



ADVANCED MANUFACTURING

One Year Check-in Report

Submitted by:

Walter Dorsey, Chair, Northeastern NC Career Pathways

Jennie Bowen, Director, Region Q WDB

Michael Williams, Director, Turning Point WDB

David Whitmer, Director, Northeastern WDB

Christina Harris, Regional Coordinator,
Northeastern Career and Technical Education

Larry Donley, NCWorks Regional Operations
Director – Northeast

Brandi Bragg, Northeastern Career Pathways
Facilitator

February 1, 2018

Advanced manufacturing continues to be a high-demand, high-growth industry within northeastern North Carolina. Since receiving state certification last year, the Northeastern partnership has worked diligently to move forward in its goals for the advanced manufacturing pathway.

For 2016-2017, the three workforce development boards reported a total of 81 adults enrolled in the advanced manufacturing pathway through their eleven NCWorks Career Centers, up from 58 the previous year. This total includes dislocated workers as well as veterans, which were not collected as separate numbers. We will collect disaggregated data for these subgroups in future updates. The three WDBs also reported a total of 30 youths enrolled in an advanced manufacturing pathway, up from 24 the previous year. In the same time period, 2631 students from 8 community colleges earned certificates, diplomas or degrees in an advanced manufacturing path, while a total of 76 students were enrolled in Advanced Manufacturing clusters through 18 of our partner LEAs.

Career awareness efforts include the use of a new visual assessment tool, [Traitify](#)^{*}, which is available to every stakeholder in our region. This tool links students and job seekers to real-world data from O*Net regarding their job matches, as well as a link to NCWorks for similar jobs posted in their area. Our region also developed a toolkit, produced specifically for front-line workers in NCWorks career centers, community colleges and secondary schools, to help them more seamlessly integrate career pathways into their jobs. Career counselors representing all stakeholders were invited to attend a counseling retreat in October 2017 which focused on utilizing Traitify and the toolkit, as well as other counseling techniques in support of career pathways.

Marketing efforts are underway to more broadly reach the community regarding Advanced Manufacturing and other pathways. With an [updated website](#)^{*} and social media accounts ([Facebook](#), [Instagram](#), [Twitter](#))^{*}, sharing information about the pathways with the community is a big part of the awareness phase. Currently, the directors of the three workforce development boards are meeting with marketing agencies in an effort to produce brochures, flyers and success story videos to increase awareness. Locally, many of our community college and LEA partners are hosting events specific to creating awareness around the Advanced Manufacturing pathway (see Section 4 for details).

While our region boasts more than 50 employer partners overall, perhaps a better measure of employer participation is through work-based learning metrics. In the two areas of our region which have received local implementation certification for Advanced Manufacturing, there are 16 employers who are currently providing work-based learning opportunities or who have promised to do so within the next 12 months. Each of our stakeholders continually works to recruit employers as partners, whether through work-based learning opportunities (**Exhibits J & K**), career fairs or for advisory roles during local implementation (**Exhibits B & C**).

We are pleased that College of the Albemarle (COA) and Nash Community College (NCC) consortia have applied and received local implementation certification for Advanced Manufacturing. In addition to College of the Albemarle, the consortia included the Northeastern Workforce Development Board, the Currituck, Dare, Edenton-Chowan, Elizabeth City-Pasquotank, and Perquimans County LEA's. The schools under those LEA's who qualified for certification include Currituck High School, Hatteras Secondary, First Flight High School, Manteo High School, John A. Holmes High School, Northeastern High School, Pasquotank High School and Perquimans High School. Any schools who were not part of the original application are encouraged to apply for certification as soon as they meet the qualifications.

In addition to Nash Community College, the NCC consortia included Turning Point Workforce Development Board and Nash-Rocky Mount Public Schools. The schools under that LEA which qualified for certification were Northern Nash, Southern Nash, Nash Central and Rocky Mount High Schools. While the NCWorks centers provided some involvement in this process, we are currently in the process of finalizing the requirements for centers to qualify under local implementation. Once those plans are finalized, qualified NCWorks centers in areas where the consortia have received local implementation will be able to apply and receive certification.

We have several other consortia who continue to work towards completion of the requirements for local implementation certification, including Beaufort Community College and Halifax Community College. One of the biggest challenges since the initial certification has been building solid work-based learning opportunities, especially for high school students. Age requirements have proven to be a difficult obstacle in some situations, but our partners have worked together to find reasonable solutions to these problems. As a demonstration of this cooperative effort, some high school partners in the COA consortia were able to secure letters from employers promising to work together towards a qualified work-based learning program over the next 12 months (**Exhibits L & M**).

*links to website

1. Demand Driven and Data Informed

As of Jan 1 2018, there were 376 employers and 244 job openings in manufacturing in Northeastern Prosperity Zone. Advanced Manufacturing is considered a "high demand" industry within this region and throughout the state. Careers in this pathway provide an average weekly wage of \$976.[^] In December of 2017, Governor Cooper announced the largest ever manufacturing investment in eastern North Carolina, in Edgecombe County. [Triangle Tyre](#)^{*}, a Chinese tire manufacturing company, is expected to create 800 jobs and to add more than \$2 Billion to North Carolina's economy. Once all positions are filled, the average annual salary for employees at Triangle Tyre is expected to exceed the average for Edgecombe County by more than \$20,000 per year.

*link to article from Governor Coopers' website
^data gathered from ncworks.gov

2. Employer Engagement

Since the state certification for Advanced Manufacturing for the Northeastern Region, two of our local community college areas have earned local implementation certifications for Advanced Manufacturing. This required collaboration between the community college, workforce board, local education agencies, employers and other community partners. To qualify for certification, each group was required to involve employers in the process, in advisory capacities as well as for work-based learning requirements. Please see the “Manufacturing Industry Employers” section in the attached and updated pathway development team document (**Exhibit A**). Please also note the attached sign-in sheets which include employer representatives for each of the two areas (**Exhibits B & C**).

3. Collaboration

Throughout the process of organizing and certifying pathways in the northeastern region, our partners have diligently worked to maintain and build our career pathways collaboration. As you can see from **Exhibit A**, there are more than 100 people representing our partners who continue to work on the Advanced Manufacturing pathway. In addition to meetings required for local implementation in this pathway, our region has offered opportunities for collaboration through regional meetings. These meetings include our yearly Leadership meeting and Counselors' retreats, both held in October 2017, as well as our quarterly meetings for our community college partners. In March 2018, we will hold our regional 18 month review for the Advanced Manufacturing pathway at Roanoke Chowan Community College. We will spotlight their new mechatronics program at this event, as well as provide updates from partners and a review of our previous pathways work in Advanced Manufacturing. Please refer to **Exhibit D** for the Agenda from our October Leadership meeting, **Exhibit E** for the Agenda from the October counselors retreat and **Exhibit F** for the agenda from the most recent Community College Partnership meeting held in November.

4. Career Awareness

In November 2017, our partners at Pitt Community College hosted an “[Advanced Manufacturing and STEM Awareness Day](#)”^{*} for local high school students. This event highlighted several careers within Advanced Manufacturing and provided hands-on experiences with the help of local employers. Two of our community college partners, Edgecombe Community College and Nash Community College, teamed up with their local school systems to host their annual “[Manufacturing Day](#)”^{*} in October 2017. Representatives from local manufacturing companies were on-hand to talk with students about future career opportunities in advanced manufacturing.

Also in October 2017, our partner College of the Albemarle hosted an “[Advanced Manufacturing Event and Open House](#)”^{*} at their state-of-the-art *Regional Aviation and Technical Training Center*. This event was open to students, parents and community members in the local area. In 2017, the [Wilson Academy of Applied Technology](#)^{*} completed its first academic year. This program was created through a collaboration between our partners at Wilson Community College, Wilson County Schools and local manufacturing employers.

In April of 2017, Northeastern WDB partnered with College of the Albemarle to promote [Advanced Manufacturing](#) day through marketing of the event and by providing career advisors to assist attendees. In December 2017, Turning Point WDB and its affiliated NCWorks Centers partnered with Halifax Community College and other local partners to present a [job and resource](#) fair. In early January, Region Q WDB and NCWorks Beaufort County partnered with Beaufort Community College to provide [career advisors](#) on campus.

While not an exhaustive list of advanced manufacturing career awareness events over the past year, these events show the high level of collaboration between our partners at local levels to provide career awareness for secondary school students, community college students and other community members. Plans for the future include marketing advanced manufacturing careers to the broader community through printed materials, digital and social media as well as participation in a variety of community events.

*Link to article

5. Articulation and Coordination

Local implementation of the Advanced Manufacturing pathway requires the local partnerships to create modified local pathways utilizing specific elements of the regional pathway. These elements include course sequencing, work-based learning opportunities, sequenced career counseling, Career & College Promise courses, stackable credentials and an explanation of pathway entry options for adults. A key factor in this requirement is that all local entities must be involved in the creation of the modified local pathway, which reduces the opportunity for duplication of education or training opportunities. **Exhibit G** includes a flyer for the IAM (Industrial and Advanced Manufacturing) Academy for the Nash Community College area. This was the result of their work on local modified pathways. **Exhibit H** is a photo from the local implementation certification presentation for the Nash Community College area. **Exhibit I** includes a selection of local modified pathways for the College of Albemarle area.

Additionally, our partners meet every 18 months to review our regional certified pathways. This meeting includes a speaker familiar with the Advanced Manufacturing industry, information about Advanced Manufacturing opportunities at the host college and breakout sessions. During breakout sessions, all partners in attendance work in small groups to

review and revise the regional pathways as needed. Our next Advanced Manufacturing review is scheduled for March 2018 at Roanoke Chowan Community College.

6. Work-Based Learning

Work-based learning is an extremely important part of pathways work but it comes with many challenges. Career Pathways partners in the northeast continue to work together to create opportunities for work-based learning for youth and adults. For 2016-2017, our community college partners reported a total 20 employers in our area who provided advanced manufacturing work-based learning opportunities to 23 students. During the same period, our LEA partners reported a total of 51 businesses who provided advanced manufacturing work-based learning opportunities for more than 500 middle and high school students.

For the two community college areas who have received local implementation certification for advanced manufacturing, one of the requirements was to document work-based learning opportunities for each partner. **Exhibit J** documents the work-based learning opportunities for partners within the College of the Albemarle consortia, while **Exhibit K** documents those opportunities for partners within the Nash Community College consortia.

NCWorks Career Centers also provide opportunities for work-based learning, through on-the-job training, internships or other programs. At NCWorks Pitt County, one participant in the NextGen program participated in a [summer internship](#). There he gained soft skills and industry contacts, while learning tasks. All eleven NCWorks centers offer similar programs to provide work-based learning experiences to customers. Future data collections will include specific information on the outcomes of these programs.

7. Multiple Points of Entry and Exit

Our partners continue to offer multiple points of entry and exit for youth and adult jobseekers. Between the twenty LEAs who have already reported metrics for 2016-2017, more than 2000 students have received CRC certification. Nearly 3000 high school students in our region completed industry certifications over the past year. These stackable credentials will allow students to go directly into the workforce should they choose, or to continue adding credentials through training and/or higher education.

As you can see from the table below, community colleges in our region showed vast increases in the number of students earning certificates, diplomas and/or degrees in Advanced Manufacturing over the past year. Additionally, the number of Advanced Manufacturing programs in which these credentials were earned nearly quadrupled. Increased opportunities for stacking credentials allows job seekers multiple options for entering and exiting the pathway.

Progress Measure	2014-2015	2015-2016	2016-2017
Number of Advanced Manufacturing programs in which students earned certificates, diplomas and/or associate science degrees	19	19	78*
Number of <u>students</u> who earned Advanced Manufacturing certificates, diplomas, and/or associate science degrees	1055	975	2631*

*8 out of 9 Community Colleges reporting

Many of our partners in higher education continue to look for ways to help students transition more easily. For example, Pitt Community College has earned a distinction as one of the most military-friendly colleges in the country over the past several years, and just this year has added [meeting space specifically designated for veterans](#)* and their dependents. Creating a welcoming atmosphere on campus allows military students greater freedom and possibilities for earning credentials and returning to the civilian workforce.

Recently, our partners at East Carolina University and Elizabeth City State University have instituted the state sponsored “[Reverse Transfer](#)”* program, which can allow enrolled at a university, who have completed the requirements, to be awarded an associates’ degree while continuing to work towards a bachelors’ degree. This is a great opportunity for students who need to take a break from education and rejoin the workforce before completing their goals.

8. Evaluation

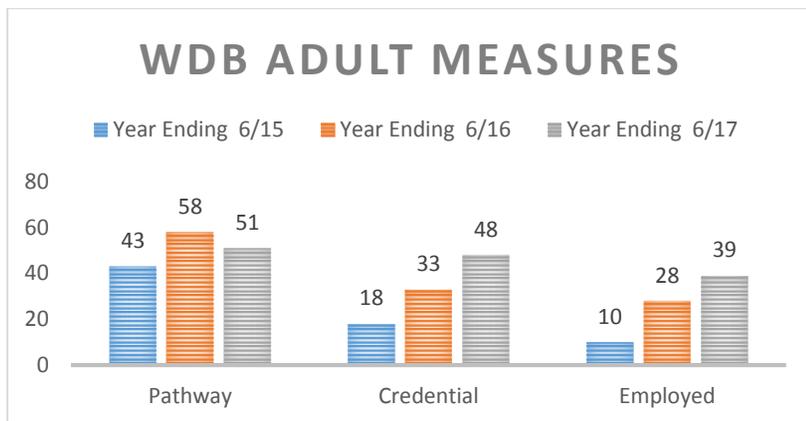
In our initial application, we defined two goals for our Advanced Manufacturing pathway as well as two outcomes for defining success. Our original goals included:

- 1) Increase the number of individuals who have a postsecondary credential that leads to a stable and satisfying advanced manufacturing career, and
- 2) Provide employers with the highly skilled workforce needed to meet the needs of the advanced manufacturing industry in northeastern North Carolina.

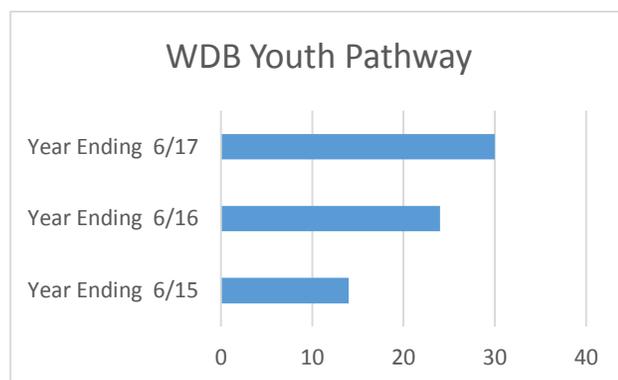
The two outcomes which we agreed to use for defining success include:

- 1) A steady year-to-year increase in the numbers of those who attain advanced manufacturing credentials, and
- 2) A steady year-to-year increase in advanced manufacturing work-based learning opportunities and employer engagement activities.

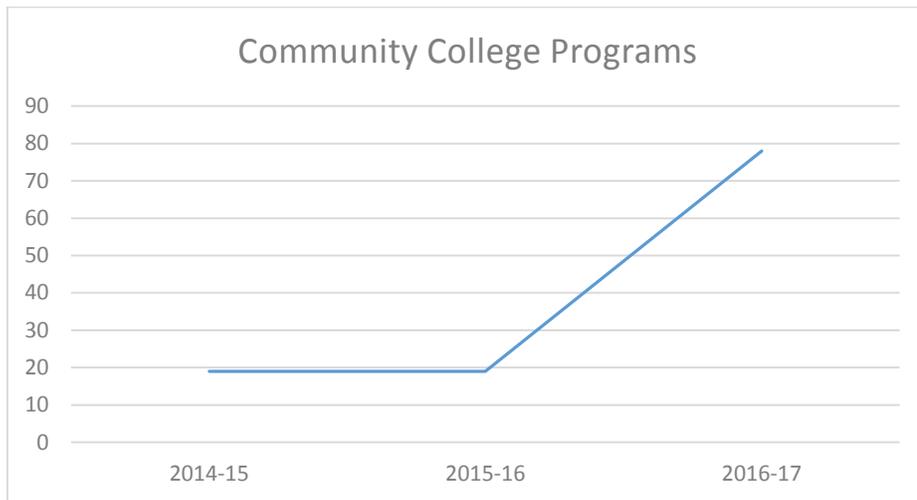
As you can see from the graph below, the workforce development board records have shown a significant increase in the number of adult clients who have earned credentials or became employed in advanced manufacturing over the past year. However, the data show a slight decrease in the number of adults who chose advanced manufacturing as a career pathway over the past year.



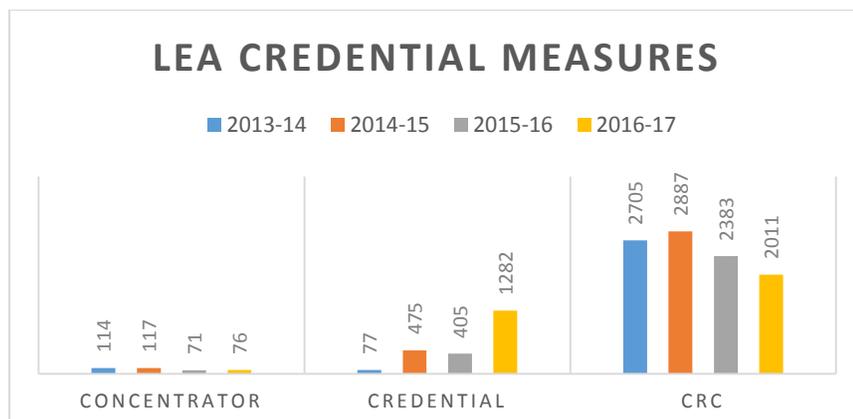
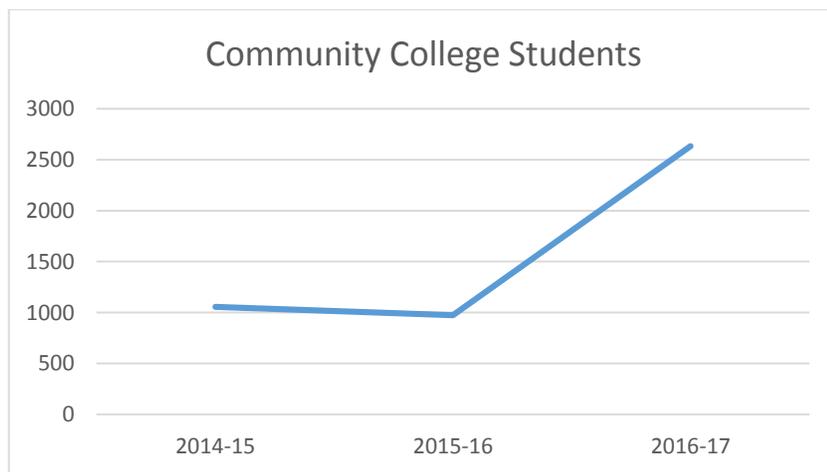
The number of youth participants in workforce development board programs choosing advanced manufacturing as a pathway also shows a steady increase.



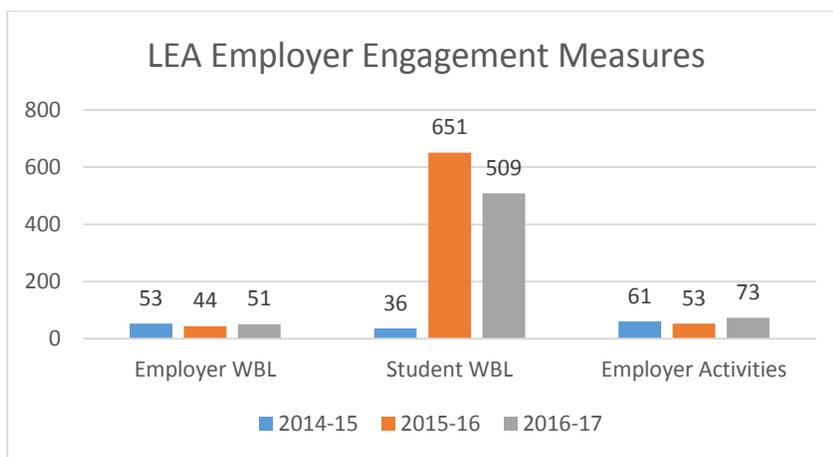
The graph below represents data from the past three years regarding the **number of advanced manufacturing programs** where certificates, diplomas and degrees were earned through our Community College partners.



This graph represents the **number of students** from those partners who earned certificates, diplomas and degrees. Each of these measures show vast increases from the previous year, perhaps indicating a shift towards greater interest in these programs within our community college system.



The chart above includes the current data we have amassed regarding the number of students who have completed requirements to be recognized as an advanced manufacturing pathway **concentrator**, the number of students who achieved advanced manufacturing related industry **credentials** and the number of high school seniors who achieved the Career Readiness Certificate (**CRC**). The number of concentrators has increased since last year but is still less than in previous years. This could be due to less interest in the pathway, but it is more likely that the numbers will increase as we receive more data. However, the number of industry related credentials shows an increase of more than 300% even without the additional data. This is a significant jump which shows tremendous success in this initiative. The numbers of students completing CRC certifications are currently less than previous years, but will also hopefully increase with further input.



The chart above explores the number of **employers offering work-based learning opportunities**, the number of **students participating in work-based learning opportunities** and the number of **employers engaged in other activities** related to advanced manufacturing which are not considered work-based learning. These incomplete data show slight progress for the number of employers involved in work-based learning and other pathway activities. The current numbers for students who are involved in work-based learning on this path are not as favorable, but are still a vast improvement over the first year we collected this data, 2014-15.

Exhibit A

Advanced Manufacturing Career Pathway Development Team

Updated 1.3.2018

BHB

The following are the representatives from 1) LEAs, community colleges, workforce development boards; 2) industry and business leaders; and 3) four-year universities, community leaders, chambers of commerce, etc. that participated in providing input on the Northeastern Advanced Manufacturing Pathways either through participating on a strategic planning subcommittee or providing input during the review/revision process. Sign-in sheets for meeting attendance are available upon request.

LEAs	Community College	Workforce Dev. Board	Manufacturing Industry Employers	Four-yr. College, Chamber, Economic Dev. etc.
Dr. Don Phipps, <i>Beaufort County</i> Ben O’Kelley, <i>Edenton-Chowan</i> Casey Bass, <i>E-Chowan</i> Rhonda James-Davis, <i>E-C Pasquotank</i> Beth Ann Trueblood, <i>Pitt County</i> Beverly Harrison, <i>E-Chowan</i> Daniel Meads, <i>Currituck County</i> Katrina Williams, <i>Hertford Cnty</i> Adrea Lilley, <i>Beaufort County</i> Sheila Porcher, <i>Edgecombe Cnty</i> Christy Harris, <i>NCDPI</i> Pam Lewis, <i>Nash-Rocky Mount</i> Wendi Pettitway, <i>Beaufort Cnty</i> Ashley Padgett, <i>Beaufort Cnty</i> Linda Wiggins, <i>Weldon City</i> Felicia Booker, <i>Halifax Cnty</i> Jill Cohen, <i>Perquimans County</i> Robin May, <i>Nash-Rocky Mount</i> Don Monroe, <i>Currituck Cnty</i>	Dr. Brian Busch, <i>Martin CC</i> David Chambers, <i>COA</i> Dr. Ivan Mosley, <i>HCC</i> Jaime Heckstall, <i>RCCC</i> Lewis Hoggard, <i>RCCC</i> Lori Ann Priest, <i>Pitt CC</i> Mark Faithful, <i>Pitt CC</i> Lisa Richmond, <i>NC CC System</i> Nancy Hobbs, <i>ECC</i> Billy Barber, <i>Martin CC</i> Michelle Waters, <i>COA</i> Sheila Hoskins, <i>ECC</i> James Lynch, <i>HCC</i> Amy Stevenson, <i>Pitt CC</i> Ruby Ward, <i>HCC</i> Wendy Marlowe, <i>Nash CC</i> John Stolarczyk, <i>COA</i> Melissa Cahoon, <i>Nash CC</i> Barbara Boyette, <i>Wilson CC</i> Dr. Deryl Davis Fulmer, <i>HCC</i> George Anderson, <i>ECC</i> Vic Marrow, <i>HCC</i> Rachel Bridgers, <i>Pitt CC</i> Ivana Stevens, <i>Nash CC</i> Larry Crisafulli, <i>Halifax CC</i> Wil Van Der Meulen, <i>Nash CC</i> Gary Blackburn, <i>Nash CC</i> Mike Starling, <i>ECC</i> Dan Joyner, <i>RCCC</i> Dr. Crystal Ange, <i>BCCC</i> Bebe Well, <i>Nash CC</i> Michael Lopes, <i>COA</i> William Spear, <i>COA</i> Karen Alexander, <i>COA</i>	Walter Dorsey, <i>Region Q</i> Jennie Bowen, <i>Region Q</i> Krista Wood, <i>NCWorks</i> Wayne Rollins, <i>Region Q</i> Emily Nicholson, <i>Northeastern</i> Carisa Rudd, <i>Turning Point</i> Dave Whitmer, <i>Northeastern</i> Michael Williams, <i>Turning Point</i> Neal Anderson, <i>NCWorks</i> Taylor Hawkins, <i>NCWorks</i> Annette Barnes, <i>NCWorks</i> Ambra Stevens, <i>NCWorks</i> Diane Thomas, <i>NCWorks</i> Nanette Turner-Williams, <i>NCWorks</i> Latoria Roundtree, <i>NCWorks</i>	Ralph Emmerson, <i>Cummins</i> David Byerly, <i>Bridgestone Tires</i> Greg Britt, <i>Ann’s House of Nuts</i> Gerry Baker, <i>Berry Plastics</i> Charles Gilmore, <i>Tyson Foods</i> Lee Corbin, <i>World Cat</i> Willie Smith, <i>Lowe’s</i> Vito Kepka, <i>Hoffer Flow Controls</i> Donna Veale, <i>Berry Plastics</i> Terry Hairston, <i>Nucor Steel</i> Sandra Hardy, <i>Purdue Farms</i> Gail Barbosa, <i>PCB Piezotronics</i> Rex Anderson, <i>Regulator Marine</i> Leora Murchison, <i>World Cat</i> Nick Bucci, <i>Nucor Steel</i> Gay Styons, <i>Domtar</i> Sheri Norwood, <i>Hoffer Flow Controls</i> Betty Toole, <i>DRS Technologies</i> Jack Benner, <i>Nucor Steel</i> Tracie Thomas, <i>Berry Plastics</i> Johnnie Brantley, <i>New Standard Corp</i> Mark Striemer, <i>Cummins</i> Joel Lee, <i>Edwards Inc</i> Bill Henkel, <i>Rocky Mount Electric</i> Tim Askew, <i>Enviroserve Chemicals</i> Jason Futrell, <i>Hoffer Flow Controls</i> Joe Gopi, <i>Sumitomo Drive Tech</i> R. Patrick Stephan, <i>Sumitomo</i> Mike Villardi, <i>Hockmeyer Equip.</i> Steve Price, <i>HAAS Factory Outlet</i> Suzanne Sanders, <i>Motion Sensors</i> Larry Roberts, <i>Steel America</i> Nathan Hassell, <i>Colonna’s Shipyard</i>	Dr. Ranjeet Agarwala, <i>ECU</i> Rex Raiford, <i>NCSU</i> Dr. Akbar Eslami, <i>ECSU</i> LuAnn Riddick, <i>ECSU</i> Steve Biggs, <i>Bertie Ec. Dev.</i> Steve Snow, <i>Hertford Cnty Coun.</i> Steve Hill, <i>STEM East</i> Amy Braswell, <i>Ahoskie Chamber</i> John Chaffee, <i>NCEast Alliance</i> Michelle Muir, <i>Dept. of Com.</i> Duna Dickenson, <i>R.V. Chamber</i> Larry Donley, <i>Dept. of Com.</i> Pam Gould, <i>STEP</i>

ADVANCED MANUFACTURING - SIGN-IN SHEET

Local Pathway meeting May 25, 2017

FC - 121 College of The Albemarle

Name - printed	Title	Company/ School	Signature
Nannette C. Turner-Williams	Manager	Networks	<i>Nannette Turner-Williams</i>
Latoria Roundtree	Career Advisor	Networks	<i>Latoria Roundtree</i>
Rob Boyce	Pathway Facilitator	Networks	<i>Rob Boyce</i>
Emily Nicholson	Bus. Serv.	NWDB	<i>Emily Nicholson</i>
BEVERLY HARRISON	MC/COO/SPC	EDENTON-CITOWAN	<i>Beverly Harrison</i>
Tim Askew	Chemical Rep	ENUNASERWE Chemicals	<i>Tim Askew</i>
Jason Futrell	Mechanical Production Supervisor	Hoffer Flow Controls	<i>Jason Futrell</i>
John Stolarczyk	CAD Program Coordinator	COA	<i>John Stolarczyk</i>
Don Monroe	CTE Director	Currituck Schools	<i>Don Monroe</i>
JOE GOPI	MANUFACTURING MANAGER	SUMITOMO DRIVE TECHNOLOGIES	<i>Joe Gopi</i>
R. Patrick Stephan	Welding Supervisor	Sumitomo Drive Technologies	<i>R. Patrick Stephan</i>
MICHAEL LOPES	PC WELDING	COA	<i>Michael Lopes</i>
William J. Spear	Welding instructor	COA	<i>William J. Spear</i>
MIKE VILLARDI	VP MANUFACT.	HOCKMEYER EQUIP	<i>Mike Villardi</i>
Rhonda James-Davis	CTE Director Eliz. City - Prog. Public	Eliz. City - Prog. Public Schools	<i>Rhonda James-Davis</i>
STEVE PRICE	SALES ENGINEER	HAAS FACTOR OUTLET	<i>Steve Price</i>
Suzanne Sanders	General Manager	Motion Sensors	<i>Suzanne Sanders</i>
KAREN ALEXANDER	COA Prog Coord BUS TECH	COA	<i>K. Alexander</i>

Advanced MANUFACTURING Local Pathway Meeting- Sign-In Sheet

May 25, 2017 FC 121 – College of The Albemarle

Name - printed	Title	Company/ School	Signature
Jean Taylor	CTE Director	Dare Co Schools	Jean Taylor
Don Monroe	CTE Director	Currituck Co Schools	Don Monroe
Latoria Roundtree	CTE		
Rhonda James-Davis	CTE Director	Eliz. City - Pasg. Public Schs	Rhonda James-Davis
Everette Carter	VPC	COA	Everette Carter
Michelle Waters	Dean	COA	Michelle Waters
Robin Zinsmeister	Dean	COA	Robin Zinsmeister
David Chambers	Fac	COA	David Chambers
Donna	Director	NWDB	Donna
Laam Roberts	FMS Supervisor	Steel America	Laam Roberts
Nathan Hassell	FMS Supervisor	Colome's Shipyard	Nathan Hassell
Jill Cohen	CTE Director	Perquimans County School	Jill Cohen

PATHWAYS MEETING

May 4, 2017

Name	Agency	Email
Jehanie Beatty	New Standard Corporation	jbeatty@newstandard.com
Robin May	Nash Rocky Mount Public Schools	rmmay@nrms.k12.nc.us
Rob Boyce	NC Works	rob.boyce@ncworks.com
Pam Gould	STEP	stepnc@Centurylink.net
Ivann Stevens	NCC	istevens@nashcc.edu
Carin L Radd	Turning Point WdR	Cradd@turningpointwd.com
Ambra Newton	NCWORKS	ambra.newton@ncworks.gov
Bebe Well	Nash Community College	cbwell197@nashcc.edu
Gary Blackburn	Nash Community College	garyb@nashcc.edu
Patela Lewis	Nash-Rocky Mount Schools	plewis@nrms.k12.nc.us
Mizema Wiggins	Turning Point WdR	mizema@turningpointwd.com
Mark Stricker	Commons RMEP	JKZ31@Commons.com
Joel Lee	Edwards, Inc.	jlee@edwardsinc.com
Eric Henkel	Rocky Mount Economic Dev. Inc.	ehenkel@RMEPINC.COM

Leadership Council Meeting

Martin Community College

Building 1, Room 14

1161 Kehukee Park Road

Williamston, NC

October 6, 2017

9:30a.m. – 12 noon

AGENDA

Welcome, introductions and overview	Walter Dorsey, <i>Chair, NeNC Career Pathways</i>
2016-2017 pathway activities in review	Rob Boyce, <i>NCWorks Career Pathway Facilitator</i>
Keynote presentation “Career Pathways – The View from Chapanoke” Introduction Presentation	Michael Williams, <i>Turning Point WDB Director</i> Dion Clark, <i>NCWorks Career Pathways Director</i>
Local Health Care Career Pathways Implementation Certification Presentation College of The Albemarle, Northeastern WDB, and Partnering LEAs (Camden, Currituck, Dare, Edenton- Chowan, Elizabeth City-Pasquotank, Gates, and Perquimans)	Background – Larry Donley, <i>Regional Operations Director (Northeast), NC Department of Commerce- Workforce Solutions Division</i> Presentation – Dion Clark and Walter Dorsey
Networking Break	
<u>Action Items</u>	
Presentation of Business Support Services Strategic Planning Committee Report	
Overview- Skill Development Subcommittee	Rob Boyce Christy Harris <i>Dept. of Pubic Inst. CTE Coordinator</i>
Employer Engagement Subcommittee	Emily Nicholson <i>Bus. Services/Economic Dev., Northeastern WDB</i>
Career Development Subcommittee	Jean Taylor <i>CTE Director, Dare County Schools</i>
Discussion and action on BSS Report	Walter Dorsey
2017-18 Pathway Calendar of Events and Activities	Rob Boyce
Discussion and action on events/activities calendar	Walter Dorsey
Remarks, announcements, questions, general comments from business representatives and others in attendance	Group
Next steps	Walter Dorsey
Adjourn	

AH Y

4TH ANNUAL CAREER GUIDANCE RETREAT

NAVIGATING CAREER SUCCESS

 **Avast Ye!** 

I. Yo Ho Ho! (Welcome and Logistics)

II. Introductions to Fellow Buccaneers, Ice-Breaker

III. Historical Knowledge of Pathway Process, Prior Career Guidance focuses

IV. Toolkit to use for Assisting Students & Job-Seekers

Take a Caulk (Break)

V. Philosophy of Career Guidance: with Exploration focus

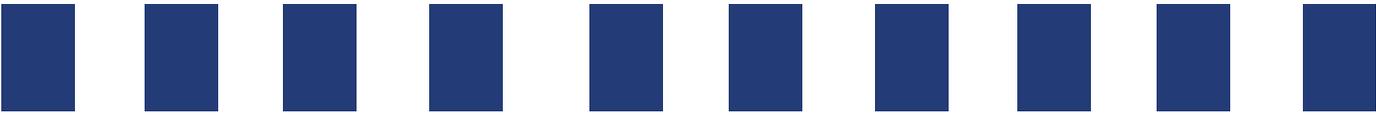
VI. Focus: Interest Inventories

VII. Introduce Traitify

VIII. Discuss Traitify features

IX. Deployment Discussion: SWOT analysis

X. Old Salts in Shipshape (Closing)



Shiver me Timbers! Give us yer feedback on this training:
<https://www.surveymonkey.com/r/ZN3SZ6V>

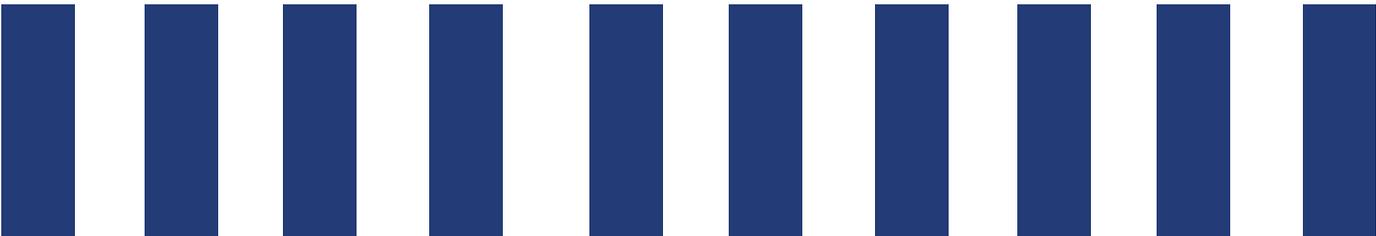
Contact Information:

**Brandi Bragg, Northeastern Career
Pathways Facilitator
brandi.bragg@nccommerce.com**

**Christina Harris, Northeast Career and
Technical Education Coordinator
christina.harris@nc.dpi.gov**

**Emily Nicholson, Northeastern Workforce
Development Board
enicholson@accog.org**

**Rachel Bridgers, Pitt Community College
Career Outreach Specialist
rbridgers@email.pittcc.edu**



**Northeastern NC Career Pathways
Community College Partnership**

November 29, 2017

9:30 a.m.

NC TeleCenter

Williamston, NC

Agenda

Welcome and Introductions

Michael Williams

Discussion topics

1. Local Implementation
2. Toolkit & Traitify
3. Website (NENCPathways.org)
4. NCWorks Training – Interactive and Recorded Trainings
5. Non-Traditional Partnership
6. Working Smart
7. Collaboration Log

Networking Break

Updates

1. Recent Events

October Leadership meeting
Career Guidance Retreat
Agriscience/Biotech Meeting
Champions Meeting

2. Upcoming Events

Regional WDB trainings
Pathway Planning w/ CTE directors (2.2.18)
Career Pathways Champions Meeting (Feb)
Non-Traditional Partnership Meeting (by 1.31.18)
Community College Partnership Meeting (2.21.18)
Advanced Manufacturing Review (3.8.18)
Submit applications for BSS & Ag/Bio (by March 2018)
Compile/Distribute 2016-2017 Metrics (by 2.15.18)

Partner Sharing

Updates from community colleges on pathway related topics and other new initiatives

Adjourn



INDUSTRIAL & ADVANCED MANUFACTURING ACADEMY

YOUR FAST TRACK TO **TOP JOBS** IN ADVANCED MANUFACTURING!

GET ON THE FAST TRACK

- 1 CONTACT YOUR GUIDANCE COUNSELOR
about enrolling in the IAM Academy.
- 2 PICK A PATHWAY AND ENROLL
Pathways begin in 9th grade.
- 3 START TAKING COLLEGE COURSES
College courses begin in 11th grade and may be tuition-free!
- 4 STUDY AT NASH COMMUNITY COLLEGE
Complete your Associate's Degree and explore internships.
- 5 FINISH AT EAST CAROLINA UNIVERSITY
Earn your Bachelor's of Science in Industrial Technology.

START YOUR CAREER.

COMPUTER ENGINEERING TECHNOLOGY

Learn the skills required to design and manufacture products with computer-aided design, computer-aided manufacturing, and computer-aided engineering. Includes training in both hardware and software.



COLLEGE COURSES INCLUDE:

Applied Software for Technology
Data Communication Systems
Computer Upgrade/Repair I
DC/AC Circuit Analysis

over 17 credits toward degree

COMPUTER-INTEGRATED MACHINING TECHNOLOGY

Use your cutting-edge computer skills to learn the skills necessary to create a product from start to finish. Includes design, development, and production in a state-of-the-art machining lab.



COLLEGE COURSES INCLUDE:

Measurement, Material & Safety
Blueprint Reading
Machining Applications I
Introduction to CNC

over 14 credits toward degree

ELECTRONICS ENGINEERING TECHNOLOGY

Design, build, test and repair electronic systems such as industrial computer controls, manufacturing systems, and automation systems. Learn about electricity, solid state fundamentals, and microprocessors.



COLLEGE COURSES INCLUDE:

Applied Software for Technology
Programmable Logic Controllers
DC/AC Circuit Analysis
Industrial Safety

over 16 credits toward degree

INDUSTRIAL SYSTEMS TECHNOLOGY

This course prepares you for the industry needed for repairing, testing, and troubleshooting industrial systems. Topics include pneumatic systems, electrical systems, welding, and tooling.



COLLEGE COURSES INCLUDE:

Measurement, Material & Safety
Machining Applications I
DC/AC Circuit Analysis
Introduction to CNC

over 12-19 credits toward degree

MECHATRONICS ENGINEERING TECHNOLOGY

Use modern mechatronics to design and manufacture a product from start to finish. Includes design, development, and production in a state-of-the-art mechatronics lab.



COLLEGE COURSES INCLUDE:

Applied Software for Technology
Programmable Logic Controllers
DC/AC Circuit Analysis
Industrial Safety

over 15 credits toward degree

WELDING TECHNOLOGY

Develop the skills needed to weld and maintain a variety of industrial equipment in the welding and metal finishing, such as electrical, mechatronics, and other processes.



COLLEGE COURSES INCLUDE:

Blueprint Reading
SAMP (Skill) Plan
GNM (MAG) SCAMP/Plan
Introduction to CNC

over 15 credits toward degree

YOUR HIGH SCHOOL



East Carolina University



Nash-Rocky Mount Public Schools



Advanced Manufacturing Alliance



www.nashcc.edu/iam

ADVANCED MANUFACTURING

..... THIS IS NOT YOUR GRANDFATHER'S JOB.

THINK THIS IS MANUFACTURING?



THINK AGAIN.



MANUFACTURING IS CHANGING...

ADVANCED MANUFACTURING TODAY

Computer technology has revolutionized manufacturing jobs.

The United States still leads the world's manufacturing economy, contributing 18.2% of manufactured products worldwide more than any other country.

Have you visited a factory lately? Repetitive manual tasks in the workplace have been replaced with high tech, automated tasks and computer numerical controlled (CNC) machines. Manufacturing jobs are safer, cleaner and more productive than ever before.

1st
IN MANUFACTURING
WORLDWIDE

U.S. manufacturing is the world's
10th LARGEST
ECONOMY

HIGH-TECH.
HIGH SALARY.
UNLIMITED POSSIBILITIES.

ADVANCE YOUR MANUFACTURING
PERCEPTION GOALS CAREER.

MANUFACTURING IN NORTH CAROLINA

There is a growing need for skilled employees in the manufacturing industry.

Manufacturing is North Carolina's largest industry, employing over 430,000 PEOPLE...

MANUFACTURING SALARIES ARE **52%** higher than the overall average salary in North Carolina.

\$63,457
AVERAGE ANNUAL SALARY

...but by the year 2030, as much as

77% OF THE CURRENT WORKFORCE WILL RETIRE.

THAT'S A LOT OF JOBS TO FILL.

North Carolina is the **4th LARGEST** manufacturing state.

MANUFACTURING CAREERS IN NASH COUNTY

HONEYWELL
PRODUCT MANUFACTURING, OIL, PRODUCT DESIGN, SERVICE
STARTING SALARY UP TO \$35/HOUR

CUMMINS-ROCKY MOUNT ENGINE PLANT
OPERATOR, ASSEMBLY, MAINTENANCE OPERATOR, TECHNICIAN
STARTING SALARY UP TO \$27/HOUR

THESE COMPANIES REPRESENT JUST A FEW OF NASH COUNTY'S MANUFACTURING EMPLOYERS.

HOSPIRA, INC.
PRODUCTION SUPERVISOR, ENGINEERING, PRODUCT DESIGN
STARTING SALARY UP TO \$25/HOUR

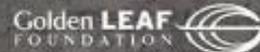
NEW STANDARD CORPORATION
TEXTILES, PACKING OPERATOR, DESIGN
STARTING SALARY UP TO \$21/HOUR

NASH COUNTY MANUFACTURING SALARIES:
\$22,800 - \$99,200

BUILD YOUR FUTURE.



Nash-Rocky Mount
Fabric Schools



www.nashcc.edu/iom

NCC Adds State Certified Advanced Manufacturing Training Pathway



From left, Ralph Emerson, Cummins Rocky Mount Engine Plant, Director of Manufacturing Functional Excellence; Pam Lewis, Nash-Rocky Mount Public Schools Executive Director of Career and Technical Education; Dr. Julia Hamilton, North Carolina Community College System Coordinator of Career and Technical Education; Dr. Bill Carver, Nash Community College President



HVAC Technologies

D35100 and C35100 I and II

Adult Career Pathway Plan of Study

Air Conditioning, Heating and Refrigeration (HVAC) Technology program will give you the skills needed to work with residential and light commercial systems, as well as assist in the start-up, preventive maintenance, service, repair, and installation of residential and light commercial systems. Upon completion of this concentration, graduates will be able to assist in the startup, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

Median Pay :\$19.81 per hour *NWDB - Economic Modeling Specialists, Inc.

	6-8 th Grade	9 th Grade	10 th Grade	11 th Grade	12 th Grade	COA Year 1	
High School Academics	English	English I	English II	English III	ENG IV	Fall Semester AHR 111* AHR 111* AHR 112 AHR 113* ENG 102 CIS 111	
	Math	Math I	Math II	Math III	Math IV		
	Science	Earth Science	Biology	Chemistry			
	Social Studies	World History	Civics	Amer. History I & II			
	Hlth/PE	Hlth/PE					
AHS				AHS Orientation Student Success Class Math Reading	HSE Orientation Student Success Class Math Reading	Spring Semester AHR 114* AHR 130 AHR 213 AHR 160 AHR 255 COM 101 WBL 110 or 111	
COA CTE Courses				AHR 110 AHR 111 AHR 113 AHR 114	AHR 110 AHR 111 AHR 113 AHR 114		
Career Counseling and Advisement	ACT Explore	NC Career Cluster Guide Activities	ACT Plan	ACT College Readiness Assessment	ACT Workplace Readiness Assessment: (WorkKeys)	COA Work Based Learning COA Resume Writing Assistance NC Works Career Center Services - www.ncworks.gov CRC	
WBL Opportunities & Career and Technical Student Organizations		Classroom Speaker Field Trip Participate in Student Organization	Classroom Speaker Participate in Student Organization	Classroom Speaker Field Trip to Local Industry Participate in Student Organization	Internship or Senior Project Participate in Student Organization	*HVAC Technology dual enrollment students have the opportunity to complete coursework in the program while in high school.	

*COA program curriculum courses required can change over time – be sure to check the current college catalog for the most updated information.

 CAREER CLUSTER For Manufacturing													
PATHWAYS	MM51 Marketing [^]	ME11 Entrepreneurship 1 [^]	MI21 Fashion Merchandising	Approved CCP Courses									
	Manufacturing Production Process Development	●	●	●	●								
Career & College Promise	Approved Career & College Promise Career Technical Education Pathway												
Additional Pathways	Health, Safety & Environmental Assurance						Logistics & Inventory Control						
Middle School Courses	BU10 Computer Skills and Applications						CC58 Exploring Career Decisions						
	BU20 Exploring Business, Marketing and Entrepreneurship						TE01 Technology Design & Innovation						

Cluster Enhancement Courses

BD10 Multimedia & Webpage Design

BF05 Personal Finance

BM10 Microsoft Word & PowerPoint [^]

BM20 Microsoft Excel and Access [^]

CC45 Career Management

CS97 CTE Internship

IC61 Drafting I

[^] - Uses materials from a third-part provider
^{*} - Completer course



Perquimans County Schools
Career and Technical Education

"Proud of the Past Focused on the Future"



Cluster: Advanced Manufacturing

Courses listed within this plan are recommendations only and should be individualized to meet each student's educational and career goals.
 (28 credits needed for graduation)

Student Name: _____
 Grade: _____
 School Name: _____

	Grade	English	Math	Science	Social Studies	Other	Work-Based Learning Experiences	
Academic	9	English I	Math I	Earth Science	World History	Health/PE	Skills USA	
	10	English II	Math II	Biology	American History I&II**		STEM Career Opportunities through College of Albemarle	
	11	English III	Math III	Chemistry	Civics and Economics		Job Shadowing CTE Internships	
	12	English IV	4th Math				Field Trips Service Learning	
		University admissions require two world language credits—one being 2nd level					Classroom Speakers	Virtual Interview
	Electives—Students choose from CTE Foundation & Enhancement options below							
CTE Preparation	Complete minimum of 4 Courses to Earn CTE Concentrator Status—one must be starred * course							
		Foundation Courses - 3 required						
	Foundation	Adobe Visual Design			Approved CCP courses -Welding 112, 115, 116,121			
		Adobe Digital Design						
		Adobe Video Design			CS95 CTE Advanced Studies			
	Enhancement	BF10 Principles of Business & Finance			BF05 Personal Finance			
		BM10 MS Word and PowerPoint			BM20 Microsoft Excel & Access			
					CS 97 CTE Internship			
	Credentials	EverFI			Microsoft Word, Powerpoint			
		Adobe ACA Certifications			Microsoft Excel, Access			
Career Readiness Credential (WorkKeys)								
Career Exploration	8th Grade Introduction to Biotechnology in Agriculture Career Counseling			9-12th Grade Pre-ACT--10th grade ACT College Readiness Assessment				
	For More Information See: http://www.nccommunitycolleges.edu/academic-programs/education-catalog cnc.org Local High School Student Services							

Employers Providing Advanced Manufacturing Work-based Learning Opportunity

Entity	Employer 1	Employer 2	Employer 3
Currituck	none currently, plan to begin Internship program 2018-19		
Dare	NC Ferry System, Chris Bock	Kitty Hawk Iron and Steel, Helen Hoppe	Outer Banks Heating and Cooling
Edenton-Chowan	Nucor	Albemarel Boats	
E-City-Pasquotank	Currently in the process of reaching out to local companies to form parternships to offer students work-based learning opplortunities		
Perquimans	Albemarle Electric	Expect marine industry employer(s) in the future	
COA	Hockmeyer Equipment		
NWDB	NWDB: OJT contracts currently in progress at Hoffer Flow Controls & Albemarle Boats		

Exhibit K – NCC WBL

Business/Indus.	Contact Information	Community College	High School	Workforce Development Board	Work-based learning components as defined by the application criteria					
					Aprox. Number of individuals served annually	Job-Shadowing if 15+ hours	Internship (unpaid)	Internship (paid)	Clinicals	Work-study
1. Cummins - Rocky Mount Engine Plant	Ralph Emmerson ralph.w.emmerson@cummins.com	X	X		5-7			X		
2. New Standard Corp.	Caleb Hurlebaus cehurlebaus@newstandard.com	X			4			X		
3. Edwards Inc.	Joel Lee jlee@edwardsinc.com	X			3-4			X		
4. Rocky Mount Electric Motor	Bill Henkel bhenkel@memnc.com		X		1			X		
5. Universal Leaf America	Vanessa Smith smithv01@universalleaf.com		X		1			X		
6. Clayton Homes	Vicky Lassiter		X		1-2			X		



October 5, 2017

Beverly C. Harrison
Instructional Management Coordinator
John A. Holmes High School
P.O. Box 409 / 600 Woodard St.
Edenton, NC 27932

RE: Letter of Intent

Dear Beverly,

It is the desire of Edenton Boatworks, LLC, builder of Albemarle Boats, *The Carolina Classic*, to implement an Internship Program for interested John A. Holmes High School students. After meeting with your team and learning more about the Career Technical Education curriculum, our management team sees great potential in forming a working relationship with the school. We believe that real workplace experience will augment the education of the students in the program and prepare them with many of the skills needed to enter the job market.

Additionally, it is our hope that the internship experience will ignite an interest in boatbuilding among these students, and that they will come to understand that there is huge potential for a career in this field here in Northeastern North Carolina.

Sincerely,

A handwritten signature in blue ink, appearing to read "W. Burch Perry, Jr.", is written over a light blue background.

W. Burch Perry, Jr.
General Manager
Albemarle Boats

140 Midway Drive
Edenton, North Carolina 27932



T | 252.482.7600
F | 252.482.4099

