

NCWorks COMMISSION

August 16, 2017



Workforce Update

NCWorks Partnership Conference October 11-13

Legislative Updates

Updates from around the workforce system

- Every Student Succeeds Act state plan (<u>www.ncpublicschools.org/succeeds</u>)
- Community College System Office developing strategic plan
- UNC System rolling out strategic plan
- DHHS Opioid Action Plan
- Commerce Improving career center services



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- The Commission has been supporting this effort for some time now with the Department of Public Instruction, the NC Chamber of Commerce, Community Colleges, and Local Workforce Development Boards.
- There was focus in our previous Strategic Plan to expand the number of NCWorks Certified Work-Ready Communities
- This initiative requires collaboration between the many workforce partners and local businesses.





NCWorks Certified Work Ready Communities Initiative



Kathy Howard NC East Alliance





The NCEast Alliance is a regional, private, not-forprofit, economic development agency serving more than 1 million residents within several small metropolitan and micropolitan areas from the fringe of the Research Triangle to the Atlantic Coast. The Alliance provides community capacity building and assists companies with site location and expansion decisions.

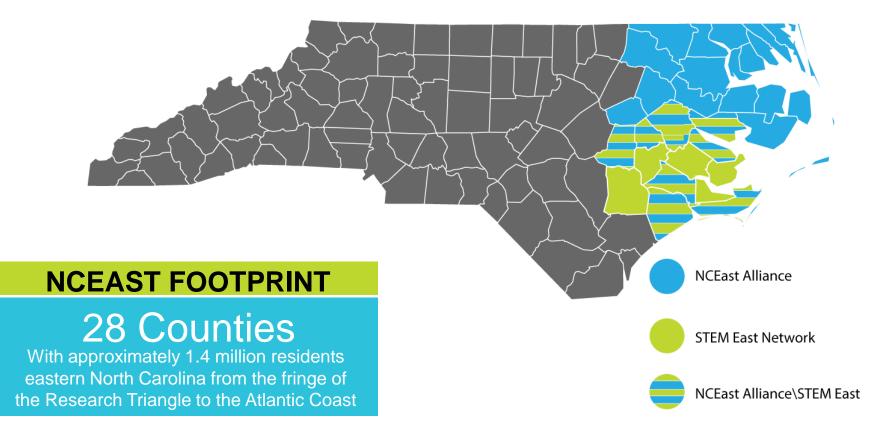




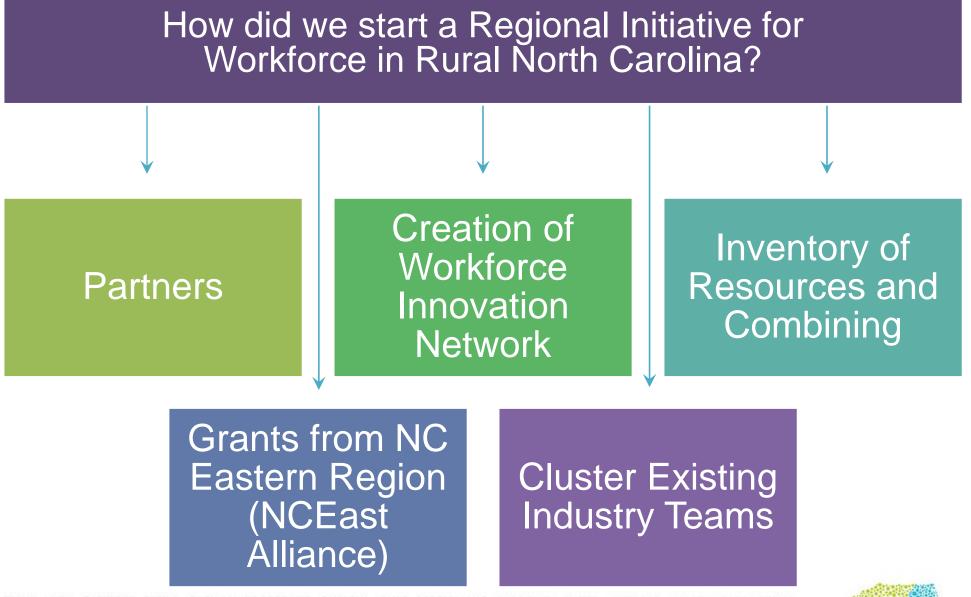
- Identify economic development opportunities having immediate and/or transformational impact.
- ✓ Build regional capacity to support growth and wealth creation.
- \checkmark Identify and address barriers to economic growth.
- ✓ Generate regional strategies through collaboration with multiple partners to develop and implement plans that improve lives & stimulate economic growth.
- Serve as the primary source of economic development data and expertise related to the region.













WorkReady Communities Developed From





- Workforce Development Boards
- North Carolina's Eastern Region
- Few Industries Seeking Assistance
- Some Community Colleges



WorkReady Communities Grew With The Help Of



- Workforce Development Boards
 - Three Year Grant Funding from NCER
 - Increase In Industries Seeking Assistance
- **ASPIRE** Key Community Colleges Leaders
 - Creation Of Team To Support Initiative

WIN & ASPIRE Success



- All Workforce Development boards in NCER
- Vertical and Horizontal Success
- Regional Industries On Board
- All Regional Community Colleges Leaders
- Significant Increase In Career Readiness Certificates







Common Thread

Career Readiness Certification & Economic Development

- Economic Development Documenting workforce quality for relocating and expanding businesses
- **Business and industry** know exactly which foundational skills they need for a productive workforce and to easily communicate their needs. This helps them plan for existing and future workforce needs
- Individuals understand which skills are required by employers and how to prepare themselves for success
- Policy makers consistently measure the skills gap in a timely manner at the national, state and local levels
- Educators close the skills gap, via tools integrated into career pathways with stackable industry-recognized credentials
- Economic developers use an on-demand reporting tool to market the quality of their workforce



Why WorkReady Communities?

- Success of ASPIRE and Win and Eastern NC
- Approached by NC Rural Center = Grant Funding
- Importance to Region, Employers & Job Seekers
- Capacity for Economic Development
- Number one Marketing Tool
- Next step in Workforce Process
- Possible Statewide Initiative





What Is A WorkReady Community?

- Initially regional pilot program
- Formal (Statewide in 2015)
 - -County level
- Building Network
- Culture of WorkReady Standards
- Collaborative effort
 - -Workforce Development
 - -Education
 - -Private Industry
 - Economic Development







Benefits to NCEast Alliance

- Award communities that meet WorkReady criteria
- Expand employer commitment to workforce development through WorkKeys profiling
- Motivate rural county participation
- Evaluate the standards proposed for certification
- Capture the lessons learned at the regional level for potential application across the state



Importance to Employers

- Employers key to generating demand
- CRC Preferred Job Ad
- •Curtiss Wright hires from pool of 400 applicants with CRC
- Training improved
- Turnover decreased
 Productivity increased
 ROI \$11,000/employee



Project Timeline

- Orientation
- Counties gather data
- Counties apply to participate
- Counties form Action Teams and work toward certification
- Counties participate in workshops hosted by NCER

Jan - March 2013

Nov - Dec

2011

Jan – Dec

2012

- Recognition of participating counties
- Assessment of demonstration project



What Makes a WorkReady Community?





NCER WorkReady Goals

- Assist communities with meeting WorkReady criteria
- Award communities that meet WorkReady criteria
- Expand employer commitment to workforce development through WorkKeys profiling
- Motivate rural county participation
- Evaluate the standards proposed for certification
- Capture the lessons learned at the regional level for potential application across the state



Data Collection Process

- Yearlong, iterative process
 >16 criteria streamlined into 4 mandatory, 5 optional
- Began with Advisory Committee in 2009
- Consultations with state and regional leaders
- ACT National Workforce Development Conference
- Example: High school graduation rate



Project Goals

- Letter of commitment from county leaders
- Progress in the HS graduation rate toward 94% goal
- Achieve number of national CRC indicated in common criteria
- Gain commitment from employers to recognize the NCRC



WorkReady Communities of Excellence

- An optional standard that sets the bar high
- Considers broader range of workforce indicators, and allows county to customize goals
- Includes criteria for rate of associate degrees, fouryear degrees, innovative or STEM curriculum, soft skills training, and apprenticeship program



NCEast Alliance

- Marketing: Website, Video, Inside Industry
- Assess and award communities that meet standards
- Expand employer commitment to workforce development
- Evaluate standards proposed for certification
- Capture lessons learned at regional level



How It Became Statewide?

- Lessons Learn Report Resulted in interest on State level
- Committed for Over a Year Before Statewide Launch
- North Carolina East Alliance
- Department of Public Instruction
- ACT
- NC Community College System
- NC Department of Commerce (Workforce Development)
- NC Chamber





Becoming NCWorks Work Ready

- In order to be certified as an NCWorks Work Ready County, a community must meet each of the following criteria:
 - A letter of commitment to workforce excellence from county leaders
 - Progress in the high school graduation rate toward the goal of 94%
 - Achieve the number of National Career Readiness
 Certifications indicated in the Common Criteria
 - -Gain **commitment from employers** to recognize the NCRC



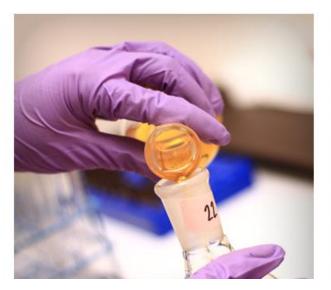




www.ncworkready.org

IE CAREER CREDENTIALS WORKREADY BENEFITS

NORTH CAROLINA'S EASTERN REGION



BETTER JOBS. BETTER WORKERS. BETTER ECONOMY. WORKFORCE READY.

North Carolina's Eastern Region is leading a WorkReady initiative to elevate our region's workforce into our number one competitive advantage. By ensuring our workers have the best skills and training, we can guarantee businesses we have the talent they need to succeed now and in the future.

This ambitious plan, funded by a grant from the NC Rural Center, and in partnership with the Eastern Carolina Workforce Development Board, Corporation for Enterprise Development (CFED), and the North Carolina Community College System, will improve the skills and marketability of our workforce and ultimately bring growth to our communities. This plan is based on This project will assess and award communities that meet Work Ready thresholds, evaluate the standards proposed for certification, motivate rural county participation, introduce the Work Ready Initiative to employers and capture the lessons learned at the regional level for potential application across the state.

GETTING STARTED



NCE ast Alliance

Kathy Howard August 2017





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Governance and System Alignment - Susan Jackson

Business Engagement – Marti Matthews

Education and Training – Chris Watters

Performance and Accountability – Mel Chernoff



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Jay Carraway Vice President of Continuing Education Lenoir Community College



Lenoir Community College





Closing the Skills Gap

Pathway to Employment A Partnership with Industry



Lenoir Community College will

- recruit academy candidates
- provide drug screening
- provide Human Resources Development classes to enhance "Soft Skills"
- enroll students in the Career Readiness Certification program (Silver Certification is required to move forward)
- award a scholarship to student to enroll in the Certified Production Technician Program (CPT)

Objectives

- to provide ready-to-work employees
- to reduce employee turnover

- to eliminate hiring and hoping
- to develop a pool of qualified applicants

Our Mission

To provide industry partners with a pipeline of potential employees who are ready for work and possess the necessary soft skills and technical skills to be successful.

Manufacturing Skill Standards Council (MSSC) Certification



Certificate Production Technician Program

- Module One Safety
- Module Two Quality Practices and Measurements
- Module Three Manufacturing Processes and Production
- Module Four Maintenance Awareness



Safety Module

Production Teams

- Product Development
- Team Development
- Idea Generation
- Decision Making
- Customer Service

Training & Leadership

- Training
- Production Group Communication
- Production Team Roles
- Team Member Skills

Safety Organization

- Safety Responsibilities
- Safety Inspections
- Job Safety Analysis
- Emergency Preparedness
- Workplace Behavior

Personal Protective Equipment

- Eye/Face Protection
- Hearing Protection
- Hand and Foot Protection
- Head and Body Protection
- Respiratory Protection

Work Area Safety

- Ergonomics
- · Platforms and Man Lifts

Fire and Electrical Safety

- Fire Safety
- Electrical Safety
- First Aid Procedures
- Accident Procedures
- Work Area Safety
- Housekeeping

Hazardous Material Safety

- Hazardous Materials
- Labeling
- Material Safety Data Sheet
- Handling and Storage
- Waste Management
- Lubricant Management

Tool and Machine Safety

- Machine Safety
- Lockout/Tagout
- Tool Safety
- Ladder Safety

Material Handling Safety

- Equipment Movement Introduction
- Rigging
- Cranes
- Powered Industrial Trucks



Multi-view Drawings

- Introduction to Blue Print Reading
- Multiview Drawings
- Introduction to Basic
 Dimensioning

Sectional Drawings and Fasteners

- Advanced Dimensioning
- Sectional Drawings
- Fasteners
- Assembly Drawings

Geometric Dimensioning and Tolerancing

- General Tolerancing
- Assembly Tolerances
- Fundamentals of GD&T
- Feature Control Frames

Basic Measurement

- S.I. Measurement
- U.S. Customary Measurement
- Tape Measure
- Measurement Conversion

Precision Measurement Tools

- Dial Caliper
- Digital Caliper
- English Micrometer
- Metric Micrometer

Dimensional Gauging

- Introduction to Gauging
- Indicator Measurement
- Data Collection

Quality Systems

- Quality Systems
- Continuous Improvement
- Inspection
- Audits

Statistical Process Control

- Basic Statistical Concepts
- Histogram Construction
- Histogram Analysis

Control Charts

- Introduction to Control Charts
- X-bar and R Chart Operation
- Control Chart Setup
- Control Chart Analysis

Continuous Improvement 1

- Introduction to Quality Tools
- Brainstorming
- Pareto Diagram
- Preventive and Corrective Action





Manufacturing Processes & Production Module

Mechanical Principles

- · Mechanisms Concepts
- Force Measurement
- Torque and Moments
- Levers and Mechanical Advantage

Mechanical Linkages

- Friction
- Inclined Planes
- Linkages
- Cams
- Turnbuckles

Machining Processes

- Introduction to Manufacturing Processes
- · Selecting a Stock
- The Parts of the Band Saw
- Band Saw Safety

Machine Tooling

- Basic Layout
- Drill Press Safety
- Drill Press Tooling
- Drilling Holes

Machine Operations

- Reaming
- Countersinking
- Counter boring
- Tapping and Chamfering

Equipment Procedures

- Machine Setup and Operation
- Machine Malfunctions
- Machine Troubleshooting

Production Planning and Workflow

- Production Planning
- Production Documents
- Cost Estimating
- Productivity

Production Control

- Scheduling
- Inventory Management
- Production Effectiveness
- Packaging and Shipping



Basic Electrical Circuits

- Fundamentals of Electricity
- Electrical Circuit Components
- Manual Input Devices
- Output Devices

Electrical Measurement

- Voltage Measurement
- Introduction to Series and Parallel Circuits
- Current Measurement
- Resistance Measurement

Electrical Power

- · Ohm's Law
- Power in Series Circuits
- Circuit Protection Devices
- AC Motor Connections
- Motor Circuit Components

Pneumatic Power Systems

- Introduction to Pneumatics
- Pneumatic Power
- Circuit Connections
- Basic Cylinder Circuits

Hydraulic Power Systems

- Introduction to Hydraulics
- Basic Cylinder Circuits
- Basic Motor Circuits
- Filtration

Lubrication Concepts

- Total Productive Maintenance
- · Lubrication Concepts
- Oils
- Greases

Bearings and Couplings

- Mechanical Power Transmission Safety
- Introduction to Bearings
- Introduction to Couplings
- Gear Drives

Belt Drives

- · Belt Drive Concepts
- V-Belt Operation
- Belt Tensioning
- Belt Tension Measurement

Chain Drives

- Chain Drive Concepts
- Chain Drive Operation
- Chain Tensioning
- Chain Tension Measurement
- Fixed Center Chain Installation

Machine Control Concepts

- Logic Elements (AND, OR)
- Logic Elements (NOT, NOR, NAND)
- Ladder Diagrams
- Electro-Pneumatic Solenoid Valves

Machine Automation

- Relay Operation
- · Relay Applications
- Limit Switch Operation
- Time-Delay Relays

Welding

- Basic Welding
- Welding Safety





Questions/Comments



Customized Training Partnership Panel Discussion

Jay Carraway

Lenoir Community College Vice President Continuing Education

Lynn Creech

Regional Customized Training Director

Reid Taylor Lenoir Community College Director of Industry Training

Harold Thomas

DuPont Kinston Plant Manager, Retired

Rick Davis

Executive Director of Economic Development, Greene County

NCWorks Certified Career Pathways

1. Advanced Manufacturing Capital Area and Durham

2. Health & Life Sciences Kerr-Tar and Capital Area

3. Information Technology Durham and Kerr-Tar

NCWorks Certified Career Pathways

4. Aviation Guilford County - TriadWorks

5. Advanced Manufacturing Regional Partnership - TriadWorks

6. Healthcare/Nursing Mountain Area



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