lack of adequate data to analyze for some programs including the CTE programs from the Department of Public Instruction.

Further, CFS includes information several of North Carolina's publically supported education, employment and training programs that participate in the system. The system does not include information from North Carolina's private institutions or out of state colleges and universities or other employment and training related service providers that do not provide information to the system. Therefore, the exact number and percentage of individuals who participate in these other education, employment and training programs and services cannot be determined.

In addition to the limitations in information provided by the education, employment and training entities, the Unemployment Insurance Wage data has its own limitations. Available wage information includes information on individuals working in jobs covered by North Carolina's Unemployment Insurance laws. Wage information reflects total quarterly wages; 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 North Carolina's unemployment insurance laws (e.g., the self-employed, church and religious organization employees, summer camp employees, and other non-covered workers), or are enrolled in the military; or are employed by the federal government.

Employment related data which 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); how much the person worked during the quarter; the number of hours worked; and the person's occupation.

WORK FIRST – TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF)

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 which can help them become employed and self-sufficient.¹

The goals of the Work First program are to keep individuals off of assistance and to help individuals to become self-sufficient. In order to receive cash assistance, parents are required to register for work search and sign a Mutual Responsibility Agreement. Work First emphasizes three strategies: diversion, shortening the time of assistance and retention. Diversion strategies focus on keeping families off of cash assistance by helping them with unexpected emergencies and setbacks. Strategies that focus on shortening the length of time, concentrate on making work mandatory and limiting the time a family can receive assistance. Retention strategies focus on helping families to stay off of public assistance by encouraging savings and providing services that help to keep families off of assistance. These include a variety of employment related services, transportation assistance, short term skills training and family enrichment services.²

PROGRAM OUTCOMES

The analyses revealed a slight increase in the number of Work First program participants and exiters between the 2008-2009 program year and the 2009-2010 program year and a decline in the number of Work First participants and exiters across the three program years. Part of the decline is attributable to the changes in the state's economic conditions.

One year post exit employment rates increased across the five program years and ranged from 58% for the 2008-2009 program year exiters to 65% for the 2012-2013 program year exiters. Post exit average wages increased across the five program years and ranged from \$8,010 for the 2008-2009 program year exiters to \$9,078 for the 2012-2013 program year exiters. Longer term post exit employment and wage measures indicated that three years after exit; 53% of the 2008-2009 exiters, 55% of the 2009-10 exiters and 58% of the 2010-2011 exiters were employed in North Carolina. Again employment rates were found to increase across program year cohorts and average three-year post exit wages showed a similar increase with the 2008-2009 exiters having an annual wage of \$9,726 three years after exit, the 2009-2010 exiters having an annual wage of \$10,223 three years after exit and the 2010-2011 exiters having an annual wage of \$10,775 three years after exit. When exiters from a given program year were followed over multiple years employment rates showed a small decline and then remained fairly stable. That is of the 2008-2009 exiters, 58% were employed in North Carolina in the first year after exit, by three years after exit the employment rate declined to 53% and then remained stable at 53% in

¹ North Carolina Division of Social Services website <http://www.ncdhhs.gov/dss/workfirst/index.htm>

² North Carolina Division of Social Services website <http://www.ncdhhs.gov/dss/workfirst/index.htm>

both the fourth and fifth years after exit. However, the average wage of those employed in North Carolina increased to \$11,162 by the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

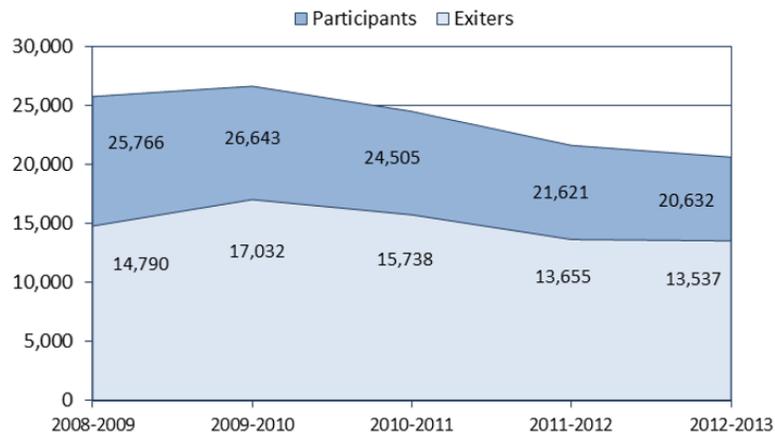
Overall the results indicate that there was a decrease in the number of Work First participants over the three program years and an increase in both short term employment rates and average wages for Work First program exiters across years. This was indicated by the one year post employment and wage trends. However, when exiters are followed over time the employment rates declined somewhat and then stabilized. The decline could be attributable to several factors including people not sustaining employment, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws.

A stated goal of the Work First program is to assist individuals in becoming self-sufficient. Results of the analyses indicate that the employment and wage outcomes show low wage outcomes for Work First program exiters and are below established federal poverty guidelines. It is recommended that the Division of Social Services may need to focus efforts to assist Work First participants in achieving higher employment and wage outcomes. This may be achieved through improved coordination with other workforce development related programs that focus on increasing employability skills, gaining occupational skills and accessing additional educational programs that may lead to increased educational credentials.

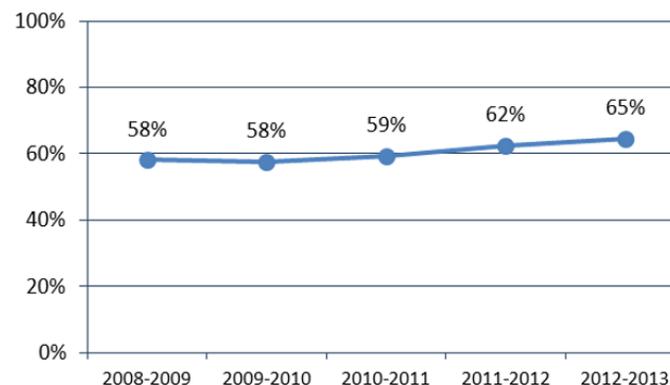
Figure 5 Division of Social Services - Work First Program Exiters 1 Year Post Exit Outcomes



PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

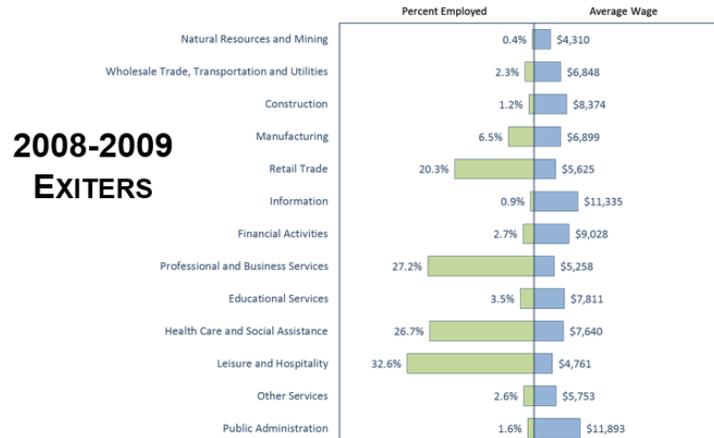
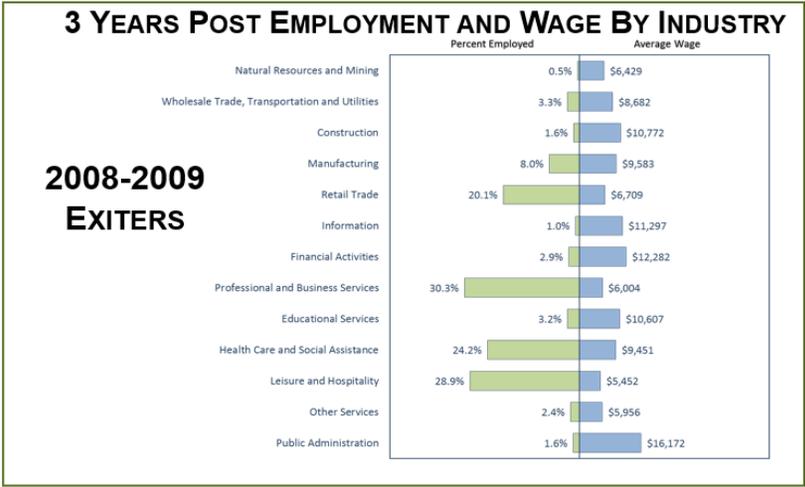
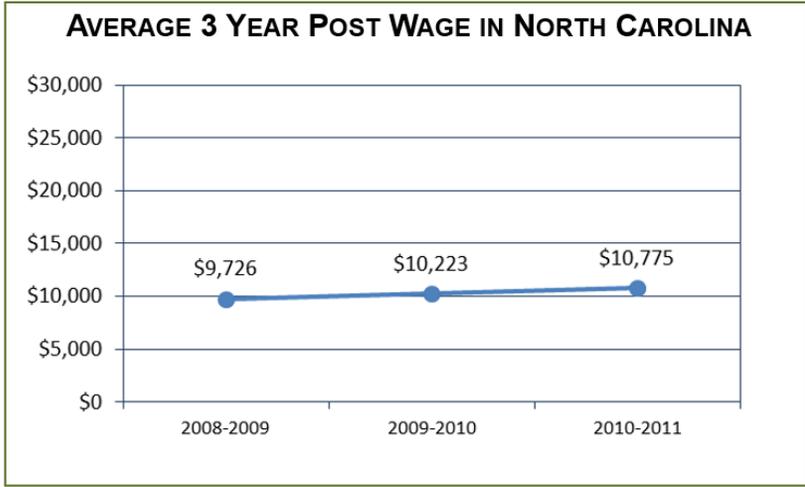
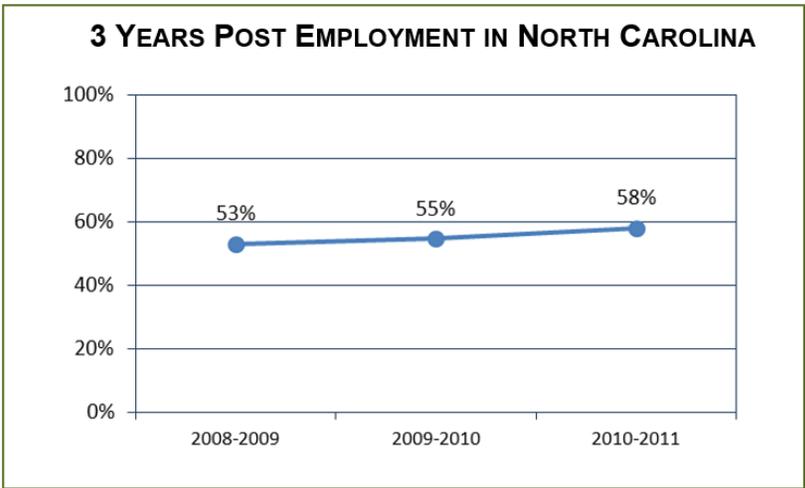
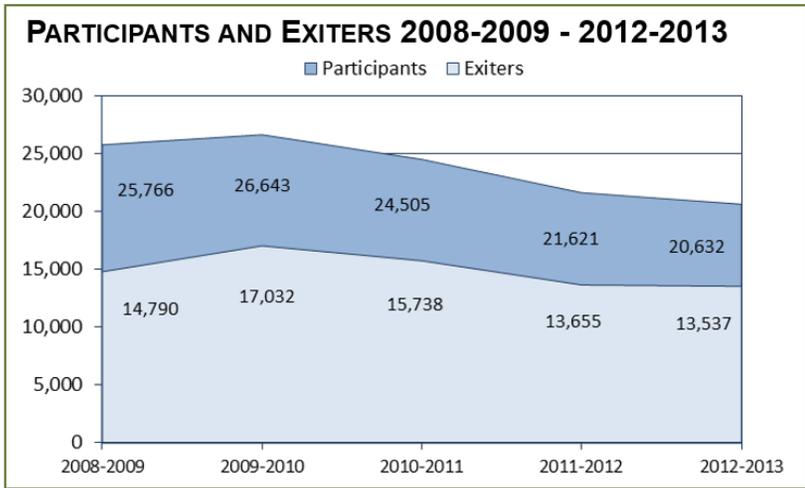


Figure 6 Division of Social Services - Work First Program Exiters 3 Years Post Exit Outcomes



DIVISION OF VOCATIONAL REHABILITATION SERVICES (DVRS)

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. WIOA is designed to help job seekers access 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 the American Job Center system and to ensure that the system is responding to the needs of employers and preparing workers for jobs that are available now and in the future.³In general, the Act took effect on July 1, 2015, the U.S. Department of Labor (DOL) in collaboration with the U.S. Department of Education and the U.S. Department of Health and Human Services are providing guidance to states regarding implementation, policies and regulations.

States may have one agency that provides VR services or two distinct agencies, one to serve individuals who are blind and visually impaired and the other to serve individuals with all other disabilities. In North Carolina, vocational rehabilitation services are administered under two separate agencies: the Division of Vocational Rehabilitation Services and the Division of Services for the Blind. DVRS provides counseling, training, education, transportation, job placement assistance, assistive technology and other support services. These services are provided to people with physical, psychiatric or intellectual disabilities including individuals who are deaf or hard of hearing or have other communicative disorders. Services are provided to individuals to assist them with finding a job and staying on the job. Some services that are provided are based on economic need, while others are provided regardless of income. Services are provided through thirty-two district offices throughout the state.⁴

Eligibility for Vocational Rehabilitation services is dependent on strict eligibility requirements. In order for a person to be eligible for services they must have a physical, or mental, or intellectual impairment which constitutes or results in a substantial impediment to employment, will benefit from vocational rehabilitation services in terms of an employment outcome, and requires those services to prepare for, secure, and/or retain gainful employment. Individuals who are receiving Social Security Disability Insurance or Supplemental Security Income benefits are presumed eligible for Vocational Rehabilitation services if they intend to get or keep a job.⁵

PROGRAM OUTCOMES

Employment and wage outcomes were derived for the Vocational Rehabilitation program exiters. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. Employment and wage outcome measures were calculated

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

⁴ North Carolina Division of Vocational Rehabilitation Services website <http://www.ncdhhs.gov/dvrs/aboutus.htm>

⁵ North Carolina Division of Vocational Rehabilitation Services website <http://www.ncdhhs.gov/dvrs/pwd/faqs.htm>

separately by program year. One year post exit employment rates ranged from a low of 41% for the 2010-2011 program year exiters to a high of 44% for both the 2008-2009 and the 2012-2013 program year exiters. One year post exit average wages ranged from \$10,803 for the 2008-2009 program year exiters to a high of \$11,206 for the 2011-2012 exiters.

Longer term post exit employment and wage measures indicate that three years after exit more than a third of the 2008-2009, 2009-2010 and 2010-2011 exiters were employed. Again the employment rates were fairly stable over the three program years as was the average three-year post exit wages with the 2008-2009 exiters having an annual wage of \$12,693 three years after exit, the 2009-2010 exiters having an annual wage of \$12,470 three years after exit and the 2010-2011 exiters having an annual wage of \$12,737 three years after exit.

While the analyses revealed relative stability in both employment and wage rates across program years the employment rates and average wages are fairly low. When the exit cohorts from a given program year were followed over multiple years after exit, the cohort employment rates showed a decline. That is of the 2008-2009 exiters 44% were employed in the first year after exit, by five years after exit the employment rate declined to 35%. However, the average wage increased from \$10,803 in the first year after exit to \$13,982 in the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been relatively stable short term employment rates and average wages for Vocational Rehabilitation program exiters. This is indicated by the one year post employment and wage trends. However, 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, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws. There are a variety of reasons why individuals who are not found in covered employment including retirement, death, and inability to find employment or people leaving the labor force.

It is important to keep in mind that persons participating in rehabilitation services through the DVRS have disabilities or communicative disorders which may impact the number of hours they can work and their ability to maintain employment. These factors contribute to the low post exit wage rates for this program. Further analyses are needed 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 in order to determine if there are geographical disparities in outcomes.

Additionally, the average wages of Vocational Rehabilitation program exiters are low in comparison to the state's general workforce. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program⁶ was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family⁷.

Part of the requirement of the new WIOA is the development of an integrated service delivery plan that includes the coordination between WIOA, Wagner Peyser, Adult Basic Education and

⁶ Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

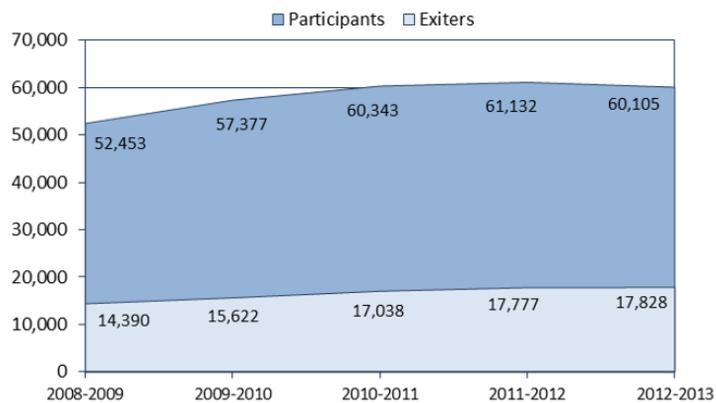
⁷ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

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.

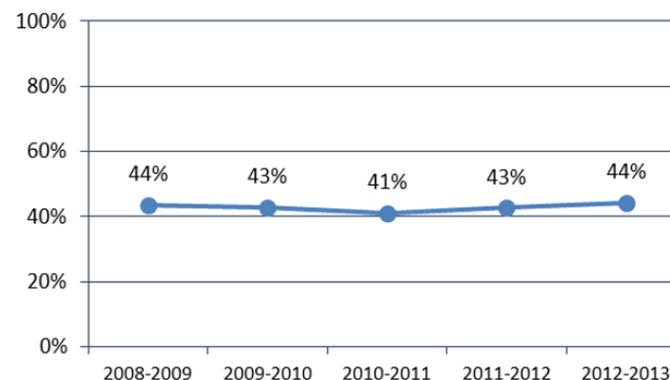
Figure 7 Division of Vocational Rehabilitation Services Program Exitters 1 Year Post Exit Outcomes



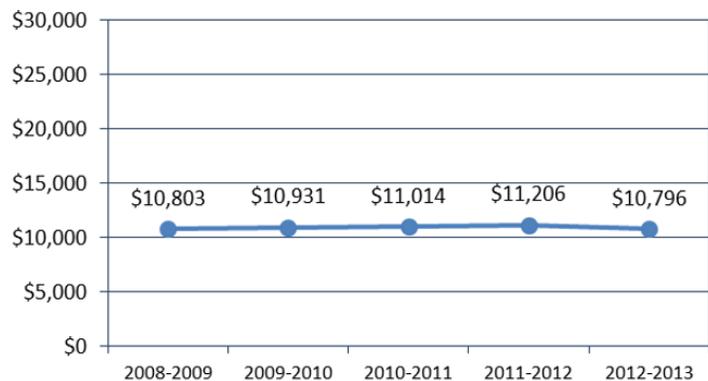
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

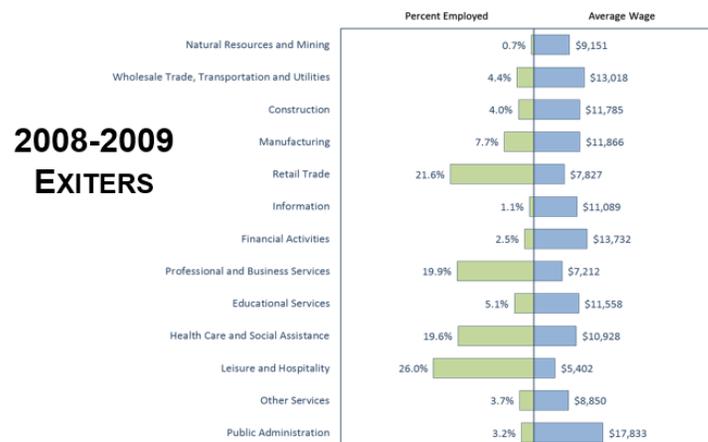
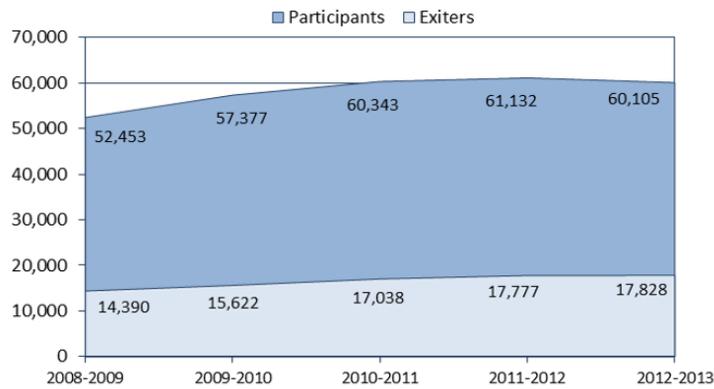


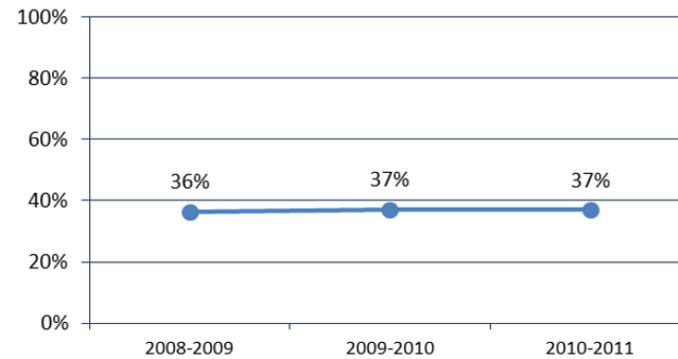
Figure 8 Division of Vocational Rehabilitation Services Program Exiters 3 Years Post Exit Outcomes



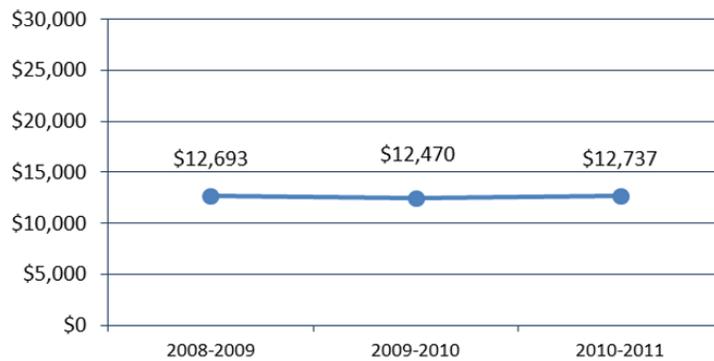
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



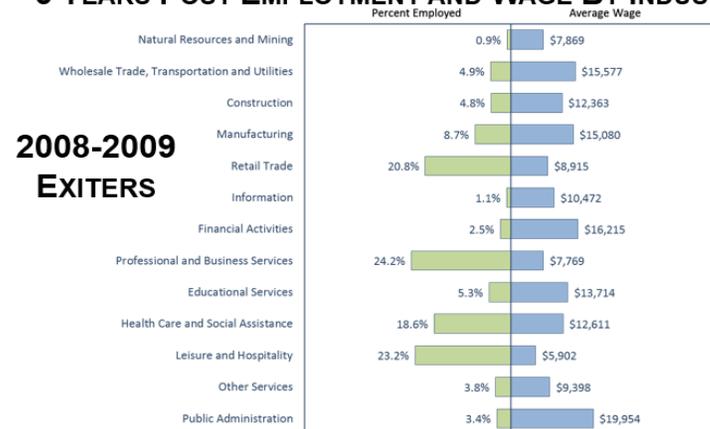
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



DIVISION OF SERVICES FOR THE BLIND (DSB)

PROGRAM OVERVIEW

The North Carolina Division of Services for the Blind (DSB) 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) supersedes WIA and is designed to help job seekers access 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.

The Division of Services for the Blind (DSB) provides vocational rehabilitation services to enable people who are blind or visually impaired including individuals who are deaf blind to reach their goals of independence and employment.⁸ These services are offered through cooperative efforts from federal, state and county resources. People with blindness or visual impairment who want to go or return to work may be eligible for DSB Vocational Rehabilitation services. These services help individuals find, keep a job, or return to work and are geared toward assisting individuals in obtaining appropriate suitable employment. Individuals can choose from an array of programs and services that best suit their individual vocational needs with support and assistance provided by Vocational and Transitional Rehabilitation Counselors, Business Services Representatives, Community Employment Specialists, Rehabilitation Engineers, Assistive Technology Specialists, Vocational Evaluators and Rehabilitation Center staff, as well as specialists to support and assist those with both blindness and hearing loss.⁹

Accessible services are planned according to each individual's employment goals and needs and may include services such as: assistive technology and training on how to use the equipment, job placement, independent living training, medical services including glasses, eye exams, surgery and treatment, job modification, job retention counseling, job seeking skills training and classes, on-the-job training, vocational or academic training, orientation and mobility services, white cane, and safety techniques to travel independently, school-to-work transition services, supported employment, vocational counseling, visual and other assessments as required, vocational counseling, work adjustment job coaching, as well as other services as required to be successful on a specific job. Some services provided are based on economic need, while others are provided regardless of income. Services are provided through staff located in district offices, through third party agreements with local Department of Social Services offices and County School Systems, and through the Rehabilitation Center for the Blind.¹⁰

PROGRAM OUTCOMES

Employment and wage outcomes were derived for the Division of Services for the Blind exiters. Analyses included the development of post exit employment rates and wage statistics for up to

⁸ Division of Services for the Blind website <http://www.ncdhhs.gov/dsb/aboutus/index.htm>

⁹ Division of Services for the Blind Annual Report for 2014
<http://www.ncdhhs.gov/dsb/publications/annual2014.htm>

¹⁰ *ibid*

five years after exit. One year post exit employment rates ranged from a low of 42% for the 2009-2010 program year exiters to a high of 51% for the 2011-2012 program year exiters. One year post exit average wages ranged from \$14,155 for the 2008-2009 program year exiters to a high of \$17,646 for the 2012-2013 exiters.

Longer term post exit employment and wage measures indicate that three years after exit 37% of the 2008-2009 exiters, 33% of the 2009-10 exiters and 40% of the 2010-2011 exiters were employed. Again the employment rates reflected some variation across the three program years. The three-year post exit wages ranged from \$16,876 for the 2008-2009 exiters, \$17,879 for the 2009-2010 exiters and \$17,585 for the 2010-2011 exiters.

Analyses revealed some variability in both employment and wage rates across program years, when cohorts were followed over multiple years, employment rates continued declined. Of the 2008-2009 exiters, 49% were employed in the first year after exit, by five years after exit the employment rate declined to 32%. However, average wages increased from \$14,155 in the first year after exit to \$17,202 in the fifth year.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there are some fluctuations in the short term employment rates and stable increases in the short term average wages for DSB program exiters. This is indicated by the one year post employment and wage trends. However, when exiters are followed over longer periods of time the employment rate tends to decline. This decline could be attributable to several factors including people not sustaining employment, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws. The average wages of DSB exiters demonstrated a stable increase over time. One year post exit wages ranged from \$14,155 for the 2008-2009 exiters to \$17,646 for the 2012-2013 exiters. In addition when exit cohorts were followed over time the average wages also exhibited increases. That is the average wage of the 2008-2009 exiters increased from \$14,155 in the first year after exit to \$17,202 in the fifth year after exit. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program ¹¹ was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family¹². While the annual average post exit wage of DSB clients is below that of the state's annual average it exceeds that of the federal poverty guidelines and shows annual growth for those individuals who are employed after exit.

As previously noted, part of the requirement of the new 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 the acquisition of increased occupational skills and educational credentials.

¹¹ Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

¹² U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

Figure 9

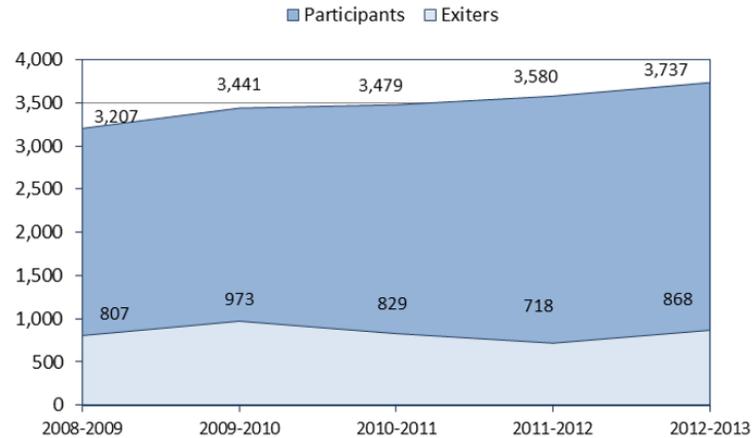
Division of Services for the Blind

Program Exiters

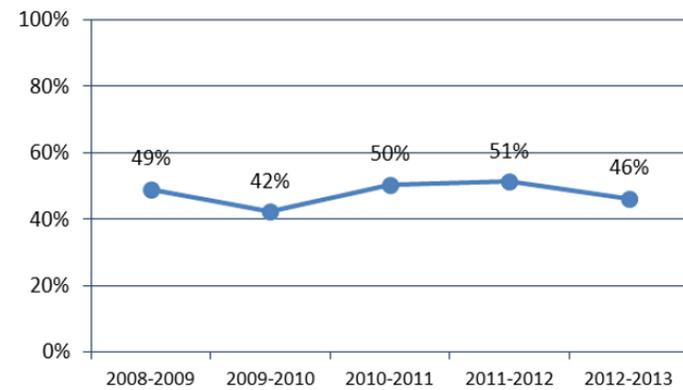
1 Year Post Exit Outcomes



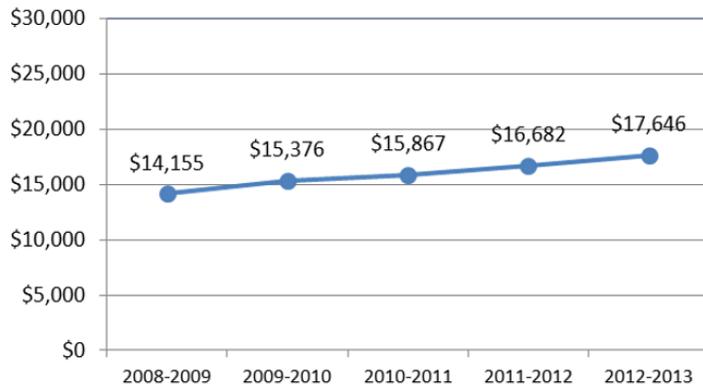
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

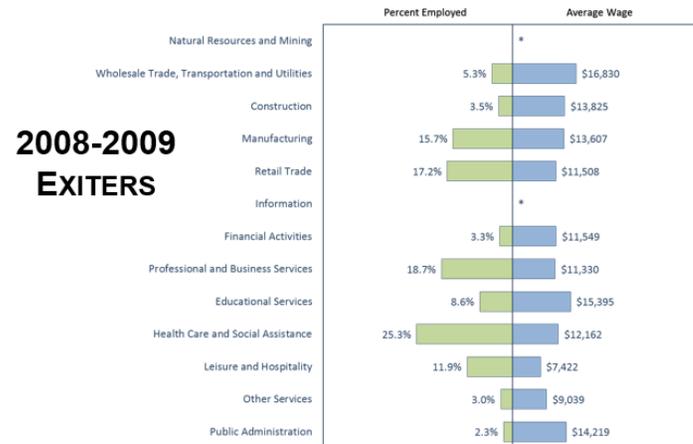
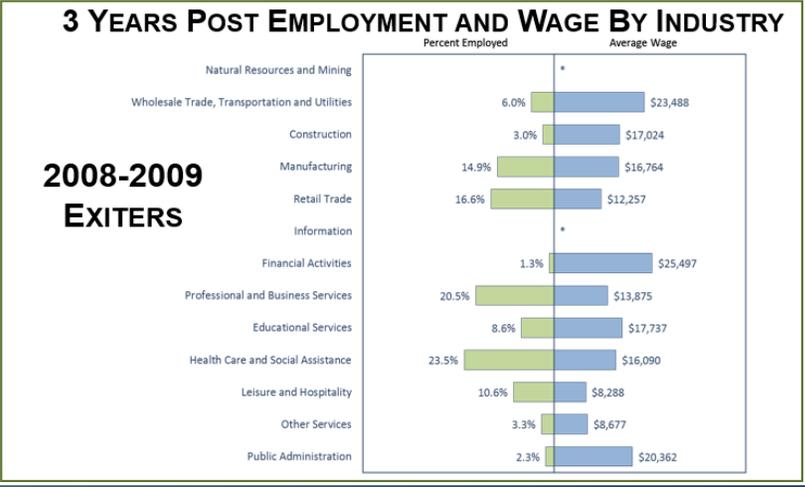
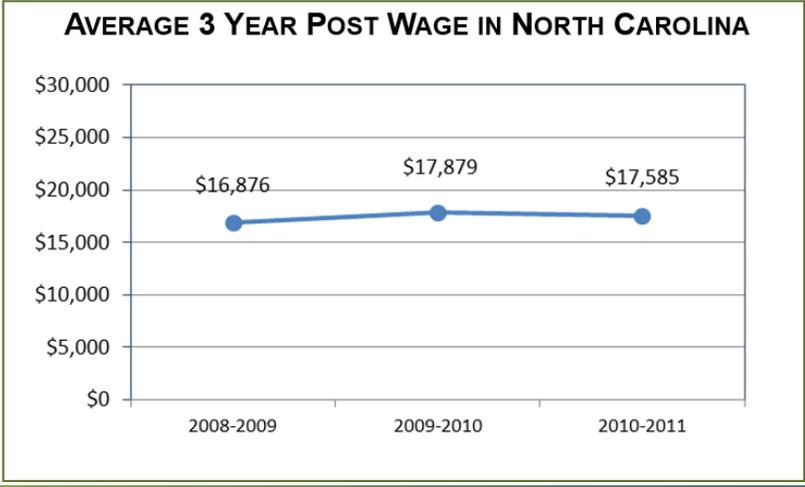
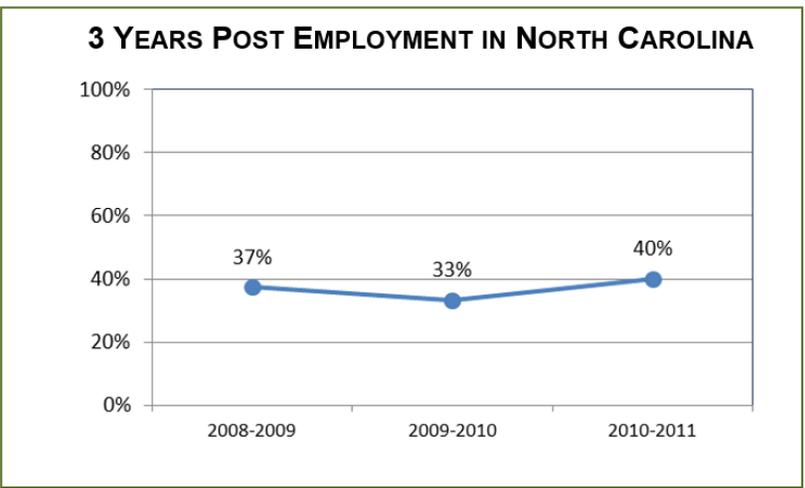
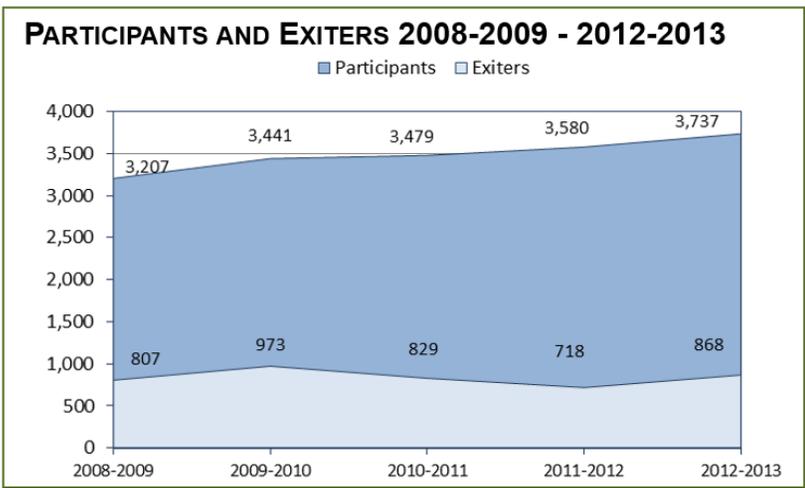


Figure 10

Division of Services for the Blind

Program Exiters

3 Years Post Exit Outcomes



WAGNER PEYSER PROGRAM

PROGRAM OVERVIEW

The Wagner-Peyser Act of 1933 established a nationwide system of public employment offices known as the Employment Service. The Wagner-Peyser Act was amended by the Workforce Investment Act (WIA) of 1998, in an effort to integrate the Employment Service program into the national One-Stop service delivery system that was authorized under the act. In July of 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law. And supersedes WIA. WIOA is designed to help job seekers access employment, education, training, and support services 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 the American Job Center system and to ensure that the system responding to the needs of employers and preparing workers for jobs that are available now and in the future.¹³

The Division of Workforce Solutions provides oversight and operational responsibility for North Carolina's Wagner Peyser Act program. Employment Services provided under the program include a variety of labor exchange services including: job search assistance, job referral, and placement assistance, re-employment services to unemployment insurance claimants as well as job recruitment assistance to employers. Services are delivered through several different delivery strategies including self-service, facilitated self-help services and staff assisted services. In addition to the labor exchange services Wagner Peyser also provides skill, ability and aptitude assessment; career guidance; job search workshops; as well as referrals to training and other related services.¹⁴

Job seekers who are Veterans receive priority referral to jobs and training as well as special employment related services and assistance. In addition, the Wagner Peyser program provides services to individuals with disabilities, migrant and seasonal farm-workers, ex-offenders, youth, minorities and older workers.¹⁵

The services offered to employers under the Wagner Peyser program include: referral of job seekers to available job openings, assistance in the development of job order requirements, matching of job seekers to job requirements, assistance with special recruitment needs, coordination of Job Fairs, assistance with job restructuring and assistance to employers in dealing with layoffs.¹⁶

In 2014, North Carolina launched the NCWorks initiative. This effort refocuses DWS' workforce and business functions, facilitates the coordination of service delivery across North Carolina's workforce partners including DWS and the North Carolina Community College System and establishes a unified brand for the delivery of workforce services.

Funding for the Wagner Peyser program is through the U.S. Department of Labor's Employment and Training Administration and comes from the Federal Unemployment Tax Act (FUTA). Money

¹³ U.S. Department of Labor Employment and Training Administration Website www.doleta.gov/wioa/

¹⁴ Ibid

¹⁵ Ibid

¹⁶ U.S. Department of Labor Employment and Training Administration website Wagner-Peyser/Labor Exchange www.doleta.gov/programs/Wagner_Peyser.cfm

is allocated to the state based on a model that takes into account the state's share of the national labor force and share of unemployed workers. Much of the employment related services that are provided under the Wagner Peyser program are the same as those provided under core services of the Workforce Investment Act (WIA) and career services under WIOA. As such the U.S. Department of Labor allows states the opportunity to leverage the two sources of funding to streamline and integrate service delivery. In 2014, the Division of Workforce Solutions implemented a new service delivery approach that integrates Wagner Peyser employment services with the core services/career services under the WIA and WIOA Adult program. This approach has been initiated throughout North Carolina's NCWorks Career Centers. Customers are provided a variety of employment and workforce services including; skill assessment services, access to skill development services and the opportunity to improve employment opportunities through skill upgrading. The integrated service delivery model emphasizes the co-enrollment of customers in both the Wagner Peyser program and the WIA/WIOA Adult program when eligibility criteria permit. Wagner Peyser services are provided throughout the state at NCWorks Career Centers and online through the NCWorks Online website.

PROGRAM OUTCOMES

Employment and wage outcomes were derived for Wagner Peyser program exiters. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. One year post exit employment rates ranged from a low of 60% for the 2008-2009 program year exiters to a high of 69% for the 2012-2013 program year exiters. One year post exit average wages ranged from \$15,883 for the 2008-2009 program year exiters to a high of \$17,295 for the 2012-2013 exiters. Longer term post exit employment and wage measures indicate that 56% of the 2008-2009 program year exiters, 60% of the 2009-2010 program year exiters and 63% of the 2010-2011 program year exiters were employed in North Carolina three years after exit. The three year post exit employment rates increased across program years as did the average three-year post exit wage, with the 2008-2009 exiters having an annual wage of \$19,735 three years after exit, the 2009-2010 exiters having an annual wage of \$20,352 three years after exit and the 2010-2011 exiters having an annual wage of \$20,850 three years after exit.

While the analyses revealed relative increases in both employment and wage rates by program year, when the exit cohorts were followed over multiple years the cohort employment rates showed a small decline. That is of the 2008-2009 exiters 60% were employed in the first year after exit, by five years after exit the employment rate declined to 53%. However, the average wage increased from \$15,883 in the first year after exit to \$22,077 in the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been increasing short term employment rates and average wages for Wagner Peyser program exiters. This is indicated by the one year post employment and wage trends. 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, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws. There are a variety of reasons why individuals who are not found in covered employment including retirement, death, and inability to find employment or people leaving the labor force. While there was a slight decline in the

percentage of individuals employed, the average wages of Wagner Peyser program exiters continue to rise over time. The average one year post exit wage of the 2008-2009 program year exiters was \$15,883 by the fifth after exit the average wage was \$22,077. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program¹⁷ was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family¹⁸.

The almost universal nature of Wagner Peyser services tends to be reflective of the state's economic condition. As the economy continues to grow and expand it is likely that the employment and wage trajectory for Wagner Peyser participants will also grow. Additional analyses are needed to help to identify additional patterns of participation in other education, employment and training services. In addition, as the DWS continues with its implementation of the new integrated service delivery strategy across both the existing WIA Title I Adult program (and forthcoming WIOA program) and the Wagner Peyser program further analyses will be needed to assess the impacts of this service delivery strategy on employment and wage outcomes.

As previously noted, part of the requirement of the new 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 the acquisition of increased occupational skills and educational credentials.

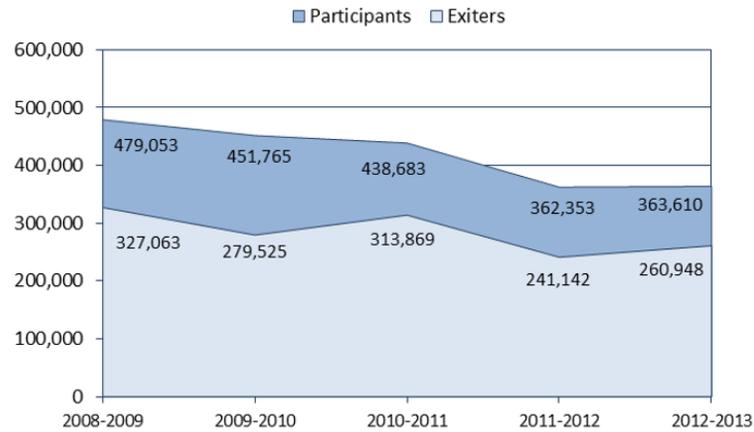
¹⁷ Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

¹⁸ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

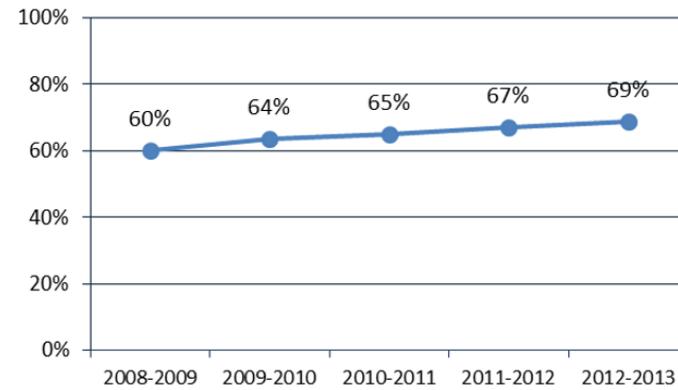
Figure 11 Wagner - Peyser Program Exiters 1 Year Post Exit Outcomes



PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

**2008-2009
EXITERS**

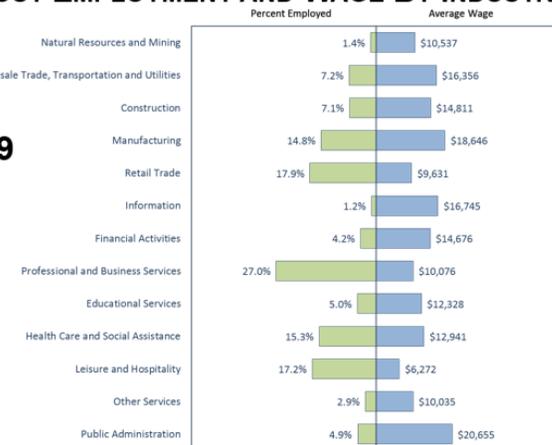
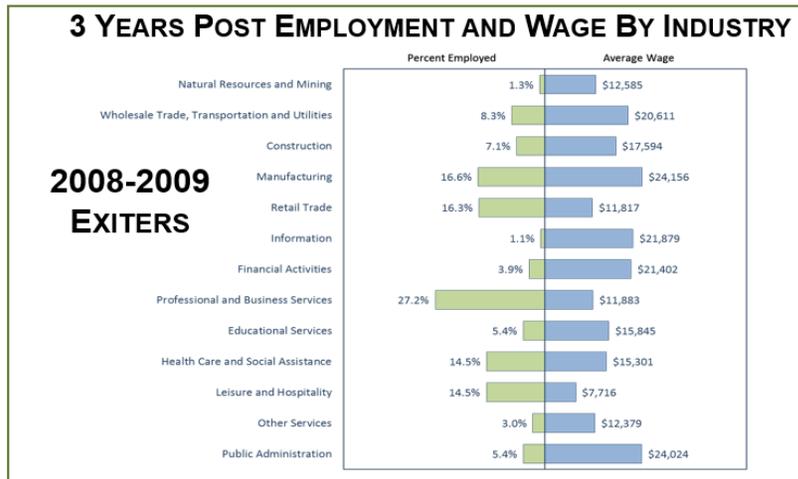
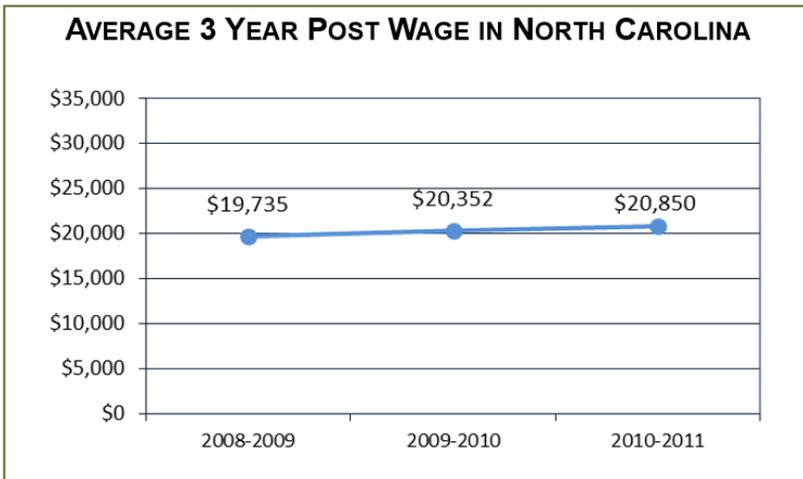
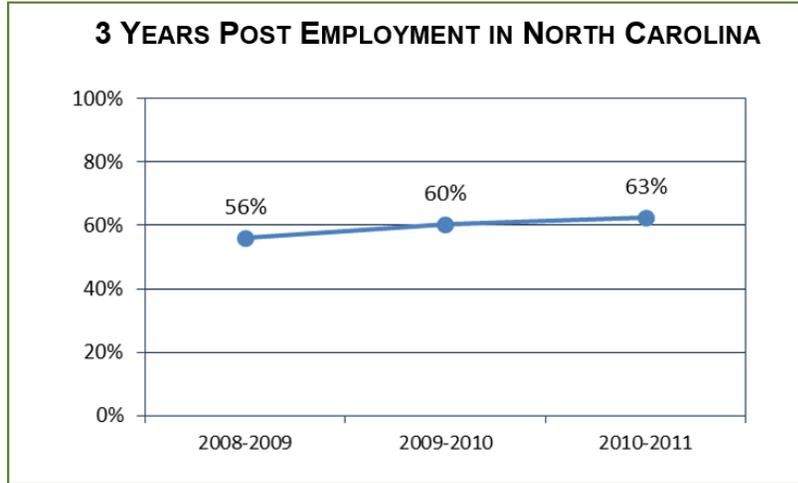
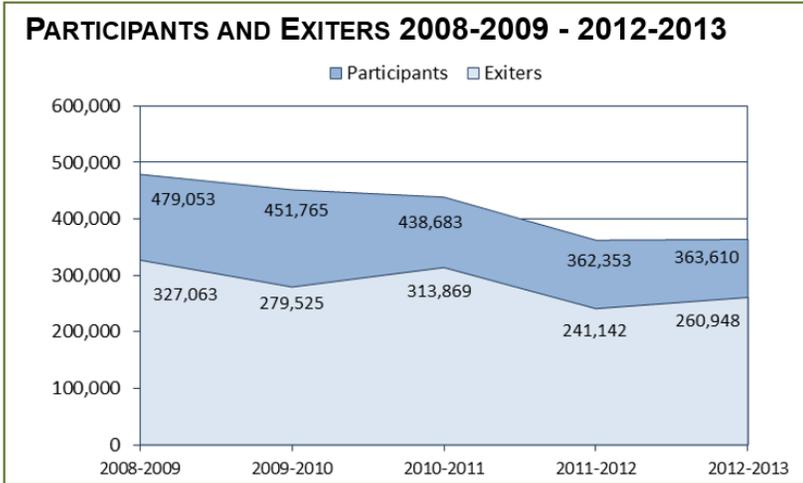


Figure 12 Wagner - Peyser Program Exiters 3 Years Post Exit Outcomes



WORKFORCE INVESTMENT ACT TITLE I PROGRAMS (WIA)

PROGRAM OVERVIEW

The Workforce Investment Act of 1998 authorized the nation's federally funded workforce development system and provides funding for services to both employers and job seekers. WIA Title I programs consist of three distinct funding streams: Adult, Dislocated Workers and Youth. WIA Title I Adult and Dislocated Worker programs are designed to provide quality employment and training services, to assist eligible individuals in finding and qualifying for meaningful employment, and to help employers find the skilled workers they need to compete and succeed in business. The goals of the programs are to increase employment, increase employment retention, increase earnings of dislocated workers and to enhance customer satisfaction for both participants and employers.¹⁹

In July of 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law. WIOA is designed to help job seekers access employment, education, training, and support services 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 the American Job Center system and to ensure that the system responding to the needs of employers and preparing workers for jobs that are available now and in the future.²⁰

WIOA supersedes the Workforce Investment Act of 1998 and amends the Adult Education and Family Literacy Act, the Wagner Peyser Act, and the Rehabilitation Act of 1973. In general, the Act took effect on July 1, 2015, the U.S. Department of Labor (DOL) in collaboration with the U.S. Department of Education and the U.S. Department of Health and Human Services is providing guidance to states on implementation timelines, policies and regulations.

Under the WIA/WIOA Adult and Dislocated Worker programs a variety of education, employment related and training services are provided to eligible customers. These include intake and registration, outreach, job search and placement assistance, provision of labor market information, comprehensive assessments, individual employment plans, counseling and career planning. Training services include both occupational and basic skills training. Additional supportive services can be provided to help facilitate the participation of participants in the program. These supportive services include transportation assistance, childcare assistance, dependent care assistance, housing assistance and other needs related payments. In addition, funds help to support Rapid Response services which are provided to employers and workers in the event of company layoffs and closings.²¹

The WIA Title I Youth program provided a comprehensive array of services to individuals aged 14 to 21. These services assist low income youth with barriers to employment, with preparation for post-secondary education and employment opportunities, attainment of educational and or skills training and securing employment with career and or promotional opportunities. Services including case management, tutoring, alternative secondary school offerings, the provision of employment opportunities that are linked to academic and occupational learning, paid and

¹⁹ U.S. Department of Labor's Employment and Training Administration website

http://www.doleta.gov/programs/general_info.cfm

²⁰ U.S. Department of Labor Employment and Training Administration Website <http://www.doleta.gov/wioa/>

²¹ Ibid

unpaid work experiences, occupational skill training, leadership development opportunities, supportive services, mentoring, follow-up services and comprehensive guidance and counseling.

The Division of Workforce Solutions provides administrative oversight and monitoring of the WIA / WIOA Adult, Dislocated Worker and Youth programs. Funding for Adult, Dislocated Worker and Youth Programs is provided to North Carolina's 23 local Workforce Development Boards (WDBs) that are responsible for program policy and oversight of services in their respective areas. Services are provided at the local level through providers who contract with the Local WDBs.

Many of the employment related services that are provided under the Wagner Peyser Act program are the same as those provided under the Workforce Investment Act (WIA) Title I core services and WIOA career services. As such the U.S. Department of Labor allows states the opportunity to leverage the two sources of funding to streamline and integrate service delivery. In 2014, the Division of Workforce Solutions implemented a new service delivery approach that called for the integration of Wagner Peyser employment services with the core services under the Workforce Investment Act Title I Adult program. This approach was initiated in 2014 throughout North Carolina' NC Works Career Centers. Customers are provided a variety of employment and workforce services including; skill assessment services, access to skill development services and the opportunity to improve employment opportunities through skill upgrading. The integrated service delivery model emphasizes co-enrollment of customers in both Wagner Peyser and WIA/WIOA Adult program when eligibility criteria permit.

WIA TITLE I ADULT PROGRAM OUTCOMES

Analyses revealed that there was a marked increase in the number of WIA Adult program participants between the 2008-2009 program year and the 2009-2010 program year and slight declines in the three years following. This trend is reflective of the economic downturn brought about by the great recession and an influx of federal funding through the American Recovery and Reinvestment Act of 2009.

Employment and wage outcomes were derived for each year of program exiters. These included analysis of post exit employment rates and wage statistics for up to five years after exit. These measures include only those individuals who are employed in North Carolina in jobs covered by the state's Unemployment Insurance laws. Employment and wage outcome measures were calculated separately by program year exit cohorts. One year post participation employment rates have been relatively stable across the five program years and ranged from 74% for the 2009-2010 exiters to 77% for the 2011-2012 exiters. One year post exit average wages ranged from \$15,470 for the 2009-2010 program year exiters to a high of \$18,070 for the 2008-2009 exiters. The one year post exit wage for the 2009-2010 exiters is likely reflective of the challenging economic conditions that were impacting the North Carolina economy.

Longer term post exit employment and wage measures indicate that three years after exit more than two-thirds of the 2008-2009, 2009-2010 and 2010-2011 program year WIA Title I Adult exiters were employed in North Carolina. The three year post exit employment rates were relatively stable across the three program years and the average three-year post exit wage demonstrated some variability, with the 2008-2009 exiters having an annual wage of \$21,698 three years after exit, the 2009-2010 exiters having an annual wage of \$19,320 three years after exit and the 2010-2011 exiters having an annual wage of \$20,582 three years after exit.

While the analyses revealed relative stability in employment rates by program year, when the exit cohorts were followed over multiple years the cohort employment rates showed a small decline. That is of the 2008-2009 program year WIA Title I Adult program exiters 76% were employed in the first year after exit, by five years after exit the employment rate declined to 65%. However, the average wage five years after exit increased to \$24,057.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been fairly stable short term employment rates and some fluctuation in average wages for WIA Adult program exiters. This is indicated by the one year post employment and wage trends. 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, people moving out of state or people 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, and inability to find employment or people leaving the labor force. The average wages of WIA Adult Program exiters continue to rise over time. The average wage of WIA Adult exiters in the first year after exit ranged from \$15,470 to over \$18,070. In addition when exit cohorts are followed over time the wages increased by the fifth year after exit the average wages of the 2008-2009 WIA adult program year exiters who were employed in North Carolina was \$24,057. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program ²² was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family²³.

As the DWS continues with its implementation of the new integrated service delivery strategy across both WIA / WIOA Adult and Wagner Peyser analyses will be needed to assess the impacts of this strategy on employment and wage outcomes. In addition, further analyses are needed to understand the enrollment of WIA/WIOA participants that are enrolled in training and to determine if these individuals are participating in training programs that lead to growing and in demand occupations.

²² Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

²³ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

Figure 13

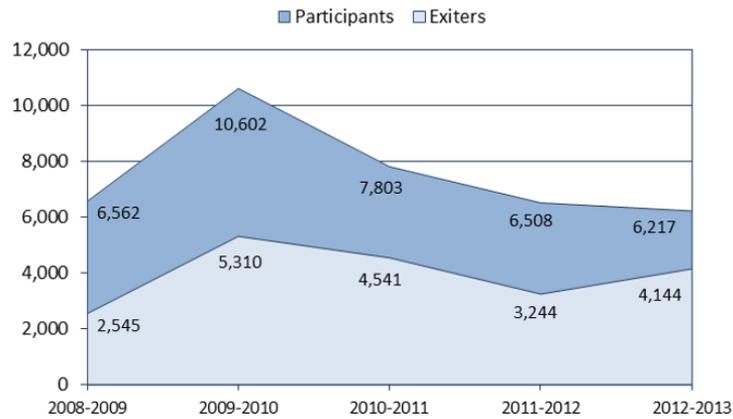
Workforce Investment Act

Adult Program Exiters

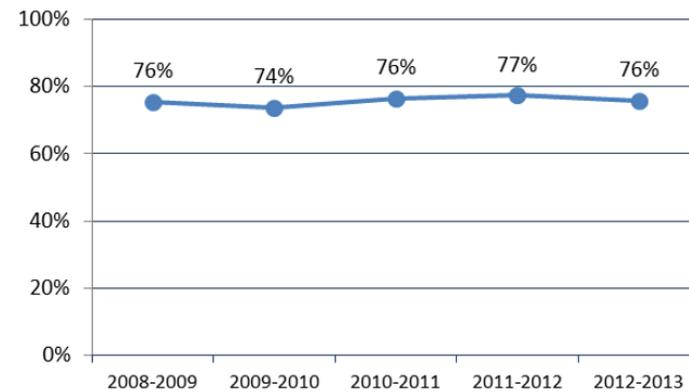
1 Year Post Exit Outcomes



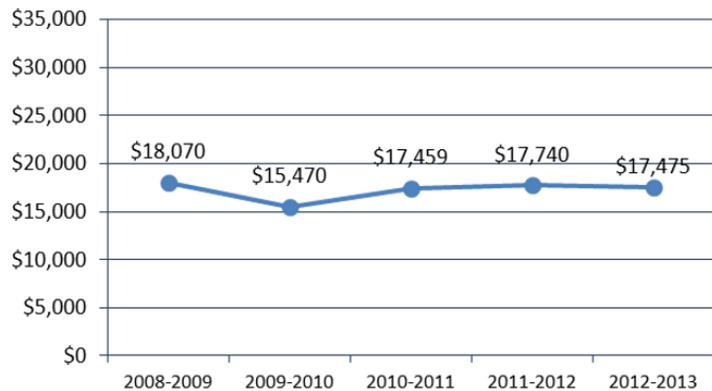
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

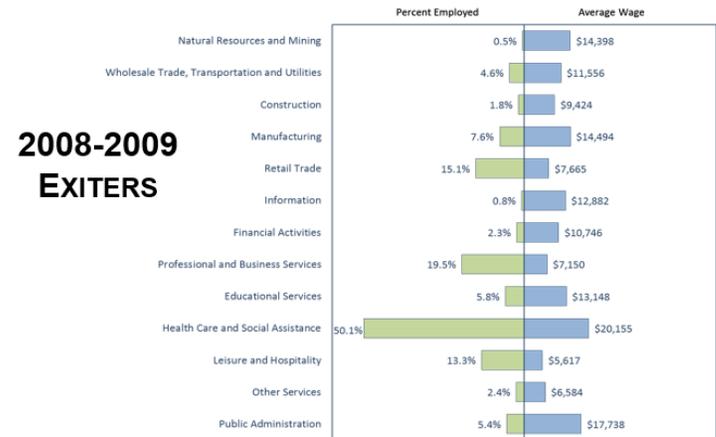


Figure 14

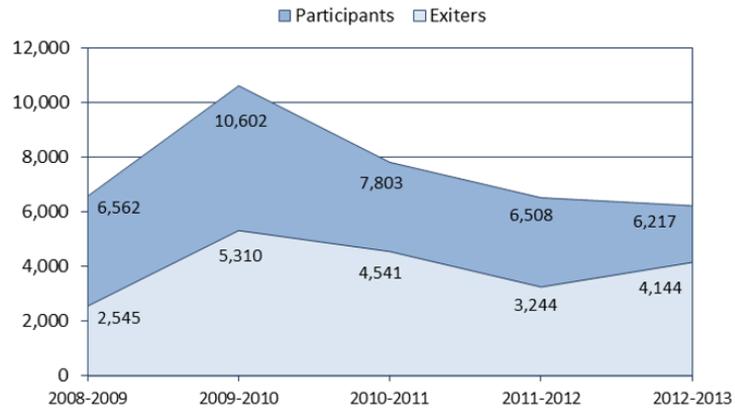
Workforce Investment Act

Adult Program Exiters

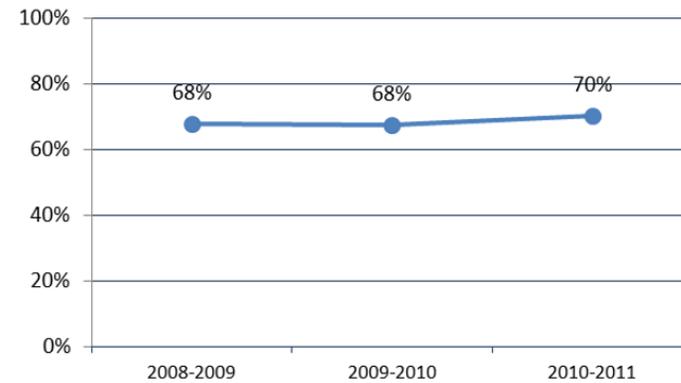
3 Years Post Exit Outcomes



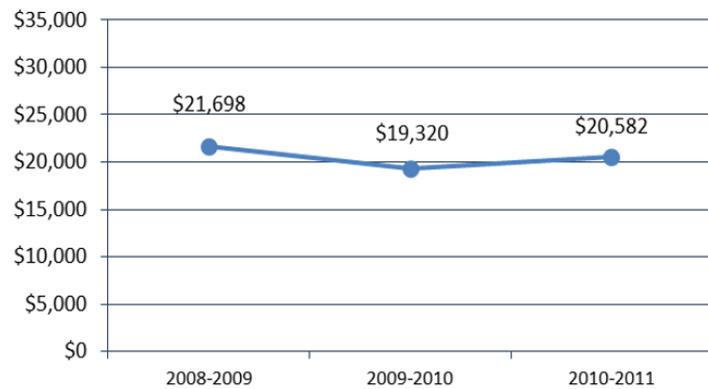
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



3 YEARS POST EMPLOYMENT IN NORTH CAROLINA

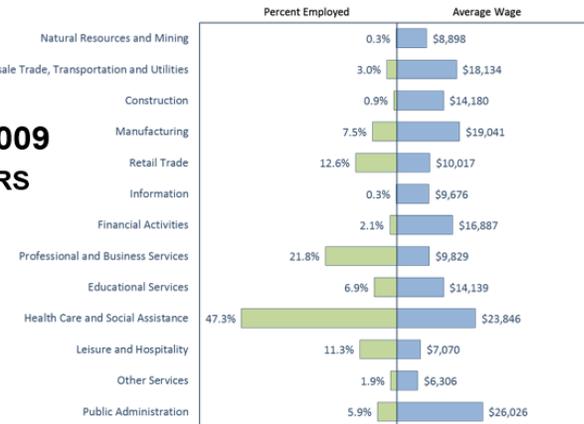


AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY

2008-2009 EXITERS



WIA TITLE I DISLOCATED WORKER PROGRAM OUTCOMES

Analyses revealed that there was a marked increase in the number of participants in the WIA Dislocated Worker program between the 2008-2009 program year and 2009-2010 program year and marked declines in each of the three years following. This trend in Dislocated Worker participants is reflective of the economic downturn brought about by the great recession. The number of exiters increased significantly between the 2008-2009 program year and the 2009-2010 program year and increased again in the 2010-2011 program year and then decreased in the 2011-2012 program year and remained stable in the 2012-2013 program year. This trend in the number of participants is reflective of the economic downturn brought about by the great recession and an influx of federal funding through the American Recovery and Reinvestment Act of 2009.

Employment and wage outcomes were derived for each year of WIA Title I Dislocated Worker program exiters. These included of post exit employment rates and wage statistics for up to five years after exit. These measures include only those individuals who are employed in North Carolina in jobs covered by the state's Unemployment Insurance laws. Employment and wage outcome measures were calculated separately by program year exit cohorts. One year post exit employment rates were relatively stable across the five program years with just slightly lower rates for the 2008-2009 exiters. Employment rates across the five program years ranged from 76% for the 2008-2009 exiters to 81% for the 2010-2011 exiters. One year post exit average wages ranged from \$21,426 for the 2008-2009 program year exiters to a high of \$25,023 for the 2010-2011 exiters.

Longer term post exit employment and wage measures indicate that three years after exit more than three-quarters of the 2008-2009, 2009-2010 and 2010-2011 exiters were employed in North Carolina. The three year post exit employment rates were relatively stable across the three program years and the average three-year post exit wage increased across the three program years, with the 2008-2009 exiters having an annual wage of \$26,717 three years after exit, the 2009-2010 exiters having an annual wage of \$28,667 three years after exit and the 2010-2011 exiters having an annual wage of \$29,479 three years after exit.

The analyses revealed relative stability in employment rates by program year and across time and increasing average wages. There were some slight declines, when the exit cohorts were followed over multiple years. The 2008-2009 exiters showed fairly stable employment rates in the first three years after exit and then slight declines in the fourth and fifth year after exit. That is of the 2008-2009 exiters 76% were employed in the first year after exit, 77% in the second year after exit, 75% in the third year after exit and by five years after exit the employment rate declined to 72%. However, the average wage five years after exit increased to \$29,651.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been fairly stable and positive short term employment rates and some fluctuation in average wages for WIA Dislocated Worker program exiters. This is indicated by the one year post employment and wage trends. 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, people moving out of state or people 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, and inability to find employment or people leaving the labor force. The average wages of WIA Dislocated Worker exiters continue to rise over time and by the fifth year after exit the annual average wage for 2008-2009 program year exiters was \$29,651. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program²⁴ was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family²⁵.

Further analyses are needed to compare the employment and wage trends for WIA Dislocated Workers to determine the changes in industrial employment and wage progressions prior to their dislocation and after participation. In addition, further analyses are needed to understand the enrollment of WIA/WIOA participants that are enrolled in training and to determine if these individuals are participating in training programs that lead to growing occupations.

As previously noted, part of the requirement of the new 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 focus on the leveraging of resources and services across these programs and focus on achieving higher employment and wage outcomes and the acquisition of occupational skills and educational credentials.

²⁴ Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

²⁵ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

Figure 15

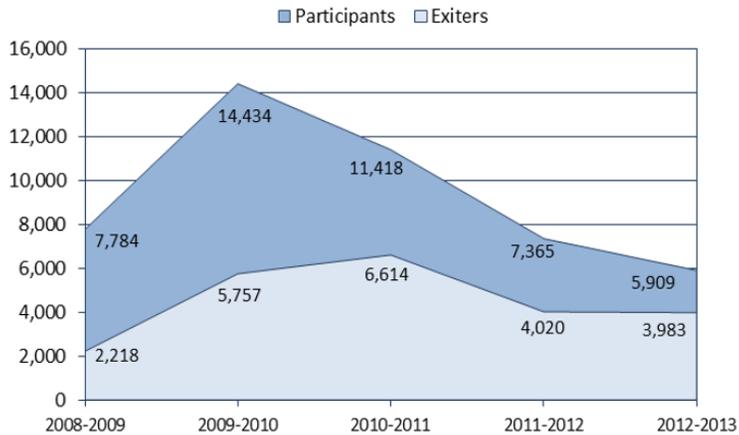
Workforce Investment Act

Dislocated Worker Program Exiters

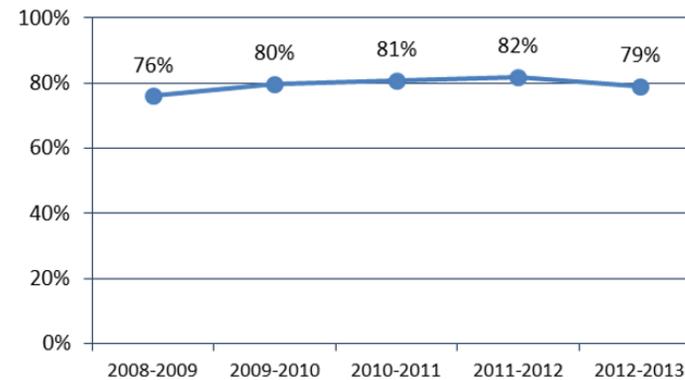
1 Year Post Exit Outcomes



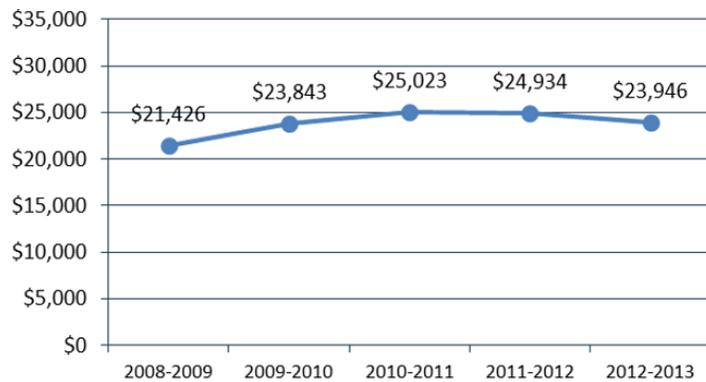
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

**2008-2009
EXITERS**

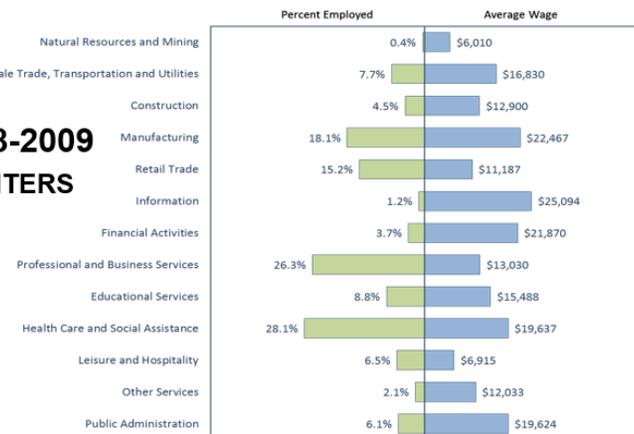
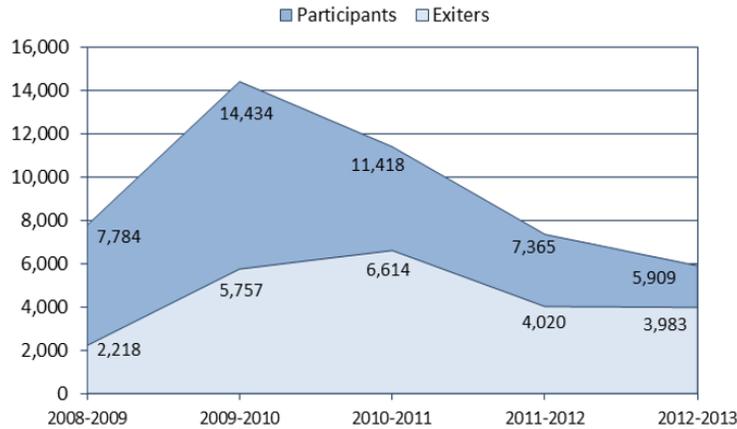


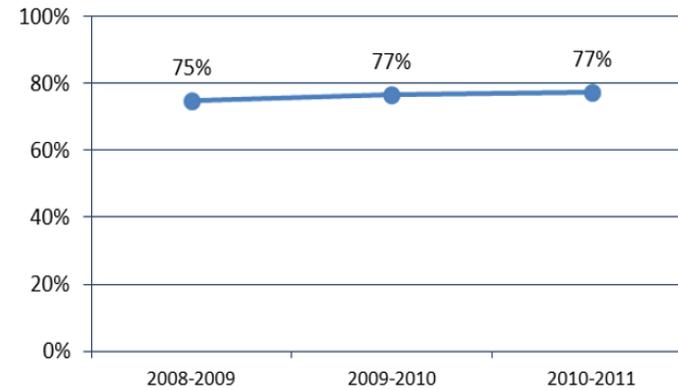
Figure 16 Workforce Investment Act Dislocated Worker Program Exiters 3 Years Post Exit Outcomes



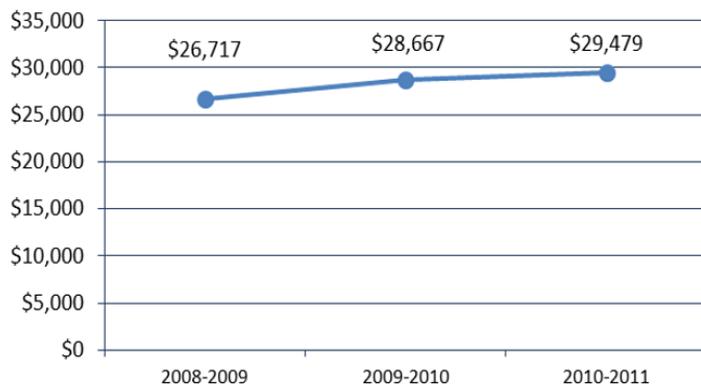
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



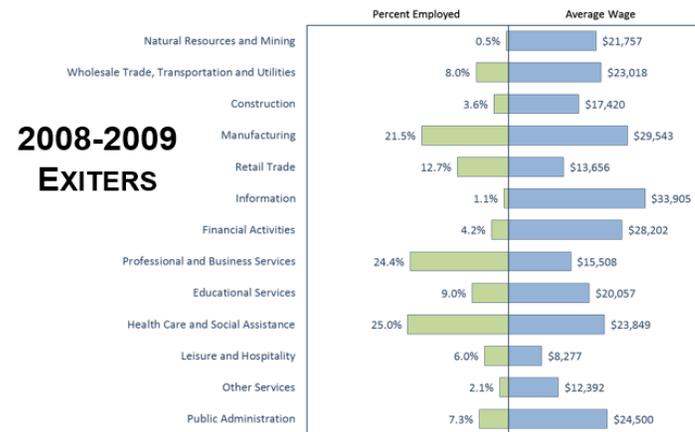
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



WIA TITLE I YOUTH PROGRAM OUTCOMES

Analyses revealed that there was a gradual increase in the number of WIA Youth program participants across the first four program years and a stabilization of the number of participants across the last two program years. Employment and wage outcomes were derived for each year of program exiters. These included analysis of post exit employment rates and wage statistics for up to five years after exit. One year post participation employment rates reflect a steady increase across the five program years. Rates across the five program years ranged from 58% for the 2008-2009 program year exiters to 70% for the 2012-2013 program year exiters. One year post exit average wages ranged from \$6,498 for the 2008-2009 program year exiters to a high of \$7,856 for the 2011-2012 program year exiters. It is important to note that WIA Title I Youth participants range in age from 14 to 21 and are more likely to be in school and less likely to be working full time.

Longer term post exit employment and wage measures for the WIA Title I Youth program indicate that three years after exit more 58% of the 2008-2009 exiters were employed in North Carolina three years after exit, 63% of the 2009-2010 were employed three years after exit and 67% of the 2010-2011 exiters were employed three years after exit. The three year post exit employment rates increased across the three program years and the average three-year post exit wage increased across the three program years, with the 2008-2009 exiters having an annual wage of \$8,632 three years after exit, the 2009-2010 exiters having an annual wage of \$9,162 three years after exit and the 2010-2011 exiters having an annual wage of \$9,790 three years after exit.

The analyses revealed increasing employment rates by program year and across time. The 2008-2009 WIA Title I Youth program showed fairly stable employment rates five years after exit. That is of the 2008-2009 exiters 58% were employed in the first year after exit and again five years after exit 58% were found to be employed. In addition, the average wage of WIA Title I Youth exiters increased from \$6,498 in the first year after exit to \$11,026 in the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been increasing short term employment rates and some fluctuation in average wages for WIA Youth exiters. This is indicated by the one year post employment and wage trends. When exiters are followed over time the employment rates tend to also be fairly stable. In addition, while the average post wages of WIA Youth exiters are low they continue to rise over time. It is important to keep in mind that the WIA Youth program serves individuals who are aged 14 to 21 and are more likely to be in school and less likely to be working full time.

As previously noted, part of the requirement of the new 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.

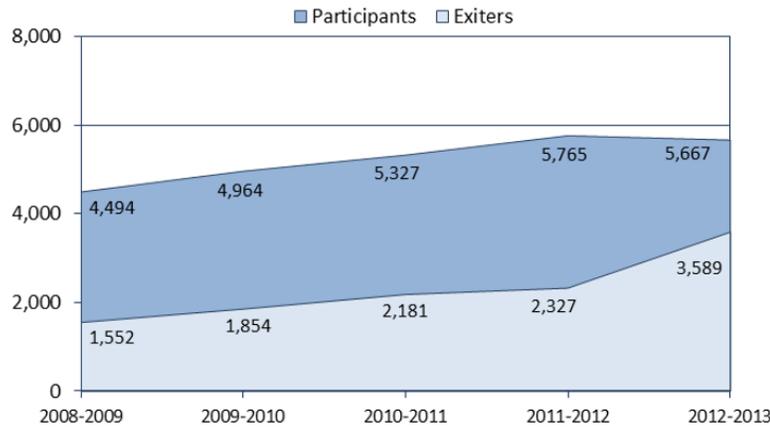
Figure 17

Workforce Investment Act Youth Program Exiters

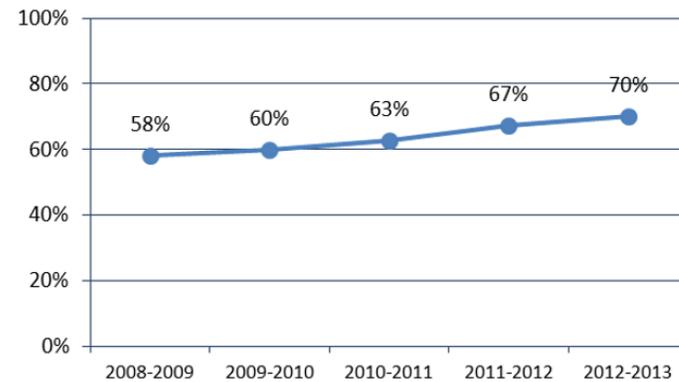
1 Year Post Exit Outcomes



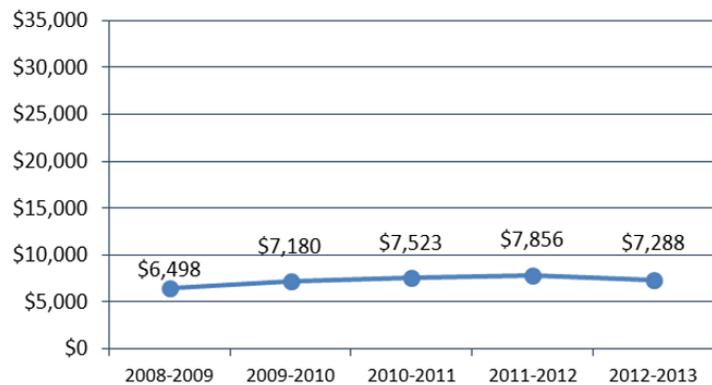
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

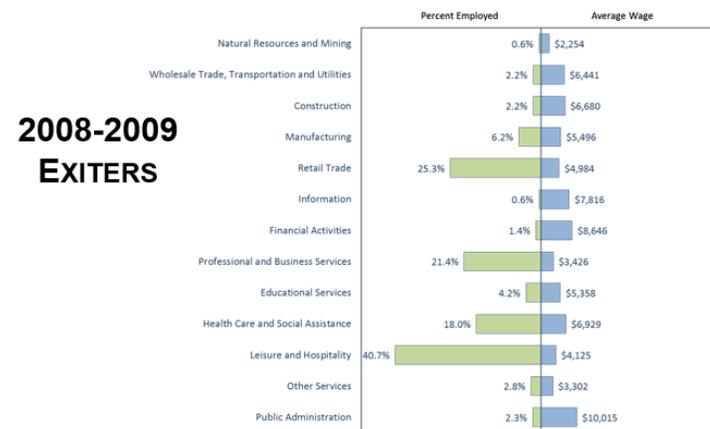
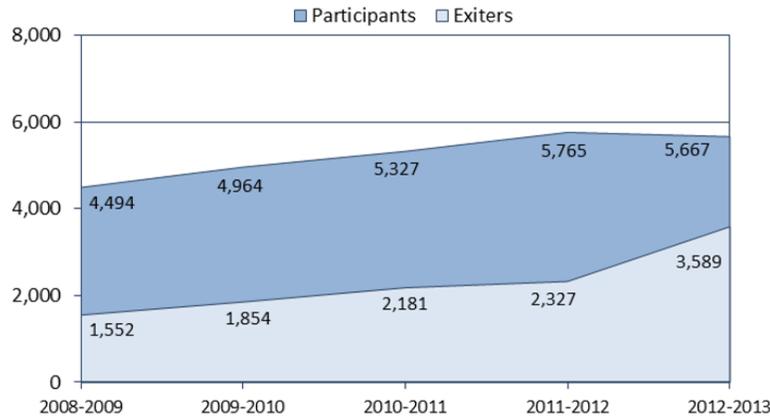


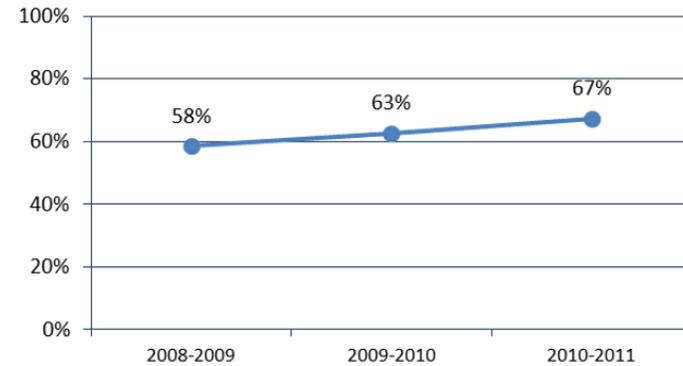
Figure 18 Workforce Investment Act Youth Program Exiters 3 Years Post Exit Outcomes



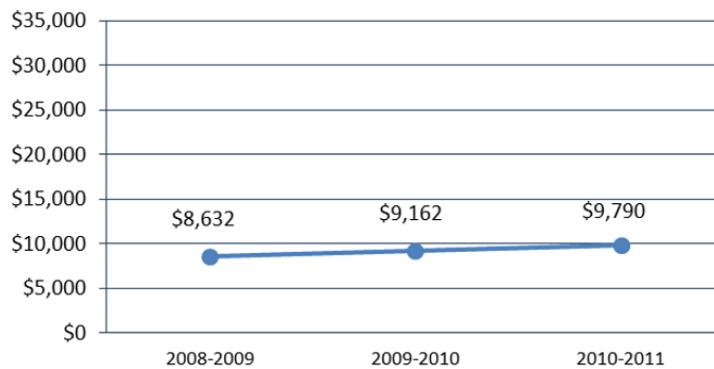
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



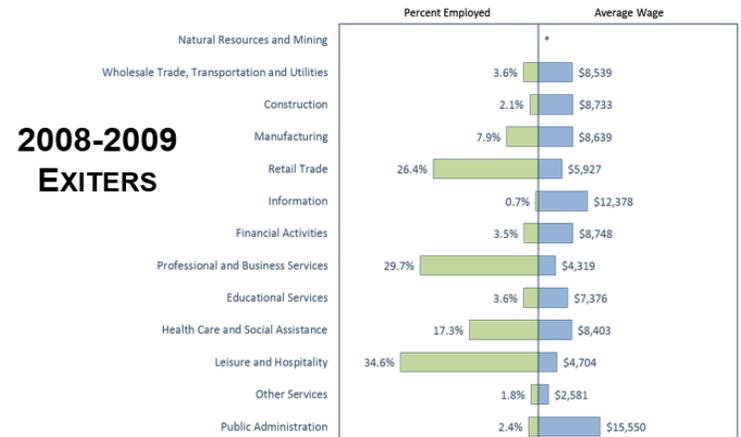
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



CAREER AND TECHNICAL EDUCATION PROGRAMS (CTE)

PROGRAM OVERVIEW

North Carolina's Community Colleges offer a diverse set of programs and courses including "curriculum programs" which range in length from one semester to two years. There are more than 275 different curriculum programs organized into eleven programmatic areas which include: Agricultural and Natural Resource Technologies, Arts and Sciences, Biological and Chemical Technologies, Business Technologies, Commercial and Artistic Production Technologies, Construction Technologies, Engineering Technologies, Health Sciences, Industrial Technologies, Public Service Technologies, Transportation Systems Technologies. These programs lead to academic credentials which include: Certificates, Diplomas and Associate degrees depending on the nature of the curriculum area and program.²⁶

Certificate programs are curriculum programs designed to provide entry-level employment related training and range from 12 to 18 semester credit hours and can usually be completed within one semester by a full-time student. Diploma Programs are curriculum programs designed to provide entry-level employment related training and range from 36 to 48 semester credit hours and can usually be completed by a full-time student 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 semester credit hours and can usually be completed by a full-time student within four semesters.

Organized within the North Carolina Community College Curriculum programs are those programs which receive part of their funding through the U.S. Department of Education's Carl D. Perkins Career and Technical Educational Act of 2006. 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 implement and deliver the programs and activities required under the Perkins Act. Funding is split between DPI and NCCCS.

In order to receive funding, the state is required to jointly develop a plan for the delivery of secondary and postsecondary vocational and technical under Perkins and submit the plan to the Office of Vocational and Adult Education within the U.S. Department of Education for approval. Perkins act funding can be used for a broad range of programs and services as well as activities designed to improve career and technical education programs and to ensure access to programs²⁷.

²⁶ North Carolina Community College System website http://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/education_catalog_02feb2015.pdf

²⁷ North Carolina Community College System website Perkins Vocational Education <http://son2.nccommunitycolleges.edu/Perkins/index.html>

CTE ASSOCIATE DEGREE PROGRAM OUTCOMES

Results of the analyses of Associate Degree CTE programs revealed that there was an increase in program participants from the 2008-2009 program year to the 2010-2011 program year and a slight decline in participants from the 2010-2011 program year to the 2012-2013 program year. The number of participants ranged from a low of 109,403 in the 2008-2009 program year to a high of 132,576 in the 2010-2011 year. In addition, the number of individuals who received Associate Degrees through CTE programs ranged from a low of 11,506 for the 2008-2009 program year to a high of over 14,000 in the 2011-2012 and 2012-2013 program years.

Employment and wage outcomes were derived for each year of Career and Technical program completers. Results indicate that the percentage of individuals found to be employed in North Carolina in the first year after completion of their CTE Associate Degree program was extremely stable across the five program year cohorts and ranged from 82% to 83%. One year post average wages for CTE Associate Degree programs were extremely stable across the five program years and ranged from \$24,772 for the 2009-2010 program year to \$25,225 for the 2008-2009 cohort.

Longer term post credential employment and wage measures indicate stable employment rates for CTE Associate Degree programs with 81% of the 2008-2009 cohort, 80% of the 2009-2010 and 80% of the 2010-2011 cohort employed in North Carolina three years after completion. The average three-year post wages for CTE Associate Degree programs were stable across the three program years, with the 2008-2009 program year cohort having an annual wage of \$31,625, the 2009-2010 cohort an annual wage of \$31,733 and the 2010-2011 cohort an annual wage of \$31,702 three years after receiving their degree.

The analyses also revealed stability in employment rates over time and steady increases in the average wage. That is of the 2008-2009 CTE Associate Degree recipients, 83% were employed in the first year after receiving the credential, by five years after receiving the credential the employment rate was 78% and the average wage increased from \$25,225 in first year after receipt of the credential to \$34,903 in the fifth year after receiving the credential.

PROGRAM OUTCOMES BY ASSOCIATE DEGREE PROGRAM AREA

Employment and wage outcome measures were calculated separately by ten major CTE program areas by program year and academic credential (Associate Degree, Diploma and Certificate). These programmatic areas include 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 Transportation Systems Technologies.

At the Associate Degree level, the three largest programmatic areas based on enrollments and degrees awarded are Business Technologies, Public Service Technologies, and Health Service Technologies. Over 4,200 individuals per year received an Associate Degree in the Health Sciences programmatic area while, the number of individuals receiving an Associate Degree in Business Technologies increased over the five program years, and ranged from 3,168 in the 2008-2009 program year to 4,322 in the 2012-2013 program year. Within the Public Service Technologies programmatic area the number of individuals receiving an Associate Degree

increased across the program years and ranged from 2,040 during the 2008-2009 program year to 2,751 during the 2012-2013 program year.

One year post completion employment rates for all programmatic areas exceeded 65% with the majority of the programmatic areas exceeding 70%. The highest employment rates were found for the Health Science Associate Degree programmatic area. One year post completion employment rates for Health Science Associate Degree programs ranged from 89% to 91%, while first year average wages exceeded \$30,000 for each of the five program year cohorts. In addition, the Health Science Degree programs demonstrated some of the highest post wages when cohorts were followed over time. Industrial Technologies Associate Degree programs also demonstrated high one year post employment rates that ranged from 79% to 85%. Average one year post average wages for Industrial Technologies Associate Degree programs ranged from just under \$28,000 to over \$32,000. In addition, when cohorts were followed over multiple years, Industrial Technologies Associate Degree programs had some of the highest post completion wages. Construction Technologies Associate Degree programs also demonstrated consistently high employment and wage rates.

Figure 19

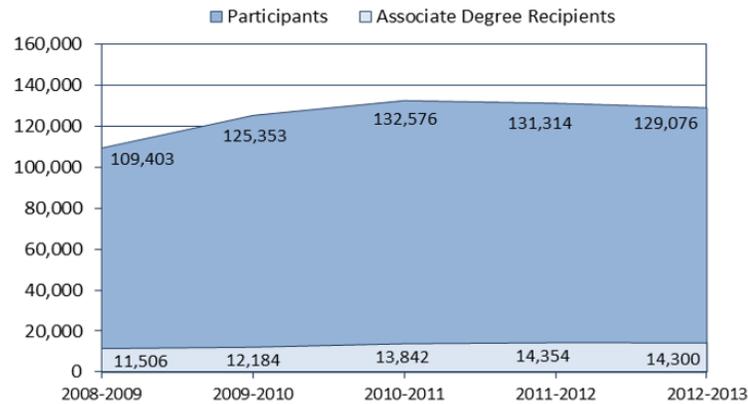
Career and Technical Education

Associate Degree Recipients

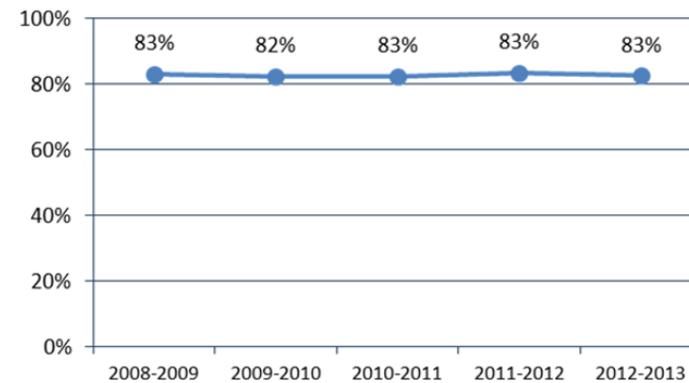
1 Year Post Completion



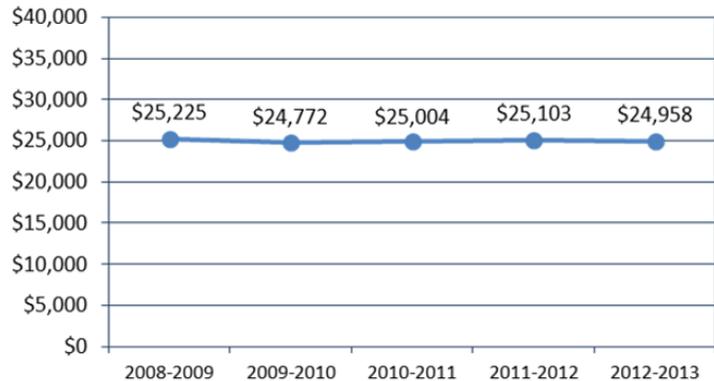
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

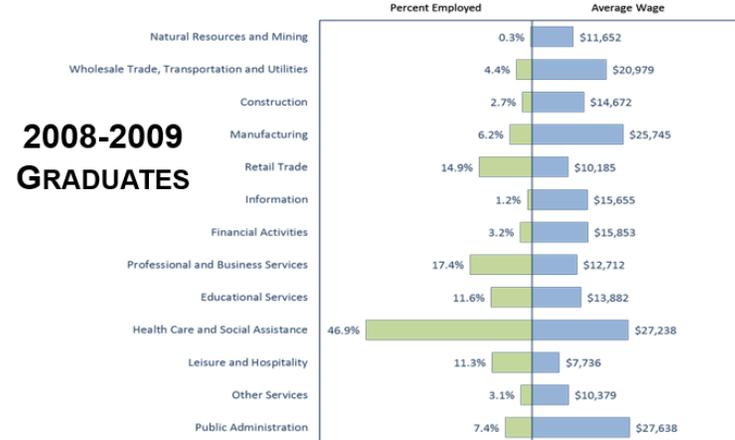


Figure 20

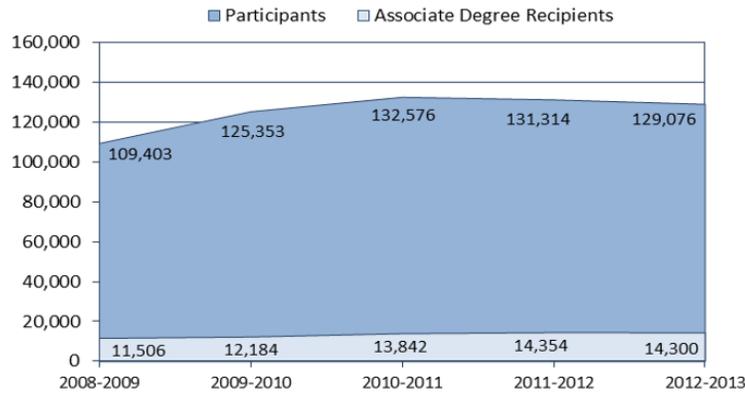
Career and Technical Education

Associate Degree Recipients

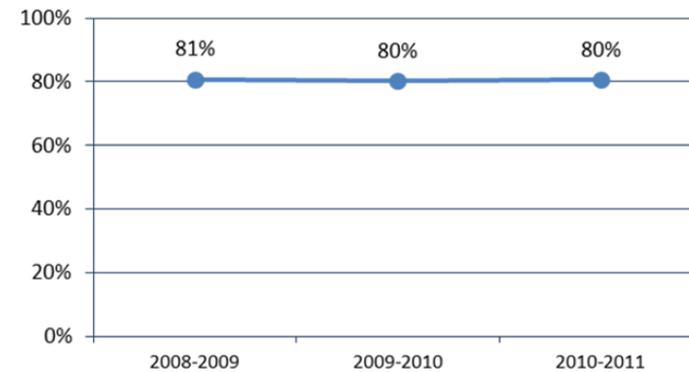
3 Years Post Completion



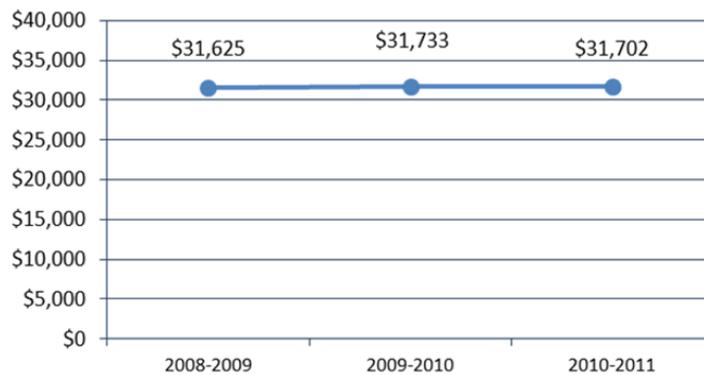
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



3 YEARS POST EMPLOYMENT IN NORTH CAROLINA

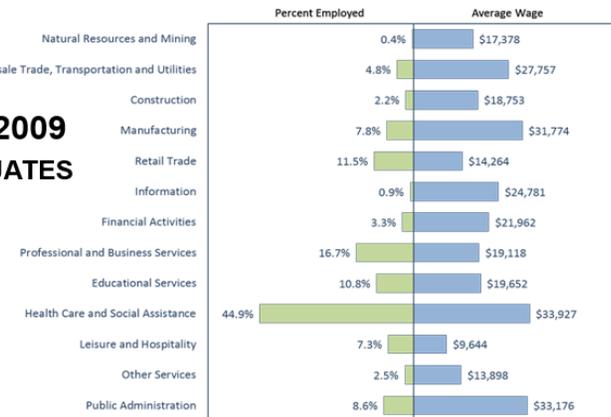


AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY

2008-2009 GRADUATES



CTE DIPLOMA PROGRAM OUTCOMES

The number of participants in the CTE Diploma programs ranged from a low of 18,368 in the 2008-2009 program years to a high of 21,219 in the 2010-2011 program year. However the number of individuals who received a Diploma through the CTE programs peaked during the 2010-2011 program year and showed a slight decline during the 2011-2012 and 2012-2013 program years.

One year post credential employment in North Carolina for CTE Diploma programs ranged from 76% for the 2009-2010 program year to 82% for both the 2011-2012 and 2012-2013 program year cohorts and were slightly lower than the employment rates for the Associate Degree program completers. One year post credential average wages for CTE Diploma programs ranged from \$21,155 for the 2009-2010 program year to \$22,481 for the 2010-2011 program year while the one year post credential average wages for CTE Certificate programs ranged from \$18,698 for the 2008-2009 program year to a high of \$20,087 for the 2010-2011 program year.

Three year post credential employment rates for CTE Diploma programs were also high and fairly stable with 77% of the 2008-2009 program year cohort, 75% of the 2009-2010 program year cohort and 79% of the 2010-2011 program year cohort employed in North Carolina three years after completion. The average three-year post credential wages for CTE Diploma programs showed slight increases across the three program years, with the 2008-2009 cohort having an annual wage of \$26,427 three years after credential, the 2009-2010 cohort having an annual wage of \$27,133 three years after credential and the 2010-2011 cohort having an annual wage of \$28,176 three years after.

Results for the 2008-2009 CTE Diploma recipients, revealed that 77% were employed in the first year after receiving a credential, by five years after receiving the credential the employment rate was 74% and the average wage increased from \$21,550 in the first year after receiving the credential to \$29,393 in the fifth year after.

PROGRAM OUTCOMES BY DIPLOMA PROGRAM AREA

Analyses by major area revealed that Health Sciences, Construction Technologies, Public Service Technologies, and Business Technologies programs had the highest number of Diploma recipients across the five program years. The employment and wage rates for CTE Diploma program recipients were below that of the Associate Degree programs. There was some variability found in outcomes across program years in both employment and wage rates by programmatic area. The highest employment and wage rates were found within the Health Sciences programmatic area. Over the last three program years the Industrial Technologies Diploma programs demonstrated both high employment and wage rates while, the Engineering Technologies programs demonstrated increasing employment and wage rates over time.

Figure 21

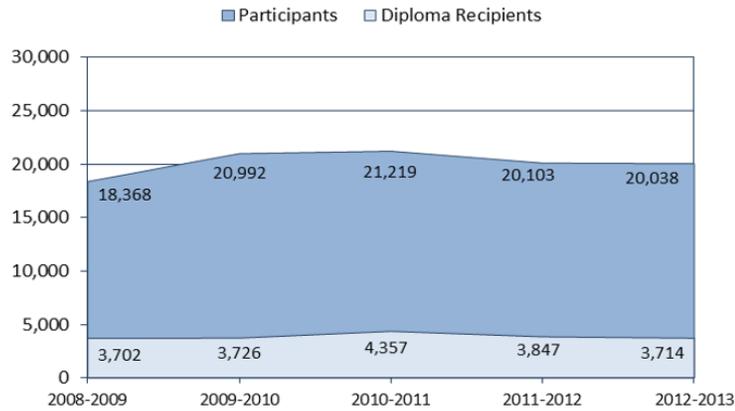
Career and Technical Education

Diploma Recipients

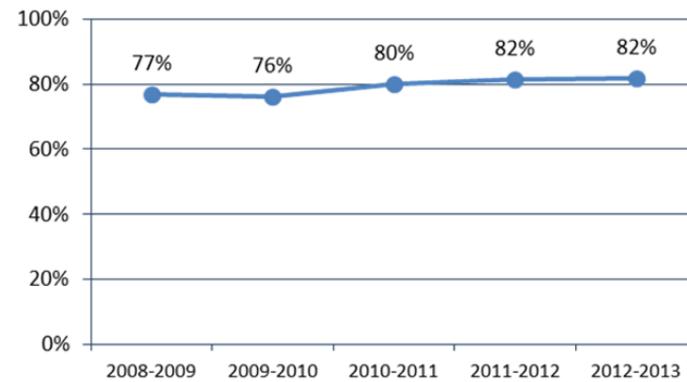
1 Year Post Completion



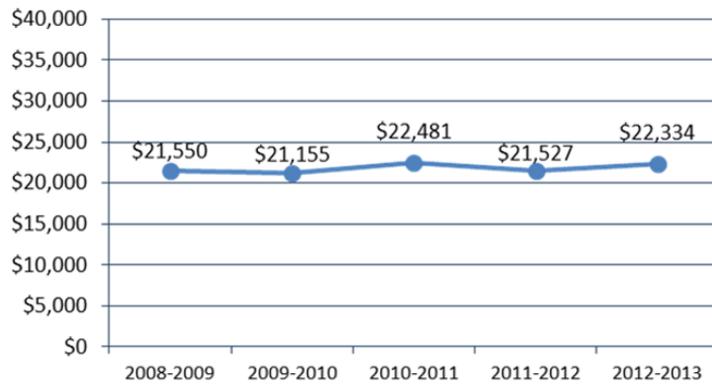
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

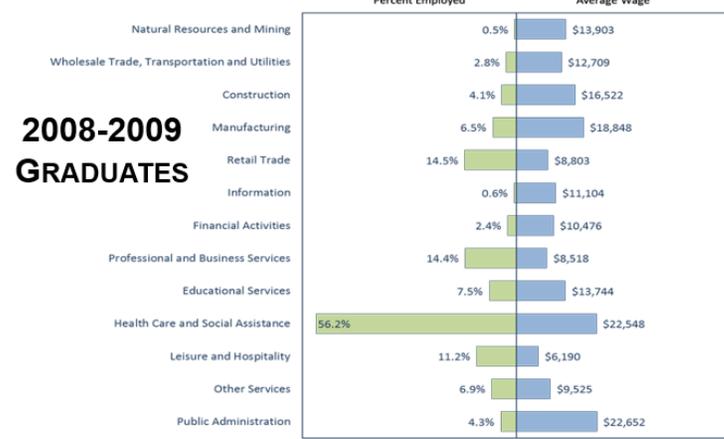


Figure 22

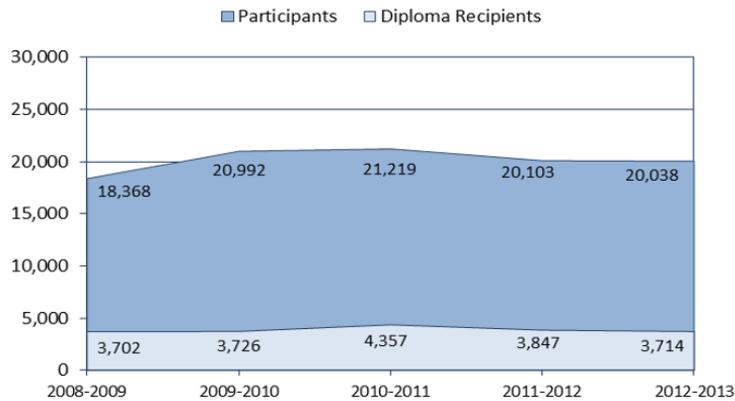
Career and Technical Education

Diploma Recipients

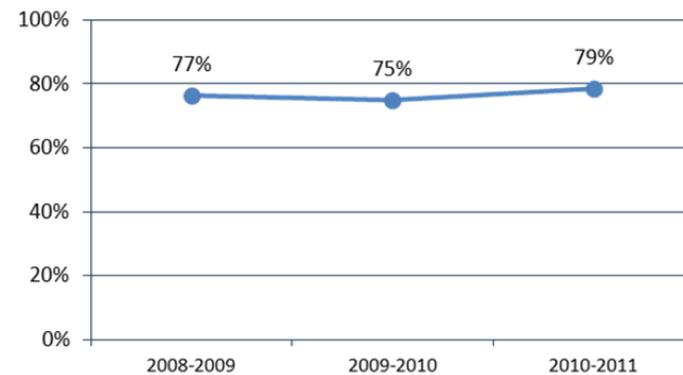
3 Years Post Completion



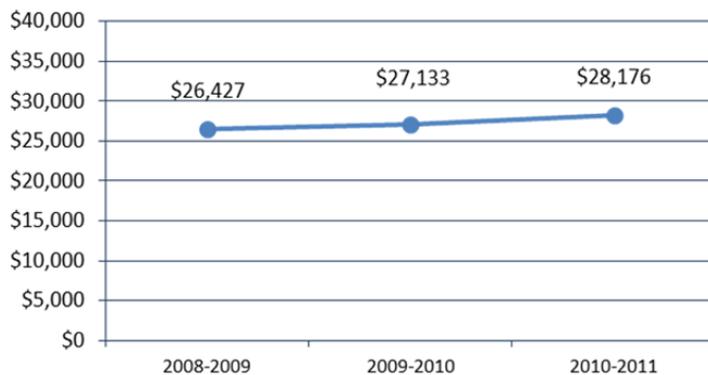
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



3 YEARS POST EMPLOYMENT IN NORTH CAROLINA

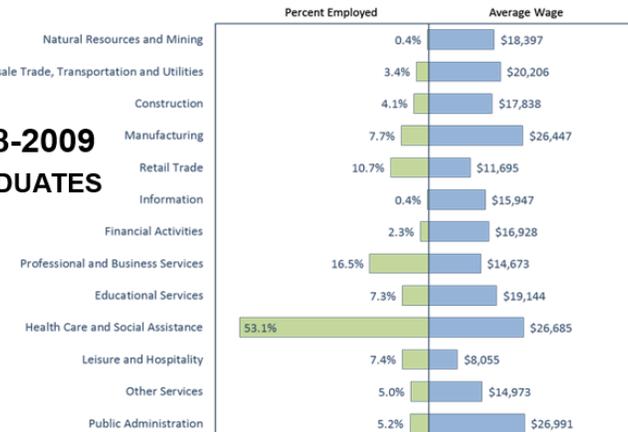


AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY

2008-2009 GRADUATES



CTE CERTIFICATE PROGRAM OUTCOMES

The number of individuals participating in CTE Certificate programs peaked during the 2009-2010 program year, declined during the 2010-2011 program year and increased during the 2011-2012 and 2012-2013 program years. The participant counts ranged from a low of 21,078 in the 2010-2011 program year to a high of 23,323 in the 2009-2010 program year. The number of individuals who received a Certificate through the CTE programs demonstrated slightly more variability across the program years and ranged from a low of 7,507 during the 2011-2012 program year to a high during the 2010-2011 program year of 8,320.

One year post credential employment in North Carolina for CTE Certificate programs ranged from a low 62% for the 2008-2009 program year to a high of 74% for the 2011-2012 program year cohort. One year post credential average wages for CTE Diploma programs ranged from \$21,155 for the 2009-2010 program year to \$22,481 for the 2010-2011 program year while the one year post credential average wages for CTE Certificate programs ranged from \$18,698 for the 2008-2009 program year to a high of \$20,087 for the 2010-2011 program year.

The three year post credential employment rates for CTE Certificate programs demonstrated slightly more variation with 63% of the 2008-2009 program year cohort, 67% of the 2009-2010 program year cohort and 70% of the 2010-2011 program year cohort employed in North Carolina three years after completion. The average three year post credential wages for CTE Certificate programs demonstrated a similar trend across the three program years with the 2008-2009 cohort having an annual wage of \$24,171 three years after credential, the 2009-2010 cohort having an annual wage of \$25,212 three years after credential and the 2010-2011 cohort having an annual wage of \$26,014 three years after credential. Longer term post credential employment and wages for Certificate recipients demonstrated a slight increase in the post credential employment rate and an increase in average wages over the five year time period. Of the 2008-2009 Certificate recipients 62% were employed in the first year after receiving a credential, by five years after receiving the credential the employment rate rose to 63% and the average wage increased from \$18,698 in the first year after receiving the credential to \$26,950 in the fifth year after receiving the credential.

PROGRAM OUTCOMES BY CERTIFICATE PROGRAM AREA

Among Certificate programs, the Public Service Technologies and Business Technologies programs had the highest number of Certificate recipients across the five program years. There was some variability in outcomes across program years in both employment and wage rates by programmatic area. Results indicated that the Health Sciences programs had some of the highest employment rates across the five program years. However, the Engineer Technologies, Industrial Technologies, Construction Technologies and Biological and Chemical Technologies certificate programs had the highest average post completion wages. In addition, while there were fairly low numbers of certificate recipients within the Biological and Chemical Technologies programs, these programs had high employment and wage outcomes.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been stable employment rates and average wages across cohorts for Career and Technical Education credential recipients. Not surprisingly both

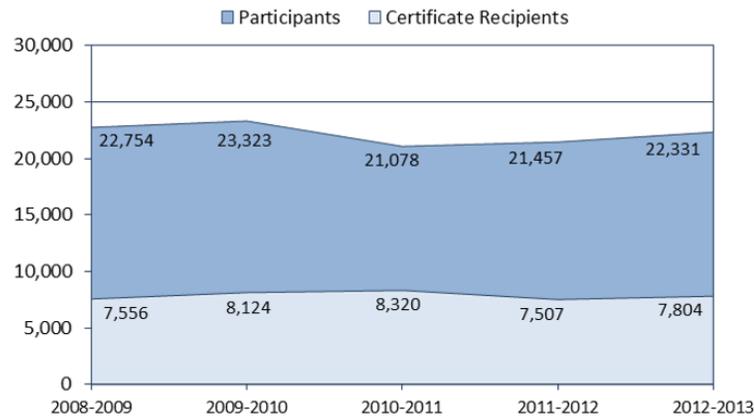
the post credential employment rates and the average wages were found to be associated with the level of academic credential received. That is the post completion employment and wages were highest for CTE Associate Degree program recipients, followed by CTE Diploma recipients and followed by CTE Certificate recipients. When cohorts are followed over time the employment rate tends to decline somewhat for both CTE Associate Degree and CTE Diploma recipients. This decline could be attributable to several factors including people not sustaining employment, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws. There are a variety of reasons why individuals who are not found in covered employment including retirement, death, and inability to find employment or people leaving the labor force. The average wages of Career and Technical Education credential recipients demonstrated growth across program year cohorts and increases when cohorts were followed over time. The stable employment rates and growth in wages demonstrate a positive outcome for Career and Technical Education programs.

While employment and wage outcomes for Career and Technical Education programs demonstrated positive outcomes, the number of individuals who are completing and receiving academic credentials indicates an area with some need for improvement. That is, the North Carolina Community College System provides Career and Technical educational programming to large numbers of individuals each year, however, the number of individuals who obtain credentials is low in comparison to the number of individuals enrolled in these programs. Additional information is needed to more fully assess the factors impacting program completion. Part of the planned enhancement of the CFS includes the expansion of information regarding student course taking and time to completion. This information is needed in order to undertake further analyses to help determine the average time to completion for programs, examine factors that may be impacting the number of academic awards achieved and to help identify those programs that are successful in helping students gain credentials and finding stable employment as well as those programs that may be in need of improvements.

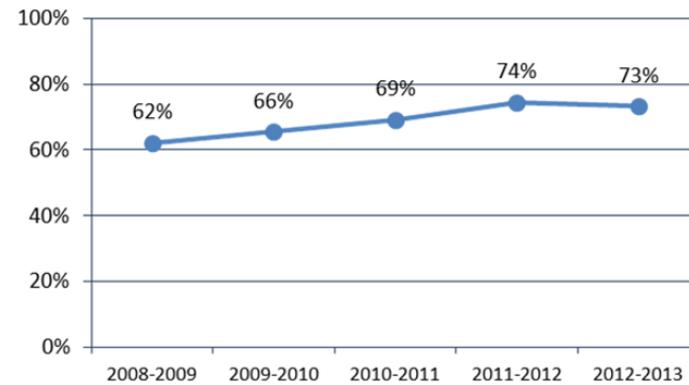
Figure 23 Career and Technical Education Certificate Recipients 1 Year Post Completion



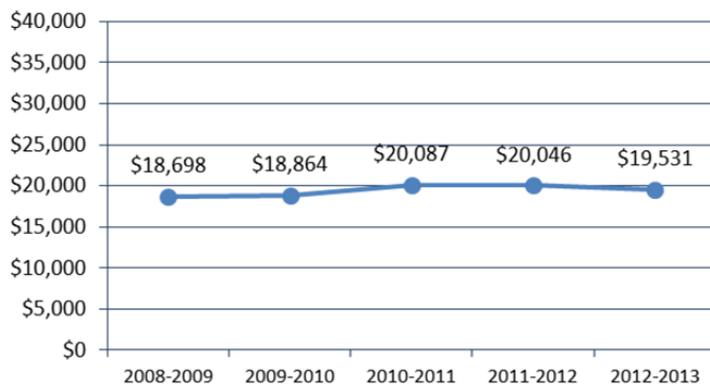
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

2008-2009 GRADUATES

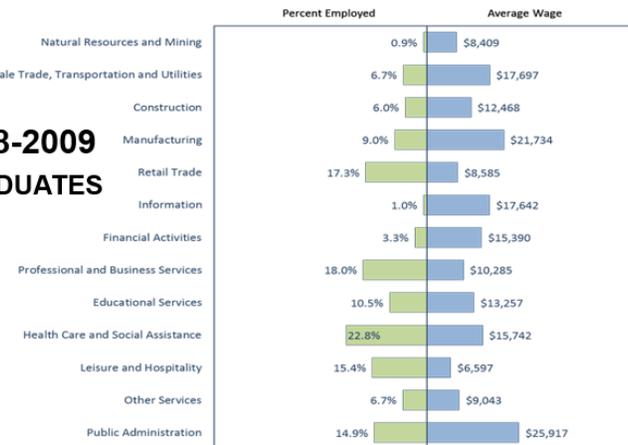
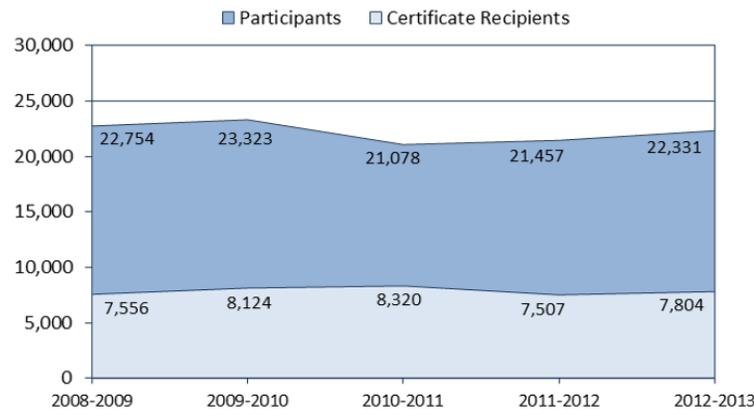


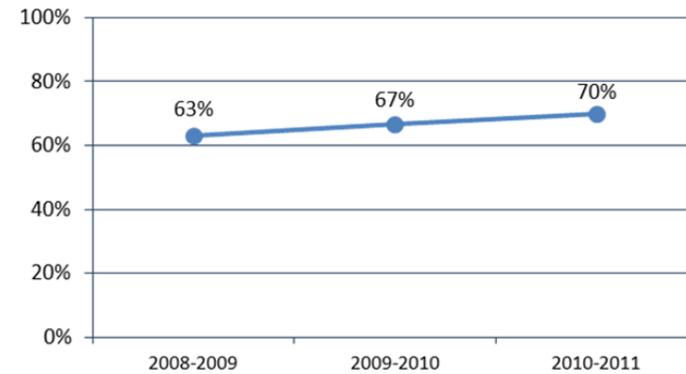
Figure 24 Career and Technical Education Certificate Recipients 3 Years Post Completion



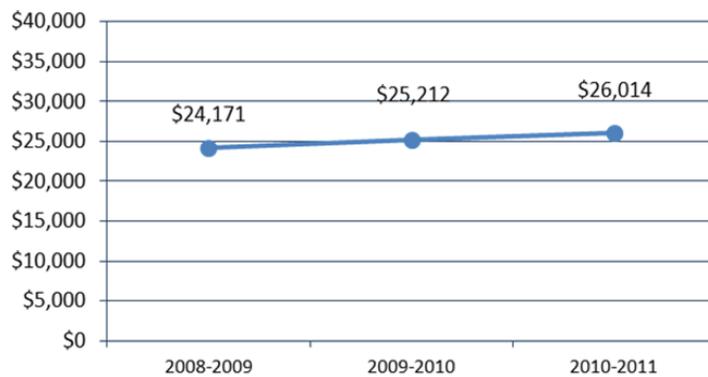
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



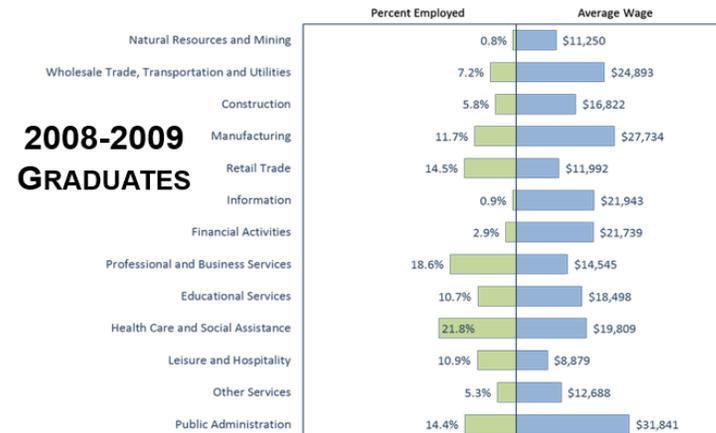
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



WORKFORCE CONTINUING EDUCATION TRAINING

PROGRAM OVERVIEW

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

Workforce Continuing Education Training programs provide a variety of courses organized under several programmatic areas. These non-credit courses are organized into several broader programmatic areas that include: Agricultural and Natural Resources; Business/Computers; Construction; Education/Language; Health; Industrial/Manufacturing; Public Safety; Service Occupations and Transportation Systems. Training programs are designed to provide instructional opportunities for individuals seeking to gain new and/or upgrade current job-related skills. Programs can be delivered as a single course or bundled together to form a series of courses. Course and program offerings provide instruction that is focused on skill competencies that may lead to a recognized credential (licensure, certification, renewal, registry listing) and/or meet local workforce needs. Workforce Continuing Education courses are designed for the specific purposes of training an individual for full- or part-time employment, upgrading the skills of incumbent workers, or retraining individuals for new employment in occupational fields.²⁸

PROGRAM OUTCOMES

Analyses revealed that there was a steady decline in the number of individuals participating in Workforce Continuing Education programs across the program years. Enrollment in these programs was at a five year high during the 2008-2009 program year and has been slowly declining each year. The number of participants reached 266,177 in the 2008-2009 program year and declined to 222,235 during the 2012-2013 program year. The number of exiters across the five year time period reflected a similar trend to the number of participants. That is there was a decline in the number of exiters across the five year time period. These declines are partially attributed to changes in economic conditions as well as to changes in course offerings.

Employment and wage outcomes were derived for each year of Workforce Continuing Education program year exiters. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. These measures include only those individuals who are employed in North Carolina in jobs covered by the state's Unemployment Insurance laws. Employment and wage outcome measures were calculated separately by program year cohorts.

Results indicated that one year post exit employment rates of Workforce Continuing Education exiters were fairly stable across the five years and ranged from 66% for the 2009-2010 program

²⁸ <http://www.nccommunitycolleges.edu/workforce-continuing-education>

year exiters to a high of 68% for the 2008-2009, 2011-2012, and 2012-2013 program year exiters. One year post exit average wages were fairly stable across the Workforce Continuing Education program year exiter cohorts and ranged from a high of \$29,504 for the 2008-2009 program year exiters to a low of \$28,836 for the 2009-2010 program year exiters.

Longer term post exit employment and wage measures for the Workforce Continuing Education program exiters indicate that three years after exit almost two-thirds of the 2008-2009, 2009-2010 and 2010-2011 program year exiters were employed in North Carolina. The three year post exit wage was stable, with the 2008-2009 exiters having an annual wage of \$32,282 three years after exit, the 2009-2010 exiters having an annual wage of \$32,279 three years after exit and the 2010-2011 exiters having an annual wage of \$32,427 three years after exit.

While the analyses revealed stability in both employment and wage rates by program year, when exit cohorts were followed over multiple years the cohort employment rates showed a decline over longer periods of time. That is of the 2008-2009 Workforce Continuing Education exiters 68% were employed in the first year after exit, by five years after exit the employment rate declined to 59%. However, the average wage increased from \$29,504 in the first year after exit to \$34,892 in the fifth year after exit.

PROGRAM OUTCOMES BY PROGRAM AREA

Employment and wage outcome measures were calculated separately by nine major programmatic areas by year within the Workforce Continuing Education program. These programmatic areas include Agricultural and Natural Resources; Business/Computers; Construction; Education/Language; Health; Industrial/Manufacturing; Public Safety; Service and Transport Systems.

The three largest programmatic areas based on enrollments were Health, Public Safety, and Business/Computers. The Health Workforce Continuing Education programmatic area had the largest number of students with more than 80,000 students enrolled in each of the first four program years and almost 78,000 during the 2012-2013 program year. Public Safety had the second largest number of students with over 69,000 individuals participating in training per year and the Business/Computers programmatic area followed with over 63,000 individuals in the 2008-2009 program year, over 52,000 in the 2009-2010 program year and over 40,000 in the last three years.

The highest post exit employment rates were found within the Health, Public Safety, Industrial/Manufacturing, and Transport Systems and Education/Language programmatic areas. Longer term post exit employment rates were highest for Health programs and Industrial/Manufacturing programs. The highest post exit average wages were found for the Public Safety, Business/Computers, Construction, Industrial/Manufacturing, Transport Systems programs. As noted in the Career and Technical Education analyses, employment trends for Continuing Education Agriculture & Natural Resources programs were fairly low. Again, it is important to note that there are substantial areas of North Carolina's agricultural industries that are not covered by the state's Unemployment Insurance Laws and thus not included in the unemployment insurance wage data and likely impact the findings for the Agricultural and Natural Resources programs.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been fairly stable short term employment rates and average wages for Workforce Continuing Education program exiters. This is indicated by the one year post employment and wage trends. 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, people moving out of state or people finding employment in jobs not covered by North Carolina's Unemployment Insurance laws. There are a variety of reasons why individuals who are not found in covered employment including retirement, death, and inability to find employment or people leaving the labor force. However, the average wages of Workforce Continuing Education program exiters continue to rise over time.

The enrollment size and breadth of course offerings within the Workforce Continuing Education program area tends to be reflective of local and state's needs and economic conditions. As the economy continues to grow and expand it is likely that the employment and wage trajectory for Workforce Continuing Education program participants will also grow. The programmatic areas with the highest employment outcomes were noted in several key areas: Public Safety, Transport Systems, Industrial / Manufacturing and Health. Post exit average wage rates were highest for Public Safety, Business / Computers, Transport Systems and Industrial / Manufacturing. It is important to note that there is a diversity of student characteristics among Workforce Continuing Education program participants. Some are incumbent workers seeking to increase current job skills, some are not in the labor force and participating in education and training for self-enrichment, some are unemployed and looking to gain new occupational skills and others are employed but seeking to gain new occupational skills for career transitions. All of these factors have an impact on the employment and wage outcomes of Workforce Continuing Education programs.

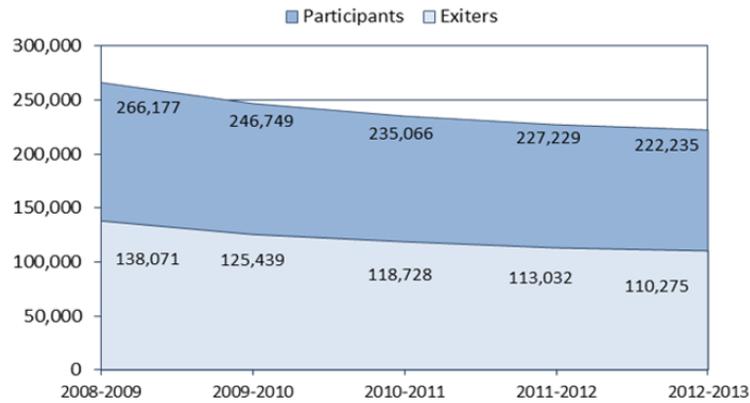
One area that is in need of additional information is in the area of industrial and occupational credentials obtained by participants of Workforce Continuing Education as well as other workforce development programs. While Workforce Continuing Education programs do not typically offer an academic credential 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. It is recommended that the North Carolina Community College System work with the Department of Commerce and with the local community colleges to determine if the information exists at the local colleges or could be accessed through other informational resources including 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 to gain critical occupational and industrial related skills and credentials.

Figure 25 Workforce Continuing Education

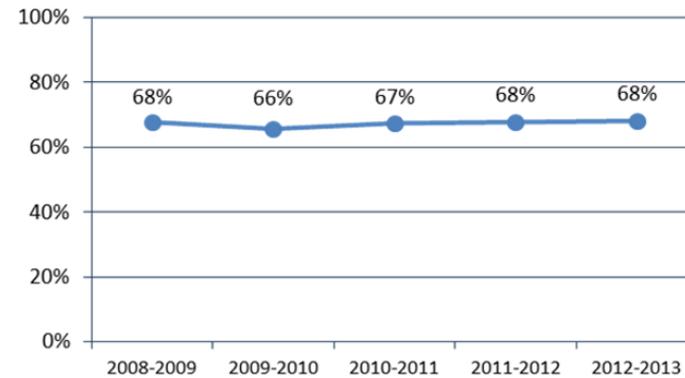
Exiters 1 Year Post Exit



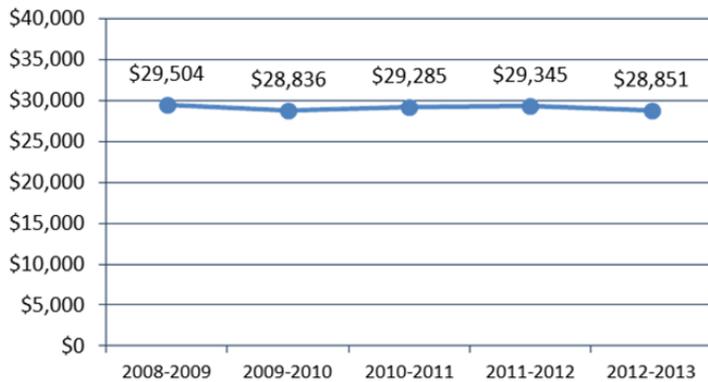
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

**2008-2009
EXITERS**

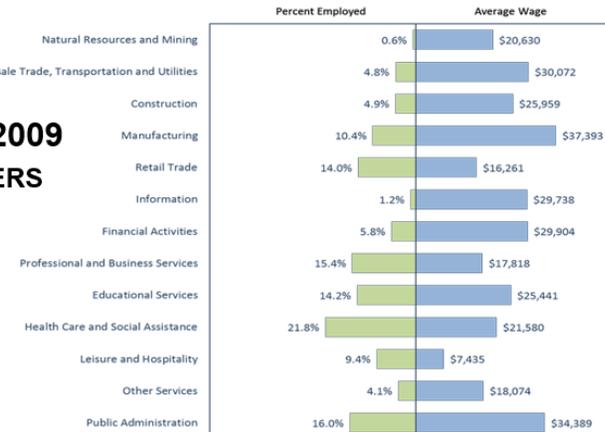
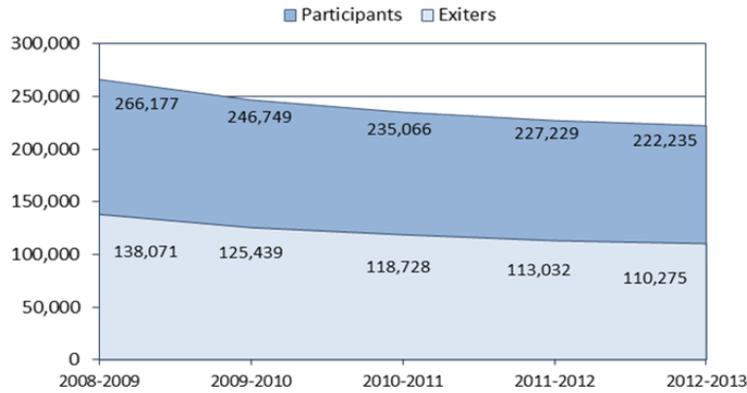


Figure 26 Workforce Continuing Education

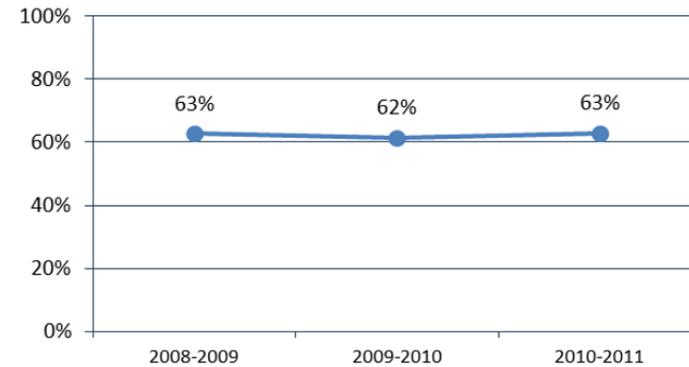
Exiters 3 Years Post Exit



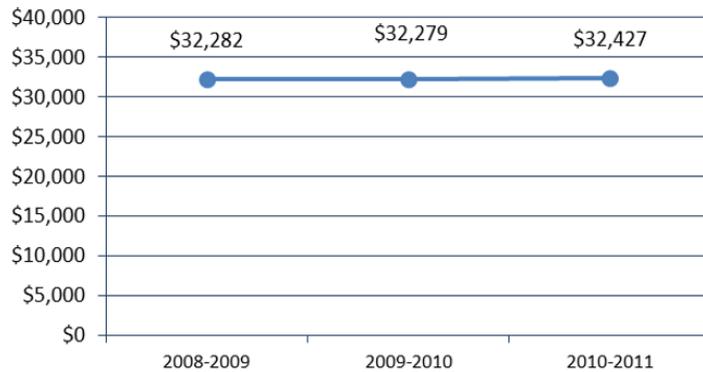
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



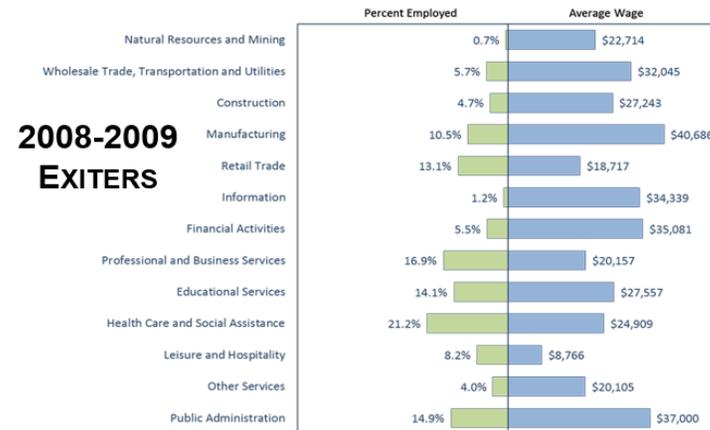
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



SMALL BUSINESS CENTER (SBC)

PROGRAM OVERVIEW

Within the North Carolina Community Colleges Continuing Education programmatic area is the state's Small Business Centers (SBC). These SBC's provide a statewide network of centers that are designed to support the development and growth of small businesses throughout the state. The Small Business Centers assist entrepreneurs, small businesses and those interested in starting businesses with a variety of training opportunities, technical assistance and informational resources. These services include training seminars and workshops focused on a variety of topics including: Starting a Business, Writing a Business Plan, Financing, Advertising, Bookkeeping and Marketing. Small Business centers also work with local businesses to develop other workshops and trainings that help to meet their specific needs.²⁹

In addition, to workshop and training offerings, SBC's provide a variety of counseling and informational resources to clients. Counseling services cover a diverse group of topics including licensing issues, business plans, business feasibility, marketing and advertising, loans and sources of financing and doing business with the government. SBC's also provide other informational, technical and referral resources. These include access to and use of computers, books and other media as well as the provision of information about businesses and industries and referrals to other governmental and business resources.³⁰

PROGRAM OUTCOMES

Analyses revealed that there was a steady decline in the number of participants receiving services through the SBC's as well as a decline in the number of exiters across the five program years. Employment and wage outcomes were derived separately for each year of Small Business Center program exiters. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. These measures include only those individuals who are employed in North Carolina in jobs covered by the state's Unemployment Insurance laws. Employment and wage outcome measures were calculated separately by program year cohorts

One year post exit employment rates showed slight declines across program years and average wages were fairly stable across the five program years. One year post exit employment rates ranged from 65% for the 2008-2009 and 2010-2011 exiters to 60% for the 2012-2013 exiters. One year post exit average wages ranged from \$33,478 for the 2009-2010 program year exiters to a high of \$34,710 for the 2008-2009 program year exiters. Longer term post exit employment and wage measures indicate stable employment rates with 61% of the 2008-2009, 2009-2010 and 2010-2011 Small Business Center program year exiters employed three years after exit.

The average three-year post exit wages were stable across the three program year cohorts, with the 2008-2009 exiters having an annual wage of \$36,914 three years after exit, the 2009-2010 exiters having an annual wage of \$36,471 three years after exit and the 2010-2011 exiters

²⁹ North Carolina Community College System website http://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/education_catalog_02feb2015.pdf

³⁰ Ibid

having an annual wage of \$36,355 three years after exit. When exit cohorts were followed over multiple years the cohort employment rates showed a decline and steady increases in the average wage. That is of the 2008-2009 Small Business Center exiters 65% were employed in the first year after exit, by five years after exit the employment rate for this group was 57%, while the average wage increased from \$34,710 in first year after exit to \$38,785 in the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

Overall, Small Business Center exiters had fairly high post exit wages compared to other workforce training programs. This may partially be due to the nature of the services and participant cohorts served by the Small Business Centers. These services are targeted to entrepreneurs, existing small businesses and those interested in starting small businesses. Further analysis is warranted to provide an understanding of the outcomes in SBC programs separately across the local community colleges. These analyses may provide additional insight into regional differences in programmatic outcomes. In addition, further analyses should focus on the transition of employment of SBC exiters across employment patterns and industries. This may provide additional information regarding the transition of SBC participants into new businesses as well as the growth of their existing businesses.

Figure 27

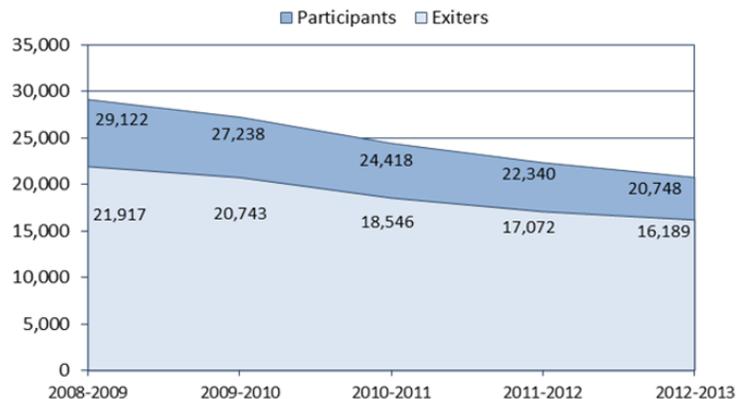
Small Business Centers

Exiters

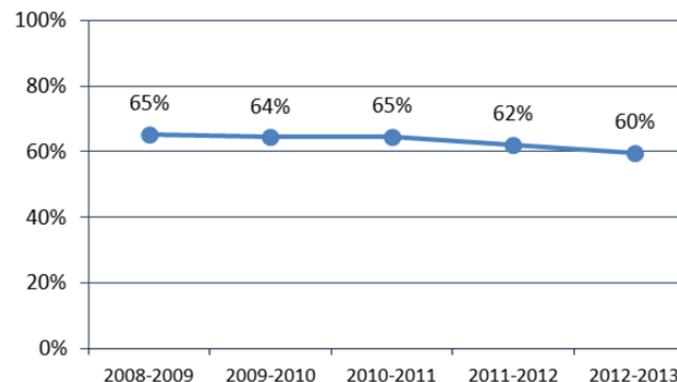
1 Year Post Exit



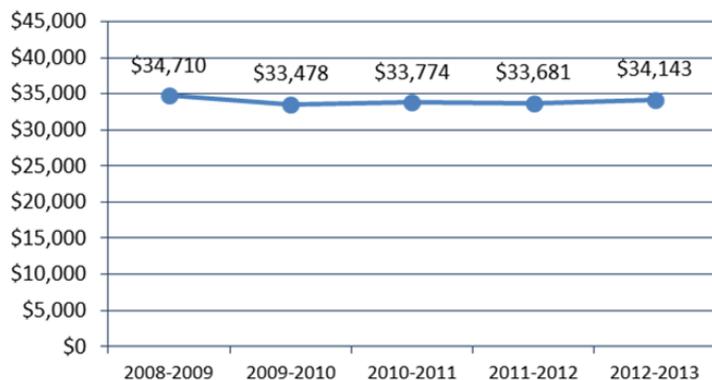
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

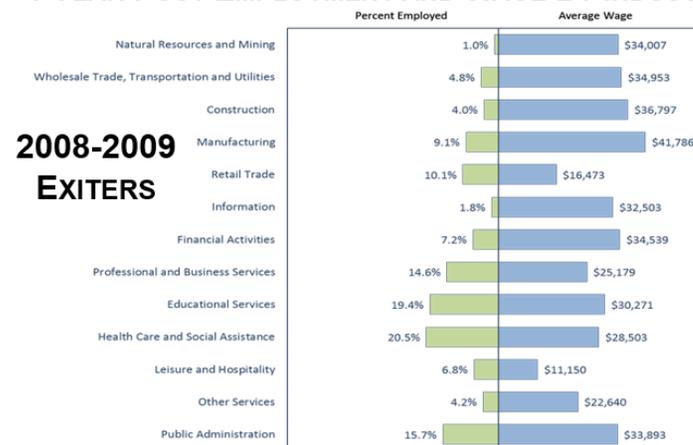


Figure 28

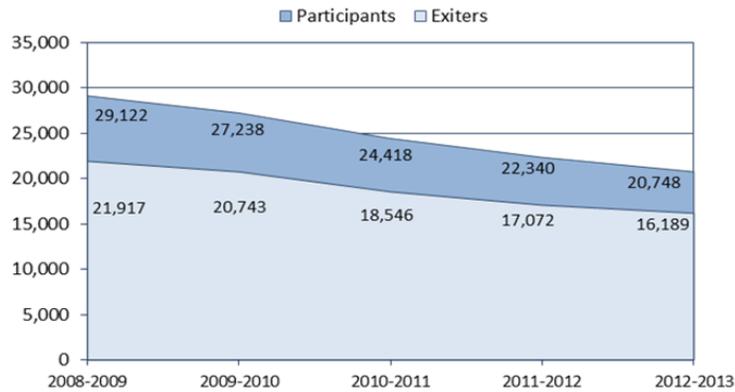
Small Business Centers

Exiters

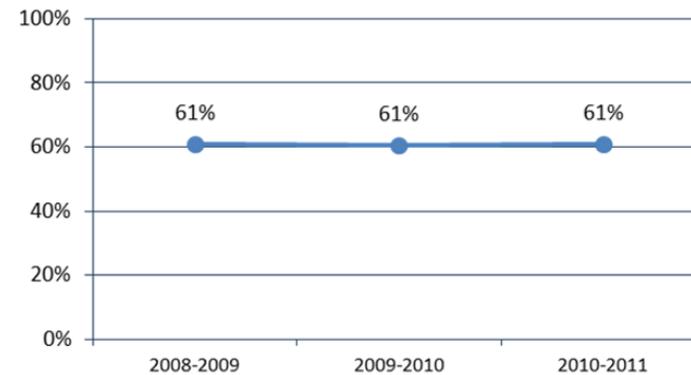
3 Years Post Exit



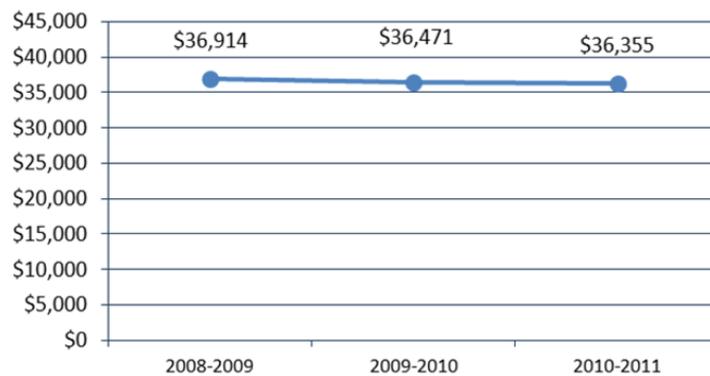
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



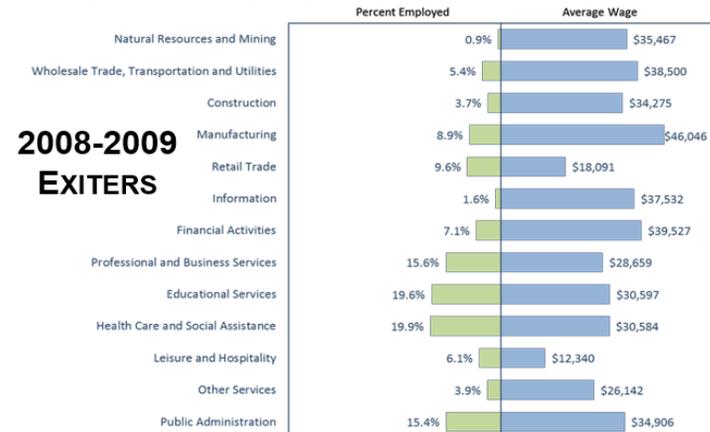
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



HUMAN RESOURCES DEVELOPMENT PROGRAMS (HRD)

PROGRAM OVERVIEW

Human Resources Development Programs (HRD) operated by the North Carolina Community Colleges, include, instructional programs targeting 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 employment 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, child care, home health care, hospitality and tourism training as well as other skill training matched to local workforce needs.³¹

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 Workforce Investment Act (WIA) participants who are receiving intensive services are receiving part of these services through their enrollment in HRD programs. HRD programs often provide an initial opportunity for some 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.

PROGRAM OUTCOMES

Analyses revealed that there was an increase in the number of participants in the HRD program between the 2008-2009 program year and the 2009-2010 program year and a slight decline in participants between the 2009-2010 program year and the 2010-2011 program year and then a steady increase in the following two years.

Employment and wage outcomes were derived for each year of Human Resources Development program year exiters. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. Analyses included the development of post exit employment rates and wage statistics for up to five years after exit. These measures include only those individuals who are employed in North Carolina in jobs covered by the state’s Unemployment Insurance laws. Employment and wage outcome measures were calculated separately by program year cohorts.

One year post exit employment rates and average wages showed steady increases across the five program years. One year post exit employment rates ranged from 51% for the 2008-2009 program year exiters to 62% for the 2012-2013 program year exiters. One year post exit average wages ranged from \$11,705 for the 2008-2009 program year exiters to a high of \$14,089 for the 2012-2013 exiters.

³¹ North Carolina Community College System website http://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/education_catalog_02feb2015.pdf

Longer term post exit employment and wage measures indicate stable employment rates with 51% of the 2008-2009 HRD exiters, 56% of the 2009-2010 HRD exiters and 57% of the 2010-2011 HRD exiters employed in North Carolina three years after exit. The average three-year post exit wages showed steady increase over the three program year cohorts, with the 2008-2009 exiters having an annual wage of \$16,517 three years after exit, the 2009-2010 exiters having an annual wage of \$17,878 three years after exit and the 2010-2011 exiters having an annual wage of \$17,967 three years after exit.

The analyses also revealed stability in the employment rates of HRD program exiters over time and steady increases in the average wage. That is of the 2008-2009 Human Resources Development program exiters, 51% were employed in the first year after exit, by five years after exit the employment rate was 50% and the average wage increased from \$11,705 in first year after exit to \$18,993 in the fifth year after exit.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been increasing employment rates across program year exit cohorts and stable employment rates when Human Resources Development program exiters are followed over time. While the average wages of HRD program exiters are fairly low, the average wage rates of HRD exiters demonstrated growth across program year exit groups and increases when exiters were followed over time. The average one year post wages of HRD exiters ranged from \$11,705 for the 2008-2009 exit cohort to \$14,089 for the 2012-2013 program year cohort. By the fifth year after exit the average wage of the 2008-2009 year exit cohort reached \$18,993. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program ³² was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family³³. The stable employment rates and growth in wages demonstrate a somewhat positive outcome for the HRD program.

Further analysis is warranted to provide an understanding of the outcomes in HRD programs across the 58 community colleges. This may provide insight into differences in programmatic outcomes. Results indicated that approximately one out of every four Human Resources Development program exiters was enrolled in further higher education in the year following exit. Further analyses should focus on the transition of HRD participants into other educational programming to provide insight into the role that HRD can provide as an entry point into further educational programming and to determine if HRD programs are assisting in helping provide participants as an entry way into achieving educational credentials.

³² Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

³³ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

Figure 29

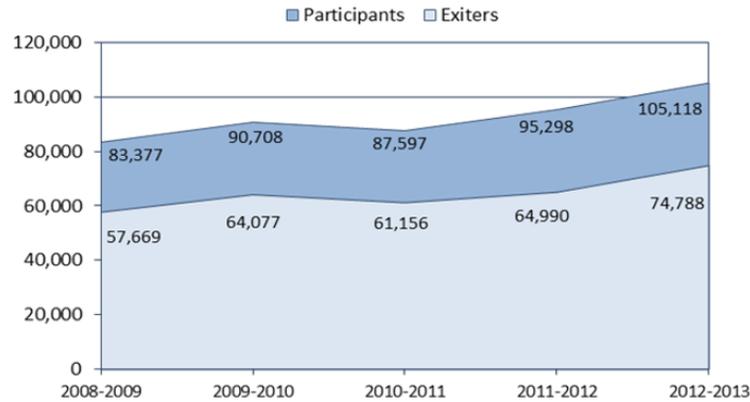
Human Resources Development

Exiters

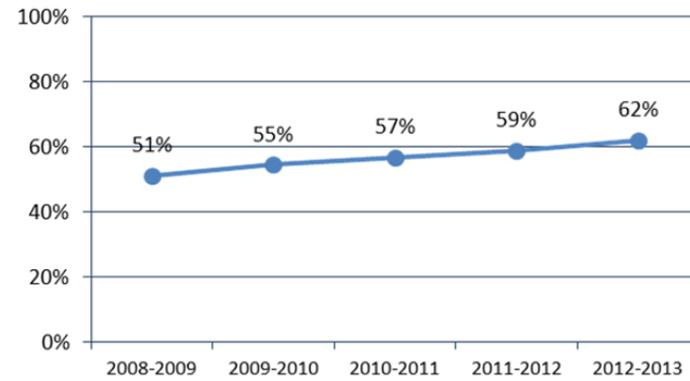
1 Year Post Exit



PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

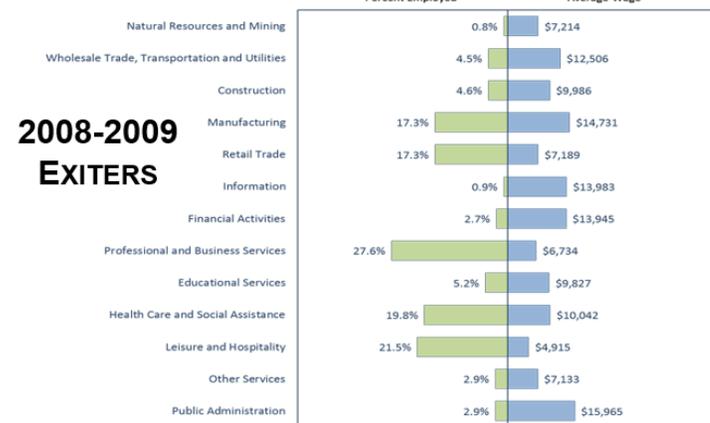
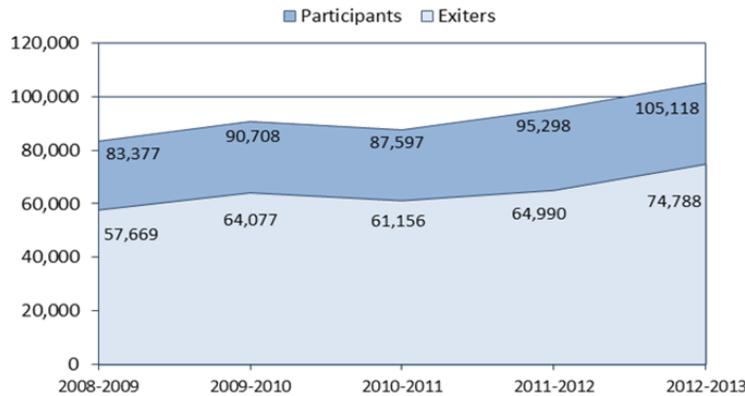


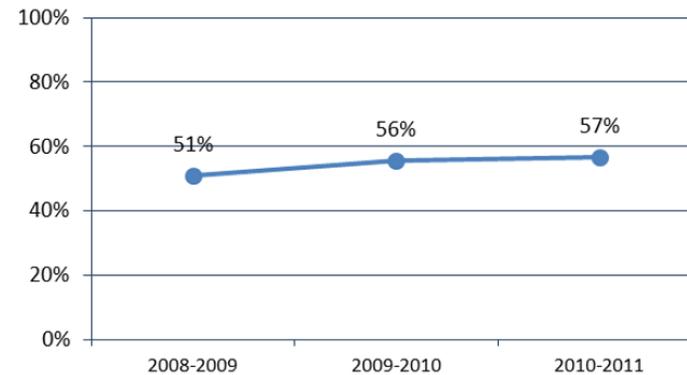
Figure 30 Human Resources Development Exiters 3 Years Post Exit



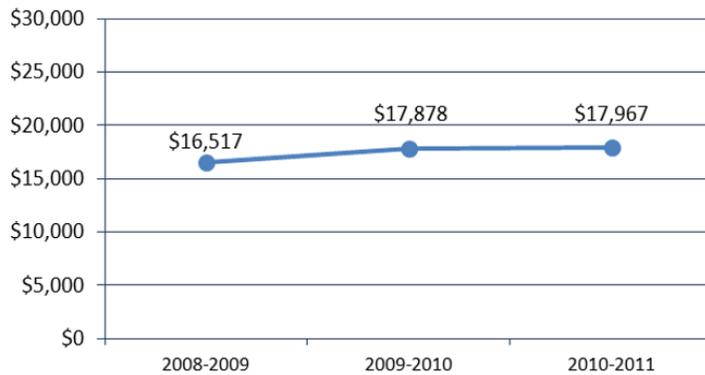
PARTICIPANTS AND EXITERS 2008-2009 - 2012-2013



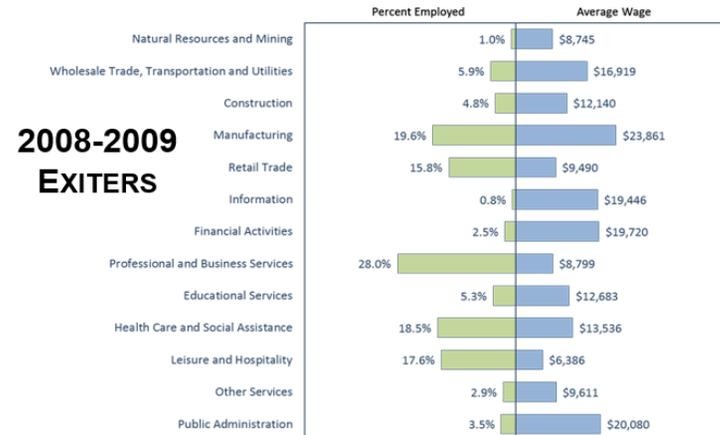
3 YEARS POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY



BASIC SKILLS PROGRAMS

PROGRAM OVERVIEW

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 area include Adult Basic Education (ABE); Adult Secondary Education (ASE) including High School Equivalency programs and Adult High School Diploma programs; and English as a Second Language (ESL) programs.³⁴ 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 who function below the high school level with instruction in reading, writing, math and English. The Adult Secondary Education (ASE) program is designed to prepare adults for further education or transition toward skill obtainment and employment. The ASE program includes both the Adult High School Diploma and the High School Equivalency Diploma programs. The Adult High School Diploma consists of classroom instruction, learning laboratory courses and distance education which assist adults with obtaining an Adult High School Diploma. The High School Equivalency Diploma program offers instruction that assists learners who are preparing to take the high school equivalency exam. English as a Second Language is a program designed to assist adults who have limited English proficiency and includes instruction in listening, speaking, reading, writing and understanding of the English language.³⁵

PROGRAM OUTCOMES

Basic Skills programs can lead to a high school equivalency credential or an Adult High School Diploma. Employment and wage outcome measures were calculated only on the subset of individuals who received either a high school equivalency credential or an Adult High School Diploma. Analyses were carried out separately by program year. It is important to note that these analyses rely on the accuracy of the participant records submitted including the use of SSNs. Results indicated that the number of Basic Skills participants declined over the five year time period and the number of credential recipients demonstrated some fluctuation over time.

One year post completion employment rates and average wages showed slight increases in employment across the five program years. One year post completion employment rates ranged from 54% for the 2009-2010 program year cohort to 60% for the 2012-2013 program year cohort. One year post completion average wages for Basic Skills Credential Recipients ranged from \$8,755 for the 2008-2009 program year cohort to a high of \$10,053 for the 2012-2013 program year cohort.

Longer term post credential employment and wage measures indicate stable employment rates with 58% of the 2008-2009 cohort, 59% of the 2009-2010 cohort and 60% of the 2010-2011

³⁴ North Carolina Community College System website http://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/education_catalog_02feb2015.pdf

³⁵ Ibid

cohort employed three years after exit. While the average three-year post credential wages were fairly low they showed slight increases over the three cohorts, with the 2008-2009 cohort having an annual wage of \$12,409 three years after credential, the 2009-2010 cohort having an annual wage of \$13,087 three years after and the 2010-2011 cohort having an annual wage of \$13,186 three years after.

The analyses also revealed stability in employment rates over time and steady increases in the average wage. That is of the 2008-2009 cohort 55% were employed in the first year after receiving the credential, by five years after receiving the credential the employment rate was 58% and the average wage increased from \$8,755 in first year after receipt of the credential to \$15,323 in the fifth year after receiving the credential.

SUMMARY AND RECOMMENDATIONS

Overall the results indicate that there have been increasing employment rates across program year cohorts and stable employment rates when Basic Skills programs credential recipients are followed over time. The post credential average wage rates of Basic Skills credential recipients are low, however there some moderate increases across time. The one year post credential average wage was \$8,755 for the 2008-2009 program year cohort and \$10,063 for the 2012-2013 program year cohort. By contrast the annual average wage in North Carolina in 2013 based on the Quarterly Census of Employment and Wages (QCEW) Program ³⁶ was \$43,784 and the 2013 federal poverty guideline for a one person family was \$11,490 and \$15,510 for a two person family³⁷. While the post completion wages are low, the increasing employment rates demonstrate a positive outcome for Basic Skills program credential recipients.

In addition, the further enrollment of Basic Skills programs credential recipients in further education is a positive outcome for the program. More than 50% of the credential recipients are enrolled in additional higher educational programming in the first year after completion. This indicates that individuals are continuing in additional skill enhancement after gaining their high school credential.

As previously noted, part of the requirement of the new 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.

³⁶ Quarterly Census of Employment and Wages (QCEW) Program, Labor and Economic Analysis Division (LEAD), North Carolina Department of Commerce

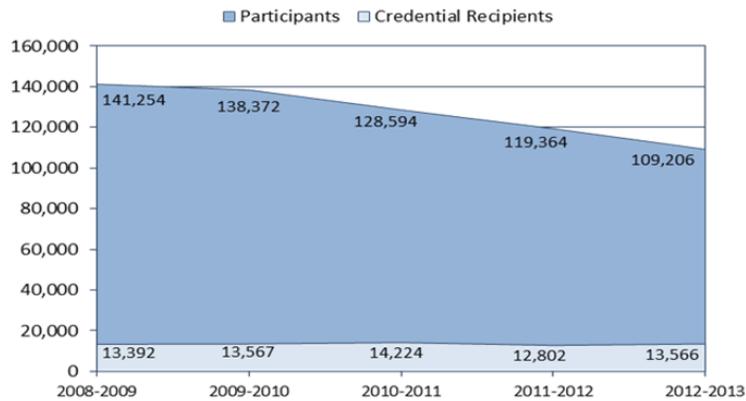
³⁷ U.S. Department of Health & Human Services: <http://aspe.hhs.gov/poverty/13poverty.cfm>

Figure 31 Basic Skills

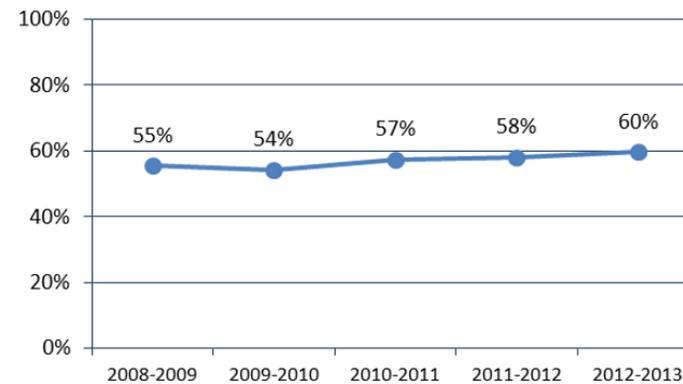
High School Equivalency and
Adult High School Diploma Recipients
1 Year Post Completion



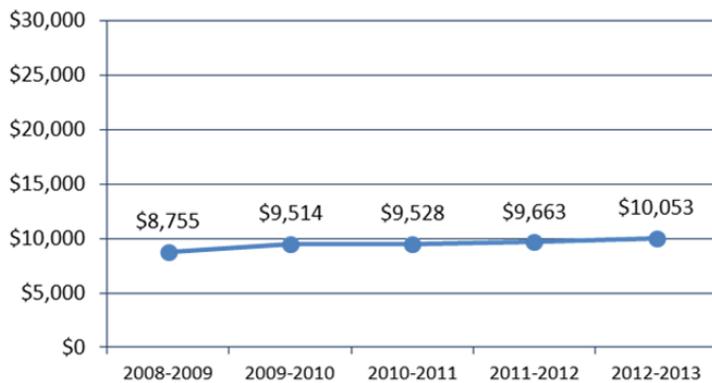
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



1 YEAR POST EMPLOYMENT IN NORTH CAROLINA



AVERAGE 1 YEAR POST WAGE IN NORTH CAROLINA



1 YEAR POST EMPLOYMENT AND WAGE BY INDUSTRY

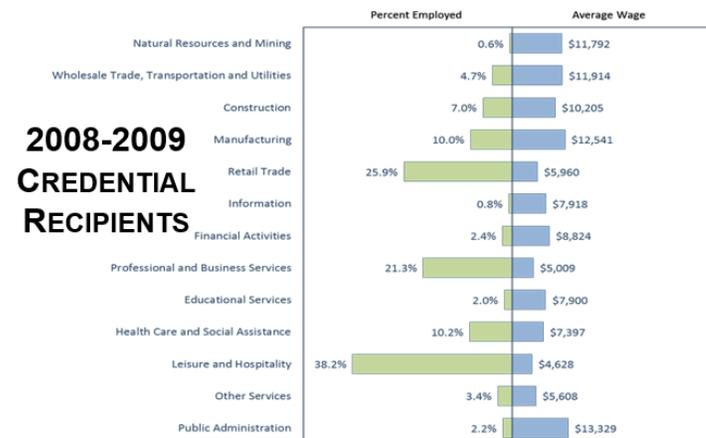
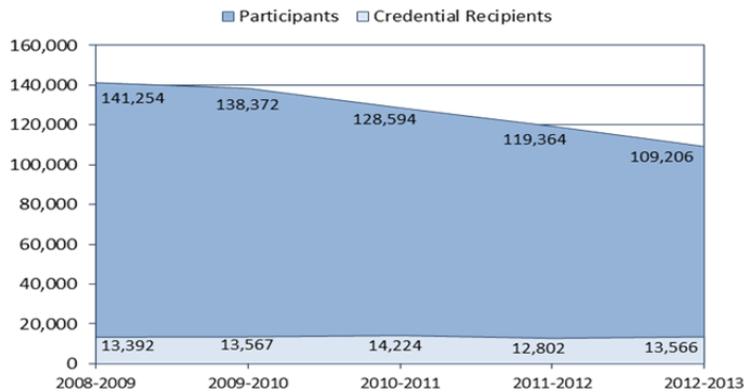


Figure 32 Basic Skills

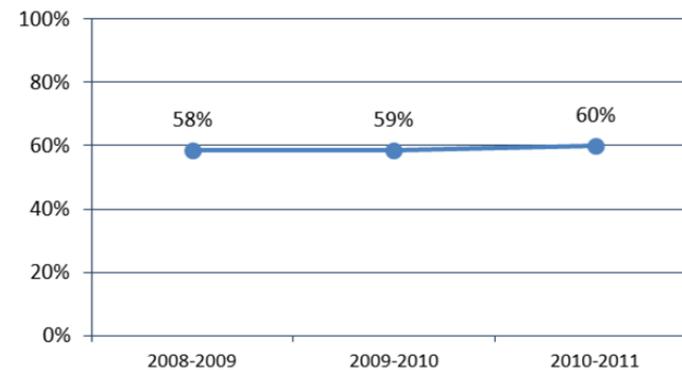
High School Equivalency and
Adult High School Diploma Recipients
3 Years Post Completion



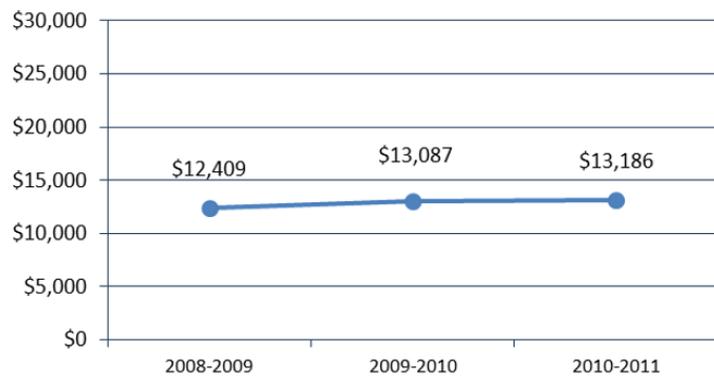
PARTICIPANTS AND RECIPIENTS 2008-2009 - 2012-2013



3 YEARS POST EMPLOYMENT IN NORTH CAROLINA

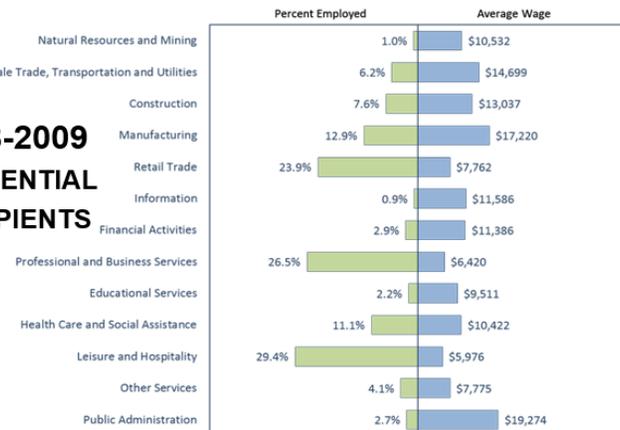


AVERAGE 3 YEAR POST WAGE IN NORTH CAROLINA



3 YEARS POST EMPLOYMENT AND WAGE BY INDUSTRY

**2008-2009
CREDENTIAL
RECIPIENTS**





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