

EAST CAROLINA UNIVERSITY[®]
**PURPLE & GOLD
BUS
TOUR**[™]

An outline map of the state of North Carolina is positioned to the right of the text, partially overlapping the word 'TOUR'.

BUS TOUR FUNDING & SUPPORT

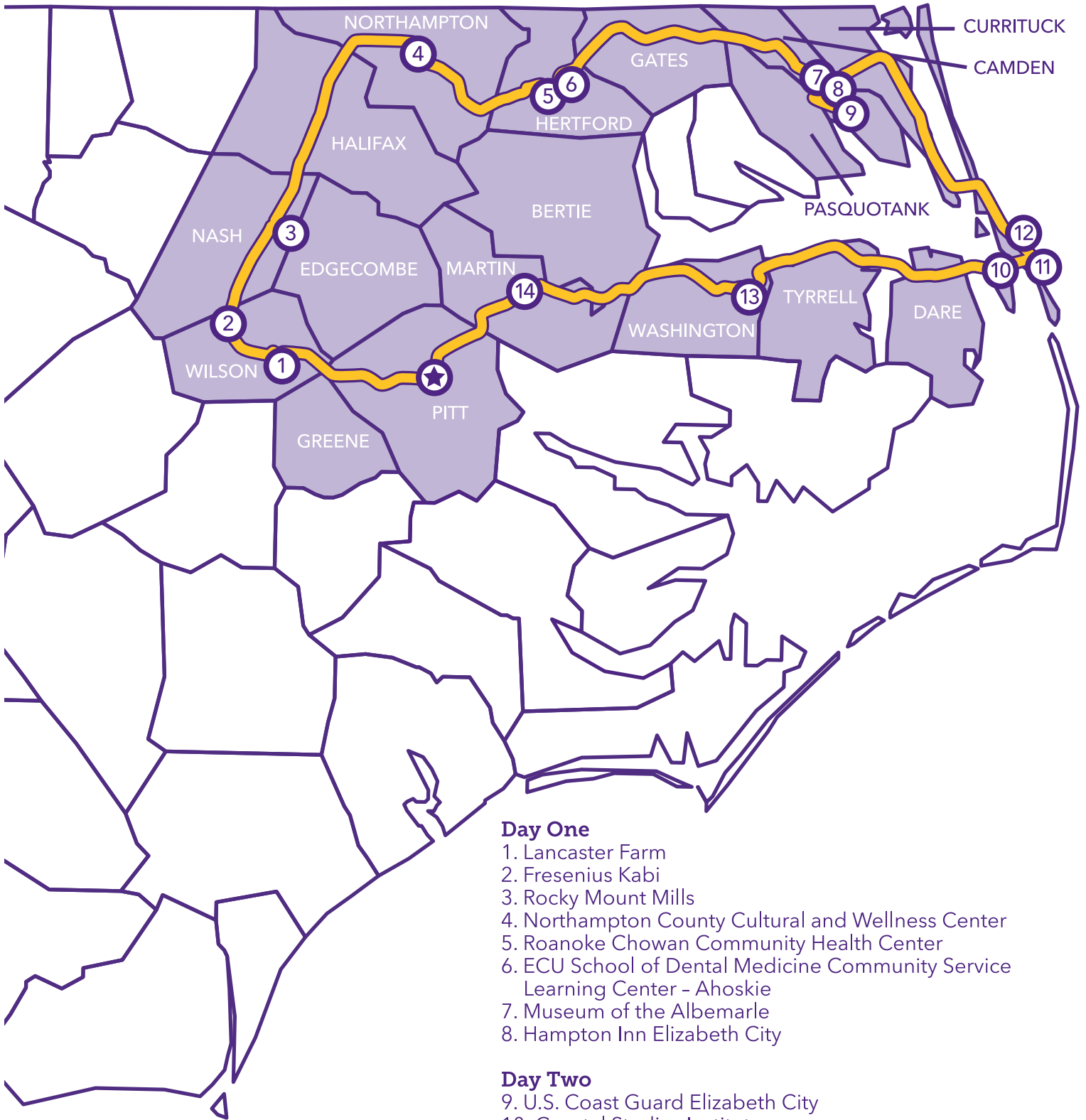


The 2023 Purple and Gold Bus Tour is partially funded by a grant from the United States Health Resources & Services Administration's (HRSA) Advanced Nursing Education Workforce program, Pamela Reis, Principal Investigator.

The purpose of this project, "Advanced Practice Registered Nurse (APRN) Academic-Clinical Practice Collaborative," (HRSA grant number T94HP32898) is to significantly strengthen the availability and capacity of the APRN primary care workforce in rural and underserved communities in eastern North Carolina.

Learn more about the program online at <https://nursing.ecu.edu/ruralscholars/>.

2023 PURPLE AND GOLD BUS TOUR STOPS



Day One

1. Lancaster Farm
2. Fresenius Kabi
3. Rocky Mount Mills
4. Northampton County Cultural and Wellness Center
5. Roanoke Chowan Community Health Center
6. ECU School of Dental Medicine Community Service Learning Center - Ahoskie
7. Museum of the Albemarle
8. Hampton Inn Elizabeth City

Day Two

9. U.S. Coast Guard Elizabeth City
10. Coastal Studies Institute
11. Jennette's Pier
12. Holiday Inn Express Nags Head

Day Three

13. Pettigrew State Park
14. Williamston Innovation Campus

TIMELINE DAY ONE

SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
<p>DEPART ECU</p>	<p>7:30 AM</p>	<p>REDE LEADERSHIP</p>	<p>ACTIVITY: Welcome remarks</p> <p>GOAL: Overview of tour</p>
<p>LANCASTER FARMS Wilson, Wilson County</p>	<p>45-Minute Drive ARRIVAL: 8:15 AM DEPARTURE: 9:30 AM</p>	<p>ROBERTA BELLAMY Agricultural behavioral health specialist, NC Agromedicine Institute</p> <p>SARAH CARRAWAY Office Manager, Lancaster Farms</p> <p>SPENCER HILL Packing House Manager, Lancaster Farms</p> <p>ROBIN TUTOR MARCOM Director, NC Agromedicine Institute</p>	<p>ACTIVITY: Tour</p> <p>GOAL: Understanding of agriculture in eastern NC, farmworker health, the need for migrant workers and their impact on agriculture in our area</p>
<p>WILSON COUNTY Windshield tour</p>	<p>20-Minute Drive 9:30-9:50 AM</p>		<p>ACTIVITY: Network on bus</p>
<p>FRESENIUS KABI Wilson, Wilson County</p>	<p>ARRIVAL: 9:50 AM DEPARTURE: 11:30 AM</p>	<p>JEAN ALLAUME Plant Manager, Fresenius Kabi</p> <p>JOHNNY WESTLUND Senior Director, Operations, Fresenius Kabi</p> <p>WILLIE HILL Senior Manager, Manufacturing, Fresenius Kabi</p> <p>LYNNE SPENCER Senior Manager, Manufacturing, Fresenius Kabi</p>	<p>ACTIVITY: Tour</p> <p>GOAL: Understanding of healthcare industry and technology used in pharma</p>

SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
WILSON AND NASH COUNTIES Windshield tour	30-Minute Drive 11:30-12:00 PM		ACTIVITY: Network on bus
ROCKY MOUNT MILLS Rocky Mount, Nash County	ARRIVAL: 12:00 PM DEPARTURE: 1:30 PM	SCOTT ROBERTS General Manager, Rocky Mount Mills NORRIS TOLSON CEO and President, Carolina's Gateway Partnership	ACTIVITY: Lunch and Tour GOAL: Understanding of economic development in the area, repurposing of historical sites, and workforce education
NASH, HALIFAX AND NORTHAMPTON COUNTIES Windshield tour	60-Minute Drive 1:30 -2:30 PM		ACTIVITY: Network on bus
CHOANOKE AREA DEVELOPMENT ASSOCIATION Jackson, Northampton County	ARRIVAL: 2:30 PM DEPARTURE: 3:30 PM	DIANE BYNUM Head Start Director, CADA BRENDA GREENE Manager, Home Ownership Program, CADA CATHERINE MOODY Board Chair, CADA CHRISTOPHER MOODY Executive Director, CADA OLIVIA TAYLOR Workforce Development Coordinator, CADA PAMELA TAYLOR Manager, Community Services, CADA ROY WORRELLS Weatherization Manager, CADA SHARN WORTHINGTON Information Management Specialist, CADA	ACTIVITY: Tour GOAL: Understanding of struggles facing rural eastern NC, housing struggles and the rural housing opportunity grant

SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
<p>NORTHAMPTON AND HERTFORD COUNTIES Windshield tour</p>	<p>45-Minute Drive 3:30 - 4:15 PM</p>		<p>ACTIVITY: Network on bus</p>
<p>ROANOKE CHOWAN COMMUNITY HEALTH CENTER Ahoskie, Hertford County</p> <p>.....</p> <p>ECU SCHOOL OF DENTAL MEDICINE COMMUNITY SERVICE LEARNING CENTER Ahoskie, Hertford County</p>	<p>ARRIVAL: 4:15 PM DEPARTURE: 5:15 PM</p>	<p>JENNIFER COBB Revenue Administrator, RCCHC</p> <p>CHAQUELLA DAUGHTRY Behavioral Health Director, RCCHC</p> <p>ASHLEY DAVIS Quality and Risk Management, RCCHC</p> <p>BRITTANY PIERCE Director of Nursing, RCCHC</p> <p>JIM POWERS Chief Human Resource Officer, RCCHC</p> <p>NICOLE BEASLEY Assistant Director, ECU CSLC</p> <p>TONI BENNETT Busines Manager, ECU CSLC</p> <p>FORD GRANT Director of General Dentistry, ECU CSLC</p> <p>ROB TEMPEL Associate Dean for Extramural Practices, ECU CSLC</p>	<p>ACTIVITY: Tour</p> <p>GOAL: Understanding health disparities in rural communities, Federally Qualified Health Centers, and the CSLC educational model and service to community</p>
<p>HERTFORD, GATES AND PASQUOTANK COUNTIES Windshield tour</p>	<p>70-Minute Drive 5:15 - 6:25 PM</p>		<p>ACTIVITY: Network on bus</p>

SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
MUSEUM OF THE ALBEMARLE Elizabeth City, Pasquotank County	ARRIVAL: 6:25 PM DEPARTURE: 8:50 PM	WANDA LASSITER Curator, Museum of the Albemarle WAYNE MATHEWS Facilities Manager, Museum of the Albemarle LORI MEADS Education Curator, Museum of the Albemarle DON PENDERGRAFT Executive Director, Museum of the Albemarle BARBARA PUTNAM Operations Manager, Museum of the Albemarle	ACTIVITY: Tour and dinner GOAL: Learn more about history of the region, enjoy museum exhibits and network with local community partners

PASQUOTANK COUNTY Windshield tour	10-Minute Drive 8:50 - 9:00 PM		ACTIVITY: Network on bus
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HAMPTON INN Elizabeth City, Pasquotank County	ARRIVAL: 9:00 PM		ACTIVITY: Overnight stay
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TIMELINE DAY TWO

HAMPTON INN Elizabeth City, Pasquotank County	6:30 - 7:45 AM		ACTIVITY: Breakfast
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PASQUOTANK COUNTY Windshield tour	10-Minute Drive 7:45 - 7:55 AM		ACTIVITY: Network on bus
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SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
<p>US COAST GUARD Elizabeth City, Pasquotank County</p>	<p>ARRIVAL: 7:55 AM</p> <p>DEPARTURE: 10:45 AM</p>	<p>DAVID BURGESS Chief, Contracting Office, Aviation Logistics Center</p> <p>JOSH STODDARD Acting Executive Director, Aviation Logistics Center</p> <p>TAD WILSON Commanding Officer, Aviation Logistics Center</p>	<p>ACTIVITY: Tour</p> <p>GOAL: Understanding of military impact on coastal and eastern N.C.</p>
<p>PASQUOTANK AND DARE COUNTIES Windshield tour</p>	<p>90 Min Drive</p> <p>10:45 AM - 12:15 PM</p>		<p>ACTIVITY: Network on bus</p>
<p>ECU OUTER-BANKS CAMPUS Wanchese, Dare County</p>	<p>ARRIVAL: 12:15 PM</p> <p>DEPARTURE: 4:00 PM</p>	<p>REIDE CORBETT Dean, ECU Integrated Coastal Programs</p> <p>JOHN MCCORD Assistant Director of Engagement and Outreach, Coastal Studies Institute</p>	<p>ACTIVITY: Lunch, tour, research discussion</p> <p>GOAL: Understanding North Carolina's coast, natural resources, Outer Banks Campus resources, and opportunities for research and partnerships</p>
<p>DARE COUNTY Windshield tour</p>	<p>10-Minute Drive</p> <p>4:00 - 4:10 PM</p>		<p>ACTIVITY: Network on bus</p>
<p>JENNETTE'S PIER Nags Head, Dare County</p>	<p>ARRIVAL: 4:10 PM</p> <p>DEPARTURE: 8:00 PM</p>	<p>GEORGE BONNER Director, North Carolina Renewable Ocean Energy Program</p> <p>GRACE ANDREWS Vice President, Scientific Research, Vesta</p>	<p>ACTIVITY: Explore on your own and STEM @ Starlight Event</p> <p>GOAL: Networking and understanding of renewable and responsible energy and effects of climate change</p>

SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
DARE COUNTY Windshield tour	10 Min Drive 8:00 - 8:10 PM		ACTIVITY: Network on bus

HOLIDAY INN EXPRESS Nags Head, Dare County	ARRIVAL: 8:10 PM		ACTIVITY: Overnight Stay
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TIMELINE DAY THREE

HOLIDAY INN EXPRESS Nags Head, Dare County	6:30 - 7:50 AM		ACTIVITY: Breakfast
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DARE, TYR-RELL, AND WASHINGTON COUNTIES Windshield Tour	70-Minute Drive 7:50 - 9:00 AM		ACTIVITY: Network on bus, video on Lost Colony archaeological findings
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PETTIGREW STATE PARK Creswell, Washington County	ARRIVAL: 9:00 AM DEPARTURE: 10:15 AM	JIM TROSTLE Superintendent Pettigrew State Park	ACTIVITY: Tour GOAL: Understanding of indigenous cul- ture in the area and archaeological findings and research in the area
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WASHINGTON AND MARTIN COUNTIES Windshield Tour	60 Minute Drive 10:15 - 11:15 AM		ACTIVITY: Network on bus
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SITE	TIME	PRESENTER	ACTIVITY & OUTCOME
<p>INNOVATION CAMPUS Williamston, Martin County</p>	<p>ARRIVAL: 11:15 AM</p> <p>DEPARTURE: 1:15 PM</p>	<p>SHANNON CECIL Director of K-12 Curriculum & Instruction & Federal Programs, Martin County Schools</p> <p>KRISTY CHRISTENBERRY Curriculum Instructional Management Coordinator, Martin County Schools</p> <p>VERNETTA GRIFFIN Business/Technology Teacher, Innovation Campus</p> <p>JAMES GUARD Director, Innovation Campus</p> <p>TABITHA MILLER Vice President, Academic Affairs, Martin Community College</p> <p>WILL PRETTYMAN Teacher, Innovation Campus</p> <p>REBECCA REVELS Health Science Teacher, Innovation Campus</p> <p>COLBY RIGGINS Academically or Intellectually Gifted Coordinator, Martin County Schools</p> <p>HEATHER SMITH Teacher, Innovation Campus</p> <p>SHAWN SMITH Career Coach, Martin Community College</p> <p>VINYA WARD Health Science Teacher, Innovation Campus</p> <p>JASON WYNNE BTSP Coordinator, Innovation Campus</p>	<p>ACTIVITY: Tour and lunch</p> <p>GOAL: Understanding innovative educa- tion and pathways to workforce through education</p>

ADDRESSES & CONTACTS

TOUR STOPS

LANCASTER FARMS

5517 N. Carolina HWY 58

Wilson, NC 27893

Telephone: 919-396-5617

Lancaster Farms is a family farm in Wilson, North Carolina that has been in operation for over 200 years. Earlier generations of the family oversaw the production of tobacco, cotton, and grains on family farms. The present-day farm produces sweet potatoes, watermelon, and peanut crops in Wilson. The farm relies on an experienced labor force that includes family, neighbors, and friends with some year-round workers and others returning year after year as government-sanctioned employees. Lancaster Farms provides food to consumers all around the world and is recognized for sustainable farming practices.

FRESENIUS KABI

5200 Corporate Pkwy

Wilson, NC 27983

Telephone: 252-281-9200

Fresenius Kabi is a global healthcare company specializing in lifesaving medicines and technologies for infusion, transfusion, and clinical nutrition. The products and services are used for the therapy and care of critically and chronically ill patients. The primary focus is directed toward meeting the needs of patients and healthcare professionals while remaining responsible to fulfill ethical and legal duties.

The plant in Wilson was acquired in 2016 from Becton Dickinson and is the Fresenius Kabi US excellence center for prefilled syringes. This site is focused on the production and distribution of complex and critical drugs in ready-to-administer delivery systems and diluents, for Fresenius Kabi and contract manufacturing partners.

ROCKY MOUNT MILLS

1151 Falls Road

Rocky Mount, NC 27804

Telephone: 252-969-0909

Rocky Mount Mills was the second cotton mill constructed in North Carolina in 1818 along the Tar River. It was closed in 1996 after the textile industry started to decline, but it boasted the title of the oldest Southern textile company. In 2014 Capitol Broadcasting Company began the process of redevelopment of the mills hoping to bring some life back into this historic area.

Rocky Mount Mills is now a development of historic proportions, bringing together residential, commercial, cultural and entertainment amenities in one unique destination. The 82-acre campus of this restored cotton mill showcases a bold approach to historic preservation that honors the past while also breathing new life into this storied place. The Mills offers beautifully restored historic spaces for offices and meetings, riverside setting for exploring, breweries, restaurants, tiny homes for vacationing and relaxing, and living spaces in the old mill.

CAROLINAS GATEWAY PARTNERSHIP AT ROCKY MOUNT MILLS

386 SW Main Street

Rocky Mount, NC 27804

Telephone: 252-442-0114

The Carolinas Gateway Partnership (CGP) is a public/private nonprofit formed in 1996 to promote growth and prosperity in Nash and Edgecombe Counties by aggressive recruiting of new businesses and expansion of existing businesses in order to create increased tax base and new jobs. The Partnership is governed by a board of 39 members and funded by the local municipalities (City of Rocky Mount, Town of Tarboro, and Edgecombe County), local philanthropic foundations, and private investors. Through philanthropic foundations and private investors' contributions, CGP is able to augment client development and recruiting activities. The CGP coordinates all regional recruiting, client development, and marketing in concert with a host of educational, State, and local civic group partners. Since its inception, the Carolinas Gateway Partnership has helped foster growth of over \$3 billion in investments and approximately 30,000 new jobs for the region.

CHOANOKE AREA DEVELOPMENT ASSOCIATION AT NORTHAMPTON COUNTY CULTURAL AND WELLNESS CENTER LOCATION

**120 Sessoms Drive
Rich Square, N.C. 27869
Telephone: 252-539-4155**

Choanoke Area Development Association (CADA) is a nonprofit organization that serves five of the northeastern North Carolina counties since 1962. CADA is dedicated to assisting families to become self-sufficient by assisting underserved citizens to achieve a better quality of life through education, training, and economic development. Recently CADA has taken lead on a Rural Opportunity Housing Grant partnership with ECU to address the housing needs in the area it serves.

ECU SCHOOL OF DENTAL MEDICINE COMMUNITY SERVICE LEARNING CENTER – AHOSKIE

**100 Health Center Drive
Ahoskie, N.C. 27910
Telephone: 252-332-1904**

The ECU School of Dental Medicine Community Service Learning Center in Ahoskie is one of eight community centers in rural North Carolina committed to providing dental services to disadvantaged communities. The center's mission is to improve the health and quality of life of all North Carolinians by creating leaders with a passion to care for the underserved and by leading the nation in community-based practice, service-learning and health education. The Ahoskie center offers comprehensive general dental services in a safe, caring and professional setting to all patients.

ROANOKE CHOWAN COMMUNITY HEALTH CENTER

**120 Health Center Drive
Ahoskie, N.C. 27910
Telephone: 252-332-3548**

Roanoke Chowan Community Health Center (RCCHC) in Ahoskie is one of four locations serving the Roanoke-Chowan community. The mission of the RCCHC is to provide comprehensive health care that reduces health disparities for the people of the Roanoke-Chowan area. It is one of 30 Federally Qualified Health Centers (FQHCs) in North Carolina. RCCHC offers complete preventative and primary health care for the entire family. It serves patients in Ahoskie, Colerain, Creswell and Murfreesboro, and administers a student wellness center at Hertford County Middle School.

MUSEUM OF THE ALBEMARLE

**501 South Water Street
Elizabeth City, N.C. 27909
Telephone: 252-335-1453**

Museum of the Albemarle in Elizabeth City was established in 1967 in a former NC Highway Patrol station, and has since moved into a four-story building downtown on the waterfront. The museum serves and promotes understanding of history and culture of the Albemarle which consists of the 13 counties spanning northeastern North Carolina. The museum houses three permanent exhibits and multiple changing exhibits throughout the year. In recent years the museum has spread outside of its facility and now houses several online exhibits, giving them the opportunity to reach more rural areas and educate beyond the brick and mortar building.

UNITED STATES COAST GUARD AIR STATION: AVIATION LOGISTICS CENTER

**Weeksville Road, Bldg 47
Elizabeth City, N.C. 27909
Telephone: 252-335-6360**

U.S. Coast Guard Air Station - Elizabeth City's Aviation Logistics Center (ALC) provides centralized logistics support for Coast Guard aviation missions. The center provides repair maintenance, engineering, supply, procurement and information services for the branch. The nation-wide ALC network supports 26 Coast Guard aviation units that operate 200 aircraft across the country and Puerto Rico. The center's staff is made up of military, civilian, and contractor employees.

ECU OUTER BANKS CAMPUS

**850 N.C. Highway 345
Wanchese, N.C. 27981
Telephone: 252-475-5400**

ECU's Outer Banks Campus is located along the second largest estuary in the United States, an iconic barrier island chain and an energetic and productive coastal ocean. The coastal campus spans 213 acres of marshes, scrub wetlands, forested wetlands and estuarine ecosystems. The campus is home to ECU's Integrated Coastal Programs academic unit and the multi-institutional Coastal Studies Institute. Led by ECU, in partnership with NC State and UNC-Chapel Hill, the institute focuses on research and education programming that responds to the needs, issues and topics of concern to eastern North Carolina residents.

JENNETTE'S PIER

7223 South Virginia Dare Trail

Nags Head, N.C. 27959

Telephone: 252-255-1501

Jennette's Pier first opened in 1939, forever changing the fishing at the Outer Banks. Over the course of 60 years it weathered nor'easters and hurricanes needing several repairs and reconstructions from time to time. In 2003, the pier was sold to North Carolina Aquarium Society to be developed into an education outpost, but later that year Hurricane Isabel knocked over 540 feet of the pier down. In 2011, the new 1,000 foot concrete pier was christened and became the fourth facility in the North Carolina Aquariums division of the N.C. Department of Environment and Natural Resources. Today anglers of all ages can enjoy some of the best fishing on the East Coast at Jennette's Pier. The pier is home to several summer camps, field trips, and outreach programs. If you are looking for a place for a special event, Jennette's Pier can accommodate 175 guests with some of the most breathtaking backdrops for your event. Jennette's Pier also offers educational programs, virtual learning science-based exhibits, several large aquariums, public bathhouses, free parking, and a gift shop.

PETTIGREW STATE PARK

2252 Lake Shore Road

Creswell, NC 27928

Telephone: 252-797-4475

Located in Washington and Tyrrell counties 75 miles northeast of Greenville, Pettigrew State Park showcases the rich habitat of Lake Phelps and the Scuppernong River. Home to wintering tundra swans and cypress trees with cavernous archways, it also embodies a rich history, from dugout canoes thousands of years old that have been dredged up from the lake, as well as the nearby Somerset Place, a State Historic Site and plantation that was worked by hundreds of enslaved Black Americans.

INNOVATION CAMPUS

411 East Boulevard

Williamston, NC 27892

Telephone: 252-792-8812

Opened in 2022, the 60,000 square foot Innovation Campus in Williamston is a shared Career and Technical Education Center for Riverside and South Creek high schools while also allowing other schools in the district use of the center to incorporate STEM into learning for all ages. The curriculum includes health sciences, business/entrepreneurship, computer technology/ drone technology and advanced manufacturing. The Innovation Campus gives students an opportunity to earn certifications and participate in real-world courses and experiences that offer career paths for their future

LODGING & DINING

HAMPTON INN ELIZABETH CITY

402 Halstead Blvd

Elizabeth City, NC 27909

Telephone: 252-333-1800

Hampton Inn Elizabeth City is located five minutes from downtown Elizabeth City, Elizabeth City State University and the city's waterfront and just a short 10-minute drive from the U.S. Coast Guard Base. The hotel features free fitness center, EV charging stations, free WiFi, and free hot breakfast for guests.

HOLIDAY INN EXPRESS NAGS HEAD OCEANFRONT

4701 SOUTH VIRGINIA TRAIL

NAGS HEAD, N.C. 27959

Telephone: 252-441-0454

Holiday Inn Express, Nags Head Oceanfront is the only Outer Banks hotel that features over four acres of oceanfront and is located in a quiet residential area. The hotel is located minutes from top attractions such as Jennette's Pier, Jockey's Ridge State Park, Bodie Island Lighthouse, and the Wright Brothers National Memorial. The hotel features an indoor pool, business center, 24 hour fitness center, free Wi-Fi and free hot and cold breakfast bar.

BUS TOUR PARTICIPANTS

FACULTY & STUDENT PARTICIPANTS

Kent Alipour

Management
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Jesse Baccus

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College of Nursing

Roberta Bellamy

Agricultural Behavioral Health
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Plant Manager, Fresenius Kabi
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Grace Andrews

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Ahoskie
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George Bonner

Director, North Carolina Renewable Ocean Energy Program
Dare County

David Burgess

Chief, Contracting Office, U.S. Coast Guard Aviation
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Shannon Cecil

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Revenue Administrator, Roanoke Chowan Community
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Hertford County

BUS TOUR PARTICIPANTS

BUS TOUR SPEAKERS

Reide Corbett

Dean, ECU Integrated Coastal Programs
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Kristy Christenberry

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Chaquella Daughtry

Behavioral Health, Roanoke Chowan Community Health Center
Hertford County

Ashley Davis

Quality and Risk Management, Roanoke Chowan Community
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Ford Grant

Director of General, ECU Community Service Learning Center -
Ahoskie
Hertford County

Brenda Greene

Manager, Home Ownership Program, Choanoke Area
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Northampton County

Vernetta Griffin

Business/Technology Teacher, Innovation Campus
Martin County

James Guard

Director, Innovation Campus
Martin County

Spencer Hill

Packing House Manager, Lancaster Farms
Wilson County

Willie Hill

Senior Manager, Manufacturing, Fresenius Kabi
Wilson County

Wanda Lassiter

Curator, Museum of the Albemarle
Pasquotank County

Wayne Mathews

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Pasquotank County

John McCord

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Studies Institute
Dare County

Lori Meads

Education Curator, Museum of the Albemarle
Pasquotank County

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Catherine Moody

Board Chair, Choanoke Area Development Association
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Christopher Moody

Executive Director, Choanoke Area Development Association
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Don Pendergraft

Executive Director, Museum of the Albemarle
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Center
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Chief Human Resource Officer, Roanoke Chowan Community
Health Center
Hertford County

Will Prettyman

Teacher, Innovation Campus
Martin County

Barbara Putnam

Operations Manager, Museum of the Albemarle
Pasquotank County

Rebecca Revels

Health Science Teacher, Innovation Campus
Martin County

Colby Riggins

Academically or Intellectually Gifted Coordinator, Martin County
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Martin County

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BUS TOUR SPEAKERS

Scott Roberts

General Manager, Rocky Mount Mills
Nash County

Heather Smith

Teacher, Innovation Campus
Martin County

Shawn Smith

Career Coach, Martin Community College
Martin County

Lynne Spencer

Senior Manager, Manufacturing, Fresenius Kabi
Wilson County

Josh Stoddard

Acting Executive Director, US Coast Guard Aviation Logistics
Center
Pasquotank County

Olivia Taylor

Workforce Development, Choanoke Area Development
Association
Northampton County

Pamela Taylor

Manager, Community Services, Choanoke Area Development
Association
Northampton County

Rob Tempel

Associate Dean for Extramural Practices, ECU Community
Service Learning Center - Ahoskie
Hertford County

Norris Tolson

CEO and President, Carolina's Gateway Partnership
Nash County

Jim Trostle

Superintendent, Pettigrew State Park
Washington County

Robin Tutor

Director, NC Agromedicine Institute
Wilson County

Vinya Ward

Health Science Teacher, HOSA Advisor, Innovation Campus
Martin County

Johnny Westlund

Senior Director, Operations, Fresenius Kabi
Wilson County

Tad Wilson

Commanding Officer, US Coast Guard Aviation Logistics Center
Pasquotank County

Roy Worrells

Weatherization Manager, Choanoke Area Development
Association
Northampton County

Sharn Worthington

Information Management Specialist, Choanoke Area
Development Association
Northampton County

Jason Wynne

BTSP Coordinator and Beginning Teacher Trainer, Martin County
Schools
Martin County

BUS TOUR PARTICIPANTS



Kent Alipour | alipourk19@ecu.edu

Management
College of Business

Kent Alipour earned his doctorate in industrial-organizational psychology, with a specialization in organizational behavior and organizational research methods from Penn State University. He currently teaches negotiation and leadership courses at both the undergraduate and graduate level. Additionally, his research focuses on two main areas: leadership and teams. Within these areas, he is interested in adopting a multilevel lens, with specific attention toward the environment or situation in which individuals and teams' function. Dr. Alipour has worked extensively in industry as an external consultant and is passionate about actively utilizing research to solve organizations' real-world problems.



Jesse Baccus | baccusj21@students.ecu.edu

Nursing Student, DNP
College of Nursing

Jesse Baccus is a student in the Family Nurse Practitioner program at East Carolina University due to graduate Spring 2024. Baccus earned Bachelor of Science in psychology with a minor in Spanish from UNC-Chapel Hill, associate degree nursing from the College of the Albemarle, and Bachelor of Science in nursing from Western Carolina. Her experience includes working at Sentara Albemarle Medical Center medical/surgical unit, Chesapeake Regional Medical Center medical/surgical oncology unit, and primary care experience at Roanoke Chowan Community Health Center. Baccus is passionate about working with the Seasonal Agricultural Outreach program at Roanoke Chowan Community Health Center and providing care for patients in our rural area.



Ann Bell | bellan16@ecu.edu

Advanced Nursing Practice and Education
College of Nursing

Ann Bell joined East Carolina University's College of Nursing in 2016 as a clinical assistant professor in the DNP concentration. She earned her Doctor of Nursing Practice (DNP) from Gardner-Webb University. Her DNP project focused on utilizing motivation interviewing to increase condom use self-efficacy. Bell's research interest are public health, rural and minority health, and agri medicine. She serves as a faculty collaborator for the HRSA Advanced Practice Registered Nurse Academic-Clinical Practice Collaborative, HRSA Advanced Nursing Education Workforce, ANEW grant.

BUS TOUR PARTICIPANTS



Roberta Bellamy | bellamy22@ecu.edu

Agricultural Behavioral Health
The North Carolina Agromedicine Institute

Roberta Bellamy earned her doctorate in medical family therapy from East Carolina University and is a North Carolina licensed marriage and family therapist. Bellamy currently works by contract for the NC Agromedicine Institute, and other agricultural entities, as a consultant and agricultural behavioral health specialist. Her research interests include community-based research with grassroots organizations that consist of and serve agricultural populations, in order to improve mental and behavioral health outcomes of individuals working and living on family farms. Bellamy's research is primarily focused on development and evaluation of behavioral health programs that focus on suicide prevention and stress management for farming families, including the emerging "soldier to agriculture" programs, across the country.



Juan Beltran-Huarac | beltranhuaracj19@ecu.edu

Physics
Thomas Harriot College of Arts and Sciences

Juan Beltran-Huarac earned his doctorate from the University of Puerto Rico in chemical physics and completed postdoctoral research stays in Harvard University and the University of North Carolina at Chapel Hill before joining ECU. His primary goal is devoted to investigating the combined effect of magnetic nanoformulations and exogenous magnetic fields to induce selective changes in cell function and tumor microenvironments. Understanding better nano/bio interactions on this magnetic approach helps him treat cancer more effectively in a non-invasive manner. As for cancer imaging, his lab develops relaxivity-tunable T1 and T2 contrast agents for MRI based on surface-complexed metal oxide nanomaterials. The safe-by-design architecture of such nanoconstructs for cancer theranostics is conducted via innovative miniaturization strategies, so he can develop high-quality products with defined size and morphology, and predictable magnetic response. His lab also evaluates their extrinsic response in relevant physiological media through integrated dispersability and dosimetric approaches. This enables to elucidate both SARs and toxicity profiles in targeted cancer cells, and in turn to unveil cell death mechanisms. His synergistic efforts aim at demonstrating feasibility of this new technology for magnetic cancer treatments and bionanotechnology.



Carrie Bergeson | bergesonc22@ecu.edu

Human Development and Family Science
College of Health and Human Performance

Carrie Bergeson earned her doctorate in human development and family science from Montclair State University. She is a critical qualitative community-engaged scholar whose research focuses on sense of community, programming, and social justice with racialized populations. She aims to be embedded in the community often engaging in participatory action research. Bergeson works to inform community members of her her research agenda and aims to empower community members to address and work to change aspects of the community they deem necessary. A larger goal of her research is to help create and maintain a youth advisory board and community coalition in order to bring her research agenda and community needs together for growth and longevity.

BUS TOUR PARTICIPANTS



Rachelle Berry | berrya22@ecu.edu

Geography

Thomas Harriot College of Arts and Sciences

Rachelle Berry earned their doctorate in geography from the University of Georgia. Their research interests include Black geographies, Black feminist theory, and urban geography. Berry's dissertation research documented their organizing journey to win reparations for a Black community removed for university dormitories with the use of urban renewal policies. Through their work they understand the relationship between white supremacist landscapes like the American university and the Black geographies they remove.



Kelly Blackmon | blackmonmorank99@students.ecu.edu

Nursing Student, DNP

College of Nursing

Kelly Blackmon received her BSN from East Carolina University in 2003 and her MSN, M.Ed. from Phoenix, AZ in 2009. She is a professionally licensed registered nurse in North Carolina with 19 years of clinical experience and thirteen years in an educator's role. Blackmon has an extensive knowledge of various areas in nursing, including critical care, medical, surgical, telemetry, emergency, maternal child, leadership, research, and pathophysiology. Her research interests include occupational wellness for rural farmers, improving health literacy for chronic disease management, and increasing access to care with alternative health care delivery models.



Coty Brayboy | brayboyc13@students.ecu.edu

Nursing Student, DNP

College of Nursing

Coty Brayboy, currently enrolled in the Doctor of Nursing, Family Nurse Practitioner program at ECU, earned his MPH from UNCG in 2013 and his BSN from UNCC. His clinical practice and research interest include public health practice, communicable disease and American Indian health.

BUS TOUR PARTICIPANTS



Roshaunda Breeden | breedenr22@ecu.edu

Educational Leadership
College of Education

Roshaunda Breeden (she/her) earned her doctorate in higher education from the University of Georgia. As a critical scholar and researcher, Breeden explores questions of equity and inclusion in higher education. Rooted in participatory and arts-based approaches, she brings an intersectional lens to understanding the roles of power and inequality in shaping educational environments and outcomes for historically marginalized students, staff, and communities. Her research departs from more traditional approaches, which are often jargon-laden and slow to reach decision-makers, to modes of scholarship that are timely and digestible for all.



Amy Brown Price | priceam20@students.ecu.edu

Nursing Student, DNP
College of Nursing

Amy Price is enrolled in East Carolina University's BSN-DNP Family Nurse Practitioner program. Price earned her ADN from Rockingham Community College and BSN from the University of North Carolina, Greensboro. Price's experience includes 8.5 years as a nurse in a large urban emergency department, one year working float pool for three emergency departments, three years working in a level II trauma/pediatric emergency department, two years working with an IV team in a large urban hospital, and four years working in an outpatient surgery center in the PRE/POST/PACU areas. Living in a rural area, she seeks to transition to an outpatient provider role caring for those of all ages and backgrounds within her community post-graduation.



Makenze Caldwell | millerma13@students.ecu.edu

Nursing Student, DNP
College of Nursing

Makenze Caldwell is a student in the BSN to DNP-FNP program at ECU. Her education includes a BSN from ECU and ambulatory care RN certification. She has worked in the operating room, emergency department, and primary care. She aspires to use the skills and knowledge acquired in the APRN RURAL Scholars program to provide care to underserved and rural populations. She also hopes to participate in mission work to provide health care to patients in developing countries.

BUS TOUR PARTICIPANTS



Crystal R. Chambers | chambersc@ecu.edu

LEED
College of Education

Crystal Renée Chambers is a professor of educational leadership at East Carolina University with expertise in law and policy in higher education. She is a native New Yorker (don't hold it against her) and through her experiences in community with people in suburban, rural, and urban environments, she became acquainted with opportunity gaps early in life. As a young person she did not understand why some people went to college and why others, smart people, did not. Addressing this disparity is at the heart of her work. Through her education policy expertise, she analyzes and addresses policy structures that reproduce systemic inequity in higher education. She is a 2018 Carnegie Fellow for her work on Rural Student College Choice and is a co-PI on THRIVE@ECU, an NSF ADVANCE Adaptation grant. Her most recent books are Law and Social Justice in Higher Education, part of the Core Concepts in Higher Education Series (Routledge, 2016) and African American Rural Education: College Experiences and Postsecondary Pathways (Emerald, 2020).



Jinbo Chen | chenji21@ecu.edu

Engineering
College of Engineering and Technology

Jinbo Chen is an assistant professor of engineering at East Carolina University. He received his doctorate and BS degree in mechanical engineering from Michigan State University. His research mainly focuses on advanced low-head hydraulic turbine systems, supercritical water and supercritical carbon-dioxide power cycle technology, and general turbomachinery development.



Bianca Coleman | colemanb20@students.ecu.edu

Nursing Student, DNP
College of Nursing

Bianca Coleman is a student of the Doctor of Nursing Practice-Family Nurse Practitioner program at East Carolina University. Bianca earned her BSN from UNC Wilmington in 2019 and ADN from Cape Fear Community College in 2016. Her experience includes six years in emergency and critical care transport nursing as a certified flight registered nurse and more than 13 years in EMS as an advanced EMT. Her interests include improving the health of rural and medically underserved populations of all ages through injury and illness prevention.

BUS TOUR PARTICIPANTS



Kay Craven | cravenk@ecu.edu

Family Medicine
ECU Health

Kay Craven is the director of clinical nutrition services, ECU Health Physicians, Department of Family Medicine. She earned her Master of Public Health from East Carolina University, completed her Bachelor of Science in nutrition and foods at Auburn University, and completed a dietetic internship at the James A. Haley Veterans Administration Hospital in Tampa, Florida. Her primary interests are in finding interventions that support lifestyle/behavior changes to prevent diabetes and/or prevent the complications from diabetes in eastern North Carolinians.



Allison Danell | danella@ecu.edu

Dean's Office
Thomas Harriot College of Arts and Sciences

Allison Danell is a professor of chemistry and, since 2020, is also dean of the Thomas Harriot College of Arts and Sciences at East Carolina University. She received her Ph.D. in chemistry from the University of North Carolina at Chapel Hill in 2001. She completed a postdoctoral fellowship at the Rowland Institute at Harvard University in 2004, before joining ECU's faculty that same year. Danell is an analytical chemist with expertise in gas phase ion chemistry and dissociation energetics, focused on using mass spectrometry to identify and characterize biomolecules (peptides, oligonucleotides, and fatty acids) and their complexes. She is an award-winning professor and advisor focused on student success through consistent classroom engagement, encouraging inquiry and curiosity, and facilitating research, internship, and other professional development activities. As dean of the largest college on ECU's campus, Danell is excited to support and promote the education, research, creativity, and workforce development opportunities afforded by the arts and sciences. She boldly acts to create partnerships with internal and external constituents to develop culturally aware communicators and skilled leaders to foster intellectual and economic success of the college, university, and region.



Myshalae Euring | euringsm21@ecu.edu

Addictions and Rehabilitation Studies
College of Allied Health Sciences

Myshalae Jamerson-Euring is an assistant professor and research director of Navigate Counseling Clinic Department of Addictions and Rehabilitation Studies College of Allied Health Sciences. She earned her doctorate in rehabilitation counseling and counselor education from North Carolina Agricultural and Technical State University in Greensboro. She is a licensed clinical mental health counselor and certified rehabilitation counselor. Jamerson-Euring is passionate about improving the lived experiences of marginalized groups. Her research interests include disability awareness and advocacy, multicultural counseling pedagogy, social justice, and racial disparities in health care. Her current research partners with Mobilizing African American Mothers through Empowerment (maame) to examine the racial bias and stereotypes which contribute to the African-American and Indigenous maternal mortality rate in North Carolina. Findings will be utilized to create culturally competent training programs for healthcare professionals and advocates.

BUS TOUR PARTICIPANTS



Conley Evans | evansmar@ecu.edu

IT
College of Nursing

Conley Evans is the assistant IT director in the College of Nursing. He attained his Bachelor of Science in Photography from Appalachian State University. His love of photography took him to the Fort Worth Zoo in Fort Worth Texas. It was here he found an affinity for technology and its applications. After five years in Texas, he moved home to eastern NC to be closer to family. This change brought him to ECU where he works for the College of Nursing as the IT director as well as the resident photographer.



Madeline Fernandez | fernandezm21@ecu.edu

Nursing Science
College of Nursing

Madeline Fernandez earned her Doctor of Philosophy in nursing from the University of Miami. Her research interests are women's health and Latino health. Her primary focus has been on mental health during pregnancy loss and infertility and disparities in minority women's health care during these reproductive traumas, specifically Latino women. She is currently exploring the experiences, perceived stress, coping strategies, and social support of women in North Carolina after suffering a miscarriage during the COVID-19 pandemic and their preferences in receiving psychosocial care. She is also examining these women's level of psychological distress (anxiety, depression, and post-traumatic stress disorder) 1-2 years after the loss.



Beng Fuh | fuhb@ecu.edu

Pediatrics
Brody School of Medicine

Beng Fuh earned his medical degree from the Philipps University in Marburg, as well as a doctorate from the Free University in Berlin, Germany. He completed residency training in pediatrics at Howard University Hospital and Children's National Medical center in Washington, D.C. as well as fellowship training in pediatric hematology and oncology at nationwide Children's Hospital in Columbus, OH. His research interests include clinical trails of new therapeutics for sickle cell disease and bleeding disorders, implementation research, and barriers to improving care for individuals with cancer and blood disorders. He identifies issues with current cares and implements new strategies of overcoming these challenges.

BUS TOUR PARTICIPANTS



Vatoyia Gardner | gardnerv22@ecu.edu

Teaching Resources Library, Joyner Library
Academic Library Services

Vatoyia Gardner earned her master's degree from North Carolina Central University. Her current professional projects include learning and incorporating educational resources including diverse literature into educational instructional sessions for classes and individual sessions. Another project Vatoyia is working on is designing model lesson plans to demonstrate use of high-quality children's materials for pre-service teachers and expanding the Teaching Resources Center's outreach activities to area educators.



Nicole Glenn | glennn21@students.ecu.edu

Nursing Student, DNP
College of Nursing

Nicole Glenn is a student in the Doctor of Nursing Practice Family Nurse Practitioner program at East Carolina University. Her credentials include ADN from Brunswick Community College and a BSN from Chamberlain University. Glenn's experience includes 12 years as a nurse on a progressive care unit. She recently transitioned to the post anesthesia care unit for orthopedic patients. Having always wanted to become a family nurse practitioner and care for her community, she plans to transition to an outpatient clinic in either Pender or Duplin County as a provider for all ages, post-graduation.



Suranga Gunerathne | gunerathnes18@ecu.edu

Engineering
College of Engineering and Technology

Suranga Gunerathne earned his doctorate in civil engineering with a concentration in geotechnical engineering from Texas Tech University. He holds a professional engineer license in several states, including North Carolina. His research interests include developing novel analysis tools which are mathematically-rigorous-yet-easy-to-use in practice, focusing on the soil-structure interactions in deep foundations, shallow foundations, soil-buried structures, and earth retaining walls. Coastal erosion is one of the main issues facing eastern coastal communities. He is also interested in addressing this issue by studying marine soil at the particle level and applying remedies such as geosynthetic applications, cemented soil treatment, and resilient and sustainable infrastructure.

BUS TOUR PARTICIPANTS



Christina Hall | hallch21@students.ecu.edu

Nursing Student, DNP
College of Nursing

Christina Hall is a student in the Doctor of Nursing Practice-Family Nurse Practitioner (DNP-FNP) program at East Carolina University. Her education includes a Bachelor of Science in Public Health from UNC at Greensboro and a Bachelor of Science in Nursing from NC A&T State University. Christina Hall has six years experience as a registered nurse specializing in cardiac medicine. She desires to work in the rural community to help alleviate health disparities and improve the overall health of underserved populations.



Casey Hardison | keec12@students.ecu.edu

Nursing Student, DNP
College of Nursing

Casey Hardison is a doctorate of nurse practice, adult gerontology primary care nurse practitioner student at East Carolina University, due to graduate in May 2023. Her credentials include a BSN from ECU College of Nursing. Her experience includes caring for adult patients in the cardiac intensive care unit. She seeks to give back to eastern North Carolina's people and help alleviate underserved populations in rural areas.



Ty Huff | huffty22@ecu.edu

Videographer
College of Nursing

Ty Huff completed his bachelors of fine arts at East Carolina University, graduating with a double concentration in graphic design and film/video production. He's continuing with that skillset as the lead videographer at ECU's College of Nursing. With this tour he's hoping to increase his knowledge on East Carolina lore while using this opportunity to make content for both the school and himself.

BUS TOUR PARTICIPANTS



Bryan Jenkins | jenkinsbr21@ecu.edu

External Affairs and Constituent Relations
Office of the Chancellor

Bryan Jenkins earned his Bachelor of Arts at UNC Chapel Hill and is a NC Certified Public Accountant. He represents the University in the Greenville area as well as the region where he highlights the assets in addition to the challenges of our region to build partnerships that better the lives of those at ECU and in our communities. His work entails building and maintaining relationships for effective advocacy, strategically communicating data and experiences, and facilitating constructive discussions among diverse stakeholders. Jenkins works hand-in-hand with ECU's director of strategic initiatives, Karson Nelson, to intentionally engage with faculty and staff at the University, community leaders, regional partners, state legislators, council of state offices, and our Washington D.C. delegation. Jenkins was born and raised in Northampton County in eastern North Carolina, so his admiration for eastern NC stems back to his roots.



Alexandria Kirian | kiriana16@students.ecu.edu

Nursing Student, DNP
College of Nursing

Alexandria Kirian is in her second year of the Doctorate of Nursing Practice graduate program with East Carolina University, with a concentration in family nurse practitioner. She earned a Bachelor of Science in Nursing from East Carolina University. She currently works as a registered nurse at Carolina East Medical Center in New Bern. Her specialty areas include postoperative surgical care, postpartum, and pediatrics. She has met countless patients who have had difficulties seeking preventative medicine. She aspires to assist those in underserved rural areas so that she can further advocate and allow them greater access to health care resources.



Suzanne Lazorick | lazoricks@ecu.edu

Pediatrics and Public Health
Brody School of Medicine

Suzanne Lazorick joined the BSOM faculty in 2006 with focus on childhood obesity and interest in quality improvement. She attended UNC Chapel Hill for medical school and a master's degree in public health and remained there for residency training in combined internal medicine and pediatrics. She practiced several years in primary care at a rural health center in Johnston County before returning to UNC for fellowship training in primary care research and preventive medicine. She sees patients in the specialty clinic for children with obesity at the ECU Pediatric Healthy Weight Research and Treatment Center. In September 2022 she became chair of the Department of Public Health.

BUS TOUR PARTICIPANTS



Charlene Loope | loopel22@ecu.edu

Teaching Resources Library, Joyner Library
Academic Library Services

Charlene Loope earned her Master's of Education from Vanderbilt University and Master of Library and Information Science from the University of South Carolina. Her current projects include integrating instructional technology with literacy learning experiences for emerging readers, development of inclusive spaces in the academic library including those for families with young children and positioning of the curriculum materials center as a model school library for pre-service teachers and area educators.



Shirley Mai | maie@ecu.edu

Marketing and Supply Chain Management
College of Business

Shirley Mai earned her doctorate in business administration from Syracuse University. Her research interests include word-of-mouth, sharing economy, digital marketing, international marketing, and quantitative approaches in marketing. Mai's main research goals aim to develop and evaluate internet-based marketing approaches for companies to reach customers.



Dennis McCunney | mccunneyw@ecu.edu

Intercultural Affairs
Student Affairs

Dennis McCunney serves as the director of intercultural affairs and adjunct faculty member of ECU's Leadership Studies minor and Master of Public Administration program. McCunney earned his doctorate in higher education administration from Morgan State University, and his dissertation focused on the formation of student culture around civic engagement, leadership and activism. He has presented his research in various areas, including the Global Service-Learning Summit, Leadership Educators Institute, NASPA Annual Conference, and the Engagement Scholarship Consortium. Recent publications include articles in AAC&U's Diversity & Democracy, New Directions in Higher Education, Metropolitan Universities Journal and Journal of Applied Research in Higher Education. His professional and research interests include public service and leadership development, organizational development, intercultural and global learning, and campus-community partnerships. McCunney's recent scholarly interests involve regional development around diversity and inclusion initiatives and the role of public institutions in promoting political learning and education for democracy.

BUS TOUR PARTICIPANTS



Patrick F. McKay | mckaypa22@ecu.edu

Management
College of Business

Patrick McKay received his Ph.D. in industrial-organizational psychology in 1999 from the University of Akron. He is a member of the Society for Industrial and Organizational Psychology, Academy of Management and the Personnel/Human Resources Research Group. McKay has been recognized as a Fellow of the Society for Industrial and Organizational Psychology. His research interests include demographic disparities in worker outcomes, diversity, diversity climate, organizational demography, worker attitudes and retention, and job- and organizational-level performance. His research has received awards from the Academy of Management's Gender and Diversity in Organizations Division including the 2007 Dorothy Harlow Distinguished Paper Award and the 2009 Saroj Parasuraman Outstanding Publication Award.



Johanna D Mena Rosa | menarosaj20@students.ecu.edu

Nursing Student, DNP
College of Nursing

Johanna Mena earned her BSN from Fayetteville State University in 2019 and ADN from Randolph Community College in 2014. Her experience includes same-day surgery care, skilled nursing home care, director of nursing, minimum data set coordinator, and staff development coordinator. Her research interests include developing and evaluating a health ministry that incorporates multifactorial health interventions to improve health care access, use of preventive services, and disease self-management in the Hispanic population. Post-graduation, Johanna plans to work in a community clinic or a health department to reach out to underserved and uninsured populations. Finally, she aspires to participate in medical missions to provide health care to individuals in developing countries.



Whitney Moore | mooerer22@ecu.edu

Kinesiology
College of Health and Human Performance

Whitney Moore earned her doctorate in the health and psychology of physical activity from the University of Kansas. Her research focuses on the how leaders can empower individuals through sport, group training, and physical education to be intrinsically motivated to exercise and be physically active to enhance their well-being. In addition to developing the ownership in exercise and empowerment in exercise scales, she has collaborated with researchers in physical education, nutrition, positive youth development, and other health-related fields to develop and revise scale measures. She has a specialty in advanced quantitative methodology that facilitates reducing study participant burden while rigorously testing the application of theory in real world settings and interventions. Moore is a certified strength and conditioning specialist with distinction and continues to publish work that brings current sport and exercise psychology research to strength and conditioning coaches. Prior to her doctorate, she was the founder and head coach of Moore Training, a company focused on developing youth athletes' athleticism and reducing their injury risk.

BUS TOUR PARTICIPANTS



Karen Mruk | mrukk23@ecu.edu

Pharmacology and Toxicology
Brody School of Medicine

Karen Mruk received her doctorate from the Department of Biochemistry and Molecular Pharmacology at UMass Medical School. She was a Craig H. Neilsen postdoctoral fellow with Professor James Chen at Stanford University. Her past research focused on using chemical tools to probe nervous system function including understanding how potassium channels in the nervous system play a role in various afflictions such as epilepsy and developing optogenetic models to model spinal cord injury in zebrafish. Currently, Mruk's laboratory focuses on nervous system injury, degeneration and regeneration using zebrafish as a model. Zebrafish have a remarkable regenerative capacity, and Mruk is interested in understanding the role bioelectricity plays in this process and the genetic factors that govern this process.



Karson Nelson | nelsonkars21@ecu.edu

Director of Strategic Initiatives and Legislative Liaison
Office of the Chancellor

Karson Nelson earned her Master of Public Administration at the UNC School of Government with a concentration in policy. She represents ECU in Raleigh and Washington, D.C. where she highlights the challenges as well as assets of our region to build partnerships that better the lives of those at our university and in our communities. Her work entails building and maintaining relationships for effective advocacy, strategically communicating data and experiences, and facilitating constructive discussions among diverse stakeholders. Karson works hand-in-hand with ECU's director of external affairs, Bryan Jenkins, to intentionally engage with faculty and staff at the university, community leaders, regional partners, state legislators, council of state offices, and our Washington D.C. delegation. Her admiration for eastern NC stems back to her roots in rural Mississippi where she grew up.

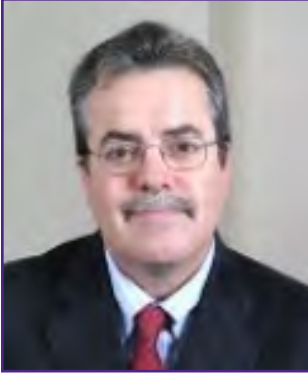


Lauren Nichols | nicholsl21@students.ecu.edu

Nursing Student, DNP
College of Nursing

Lauren Nichols is currently in the DNP, FNP program at East Carolina University and is due to graduate in 2024. Her credentials include an ADN from Edgecombe Community College and a BSN from Western Carolina University. She has nursing experience in long-term care and cardiac medicine at ECU Health Medical Center. Nichols seeks to utilize the knowledge gained in the APRN RURAL Scholars program by improving health care for underserved populations and bringing advanced nursing care to rural areas of eastern North Carolina, such as Edgecombe County, where she is from.

BUS TOUR PARTICIPANTS



Bob O'Halloran | ohalloranr@ecu.edu

Hospitality Leadership
College of Business

Bob O'Halloran earned his doctorate in tourism resources from Michigan State University. His interests include planning and development, training, business pedagogy and hospitality operations. O'Halloran is a professor and the director of the School of Hospitality Leadership. O'Halloran works with communities and businesses in eastern North Carolina assessing the feasibility for lodging development to enhance tourism infrastructure.



Cynthia O'Halloran (Deale) | ohalloranc@ecu.edu

Hospitality Leadership
College of Business

Cynthia Deale received her doctorate in education from the University of Denver, and her master's degree in tourism and recreation from Michigan State University. Her research interests include the scholarship of teaching and learning, hospitality and tourism education, sustainability, and tourism and hospitality management practices. She likes to have course projects for her hospitality and tourism students that connect them to community-oriented hospitality and tourism issues and topics.



Daniel Perrucci | perruccid22@ecu.edu

Construction Management
College of Engineering and Technology

Daniel Perrucci earned his doctorate in civil infrastructure systems from Vanderbilt University. His research interests include planning for and managing recoveries, and reconstruction after disruptive events, to increase resiliency, sustainability, and equity during extreme scenarios. Perrucci utilizes modern analytical and statistical techniques to model scenarios and support decision-making with analyzed results from collected data (e.g., drone imagery, elicited surveys, and big datasets). His most recent work evaluates post-disaster housing efforts, including the designs of temporary housing units utilized after displacement caused by disruptions, to ensure occupant satisfaction and ability to resume pre-disruption activities.

BUS TOUR PARTICIPANTS



Cindy Putnam-Evans | evansc@ecu.edu

Dean's Office

Thomas Harriott College of Arts and Sciences

Cindy Putnam-Evans earned her doctorate in biochemistry from the University of Georgia. She is a professor in the biology department, and currently serves as the associate dean for research in the Thomas Harriot College of Arts and Sciences. Her research interests include protein-protein interactions in the photosystem II complex of plants, green algae and cyanobacteria. She is a member of the ECU THRIVE team, whose goals aim to reduce bias and improve gender equity for women in STEM.



Pamela Reis | reisp@ecu.edu

Program Director and Nursing Science Department Chair
College of Nursing

Pamela Reis is the doctoral program director and nursing science department chair at the College of Nursing. She received a Bachelor of Science in nursing from Duke University and Master of Science in Nursing and doctorate from East Carolina University. She has over 40 years of nursing experience that includes practice as a nurse-midwife and neonatal nurse practitioner. Reis is the project director of a HRSA advanced nursing education workforce grant entitled Advanced Practice Registered Nurse Academic-Clinical Practice Collaborative. In her role as project director, she coordinates the Advanced Practice Registered Nurse Rural and Underserved Roadmap to Advance Leadership (RURAL) Scholars Program, an immersive experience for graduate nursing students in the primary care of rural and underserved communities in North Carolina. Her research interests are expanding the advanced practice nursing workforce in rural and underserved communities, interprofessional education, integrative therapies in women's health, and midwifery education.



Kaye Rouse | kaye.rouse@vidanthealth.com

Health Equity
ECU Health

Kaye Rouse earned her Master of Business Administration from the University of Phoenix and has worked for ECU Health for 19 years in roles ranging from insurance and billing to physician administration and now to health equity. Her interests include building community and regional partnerships to address health disparities and working towards developing plans to create a resource system to add value to the overall health and well-being of residents within eastern North Carolina. Kaye's main focus is reaching one person at a time to ensure all who need and desire to have high quality health care are aware and able to obtain those services at a level most beneficial for them. Community awareness and various modes of accessibility are at the forefront of Kaye's work, and she continues each day to share best practices, tactics, and resources as innovatively as possible to enhance health care for our community.

BUS TOUR PARTICIPANTS



Devin Smith | clarkd15@students.ecu.edu

Nursing Student, DNP
College of Nursing

Devin Smith earned her Bachelor of Science in Nursing from East Carolina University and CCRN from American Association of Critical Care Nurses. She has worked in trauma/surgical ICU, COVID ICU and CVICU. Post-graduation she seeks to transition into an outpatient provider role to be able to enhance healthcare knowledge in hopes to aid in disease prevention in her rural community.



Scott Snead | sneads19@ecu.edu

Dean's Office
College of Engineering and Technology

Scott Snead earned his Bachelor of Science in criminal justice from East Carolina University. After a 13-year career in the criminal justice field, Scott entered the private industry as a realtor and later became a pharmaceutical sales representative. These experiences led to an opportunity to work as a major gift officer with University Advancement at East Carolina University where his main responsibility initially was to raise major gifts for the College of Engineering and Technology. This experience prepared him for his current role as director of industry relations for the College of Engineering and Technology (CET). Although Scott is not able to conduct research, he does love to tell others about the many exciting research activities that are taking place at his alma mater and throughout eastern North Carolina and how this benefits our faculty, students, and our research sponsors, as well as the region and in some cases, our nation. Scott serves as the Director for the Center for Innovation in Technology and Engineering (CITE), with the goal of coordinating training and consulting opportunities for industry partners and CET faculty. He is also very much involved with the CET Student Success Center and strives to connect students with experiential opportunities that are provided by our industry partners.



Jacob Talkington | talkingtonj20@students.ecu.edu

Nursing Student, DNP
College of Nursing

Jacob Talkington is a student in the Family Nurse Practitioner doctorate program at East Carolina University. His credentials include a BS in biology from High Point University and BSN from Duke University. Jacob has experience in the emergency department at Cone Health in Greensboro. He is interested in providing accessible care for rural and underserved communities in NC.

BUS TOUR PARTICIPANTS



Eric Wade | wadee21@ecu.edu

Coastal Studies
Integrated Coastal Programs

Eric Wade earned his Bachelor of Science in marine biology from the University of North Carolina Wilmington and a master's in fisheries science from Oregon State University. Wade's research explores decision-making and behaviors in natural resources, primarily in coastal and marine systems. He is interested in understanding the drivers and feedback of individual and collective decisions and how stakeholders navigate socio-ecological change. At the same time, Wade's research aims to understand the influence and interaction of formal and informal institutions on the decision-making strategies of stakeholders. He primarily explores these topics interdisciplinarily, drawing from theories in social psychology, behavioral economics, and sociology.



Latasha Williams | williamslat21@students.ecu.edu

Nursing Student, DNP
College of Nursing

Latasha Williams is a graduate student in the Adult-Gerontology Clinical Nurse Specialist program at East Carolina University. She previously earned her Master of Science in Nursing degree from the University of North Carolina Wilmington, her Bachelor of Science in Nursing from Fayetteville State University, and her associate degree in nursing from the College of the Albemarle. Her nursing experience includes working at ECU Health Medical Center in the acute inpatient physical medicine and rehabilitation units. Her research interests include improving transitions of care while increasing positive patient outcomes for our rural and underserved communities.

ECU LEADERSHIP & STAFF



Briana Best | bestb21@ecu.edu

Briana Best earned a bachelor's degree in social work from East Carolina University. Since obtaining her degree, she has worked in areas within her community to promote the importance of mental and emotional health. After leaving the Edgecombe County Department of Social Services as a child welfare social worker, she made a career change to return home to ECU.



Robin Cogger | rncogger@ecu.edu

Robin Cogger earned a bachelor of science from Cornell University and a master of science and doctoral degrees from the University of California, Berkeley, all in mechanical engineering. She completed her post-doctoral research as a fellow at Harvard Medical School and the Department of Surgery at Massachusetts General Hospital in Boston. Cogger has served as an innovative leader, professor, and scholar within the UNC System for over 26 years. She currently serves as the provost, senior vice chancellor for academic affairs and a professor of engineering at ECU. Cogger's technical research expertise is in solving design and performance problems related to tissue engineered organs, with special emphasis on liver replacement devices and their safe storage for off-the-shelf availability.



Tristyn Daughtry | daughtrytr21@ecu.edu

Tristyn Daughtry, a native of Greenville, earned a bachelor's in management and master's in business administration with a certificate in development and environmental planning from East Carolina University. During her time as a student, her primary focus and research areas were in small business development, rural entrepreneurship, and inclusive economies. Tristyn serves as the program manager of RISE29, the university's student entrepreneurship internship program that supports rural economic development initiatives throughout eastern North Carolina.



Mary Farwell | farwellm@ecu.edu

Mary Farwell earned a bachelor's degree from Brown University and her doctorate in biochemistry from the University of California, Berkeley. She serves as the assistant vice chancellor for research development and is a professor of biology. Farwell's research interests include mitochondrial regulation of cell death in cancer cells and student success in STEM.



Merrill Flood | floodm18@ecu.edu

Merrill Flood retired from the City of Greenville as an assistant city manager. He worked in various positions before serving as the director of planning, leading planning, economic development, and housing activities for the city. Flood joined ECU as the director of research and innovation campus development. Flood works with the leadership of ECU in the development of the East Carolina Research and Innovation Campus (ECRIC). Flood is also a planner-in-residence and planning instructor at ECU.



Cassie Keel | keelc15@ecu.edu

Cassie Keel earned a bachelor's in psychology from East Carolina University, a certificate in project management and is currently enrolled in ECU's master's of business administration program. She is the university program associate for the office of engaged research. Keel manages the SECU Public Fellows Internship program, ECU Purple and Gold Bus Tour, assists with the Engaged Outreach Scholars Academy (EOSA) and supports other office efforts.



Angela Lamson | lamsona@ecu.edu

Angela Lamson earned a bachelor's in psychology, master's in human development and family studies with a certificate in gerontology and a doctorate in marriage and family therapy from Iowa State University. Lamson is the Nancy W. Darden Distinguished Professor and serves as the interim assistant vice chancellor for economic and community engagement. Lamson's research, teaching, external funding, and service are devoted to DEI, thriving and resilient families and communities, compassion fatigue among providers, medial family therapy, and integrated care through community health, military, primary care, specialty care, and school-based systems.



Jim Menke | menkej@ecu.edu

A retired Navy master chief, Jim Menke received a bachelor's and master's degrees in health sciences from Trident University. He joined ECU as the military research liaison and project manager for Operation Reentry North Carolina (ORNC). Menke currently serves as the director of national security initiatives at ECU, facilitating educational and research partnerships between ECU, the Department of Defense and other national security agencies. Formerly, Menke served on the staff of the Navy Surgeon General at the Bureau of Medicine and Surgery in Washington, D.C.



Sharon Paynter | paynters@ecu.edu

Sharon Paynter earned a doctorate in public administration from North Carolina State University, master's in legal administration from the University of Denver, and master's of public administration and bachelor's degrees from UNC-Chapel Hill. Paynter currently serves as the acting chief research and engagement officer and is an associate professor of political science. Paynter's research interests include hunger, poverty and public policy.



Kim Tilghman | tilghmank22@ecu.edu

Kim Tilghman earned a bachelor's degree in film studies from UNC Wilmington. Tilghman spent nine years in various roles behind the scenes at WITN-TV and six years as a public communicator for the City of Jacksonville before joining ECU as REDE's communications liaison. Tilghman oversees REDE's communication efforts with ECU news services and with external media outlets, while also maintaining the office's web and social media presence.



Keith Wheeler | wheelerch18@ecu.edu

Keith Wheeler, a retired U.S. Navy captain, earned a master's degree in national security and strategic studies from the U.S. Naval War College. Wheeler serves as the executive director of national security and industry initiatives. The Manteo native has held numerous leadership positions in the Navy, including commanding officer of U.S.S. McInerney where he led the Navy's first at-sea autonomous flight tests of the Fire Scout unmanned aerial vehicle. Wheeler also served as the chief of staff at DARPA – the Defense Advanced Research Projects Agency – charged with creating breakthrough technologies and capabilities for national security.



CONTINUING AND PROFESSIONAL EDUCATION (CPE)

OUR SERVICES



Workshops



Career Training



Microcredentials



CEU Hours



Trips &
Immersive Events



Conference Planning

Learning That Lasts A Lifetime

ABOUT US

The East Carolina University Office of Continuing and Professional Education provides dynamic, high quality, and accessible learning opportunities to enrich the lives of adult learners in eastern North Carolina and beyond. Our mission is to:

- Deliver professional education that is responsive to industry and workforce needs;
- Provide learning opportunities that improve quality of life for individuals and communities;
- Provide event management and course administration to allow clients to focus on content delivery.

CONNECT WITH US

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252-737-5878

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300 East First Street
Mail Stop 310
Greenville, NC 27858

Contact CPE

Phone: 252-328-9198 or Email: cpe@ecu.edu







VISIT OUR WEBSITE

www.rede.ecu.edu/cpe/



LIFELONG LEARNING PROGRAM (LLP)

OUR PROGRAM

-  Lectures
-  Workshops
-  Classes
-  Trips
-  Immersive Events
-  Volunteer

PROPOSE CONTENT

Submit a Content Proposal
www.llp.ecu.edu
 Click, Volunteer
 Then Click, Course Proposal

CONNECT, ENGAGE, INSPIRE...

The Lifelong Learning Program at East Carolina University (ECU) offers adults affordable learning experiences in a relaxed atmosphere, without entrance requirements, exams, or grades. Our purpose is to connect, engage and inspire the eastern North Carolina community by providing interesting and stimulating speakers, enriching courses, workshops and lectures, special events, enjoyable trips, and more!

Participants are encouraged to tap into the rich intellectual and cultural resources of the University, experts, and talented peers who are willing to share their expertise and valuable insight. This gateway to learning also provides a setting for making new friends and developing new social networks with people from different walks of life.

CONNECT WITH US

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 300 East First Street
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Contact the Lifelong Learning Program
 252-328-9198, Option 2 or llp@ecu.edu

VISIT OUR WEBSITE
www.llp.ecu.edu



**ECONOMIC AND
COMMUNITY
ENGAGEMENT**

Discussion Guide
for Engaged Scholarship

Modified by the Office of Economic and Community Engagement at East Carolina University® with permission from Diane M. Doberneck, Chris R. Glass, & John H. Schweitzer University Outreach and Engagement, Michigan State University September 2011

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community engagement

“Community engagement (CE) describes collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity.”

- Carnegie Foundation

- In your unit, what CE collaboration and activities are faculty conducting?
- Are there existing partnerships between faculty in your unit and community organizations that could become CE projects?

public service

Broadly defined, public service at ECU is the use of university resources to address societal challenges and contribute to the common good.

- In your unit, what are examples of public service?
- What criteria do you use to judge its quality?

community

Communities can be defined by geography (neighborhood, city), circumstance (disaster survival, belonging to a school district), identity (gender, ethnicity, race, etc.), kinship, affiliation (political party, alumni group), or profession (field of expertise, type of business).

“The purpose of community engagement is the partnership of college and university resources with those of public and private sectors to enrich scholarship, research, and creative activity; enhance curriculum, teaching, and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good.”

- Carnegie Foundation

- What communities are natural partners for faculty in your discipline, department, or college?
- How can community partners connect with faculty in your discipline, department, or college?

outreach

Outreach is the voluntary provision of programs, services, activities, or expertise for those outside the traditional university community.

- What are examples of outreach provided by students, staff, and faculty in your unit?
- How are outreach experiences conducted by students, faculty, or staff recognized or honored in your unit?

scholarship

Community engaged scholarship (CES) focuses on issues that are important to communities and educational institutions. CES should be evaluated by clear standards of rigor and quality just as other forms of scholarship are judged in the Academy. CES takes the form of peer-reviewed manuscripts and conference presentations as well as other products such as training manuals, patents and copyrights, classroom lectures, curricula, news articles, websites, technical bulletins, evaluation reports, public performances, workshops, and more. Faculty scholarship at ECU includes the scholarship of research, the scholarship of creative activity/innovation, and the scholarship of engagement and /or outreach.

- How is CES recognized toward research and creative activity in your unit, department/school, or college?
- What criteria are used to evaluate the quality of community engaged scholarship?
- How do your community partners provide input on their experiences of the partnership/sustainability?

type of activity

Faculty may partner with communities through research, scholarship, and creative activity, teaching and learning (such as service learning course or co-curricular activities), service (such as technical assistance or expert testimony), or innovation and entrepreneurship (such as patents, licenses, new business ventures, etc.).

- In your unit, department/school, or college what community engaged activities are formally recognized on student transcripts or toward faculty/staff awards or promotion?
- How does your unit, department/school, or college encourage involvement in community engaged activities?

sustainability

It is important to address sustainability in university-community partnerships by considering plans for sharing resources, development of joint funding proposals, dissemination of research findings, and thinking about how the partnership can mature.

- Sustainable partnerships require investment from all parties. What are examples of sustainable partnerships in your unit?
- What university resources are needed to support the sustainable partnerships in your unit?

community based learning

Community based learning (CBL) is the integration of service activities with structured reflection that addresses defined community need through intentional opportunities for student learning and development. CBL can be curricular (e.g., designated service learning courses) or co-curricular (e.g., alternative spring break). CBL is beneficial for both university and community partners.

- How are community based learning experiences recognized on student records or in faculty/staff reviews in your unit, department/school, or college?
- How could CBL experiences become integrated with scholarship or external funding opportunities?
- How do community partners evaluate the CBL experiences?

degree of collaborative scholarship

Faculty members collaborate with community partners in a variety of ways that range from being responsive to community needs to full partner engagement in research design, implementation, analysis, and publication. The range in degree of engagement reflects elasticity in collaboration - with faculty members and community partners making the appropriate choices given the community, context, research problem, resources available, and more.

- What university and community supports are necessary to develop partnerships with community organizations that may lead to full partner engagement in the production of research, scholarship, and creative activity?
- How are community partners engaged in the decision making process related to the desired level of collaboration in scholarship initiatives?

language

The language associated with scholarly outreach and engagement varies by discipline. The ways of describing scholarly outreach and engagement include translational research, service learning, public humanities, civic engagement, university-community partnerships, community based participatory research, and others.

- What words are commonly used to refer to scholarly outreach and engagement in your discipline?
- Are faculty in your department aware of the outlets for disseminating outreach and engagement activities in general; in your discipline?

See: [REDE.ECU.EDU/ENGAGEMENT/RESOURCES](https://rede.ecu.edu/engagement/resources)

support

Faculty members improve their engaged scholarship through conversation, collaboration and reflection with other engaged scholars. At ECU, the Office of Engaged Research offers resources to aid faculty in developing a research agenda based on engaged scholarship.

- What resources would help faculty in your department develop an engaged scholarship agenda?
- Are there institutional barriers to engage scholarship in your discipline, department, and college?



ENGAGEMENT AND OUTREACH SCHOLARS ACADEMY

The Engagement and Outreach Scholars Academy (EOSA) is a national model for engaged scholarship. EOSA provides professional development and project support for research that connect campus with communities. Projects result in a culture of partnership, reciprocity, and high-quality scholarship. Faculty selected to the program participate in cohort-based workshops and develop a research project with their community partner. Graduate and undergraduate students join each research team and participate in the Student Engagement and Outreach Scholars Academy.



27 projects eastern NC counties



4 publications



6 new community partners



31 faculty members throughout ECU



CONNECT WITH US: [REDE.ECU.EDU/ENGAGEMENT](https://rede.ecu.edu/engagement)



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Data captured since 2018



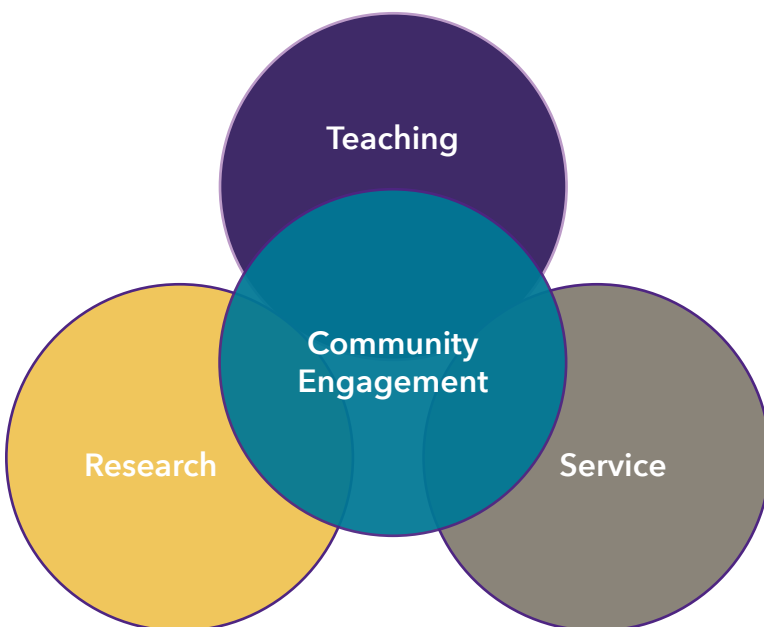
ECU

OFFICE OF
ENGAGED RESEARCH

EOSA was created to increase the knowledge of, motivation for, and resource capacity in community engagement with external partners.

Scholarship of Engagement

- The **scholarship of discovery** refers to the pursuit of inquiry and investigation in search of new knowledge.
- The **scholarship of integration** consists of making connections across disciplines and Service advancing knowledge through synthesis.
- The **scholarship of application** asks how knowledge can be applied to the social issues of the times in a dynamic process that generates and tests new theory and knowledge.
- The **scholarship of teaching** includes not only transmitting knowledge, but also transforming and extending it.
- The **scholarship of engagement** connects any of the above dimensions of scholarship to the understanding and solving of pressing social, civic, and ethical problems.





SECU PUBLIC FELLOWS INTERNSHIP

Looking for a dynamic internship opportunity that gives you a chance to positively impact eastern North Carolina? The State Employees Credit Union Public Fellows Internship Program may be the perfect fit for you! Get paid to build connections with community leaders, receive business etiquette and leadership training, and work on a project that develops skills for your career while advancing ECU's mission to serve others through partnership.

BUILDING TALENT, FORGING PARTNERSHIPS



\$4,500 stipend for internship participants



Work in **eastern North Carolina** communities



Develop network relationships with local leaders



Learn professional etiquette and leadership skills

CONNECT WITH US

[REDE.ECU.EDU/ENGAGEMENT](https://rede.ecu.edu/engagement)



Cassie Keel
SECU PFI Program Manager
KEELC15@ECU.EDU



Taking classes and getting good grades aren't enough anymore. **Employers want someone who is well-rounded and has experience.** Why not spend your summer in a great community that allows you to **prepare for your career? Don't let these opportunities pass you by.**

Alex Murphy | 2018 PSI Intern at Pocosin Arts Center

PFI MISSION

The SECU Public Fellows Internship Program focuses on strengthening eastern North Carolina communities by bringing in talented, skilled students to work in professional internships. The program is unique in its mission to combine a traditional internship experience with a community engaged mission, partnering students with leaders in local government, nonprofits and private businesses to solve local problems.

WHY CHOOSE PFI?

The benefits of the SECU Public Fellows Internship Program go beyond the \$4,500 stipend for interns. Students may be tasked with exploring community and economic development, grant writing, or project implementation, strengthening core competencies gained through academic programs and experiential learning. The program also includes professional and leadership development components, specifically workshops on communication, business etiquette, networking and professional practice.

ELIGIBILITY

The SECU Public Fellows Internship Program is open to ECU undergraduate students who meet the following requirements:

- **North Carolina resident**
- **In good academic standing**
- **Completed at least 60 semester credit hours**

Applicants will be selected by a team from the Office of Community Engagement and Research and additional faculty representatives.

Apply online at [GO.ECU.ECU/PFI](https://go.ecu.edu/pfi).



LICENSING & COMMERCIALIZATION

TRANSLATING RESEARCH INTO IMPACT

The Office of Licensing and Commercialization (formerly called the Office of Innovation & New Venture) assists faculty, students and staff in exchanging ideas into real world solutions that can transform the region's economy and have a direct impact on individuals living in eastern North Carolina. Licensing and Commercialization accomplishes this mission by commercializing university-owned intellectual property (patents, copyright and trademarks), assisting in new venture development, enhancing research and industry collaboration, and providing educational programming to the community.



Over \$8.5M in revenue
from office activities
since inception



298 patents issued



1,100 faculty
innovations disclosed



Over 35 active ECU
faculty members in the
National Academy of
Inventors



CONTACT US



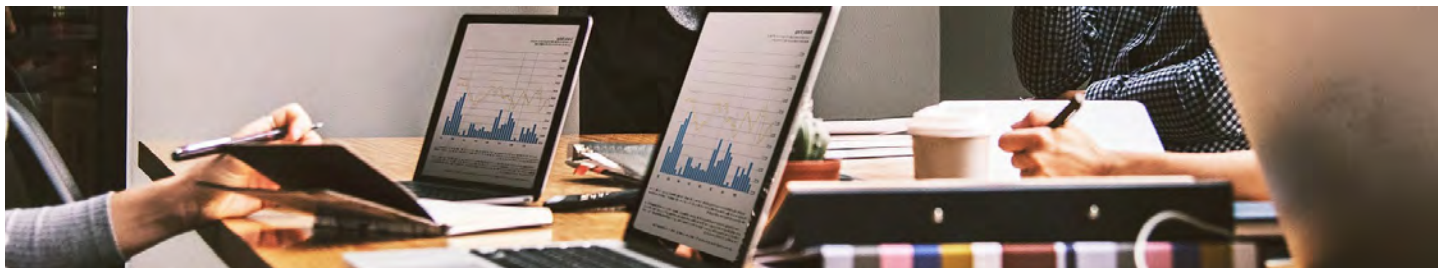
Carlyle Rogers

Director of Licensing and Commercialization
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ECU

LICENSING &
COMMERCIALIZATION



Core Functions

- Intellectual property protection, assessment, and management
- Patents, trademarks, and copyright
- Innovation scouting and assessment (patentability & marketability)
- Work with legal counsel and faculty on intellectual property legal actions
- Oversight of the ECU Patent Committee
- Federal compliance with the Bayh Dole Act
- Agreement review and execution
- License agreements, MTAs and CDAs
- New ventures and startups
- Work with faculty to develop viable startup opportunities and business models

Core Programs

I-Corps@ECU

Funded by the National Science Foundation, I-Corps@ECU is an interactive program focused on validating the link between your idea, innovation and/or research and the audience you are trying to reach. I-Corps guides participants through a step-by-step process and provides a clear path forward. \$5,000 in funding is available for eligible teams to support proof of concept studies and/or travel.

Digital Market

ECU's Digital Market began with the idea to better connect research-based solutions to those in need. ECU faculty inventors have developed an array of digital content in the form of apps, documents, videos and sounds, but have struggled to find a place for the content beyond publications and conferences. By placing content on the ECU's Digital Market, the visibility of the university's research enterprise is increased, royalties generated by the exchange are given back to the contributing faculty, and research-based solutions have an easy path to help those who need it.

Foundation of Innovations

Foundations of Innovation is a collection of self-paced training modules designed to allow faculty, staff and students explore the process of developing early-stage innovative ideas into potential new products or resources. Each module contains a short 20-30-minute video along with downloadable materials to facilitate the process of idea evaluation and assessment. Focus areas include biomedical, digital content, intellectual property protection and general business/service development.

Innovation Ambassador Program

This program is a 5 hr/week paid internship (\$2,000/semester) that trains graduate students in a STEM discipline on the translational interplay between research and commercialization. Ambassadors are exposed to a variety of research endeavors; learn core principles of the commercialization process; understand the importance of patents, trademark and copyright; and have opportunities to network with external business development partners.

Catalyst Commercialization Grant Assistance

The Catalyst Commercialization Grant Assistance Program aims to accelerate the submission of commercialization related grants. The process begins with a thorough review of the commercial viability of your idea, followed by receiving feedback from industry stakeholders. Projects that receive favorable review will advance forward, and a commercialization proposal will be developed to advance the innovation towards licensing.

Laboratory Licensing Partnership Program

The Laboratory Licensing Partnership Program at ECU seeks to identify novel research material that can be licensed to our extensive network of partners, including universities, companies and other third parties. Revenue generated from licensing is available to support research activities, such as purchase of laboratory material, travel to conferences, pay student stipends or fund future research.

Find more info at REDE.ECU.EDU/INNOVATION





The Office of Research and Innovation Campus Development

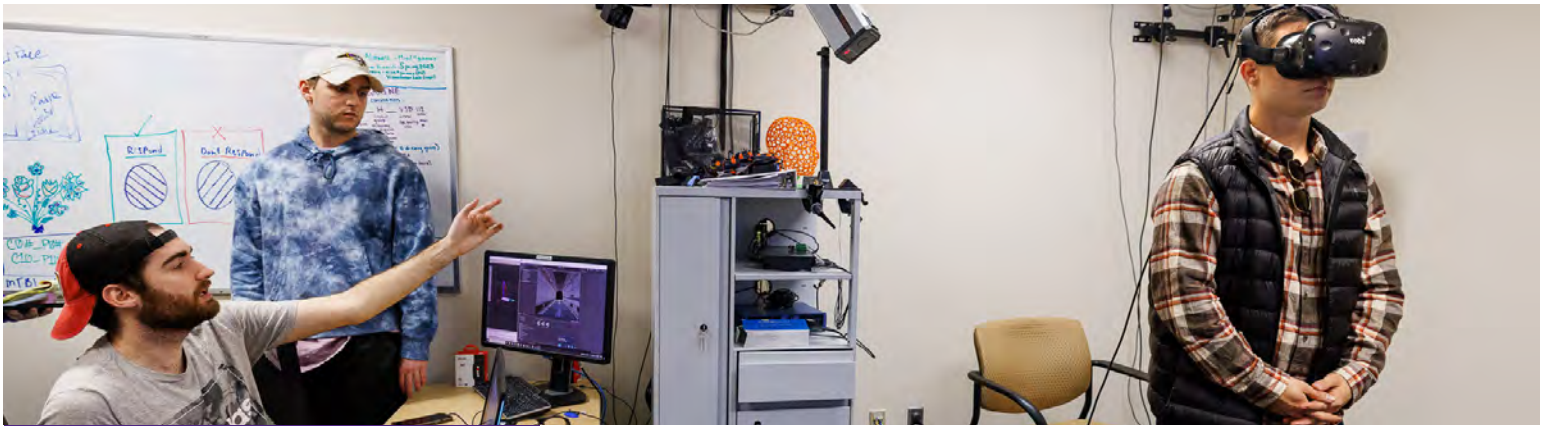
The Office of Research and Innovation Campus Development oversees the physical development of East Carolina University’s Research and Innovation Campus. The ECU Research and Innovation Campus network, currently encompasses more than 500 acres within six sites spanning more than 100 miles of eastern North Carolina. Value-adding resources within each district and area are already available to support research, discovery, innovation, entrepreneurship, incubation, manufacturing and commercialization.

ECU is currently transforming its Warehouse District into the next phase of the expanding Millennial Campus through a public-private partnership. This district encompasses more than 22 acres of opportunities to restore and reuse valuable historic properties and accelerate reinvestment activities within Greenville’s center city and arts and innovation district for collaborative research, innovation, and economic development.

The Office also aids communities within the 29-county region of Eastern NC in the areas of Community and Economic Development.



Merrill Flood
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OFFICE OF NATIONAL SECURITY & INDUSTRY INITIATIVES

The Office of National Security & Industry Initiatives (ONSII) operates within Research, Economic Development and Engagement and serves as a conduit through which researchers can connect with external stakeholders and align their interest with those of regional business and Department of Defense (DoD), Department of Homeland Security (DHS), and other federal partners. We create and strengthen ECU partnerships through regional engagement with industry, military, government, and economic/workforce developers to increase opportunities for students and faculty to provide value to partners and advance student success, public service and regional transformation.

CONNECTING RESEARCHERS WITH REGIONAL PARTNERS



18 active DoD awards



Record \$2.1M in DoD-sponsored expenditures in FY22



Record \$3.6M in DoD-sponsored awards in FY22

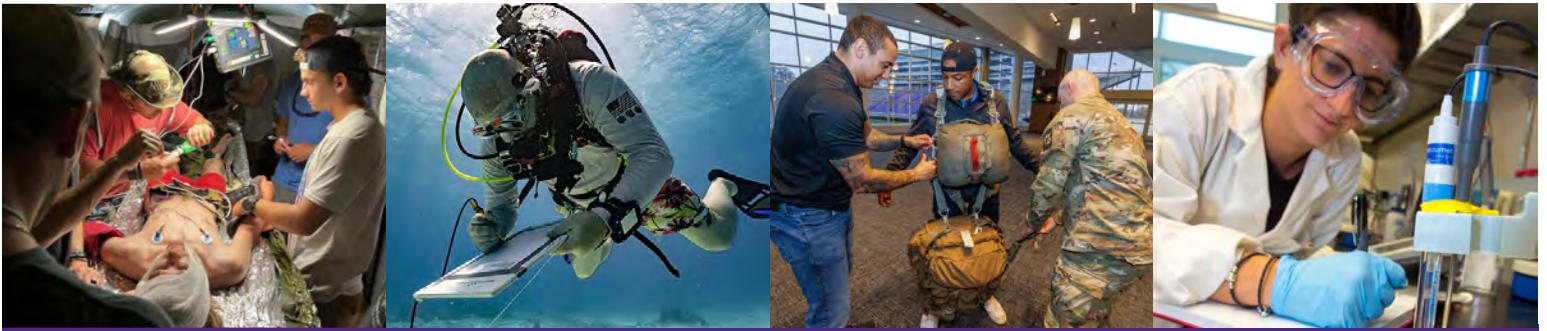
FIND US ONLINE: [REDE.ECU.EDU/ONSII](https://rede.ecu.edu/onsii)



Jim Menke
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Keith Wheeler
Executive Director of National Security and Industry Initiatives
WHEELER18@ECU.EDU



ONSII helps facilitate faculty connections with a broad network, including:

Military-Civilian Medical Partnerships

We're strengthening ECU and ECU Health relationships with Naval Medical Center Camp Lejeune with an ultimate goal of training multidisciplinary medical personnel: physicians, nurses, EMTs and others. Military and civilian health providers will work together to enhance patient care through mutual training, sharing best practices and innovation.

Army XVIII Airborne Corps, 82nd Airborne Division

Under the XVIII Airborne Corps - UNC System Educational Partnership Agreement (EPA), we work with 82nd Airborne Innovation Lab (AIL) and the Civil-Military Innovation Institute (CMI2) on specific project requests as well as providing broad research and innovation expertise as needed.

National Security Agency (NSA)

An EPA and Cooperative Research and Development Agreement (CRADA) are in place, enabling development of capstone projects with technology systems and computer science teams, subject matter expert presentations to faculty and students, and creation of a High-Performance Computing (HPC) concentration.

Each year, the NSA Laboratory for Analytic Sciences (LAS) brings together collaborators from three sectors - industry, academia and government - to conduct research that has a direct impact on national security. The LAS is always looking for partners to explore cutting-edge research projects.

Institute of Applied Engineering Academic Consortium

The Academic Consortium delivers solutions that make it easier for Grant Sponsor organizations and top Academic Institutions to work together. It helps U.S. Special Operations Command (USSOCOM) fund research by connecting DoD to advanced research institutes.

Minerva Research Initiative

The Minerva Research Initiative supports social science research aimed at improving our basic understanding of security, broadly defined. All supported projects are university-based and unclassified and the goal is to improve DoD's basic understanding of the social, cultural, behavioral, and political forces that shape the world.

ENC Pharma Manufacturing Sector

Prior to the pandemic, this sector projected thousands of new jobs for our region. Since the pandemic, the demand has increased considerably. In response to this need, ONSII led the proposal and funding effort that resulted in the establishment of the Eastern Region Pharma Center (ERPC), a facilitator for workforce development in biomanufacturing. The ERPC acts as the hub within the BioPharma Crescent connecting ECU, five community colleges, and over a dozen pharma companies in eastern North Carolina. It is committed to:

- Increasing pharma awareness and workforce preparedness of rural counties' young talent in ENC
- Increasing the numbers, opportunities, capabilities, and productivity of AAS and BS degree graduates
- Increasing ECU's readiness to re-skill, up-skill, and new-skill incumbent employees of our pharma manufacturer

We can help you collaborate with partners like Thermo Fisher Scientific, Catalent, CMP Pharma, Novo Nordisk, Grifols, Pfizer, Merck, Fesenius Kabi, Novartis, the NC Biotechnology Center, and the BioPharma Crescent.

ENC Aerospace Sector

Significant regional growth is forecast in this sector due to the military and civilian expansion in maintenance, repair and overhaul (MRO) operations. We can help you collaborate with partners like Fleet Readiness Center East (FRC East) - Marine Corps Air Station Cherry Point, Aviation Logistics Center (ALC) - USCG Station Elizabeth City, 4th Fighter Wing - Seymour Johnson AFB, NC Global TransPark (GTP) - Kinston, flyexclusive, Draken International, Spirit Aerosystems and the ENC NavalX Tech Bridge.

ENC Food Commercialization Center (ENC FCC)

The ENCFCC groundbreaking was in November 2022. The purpose of the center, located in Ayden, is to help growers and food entrepreneurs improve their access to the food commercialization sector. Once the facility becomes operational, we believe there are potential ECU connections to include nutrition, food science, marketing, packaging, entrepreneurship, processing innovation, and supply chain analytics.

Find more info at REDE.ECU.EDU/ONSII





Consult with
regional businesses on
real-world problems



Develop a
startup through
ECU's RISEUp Academy



Hone entrepreneurial
skills through
ECU's **E-Passport Program**

RISE 29 ENTREPRENEURSHIP PROGRAM

In 2019 East Carolina University created RISE29, now a national model for emerging entrepreneurs who are transforming rural communities with startups, business consulting and job development.

Small business partners bring real problems to ECU that engage students in finding innovative solutions to their challenges. Students conduct industry and market research, analyze data, and use critical thinking to bring new ideas to life. Along the way, the small businesses are able to make decisions that impact eastern North Carolina through job creation, job retention, and the strengthening of strong entrepreneurial networks.

In alignment with the RISE29 model, a key element of the program is supporting ECU student entrepreneurs. Opportunities like the RISEUp Academy and the E-Passport program expose students to resources within the region and foster a culture of entrepreneurship across ECU's campus.



CONNECT WITH US



Tristyn Daughtry

RISE29 Program Manager

RISE29@ecu.edu

252-814-6114





// I don't believe I could have started my business just anywhere. ECU and Greenville have provided me all of the tools and support I need for my business to thrive. **I can't imagine a better place to start a business than in eastern North Carolina.** //

Taylor Walden | Owner, Simple & Sentimental
ECU Senior, Business Management

ENTREPRENEURSHIP PATHWAYS

RISE29 Consulting Internships

- Offered every semester
- Matches student teams with small business clients
- Addresses systemic challenges or growth opportunities
- Conducts extensive research and analysis to develop and implement strategic recommendations

RISEUp Academy Internships

- Offered once a year
- Takes student from business idea to launch
- Expand your network
- Get introduced to experts and local entrepreneurs, economic development professionals, and local business leaders

ECU E-Passport Program

- Establishes a culture of entrepreneurship at ECU
- Expand your network, find mentors and grow knowledge
- Participate in entrepreneurial events hosted across campus
- Tailored to meet individual students' needs

RESEARCH & DEVELOPMENT SUPPORT

ECU and its partners are providing research and development support through a variety of approaches, from student housing programs to financial support. Below is a sampling of the resources provided through RISE29.

- Accelerate Rural
- Innovation Living Learning Community
- Industry and Community Partner Mentoring
- Microenterprise Fund
- Miller School of Entrepreneurship
- Multi-Campus Research Labs
- NSF I-Corps@ECU
- Office of Innovation and New Ventures
- Pirate Entrepreneurship Challenge
- Small Business and Technology Development Center at ECU
- Van and Jennifer Isley Innovation Hub

STUDENT OPPORTUNITIES

RISE29 accepts students for fall, spring and summer internship opportunities, as well as opportunities for its RISEUp Academy and E-Passport programs.

Fall and Spring Internships

- 15 weeks
- 20 hours per week
- \$10 hour

Summer Internships

- 12 weeks
- 25 hours per week
- \$10 hour

For more information about these opportunities, contact RISE29 at RISE29@ecu.edu.



Why Should I Work with the *Small Business & Technology Development Center?*

Better Decisions

Managing a business means making serious and difficult decisions; but you don't have to do it alone. The SBTDC's management counselors provide one-on-one assistance to help you:

- Review, confirm & enhance your current plans
- Discover & evaluate new opportunities
- Acquire new ideas.

All of this is designed so that you can make the best decisions possible for your business.

Better Financial Performance

Everyone wants their business to be more profitable. The SBTDC can help you to:

- Understand your financial data and reports
- Analyze your costs & revenues
- Identify problem areas
- Develop a plan for improvement, and
- Prepare financial projections

Using our knowledge and experience, along with the latest analytical tools, the SBTDC can help you assess your current financial performance and recognize opportunities to increase your bottom line.

Our professional staff combines real-life business experience with industry expertise, education, and advanced training. Most of our counselors have been business owners or have held executive positions. Most of our counseling services and training events are free to the public and our organization keeps client information confidential.

sbtdc
Your business. Better.

The SBTDC is a statewide university system program that advises small and mid-size businesses. Our goal is to help you make your business better.

Over the past 25 years, the SBTDC has served more than 100,000 North Carolina business owners and entrepreneurs. We maintain 16 offices across the state, each supported by a local University of North Carolina Campus.

Better Access to Capital

Obtaining financing and contracts for your business can be difficult and fiercely competitive. It helps to have someone with the experience to navigate the waters and increase your chances of success. The SBTDC specializes in helping businesses access and prepare for:

- Bank loans
- Federal, state & local government contracts
- Federal research & development funding
- Equity capital investment, and
- International export financing

The SBTDC can help you select and pursue the best approach to growing your business.

Better Future Direction

You may see a need to revitalize your business—or you may be assessing how to better position your business for the future. The SBTDC can help you develop and implement strategies to:

- Address short-term turnaround needs
- Create or expand markets
- Improve or create products & services
- Reposition your business long-term, and
- Address leadership or ownership succession

The SBTDC's services are designed to save you time and accelerate your plans for a better future.

Small Business & Technology Development Center at East Carolina University

Businesses that team up with the SBTDC get results. Over the last 5 years, the average business we worked with credited the SBTDC with helping them:

Increase revenue by over 10%

– *more than 3 times* the rate of growth for the average NC firm

Increase the size of their business by over 10%

– *more than 6 times* the NC rate of employment growth

Over the last 5 years, we have also cumulatively helped businesses

- Obtain *over \$3 billion* in government contracts
- Acquire *over \$500 million* in financing through loans, private investments, and research and development, and
- Weather economic uncertainties by *saving 18,000 jobs* that otherwise would have been cut.

SBTDC @ ECU Counseling Team

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Location & Contact Information



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300 East 1st Street | Greenville, NC | 27858
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The SBTDC is a business and technology extension program of the UNC System and is funded in part through a cooperative agreement with the US Small Business Administration.



96% of ECU undergraduate researchers said **research contributed to their personal and professional growth**



ECU provides an average of **\$103,176 in faculty-mentored research support annually**



Hundreds of student presenters contribute to ECU's annual Research and Creative Activity Week



68% of students nationally said their **interest in STEM fields** increased after participating in undergraduate research

UNDERGRADUATE RESEARCH

At East Carolina University®, undergraduate students are participating in cutting-edge research that empowers them to take what they've learned in the classroom into the real world. Our undergraduate researchers have led projects that quantify the impact social media sites have on education; create better meal and exercise plans for elementary school students; and improve pharmaceutical therapies for neurodegenerative diseases. By participating in undergraduate research programs at ECU, our students contribute knowledge and innovation to their fields of study. Learn more about the resources ECU provides its undergraduate researchers.

EMPOWERING STUDENTS THROUGH RESEARCH



CONNECT WITH US: [REDE.ECU.EDU/UNDERGRADUATE](https://rede.ecu.edu/undergraduate)



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ECU

UNDERGRADUATE RESEARCH



// Research has given me the opportunity to not only take my education to the next level, but develop ways to help other people. //

Sarah Bammel

University Studies Major with mentor
Dr. Erika Johnson (right), School of Communication



UNDERGRADUATE RESEARCH FUNDING

ECU provides numerous funding opportunities for undergraduate researchers. Our Office of Undergraduate Research provides support for faculty-mentored projects through its Undergraduate Research and Creative Activity Awards, offering up to \$2,000 for selected projects in the biomedical sciences, STEM, social sciences, and arts and humanities fields. Additionally, the office provides Conference Awards that aid student presentations at conferences across the country. These funds offset the debt our undergraduates incur while providing vital opportunities to conduct novel research.



ENGAGED RESEARCH & INTERNSHIPS

Undergraduates have the opportunity to put their creativity to use in real-world settings with ECU's engaged research and internship opportunities. The university partners with community and industry leaders in arts, culture, history, biomedical sciences, biology, business and engineering, among others, offering projects that solve needs for clients and environments. Additionally, our undergraduate researchers have developed ecological sanctuaries, programs for at-risk teens, have interned at leading pharmaceutical companies, wildlife refuges, Fortune 500 companies, and media giants. Our undergraduate research resources put students in a position to excel in major industries with authentic experiences with the companies they'll one day work for and help lead ECU in regional transformation.



RESEARCH EVENTS

Along with providing funding and opportunities to conduct research, ECU highlights its undergraduate researchers at events on campus and across the state. The university hosts Research and Creative Achievement Week, an annual week-long celebration that offers student researchers an opportunity to practice their presentation skills and meet scholars with similar interests. ECU also hosts the Capture 180 Research Challenge, asking undergraduates to share their research in three-minute presentations. Finally, ECU supports its undergraduates with an annual trip to the State of North Carolina Undergraduate Research and Creativity Symposium. The event brings researchers from across the state together to share their work through posters, presentations, performances and works of art.

Find more info at rede.ecu.edu/undergraduate



WILSON COUNTY

Established in 1855 out of Edgecombe, Johnston, Nash, and Wayne counties, Wilson County was named after Colonel Louis D. Wilson, a former soldier and legislator who died during the Mexican-American War. The city of Wilson serves as the county seat.

Located five minutes from I-95 and 45 minutes from Raleigh, Wilson County has no major waterways -- just streams and swampy land. The lack of a major waterway meant less trade and commerce, which likely hampered early development of the county. But, as of the 2020 Census, the population was 78,784 with 50,000 in the city of Wilson alone.



Once called “the World’s Greatest Tobacco Market,” the city of Wilson has transformed from an agricultural-based economy to one of industry and tourism. Former brick tobacco warehouses have been reborn into boutique shops, restaurants and modern loft apartments.

Gaining national attention for an arts-driven downtown revitalization, Wilson became a model for “creative placemaking” when the imaginative two-acre Vollis Simpson Whirligig Park and Museum opened to the public. Vollis Simpson was a farm machine repairman who used discarded items to create colorful, large-scale kinetic sculptures. The park provides artistic, educational and recreational opportunities for residents and visitors.

There are over 90 manufacturing and industry companies in Wilson County to include Bridgestone, Merck, Sandoz and LiveDo. Sectors consist of pharmaceuticals, automotive parts, aerospace, packaging and food preparation.

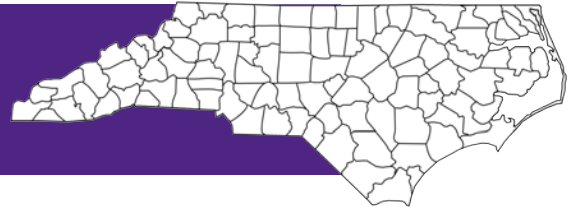
BB&T (Branch Banking and Trust Company), now Truist, was born in Wilson in 1872. Today, Truist is the number one non-manufacturing employer in the county.

On the Purple and Gold Bus Tour, we will visit Lancaster Farm to see upclose agriculture’s impact on the region, as well as learn about migrant workers and farm worker health. We will also visit Fresnius Kabi USA to learn more about the pharma industry.

SOURCES

<https://www.historicdowntownwilson.com/>
<https://www.wilsoncountync.gov/>
<https://www.wilsonwhirligigpark.org/>
<https://www.wilsonedc.com/>
<https://www.ncpedia.org/geography/wilson>
<https://northcarolinahistory.org/encyclopedia/wilson-county-1855/>
https://www.carolana.com/NC/Counties/wilson_county_nc.html

WILSON COUNTY SPEAKERS



Roberta Bellamy **Agricultural Behavioral Health Specialist** **North Carolina Agromedicine Institute**

Roberta Bellamy earned her doctorate in medical family therapy from East Carolina University and is a North Carolina licensed marriage and family therapist. Bellamy currently works by contract for the NC Agromedicine Institute, and other agricultural entities, as a consultant and agricultural behavioral health specialist. Her research interests include community-based research with grassroots organizations that consist of and serve agricultural populations, in order to improve mental and behavioral health outcomes of individuals working and living on family farms. Bellamy's research is primarily focused on development and evaluation of behavioral health programs that focus on suicide prevention and stress management for farming families, including the emerging "soldier to agriculture" programs, across the country.



Sarah Carraway **Office Manager** **Lancaster Farms**

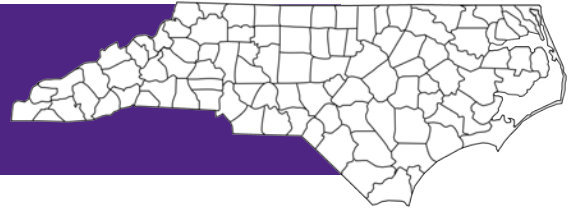
Sarah Carraway earned her bachelor's in hospitality management from ECU in 2006, and is a fifth-generation farmer at Lancaster Farms in Wilson, NC. In operation since the 1700s this family farm continues to thrive. Carraway joined the family farm as an employee in 2007, where she has had many roles, but most recently her role is Office Manager. From 2007 to 2011, she also worked with Phillip Morris on the burley and cured markets. In 2022, Carraway was elected to the Board of Directors for the North Carolina Sweetpotato Commission Foundation where she will serve a three year term. This group works to better understand consumer needs and expectations, collaborate with researchers and developers to create value-added products, and seek opportunities to increase processing opportunities with major food manufacturers.



Spencer Hill **Packing House Manager** **Lancaster Farms**

Spencer Hill earned a bachelor's degree in math from East Carolina University, and decided to continue in the family business. After growing up on a farm in Kinston, NC and spending years after college continuing to work on his family's farm, Hill took his talents to Lancaster Farms in Wilson in 2020. He currently serves as the Packing House Manager for the sweet potato packing house. There he oversees the daily operations of the packing house and the farm employees.

WILSON COUNTY SPEAKERS



Robin Tutor Marcom
Director
North Carolina Agromedicine Institute

Robin Tutor Marcom is Director of the North Carolina Agromedicine Institute. She has degrees in occupational therapy and public health from East Carolina University and a doctorate in agriculture and extension education from NC State University. Although her day-to-day work encompasses the broad spectrum of agricultural safety and health, Robin's primary expertise is in respiratory protection, farm stress and migrant/seasonal farmworker health. As a member of an active farm family, she considers it a privilege to combine her personal and professional passions to serve agriculture's most important asset – it's people!



Jean Allaume
Plant Manager
Fresenius Kabi

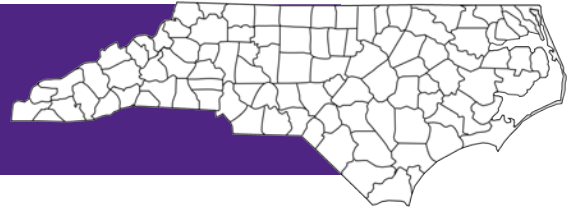
Jean Allaume is an experienced pharmacist with over 20 years in the industry. Allaume began his career in France with Johnson and Johnson in a solid dose and oral liquid manufacturing plant where he took on many roles, mainly in the QA process validation and production department. He joined Fresenius in 2005 as Production Director where he assisted in transforming the site from manual bag filling technology to fully automated technology in 2012. Allaume has led the expansion of the Wilson Fresenius Kabi plant since 2016.



Willie Hill
Senior Manager, Standard Solutions Packaging
Fresenius Kabi

Willis Hill earned degrees in sociology and criminal justice from NC State. Hill serves as the Senior Manager for the Standard Solutions Packaging at Fresenius Kabi. During his six years of employment at Fresenius Kabi, Hill has served as Compliance Manager, Production Supervisor, and Senior Manager of Manufacturing Services. Hill took on his current role in January of 2023.

WILSON COUNTY SPEAKERS



Johnny Westlund **Sr. Director, Operations** **Fresenius Kabi**

Johnny Westlund is currently Sr. Director of Operations at Fresenius Kabi USA, LLC. In his role he is leading the operation team with over 200 personnel in day-to-day tasks and strategy long-term projects. Johnny started his career with Fresenius Kabi back in 2002 in Uppsala, Sweden. During his time with the company, he has held various positions from temporary roles to management roles in the areas packaging, sterilization, and filling. His various roles have given him a deep insight of the company's nuts and bolts, as well as a unique understanding of the strategies and processes needed to achieve team, company, and stakeholder's objectives. Johnny and his family relocated from Uppsala to Wilson in 2018 for the operational design of the new standard solution project, which is a 400 million dollar project. Johnny has contributed to creating one of the most modern and efficient manufacturing buildings in the world.

ENSURING TELEHEALTH ACCESS FOR NORTH CAROLINA



BY NADIA BEY
HEALTH AFFAIRS
APRIL 26, 2022

<https://www.healthaffairs.org/doi/10.1377/forefront.20220422.227909/> <https://www.ces.ncsu.edu/2022/08/keeping-workers-safe-on-the-farm/>

There are more than two million farmworkers in the United States and approximately 100,000 in North Carolina alone. A significant portion of these workers—83 percent as of 2016—are Hispanic or Latinx, and many are migrants. Despite forming a major cornerstone of US life and the economy, farmworkers do not have equal access to the resources and services that non-farmworkers do to maintain their overall health and well-being. One area with particularly pronounced disparities is health care; farmworkers experience a variety of barriers to care, including a lack of health coverage, disparate access to providers, language barriers, and discrimination from providers and employers. This lack of access has consequences not only for the workers themselves but also for their families.

Barriers to health care access depend on how established a worker and their family are in a given location. “Consistent” populations, which include non-migrant workers and migrant workers with long-term residences, may seek care more frequently than “transient” populations. The latter includes workers that have US work visas, undocumented workers, and other workers who move around frequently or are difficult to locate. Research has shown that migrant workers avoid seeking care due to immigration status concerns. Strategies for improving access to routine and as-needed health care are crucial for farmworkers, who may experience a variety of occupational, environmental, and social stressors.

Telehealth, defined as the asynchronous or synchronous transfer of health information between patient and provider, is a tool that can bridge some of the gaps in health care access by reducing barriers that may exist for in-person health visits. Despite an increase in telehealth use during the COVID-19 pandemic, there are still disparities, particularly among rural and low-income populations including farmworkers who may lack access to consistent internet connections or devices that can perform the necessary functions for a virtual visit, such as cell phones, smartphones, or laptops.

Research has shown that patients, including farmworker patients, are receptive to virtual care, and researchers believe that telehealth can increase access to primary care in particular. Studies have also found that Latinx people, a demographic that overlaps with farmworkers, are willing to use telehealth if their provider offers it and they understand how it works. Despite demonstrated interest among farmworkers and the fact that they are increasingly gaining access to cell phones and smartphones, telehealth has yet to be widely adopted by this population.

Many farmworkers seek care at community health centers and migrant health centers, which provide access to care regardless of patients' ability to pay. Using the 2020 Uniform Data Set maintained by the Health Resources and Services Administration (HRSA), I identified HRSA-recognized community health centers in North Carolina that served farmworkers and the health centers that opted to provide access to care via telehealth during 2020 (see exhibit 1). The data show that out of 42 HRSA-funded health centers operating 364 clinical sites in North Carolina, 27 organizations served farmworkers and their dependents across 307 clinic sites. Twenty-five of those entities offered real-time telehealth (videoconferencing) for patients. Although the data specify which grant recipients offered telehealth and how many farmworkers those grant recipients served, the data are not conducive to identifying which individual clinic sites administered telehealth to farmworkers.

When I contacted one of the centers, it became clear through my conversation with an outreach coordinator that long-term adoption of telehealth for farmworkers is a challenge. Although the health center saw an increase in telehealth use among farmworkers in 2020, it gradually shifted back toward in-person visits to prioritize access to dental care and other preventive services. Some seasonal workers and their families might visit up to four times per year, while transient workers are harder to follow up with because of how frequently their contact information changes. For this reason, farmworkers are described as a "hard-to-reach" population. The health center leaves their contact information at work sites so workers can initiate contact with them rather than the other way around. Telehealth will not overcome all of these barriers to health service delivery, but it is an important option to explore for increasing access to care.

How To Reach Farmworkers

Audio-only or telephonic telehealth is a proposed alternative to video telehealth, as it does not require internet access and may also be appropriate for farmworkers who prefer phone over internet or otherwise cannot use video visits. In 2015, North Carolina farmworkers were more likely to obtain health information via radio, television, or telephone than other electronic methods. Additionally, a recent issue brief from the Assistant Secretary for Planning and Evaluation Office of Health Policy notes that Latinx people were among the lowest uptake groups for video telehealth in 2021 despite using telehealth more frequently than White people in general. However, members of transient populations are more likely to experience phone number turnover.

A potential solution could be helping workers that do own smartphones set up a Voice over Internet Protocol (VoIP) account to receive and send calls. WhatsApp, a VoIP application, was one of the most commonly used apps by farmworkers with access to the internet in 2018, although a preexisting phone number is needed to sign up. Theoretically, using VoIP applications such as Google Voice or Skype would allow farmworkers to generate a phone number or username that would remain consistent across devices, but additional research is needed to determine the feasibility in real-world application. Another limitation in considering this strategy is that not all farmworkers have smartphones.

Expanding access to broadband would open up opportunities to engage with farmworkers in a variety of ways. One-third of farm camps in North Carolina lacked broadband in 2020, and a recent survey by Latino advocacy group AMEXCAN found that farmworkers themselves identify a need for internet access. Allocating funding to the provision of hotspots or installing internet infrastructure in migrant camps would be particularly useful for supporting access for farmworkers.

Digital Health Equity

In addition to allowing more people to take advantage of health services, access to telehealth is a part of the larger statewide fight for digital equity. The North Carolina Farmworker Health Project (NCFHP), operating within the state Department of Health and Human Services, held a webinar October 20, 2021, explaining their work to bridge the digital divide. The NCFHP supports eight outreach programs, including a partnership with the North Carolina Agromedicine Institute to equip migrant housing with internet connectivity. They have also developed a mobile hotspot lending program wherein health outreach workers deliver cellular network hotspots to farms. One of the NCFHP's local partners is Surry Medical Ministries, which has worked with a local broadband provider to outfit two farms with fiber internet as of October 2021. However, state-run programs such as these are designed to be short term. Continuing to invest in these programs and expand their scope at the local level would allow for the wider implementation of broadband and for farmworker communities to get the care they need.

Nonetheless, developing the necessary infrastructure for internet access remains a challenge. Recent reporting by North Carolina Health News highlighted barriers that range from how housing is built to the fact that many migrant camps are far off the road or hidden by other structures. A 2015 study found that out of 180 camps, more than one-third were hidden. Hidden camps were also more likely to have more than 20 residents, which would place greater pressure on the internet connection. These barriers lead to higher costs for broadband implementation. Examining how many migrant camps are hidden in the state as well as ways to finance infrastructure in these camps is crucial to expanding access.

Areas For Future Research

Expanding access to telehealth is especially relevant for farmworkers with families, as children's health is often dependent on the health of their parents. Workers with families may have slightly improved access to health services; farmworkers who were partnered or had children have been found more likely to have US-based health insurance, making them "consistent" populations. As I was told by a health center representative, farmworkers bring their families when they present for care at health centers. More research is needed on the downstream impact of access to telehealth on farmworker families. Developing initiatives to specifically serve children of farmworkers or child farmworkers could also be beneficial.

Gender is also an important consideration when devising strategies to increase access to telehealth. General trends have shown that telehealth users are more likely to be female. Women are also more likely to seek primary care than men, although they may seek care later than men. However, there is not sufficient research on whether the same trends exist among farmworkers—approximately one-third of farmworkers are women, but the majority of research about this population is centered on men. A variety of unique factors contribute to adverse physical and mental health outcomes for female farmworkers. Researchers have found that gender is a determinant in work hours: One study found that women work fewer days than men and are more likely to work seasonally rather than year round. Gender is also a determinant in pay and exposure to risk. Wives of male farmworkers, called "farmer spouses," and farm homemakers may perform particular tasks at work sites such as irrigation or driving machinery, but downplay their risk of injury or exposure to pesticides because they see their work on the farm as minor in comparison to housework. Female farmworkers are also at risk of sexual harassment and assault, a risk that has been explored in research and the media. Additional research is necessary to gain a better understanding of how care-seeking behavior, occupational risk, and daily activities translate into telehealth use for farmworkers of all genders.

The past two years have shown that telehealth is here to stay. Even though there has been a "modest decline" in telehealth use since the early stages of the COVID-19 pandemic, policies are being introduced at the local and national levels to expand access on more than a temporary basis. North Carolina Medicaid recently announced that several telehealth flexibilities introduced during the pandemic are now permanently codified in the program, including behavioral health—an area that the health center representative said would be beneficial for workers to have access to. Thus, farmworkers should be taken into account when developing clinical policy, payment policies, and community infrastructure to support telehealth access.

Considerations For Policy And Care Delivery

Remote care should not replace current outreach efforts; continuing targeted in-person outreach at work sites is crucial to ensuring that farmworkers get all of the services they need. In addition to providing face-to-face care at these site visits, providers could explore ways to incorporate technology. Some rural areas in other states have developed mixed models in which people travel to local sites to receive telemedicine from providers who may be more distant or provide specialized services. This may be particularly useful for farmworkers, many of whom have chronic conditions and some of whom have expressed satisfaction with specialized telehealth visits.

Policy makers should continue funding preexisting state initiatives and investing in infrastructure development as they have done in recent months. The most recent North Carolina state budget expanded the criteria for participation in the Growing Rural Economies with Access to Technology program and implemented the Completing Access to Broadband program, both of which aim to develop broadband infrastructure in underserved

areas. State lawmakers and county commissioners have also used COVID-19 funds for fiber installation in the past. A more targeted policy that addresses the lack of broadband in migrant camps could further expand access and supplement preexisting programs managed by the North Carolina Department of Health and Human Services. Policy makers should also consider providing greater resources to local health centers, particularly for telehealth use. Recipients of the Community Health Grant from the state Office of Rural Health are permitted to use those funds for telehealth services and equipment, but a broader, non-application-based approach to distribution could potentially support more centers. Policy makers should also consider investing in additional research on farmworker families and female farmworkers, which could be undertaken by the North Carolina Policy Collaboratory. Lawmakers should also consider modifying migrant housing regulations to require access to internet, a policy that is presently missing at the state and federal levels.

Farmworkers should not be left out of the broader conversation surrounding telehealth, and it is important that North Carolina continues to work toward ensuring health care access for all.

Farmworkers' Vital Contribution to North Carolina's Economy



Agriculture serves as the economic backbone for North Carolina, and farmworkers' hand labor is needed to produce crops that bring in billions of dollars to the state's economy each year. Despite this fact, farmworkers remain one of the state's most economically disadvantaged and unprotected group of laborers.

Farmworkers are critical to North Carolina's agriculture:

Agriculture is North Carolina's leading industry, including food, fiber and forestry, contributing over \$69.6 billion annually and accounting for nearly one-fifth of the state's income.

North Carolina has a diverse agricultural economy, with 53,000 farmers growing over 80 different crops.

Eighty-five percent of fresh fruits and vegetables produced in the United States, including those in North Carolina, are harvested by hand.

Over 150,000 farmworkers and their dependents labor each year in North Carolina in crops including tobacco, greenhouse and nursery, Christmas trees, vegetables, and fruits. Together these crops bring in more than \$2.4 billion in sales to North Carolina's economy.

Farmers' reliance on hired labor, especially in labor-intensive crops, is steadily increasing, as farm owners and their family members seek other employment.

With each agricultural season, farmworkers' presence increases the overall economy in the regions in which they work and boosts the number of jobs available to local residents.

Farmworkers face low wages and few protections:

Poverty: Farmworkers' average annual income is \$11,000, making them the second lowest paid workforce in the nation. Farmworkers living in East Coast states such as North Carolina earn about 35% less than this national average.

Wage Discrimination: Farmworkers are paid nearly 50% less per week than other wage and salary workers. The percent of farmworker families living in poverty is nearly double that of other working families in the US.

Food Insecurity: According to a 2006 study, nearly five out of 10 farmworker households in North Carolina reported not being able to afford enough food to feed their families.

Hazardous Work: Agriculture is consistently ranked one of the three most dangerous occupations in the United States. Despite this, farmworkers are not protected by the same safety laws that protect workers in other industries. Pesticide poisoning, heat illness, musculoskeletal and eye damage, respiratory illness, and injuries resulting from operating dangerous equipment are frequent occupational health concerns experienced by farmworkers.

Child Labor: Labor laws allow children as young as 10 to work in farm work under certain conditions and with their parents' consent. Children must be at least 14 to perform most other types of work, under both federal and state law.

Limited Workers' Compensation: In North Carolina most growers are exempt from laws requiring Workers' Compensation for farmworkers who are injured on the job.

Few Workers' Rights: There is no protection from employer retaliation under North Carolina and federal law for farmworkers to unionize, work overtime, or take sick leave. Farmworkers who are fired from their jobs have fewer options to seek damages than workers in other sectors.

Where does your food dollar go?

71¢ = Corporate Food Processor
23¢ = Farmer
6¢ = Farmworker



"I think that the minimum wage ought to change. Because those that work in the fields work very hard, they suffer a lot, and it is not an easy job. There are many people who die in the fields, especially in tobacco, because of the heat. I think that those who work in the fields deserve more for what they do." North Carolina Farmworker



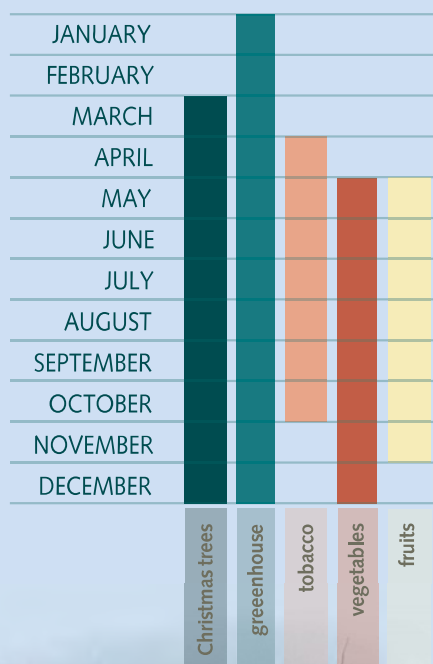
Hand-Harvested Agriculture in NC

This page highlights statistics about the state's major hand-harvested agricultural crops, seasons, number of workers during peak harvest, and pay rates.

Farmworkers are typically paid hourly or by the bucket (5/8 bushel) of fruit or vegetable that they pick.



NC Agricultural Seasons



Greenhouse/Nursery: \$813 million

NC ranks fourth in US production
13,400 workers

Tobacco: \$746 million

NC ranks first in US production
32,000 workers

Vegetables: \$411 million

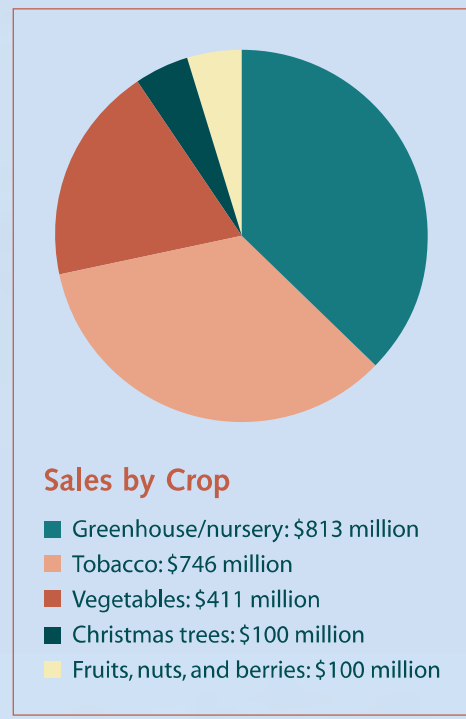
NC ranks first in US production of sweet potatoes
22,500 workers

Christmas trees: \$100 million

NC ranks second in US production
3,000–7,000 workers depending on time of year

Fruits, Nuts, and Berries: \$100 million

NC ranks third in US production of strawberries
7,250 workers



Sales by Crop

- Greenhouse/nursery: \$813 million
- Tobacco: \$746 million
- Vegetables: \$411 million
- Christmas trees: \$100 million
- Fruits, nuts, and berries: \$100 million



Did you know that in North Carolina a farmworker needs to pick and haul 125 buckets of sweet potatoes (two tons) to make \$50?

Get Involved & Learn More!

- Farmworker Advocacy Network (FAN): www.ncfan.org
- NC Farmworker Health Program: www.ncfhp.org
- NC Farmworker Institute: www.ncfarmworkers.org
- Student Action with Farmworkers (SAF): www.saf-unite.org
- Witness for Justice: www.farmworkerlanc.org/get-involved/witness-for-justice

SOURCES: 1 www.ag-econ.ncsu.edu/faculty/walden/ncagsz2011.pdf; 2 National Center for Farmworker Health; 3 Larson A., Farmworker Enumeration Study, 2000; 4 US Dept. of Labor, National Agricultural Workers Survey (NAWS), 2005; 5 Runyan, J. USDA, 2001; 6 Ward, L. Analysis of NAWS, 2003; 7 Quandt, S. et al, Public Health Reports, 2006; 8 NC General Statute; 9 Ag. Council of America, and Lilly, P. NC State University, n.d.; 10 WRAL, 2005; 11 US Dept. of Labor, Prevailing Wage Survey, 2002; 12 Rothenberg D., 1998. Full citations available at www.ncfarmworkers.org.

Facts About North Carolina Farmworkers

Farmworkers play a vital role in cultivating the food we eat every day, and North Carolina has one of the largest farmworker populations in the nation. Even though 85% of our fresh fruits and vegetables are harvested by hand, farmworkers remain largely invisible.

Overview of Farm Work

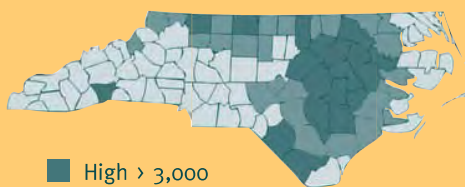
Agricultural labor includes planting, cultivating, harvesting, and preparing crops for market or storage.

Migrant farmworkers travel from place to place to work in agriculture and move into temporary housing while working; seasonal farmworkers work primarily in agriculture, but live in one community year-round.

Farmworkers are usually employed by farm owners or by “crew leaders,” who serve as intermediaries between growers and workers.

The H2A program allows foreign “guestworkers” to perform seasonal farm work under a temporary work visa designed for agricultural workers in the United States.

NC Farmworker Density



- High > 3,000
- Medium 1,000–2,999
- Low < 1,000

Demographics of North Carolina Farmworkers

North Carolina ranks sixth in the nation in the number of migrant farmworkers.

There are approximately 150,000 farmworkers and their dependents in North Carolina each growing season, but this estimate is considered low. In the United States there are two to three million farmworkers.

Even though the overall number of farmworkers in North Carolina has decreased over the last 20 years, the number that migrate has nearly doubled.

Ninety-four percent of migrant farmworkers in North Carolina are native Spanish speakers.

Nationally, most farmworkers are unaccompanied males whose families still live in their home countries.

The US Department of Labor reports that 53% of farmworkers nationally are undocumented (working without legal authorization), 25% are US citizens, and 21% are legal permanent residents (green card holders).

Farmworkers' Impact on North Carolina

Agriculture, including food, fiber, and forestry, contributes over \$69.6 billion annually to North Carolina's economy and represents almost one-fifth of the state's income.

Each farmworker's labor contributes over \$12,000 in profits to North Carolina's economy annually.

Major North Carolina crops requiring hand labor include: tobacco, Christmas trees, sweet potatoes, cucumbers, apples, bell peppers, and other fruits and vegetables. Many farmworkers also work in greenhouses and nurseries.

“It’s just ridiculous that we, the ones that are feeding the whole world, are the ones that [live in such poor conditions].”

—Wayne County Farmworker, North Carolina



SAMPLE WORKDAY FOR A NC TOBACCO WORKER

5:00 AM: Get dressed in the dark. Eat a quick cold breakfast in your trailer.

5:45 AM: Board the van that will take you to the fields. You're not sure where you're going, and you don't know the way.

6:00 AM: Put on a garbage bag with holes for your head and arms to shield you from the nicotine on the tobacco leaves. You've heard that workers at other farms get a yellow raincoat, but not here. Begin picking as fast as you can. If you don't pick fast enough, you may not get a break.

9:00 AM: You get a break for 5–10 minutes to take off your plastic bag and drink some water from the cooler in the van. The sun is already blazing, and there is no shade.

12:00 PM: Because you're far away from the trailer, you're told to eat lunch in the fields. There's no soap to wash the pesticides and nicotine off your hands, only water. You only have a half hour.

4:00 PM: You finally get your second and last water break, only for five minutes. Depending on the stage of the harvest, you might continue to work for three or four more hours in the sun.

7:00 PM: You're driven back to your trailer where you take off your pesticide-covered clothing and shoes. Exhausted, you and your roommates take turns showering, cooking dinner, and preparing lunch for the next day. You wait for your turn to use the cell phone you share with your roommates to call your family back home.

Economic Profile

Poverty: Nationally, farmworkers' average annual income is \$11,000; for a family it is approximately \$16,000. Farmworkers on the East Coast earn about 35% less than the national average.

Hard work, low pay: Farmworkers are paid nearly 50% less per week than other wage and salary workers. The percent of farmworker families living in poverty is nearly double that of other working families in the US.

Few wage protections: Most farmworkers are exempt from minimum wage laws, and all are exempt from overtime provisions, despite long work days during peak harvest.

Few benefits: Despite pervasive poverty, less than one percent of farmworkers collect general assistance welfare nationwide. Only 10% of farmworkers report having health insurance through an employer health plan. Fewer than four out of 10 workers interviewed said that they would receive unemployment benefits if out of work.

Hunger: Nearly five out of 10 farmworker households in North Carolina reported not being able to afford enough food to feed their families.

Health Profile

Poor and crowded housing: Research suggests that the health of North Carolina farmworker families is at risk due to substandard housing. State regulations require only one wash tub for every 30 workers, one shower for every 10 workers, one toilet for every 15 workers, and do not require telephone access in case of emergency. Seven out of 10 farmworkers on the East Coast live in crowded conditions. Such housing conditions put people at risk of the spread of infectious disease such as tuberculosis, as well as parasitic infections and gastrointestinal illness.

Pesticide exposure: Up to 44% of farmworker families live in housing directly adjacent to agricultural fields, increasing likelihood of pesticide exposure. A 2006 study in Eastern North Carolina showed that most farmworker children are routinely exposed to pesticides.

Illness and Injury: Farmworkers experience high incidences of heat illness, green tobacco sickness (nicotine poisoning), musculoskeletal pain, eye and limb injuries from hazardous equipment, and chronic disease.

Limited Workers' Compensation: In North Carolina, very few farmworkers are covered by workers' compensation. Only farmers employing 10 or

more year-round workers or any H2A worker are required to carry workers' compensation insurance.

Limited access to care: Barriers to receiving health care include lack of transportation, limited hours of clinic operation, cost of health care, limited interpreter services, and frequent relocation in order to seek farm work.

Farmworkers Organize

In 2004, a historic labor agreement was signed between the Farm Labor Organizing Committee (FLOC), the North Carolina Growers Association, and the Mt. Olive Pickle Company, unionizing H2A guestworkers for the first time in the nation. The contract includes sick pay, hiring security, and a grievance procedure.

Get Involved & Learn More!

Farmworker Advocacy Network (FAN): www.ncfan.org

NC Farmworker Health Program: www.ncfhp.org

NC Farmworker Institute: www.ncfarmworkers.org

Student Action with Farmworkers (SAF): www.saf-unite.org

Witness for Justice: www.farmworkerlanc.org/get-involved/witness-for-justice

SOURCES: 1 Olivieri, VJ, US Dept. of Ag., 1993; 2 Public Law 104-299, 1996; 3 Larson, A, Farmworker Enumeration Study, 2000; 4 Report of the Commission on Agricultural Workers, 1992; 5 NC Employment Security Commission, 2005; 6 National Agricultural Workers Survey, US Dept. of Labor, 2005; 7 www.ag-econ.ncsu.edu/faculty/walden/ncagsz2011.pdf; 8 Sutter, S, NC State University, 1988; 9 Ward, L, East Coast Analysis of NAWS, 1998; 10 www.ers.usda.gov/publications/err60/err60.pdf; 11 US Dept. of Labor, Prevailing Wage Surveys, 2002; 12 Early, J, Journal of Immigrant and Minority Health, 2006; 13 NC Migrant Housing Act, 1989; 14 Housing Assistance Council, 2001; 15 Arcury, T, American Journal of Industrial Medicine, 2006; 16 National Center for Farmworker Health; 17 NC General Statute 97-13b; 18 WRAL, 2005. Full citations available at www.ncfarmworkers.org.

Published by the Farmworker Ministry Committee of the North Carolina Council of Churches, with generous support by The Duke Endowment, 2012. Special assistance provided by Legal Aid of NC—Farmworker Unit, the NC Farmworker Health Program, and Student Action with Farmworkers.



North Carolina Farmworker Health Facts

Farm labor ranks as one of the top three most dangerous occupations in the United States. In addition to hazards in the fields, farmworkers and their families face unique burdens on their physical and mental health. North Carolina's leading industry is agriculture, yet farmworkers are among the most underserved residents in the state.

Occupational Risks

Injuries on the Job: Injuries in farm work commonly result from repetitive movements and stooping with few breaks, operating dangerous equipment and carrying heavy loads. Farmworkers suffer from high levels of heat stress, musculoskeletal pain and respiratory illness. At least one in four farmworkers report having been injured on the job in their lifetime,¹ and the fatality rate for farmworkers in NC is higher than the national average.²

Chemical and Nicotine Exposure: Farmworkers endure the highest rate of toxic chemical injuries and skin disorders of any workers in the country.³ Nausea, vomiting, cramping and itchy/burning eyes are known short-term effects of acute pesticide poisoning while long-term health effects of pesticide exposure include cancer, neurological disorders, miscarriage, memory loss, and depression.⁴ Skin conditions such as dermatitis are not only linked to pesticide exposure but to the handling of other chemical agents and plants. Nationwide, nearly half of farmworkers report having skin rashes.⁵ Green tobacco sickness, or nicotine poisoning through the skin, is experienced at least once in a growing season by 24% of tobacco workers.⁶ In just one day, workers can absorb the amount of nicotine found in 36 cigarettes.⁷

Extreme Conditions: Farmworkers often labor in adverse weather conditions, including extreme temperatures, rain, and the hot sun.⁸ Nationwide, environmental heat is responsible for claiming the lives of 423 workers between 1992-2006; in NC, heat stroke killed seven farmworkers within a five-year period.^{9,10}

Poor Field Sanitation: Employers who have ten or fewer workers are not required by law to provide access to toilets and clean water during the long work day, and some employers ignore existing field sanitation regulations.⁸ Workers have resorted to hand-washing and drinking water from irrigation ditches and ponds containing run-off from pesticide-ridden fields when there is no other water source.⁸

Substandard Housing: A lack of clean facilities for food preparation, bathing after work, and washing laundry, plus a susceptibility to pesticide drift from nearby fields, exposes farmworker families to the "take-home" affect of pesticides.⁴ Researchers found increased levels of pesticides in NC farmworker children compared with the general population.⁴ Lack of clean water is the likely cause of very high rates of parasites and gastrointestinal infections among farmworker families.¹¹ Overcrowded housing is common and increases the risk of infectious diseases and other health problems.^{8,12}

“Farmworkers feed the world. I think if everybody knows the importance of farmworkers they will want to keep them healthy.”

—Guillermo Noguera, Health Outreach Coordinator, Columbus County, NC

General Health Issues

Chronic Illness: Farmworkers suffer from higher blood pressure compared with the general public, especially for men and women aged 20-44.¹³ This puts them at increased risk for heart disease and diabetes.⁵

Food Insecurity: Nearly five out of ten farmworker households in NC cannot afford enough food for their families.¹⁴

Women's Health: Nationwide, less than half of pregnant women in farmworker families interviewed in 2000 had received health care during their first trimester.¹⁵

Childrens' Health: 53% of children in migrant farmworker families in Eastern North Carolina have an unmet medical need, and the need is proportionally higher for preschool aged children.¹⁶

Infectious Diseases: Nationally, farmworkers face six times the risk of other groups of contracting tuberculosis.¹⁷ The high incidences of HIV and other sexually transmitted diseases in farmworkers are attributed by some to isolation, poverty, and limited knowledge about how a disease is transmitted.⁵



Oral Health: Dental problems present a serious unmet health need for farmworkers and their children. Nearly one-third of NC farmworkers in a study sample have missing and/or fractured teeth, but only one in five had seen a dentist within the past year.¹⁸

Mental health: Nationally, 40% of farmworkers are depressed and 30% experience anxiety.¹⁹ Causes of strain on mental health include isolation, limited social support, separation from family members, job and financial stress, poor housing and unhealthy working environments.

Barriers to Care

Of the more than 150,000 farmworkers in the state, less than 20% receive health care.^{12, 20} The health needs of the state's farmworker families persist due in part to several barriers, most of which are non-financial. 20% of farmworkers in Eastern NC lack information about where to go for health care.¹⁶

Frequent mobility: About one-third of farmworkers change residence over the summer, moving within and out of the state for employment.²¹ Mobility is a barrier to receiving long-term care and time-sensitive health services such as prenatal care for women and treatment for chronic illness.

Transportation: In Eastern NC, 80% of farmworker families with children lack transportation.¹⁶ Many do not have a driver's license or car insurance and are often dependent on their employer to drive them to medical facilities.²²

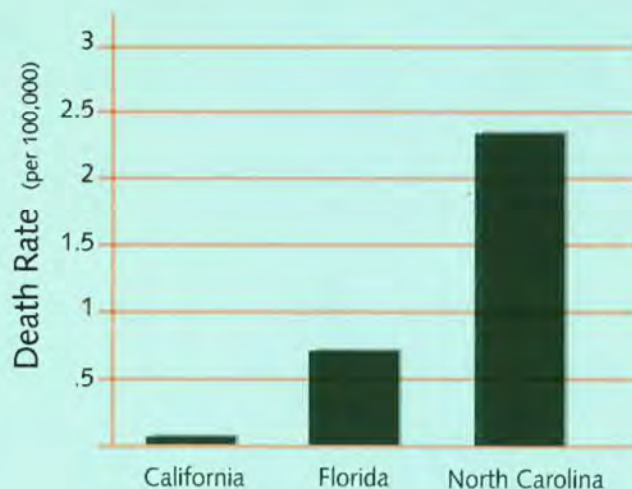
Language: The majority of NC farmworkers are Spanish-speaking (94%),¹² and the primary language for at least 10-15% of workers in NC is an indigenous language.⁵ Few health delivery sites in NC have adequate Spanish language resources, let alone the capacity for other languages.¹⁸

Heat Fatalities Among Farmworkers

in three major agricultural states (1992-2006)

Between 1992-2006, there were 423 reported worker deaths from environmental heat in U.S. 24% of these were in agriculture and related industries.

Source: Morbidity and Mortality Weekly Report (2008). *Heat-related deaths among crop workers, United States, 1992-2006.*



Insurance: 85% of farmworkers in the U.S. have no health insurance, and nine out of ten children in farmworker families are uninsured.¹⁵ The majority of these workers do not qualify for social services because of immigration status, even though many live significantly below the federal poverty line.⁵

Workers' compensation: The majority of NC farmworkers are not covered by workers' compensation. Only agricultural employers that hire H2-A workers or more than ten employees are required to provide the coverage.

Fear: Anti-immigrant sentiment may prevent workers from getting treatment for illness or injury, necessary follow-up attention, or routine health care.

Culture: Cultural beliefs and perceptions of the U.S. health care system might cause a delay in farmworkers seeking medical care and some discrepancies in types of treatment.⁵

“Many farmworkers come for the first time, and don't know there is a clinic, don't know there is a health outreach worker who can help them...It's very important, not just for one person but for the whole community.”

--Margarita, mother and farmworker in Oxford, NC



The North Carolina Agromedicine Institute ('the Institute') is an inter-institutional partnership among East Carolina, North Carolina State, and North Carolina Agricultural & Technical State Universities. Sanctioned by the University of North Carolina Board of Governors in 1999, the organization's mission is to promote the health and safety of farmers, fishermen, foresters, their workers and their families through research, prevention/intervention and education/outreach. The Institute serves all one hundred counties of North Carolina and other states by request. The Institute is not regulatory or advocacy but works in a neutral, trusted space providing prevention/intervention and education/outreach services to the state's agricultural community.

Working in the area of agricultural occupational & environmental health? Join us as an Institute Member. <https://www.ncagromedicine.org/research-institutemembers.php#membersprogram>

Want to learn more about agriculture (farming, fishing and forestry) in North Carolina? We are happy to provide information and to connect you with partners across the state who can serve as resources for you.

Have students (undergraduate, masters, or doctoral) that need a service learning project, internship, thesis or dissertation opportunity? Opportunities are available year round. Graduate students are also eligible to enroll in MPH 6036 Fundamentals of Agromedicine Spring, Summer or 11-week summer.

Visit our websites to learn more about the Institute's work in all one hundred counties of NC and beyond

www.ncagromedicine.org and www.ncfarmstress.org

For more information, contact:

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HEALTHY FARMWORKERS NEW GRANT WILL HELP ECU, COLLABORATORS GET INFORMATION TO MIGRANT, SEASONAL WORKERS



BY CRYSTAL BAITY
ECU NEWS SERVICES
OCTOBER 1, 2019

<https://news.ecu.edu/2019/10/01/healthy-farmworkers/>

Heat-related illnesses, pesticide exposure and other occupational hazards face migrant and seasonal farmworkers each day.

But a new three-year, \$427,551 health disparities grant from the National Institutes of Health's National Library of Medicine will help East Carolina University and its collaborators address those challenges by getting much-needed information into farmworkers' hands.

ECU, N.C. State University's extension toxicology program and Student Action with Farmworkers are leading the effort. Additional organizations supporting the work are the N.C. Farmworker Health Program and the N.C. Community Health Center Association.

"We developed this project because everyone deserves the ability to access high-quality health information," said Dr. Joseph G.L. Lee, associate professor and assistant chair of the Department of Health Education and Promotion in the College of Health and Human Performance. Lee, the project's principal investigator, is also an affiliated faculty member in the Center for Health Disparities in the Brody School of Medicine.

North Carolina ranks sixth in the nation in the number of migrant farmworkers, with approximately 150,000 seasonal and migrant farmworkers and their dependents in the state each growing season, according to Student Action with Farmworkers (SAF). Major crops requiring farm laborers include tobacco, Christmas trees, sweet potatoes, cucumbers, apples, bell peppers, and other fruits and vegetables. Farmworkers also are employed in nurseries and greenhouses.

The grant project will take a three-level approach to promote health literacy among migrant and seasonal workers across North Carolina:

Identify and assess health information designed for farmworkers and promote the submission of evidence-based education materials to the National Library of Medicine's (NLM) HealthReach database;

Increase knowledge of NLM resources for farmworker health outreach workers and pilot technology to enhance education in combination with professional development opportunities;

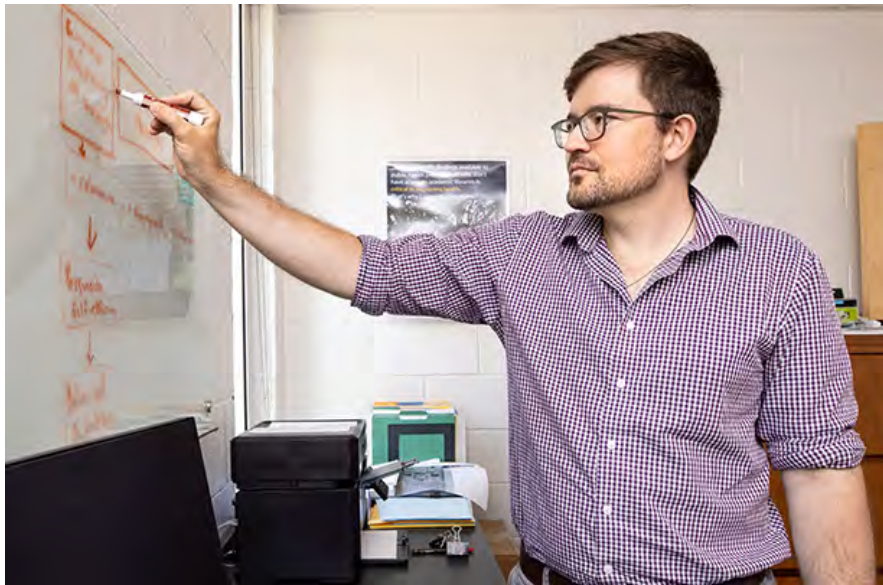
Provide Wi-Fi hot spots and access to the internet in combination with health literacy training at farmworker youth programs and migrant labor camps.

“This grant represents an investment by the National Library of Medicine in better access to health information for North Carolina farmworkers and their families,” Lee said.

ECU researchers will collect health education materials that range from fact sheets and pamphlets to comic books and videos, Lee said. The materials will be evaluated for readability and quality, and then submitted to NLM’s HealthReach to assist farmworker health providers.

“Most of these materials are being distributed by health outreach workers or community health workers who visit migrant labor camps to provide information, connect people with the clinic, and do brief screenings,” Lee said. “The goal is to give these outreach workers better tools to use.”

ECU’s team includes Dr. Leslie Cofie in the Department of Health and Human Promotion, Dr. Gina Firnhaber, previously at Laupus Library and now in the College of Nursing, and Jamie Bloss in the library. Several students will also be involved in the project.



Dr. Catherine LePrevost and colleagues at NCSU will be responsible for testing technology to help outreach workers visiting migrant and seasonal farmworker labor camps.

Melinda Wiggins, executive director of SAF, and her team will work with community partners across the state to install and maintain internet access points in labor camps.

“We are excited to partner with NCSU and ECU to increase farmworkers’ access to technology and to facilitate communication with their families back home to positively impact their mental

health,” Wiggins said.

The nonprofit SAF’s mission is to bring students and farmworkers together to learn about each other’s lives, share resources and skills, improve working conditions, and build diverse coalitions for social change.

The grant builds on a pilot project between ECU, Joyner Library and SAF funded in 2017 by the National Network of Libraries of Medicine.

CHANGING FACE OF N.C.: INNOVATIVE COOLING METHOD INCREASES SWEET POTATO FARMER'S PROFITS



BY VICTORIA WRESILO
SPECTRUM LOCAL NEWS
JUNE 3, 2021

<https://spectrumlocalnews.com/nc/charlotte/news/2021/06/03/the-invention-that-changed-nc-sweet-potato-industry#>

More than 100 operations across North Carolina now use negative horizontal ventilation to increase profits and shelf life of sweet potatoes for customers.

It's a method of forced air cooling, invented by N.C. State Professor Dr. Mike Boyette.

What You Need To Know

- Negative horizontal ventilation allows farmers to control the humidity and temperature of storage buildings that house sweet potatoes
- Dr. Mike Boyette with N.C. State created the storage technique
- Before, sweet potatoes would spoil within a few months, but now farmers can keep sweet potatoes up to a year before packing them for customers
- More than 100 operations across North Carolina have facilities with negative horizontal ventilation

“You can grow sweet potatoes from Ontario, to all the way down to Uruguay and all over the world,” Boyette said. “But only the places that have invested in the infrastructure we got here...that can keep them, I mean, I have seen potatoes like this, out of the ground for 13 months.”

The storage technique uses fans that allow farms to control the temperature and humidity in the buildings where sweet potatoes are stored.

“What you can guarantee is that every potato in the room, 20 feet deep, 150 feet long, 60 feet long. We are talking millions of pounds of sweet potatoes, every potato in the room is going to be at about the same temperature,” Boyette said.

It matters for operations like Lancaster Farms in Wilson, because it's an export packer. Meaning, 100% of its sweet potatoes ship overseas.

"Once they leave our facility, they are on a container for two weeks," said Sarah Carraway, the farm's office manager. "There's probably three weeks between the time it gets packed at our facility, to actually hits the warehouse in the EU, UK or wherever we are sending."

Carraway's family owns the farm. She says this invention, plus the potato curing process, is a game changer.

"It's a good product, it's sweeter. It's holding the sugars in it. And I also think you should invest in a curing facility like this because you're able to hold your potato," Carraway said. "So if the market was low or whatever was going on, you're able to keep your potato in a good environment until you're able to put it on a packing line."

According to N.C. State, historically, sweet potato farmers were limited to an August through November harvest. And due to poor storage, the crops needed to sell a few months later.

Studies showed rot and poor handling accounted for the loss of half of the nation's harvest. Boyette was able to counteract that with his invention of negative horizontal ventilation.

According to the North Carolina SweetPotato Commission, North Carolina has ranked as the No. 1 sweet potato producing state in the United States since 1971.



Grant continues faculty partnership with Wilson middle school

PUBLISHED AUG 02, 2021 BY [MATT SMITH](#)

FILED UNDER: [ECU NOW BLOG](#), [FACULTY/STAFF](#), [RESEARCH](#)

An East Carolina University associate professor will examine the outcomes of emotional poverty training on teachers practice in Wilson thanks to funding from a grant from the [Engagement Scholarship Consortium](#).

The \$5,000 ESC Engaged Scholarship Research/Creative Activities Grant awarded to the [College of Nursing's](#) Dr. Deborah Tyndall continues a partnership with Wilson County Schools that began in 2013.

The study will examine outcomes of emotional poverty training on teacher practice to study its effect on student perspectives of school connectedness and attitudes on seeking help.

Defined as the belief by students that adults and peers in their school care about them and their learning, school connectedness has been found to have the potential to offset risk factors that lead to negative student educational and mental health outcomes, Tyndall said.

Tyndall's project will include focus groups with teachers to explore



*East Carolina University College of Nursing assistant professor Dr. Deborah Tyndall received a grant from the Engagement Scholarship Consortium to continue her community engaged research project with Wilson County Schools.
(Contributed photo)*

their use of school connectedness strategies, and both surveys and focus groups with students to learn more about their attitudes toward school connectedness and their willingness to seek help from school staff.

“We anticipate that this project will allow us to compare perceptions between teachers and students regarding school connectedness,” Tyndall said. “These findings will be critical in identifying appropriate interventions to improve school connectedness at Toisnot Middle School.”

Developed by educator Dr. Ruby Payne, emotional poverty workshops have been used by thousands to better recognize when students’ disruptive behaviors in the classroom may be due to mental health or emotional needs.

Emotional poverty can occur in all demographics, but students at low-income schools may be more at risk. Toisnot is a Title 1 school in which 72% of students are considered economically disadvantaged. In-school suspension rates reach seven times higher than the state average, Tyndall said.

Tyndall partnered with Toisnot in 2019 and led an [Engagement and Outreach Scholars Academy](#) project that involved the school. After attending support service team meetings at the school, Toisnot leadership worked with Tyndall to find priority areas that her research could address, including teacher attentiveness and responsiveness to their students’ emotional states.

“Focusing on community engagement has made me think outside of my researcher bubble and be more considerate of what is important to our community,” Tyndall said. “It’s been a rewarding experience to give back to my community. In the eight years I have partnered with Wilson County Schools, I have gained a whole new level of respect for the work that school leaders and teachers do for students.”

Tyndall plans to begin the next phase of her project with a presentation to teachers and staff at the school this month.

In addition to Tyndall, the partnership has included participation from several ECU students, including College of Nursing doctoral candidates and [EC Scholars](#) as part of the EOSA program.

“This partnership is an excellent example of how a university and a community partner can work together to connect student learning in classrooms with practical experience,” said Sharon Paynter, ECU assistant vice chancellor for economic and community engagement and ESC board member. “It brings together the knowledge and skills of the partners in a way that creates value for the community and university and national recognition for the work highlights its importance.”

The ESC is composed of higher education institutions that work to build strong university-community partnerships. The consortium includes 41 universities from across the country, including the University of Alabama, Michigan State University, Virginia Tech and Ohio State University.

ECU and its partners have received past honors from the ESC, including for work in [agricultural health and safety](#) and [high school athletics safety reform](#).

MORE THAN THE TYPICAL STANDARD SOLUTION NEW AUTOMATION HELPS KEEP IV FLUIDS FLOWING AT HEALTH CARE COMPANY FRESENIUS KABI.



BY UNKNOWN AUTHOR

DC VELOCITY

MARCH 29, 2022

<https://www.dcvelocity.com/articles/54223-more-than-the-typical-standard-solution>

When global health care company Fresenius Kabi sought to expand its United States operations with a new product line, it followed its long-held strategy of manufacturing its products in the country or region where they are used. The German-based firm has three manufacturing sites in the U. S. to serve its hospital and clinic customers in the American market, so it was an easy decision to invest in expanding an existing site in Wilson, N.C. The Wilson site manufactures generic medicines in pre-filled syringes. The new operation is for the production of IV (intravenous) solutions that provide fluids and medicines for patients in clinics and hospitals. Automating processes at the Wilson site was important to assure safety, accuracy, and precise handling of the solutions.

“This facility is the most automated and integrated of our three production facilities operating in the US,” says Wolfgang Salrein, vice president, expansion project, at Fresenius Kabi. “The new operation is capable of producing million units of standard solutions annually.”

To provide space for the new operations, a rack-supported high-rise building was erected to house an automated storage and retrieval system (AS/RS) from Stoecklin Logistics. The three-aisle system contains 10,200 pallet positions where finished goods are stored until ready to ship. Most products spend about a week in the temperature-monitored storage, during which time they naturally cool following their sterilization during the manufacturing processes.

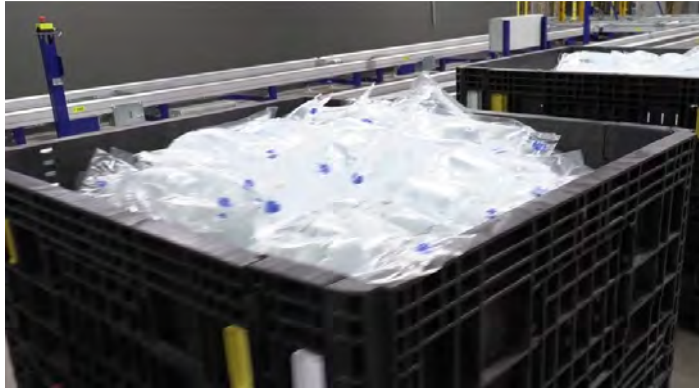
A Fluid Flow

To begin the flow processes in Wilson, the chemical fluid mixtures are produced in the adjacent plant and are filled into the intravenous non-PVC bags. The bags are next automatically packed using robots with articulating arms. From there, additional robots palletize the cartons into neat, perfect stacks. A Stoecklin transfer car then picks up a stacked pallet and delivers it to one of the facility’s stretch wrappers and then the load is conveyed to the automated storage and retrieval system. The Stoecklin control software works with the facility’s SAP management system to assure that the status of each batch is carefully monitored throughout the product journey.

“What’s really great about this system is the high-rise keeps everything consolidated in a vertical format, which is integrated to SAP and you have a track and trace system,” adds Michael West, senior project engineer. He

says the automation makes it much easier to find product when it is ready to ship. “You don’t have a big floor plan where you have to go all over to actually find what you’re looking for. It’s all condensed and it is efficient,” he says.

When ready for shipment, the three storage cranes working within the AS/RS retrieves the pallets and discharges them onto a takeaway conveyor for transport to a shipping area. Upon arrival, another transfer car delivers the pallets to staging lanes where the pallets are held temporarily until trucks are ready for loading.



The automation of the warehouse has reduced labor costs and nearly eliminated forklift traffic, while also providing gentle handling to maintain product integrity.

“If you can automate a process, you can get a more reliable and consistent product and you can eliminate some human error. This leads to a better-quality product for our customers and ultimately for the patients that use our products,” explains Christi Mitchell, engineering and maintenance manager. “The entire team was impressed with the speed and the efficiency that the warehouse was put together by the Stoecklin team. They came in and it was amazing and fluid,” she adds.

NASH COUNTY

Established in 1777 from Edgecombe County, Nash County was named for Francis Nash, a general who served under George Washington during the Revolutionary War. Nashville is the county seat.



Nash County has a population of over 94,000 with approximately 55,000 in Rocky Mount -- the 17th largest city in the state.

Bordering the coastal and piedmont regions of the state, Nash County offers direct access to I-95 and Hwy 64. Depending on where you are in the county, you can be in the Raleigh area within a 25- to 45- minute drive.

Visitors can enjoy the Tar River Orchestra & Chorus, explore the Tar River Paddle

Trail, or catch a game at the Rocky Mount Sports Complex (RMSC). Covering 143 acres, the sports complex is one of the largest of its kind on the east coast. RMSC is a premier athletic facility that hosts youth teams from all over the country.

Nash County is a leading agricultural county in the state, producing commodities such as tobacco, sweet potatoes, cucumbers, soybeans, corn, peanuts, cotton, beef and dairy cattle, and poultry. The county also has three operating mines that extract gold and silver.

Industry opportunities have steadily grown in the county with manufacturing as the leading job producer. Major manufacturing sectors include food processing, advanced manufacturing, distribution, and logistics. The Cheesecake Factory Bakery, Honeywell Aerospace, and Pfizer are just some of the Class A industries that call Nash County home. Providing another big boost to the local job market, the CSX Carolina Connector Intermodal Terminal which opened in 2021. The facility is a multimodal supply chain solution for industries in the region.

On the Purple and Gold Bus Tour, we will visit Rocky Mount Mills, an 82-acre repurposed cotton mill that now houses a brewery, restaurants, cultural and entertainment amenities, residential lofts and office space. There, we will experience the unique restaurants and local craft beers while exploring the innovatively revitalized facility and its picturesque grounds. The grounds include River & Twine, a 20-unit boutique tiny home hotel set along the Tar River that offers a unique option for those staying overnight.

While at the Mills, we will also hear from a representative with Carolina Gateway Partnership, a public-private agency dedicated to the economic development of the Edgecombe and Nash County areas through retention, creation, and expansion of industry and other businesses.

SOURCES

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<https://explorenashcounty.com/>

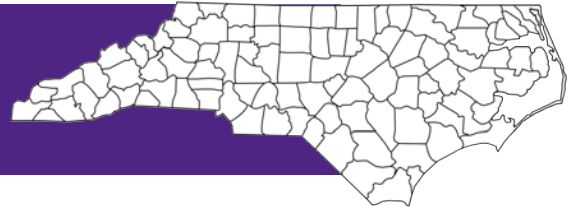
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NASH COUNTY SPEAKERS



Scott Roberts
General Manager
Rocky Mount Mills

Scott Roberts, general manager for Rocky Mount Mills, is originally from Durham, North Carolina. Roberts worked 30 years for the City of Durham Fire Department serving the last 15 years as Battalion Chief prior to retiring in 2016. Roberts joined Capitol Broadcasting Real Estate team in 2014 as an Assistant Property Manager of American Tobacco Historic District and moved to Rocky Mount in 2016 to become the general manager of Rocky Mills. Roberts has bachelor degrees in business administration, law enforcement administration, and emergency medicine. As part of his role as general manager for Rocky Mount Mills, Roberts serves on the Carolina Gateways Partnership Board.



Norris Tolson
CEO and President
Carolinas Gateway Partnership

Norris Tolson became the CEO and President for Carolinas Gateway Partnership in January of 2016. Tolson previously served as a senior advisor for economic development with the Williams Mullen law firm. Prior to that, he was president and CEO of the North Carolina Biotechnology Center from 2007 - 2014. Tolson was elected to the North Carolina General Assembly and served in the House of Representatives from 1994 until 1997 representing parts of Edgecombe, Nash, Pitt and Wilson Counties. Tolson graduated from NCSU with a bachelor's degree in crop science and agribusiness and has served his alma mater in many other capacities over the years. He received the Distinguished Alumni Award from the university in recognition of his outstanding career achievements.

A SECOND CHANCE FOR NORTH CAROLINA'S SHUTTERED FACTORIES

WITH THE RISE OF REMOTE WORK, DEVELOPERS ARE BETTING THEY CAN LURE YOUNG TALENT AND RAISE ECONOMIC PROSPECTS FOR THE STATE'S DEPRESSED AREAS.



BY AMANDA ABRAMS
THE NEW YORK TIMES
AUGUST 16, 2021

<https://www.nytimes.com/2021/06/15/business/north-carolina-factories-redevelopment.html>

Less than a decade ago, the economic malaise in Rocky Mount, N.C., was tangible. Rocky Mount Mills, a big cotton mill that had given the town its identity, had shut down in 1996, costing the area hundreds of jobs. Downtown was deserted. Nobody was hiring.

Now, the mill is a bustling complex with restaurants and breweries. It has a small hotel composed of tiny houses on wheels, a wide lawn where concerts regularly take place and a Wiffle ball field.

Since 2013, Rocky Mount Mills' current owner, Capitol Broadcasting Company, has redeveloped the site, giving it a dynamic atmosphere with stores and residences. Its leaders are aiming to create a sense of community that will entice out-of-town businesses and workers to settle there, raising the town's economic prospects and spurring more growth.

"We went through a really rough patch before they decided to invest in that project," said Rocky Mount's mayor, Sandy Roberson.

Rocky Mount isn't the only mill town in North Carolina trying to revitalize its economy. In High Point, Greensboro and Winston-Salem, a region known as the Piedmont Triad, other large factories that once served as economic engines providing many blue-collar jobs are being turned into vibrant mixed-use complexes for work and play. The projects have been designed to connect struggling regions to a new economy based on technology, information and innovation.

Now, with the rise of remote work, developers are betting that the factories' beauty and sense of history, packaged with a roster of community activities, will give them a way to lure young talent. If workers are no longer tethered to their offices, they're free to go anywhere — and it's possible they will choose smaller cities with a higher quality of life.

Christopher Chung, the chief executive of the Economic Development Partnership of North Carolina, is optimistic. "A lot of these communities have the best chance they've had in a while to recruit individuals to take advantage of much more affordable housing prices and the other amenities that are there," he said. "This seems like a unique moment to realize the gains."

Renovating old, historic structures as a way to attract workers is a relatively new trend. These “adaptive reuse” projects can have a cachet that appeals to young professionals seeking not just functional workplaces but ones with a certain “cool” factor.

“What they have going for them is this authenticity of place, and the history and heritage surrounding that,” Donald K. Carter, a senior research fellow at Carnegie Mellon University’s Remaking Cities Institute, said of industrial buildings from the 19th and early 20th centuries. As a result, he added, “almost every city is now looking at these buildings as real economic development assets.”



That’s the thinking of the developers behind the North Carolina projects, but Rocky Mount Mills is arguably the most ambitious. The facility, a former cotton mill at a picturesque bend in the Tar River, is a vast building with high ceilings, original wood floors, tall windows and giant heart pine beams. Completed in 2019, it includes retail, office and residential space.

Unlike other projects, this one is in rural, economically depressed eastern North Carolina. Rocky Mount never really recovered from the mill’s closure, and its resources are still limited: It has few megarich donors, no hordes of university students and not many hip businesses.

The developers aimed to create their own momentum. The mill property covers more than 150 acres and has four restaurants and four local breweries with taprooms. To help establish a community, Capitol Broadcasting bought and restored almost 70 original mill houses surrounding the campus.

“We knew we wanted to create a quality-of-life place that people wanted to be a part of,” said Michael Goodman, vice president of real estate for Capitol Broadcasting, which also owns WRAL-TV in Raleigh and the Durham Bulls minor-league baseball team, among other properties in the state.

The houses were snapped up almost instantly, and on weekends, the property almost feels like prepandemic times. But the office space is taking longer to fill; currently, it’s only 60 percent leased and lacks the kind of anchor tenants that Capitol Broadcasting had hoped to see.

But the developer sees opportunity in the remote-work models spawned by the pandemic. An hour’s drive to the west lies North Carolina’s Research Triangle, home to the University of North Carolina at Chapel Hill, Duke University and North Carolina State University. That region is booming and poised to grow more: Apple just announced plans to build a \$1 billion campus. Some of those workers might prefer to live in a place like Rocky Mount, where housing and services are affordable and traffic is negligible.

“We’ve got lower-priced housing, food and beer, and kayaking on the river and hiking,” Mr. Goodman said. “With the growth and talent base coming out of the Triangle, areas like Rocky Mount will only feed on it.”

Other developers are hoping to capitalize on similar advantages.

In Greensboro, a nonprofit lender, Self-Help, has been transforming Revolution Mill, a former flannel mill that closed in 1982. It’s now home to 125 businesses, 150 residences, restaurants and outdoor performance spaces. In a second phase, Self-Help recently began renovating an adjacent five-story, 145,000-square-foot building that was once used for packing and shipping. With 18-foot ceilings and concrete pillars, it will hold restaurants on the ground floor and offices and apartments above.

In High Point, city officials worked with High Point University and other donors to redevelop a former hosiery factory. But the city’s challenge is unusual: It hosts a renowned biannual furniture market, and its downtown has been taken over by furniture showrooms that are vacant 10 months out of the year.

The High Point project, called Congdon Yards, is an effort to create a year-round gathering spot that will also draw young talent. Along with offices, the space includes a co-working area and a 6,000-square-foot workshop with commercial-grade woodworking equipment available to local designers and artisans.

For those redevelopment projects, a project in Winston-Salem serves as a shining example of what a smart adaptive reuse project might achieve.

The city has long been home to the tobacco company R.J. Reynolds, now part of Reynolds American. When Reynolds moved its manufacturing operations out of town in 1986, officials from the city, Wake Forest University and Wake Forest Baptist Medical Center began making long-term plans and investments in the site. The first building was redeveloped in 2012.



Today, just about all of the warehouses, factories and other industrial facilities have been renovated in a 2.1-million-square-foot complex called Innovation Quarter. The buildings are home to the health system's labs and the university's medical and engineering schools, as well as companies like the I.T. firm Inmar and dozens of start-ups — all tightly clustered around a small green space.

Innovation Quarter is no moribund research park. Thousands of workers and students cross its 330 acres daily, and its administrators maintain a busy schedule of yoga classes, food trucks and lunchtime concerts in the park. That dynamism has transformed the rest of Winston-Salem, which now boasts a busy downtown with significant residential growth. The city gained workers during the pandemic, according to a McKinsey report.

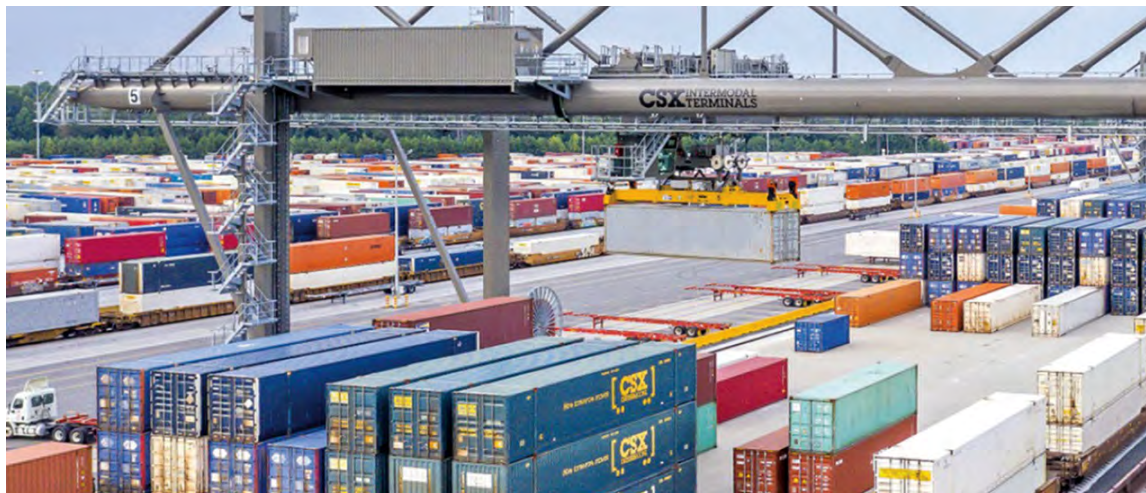
“This area lost jobs in the '80s and '90s,” said Graydon Pleasants, the head of real estate development at Innovation Quarter. “Now, people are leaving California and leaving the big cities. The spillover is finally happening.”

The last unfinished spot abutting the park is a former power plant being redeveloped by a local firm, Front Street Capital, as an office building. In a tip of the hat to the structure's past, the company turned an adjacent elevated rail line on concrete trestles into a walkway; below, in what was once the coal pit, locals sit at a brewery's long tables while their children play nearby.

“Our people love it because it feels really alive,” said David Mullen, president of the Variable, an ad agency that occupies part of the building. Several years ago, he said, it was difficult to attract high-level talent to the city. But now, “people visit and are like, ‘Holy cow!’”



CSX CHRISTENS CCX



BY WILLIAM C VANTUONO

RAILWAY AGE

NOVEMBER 19, 2021

<https://www.railwayage.com/intermodal/csx-christens-ccx/>

Located on 330 acres near Rocky Mount, N.C., on a CSX main line, CCX features three wide-span, zero-emission electric cranes with a lift capacity of 110,000 containers per year. Most of the container handling will be fully automated, with operators controlling the initial lift and final placement from inside the terminal building. In addition to its remotely operated electric cranes, CCX “maximizes safe and efficient truck movement through the facility” with CSX’s XGate technology that “automates the in-gate process, streamlines traffic flows and automatically inspects loads leaving the facility.”

At the facility’s grand opening Nov. 18, officials from CSX and the North Carolina Department of Transportation (NCDOT), which shared construction costs, said CCX is “a positive development for the regional economy and the nation’s supply chain.”

“Millions of people live within 120 miles of this terminal,” said Eric Boyette, NCDOT Secretary. “The Carolina Connector will spur business development, divert thousands of trucks off highways and provide much needed jobs in this fast-growing region.”

“CSX appreciates our partnership with the North Carolina Department of Transportation, and we thank the state for its contribution toward making this project possible,” said Nathan Goldman, CSX Executive Vice President and Chief Legal Officer. “The CCX terminal is a demonstration of how CSX is creating sustainable supply chain solutions for customers by expanding our intermodal network in Eastern North Carolina and connecting to the busy I-95 corridor. We are proud that this project will be a catalyst for economic growth and development in the region.”



Norris Tolson, CEO and President of Carolinas Gateway Partnership, commented, “The Carolina Connector is a welcome asset for North Carolina. This event gives us the opportunity to celebrate the hard work and cooperation of NCDOT, CSX, Carolinas Gateway Partnership and other partners. This collaborative effort will pay dividends to North Carolina citizens for years to come.”

FORMER QVC FACILITY DRAWING INTEREST



BY WILLIAM F. WEST
ROCKY MOUNT TELEGRAM
SEPTEMBER 1, 2022

https://www.rockymounttelegram.com/news/business/former-qvc-facility-drawing-interest/article_d29e139a-3cd2-540e-938d-28997b02177a.html

During a question-and-answer session following a presentation by Carolinas Gateway Partnership President and CEO Norris Tolson to the Rocky Mount Rotary Club, Mayor Sandy Roberson's Chief of Staff Cary Cox wanted to know whether there is any interest in the former QVC distribution facility off U.S. 64 in Edgecombe County.

Tolson replied in the affirmative and said that when the fire occurred at the facility in the early morning hours of Dec. 18, 2021, QVC had about 65,000-75,000 pallets or truckloads of material on-site.

"And so they've been very, very busy moving product off the site," Tolson told the club's luncheon gathering on Monday. "About 60 percent of that site is still viable."

Tolson emphasized that means that of what was 1.2 million square feet at the site, there is about 650,000 square feet of usable building.

Tolson also said QVC representatives told him and his team last week the company had received offers for the site from a couple of people.

"We've actually got it under consideration by a company that's interested in manufacturing solar panels on that site," he said. "So I think we'll get somebody out there as soon as QVC is ready to turn it loose."

"They started to — they're getting close."

QVC is the network based northwest of Philadelphia that focuses on offering viewers a televised, in-home shopping experience. QVC is part of the Qurate Retail Group, which is a Denver-area-based media conglomerate.

The Telegram reported on April 7 that QVC said in a news release a decision had been made not to rebuild the facility in Edgecombe County.

The fire was reported at 2:06 a.m. on Dec. 18, 2021, which was a Saturday. One of the workers at the QVC facility, Kevon Ricks, 21, was killed in the fire.

Earlier during the question-and-answer session on Monday, Nash County Commissioner Fred Belfield asked

whether there have been thoughts about any alternatives to large industries if anything happens to them and they decide to shut down.

Belfield cited the fire at the QVC facility.

Tolson said QVC prior to the fire had 3,000 people working at the facility, with more than 1,900 of them having been full-time employees and with the rest having been contractors.

Tolson said five months after the fire, 1,600 of those people had been placed somewhere else, either in Edgecombe County or elsewhere in the region.

“There is a workforce development group that is supposed to help people get placed in other jobs,” he said.

He also referred to news reports on Friday that Sandoz, a division of pharmaceutical giant Novartis, plans to shut down its plant in Wilson next year. The plant employs about 240 people.

“They’ll be absorbed in the industry,” he said. “There’s some pharmaceutical companies down in Greenville that are desperate to hire people.”

He also said he and his team know that at pharmaceuticals giant Pfizer’s plant at North Wesleyan Boulevard and N.C. 4 and at the Cummins Rocky Mount Engine Plant off U.S. 301 just southwest of Whitakers, their respective attrition rates run from 5 percent to 8 percent a year.

Tolson emphasized that if one takes the Pfizer plant alone at 3,300 employees and does the math, then one can see 5 percent of 3,300 is a lot of people one has to find to fill positions.

He said other plants, such as the one Sara Lee Frozen Bakery has off U.S. 258 southwest of Tarboro, are in the same boat.

“So we’re always looking to fill the workforce, but the new people, Fred, that we’re going to have to have available sometime in the 2025 range, we’re looking at a minimum of 3,000 — minimum of 3,000,” Tolson told Belfield in reference to anticipated future economic development.

“So we’re starting to talk to the colleges and the community colleges about: How are you going to be able to help us locate those people, get ’em trained up — and have ’em ready to go to work?” he said.

RESEARCH CONNECTION PROGRAM FOSTERS MENTORING RELATIONSHIP, OPPORTUNITY TO



BY KRISTEN MARTIN
ECU NEWS SERVICES
MAY 11, 2022

<https://news.ecu.edu/2022/05/11/research-connection/>

For many aspiring college students, being able to participate in research projects as an undergraduate is a huge draw. With East Carolina University's status as the only university in North Carolina with a medical school, dental school and college of engineering and technology, opportunities for students to immerse themselves in research are endless.

The university's Division of Research, Economic Development and Engagement offers a variety of ways to work with researchers across campus, including the Engagement and Outreach Scholars Academy (EOSA), which connects faculty members, graduate and undergraduate students across disciplines to participate in community-engaged research. "The power of collaboration between universities and their external partners is evident in programs like EOSA," said Dr. Sharon Paynter, assistant vice chancellor for economic and community engagement. "Engaged research results in projects that address community-identified needs and at the same time provides students opportunities to use analytical and technical skills gained in classroom settings and offers faculty avenues to bring their technical expertise to bear on real-world challenges. At ECU, about half of sponsored programs involves this type of community-engaged research."

Every year, the second-year EC Scholars enroll in HNRS 3100, a research internship class where they partner with the faculty and community partners involved in EOSA. For some students this is their first chance to participate in research at the university level. It also gives them a chance to develop a mentor relationship with faculty who may not be in their degree program.

Anjalee Hou, an economics major, and Taylor Cash, a biology major, are second-year EC Scholars who have built rapport with Dr. Emily Yeager, an EOSA faculty member and assistant professor in the College of Health and Human Performance's recreation sciences department. They have decided to continue working with Yeager as part of their required signature honors project even after the EOSA experience ended.

"In the beginning, since we didn't know a lot about EOSA, I was a little scared because you have all of these faculty projects," Hou said. "It really works out in the end, where they're opening you up to new perspectives. I think that's the biggest part of it that we overlook where we're expecting EOSA to be something that fulfills a niche that we specifically want but I think the whole point of EOSA is to get you out and find something new."

Yeager's research focuses on asset mapping the eastern Tar-Pamlico Blue Economy Corridor (BEC), which includes all the communities along the river from Rocky Mount to Washington. The World Bank defines the

blue economy as sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ecosystem health, encompassing activities from tourism to renewable energy.

“The goal is to create a digital interactive map that would display all of these cool resources that the community tells us exist,” Yeager said.

There are seven kinds of assets Yeager’s team is interested in identifying:

- Nature-based tourism, such as kayaking, fishing and wildlife viewing
- Hospitality
- Socio-cultural heritage
- Science, technology, education, arts and math (STEAM)
- Americans with Disabilities Act accessibility
- Conservation assets
- Public health



“We are trying to cross-promote other things that people are doing, but also maybe identify a few things people have not really thought of before, something that can improve your quality of life,” she said.

Yeager developed her interest in the Tar River at a young age. She grew up in Franklin County near the Tar River’s headwaters, where she played as a child with her dad. Then, she moved to Greenville, where she pursued her bachelor’s and master’s degrees.

“Greenville is actually the place where I learned to kayak, and I would fish when I was in school here, but I still took it for granted,” she said.

While she pursued her doctoral degree in Georgia, she dreamed of coming back to eastern North Carolina as a professor at ECU.

“When I came back, I decided to go to some of my old stomping grounds on the Tar and Pamlico rivers,” she said. “The thing that I noticed was that these communities had some cool things going on which all related back to returning to the water. There was this historical retreat from waterways when you had the export of manufacturing elsewhere so now, I’m seeing how they’re revitalizing these spaces or turning them into places you can live, work and play.”

While Yeager is pursuing her passion, she encourages Cash and Hou to also pursue things they are interested in.

“She’s really, really supportive and lets us take the lead,” Cash said. “If we want to learn how to use a certain program, she’ll offer to train us in it.”

An example of this is the ArcGIS software. Neither student knew how to use it before working with Yeager. Now, they not only have completed maps for the BEC research but have started using the software in biology classes as well

“From day one, I don’t think there’s a single thing Dr. Yeager has said no to us about and she’s always so supportive of any questions,” Hou said.

They regularly get coffee with Yeager and discuss their futures and ask her advice on resumes, graduate programs and more. They are not the only ones reaping the positive benefits of the mentor-mentee relationship.

“Being encouraged to be involved with my students so much was such a lifeline,” Yeager said. “They’re so inspirational and seeing them lifted up and hearing their stories about what they learned and feeling confident — that’s all you want at the end of the day, for the students to feel like they learned something and it was a value.”

One of the major projects that Cash and Hou have assisted with is the creation of social media accounts to promote the BEC, which was a new experience for them. They also learned valuable skills in literature review and graphic design.

“For me, while I’m econ, I’m also pre-med,” Hou said. “I’ve been mainly focusing on medical stuff and trying to find clinical research, so it’s been super fun working with Dr. Yeager on something that pertains to my econ major and things I’ve learned in class. I finally see the real-world applications to it.”

The next stage of the project is conducting community workshops in Nash, Edgecombe, Pitt and Beaufort counties to ask local residents what they believe are important assets in their community. These workshops build on a survey that was sent out to about 8,000 residents who live in and near the river basin. Once the final workshop is completed on May 22 at the Tarboro campus of Edgecombe Community College, Yeager and her team will analyze the data with the goal of making the asset map live in the fall.

“It’s a community development tool,” Yeager said. “That’s what we hope to do. Some people can use it for marketing, some could use it for economic development, whatever they want to do, but I was so inspired by everything that was happening in these communities along the waterways and wanted to see what people thought about it.”



NORTHAMPTON COUNTY



Established in 1741 out of Bertie County, Northampton County was created for travelers' convenience. Those living in the area needed better access to a courthouse, and Northampton County was created to serve that need. It received its name from James Compton, Earl of Northampton.

Northampton County sits at the North Carolina/Virginia state border with I-95 running through the western part of the county.

With approximately 537 square miles of land and a population of just over 17,000, Northampton County is a vastly rural and agriculturally rich area. There are 272 farms including 195,000 acres of commercial forests covering about half of the county's land.

The main crops grown in the county are peanuts and cotton followed by tobacco, soybeans and corn. Peanuts grow well in sandy, well-drained soil so it's a productive crop in the coastal plain of North Carolina. Other agricultural products include livestock like chickens, hogs and cattle.

While rich in agri-business, Northampton County is also home to state-of-the-art manufacturing and distribution facilities like Purdue Farms, J.S. Sanfilippo & Son - Peanut Processors, Severn Peanut Company, Northampton Peanut Company, Lowe's Home Improvement Regional Warehouse, and Envia Pellet Plant. Types of industry activity include chemicals, foodstuffs, farm machinery, lumber and other wood products, and apparel.

On the Purple and Gold Bus Tour, we will visit with the Choanoke Area Development Association (CADA), a non-profit that serves five northeastern NC counties by helping disadvantaged citizens achieve a better quality of life through education, training and economic development. A team within REDE recently worked to help CADA secure a Rural Opportunity Housing grant. We will learn more about how that grant will benefit Northampton County and surrounding communities.

SOURCES

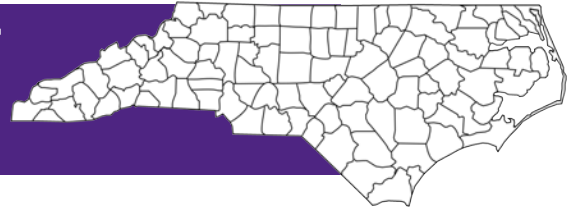
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NORTHAMPTON COUNTY SPEAKERS



Dianne Bynum
Head Start Director
Choanoke Area Development Association

Dianne Bynum serves as the Head Start/Early Head Start Program Director at Choanoke Area Development Association of NC, Inc. (CADA) since 2012. Bynum has served CADA for over 20 years in many roles to include teacher, lead teacher, Family Service Site Manager, Center Manager, Mentor Coach, Education Service Area Manager, and Assistant Head Start/Early Head Start Director. She is also a certified Classroom Assessment Scoring System (CLASS) Observer and an Affiliate CLASS Trainer. As CADA director, Bynum works to establish community partnerships and make comprehensive services and resources available to the children and families CADA serves. She has worked to establish partnerships that bring resources to CADA to enhance the Head Start/Early Head Start programs.



Brenda Greene
Manager, Home Ownership Program
Choanoke Area Development Association

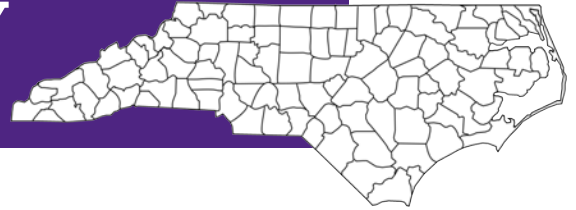
Brenda Greene is a resident of Winton, a town in Hertford County. She has served CADA since 1999 as the Homeownership Program's Certified Housing Counselor. She is an AHECTI Certified Homeowner Educator Counselor and a Housing Finance Development Professional. Greene is also a licensed NC Real Estate Broker who prefers to assist those seeking the "American Dream" by teaching home buyer education. She believes in community service and the vision and mission of CADA. She has served the citizens of Hertford County as a member of the Hertford County Board of Commissioners, the Public Health Authority, Choanoke Public Transportation Authority Board, and the Board of Trustees at Roanoke-Chowan Community College.



Catherine Moody
Board Chair
Choanoke Area Development Association

Catherine Moody was born and reared in Northampton County. Moody earned a bachelor's degree in education from NC Wesleyan College and a master's degree in educational leadership from Virginia State University. Moody has enjoyed a long career in education as a teacher, administrator, school board member and a leader. She started her career as a teacher of nursing at Halifax Community College. Moody works diligently to improve the life of all citizens serving on the Northampton County School Board of Education and as a consultant to the Gregory B. Davis Foundation, and now serves on the Upper Coastal Plain Joint Community Advisory Committee office on Aging, Chairman of Scholarship committee for Halifax County Branch of University Women, Vice Chairwoman for Turning Point Workforce Development Board of Directors and the CADA Board of Directors. She also served on the Cooperative Extension Advisory Leaders Committee. She is certified as a National School Board Affiliate and was inducted in the NCCAA Hall of Fame in 2017. She is the recipient of the 2019 Hero Award from Halifax Community College.

NORTHAMPTON COUNTY SPEAKERS



Christopher Moody
Executive Director
Choanoke Area Development Association

Christopher S. Moody is a native of Roanoke Rapids, North Carolina. He started his career with CADA in 2006 as a Case Manager in the Fathers in Focus Network Program. This program provides fathers with the tools to become better fathers and better men able to serve their families and their communities. He transitioned to Program Manager for the Fathers In Focus Network program and later became Director of Community Services for CADA. In 2021, Mr. Moody was elected to serve as the Executive Director of CADA, Inc. He strives to continue the rich history of CADA by serving the community and advancing agency resources and partnerships to address the community needs within CADA's service area.



Olivia Taylor
Workforce Development Coordinator
Choanoke Area Development Association

Olivia J. Taylor has been a Workforce Development Coordinator for Choanoke Area Development Association of NC, Inc. for 20 years. Taylor is a graduate of Elizabeth City State University where she earned a bachelor's in sociology/social work. She was inducted into the North Carolina Community Action Association Hall of Fame in 2017.

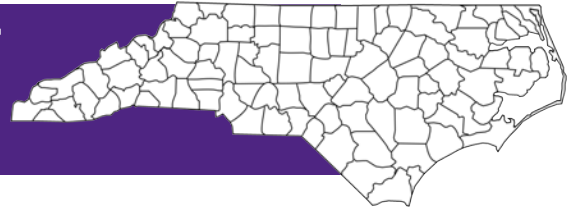
Taylor brings dedication and positive results to the programs by working hard and being a team player. She is passionate about people's lives and is always excited to see the positive impact CADA services have on the families served. She seeks to be an inspiration by sharing heart for the people that CADA serves.



Pamela Taylor
Manager of Community Services
Choanoke Area Development Association

Pamela Taylor is a native of Northampton County. Taylor has served CADA in many roles to include CSBG Secretary, Parents as Teachers Coordinator, Second Chance Counts Case Manager and now as the Manager of Community Services. Taylor has vast experience working with youth. She serves others in her church and community and looks forward to developing more community partnerships to better serve the citizens served by CADA. She enjoys identifying resources to help make a difference because helping people is what she loves to do.

NORTHAMPTON COUNTY SPEAKERS



Roy Worrells
Weatherization Coordinator
Choanoke Area Development Association

Roy Worrells has been an employee of CADA since 2009. He began his service to the community as a member of the weatherization crew. His experience working on the weatherization crew allowed him the opportunity to become the program's Weatherization Coordinator. Over the years Roy has helped low-income families save energy and reduce expenses through the installation of energy conservation materials and the implementation of energy efficiency measures in their homes. His expertise, willingness to be a team player and his passion for helping families provides him opportunities to assist other programs such as Urgent Repair and Essential Single Family Rehabilitation. Worrells is also a member of Professional Housing Rehabilitation Association of North Carolina.



Sharn Worthington
Information Management Specialist
Choanoke Area Development Association

Sharn Worthington received an associate's degree in information systems technology from Roanoke-Chowan Community College. He has been involved in community relations for the past 19 years assisting residents in Bertie and Hertford Counties in securing stable housing. During his tenure at CADA, he has also provided families with resources that have helped them obtain self-sufficiency. He has a passion for connecting families to affordable and stable housing because he understands the benefits of obtaining affordable, safe and stable housing.

BANK BRANCH CLOSINGS CREATE 'BANKING DESERTS' IN RURAL NC



BY DAVID RANII
THE NEWS & OBSERVER
NOVEMBER 12, 2016

<https://www.newsobserver.com/news/business/article114156083.html>

The mayor of this struggling small town roughly 100 miles northeast of Raleigh worries that the recent closing of its one and only bank branch will have severe and long-lasting repercussions.

“What business is going to come to a town with no bank?” asked Doris “Peggy” Risper, who has been mayor of this Northampton County town of 901 residents for the past decade.

Risper has been hearing from senior citizens who don’t have an easy way to travel to the nearest bank branch, which is now about 14 miles away, and have no interest in online banking.

“I had one lady come in, a senior citizen, and ask me: ‘Would it help if we protested (the branch’s closing) with signs?’” Risper said. “She was about 82 years old.”

The Oct. 21 closure of the PNC Bank branch in Rich Square is part of a larger trend. Driven by the popularity of ATMs and online and mobile banking, the rising price tag of maintaining a branch, a wave of industry consolidation, and efforts to boost profitability by cutting costs, banks across North Carolina and nationwide are closing branches.

In the past year more than 1,600 branches have closed across the country, according to S&P Global Market Intelligence. In North Carolina, the number of full-service branches has fallen by 11.7 percent since 2009 – from 2,717 to 2,400, according to the latest FDIC data. The majority of those – 195 – were in rural counties, based on the N.C. Rural Center’s definition of having an average population density of 250 people or less per square mile.

That has created an untold number of “banking deserts” in rural communities in North Carolina and nationwide, triggering anxiety that the exodus of these branches poses a significant handicap for economies that are already ailing.

A recent study by University of California at Berkeley economist H.Q. Nguyen found that after a branch closes, loans to small businesses in the vicinity are reduced by 8 percent over several years.

“Access to banking services in the rural parts of the state is something of a concern to us,” said Peter Gwaltney, CEO of the N.C. Bankers Association, which is based in Raleigh. “But at the end of the day, shareholders expect

a return and economics drive the decisions the banks make.”

To be sure, branches are being shuttered in both urban and rural communities. But rural communities are hardest hit because their residents and businesses lack the wealth of options available to their urban counterparts. FDIC data shows that, as of June 30, Wake County boasted 29 different banks with a total of 246 branches.

“Not all branch closures are equal,” said Peter Skillern, executive director of Reinvestment Partners, a consumer advocacy group based in Durham. “Where there is a consolidation of branches that are across the street from each other during a merger, there is really no damage. In fact, it’s a good allocation of resources.”

But a half-dozen North Carolina counties are home to just two bank branches and two counties, Camden and Northampton, have just a single branch each. Northampton County had five branches as recently as 2013.

“There is more than one North Carolina and I don’t think those in prosperous North Carolina really understand the impact of not being in the area that is growing and has resources and has services,” said Sallie Surface, executive director of the Choanoke Area Development Association of North Carolina, which is based in Rich Square.

The Edgecombe County town of Pinetops, home to more than 1,300 residents, also lost its sole bank branch on Oct. 21.

“Every (small) town needs a hardware store and a church and a service station, so to speak, and a bank,” said Pinetops Mayor Steve Burress.

Customers move online

Bankers and industry experts point out that branches are no longer the be-all and end-all of a banking relationship that they once were.

Bank of America, which has 47 million consumer and small business customers, reports that it has 20 million customers who use online and mobile banking. BofA spokeswoman Jennifer Darwin said the bank is adding 7,000 active mobile users every day.

“We really have reached the end of the useful life of the traditional bank branch,” said Tony Plath, a finance professor at UNC-Charlotte. “The idea of I want to go to the bank and cash my paycheck – nobody does that anymore.”

Branches are transitioning from being transaction-oriented to focusing on advisory services, such as wealth management and retirement planning, Plath said.

“Rural markets lack sufficient traffic for these advisory services,” he said.

Jim Hansen, PNC’s regional president for the eastern Carolinas market, said that 65 percent of the consumers and 72 percent of businesses that used the Rich Square branch also used other PNC branches.

“Those clients in Rich Square are still our clients,” Hansen said. “We’re still serving them.”

A community loss

But Skillern of Reinvestment Partners said the closure of the Rich Square branch creates “a hole in that economy that can’t be replaced.”

About one-third of the households in the census tract where the Rich Square branch was located live below the poverty line. Within a two-block vicinity, there are roughly a dozen vacant storefronts and lots.

Kimberly Turner, the manager of Northampton County, fears that without a branch in Rich Square it will be

tougher for local small businesses to get loans.

The PNC bankers at the Rich Square branch were quite familiar with the local businesses “because they’re right down the street,” making it easier to assess whether they were loan worthy, she said. Bankers in other towns “don’t have that community interaction with us, that familiarity with us.”

For the businesses that remain, the loss of the bank is also a matter of convenience and safety.

Horace Robinson, owner of the Upper Cutz Barber Shop in Rich Square, said that when the PNC branch was in business he would quickly run over and get change whenever he needed it.

Now, he said, “I’ll have to keep more (cash) on hand, which I don’t like doing” for security reasons.

Robinson and other Rich Square merchants also complain they now have to drive 14 miles to the Southern Bank and Trust branch in Jackson, or 16 miles to the nearest PNC branch in the Hertford County town of Murfreesboro, to deposit their cash. They say it’s not just a an inconvenience but an invitation to robbery.

In response to those concerns, PNC has pledged to install a full-service ATM in Rich Square later this month that will accept cash deposits.

After PNC announced it was closing the Rich Square branch, a coalition of local civic and business groups and leaders tried to persuade the bank to keep the branch open. Although that effort failed, after listening to the group’s concerns PNC pledged to take several steps, including installing the deposit-friendly ATM, to lessen the impact.

It also will provide classes for online and mobile banking; provide the Choanoke Area Development Association with a half-dozen computers that consumers can use for online banking; and, for the next year, offer travel vouchers for free bus service to the PNC branch in Murfreesboro.

PNC, which reports that it tried but failed to find a bank willing to buy the Rich Square branch, also said it is planning to donate the building that housed its Rich Square branch, as well as the branch building in Pinetops, to the local town governments.

“It’s not in anybody’s interest to have a vacant building,” said PNC spokeswoman Cynthia Montgomery.

Skillern of Reinvestment Partners, which has studied the issue of bank closures, said he wasn’t aware of any other bank that made concessions similar to what PNC did in Rich Square when closing a branch in North Carolina.

But, for many customers, PNC’s efforts just won’t be the same as having an actual bank branch.

“Think of all the things you do in a branch,” said Adam Rust, research director at Reinvestment Partners. “I think of the safety deposit box, filling out a mortgage application, getting a cashier’s check, opening an account ... wire transfers. There’s all kinds of services that just aren’t seamlessly done on your phone just yet.”

Neither federal nor state banking regulators have the authority to stop, or even delay, a branch closure. But Reinvestment Partners is urging regulators to become more pro-active by, among other things, coming up with a package of incentives aimed at making it financially feasible for a bank to maintain the last branch in town.

“The reason we are telling regulators to pay attention is that, once the last branch leaves town, it’s too late,” Skillern said.

Branch closings

The largest banks in the state have led the parade of branch closures in both urban and rural areas, according to FDIC data. Rural counties are based on the N.C. Rural Center's definition of a county having an average population density of 250 people or less per square mile.

SunTrust closed 51 branches in North Carolina between mid-2009 and June 30 of this year, including 13 in rural counties.

First Citizens pared 38 North Carolina branches between mid-2009 and June 30 of this year, including 24 rural offices. One of those rural branches was sold to another bank and, in many of the rural areas where it closed branches, it still maintains another branch, said a bank spokeswoman.

Bank of America has reduced its North Carolina branch network during that seven-year span by 34 branches, including 21 in rural counties. A bank spokeswoman said 11 of those rural branches were sold to other banks and remain open.

PNC, which acquired RBC Bank in 2012, closed 25 branches across the state between mid-2012 and June 30. It closed another five on Oct. 21, including the Rich Square and Pinetops branches and one on Lake Boone Trail in Raleigh. Of the total of 30 closed branches, 25 were in rural areas.

Jim Hansen, PNC's regional president for the eastern Carolinas market, contends that it's misleading to use the N.C. Rural Center's definition of rural. He noted that one of the branches that the bank closed last month was in Pinehurst in Moore County, which is rural by the Rural Center's definition. Considering that the Pinehurst branch was near a custom men's clothing shop and "a high-end realtor selling \$1.5 million homes," he added, "you'd be hard-pressed to convince me we closed a rural branch."

A more pertinent statistic, said Hansen, is the number of branches closed in low- and moderate-income tracts as defined by the U.S. Census Bureau. Data shows that those residents "have much more of a need for a branch," he said. By PNC's calculation, it has closed four branches in low- and moderate-income tracts in the past five years, including the Rich Square branch.

Wells Fargo has closed 11 branches statewide since mid-2009, but only one of those branches was in a rural county.

"When other banks close their branches, it makes the market better for us," said Jack Clayton, president of the Wells Fargo region that includes 60 counties in central and eastern North Carolina. "Our branches have been able to grow because some others have consolidated."

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The non-medical parts of health

DHHS plans to use some of the money from a \$10 million, five-year federal grant to train obstetricians and family practitioners to recognize implicit bias using a March of Dimes program.

The target audience would be “any health care worker that interacts with women of reproductive age,” including medical students, said Michaela Penix, state director of maternal child health and government affairs for March of Dimes NC.

The training is part of a much larger plan to improve maternal health that includes starting a new task force, increasing access to medical specialists for patients living in rural areas through telemedicine, and paying for doula services in a handful of areas. Doula support women in labor. Some also help families with birth preparations and provide support once babies are at home.

Last year the state launched a network called NCCARE360, an electronic platform that connects medical providers and social service agencies for the purpose of referring patients to resources such as housing, food, counseling, or transportation. Private money and federal grants pay for the platform, according to DHHS, and NCCARE360 does not use state money.

The importance of safe housing came into stark public view after the deaths of two babies in McDougald Terrace, Durham’s largest public housing community. About 280 families were evacuated. Officials discovered that carbon monoxide was leaking from stoves, heaters and water heaters, The News & Observer has reported. The state medical examiner determined that the infants did not die of carbon monoxide poisoning, but about a dozen people had been treated for exposure to the gas, including a 16-day-old infant.

In public forums, residents described living in apartments where feces back up into the bathtub, mold grows

ECU-LED GROUP ADDRESSES HOUSING NEEDS IN EASTERN NORTH CAROLINA



BY KIM TILGHMAN
ECU NEWS SERVICES
JANUARY 30, 2023

[HTTPS://NEWS.ECU.EDU/2023/01/30/ECU-LED-GROUP-ADDRESSES-HOUSING-NEEDS-IN-EASTERN-NORTH-CAROLINA/](https://news.ecu.edu/2023/01/30/ecu-led-group-addresses-housing-needs-in-eastern-north-carolina/)

East Carolina University's Office of Research, Economic Development and Engagement (REDE) is addressing the housing needs for low-and moderate-income families in northeast North Carolina.

Under the guidance of REDE, the newly formed Choanoke Area HOME Consortium has been granted multiyear funding from the U.S Department of Housing and Urban Development (HUD) for up to \$733,850 annually for the first three years, with a renewal for reoccurring annual funding of a similar amount after the first three years. The funding allocation will begin in July 2023.

The affordable housing funds will be divided among the communities that make up the consortium, including:

- Bertie County — Aulander, Askewville, Colerain, Kelford, Lewiston-Woodville, Powellville, Roxobel and Windsor
- Halifax County — Enfield, Halifax, Hobgood, Littleton, Roanoke Rapids, Scotland Neck and Weldon
- Hertford County — Ahoskie, Cofield, Como, Harrellsville, Murfreesboro and Winton
- Martin County — Bear Grass, Everetts, Hamilton, Hassell, Jamesville, Oak City, Parmele, Robersonville and Williamston
- Northampton County — Conway, Garysburg, Gaston, Jackson, Lasker, Rich Square, Severn and Woodland

Halifax County was elected to serve as the lead entity for the consortium and will work with the Choanoke Area Development Association (CADA) to administer the program activities and funding.

The collaboration that led to this funding opportunity began in January 2020 when the SECU Foundation started the Rural Opportunity Grant Program to address key challenges in specific regions of the state. The availability and accessibility of affordable housing was identified as a need for northeastern North Carolina.

A longtime partner of ECU, the foundation tapped into the university's resources and expertise to develop a plan to address the housing issue. ECU's REDE office works to assist regional transformation efforts by providing research, innovations, resources and connections that lead to lasting impacts and positive outcomes for the area.

Prepared to tackle the challenge, director of research and innovation campus development Merrill Flood said,

“It was important to us that it was not a ‘one-off’ funding source. That does not help anyone. Development of a program with long-term sustainability and consistent resourcing had to be the end result, in my mind.”

An ECU alum, Flood worked 29 years for the city of Greenville as a planner, then as director of community development, and retired as an assistant city manager. He returned to ECU to teach planning and is leading the development of the East Carolina Research and Innovation Campus as part of the office of economic and community engagement within REDE.



Flood said he became aware of the HOME consortium program when working for the city and introduced the option as a solution to affordable housing needs.

“I created a HOME consortium in 1997 when I was with the city of Greenville and oversaw it for about 12 years,” Flood said. “The HOME consortium program and its various funding categories were created in 1992 by the Cranston-Gonzalez Affordable

Housing Act. Consortia are geographically connected units of local government who agree, by execution of a joint cooperation agreement, to be considered for a direct formula allocation funding from HUD under the HOME consortium category of funding.”

The HOME program would allow the identified communities to address affordable housing needs on a regional level and in a coordinated way.

“With consistent housing funds, communities find that they can better leverage outside investments for affordable housing production, allocation and preservation,” Flood said.

ECU led the discussions with representatives in each identified municipality, guided them on the opportunity, and provided them with pre-submission materials to be considered for eligibility.

The program participants agreed to pursue funding.

“It’s a big win for this region,” Flood said. “This is critical to their long-term economic vitality, growth and development.”

Sharon Paynter, ECU’s acting chief research and engagement officer, said, “When the SECU Foundation came to us with the opportunity to work on affordable housing in northeastern North Carolina, we embarked on quite a journey to find a feasible option that would have impact on the problem. I’m certain that the resulting consortium has the potential to improve safe and accessible housing options for years to come.”

Also part of the REDE team in this effort were Elizabeth Hodge and university program specialist Cassandra Keel.

The SECU Foundation provided CADA \$40,000 to fund the completion of the required 5-year consolidated plan and 1-year action plan for the Consortium. The State of North Carolina has certified CADA to direct the activities of the HOME Consortium.

As for the university’s role in this successful service, Flood assures that ECU will continue to support the region as they work toward a solution for affordable housing.

“Our office continues to educate and advise the consortium on the startup of the program, provide data profiles of their individual communities and point them to other resources to address their needs,” Flood said.

GAPS IN NC ADDICTION TREATMENT DISPROPORTIONATELY HIT RURAL RESIDENTS OF COLOR

A NEW CDC STUDY FOUND MORE THAN 75 PERCENT OF COUNTIES DON'T HAVE ANYWHERE RESIDENTS CAN GET METHADONE, AND 30 PERCENT OF COUNTIES LACK A BUPRENORPHINE PROVIDER. IN NORTH CAROLINA, RURAL COMMUNITIES WITH MANY BLACK AND INDIGENOUS RESIDENTS OFTEN LACK ACCESS TO CARE.



BY CLARISSA DONNELLY-DEROVEN

NC HEALTH NEWS

JUNE 6, 2022

<https://www.northcarolinahealthnews.org/2022/06/06/gaps-in-nc-addiction-treatment-disproportionately-hit-rural-residents-of-color/>

In recent years, illicitly manufactured fentanyl has tainted the supply of street drugs, leading to skyrocketing rates of overdoses and deaths.

Of late, though, there's growing hope for those who want treatment for their substance use disorder. Two medications — buprenorphine and methadone — can be effectively used to help people break the cycle of addiction.

But that's only if the drugs are available. Too often, they're not, according to a recent analysis from the Centers for Disease Control and Prevention.

The researchers found that more than 75 percent of counties across the country don't have opioid treatment programs, which are the only places where people can receive methadone, while about 30 percent of counties don't have any clinicians who can prescribe buprenorphine, which also gets prescribed under the brand name Suboxone.

Rural North Carolinians suffer disproportionately from those provider gaps, according to an analysis by NC Health News.

Across the state, the numbers are slightly better than the national picture: 52 counties don't have an opioid treatment program, while 14 of the state's 100 counties don't have a buprenorphine provider.

But of the 52 North Carolina counties without opioid treatment programs, 50 are rural — leaving 65 percent of the state's rural areas without access to methadone, while all 14 of the counties without a buprenorphine prescriber are rural.

While in recent years the state has seen its population increasingly move from rural areas to urban ones, the

Office of State Budget and Management estimates that about 42 percent of residents live outside of municipal areas, and North Carolina has the second largest rural population in the U.S.

Nonetheless, the state’s 22 urban and suburban counties have 75 percent of the state’s nearly 1,600 authorized buprenorphine prescribers.

Structural barriers — from general clinician shortages across rural areas to unsustainable work loads for those who fill the gaps — prevent health care workers from getting these life-saving medications into their patients’ hands. Many also say the persistent stigma against people who use drugs plays a role.

Time consuming

A 2019 analysis by researchers at the CDC found that North Carolina was one of just five states where the rate of deaths from overdoses was higher in rural areas than urban ones.

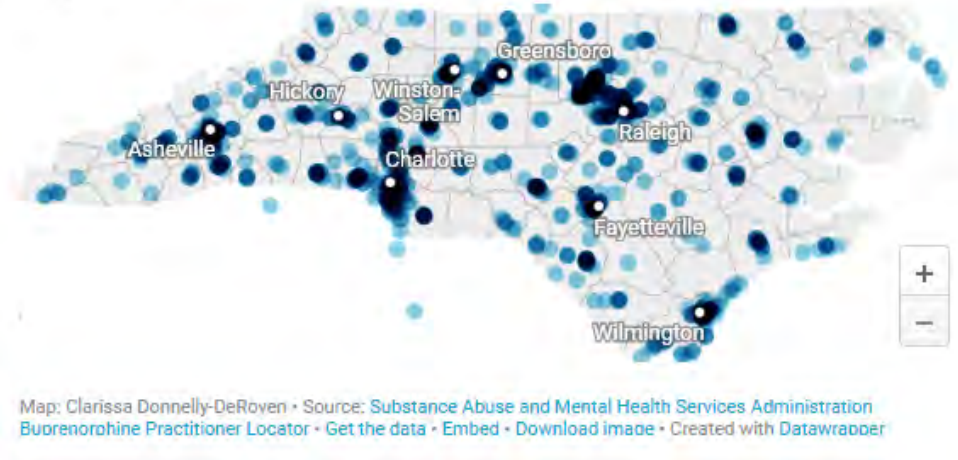
The dearth of medical providers in rural areas affects all types of patients, but for those who are taking buprenorphine or methadone, the small provider networks can pose an even greater problem since the medications come with strict federal regulations.

“Most of my patients are on a monthly schedule,” said David Sanders, a physician assistant. He’s the only authorized buprenorphine prescriber in Stokes County, where he works at a family medicine practice, though he sees most of his buprenorphine patients at a clinic in High Point dedicated to substance use disorder.

“We’d be there two or three days a week, and people would come from the surrounding areas,” he said. “They’d come from Greensboro, it’d attract a lot of people from Eden and Reidsville and a lot of the rural areas.”

Location of Buprenorphine prescribers in NC

A recent study found that more than 30 percent of counties across the country do not have any clinicians who can prescribe buprenorphine. In North Carolina, 14 counties do not have any providers who can prescribe buprenorphine, while eight counties have just one provider.



A monthly visit to the doctor is pretty standard for patients who are taking buprenorphine and are stable on the medication, but at the beginning of someone’s treatment, they may need to come in every week, or every few days. For patients without a clinician in-county, this means a lot of time driving, a lot of money on gas, and a lot of time off work.

That’s if they even have a vehicle.

“A lot of the people in the area have actually gone to buying Suboxone or buprenorphine off the street, due to the fact that it’s just very much interfering with their schedule,” said Leslie McPherson, the only buprenorphine prescriber in coastal Currituck County. “And it’s very, very, very expensive and a lot of insurance companies don’t reimburse for it either.”

Multiple hoops to jump through

In order to prescribe buprenorphine, clinicians must complete a training and receive a waiver from the U.S. Drug Enforcement Administration. For physicians, the training is eight hours. For advanced practice nurses and physician assistants, it’s 24 hours.

The course can be completed online, but for some rural clinicians who are already overloaded with patients and administrative duties, it can be hard to find time. Once the training is over, caring for patients with substance use disorder requires a big commitment.

“There was no way — no way — I could handle more than 10 [patients taking buprenorphine] at a time in a small office,” McPherson said. “There are a lot of other factors involved in getting them their medication: they couldn’t make it to their urine drug screen, they couldn’t make it to one of their mental health appointments.”

To continue receiving buprenorphine, per federal rules, patients need to complete regular drug tests and counseling appointments. When somebody missed one of these components of their care, McPherson did everything she could to help them get back on track. Oftentimes, it was just because life got in the way: a car broke down, a family emergency, chronic pain prevented them.

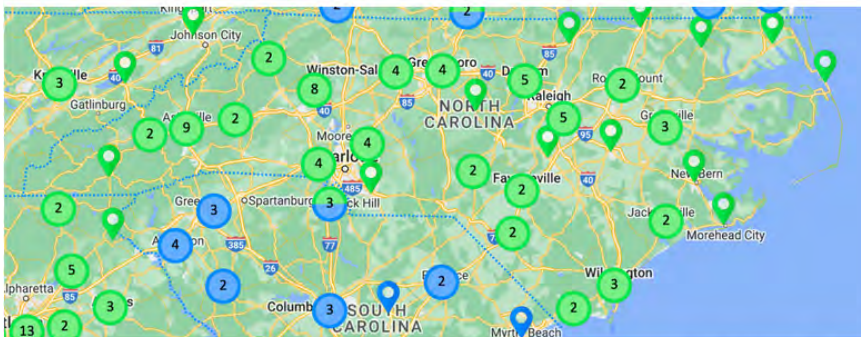
“There’s so many reasons,” she said. “We’d have to go to a modified monitoring schedule.

“My solution wasn’t to just cut somebody off, because I think that’s stupid. I think it’s a very stupid way to practice medicine. You don’t cut off your hypertension patient and just say, ‘You can’t come here anymore because you stopped taking your blood pressure medicine,’ right?”

Daily dosing

While the barriers to getting buprenorphine are great, the ones for methadone are even greater, as patients often must visit a doctor daily to get their dose.

The two medications work differently. Buprenorphine partially activates the brain’s opioid receptors and blocks other opioids from binding to those receptors. This has the result of reducing drug cravings and use and the possibility of overdose. Methadone activates those same opioid receptors to prevent other opiates, such as heroin, from using them. Both medications reduce withdrawal symptoms.



In North Carolina, according to data maintained by the Central Registry, 52 counties do not have an opioid treatment program — the only location where people can receive methadone. Credit: Lighthouse Software Systems Central Registry

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A third medication, naltrexone, can also be used to treat addiction. It blocks opioid receptors entirely, but it cannot prevent withdrawal symptoms, meaning it's designed to be used after a person has detoxed to prevent relapse and overdose. There isn't a similar registry used to track prescribers of naltrexone as there is for buprenorphine and methadone, and the data on how well it helps people get – and stay – off of substances is less compelling.

Because each medication impacts the brain differently, health professionals say it's critical that people have access to all three to find their best fit.

In practice, though, that doesn't happen.

Racial and rural disparities

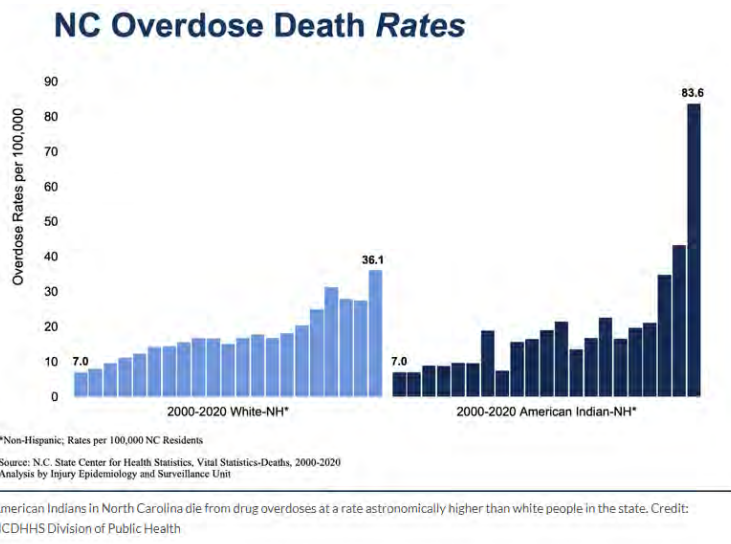
In 12 counties — Anson, Camden, Chowan, Gates, Graham, Hyde, Jones, Martin, Northampton, Pamlico, Tyrell and Warren — residents don't have access to an in-county opioid treatment program or a buprenorphine provider.

In half of these counties, between 100 and 83 percent of people live outside of municipal limits, according to Michael Cline, the state demographer at the NC Office of State Budget and Management.

The CDC analysis on access to these medications found that nationally, as the percentage of Black and Latino residents increased in a county, so did the availability of both treatment options.

But NC Health News found that of the 12 counties in the state without opioid treatment options, 10 have higher proportions of Black or Indigenous residents — two groups that suffer from overdose deaths at disproportionate rates — than the rural average.

“What we do see in North Carolina is what we see across the country — significant health disparities across the board, and a lot of that is driven by the adverse social determinants of health,” said Ronny Bell at a May webinar hosted by the National Indian Health Board. Bell is a professor at Wake Forest University, the chair of the NC American Indian Health Board, and an enrolled member of the Lumbee tribe.



American Indians in North Carolina die from drug overdoses at a rate astronomically higher than white people in the state. Credit: NCDHHS Division of Public Health

Mary Beth Cox is a substance use epidemiologist at the state health department who studies disparities in treatment access.

“If we were to just look at the counts, then you might say, ‘Yes this is primarily a non-Hispanic white problem.’ However, when we standardize for population in our state and look at the rates per 100,000,” she explained at the webinar, “we see a much different story unfold.”

American Indians in North Carolina have the highest proportional rate of deaths from overdose. During the pandemic, it got even worse: in 2020, Indigenous people in North Carolina died from drug overdoses at a rate

Stigma and lack of support

Eight counties without access to methadone have just one authorized buprenorphine prescriber.

In southeastern Bladen County, that’s Robert Rich — or, it was.

“I’m not currently prescribing,” he said. He only works part time at Bladen Medical Associates, and he has many administrative duties that keep him from seeing patients.

There are three providers at the site currently in waiver training — one doctor, and two PAs/NPs — but Rich doesn’t think it’s safe to go back to prescribing until there are back-up prescribers for when he’s unavailable. While he’s not prescribing, the clinic arranged to send patients to nearby Robeson County for their medication.

Rich has had his prescriber authorization for about four years, and he’s represented the American Academy of Family Physicians in many different opioid initiatives.

“I’ve been intimately aware of the issue for several years,” he said. “You see and hear about it in the community all the time.”

He, Sanders and McPherson all agree that stigma against people who use drugs is partially to blame for the prescriber shortage.

“Before I got into it, I even had this stigma,” Sanders said. He didn’t recognize the names of the medications, and all of the additional steps needed to become a prescriber fueled his skepticism.

“It’s weird,” he said. “You have to get this waiver, so you have to do extra training whether you’re a doctor or a PA or a nurse practitioner. And even the wording — instead of initiating a medicine, which is what I would do with any other medicine on the planet, when we do this it’s called ‘induction.’”

“It’s just unfamiliarity with the medicine and so people are hesitant and uncertain about it,” he said. “But I’ve grown to have a high comfort level with it, and I think it’s a wonderful, wonderful medicine because it is so relatively safe.”

Building the needed workforce

Part of increasing the number of prescribers, especially in rural areas, Rich said, is showing models for how this care can work. New prescribers need to feel like they have a community of other clinicians they can turn to when issues or questions arise.

“The more examples that you have of a prescriber that is doing it, is making it work, and can serve as a mentor to other individuals — you can get those individuals to say ‘I’ll give it a try as long as I have someone else to back me up and help me through the process of learning how,’” Rich said.

A recent bill in Congress, which has rare bipartisan support, would require doctors be trained in treating opioid use disorder. If passed, it could help increase the number of prescribers who feel equipped to care for people experiencing addiction.

The American Medical Association has come out against it.

Even if the bill were to pass, other structural barriers remain, said McPherson, from Currituck. She prescribed buprenorphine from her small, independent family medicine practice. She started after patients she was seeing for primary care asked if she could prescribe it.

Once the word got around she realized how significant the need was.

“It got really complicated at my office because I had to say, ‘Look, I’ve got the max amount of patients. And yes, I do want to help, but I can’t afford it. I can’t afford the resources to do it. I can’t afford the time,’” she remembered.

“This is really something that should be taken up by every, in my opinion, every primary care office,” she said, but it’s hard because “providers don’t have the support they need.”

Lack of insurance reimbursement proved to be one of the most significant barriers.

“Every Suboxone patient I had was negative income,” she said. “A lot of insurance companies will not reimburse primary care providers for certain mental health codes, especially if [the patient] already is seeing a mental health provider.”

She said many patients would make an appointment to see her for their medication and a mental health provider for counseling on the same day. That way, they didn’t have to take extra time off work or spend the extra money on gas.

But, her office soon realized that a patient’s insurance company wouldn’t pay for two mental health visits on the same day.

“They couldn’t see a primary health care provider and a mental health care provider using a mental health care code on the same day,” she said. “I didn’t get paid for a lot of people.”

“I chose to do it because our community needed it, but I could only do as many as I could.”

How Does A Person Apply?

Please contact the CADA Community Services Center in your county to apply for a program or services. Eligibility is based on residence in **Bertie, Halifax, Hertford, Martin or Northampton Counties** (or specific area of service), income level and program guidelines. Therefore, applicants are encouraged to bring personal identification and proof of income when they apply. Visit CADA website for additional information at www.nc-cada.org

CADA COMMUNITY SERVICES CENTERS

Bertie County

CADA Community Services Center
128 East Granville Street
Windsor, North Carolina 27983
Telephone: 252-794-3107/Fax: 794-5684
Olivia Taylor, Manager

Halifax County

CADA Community Services Center
116 B West 3rd Street
Roanoke Rapids, North Carolina 27870
Telephone: 252-537-1111/Fax: 252-537-8087
Debbie Hardy, Manager

Hertford County

CADA Community Services Center
105 N Academy St. Building B
Ahoskie, North Carolina 27910
Telephone: 252-332-2692/Fax: 252-332-2147
Jacqueline Melton, Manager

Martin County

CADA Community Services Center
407 East Boulevard
Williamston, North Carolina 27982
Telephone: 252-792-7816

Northampton County

CADA Community Services Center
120 Sessoms Drive
Post Office Box 530
Rich Square, North Carolina 27869
Telephone: 252-539-4155/Fax: 252-539-2048
Pamela Taylor, Manager of Community Services

CADA is a private, non-profit organization assisting low-income residents in Bertie, Halifax, Hertford, Martin, and Northampton Counties.

Board Members

Bertie County

Bonnie Bazemore
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- 1/3 public Officials/Reps
- 1/3 Community-At-Large/Reps
- 1/3 Low-Income Reps

8/31/2022

CADA

Sixty-One Years of Service
1962-2023



**Choanoke Area Development Association
of North Carolina Incorporated.**

Post Office Box 530
120 Sessoms Drive
Rich Square, North Carolina 27869
Telephone: (252) 539-4155
Fax Number: (252) 539-2048
Web Site: www.nc-cada.org

Christopher S. Moody, Executive Director

“ CADA, with its many partners, will assist disadvantaged citizens achieve a better quality of life through education, training and economic development.”

Equal Opportunity Employer

WHAT IS CADA?

CADA's Purpose - To promote, through regional cooperation, the industrial, agricultural, recreational, educational, general economic well-being, and health and welfare of the citizens of Bertie, Halifax, Hertford, Martin and Northampton Counties.

Overview of Programs Administered by CADA:

Self-Sufficiency

This program assists low-income families/individuals become self-sufficient through employment, skills training or job-development techniques/ motivation by coordinating public and private resources.



Head Start / Early Head Start

This program provides eligible children with a comprehensive, coordinated child development pre-school program in the four county service area.

Housing Choice Voucher Program (Section 8)

The CADA Administrative office is a Public Housing Authority for a subsidized rental assistance program for low-income families/individuals who live in Bertie & Hertford County.



Housing Choice Voucher Program
(Section 8 Housing)

Urgent Repair Program

Repair Program to enable seniors to remain in their homes. This service is available for residents in Bertie, Hertford, Halifax, Martin and Northampton Counties.

Weatherization Program

This program addresses energy conservation by preventing weather infiltration. Senior citizens, the physically impaired, and families with young children are prioritized. Service are available for Bertie, Hertford, Martin, Halifax, Northampton and Edgemcombe Counties.



Rehabilitation of Owner-Occupied Sub-standard Housing Single Family Rehabilitation Program

Comprehensive Repair of owner occupied homes.

This program assists applicants to apply for loans from USDA Rural Development, NCHFA, and other lenders to rehab their homes from substandard to standard conditions.



New Construction

This program is designed to assist families/individuals with all phases of construction, loan application, housing plans, permits, supervision, inspections, etc.

First Time Homebuyers

CADA assists qualified families/individuals become homeowners with down payment assistance costs up to 10% of the sales price.



Homebuyers Education

Classes are offered that help explain the process of becoming a homeowner. Credit repair and budget counseling is provided.

Foreclosure Prevention

Assist eligible homeowners prevent foreclosure.



Food Pantry

A food pantry is operated at the Northampton County CADA Community Services Center. Volunteers receive food donated by area churches and distribute them to the needy clients. There is also a mobile food bank. This service is available for citizens in Northampton County.

Emergency Assistance

CADA administers two programs: Energy Share and Federal Emergency Food & Shelter program. Applicants must demonstrate an emergency need and exhaust all other sources of assistance. For more information contact your local CADA branch office.



Parents As Teachers

This program is designed to give parents the information and support needed to give their children the best start in life by offering timely information on a child's development and ways to encourage learning through play. This service is available in Hertford and Northampton County.

WIOA Youth Program

This program is designed to serve youth year round with the purpose of providing work experience, educational development and leadership development for disadvantaged youth. WIOA will serve In School Youth ages 14-21 and Out of School Youth ages 16-24 years old. This service is available for youth in Halifax and Northampton County.

Community Connections Center

The community is welcome to use the computer center on Mondays-Thursdays from 8:30a.m.-5:00p.m. and Fridays from 8:30a.m.-1:00p.m. at the CADA office in Rich Square, NC. Financial Literacy classes are provided. One-on-one budget counseling is available. Sign up today to access the services and for job search and on-line classes.

OUR VISION

“CADA will have the resources to address the needs for current and future generations.”

CADA is a private, non-profit organization assisting low-income residents in Bertie, Halifax, Hertford, Martin, and Northampton Counties.

HERTFORD COUNTY

First settled by the Chowanoac, Meherrin and Tuscarora native tribes, Hertford County was established in 1759 after annexation from Chowan, Bertie and Northampton counties. The county was an early hub of agricultural activity due to its rich farmland and access to the Chowan River.



Agriculture remains a strong industry in Hertford County. Farmers produce crops ranging from peanuts, soybeans and tobacco. A concentrated effort by county leadership to diversify its industries and bring in more manufacturers was enacted in the 1950s. Today, Duck Thru Food Stores is the county's top employer, followed by ECU Health and Nucor Corporation. The Nucor steel plate mill in Cofield produce steel products using a "mini-mill" concept. The plant uses electric arc furnaces and continuous casting technology to recycle steel, producing steel plates for construction, energy and transportation industries.

Tourism dollars brought in nearly \$30 million to Hertford County in 2021. Top attractions near Hertford County include Merchants Mill Pond State Park in Gatesville, the Brown C.S. Regional Cultural Arts Center, and the Brady C. Jefcoat Museum. The Brown C.S. Regional Cultural Arts Center is housed in one of the first high schools for people of color in state of NC. Now a regional arts center and museum in Winton, the center has served as a nonprofit since 1986 to educate the community on African arts and student life before desegregation.

On the Purple and Gold Bus Tour, we will visit the ECU Dental School of Medicine's Community Service Learning Center (CSLC) in Ahoskie and the Roanoke Chowan Community Health Center (RCCHC). The CSLC is one of eight ECU rural dental health and education centers in the state. The RCCHC facility is a 40,000 square foot health facility that holds 48 exam rooms, laboratories, an in-house pharmacy, and corporate offices. RCCHC is a Federally Qualified Health Center.

SOURCES

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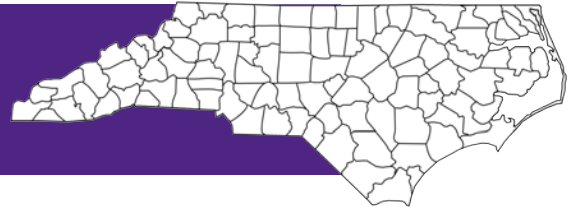
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<https://csbrownculturalartscenter.weebly.com/exhibits.html>

HERTFORD COUNTY SPEAKERS



Jennifer Cobb
Revenue Administrator
Roanoke Chowan Community Health Center

Jennifer Cobb serves as the Revenue Administrator for the Roanoke Chowan Community Health Center in Ahoskie. She has been with RCCHC for over 17 years and has worked in many different administrative roles. She manages staff in the areas of medical billing, outgoing specialty referrals, medication prior authorizations, and electronic health records support.



Chaquella Daughtry
Behavioral Health Director
Roanoke Chowan Community Health Center

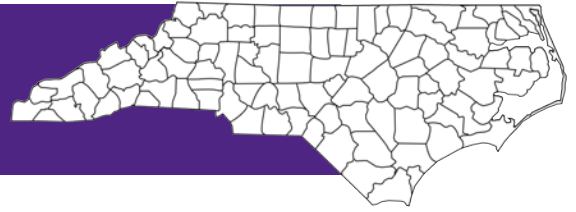
Chaquella Daughtry earned her bachelors in social work from Elizabeth City State University and her master's in social work from University of North Carolina Greensboro. She serves as the Behavioral Health Director at Roanoke Chowan Community Health Center, Ahoskie. Daughtry is a licensed clinical social worker, a licensed nursing home administrator, and a certified nursing assistant. Her career focus is in behavioral health and geriatrics.



Ashley Davis
Quality and Risk Management Director
Roanoke Chowan Community Health Center

Ashley Davis earned her bachelors in nursing and interior design from East Carolina University and her doctorate of nursing practice from Maryville University. She currently serves as the Quality and Risk Management Director at Roanoke Chowan Community Health Center. Her focus areas include quality improvement and safety of the rural population.

HERTFORD COUNTY SPEAKERS



Brittany Pierce
Director of Nursing
Roanoke Chowan Community Health Center

Brittany Pierce earned her bachelor's and master's in nursing leadership and management from Western Governor's University. Pierce currently serves as the director of nursing for Roanoke Chowan Community Health Center, and helps oversee five clinics in this role. Her career foci are rural health care, representation, empowerment, and mentoring of nursing and clinical staff. Pierce is an advocate for positive change in the day to day work of clinical staff and makes high-level decisions to ensure safe high quality clinic and patient care standards.



Jim Powers
Chief Human Resource Officer
Roanoke Chowan Community Health Center

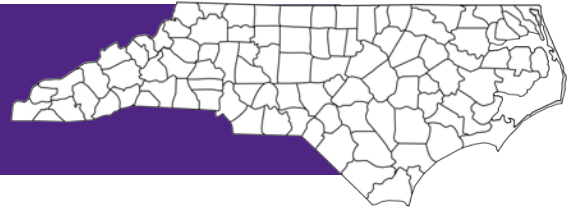
Jim Powers has been employed with Roanoke Chowan Community Health Center for over three years. Having worked mostly in the areas of human resources and finance for multiple industries, Powers is very familiar with workforce development, retention, organizational development, employee relations, compensation, benefits, training, and organizational effectiveness. He received his formal education at Welch College in Nashville, TN as well as numerous certifications while on active duty in Zweibrucken, GE with the United States Air Force. He is an active member of the Society for Human Resource Management (SHRM). As CHRO, Powers is responsible for the development and execution of the Health Center's human resource strategy and approach that supports the organization's business plan and strategy for growth.



Nicole Beasley
Assistant Director
ECU Community Service Learning Center - Ahoskie

Nicole Beasley earned her doctorate of dental medicine from East Carolina University in 2016. Beasley began her dental career in serving the rural population in Jackson North Carolina from 2017 through 2020 while also holding an adjunct instructor position at UNC School of Dentistry. She joined the Community Service Learning Center in Ahoskie in September of 2020 where she is the Assistant Director and a Clinical Assistant Professor. Beasley supervises students and residents as they learn and perform procedures to the underserved population in and around Ahoskie. Beasley has previously served as a speaker for the Purple and Gold Bus Tour when it went virtual in 2021.

HERTFORD COUNTY SPEAKERS



Toni Bennett
Business Manager
ECU Community Service Learning Center - Ahoskie

Toni Bennett was born in Edgecombe County, North Carolina and was raised in Martin County. Bennett was one of the original staff members hired in Elizabeth City's Community Service Learning Center in 2013. She helped establish the front desk and business systems for the opening of ECU's second CSLC. Later that summer, she was promoted to patient care coordinator at the Ahoskie CSLC. In 2010, Bennett earned her bachelor's in business administration at the University of Mount Olive before earning her MBA with a concentration in human resources from Northcentral University in 2015.



Ford Grant
Director
ECU Community Service Learning Center - Ahoskie

Ford Grant serves as a clinical associate professor at ECU's School of Dental Medicine and is the director of the Ahoskie Community Service Learning Center. The Louisville, Kentucky native received dental training from the Louisville School of Dentistry where he served as a part-time faculty member for five years while in private practice. He is a past president and fellow of the American Society for Geriatric Dentistry, a founding member and diplomate of the American Board of Special Care Dentistry, and is a member of the Royal College of Surgeons, Edinburgh, in special needs dentistry.



Rob Tempel Jr.
Associate Dean for Extramural Clinic Practices
ECU School of Dental Medicine

Rob Tempel joined the ECU School of Dental Medicine in 2018 as the Associate Dean for Extramural Clinical Practices. Tempel earned his DDS from the University of Maryland School of Dentistry. He had a distinguished career in the U.S. Army, retiring as a Major General and 27th Chief of the U.S. Army Dental Corps and Commanding General of the U.S. Army Central Regional Health Command. His many tours of duty included an AEGD one-year residency program and a comprehensive dentistry residency program. Following his residency programs, Tempel had assignments with conventional and Special Operations units, in addition to leading medical and dental units at all levels throughout the United States and Europe. In his current role, he is leading the extramural educational experiences of senior students and AEGD residents at the eight CSLCs across the state, along with community service and outreach for the Dental School.

A RADICAL WAY TO THINK ABOUT HEALTH

NORTH CAROLINA IS PILOTING AN AMBITIOUS, \$650-MILLION MEDICAID PROGRAM TO ADDRESS THE SOCIAL FACTORS THAT CONTRIBUTE TO PARTICIPANTS' HEALTH. IT'S A BIG LIFT THAT'S GOTTEN A SLOW START.



BY AMANDA ARAMS

THE ASSEMBLY

DECEMBER 1, 2022

<https://www.theassemblync.com/health/healthy-opportunities-pilot-medicaid/>

Regina Goddard is an open, affable woman, given to cackling when she's amused. But she wasn't laughing last summer. The house she and her 13-year-old daughter were renting in Aurora, North Carolina, had become increasingly dilapidated, but despite two electrical fires, a caved-in septic tank, and a leaking roof, the landlord refused to fix it up.

"The health department could've condemned the place, and we'd have been homeless," said Goddard, 55.

Goddard has hernias, many of them. She used to work: "I'm a certified mechanic, a crane operator, and a journeyman ironworker," she said. "That's why I have all the problems I do, because I worked so hard in my life. I'm a female but I worked like a man." A pregnancy at 42 worsened her hernias, and she's been disabled ever since. She and her daughter live on \$841 a month from disability payments, plus government food benefits.

She'd found another place to rent—a trailer in rural Beaufort County, about 10 miles from Aurora—that seemed suitable and was within her monthly budget. But she didn't have enough saved to pay the first and last months' rent up front.

She told that to the nurse when she received her monthly check-in call from Wellcare. "I was saying, 'I'm tripping out, I'm about to be homeless,'" said Goddard.

Wellcare is a private health insurance company, one of five that began covering NC Medicaid members in 2021. That's when the state's Medicaid program transitioned to managed care, using for-profit businesses to administer the giant public health care program in an effort to keep costs down. The Wellcare nurse ensures that Goddard gets the medical care and support she needs, including a home health aide who comes over daily to help her bathe, get dressed, and clean her house.

But this call was different. The nurse asked some questions about Goddard's situation and referred her to Cornerstone Community Based Programs, a nonprofit in nearby Washington, N.C. An employee there briefly interviewed Goddard, drove out to take a look at the trailer, and then cut a \$900 check for the new landlord covering first and last months' rent.

“I’m tickled to death,” said Goddard, now comfortably settled in her new home. While unremarkable on the outside, its interior is spacious and cozy. “It’s been nothing but up since I met those people.”

Though it is church-based, Cornerstone isn’t a charity. It’s a nonprofit that the North Carolina Department of Health and Human Services has contracted with as part of a new initiative that public health experts around the country are watching.

The Healthy Opportunities Pilot, or HOP, is a \$650 million, five-year program focused on a simple concept: living conditions influence people’s health more than anything else.



The idea is pretty intuitive. If you can’t afford healthy food, if your house has mold or spotty electricity, if you don’t have a car and struggle to get to doctors’ appointments, all the medical care in the world might not be enough to keep you well.

Those conditions—food, housing, transportation, as well as less-tangible elements like stress—are known as social determinants of health. For the past decade, public health and medical fields have increasingly focused on them.

Hospitals and health care organizations around the country have started supplementing traditional care with offerings like free produce and transportation, and some are even investing in affordable housing.

Ultimately, it’s an effort to reduce the cost of health care. If Goddard and her daughter became homeless, her health would likely worsen. She would require more medical attention, which could cost Medicaid tens or even hundreds of thousands of dollars. The \$900 for rent becomes a great deal.

That’s why Medicaid, a public health insurance program for low-income people that’s administered at the state level and jointly funded by states and the federal government, is wading into the arena.

Other states are running similar pilots, but North Carolina’s is the most ambitious. “This offers a much broader range of services to a much broader group of Medicaid beneficiaries than has ever been done,” said Amanda Van Vleet, associate director of innovation at N.C. Medicaid.

But in just these first months, Van Vleet and her team have found that moving from a traditional health care model to something more radical has been an onerous undertaking.

A Slow Start

In the public health world, there’s little debate that lacking sufficient food or a safe, clean, temperature-controlled home worsens people’s health.

These social determinants of health, experts say, account for around 80 percent of outcomes—far more than aspects like doctors’ visits or medication.

“There’s no dispute about that,” said Seth Berkowitz, a professor of medicine at UNC-Chapel Hill and research-

er at the Cecil G. Sheps Center for Health Services Research, at a virtual event about the HOP program in July. Around the country, 500 people tuned in for the event. “The best way to address them is less clear. There’s no doubt that we should be doing something, but we don’t know exactly what.”

That’s what North Carolina is trying to figure out. Dr. Mandy Cohen, the former NC DHHS secretary, began designing the program in early 2017; the federal Centers for Medicare and Medicaid Services (CMS) approved it in October 2018. The pilot, which covers 33 counties across three regions, officially launched in March 2022.

It was supposed to begin when the state Medicaid program transitioned to managed care, but a budget impasse between Democrats and Republicans in 2019 caused delays to both. North Carolina is providing roughly a third of the pilot’s funding; state funding for HOP—\$92 million so far, covering a share of the program’s first two years—didn’t arrive until 2021.

To support the new Medicaid pilot, state administrators have had to create a complicated new system that joins giant, for-profit institutions with tiny, hyper-local nonprofits. It aims to improve health and well-being among low-income North Carolinians while simultaneously investing in local economies.

It’s been a lift, to say the least.

Here’s how it’s supposed to work: For one of the state’s 1.6 million Medicaid managed care beneficiaries to be eligible for HOP, they have to live in one of the pilot’s three regions, have at least two chronic conditions or repeat ER or hospital visits, and have an additional risk factor like food or housing insecurity.

People who qualify for the program are assigned a care manager who assesses their health plan and need for services, then connects the patients with community organizations that can help them. Each region has a network lead, an organization that makes sure things move smoothly and the community groups get paid for their work.

The program includes 29 service categories, from transportation vouchers and weekly produce boxes to parenting classes and help finding housing. Assistance to those experiencing domestic violence is another service the administrators are still rolling out.



then connects the patients with community organizations that can help them. Each region has a network lead, an organization that makes sure things move smoothly and the community groups get paid for their work.

The program includes 29 service categories, from transportation vouchers and weekly produce boxes to parenting classes and help finding housing. Assistance to those experiencing domestic violence is another service the administrators are still rolling out.

When the network leads and their regions were announced in May 2021, some observers were surprised that they were all relatively rural. The pilot is running in North Carolina's northeast, southeast, and far western regions, leaving out cities like Charlotte, Raleigh, and Greensboro.

DHHS says the three organizations best qualified to act as network leads happened to cover largely rural areas of the state. In many ways, that has made HOP significantly more challenging to implement. The state's urban regions have bigger health care systems and sophisticated nonprofits. North Carolina's rural residents are generally poorer, less healthy, and often have a harder time accessing medical care.

In the northeast region, for example, eight out of the nine counties in the program have health outcomes ranked in the state's lowest fifth. Roughly 20 percent of residents there are below the poverty line; statewide, the number is 14 percent.

This has also impacted the availability of service organizations, since HOP was designed to work with nonprofits already rooted in their communities. Network leads spent four months identifying and training organizations, work that has continued with additional nonprofits after the pilot's launch.

Berkowitz and other researchers from the Sheps Center will be evaluating the pilot's effectiveness over its five years. They will be looking for outcomes like reduced emergency room usage and better management of chronic conditions like high blood pressure—things that, research shows, can strongly respond to improvements in patients' living conditions.

Berkowitz underscores that this program is an experiment. It could become an example for Medicaid programs across the country—but because no other state has done anything quite like this, there's no model to follow.

'You Spend More Time, You Get to Know Them'

Organizational difficulties have generally been surmountable. What's dogging the program now is getting people in the door.

Cornerstone, for example, has helped only one other person with housing besides Goddard. In the northeastern town of Ahoskie, Roanoke Chowan Community Health Center has just one person receiving services so far. And in Hertford County, only about 30 people are getting food from Cultivator, a local nonprofit.

DHHS reports that about 4,200 referrals have been made for HOP services and that fewer than 13,000 people are eligible for the pilot, meaning it's reaching roughly a third of those who qualify. That's a start, but the Centers for Medicare and Medicaid Services initially approved a plan for 25,000 to 50,000 eligible members. DHHS leaders say that was a rough estimate created before the pilot's regions had been selected, and its actual locations have smaller target populations.

"We're disappointed, but we understand this is a pilot project," said Michelle Lewis, Roanoke Chowan Community Health Center's population health and integrated care administrator. "We're here to work out kinks and provide feedback."

Many of the health policy experts watching the program echoed that. "This is all being done for the first time, so I think there's a recognition that it's going to be impossible to get everything perfect," said William Bleser, assistant research director at Duke's Margolis Center. "It's not going flawlessly, but it's a learning process."

As Miranda Catania explains how she gets people to talk in HOP screenings, she illustrates a reason referrals have been slow.

“When people are in need of help, they’re too embarrassed to ask,” she said. “Nobody’s going to blatantly come out and say, ‘Hey, I need help with food.’”

Catania is a care manager with NC Community Health Center Association in Raleigh. She spends all day talking to potential HOP participants, asking them careful questions to glean details about their living situations. “Some people are hesitant, so I feel like it’s my job to break that shell and get them to tell stories,” she said. “You spend more time, you get to know them. They always have more than one social determinant of health [need].” So far, every referral she’s made has been approved.

Her association represents clinics that treat mostly low-income patients. Employees at the clinics in participating regions have flagged the patients she talks to as potentially needing help.

Most of the other care managers in the HOP program work for hospital systems and health insurance companies. Many are adding these screenings, which can take up to an hour, to their existing workloads. For Catania, it’s her full-time job.

The process is opaque. No one seems to know exactly how many care managers there currently are, for example, but some observers have questioned whether those care managers are able to give the referrals the focus they require.

“It’s possible there’s a lack of incentive to push or pull referrals to the care manager,” said Fred Johnson, who ran a Wake County Medicaid plan for disabled adults and has worked in the field for years. HOP’s assessment and eligibility requirements create an additional layer of tasks for a care manager. “That’s the pivotal worker in the HOP pilot, but they have other patients and outcomes to meet.”

Leaders of the community organizations The Assembly spoke to agreed that many Medicaid beneficiaries might need a little more attention during screenings.

“They don’t know what to ask for. And then they get a litany of questions,” said Harry Crews, executive director of Green Rural Redevelopment Organization, which provides food services to participants in four northeast counties. “The client will get frustrated with all the questions. They’re thinking, ‘I don’t want to lose my Medicaid, I don’t want to lose my food stamps,’ so they hang up.”



“People need their hand held sometimes,” he said.

Getting the Word Out

In Halifax County’s Scotland Neck, volunteers met at Dawson Elementary School on a Friday in September. The school has been closed for a few years, but the local organization A Better Chance A Better Community (ABC2) is converting it into a “resiliency hub” to offer food assistance, small business

and some emergency services to residents.

ABC2 is one of the nonprofits in the pilot program, and the site is the designated spot for community members to pick up food boxes. The program currently has about 50 clients—a good number for a rural community like Scotland Neck. ABC2 founder Chester Williams says it took some effort to get to this point.

“Many in our community, even myself, we thought Medicaid was only to pay your doctors’ bills,” he explains. “This is news to a lot of folks.” Williams and his staff have talked up the program at churches and local events, and brought in HOP representatives to speak to the community.

Rural residents tend to be hard to reach, and many North Carolinians have never heard of HOP. That includes the doctors, nurses and health care administrators who could connect Medicaid recipients to the program.

“In my clinic, there’s only 10 people enrolled so far,” said Dawn Daly-Mack. Today, she’s at Dawson Elementary School as a volunteer, but during the week, she works as a nurse and care coordinator at Rural Health Group in nearby Roanoke Rapids.

Daly-Mack brought flyers advertising the initiative to her clinic, which sees largely low-income people, and explained it to the administrators, who were unfamiliar with it.

The program has already benefited ABC2 and other organizations in the pilot, many of which have deep roots in their communities but very little funding; ABC2, for example, reported its 2020 revenue as \$82,000, according to Guidestar, a nonprofit database. Of the initiative’s total allocation, \$100 million is dedicated to capacity-building and overhead for the three network leads and the nonprofits in their networks, which currently total around 150.

“It’s huge, game-changing,” said Peter Skillern, executive director of Durham-based Reinvestment Partners, one of the only organizations in the program that serves all three regions. “We threw out 20-year-old donated furniture and actually got desks. My computer was thrown away and I got a new one.”

That money is boosting local economies, too. ABC2, for example, has finally been able to bring many of its longtime volunteers on staff and invest in things like kitchen renovations and a refrigerated truck. It used some of the funding to develop deeper relationships with local farmers, whose produce is now showing up in the food boxes.

But the capacity-building funding only lasts 24 months, and then organizations are expected to be self-sustaining. They’re paid by the program every time they provide a service to an individual, but to succeed, they’ll need far more referrals.

“You have to get to volume,” said Skillern. He pointed to one of the HOP services his group administers: \$40 worth of fruit and vegetables that



participants can redeem at Food Lion or Walmart. Medicaid pays the \$40, and Reinvestment Partners receives \$5.25 as a service fee per person every month. Even if 1,000 clients used the benefit, the organization would only earn \$5,250 a month. “It’s still not quite enough to run a program. That’s part of the challenge.”

The pilot needs more participants so it can be effectively evaluated, too. Even if the program results in several hundred Medicaid beneficiaries better managing their diabetes, HOP will never go statewide if researchers can’t translate those benefits into reduced Medicaid costs in a statistically significant way.

Even that might not be enough to expand the program across North Carolina; federal regulators would also have to approve it, and the General Assembly would have to provide a portion of the funding. DHHS has not given an estimate on how much it would cost to run the program statewide.

A key question for both of them will be whether this complicated, hands-on, community-focused program can demonstrate cost effectiveness.

“That’s a lot of money to prove that giving people food security and transportation and a safe place to live makes them healthier,” said state Senator Jim Burgin, a Republican co-chair of the Joint Legislative Oversight Committee on Health and Human Services. He supports the program but questioned whether the \$650 million would be better and more quickly used if it was applied to the whole state, rather than just the three regions. “We have a limited time to spend it. I don’t want to waste it.”

But DHHS—which intends to ask the legislature for \$102 million in the upcoming budget to fund the next two years—says the program is gaining momentum. “We did purposefully ramp up the pilots slowly; we wanted some time to iron out the kinks before we had an influx of enrollees,” said Van Vleet. “Now that we see they’re OK, we’re working with all of our partners to try to grow enrollment from many different angles.”

For providers on the ground, the immediate impacts seem clear. “I’ve had people tell me the boxes are a blessing to them because now they can afford their medicine,” said ABC2’s Williams. “They’re saying they’re eating better, losing weight. Before, it was too expensive.”

And they are telling others, he said. “They say, ‘This is really nice produce...A real healthy box.’”

COVID BREATHES LIFE INTO NORTH CAROLINA'S RURAL TELEHEALTH, BUT BROADBAND REMAINS AN OBSTACLE

NORTH THE CORONAVIRUS PANDEMIC FORCED PROVIDERS TO SEE MANY OF THEIR PATIENTS VIRTUALLY. IN RURAL NORTH CAROLINA, WHERE THE BROADBAND INFRASTRUCTURE IS LACKING, THAT TRANSITION CAN BE CHALLENGING.



BY LIORA ENGEL-SMITH
NC HEALTH NEWS
MAY 14, 2020

<https://www.northcarolinahealthnews.org/2020/05/14/coronavirus-rural-telehealth/>

Though he doesn't see patients face-to-face these days, Dr. Charles Sawyer still carries his prescription pad. The 87-year-old doesn't often write prescriptions by hand anymore, but there's something about the familiar feel of the pad in his coat pocket, he said.

Sawyer, a primary care physician at Roanoke Chowan Community Health Center, is a traditionalist. He dictates, rather than types, patient notes to be transcribed into electronic charts. And though his notes are readily available to patients through an online portal, he still sends his patients letters after every visit.

In recent weeks, Sawyer's practice has undergone a seismic change unlike anything else he's seen in his 55-year career. Sawyer is seeing all of his patients online or via phone.

Gone are the exam room chats and the listening to hearts and lungs — those are left to younger staff who are less at risk for developing COVID-19 complications. Instead, Sawyer sits at his computer at the center in Ahoskie, and checks in with patients by phone or via video.

"I'm a hands-on type doctor, always have been. I do the best I can to adjust to it," he said. "It's not something I truly enjoy doing, but during this time of the virus, we just have to adjust and do the best we can."

The move to telehealth appointments at Roanoke Chowan has been swift by necessity, but it was only possible because the center already had more than a decade of experience with caring for patients virtually, said CEO Kim Schwartz.

Like many rural areas across the state, Roanoke Chowan serves a population for whom internet access isn't a given. Forget computers, some patients don't even have a reliable phone connection — cell or landline. With libraries, schools and fast-food restaurants off-limits because of coronavirus, patients without internet at home may find themselves with few alternatives.

None of these challenges are new, but the need to address them has gained new urgency as coronavirus spreads

through rural North Carolina.

“Certainly this situation highlights the inequities throughout the state,” said Jeff Sural, director of the Broadband Infrastructure Office at the North Carolina Department of Information Technology, in a Rural Center broadband webinar last week. “It really brought to bear the difference between the haves and the have nots.”

Deep within the broadband chasm that prevails within rural North Carolina, providers worry that a sizable group of digital “have nots” aren’t getting the care they need.



Broadband, telehealth triage

The first signs of change for telehealth in North Carolina began in March, as private insurers and state and federal payers such as Medicaid and Medicare amended billing rules for telemedicine appointments to promote social distancing. Before the change, some insurers paid less for telemedicine appointments, and even less for telephone conversations with patients, while others didn’t reliably cover such visits.

But coronavirus containment efforts pushed insurers — and the state — to pay more for video calls. And the increase in reimbursement rates has made virtual visits financially feasible for many providers, including those at Roanoke Chowan.

Telehealth caught on at other health centers too, said Brendan Riley, director of policy at the North Carolina Community Health Center Association. Before the rule change, roughly 10 of the state’s 42 health center providers offered some degree of telehealth, either through phone visits, remote patient monitoring or in-office computer consultations with specialists who are off-site. As of this month, at least 34 organizations have begun offering telehealth options, he added.

“It’s growing every day,” he said.

Within weeks of these telehealth financing changes, Roanoke Chowan staff moved 80 percent of all patient appointments to online or over the phone, Schwartz said. To get to that figure, staff took a multi-pronged approach, working with clients one-on-one. Clients who have an internet connection and a device get training on video conferencing. Staff invited those who don’t have a device or internet to the clinic parking lots, where WiFi hotspots and devices are available for appointments. Patients who can’t get to the parking lot receive a phone visit, and face-to-face appointments happen only when there’s no other option, such as in a medical emergency.

Schwartz knows that these workarounds aren’t long-term solutions. Patients may not have a car in which to sit during parking lot appointments, and conducting such appointments outside may not be feasible in a sweltering North Carolina summer. With no end in sight for the coronavirus crisis, the center has been exploring other alternatives, including scattering Wi-Fi hotspots in other spaces such as churches and community colleges, or even using Wi-Fi-enabled vans to bridge the digital divide.

The state Department of Information Technology recently took a similar approach in a related broadband access challenge: remote learning while schools and libraries are closed. The department is dispatching school buses with hotspots to dozens of locations in underserved areas to allow for remote learning. The department also

compiled a statewide list of free hotspots, some of which are in rural areas. But these solutions can only go so far, Sural said in last week's webinar.

"To be honest, right now we're in the triage phase. We're simply trying to get connectivity to those that need it," he said.

"It's not the best solution. It's not a permanent solution, but right now, we're finding that that's one way to at least give students access."

Rural providers across North Carolina are performing a similar triage with telehealth initiatives in their respective communities.

Growing pains

In March and April, dozens of western North Carolina providers were suddenly thrust into the telehealth world. The largely rural region of the state had few telemedicine options outside of cities, said Bryan Hodge, director of rural initiatives at Mountain Area Health Education Center.

In a survey the agency conducted after COVID-19 became a reality in the state, 92 percent of 113 clinics in the western part of the state had adopted telemedicine and phone visits. Fewer than three-quarters of respondents, however, said they knew how to bill for these services.

MAHEC has been offering training and support on billing and technical issues to some of those providers, but rural areas in the western part of the state suffer from many of the same broadband availability challenges that providers at eastern North Carolina's Roanoke Chowan clinics are up against.

Patricia Hall is all too familiar with these limitations. A primary care provider at Celso Health Center in Yancey County, Hall has been seeing patients virtually for several weeks now.

She's seen her share of frozen screens during video calls, she said. Even when video works, the image may be too fuzzy to properly diagnose rashes and lesions.

Hall resorts to phone check-ins when video appointments aren't feasible. Audio calls alone can't provide the level of detail she's accustomed to because she can't see the patient, she said, but the center has been exploring ways for patients to send pictures of rashes and other conditions securely. A similar approach is already being used successfully in other parts of the world where the rural broadband infrastructure is either weak or nonexistent.

When the internet and hardware cooperate, virtual visits can be a powerful tool, Hall said, especially because it can give her a glimpse into people's living rooms and offices.

"I feel a real appreciation for patients," she said. "We both get to see each other as more human, kind of literally having a window into each other's lives."

Internet-based exclusion

Phone visits are now the norm for Brittany Hipkins, a provider at Blue Ridge Community Health in Jackson County. On any given day, roughly a third to half of all the patients she works with need a phone visit because of internet access issues.

For patients who have an internet connection that's fast enough for video calls, she added, virtual meetings can remove another common rural barrier to care: transportation.

That, in a nutshell is the promise of telehealth in rural areas. But for telehealth to fulfill that vision, rural broadband needs a significant boost, said Hodge, of MAHEC.

North Carolina's investments in rural broadband have thus far been modest. In the most recent round of COVID-19 funding, lawmakers added \$9 million to a matching grant program that helps internet providers connect rural homes to the internet.

The program, known as Growing Rural Economies with Access to Technology or GREAT, began in 2018 and had already awarded \$15 million for rural broadband projects that wired roughly 450 businesses and more than 9,000 households as of last year.

By all estimates, the broadband needs of rural areas, however, are far greater.

"There's not enough money in the world to touch every part of our country in the rural parts," said Robert Hosford, North Carolina state director for USDA rural development at the Rural Center's broadband webinar.

It's difficult to put a dollar amount to that need because there are no reliable estimates of how many homes in rural North Carolina lack access to the internet. The cost of wiring homes also varies widely, depending on terrain, the type of fiber used and distance from the nearest wire. Laying a mile of cable can cost \$18,000-\$20,000, by some estimates. The total cost of such an undertaking in rural North Carolina is hard to calculate, but a recent estimate puts the cost of connecting every household in the United States to fiber broadband at \$130-\$150 billion over five to seven years.

With broadband improvements in North Carolina coming in small measures, the internet access conundrum, and by extension, the barriers to rural telemedicine in the age of coronavirus aren't likely to resolve anytime soon.

For his part, Sawyer, the provider at Roanoke Chowan, has gotten used to the new reality of connecting with his patients online, and he hopes his patients have too.

"It's a learning curve," he said. "You start off, you don't have a clue and then over a period of time, you get acclimated."

ENHANCING ECU'S REACH

GRANT FOR IMPROVING DIGITAL EQUITY TO IMPACT 29 REGIONAL COUNTIES



BY RONNIE WOODWARD
ECU NEWS SERVICES
JANUARY 20, 2023

<https://news.ecu.edu/2023/01/20/enhancing-ecus-reach/>

East Carolina University is receiving \$1.39 million for a collaborative project that aims to improve access to digital technology and literacy, resources and skills training for residents in 29 eastern North Carolina counties.

The project is funded by the State Office of Digital Equity and Literacy and led by Leslie Cofie, principal investigator and assistant professor of health education and promotion in the College of Health and Human Performance, and Alice Richman, co-principal investigator and professor of health education and promotion, along with ECU Health and Laupus Health Sciences Library.

A primary goal is to enhance the capacity of ECU as a center for bridging the digital equity divide experienced by rural and underserved communities in the region. Public libraries and trained community health workers will help facilitate technological needs and educational access to identified populations, which includes low-income households, individuals who primarily reside in a rural area, individuals with a language barrier, and community members who identify as Black, Indigenous and people of color.

Cofie and Richman estimate the eventual free deployment of 290 computing devices, 1,160 hotspots and 29 rugged internet hubs that libraries and communities will be able to keep after the completion of the two-year project.

“The issue at hand is we know access to digital technology and digital literacy is so important because it affects every aspect of our lives,” Cofie said. “We are trying to target communities that can benefit from these types of resources.”

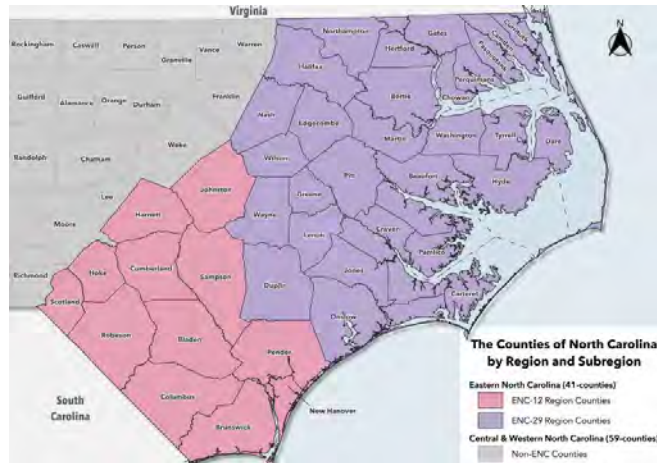
Key support will come from Jamie Bloss and Amanda Haberstroh, representing Laupus Health Sciences Library, and Abby Schwartz from the ECU School of Social Work. ECU Health, the Care Share Health Alliance and Roanoke Chowan Community Health Center also are partners in engagement and supporting community health workers. Funds will help train community health workers, with plans for at least half of them to be bilingual in Spanish and English.

“One of the things I love about this project is the breadth and diversity of collaborators we brought together,” Richman said. “That’s not only at ECU, but with local community organizations. ... We’re all coming together to provide education and resources around digital equity to a 29-county subregion. We’re delivering these

services directly to the community, and we put together a really good group to be able to do that. That makes it exciting.”

This will build on previous collaborative research involving the College of Health and Human Performance and Laupus Library focused on farmworker health-related and digital access improvements.

The project is divided into three pillars — conduct formative evaluation of internet connectivity, technology and resource needs of communities; adapt and tailor existing digital literacy training and resources to meet the needs of eastern North Carolina while preparing community health workers to disseminate training materials and methods; and deliver digital technology and digital literacy training and resources to community members.



“This grant provides us the opportunity to continue previous outreach while supporting our colleagues in rural public library systems,” said Haberstroh, a librarian liaison to the ECU College of Nursing and graduate programs. “We are looking forward to this collaborative effort and are hopeful for the future of health information access through improved digital equity in eastern North Carolina.”

ECU’s award is part of \$9.9 million in funding announced for the state’s first digital equity grant.

“Access to internet connectivity and any type of digital literacy is really crucial,” Cofie said. “Exposing community members to these skills and resources will go a long way in contributing to their ability to participate in any type of civic engagement or economic engagement or access to health information and resources, and even health care.”

Gov. Roy Cooper added in a state release, “All North Carolinians need the knowledge and the devices to safely access the internet. This first round of digital equity funding will help us build the foundation of the effort to make sure everyone can get online in an affordable way.”





Our mission: Great care for every one, every day.

About Us:

Services Include

- Primary Care
- Pediatrics
- Lab Services
- Pharmacy Services
- Medication Assistance Program
- Evening and Saturday Hours
- Diabetes Education
- Ag. Worker Outreach
- Behavioral Health Services
- Substance Abuse Services
- Care Management Services
- Community Health Workers
- Telehealth In-Home Monitoring
- Sliding Fee Scale
- 24/7 care



RCCHC Receives Patriot Award from the US Army National Guard

RCCHC

- Served 16,810 patients in 2022
- Gave over 18,000 immunizations
- Employs over 230 people

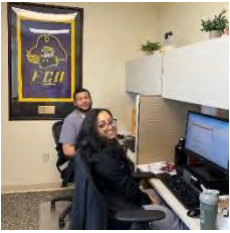
Roanoke Chowan Community Health Center serves **Bertie, Gates, Hertford, Northampton and Washington** counties as well as patients that come into those areas for work and services. We have five sites: Ahoskie Comprehensive Care, Colerain Primary Care, Murfreesboro Primary Care, Creswell Primary Care, and Woodland Primary Care, as well as our brand-new Mobile Health Clinic. We also have a School Based Health Center and an Agricultural Outreach program that utilizes the mobile unit in the evenings. Intergenerational poverty is an ongoing challenge for this part of the state- affecting health from many angles: lack of stable housing and affordable transportation; quick but not nutritionally rich foods; lack of safe places for exercise; and many more.

Federally qualified health centers like ours exist in medically underserved areas, and provide care regardless of patients' insurance status or ability to pay. We also try to provide as many services as possible under one roof. We are governed by a majority-patient board, who knows the needs of their own community very well.

Whole-Person Care

We take care of the TOTAL patient via the integration of primary care, pharmacy, behavioral health, 340b, telehealth, population health & the mobile medical clinic to reach patients where they are.





Family Medicine Rural Residency program

The RCCHC Rural Residency program is a collaboration between RCCHC, ECU Brody School of Medicine and ECU Health. It gives medical school graduates with an interest in rural & underserved communities the opportunity for first-hand experience through a structured residency training. This increases the likelihood they will practice in a safety net clinic.

Telehealth

RCCHC utilizes telehealth services by issuing medical equipment to patients in their home to monitor their chronic conditions. During the COVID 19 pandemic we were able to offer telehealth services to our patients that enabled them to attend their primary care appointments. RCCHC’s mobile unit travels to underserved localities in our service area and is equipped to offer telehealth behavioral health, primary care and infectious disease consultations with a provider at one of our brick and mortar clinic sites.



340B Program

The purpose of the 340B Drug Discount program is to enable CHCs to stretch scarce federal resources as far as possible. We reach more eligible patients providing comprehensive health care services in areas where this would not be possible without the resources gained by the 340B Drug program. By discounting the cost of outpatient medications for health centers, 340B enables RCCHC to provide affordable medications for our patients and reinvest savings into other key services, such as behavioral health, dental, mobile, and school-based health

services. The 340B program is crucial in communities like ours where patients cannot afford life-saving medications.

Mobile Health Clinic

In 2022 RCCHC launched the Mobile Health Clinic. During the day, the clinic goes to familiar sites in the communities we serve, where populations have less access to transportation. When agricultural workers are in the area, our agricultural worker health team takes the unit to visit farms and work sites to deliver more comprehensive health care where the workers are.





RCCHC

Roanoke Chowan Community Health Center

**GET
INVOLVED!**



Become a community health center advocate--write to your elected officials and ask them to Expand Medicaid:

<https://ncchca.quorum.us/campaign/45068/>



SCHOOL *of* DENTAL MEDICINE

Defined by educational innovation and exceptional patient care, ECU's School of Dental Medicine is turning today's students into tomorrow's leaders in oral health care. As Pirates™ and as dentists, we are dedicated to a mission of service and providing transformational care to rural and underserved communities across our state. With your support, our graduates will continue their groundbreaking work in the regions that need them most – using their skills to leave places better than they found them.

Gifts as Good as Gold

Patient Care Funds to ensure all who need care are treated in our clinics.

Recruitment Funding and Scholarships to recruit talented, diverse and deserving students for our classrooms and clinics.

Faculty Support to provide our faculty with the support they need to deliver an innovative educational experience.



Charting Our Course

DR. MICHAEL WEBB AND DR. MARK MOSS serve as principal investigator and co-project director on a \$3.1 million grant from the Health Resources and Services Administration to enhance resident training in the care of patients with special needs in eastern North Carolina and across the state. The grant is one of the largest in the dental school's history.

DR. GREG CHADWICK, dean of the ECU School of Dental Medicine, has been named president-elect of FDI World Dental Federation, the premier representative body for more than one million dentists worldwide.

OCTAVIA MILLER, a fourth-year SoDM student, is the two-time recipient of the National Dental Association Foundation's Audacity to Dream Scholarship for Community Service in recognition of her efforts in engaging communities and caring for the people around her.

DR. TODD WATKINS, assistant dean, was inducted into the National Academy of Inventors as a senior member – the only dentist inducted as a senior member or fellow and the only member who has patented educational analytics systems.



Achievements More Prestigious Than Gold



90% of ECU's dental graduates who have completed their residencies are practicing dentistry in N.C.



200 military veterans received care through SoDM's Smiles for Veterans program across N.C.



2019 William J. Gies Award for Innovation winner, presented to the school by The American Dental Education Association.

730+ patients served through the school's Patient Care Funds, which fully or partly covers the cost of dental procedures for patients in need.



2022 Josiah Macy Jr. Foundation Award for Excellence in Social Mission in Health Sciences Professions winner, for efforts in social mission through education and patient care.

89,000+ patients from all 100 North Carolina counties have received care in the school's on-campus clinics and statewide community service-learning centers.

Our Gold Standard

Since 2011, our students, faculty and graduates have led the way in delivering exceptional dental care to our patients in North Carolina. With your support, we will set the gold standard for dentistry – one smile at a time.

give.ecu.edu/dental





ECU

**SCHOOL OF
DENTAL MEDICINE**



Welcome

Welcome to the ECU School of Dental Medicine Community Service Learning Center-Ahoskie. The center exemplifies the dental school's vision to improve the health and quality of life of all North Carolinians by creating leaders with a passion to care for the underserved and by leading the nation in community-based, service learning oral health education.

Our faculty, student, and resident providers are committed to offering comprehensive general dental services for adults, children, and special care patients in a safe, caring, and professional setting. We are proud to serve the dental care needs of the entire region as an operational partner with the Roanoke Chowan Community Health Center (RCCHC) located next door. We welcome patients Monday through Friday 8:00 a.m. until 5:00 p.m. Emergency services are provided Monday through Friday on a walk-in basis. After hours emergency services are provided for patients of record as requested.

Presenting:

Dr. T. Rob Tempel, Associate Dean for Extramural Clinical Practices

Dr. Ford Grant, Faculty Director

Dr. Nicole Beasley '16/AEGD '17, Assistant Director

Toni Bennett, Business Manager

Services include:

Comprehensive General Dentistry

Children's Dentistry

Oral Surgery – Extractions

Root Canals

Sealants and Tooth Colored Fillings

Crowns and Bridges

Implant Services

Dentures and Partial Dentures

Periodontal Services and Cleanings

Cosmetic Tooth Whitening

Digital Radiography

3-D/Cone Beam Imaging

Ahoskie /ə' hɒski/ is a town in Hertford County, North Carolina. The population was 5,039 at the 2010 census. Ahoskie is located in North Carolina's Inner Banks region. Its nickname is "The Only One" because no other town in the world is known by the same name. The origin of the word Ahoskie, which was originally spelled "Ahotsky," came from the Wyanoke Indians who entered the Hertford County area at the beginning of European settlement.

100 Health Center Drive, Ahoskie, NC 27910, Phone 252-332-1904

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Department of Pediatric Dentistry,
Orthodontics and Dentofacial
Orthopedics
252-737-7033

Department of Foundational
Sciences
252-737-7156

TOUR

Making a Difference
in North Carolina



The CSLC-Ahoskie:

- Opened in July 2012 as ECU's first Community Service Learning Center.
- Provides an annual economic impact of well over \$1 million to the community.
- Has served almost 7,500 patients and provided nearly \$10 million in dental services.
- Is the dental provider for the Roanoke Chowan Community Health Center (RCCHC), a Federally Qualified Health Center (FQHC), located next door. The CSLC also maintains a close relationship with ECU Health Roanoke Chowan Hospital in Ahoskie.
- Maintains an advisory board of local leaders who provide community networking and resources.
- Participates each February in the American Dental Association's Give Kids a Smile day, providing cleanings, fluoride treatments, sealants and dental education for local school children free of charge.

Students, Residents and Staff

On any given week day, four fourth-year students and two residents provide patient care under the supervision of faculty dentists at the school's eight community service learning centers (CSLCs). Students complete nine-week rotations at three different CSLCs while residents remain at CSLCs for a year. Students and residents live in the communities they serve. In Ahoskie, a majority of staff members were either born in the area or are long-time residents.



PASQUOTANK COUNTY

Formed in 1861 out of Albemarle County, Pasquotank County was named after the region's Pasquotank natives. The term means "where the current divides or forks," a perfect name of a county bordered by the Albemarle Sound. The land was attractive to settlers because of its many small streams, creeks and rivers, giving inhabitants easy access to ports and other colonies. Elizabeth City is the county seat.



The fifth smallest county in North Carolina, size-wise, the population sits at just over 40,000 as of the 2020 Census.

Pasquotank County's tourist attractions include the Museum of the Albemarle and the Arts of the Albemarle. Visitors can also explore the county's Waterfront Market in Elizabeth City during the summer months.

Products produced in Pasquotank County include lumber, potatoes, wheat, corn, cabbage, broccoli and soybeans -- a crop that was first commercially processed in the state in Elizabeth City.

Major non-public employers in the area are Sentara Albemarle Medical Center, Amentum Aviation, Moneysworth, Hoffler Flow Controls, Jones Lumber Company, Hockmeyer Equipment Corporation and Telephonics Corporation.

On the Purple and Gold Bus Tour, we will visit the U.S. Coast Guard Air Station in Elizabeth City. Commissioned in 1940, the air station is located along the Pasquotank River and the Albemarle Sound. Housing more than 855 military personnel, it's the country's second largest Coast Guard aviation base. We will also visit the Museum of the Albemarle where we will find the history and culture of the Albemarle Region preserved through regional collections and historical interpretation.

SOURCES

<https://www.ncpedia.org/geography/pasquotank>

https://www.carolana.com/NC/Counties/pasquotank_county_nc.html

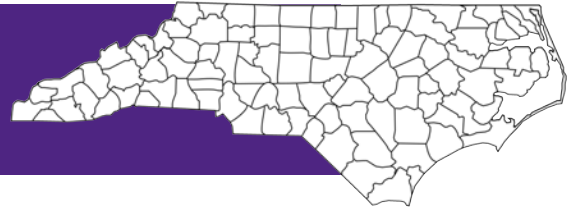
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PASQUOTANK COUNTY SPEAKERS - DAY 1



Wanda Lassiter
Curator
Museum of the Albemarle

Wanda Lassiter began her career at the museum in 2006 as the Collections Specialist under then Curator Thomas Butchko. With the assistance of the collections department staff (Caroline Barker and Noah Edwards) and the exhibit/design staff (Lynette Sawyer, Matthew Ferrell, and Andrew Nelson-Redondo) she is responsible for the maintenance and stabilization of over 30,000 artifacts; researching, writing, and designing in-house and traveling exhibitions; acquiring artifacts; and creating and supplying text and images for promotional and social media pieces.



Wayne Mathews
Facilities Manager
Museum of the Albemarle

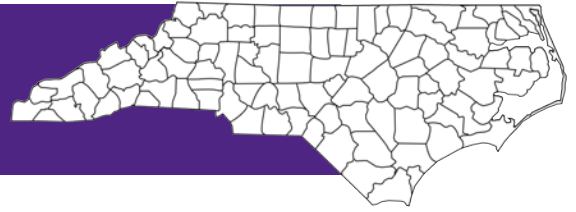
Wayne Mathews has been with the museum for close to thirty years. In his role, Mathews is responsible for the everyday electrical and mechanical functions of the museum. He oversees all HVAC systems, elevators, electrical and museum up-keep, repairs, and maintenance. Mathews has a vital role in keeping the museum functioning.



Lori Meads
Museum Curator II, Education Chief
Museum of the Albemarle

Lori Meads joined the Museum of the Albemarle in September of 2001. Meads is responsible for overseeing the staff in the education department with developing, planning, and implementing all educational programs for adults and children. She has a vital role in assisting with the museum's library, scheduling groups, volunteer programs, program calendar, and the information desk that is staffed by four receptionists and volunteers.

PASQUOTANK COUNTY SPEAKERS - DAY 1



Don Pendergraft
Executive Director
Museum of the Albemarle

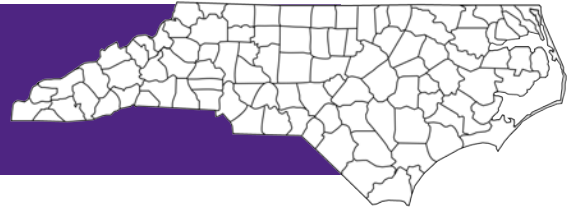
Don Pendergraft began his time at the museum designing and fabricating exhibits. He left briefly to pursue employment at the NC Museum of History as Chief Exhibit Designer, but returned to take on the role as Executive Director, where he oversees all exhibits and educational programming.



Barbara Putnam
Operations Manager
Museum of the Albemarle

Barbara Putnam joined the museum as Operations Manager six years ago. She is responsible for overseeing all exhibits, education programming, financials of the museum's state budget and non-profit budget of our support groups, Friends of the Museum of the Albemarle. Putnam also serves as the social media manager for all social media platforms at the museum.

PASQUOTANK COUNTY SPEAKERS - DAY 2



David Burgess **Chief of the Contracting Office** **US Coast Guard Aviation Logistics Center**

David Burgess is the Chief of the Contracting Office for the Aviation Logistics Center (ALC) for the United States Coast Guard, providing leadership on procurement operations and strategic and business guidance. He leads a talented team of approximately 70 contracting professionals who are committed to their stakeholders by providing quality contracting support to advance ALC's mission: We keep 'Em Flying by Providing – the Right Stuff, at the Right Place, at the Right Time, at the Right Cost...Every Time.

Prior to assuming this position in August 2006, Burgess was the Supply Cell Leader and Supervisory Contracting Officer of the then newly formed C-130J Aircraft Project Office for the U.S. Coast Guard. In this role, he provided strategic guidance in the development and implementation of a comprehensive logistics plan, the development of sparing models for various components, and led several performance-based contracting initiatives to support this new aircraft platform. Burgess has been a certified acquisition professional since 2004 and is Level III certified in Contracting by DHS. Mr. Burgess has held other contracting positions with the Coast Guard supporting all of the Coast Guard's aviation platforms including the HU-25, HH-60, HH-65 and HC-130H. In these various positions, Mr. Burgess initiated several innovative contracting practices and gained extensive experience in performance-based contracting and best value awards.

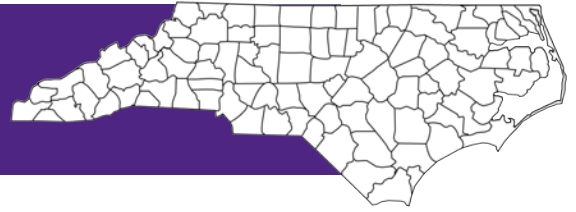


Josh Stoddard **Acting Executive Director** **US Coast Guard Aviation Logistics Center**

Josh Stoddard is currently serving as the Acting Executive Director of U.S. Coast Guard Aviation Logistics Center. In this position, he is second in command to ALC's Commanding Officer, Captain Tad Wilson. The Executive Director position adds a civilian employee perspective to the ALC leadership team joining the military Executive Officer and the Command Master Chief. Stoddard's duties include overseeing the hub of Coast Guard aviation support that provides depot level maintenance, engineering, supply, procurement, information services and acquisition project management for a fleet of over 200 aircraft while adhering to the pillars of aeronautical engineering and Assuring Airworthiness and Reliability, Optimizing Logistics and Ensuring Stewardship Excellence.

Stoddard enlisted in the U.S. Coast Guard in 2000 and was an active-duty member from 2000-2005 serving as an Aviation Maintenance Technician and Dropmaster on HC-130Hs at Air Station Elizabeth City. Following his military service, he received his bachelor's in business administration from the University of North Carolina at Greensboro. Stoddard began his federal career at ALC in 2011 and previous ALC assignments include Deputy Aviation Logistics Division, Supervisory Contracting Officer Medium Range Recovery Division, Contract Specialist Medium Range Surveillance Division, Contract Specialist Long Range Surveillance Division, and Procurement Technician Engineering Services Division.

PASQUOTANK COUNTY SPEAKERS - DAY 2



Tad Wilson **Commanding Officer** **US Coast Guard Aviation Logistics Center**

Tad Wilson is a 1996 graduate of the U.S. Coast Guard Academy where he earned his bachelor's in mechanical engineering. After receiving his commission, Captain Wilson served his initial tour as Engineering Officer of the Watch and Officer of the Deck aboard Coast Guard Cutter Thetis, executing law enforcement and drug and migrant interdiction missions in the Caribbean Basin. He attended Naval Flight Training in Pensacola, Florida, and served his first aviation tour flying the HH-65A helicopter at Air Station San Francisco, California. He was designated an Aeronautical Engineer and served as the Assistant Aeronautical Engineering Officer at Coast Guard Air Station Savannah, Georgia. In 2010, Captain Wilson earned a master's in aeronautical engineering from Purdue University. He went on to be the Airworthiness Sustainment Branch Chief and Engineering Services Division Chief at the Aviation Logistics Center, assuring the airworthiness of the Coast Guard's aging aviation fleet of over 200 aircraft. Captain Wilson then returned to the operational Coast Guard as the Engineering Officer of Air Station San Francisco before fleeting up to serve as Executive Officer. He then attended the US Naval War College where he earned a master's with distinction in National Security and Strategic Studies and was awarded the Bragg Award as the Coast Guard's Honor Graduate. He most recently served as the Executive Assistant to the Assistant Commandant for Engineering and Logistics.

BLUE CROSS FUNDING BLUE CROSS NC FUNDS ECU, ECSU PARTNERSHIP FOR STUDENT BEHAVIORAL HEALTH SERVICES



BY: SPAINE STEPHENS
ECU NEWS SERVICES
MARCH 11, 2022

<https://news.ecu.edu/2022/03/11/blue-cross-funding/>

Blue Cross and Blue Shield of North Carolina is awarding \$1.54 million to East Carolina University to provide telepsychiatry services over the next five years for students at Elizabeth City State University.

This partnership expands behavioral health care services at ECSU at a time when mental health concerns on college campuses caused by the COVID-19 pandemic are surging.

Depression, anxiety and other mental health disorders are being diagnosed at high rates. An estimated one in four Americans ages 18 and older have a mental disorder in any one year.

The challenges associated with attending college, such as academic pressure, can trigger symptoms or cause the first onset of behavioral health and substance use problems in students. Higher education institutions are uniquely positioned to provide behavioral health support for students alongside physical health, academic, professional and social services.

“Through collaborative efforts with partners like ECU and ECSU, we’re able expand quality behavioral health care services across the state,” said Dr. Nora Dennis, lead medical director of behavioral health and health equity at Blue Cross NC. “In order to improve the health and well-being of all North Carolinians, we must equally address physical and behavioral health needs. That’s why our goal is to improve access to behavioral health care in rural and underserved communities by 25% in five years.”

The investment from Blue Cross NC bolsters the ECU-led North Carolina Statewide Telepsychiatry Program (NC-STeP), which connects patients in hospital emergency departments and community-based settings with expert psychiatric care using telehealth technology. NC-STeP enhances access to behavioral health care, especially in North Carolina’s rural communities, such as Pasquotank County where ECSU is located. Telepsychiatry helps address the shortage of providers for patients who otherwise may not have access to services, all while reducing unnecessary hospital admissions and improving after-care and patient outcomes.

Cheryl Parquet, director of Community Engagement and Marketing Activation, Blue Cross and Blue Shield of North Carolina; Ryan Baker, administrator, ECU Center for Telepsychiatry & e-Behavioral Health, NC-STeP; and Jody Grandy, director of ECSU Student Counseling Services, participate in the grant check presentation

during the Feb. 27 Charlotte Hornets game at the Spectrum Center. (Contributed photo)

“With this investment from Blue Cross NC, ECU will embed a behavioral health provider, linked via telepsychiatry to a clinical psychiatrist, for case consultations and care planning at the Student Health Center at ECSU,” said Dr. Sy Saeed, director of the ECU Center for Telepsychiatry and founding executive director of NC-STeP. “This resource will benefit students by improving access to behavioral health care, reducing the need for trips to the emergency department and inpatient admissions and reducing delays in diagnosis. The psychiatrist will also be available to the patient’s primary care provider for diagnostic and treatment recommendations. We are emphasizing the total health care needs of the patient so that optimum adherence can be achieved with medications and illness self-management.”

NC-SteP was developed through the N.C. Department of Health and Human Services’ Office of Rural Health and Community Care. Since the program’s inception, more than 48,000 psychiatry assessments have been completed, resulting in more than 7,300 involuntary commitments overturned. The program currently serves 39 hospital emergency departments and 18 community sites across North Carolina with five new community sites planned for spring 2022. Saeed will lead the Blue Cross NC-funded project in partnership with ECSU.

“Students need a place to share things that upset, frighten, confuse or thrill them, and these added telepsychiatry services will help us support more students directly on campus,” said Dr. Gary Brown, ECSU’s vice chancellor for Student Affairs, which oversees the Student Health Center. “These funds will allow ECSU to expand our nurse practitioner coverage on campus from 24 to 32 hours, and NC-STeP will augment the traditional models of professional counseling and preventive services we provide to students adjusting to the demands of college life.”

ECSU currently offers a wide range of professional counseling, preventive and psycho-educational services to enrolled students adjusting to the demands of college life. This includes resources that address the psychological, developmental and academic needs of students through counseling, faculty, staff, student and family consultation and peer education and outreach programming, as well as Therapy Assistance Online (TAO).

ECU is in the public phase of the Pursue Gold campaign to raise half a billion dollars. This ambitious effort will create new paths to success for Pirates on campus, across the country and around the world. Donor gifts during the campaign will keep us constantly leading and ready to advance what’s possible. Learn more at pursuegold.ecu.edu.



COAST GUARD STATION ELIZABETH CITY SET TO MARK 82ND YEAR



BY KIP TABB
COASTAL REVIEW
AUGUST 9, 2022

<https://coastalreview.org/2022/08/coast-guard-station-elizabeth-city-set-to-mark-82nd-year/>

United States Coast Guard Air Station Elizabeth City is celebrating its 82nd birthday Monday, just weeks after the Coast Guard's 232-year anniversary Aug. 4.

Now the Coast Guard's largest aviation facility and biggest employer in the area, the base on the south side of Elizabeth City covers some 800 acres, a far cry from the original 249 acres when it first began operations Aug. 15, 1940.

When the station was commissioned, there were only four officers, 52 enlisted men and 10 aircraft including three Hall PH-2 seaplanes, four Fairchild J2K landplanes, and three Grumman JF-2 amphibians, according to Coast Guard Aviation History, a project of the Coast Guard Aviation Association.

Today, there is a combined workforce of around 2,000 Coast Guard personnel and civilian employees, making it the largest employer in northeastern North Carolina, according to the state archives.

The station's core mission is search and rescue, but it also has aerial patrols as diverse as iceberg tracking in the Atlantic to monitoring shipping from the Atlantic Coast to the Azores.

Until recently, the base handled the training of the service's rescue swimmers. After 30 years here, the training has temporarily moved to Petaluma, California. The renovated facility should reopen in 2025, according to the Coast Guard website.

Although Elizabeth City is one of the largest and busiest Coast Guard bases in the nation, there seems to be very little documentation of its earliest days.

From its beginning, Elizabeth City was an air base. It is not clear why Elizabeth City was chosen for what would become one of the most important Coast Guard and Naval facilities on the East Coast during World War II.

It is likely that the late Lindsay Warren played an important role. Warren was a Democrat who represented the 1st District encompassing northeastern North Carolina, from 1925 to 1940. He was briefly the speaker of the House before becoming the nation's comptroller general in 1940.

Aycock Brown, in his "Covering the Waterfront" column that he wrote for the Beaufort News in the 1930s and 1940s, took note of 1939 headlines to speculate on what could be happening at Elizabeth City, suggesting Warren played an important part in bringing the base to the area.

One of the headlines originated in Elizabeth City, the other was from Washington, D.C.

"The Elizabeth City story stated that work began there Tuesday on the \$128,000 WPA project which will when completed, be a modern and up-to-date Coast Guard Air Base, obtained through the efforts of Congressman Lindsay Warren," Brown wrote.

"The Washington story under the caption: 'Warren Has Hopes For Ocean Air Base' quoted the congressman as saying he was looking into the possibility of Elizabeth City, N.C., becoming an airbase for trans-Atlantic plane service."

Brown's \$128,000 from Works Progress Administration was dwarfed by the \$2 million, or \$42.3 million today, that the government actually spent on the facility. Also called Work Projects Administration, the WPA was created in 1935 for the unemployed under President Franklin D. Roosevelt's New Deal.

Neither the base nor the city ever became a center for trans-Atlantic plane service, but what it did become was an important facility for confronting the U-boats that brought World War II to the doorstep of the nation.

While Warren may have played a role in steering the Coast Guard to Elizabeth City, there were other factors also at play.

Even though the United States was ill-prepared for open warfare when the Japanese attacked Pearl Harbor on Dec. 7, 1941, government officials were aware that the world was becoming an increasingly dangerous place and were taking steps to protect vital interests.

Chesapeake Bay and the Hampton Roads area of Virginia was one of the largest ports on the East Coast, and had the open water needed for the seaplanes the Coast Guard was using.

The Virginia ports, though, were open to the sea, and Elizabeth City's inland location was important to planners.



A document provided by Dr. William H. Thiesen, Atlantic area historian for the Coast Guard, offers a clue to what planners were thinking.

The document seems to be a study of how the Coast Guard's air bases in general were used during World War II, although there is no date on it. The study's author is unknown, and the pages are marked "confidential."

"While the station was primarily intended as a major overhaul base for the eastern seaboard, the location of the base nevertheless was selected with a view of its strategic importance in regard to possible enemy action in time of war," the study's author wrote. "The new site was ideal, the most advantageous location between New York and Miami. In a sheltered area, north of Albemarle Sound and some fifty or sixty miles from Cape Hatteras, the station was built on the sloping banks of the Pasquotank River."

Initially most of the flights were mapping exercises and law enforcement, especially enforcement of the Neutrality Acts. The Neutrality Acts were designed to keep the United States out of the warfare that was so much a part of the decade. Although modified and eventually rendered irrelevant, the acts prohibited U.S. flagged ships from carrying weapons of war to belligerent nations.

It was enforcement of the Neutrality Act of 1939 that Roosevelt used to expand and modernize the Coast Guard, informing Congress in an executive order “that a national emergency exists in connection with ...proper observance, safeguarding, and enforcing of the neutrality of the United States...”

He went on to authorize the Coast Guard to add 2,000 more men and to order the “... facilities of the Coast Guard be increased, repaired, modernized, enlarged, and equipped to the extent determined by the Secretary of the Treasury ...”

With the declaration of war, the Coast Guard was directed to operate as part of the Navy, and one of the primary functions of the base was the interdiction of German submarines. It was a function Coast Guard aircraft were ill-suited to perform.

“Initially there were very few resources available to combat the German submarines. The Coast Guard aircraft, not designed for combat, were equipped with locally fabricated depth charge racks and pressed into service,” notes United States Coast Guard Aviation History website.

It was extraordinarily frustrating for the pilots, according to the confidential study.

“Daily, merchant vessels were being sunk, while pilots stood by helplessly, unable to do more than turn in an outraged report,” the study continues, “It was not until December, 1943, that adequate fighting planes were procured. By that time the submarine danger was almost over.”

Yet the air crews saved lives, though the rescues were dangerous. Aviation History combines all air station activity indicating that more than 1,000 were rescued and with 95 landings.

“Three OS2U Kingfishers on a routine patrol spotted men in the water 30 miles east of Cape Hatteras. Depth charges were dropped in an area where it would not injure the men. All three aircraft landed and picked up all the survivors who rested on the wings until a boat arrived from the Elizabeth City air station to pick them up,” is one of the stories on the website.

By the end of the war, the base had returned to much of its original mission of rescue. Aggressive patrolling by U.S. military aircraft and communication with naval ships made the East Coast too dangerous for the submarines.

After the war, Elizabeth City, now greatly expanded, became a training and repair hub for the Coast Guard, as well as an air patrol base, functions that have continued until today.

WITH LIVES ON THE LINE, BASE ELIZABETH CITY KEEPS COAST GUARD AIRCRAFT RUNNING



BY CRAIG HOOPER
FORBES
JUNE 7, 2022

<https://www.forbes.com/sites/craighooper/2022/06/07/with-lives-on-the-line-base-elizabeth-city-keeps-coast-guard-aircraft-running/?sh=269dc12e7423>

The U.S. Coast Guard's low-profile Aviation Logistics Center, tucked in a small corner of North Carolina, is a high-tech, aviation-focused equivalent of a naval shipyard. Unnoticed by Washington, the former seaplane base, just outside the Great Dismal Swamp and near the sleepy town of Elizabeth City, has become a bustling depot, handling the enormous mix of aircraft upgrades, refits and repairs for the Department of Homeland Security's maritime aviators.

The Aviation Logistics Center has a big job, and they do it well, keeping Coast Guard aircraft flying for far longer than any maritime peer. With lives on the line, the Coast Guard maintains their aircraft as hard as they fly, but, as the Coast Guard's aviation capabilities evolve, the "aging-but-essential" World War II-era base is at a crossroads.

The facility could use a little more attention from Washington policymakers.

A Sleepy, High-Tech Surprise

The bucolic surroundings and sun-faded "gate guards" at Base Elizabeth City are deceptive. The old aircraft displays mask a very busy, cutting-edge facility that is home to a range of different operational, training and maintenance commands. The Aviation Logistics Center—as important as it is—is only a single, relatively independent component of the Coast Guard's larger base complex, and it is easy to overlook.

On one remote side of the Elizabeth City base, HC-130 Hercules, HC-144 Ocean Sentry and HC-27J Spartan patrol aircraft are tucked into work-bays, undergoing a combination of deep depot maintenance, missionization and standardization.

The work is steady. Every 48 months, each Coast Guard aircraft and helicopter arrives at the field, gets stripped down to bare metal and is, in essence, rebuilt, emerging in the latest platform configuration. Outside of repainting newly prepared fixed-wing aircraft—about the only thing Elizabeth City's army of 1800 Coast Guard maintainers are unable to do—the Coast Guard does everything else. And even though the Aviation Logistics Center faces workforce challenges common to most manufacturers, the base recruits, hires and trains some of the

best aircraft maintainers in the business.

Rotary wing work takes place in two hulking World War II-era hangars. In one, old MH-65 Dolphin helicopters are stripped down to a bare frame and rebuilt, while, in the other, gear from high-hour Coast Guard MH-60's Jayhawk helicopters are stripped off, refreshed and repurposed for use aboard new or "lightly used" Navy Seahawk hulls that have already been used, on average, for about 7,000 hours and scavenged from U.S. government aircraft "boneyards."

Maintenance work in the hangars is supported by a network of 20 specialized shops, where technicians struggle to cram high-tech gear into aging, World War II-era buildings, trying to perch their million-dollar machines above flood level. The nimble shops need flexibility. As the Coast Guard's intensive maintenance program keeps the Coast Guard's aircraft in service far longer than the original manufacturers expected, the Aviation Logistics Center evolves to meet the need, developing, for example, a center of additive manufacturing excellence, where teams reverse engineer, prototype, test and then manufacture many mission-critical aircraft parts made by companies that have since moved on. In essence, the facility has become something of a counterbalance to the private sector, injecting competition into a space where original manufacturers are highly favored. But the old buildings are at a breaking point, and rather than focus on the work, too many maintainers spend their valuable time figuring out how to make the old facilities work instead.

Aside from the maintenance work, Base Elizabeth City serves as a supply depot for all the Coast Guard's flying commands. Over a billion dollars in critical aviation parts rest in a non-climate-controlled warehouse, inches from the flood-prone Pasquotank River, as sweating warehouse workers race about, organizing parts needed to keep the Coast Guard's widely dispersed aircraft flying. Others, behind the scenes, handle contracting work, or scrutinize incoming shipments for fakes or other quality deviations.

Beyond the base, teams of Elizabeth City maintainers range across the United States, helping fix Coast Guard aircraft in the field.

In short, at Elizabeth City, the Coast Guard is doing it all for their five primary airborne platforms. And while the Aviation Logistics Center is doing a great job, the maintainers can only do so much with the aging physical plant and the resources they have. The workers are constantly under pressure, for if they fail to get aircraft turned around and out the door, on time, they know the delay echoes across the rest of the fleet.

But their work is just going to get harder.

A Base At A Crossroads

The Coast Guard's aviation maintenance facility faces operational and organizational challenges that need high level attention from the Coast Guard, the Department of Homeland Security, and Congress.

Aviation is not getting any easier. Striking a balance between robust simplicity and the technical demands of intelligence-based targeting and military mission support is hard. Building a cadre of personnel capable of introducing and integrating obscure-but-critical technology into an airframe is a tough job. Rapid technological and requirements changes make the job even more daunting.

As the Coast Guard's aircraft age, the work gets even harder. Original manufacturers often value "new" aircraft sales more than "long-term" sustainment and can become less eager to support platforms as they get older. The bureaucratic maneuvering can be intense as users throughout the globe form affinity groups to compare notes and encourage proactive manufacturer engagement.

Take the Coast Guard's MH-65 Dolphin helicopter. Given the service's vigorous maintenance efforts, the long-lived Coast Guard's MH-65s are becoming the B-52s of the sea—iconic, seemingly immortal platforms.

By retirement, the Coast Guard's MH-65 fleet will be approaching sixty years of service, and the platforms will have gone through five different class-wide modifications. The final "Echo" model is set to support the

Coast Guard through 2037 at the earliest, and the Coast Guard wants to run these helicopters well past 30,000 hours—an impressive feat, marked by the fact that the better-funded Defense Department retires their helicopters far earlier. Other military services even throw a party on the rare occasion when one of their helicopters somehow makes it to 15,000 hours.

While the Coast Guard regularly wins kudos for eking as much service out of their platforms as possible, aging platforms need lots and lots of maintenance. As the frugal Coast Guard pushes their aircraft to serve far beyond their originally anticipated service life, parts start to break in ways that engineers never predicted. Aged aircraft become, in essence, “individuals,” each with a peculiar quirk, making it somewhat difficult for maintainers to apply uniform procedures for each airframe. For an austere, efficiency-minded repair depot, laser-focused on schedule, maintainers may be hard-pressed to deviate from standardized procedures.

The depot has very little slack. As the Coast Guard’s fleet of 95 MH-65 helicopters ages out, and the Coast Guard starts shifting to a single-type MH-60, Elizabeth City will face capacity, space and performance challenges as the pace of the Coast Guard’s rotary wing evolution picks up. But with both Congress and the Coast Guard unsure of how the transition to a common helicopter will proceed, the Coast Guard’s aviation depot is left to grapple with the uncertainty.

Time is at a premium. As a busy, cramped, and old facility, Base Elizabeth City needs to know what might be coming. Change cannot happen overnight, and Washington policymakers may underestimate the methodical planning, training, and recapitalization required to keep a changing Coast Guard safe and in the air.

There are, however, opportunities for organizational innovation. The Department of Homeland Security supervises a large air fleet, split almost evenly between the Coast Guard and U.S. Customs and Border Protection Air and Marine Operations. While both have very different operational requirements, both fly MH-60 helicopters and they may, in time, start flying common long-range patrol platforms and other things. It may be a good time to start centralizing the Department of Homeland Security’s aviation maintenance capabilities around modern facilities that are less at risk from storms and flooding, and potentially consolidating contracting with major suppliers for heavy maintenance or missionization.

By thinking ahead and moving quickly, the Department Homeland Security could probably get the congressional support needed to build a modern maintenance depot, keeping its diverse “air capability” maintained and flying safely into the next century.

COMPREHENSIVE FOOD NUTRITION PROGRAM AIMS TO COMBAT DISPARITIES IN DIABETES TREATMENTS

FRESH START PROVIDES IN-PERSON GROUP CLASSES, A PRODUCE PRESCRIPTION AND ONE-ON-ONE HEALTH COACHING TO HELP ADDRESS SOCIAL DETERMINANTS OF HEALTH COMPLICATING DIABETES MANAGEMENT FOR LOW-INCOME, UNINSURED PATIENTS IN EASTERN NORTH CAROLINA



BY RACHEL CRUMPLER

NC HEALTH NEWS

JANUARY 19, 2023

<https://www.northcarolinahealthnews.org/2023/01/19/comprehensive-food-nutrition-program-aims-to-combat-disparities-in-diabetes-treatments/>

Health care providers have traditionally written prescriptions for medications, for exercise, for therapy, even for relaxation for their patients. So to combat obesity and poor nutrition, why not give patients a prescription to help them eat better?

Such food prescriptions — delivered to patients in the form of vouchers that can help patients get access to more fresh fruits and vegetables — are becoming increasingly popular across the U.S.

Lauren Sastre, a professor in the Department of Nutrition Science at East Carolina University, saw the promise of food prescription programs in fall 2018 when she started researching their implementation. While she considered them helpful, Sastre didn't think they went far enough in breaking down barriers to getting healthy food.

For one, she said, transportation issues persist — especially in rural areas. Additionally, the amounts of fresh food offered aren't often substantial enough to meet nutrition recommendations. For example, in some cases the allotted funds would only cover the cost of a tomato and a cucumber.



Sastre wanted to create a more robust produce prescription program — to operate longer, to provide more food and to offer more educational support.

“If you don't have access to healthy food, you can't eat well, period,” Sastre said. “So that's step one. But there needs to be more than step one. We don't have Home Ec anymore. We're not teaching people

how to prepare things from scratch. The idea that people are going to take this produce home and cook it and eat it — there has to be some level of support in place for that.”

Last year, Sastre launched a comprehensive nutrition program called Fresh Start, serving low-income, uninsured patients with diabetes living in Eastern North Carolina.

Fresh Start offers nine in-person group classes from January to May. The classes include education on diabetes management, demonstrations of simple at-home physical exercises, and on-site cooking and taste-testing of the prepared food. Participants attending class leave with fresh produce and healthy recipes. One-on-one health coaching, conducted by trained ECU students, is also provided over the phone to help patients set attainable lifestyle goals.

None of these elements is groundbreaking by itself, Sastre said. It's the combination that's significant.

“I've never seen a program that has them all offered at the same time and ... intentionally integrated,” she said. “Our cooking aligns with the food we know we're giving out. Our health coaches touch base with their patients and see how they're working with that food and if they have questions or want more recipe ideas.”

The elements together create a synergy, Sastre said, that maximizes health improvements. Patients gain access, confidence and support to create real behavioral and lifestyle changes needed to manage their diabetes.

Diabetes in North Carolina

- In North Carolina, about 12.4 percent of adults have diabetes, outpacing the national rate of 10.9 percent, according to the annual America's Health Rankings database
- Nearly 244,000 people are estimated to have diabetes but don't yet know they have it
- Every year, an estimated 73,032 people in North Carolina are diagnosed with diabetes

Data from the American Diabetes Association

Expensive disease

Funded by a three-year, \$365,000 grant from The Duke Endowment, Sastre partnered with the North Carolina Association of Free and Charitable Clinics to offer Fresh Start to low-income, uninsured patients with diabetes at several clinics in the eastern part of the state.

April Cook, CEO of the North Carolina Association of Free and Charitable Clinics, said diabetes is prevalent among patients at its 71 member clinics across the state. She said about 40 percent of the total patients served have diabetes.

People with low incomes suffer disproportionately from diet-related chronic diseases, such as diabetes, and have fewer resources to manage their diseases. Food insecurity is recognized as a common risk factor for developing type 2 diabetes (which used to be known as “adult onset diabetes”) and is a contributor to socioeconomic, racial and ethnic disparities in diabetes outcomes.

Cook said patients served at free and charitable clinics are often newly diagnosed or will get diagnosed with diabetes there for the first time. She said many patients come in with glycemic levels, a measurement known as hemoglobin A1C, as high as 15 percent, when the normal level should be below 5.7 percent. The A1C measurement reflects a person's blood sugar measurements over time.

Living for a long time with high blood sugar levels has major health implications, including loss of eyesight, kidney disease and nerve damage.

Diabetes is an expensive chronic disease. People with diabetes pay approximately 2.3 times more in medical expenses than those who do not have the disease, according to the American Diabetes Association. The organization estimates that diagnosed diabetes costs North Carolina about \$10.6 billion each year — a combination of direct medical costs and indirect costs from lost productivity.

Cook said patients often don't realize how bad they feel until they start making improvements. But making those improvements comes with extra challenges for low-income patient populations. One of the best ways to control blood glucose level is to eat healthier, but that is more expensive.

“It's really sad to think that you want to provide the best that you can for your family and your children — and knowing that the things that are more nutritious, healthier, are out of reach for you,” Cook said, noting that's the reality for many folks.

Kelli Corbett, lead nurse practitioner at Wayne Action Teams for Community Health clinic in Wayne County, said she always advises her patients to shop on the perimeter of the grocery store where the fresh, unprocessed options are. She consistently hears that it's a struggle. One patient told her they could only afford to eat peanut butter and jelly sandwiches until their next check.



Cook said the grant-funded partnership with Sastre is a game-changer for the clinics' patients in providing healthy food as well as education and cooking skills. What patients learn can then be shared with other members of their households and families, helping to create systemic change.

“You can throw money at it through medicine all you want,” Cook said. “But if you don't start addressing the social determinants that surround someone's health, it's not as easy to have an impact.”
'There's sights. There's smells.'

In its first year, Fresh Start served 56 patients from two clinics with diabetes.

The researchers saw results, even in the few months of the program. Patients' levels of hemoglobin A1C decreased by an average 1.21 percent. For those who attended at least four group classes, blood sugar levels decreased even further, by an average of 1.87 percent. Food literacy also improved.

This year, the program is planning to triple its scope, expanding to serve around 150 patients at five clinics in Eastern North Carolina.

Clinics served

- WATCH Clinic in Goldsboro
- MERCI Clinic in New Bern
- Hope Clinic in Bayboro
- The Albemarle Hospital Foundation Community Care Clinic in Elizabeth City
- Community Care Clinic of Dare in Nags Head

Ramon Harmon, deputy director of the Albemarle Hospital Foundation Community Care Clinic in Elizabeth City, said patients that participated enjoyed the hands-on approach Fresh Start offers.

“All the education that we provide in the health care arena is somebody standing up talking to a patient that’s sitting down, and we’re just lecturing them essentially,” Harmon said. “Maybe about 50 percent of that is actually received by the patient.”

“With the Fresh Start program, it’s interactive. The patients get up. They move. There’s a cooking demonstration. There’s sights. There’s smells.”

A main appeal of participating in the program is the ability to taste food at the end of class, he said. Patients like the immediate feedback of determining whether it’s a vegetable they like and would consider including in their diet.

“Being able to show them that you can add vegetables into things — you can season them, you can make them taste better than what they seem — is very cool, and [so is] seeing them get excited about it,” said Brooke Gillespie, a senior at ECU who helped with recipe development last year and is now serving as program coordinator.



Last year, after taste testing, Sastre said kale — participants’ least familiar vegetable — turned out to be their favorite.

In addition to exposing patients to new foods, Fresh Start is making an intentional effort to tailor some recipes and educational materials to the cultural preferences of its Latino patients. For example, a handout on how much sugar is in drinks will include Mexican sodas and juices found in a typical Latino store. Asparagus frittata was a new recipe that many patients never considered making. After tasting, the dish was a big hit among participants. Credit: Rachel Crumpler

Additionally, there’s been positive feedback about health coaching.

Sarah Elliott, a junior studying nutrition at ECU, served as a health coach last year, engaging in weekly phone calls with two patients.

On the calls, she helped patients set physical activity and diet goals and checked in on their progress. For example, one of her patients started out drinking three regular soft drinks a day, but she slowly cut the number and switched to diet soft drinks by the end of the program.

“Patients shared that that kind of one-on-one, consistent support was something they hadn’t received before, and that was the piece that helped them stay motivated and stay on their goals,” Elliott said. “Behavior change is really hard without that — someone holding you accountable and checking in and doing it in a compassionate way.”



By the end of the monthslong Fresh Start program, progression is noticeable in patients.

Sastre recalls one patient with consistently elevated blood sugar who was starting to lose his eyesight at the beginning of the program. By the end, he expressed how much better he could see — a result of the diet changes he implemented from the program.

Where Fresh Start produce comes from

Fresh Start's food prescription program relies on donated, un-sold local produce. This is possible through Fresh Start's partnership with the Society of St. Andrew, an organization that works with farmers to collect fresh produce they are unable to sell and then distribute it to groups in the community that help people who are food insecure.

Michael Binger, regional director for North Carolina and South Carolina at the Society of St. Andrew, said when he gets a call from a farmer donating produce in Eastern North Carolina, he calls Fresh Start, which sends volunteers to harvest the fields. Most of the produce is sourced from 10 farms and then transported and distributed to patients during the next group class.

He said farmers receive a national farm tax credit for food donations — roughly half the fair market value.

Fresh Start recovered more than 2,000 pounds of produce last year from North Carolina fields. The Society of St. Andrew will connect Fresh Start with more produce this year to accommodate the increased patient volume, and Binger said obtaining the larger amount of food won't be a problem.

Binger said there's an abundance of healthy, edible food that never makes it out of the fields every year. The issue is often getting produce from where it is to the people who need it.

DARE COUNTY

Named after Virginia Dare, the first English child born in America, Dare County was established in 1870 out of Currituck, Tyrrell and Hyde counties. Manteo is the county seat.

Containing 85 miles of continuous coastline, tourism remains the biggest industry and economic driver for the area. While the population sits at around 36,000 year-round residents, the number swells during the summer months with vacationers. Visitor spending in Dare County surpassed \$1.8 billion in 2022, placing it at #4 in all of North Carolina for visitor spending. Much of that money goes back into beach nourishment.

Tourism provides more than 13,500 jobs in Dare County, employing a third of its residents. Realty companies make up three of the county's top seven employers, while ECU Health and Food Lion are the leading non-public employers in Dare County.

The county is home to the Lost Colony outdoor drama, the Alligator River National Wildlife Refuge, Jockey's Ridge State Park, the Wright Brothers National Memorial and Museum, the North Carolina Aquarium on Roanoke Island, and the Elizabethan Gardens. Visitors can also view the Bodie Island Lighthouse and Cape Hatteras Lighthouse - the nation's tallest and most recognizable lighthouse.

On the Purple and Gold Bus Tour, we will visit the East Carolina University® Outer Banks Campus. The Outer Banks Campus spans 213 acres of marshes, scrub wetlands, forested wetlands, and estuarine ecosystems and is home to the Coastal Studies Institute. Research at the Outer Banks Campus covers a broad range of pressing environmental concerns, including estuarine ecology, coastal engineering and ocean energy, public policy and coastal sustainability, coastal processes, and maritime heritage.



SOURCES

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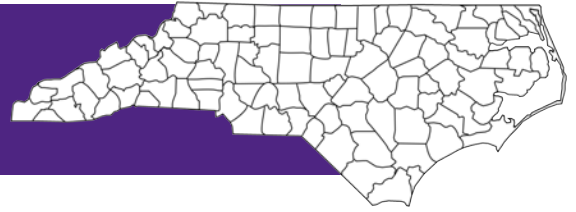
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<https://coastal.ecu.edu/obx-campus/>

DARE COUNTY SPEAKERS



Grace Andrews
Vice President, Scientific Research
Vesta

Grace Andrews has a Ph.D. in Earth Science from Northwestern University. Her research investigated the rates of, and controls on, geologic timescale chemical weathering. Prior to joining Project Vesta, she worked at the Leverhulme Centre for Climate Change Mitigation implementing terrestrial Enhanced Weathering trials at locations around the globe.



George Bonner
Director
North Carolina Renewable Ocean Energy Program

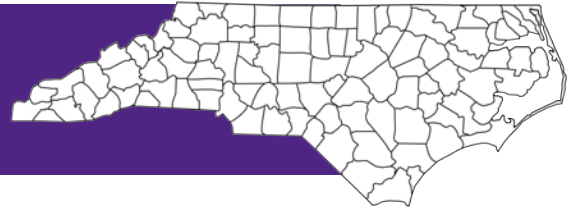
George Bonner serves as North Carolina's Director of Renewable Ocean Energy leading research and development of marine energy solutions across the University of North Carolina system. Following retirement from a 30-year career in the U. S. Coast Guard (USCG) in July 2019, Bonner returned home to the Outer Banks his new position at the Coastal Studies Institute. Captain Bonner's USCG career included command assignments as Commander, USCG Shore Infrastructure Logistics Center and Commanding Officer of USCG Facilities Design and Construction Center. Throughout his career, he has led strategic efforts to enhance infrastructure resiliency and sustainability while adapting to a changing climate. He is a North Carolina registered Professional Engineer and a Certified Floodplain Manager.



Reide Corbett
Dean of Integrated Coastal Programs, Executive Directors
Coastal Studies Institute

Reide Corbett was born and raised in coastal North Carolina. After receiving his Ph.D. in oceanography from Florida State University and spending a short time at Tulane University in New Orleans, he returned to North Carolina to join the faculty at ECU. He is now the Dean of Integrated Coastal Programs, the executive director of the Coastal Studies Institute, and a professor in the Department of Coastal Studies at ECU. Corbett is a coastal oceanographer and geochemist with an overall scientific interest in the geochemical and geomorphic dynamics of coastal and open ocean environments. Much of his research during the last two decades has focused on the delivery of constituents by submarine groundwater discharge and sediment dynamics across the continental margin. Corbett's research has broadened through the years to include coastal change and geomorphic evolution across telescoping timescales.

DARE COUNTY SPEAKERS



John McCord
Associate Director of Engagement and Outreach
Coastal Studies Institute

John McCord is the associate director of engagement and outreach at the Coastal Studies Institute. McCord earned his BS in natural resource management from UNC Wilmington. McCord joined the Coastal Studies Institute in 2005 and is responsible for communicating the research and activities of the Coastal Studies Institute and ECU Integrated Coastal Programs to a variety of audiences including local government officials, university faculty, teachers, K-12 students, life-long learners and the public. McCord fulfills this mission through a variety of education and outreach methods including workshops, educational programming, publications, press coverage, multi-media development and web-based learning.

COASTAL RESIDENTS ON CLIMATE CHANGE: "THE OCEAN'S COMING FOR YOU"



BY BEN TRACY
CBS NEWS
JANUARY 8, 2023

<https://www.cbsnews.com/news/coastal-residents-on-climate-change-sea-level-rise-beach-erosion/>

Thirty years ago Jim Hartshorne looked out at the endless expanse of blue water and decided North Carolina's Outer Banks felt like home. He said that back in 1993, sea level rise was not a concern. "I didn't think it would happen quite as quickly as what it did," he said. "I thought it wouldn't happen in my lifetime; I'd let the kids worry about it. But I've had to worry about it here the last ten years."

The ocean has become an increasingly greedy neighbor. Storms are more frequent, and more fierce. Parts of these Barrier Islands have retreated more than 200 feet in the last two decades. Some beaches are now losing about 13 feet a year, according to the National Park Service.

[ocean-is-coming-for-you-wide.jpg](#)

Beach erosion from rising sea levels in Rodanthe, North Carolina. CBS News

This past summer, video of the Atlantic claiming yet another beach house in Rodanthe, just up the road from Hartshorne, went viral on Twitter.

Hartshorne said, "You gotta take the good with the bad. It's wonderful to be out here. It's pretty. But you have to know the ocean's coming for you."

He's trying to delay that day by reinforcing the pilings that hold up his house, and rebuilding a staircase; the old one washed away during a recent storm. He said he's spent between \$20,000 and \$22,000 this year alone repairing storm damage.

Hartshorne and his neighbors are getting help from North Carolina's Dare County, which is spending \$25 million to widen 12 miles of coastline along the Outer Banks.

[nc-beach-restoration.jpg](#)

Beach restoration work being done on North Carolina's Barrier Islands. CBS News

A few months ago waves were hitting Hartshorne's pilings; now he has a six-foot-tall dune and a few hundred feet of new beach.

The county also spent \$155 million to build the Rodanthe Bridge because Highway 12, the only way in and out, kept flooding. Years ago, the historic Cape Hatteras Lighthouse was moved nearly 3,000 feet inland, an ironic warning of the dramatic climatic changes to come.

“You’re not going to stop the ocean; you’re not going to completely engineer your way out of this challenge,” said Reide Corbett, who runs the Coastal Studies Institute on the Outer Banks. “We will have to think about how we move infrastructure, how we move people.”

“Yes, sea level has changed in our past, but it’s changing at a rate that we haven’t seen before.”

Corbett took “Sunday Morning” out to the marsh where he and other scientists collect soil samples that are a peek into the past. He says their research shows the rate of sea level rise here has doubled in the past 100 years.

reide-corbett-soil-samples.jpg
Oceanographer and geochemist Reide Corbett takes soil samples along the North Carolina coast to study sea level changes over time. CBS News

“That’s pretty aggressive acceleration,” said Tracy.

“Yeah, and we’re just starting to see the ramp,” Corbett said. “We’re looking at a foot rise in the next 30 years. That’s going to impact most homeowners on the Outer Banks during their mortgage. And so, it’s not about putting it off to the next generation. It’s happening today. We’re seeing those impacts today.”

Sea level rise is accelerating due to global warming caused mainly by the burning of fossil fuels. It’s causing the world’s ice sheets and glaciers to melt.

A new NASA report says sea levels along U.S. coastlines are expected to rise as much as 12 inches by 2050, with the Southeast and Gulf Coasts seeing the most change.

By 2100, 13 million Americans could be displaced, and \$1 trillion worth of property inundated.

East Coast cities such as Miami are already struggling with flooding even on sunny days, and hurricanes and



storm surge along the Gulf Coast are expected to get more intense.

In Galveston Texas, the Army Corps of Engineers is planning to build a system of massive gates (designed to fend off 22 feet of storm surge), and 43 miles of sand dunes (to protect against rising seas and stronger hurricanes). The project is estimated to cost \$31 billion.

“The intent here is to provide multiple lines of defense,” said Kelly Burks-Copes, who is with the Corps’ Galveston District. “It will be the largest infrastructure project in the nation for the next 20 years.”

Tracy asked, “Is this where we’re at with climate change, that we have to do things like this?”

“I think that it’s a necessity, if we’re going to continue to live close to the ocean. If we want to live here on the coast, then we have to provide a level of defense.”

Jane Tollini thought she had it made, living high above the Pacific on the cliffs of Pacifica, California. “There was a 20-foot front yard, a 900-square-foot house, then there was like maybe 25, 30 feet until you came to this white picket fence in the backyard,” she said. “And it felt like I could get drunk, roll out the door, hit the fence, and I would be safe. I thought I was golden!”

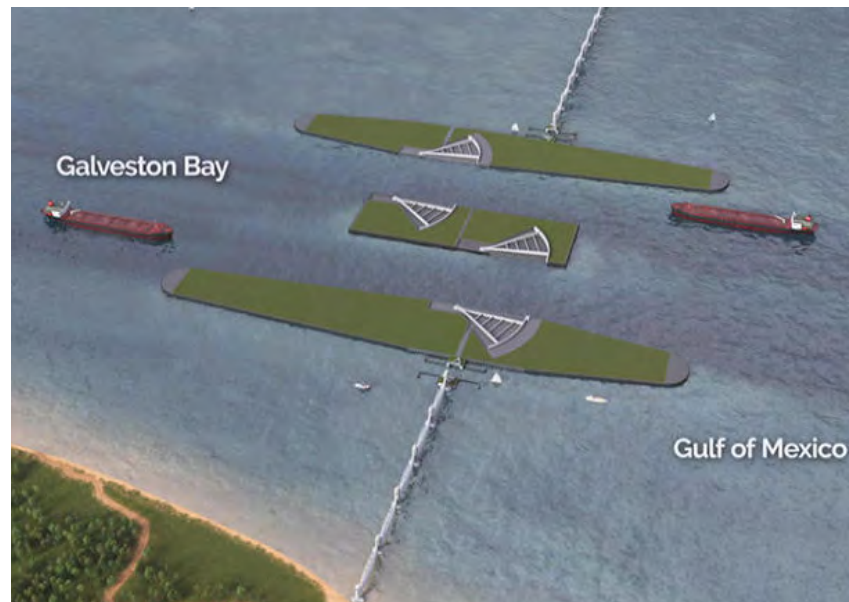
She was wrong. Punishing El Niño storms in 1998 turned her California dream home into a nightmare. She woke up one morning to find her backyard was gone. “There was nada, nothing, zip,” she said. “And it was terrifying. Now if somehow this idiot had gotten up, walked to that sliding glass door, opened it, and stepped out, I would’ve stepped into space. That’s how undercut I was.

“I was like, how did this happen, and so quickly? And I slept through most of it.”

That morning she called friends to help her quickly move out before her house, and 12 others, had to be torn down and pushed into the ocean. Since then, entire apartment complexes have realized that they, too, picked a losing fight with the Pacific. Of course, erosion has always been a part of life on the West Coast, but scientists say climate change is accelerating it, threatening nearly all of California’s 1,000 miles of coastline and billions of dollars’ worth of real estate.

Tollini said, “If you believe there is going to be more water, then there is going to be less land on every coast around the world.”

And having lived on the leading edge of climate change, Tollini has no doubts about who has the upper hand: “Mother Nature’s always gonna win. And she has got a bone to pick with the human race. And I don’t blame her.”



NC FISHERMEN CONCERNED ABOUT UNCERTAIN IMPACTS OF OFFSHORE WIND



BY CELESTE GRACIA
NORTH CAROLINA PUBLIC RADIO
JUNE 6, 2022

<https://www.wunc.org/2022-06-06/nc-fishermen-concerned-about-uncertain-impacts-of-off-shore-wind>

On a sunny, windy May morning, John Doshier rides down the Intracoastal Waterway from Holden Beach to Southport on a small boat. He points over to the left side of the shore and talks loudly over the waves.

“I grew up literally behind the red roof house right there,” Doshier said. “My mom still lives there.”

He points to another house a few blocks down.

“My grandmother’s fish house [is] right here. My mom still owns that. She’s one of the only people that still has that, where those benches are and stuff – that’s one of ours,” Doshier said.

Doshier is a fishing charter captain from Southport. He’s also the vice president of the North Carolina For Hire Captain’s Association.



For generations, Doshier’s family has lived and fished along the coast. But after centuries of open waters, there’s a big change coming. In the next 15 years, massive wind farms are expected to be constructed off of North Carolina’s waters.

Recreational and commercial fishermen alike have a lot of questions about these projects. The main ones: how much access will fishermen have to wind farms, and how will the wind farms impact the fish? Unfortunately, information is limited because offshore wind is still new in the United States.

Kitty Hawk

There are currently two offshore wind farms in various planning stages off North Carolina’s coast. One is off Kitty Hawk along the Outer Banks; the other, called Wilmington East, is off Wilmington.

Avangrid Renewables is developing the wind farm off Kitty Hawk. Construction there is expected to start in 2026.



Dewey Hemilright, a commercial fisherman based in Wanchese for over 30 years, worked with Avangrid as a fishing representative for the Kitty Hawk project.

“I’m here to answer their call [about] the landscape,” Hemilright said. “What’s been known there to be fishing? Who’s fishing there? If they got transmission lines going somewhere, what fisheries would it affect, possibly?”

While aboard his boat ‘Tar Baby,’ Hemilright explained that the wind farm off Kitty Hawk will be in a pass-due area, meaning boats pass through there to reach fishing grounds. Because of that, fishermen in the area have had few worries.

“To date... I haven’t heard [any concerns],” Hemilright said. “They might have opinion on windmills. But no concerns.”

Wilmington East

The oceanic geography near Wilmington East is very dynamic. The Cape Fear River empties into the Atlantic Ocean. The Gulf Stream, which carries warm waters, flows about 20 miles off the coast. Some areas are potentially dangerous for ships, like the Frying Pan Shoals, where built up sand is constantly moving. There’s also the Outer Shelf Reefs.

Cane Faircloth, president of the North Carolina For Hire Captain’s Association, explained that because of all these different factors, fishermen around Wilmington can only fish in certain areas.

He and other fishermen said they feel like state and federal officials are unaware of these dynamics, and that lawmakers are moving too fast.

“[Offshore wind] is not the type of thing that we need to be rushing to,” Faircloth said. “We need to have really good environmental and economic impact studies done of how this is going to affect the coast and the coastal communities. And that is not being performed.”

In truth, these studies are being performed. This misunderstanding speaks to the lack of communication that’s taking place.

Faircloth, who lives in Holden Beach and works as a fishing charter captain and local realtor, also points out that while politicians may talk about how offshore wind could generate billions of dollars, North Carolina’s fishing industry is already extremely successful. In 2019, the statewide sales impact of commercial fishing was



over \$300 million.

According to a recent article from the Wall Street Journal, officials with the U.S. Department of Interior said they're aware of fishermen's concerns about offshore wind impacting their businesses. Officials claim they're working on guidance for "how wind farm developers can minimize harm to commercial and recreational fishing, while compensating businesses for losses."

change, Faircloth also said he doesn't understand why or how the area for Wilmington East was picked. He feels excluded from conversations leading up to the area being leased out.

A skeptic of man-made climate

"Let's get the people involved that know the ocean [and] know the water. Not somebody who's sitting behind a desk at UNC Chapel Hill or Duke University," Faircloth said. "Why don't we talk to the people who actually live there? [Who] know the area and have an intimate relationship with it for a long time. And that's not what's going on."

Politics of offshore wind

Offshore wind, like many other issues, has become a political hot potato. Under Former President Barack Obama, the Bureau of Ocean Energy Management (BOEM) moved forward quickly with several projects. BOEM is the federal agency that oversees offshore wind development in the U.S.

But that momentum stopped under Former President Donald Trump, who has repeatedly made misleading statements about offshore wind. Most recently, Trump greatly inflated the threat wind turbines have against birds while talking on Sean Hannity.

"[Turbines are] killing the bald eagle and other eagles and other birds. And we have these windmills all over the place, and the environmentalists pretend they love them, but they're really hurting our country," Trump said.

Now that President Biden and Gov. Roy Cooper are in office, both of whom are Democrats, offshore wind is once again moving forward. Plus, in North Carolina there is growing bipartisan support.

In June 2021, Cooper issued an executive order that establishes offshore wind development goals of 2.8 gigawatts (GW) off the North Carolina coast by 2030 and 8 GW by 2040.

Then last October, Cooper and the Republican controlled General Assembly passed bipartisan legislation to lower carbon emissions in North Carolina. The law requires the state to lower emissions by 70% by 2030 and to reach carbon neutrality by 2050. Energy powered from offshore wind is expected to help reach these goals.

Available information

In 2009, UNC Chapel Hill released a study looking at the feasibility of offshore wind in the state. This study was ordered by state lawmakers and found that "North Carolina is well positioned to develop utility scale wind energy production." The study also suggested preliminary areas for wind farms.

Jess Hawkins, a retired marine biologist in Morehead City, helped research this study. "What happened is UNC looked at the whole coast [and] at all the physical factors," Hawkins said. "Like where is wind the best? Where would you have access... to transfer the power from the wind to the grid? They combined all those factors, and recommended a series of sites to the General Assembly."

This information was forwarded to BOEM. Hawkins said he made sure to include input from all sorts of

stakeholders when he was working on this 2009 study.

“Not just hook and line fishermen, but draggers, gill netters, commercial bottom fishermen, charter fishermen,” Hawkins said.

Since that study was published, BOEM has held dozens of in person or online public meetings, and asked for public comments on several documents and studies related to offshore wind in North Carolina.

Despite these opportunities, Glenn Skinner, executive director of the North Carolina Fisheries Association, said he feels like so far, fishermen have only had some input.

“You hear talks about wind energy, but we’ve heard this for years. Nothing ever happened,” Skinner said. “I think it’s human nature [to get] complacent until you hear ‘lease.’ I think... we’re starting to realize [we] should have been engaged prior.

“But there was nothing imminent. You just kind of put it to the side [and] deal with more important issues—your everyday life, your work, and then you hear there’s going to be a lease, and people start to panic. We’ve had to assure fishermen just because this area is going to be leased, that doesn’t mean the windmill is going to be there next year. This is still an ongoing thing. Now we need to get engaged and give our input.”

Last month, BOEM held an auction for two leases in the Wilmington East area. Duke Energy and French company Total Energies each won those leases for a combined \$315 million. Both companies are expected to appoint a fishing liaison soon.

This will help fishermen get information more easily, because right now, there’s not a specific point person for them to go to.

There’s two main questions many fishermen are asking: how much access will they have to the wind farms, and what will the wind farms do to the fish?

“We don’t know. And I think that the fact that we don’t know is what gets people so up in arms. Your knee jerk reaction is to oppose it because you don’t know how it’s going to impact you,” Skinner said. “If you had some substantial studies done that... specifies and lays it out, you can prepare for it. But without that, it just scares people.”

The U.S. Coast Guard has repeatedly said they will not restrict access to the wind farms, only during construction. However, Hawkins argues this access should be guaranteed by law.

As far as potential impacts to fish, there are some studies available that provide an idea for how the wind farms could impact Wilmington East. In 2015, BOEM released an environmental assessment specific to Kitty Hawk and Wilmington East. The report found that wind farms in these areas will likely have little effect on the environment and on birds, bats, and fish.

In 2018 researchers at Cranfield University in the United Kingdom found that offshore wind turbines in Europe essentially acted as artificial reefs, increasing local biomass and promoting biodiversity. However, the study also notes that “whether changes in biodiversity will have positive, negative or neutral effects on ecosystem services is unclear.”

Additionally, in July 2020, a 6-year study conducted by the Holderness Fishing Industry showed that offshore wind farms had no significant negative impact on the ecology of European lobsters. Lobster is not a prominent stock for North Carolina fishermen, and the waters and ecology in the U.K are different than off North Carolina’s water.



An industry funded study published in March of this year found that the Block Island Wind Farm in Rhode Island has had no significant negative effect on fish populations during construction and operation. The Block Island Wind Farm is only 5 wind turbines.

Last year BOEM released a report comparing the environmental effects from various offshore wind turbine foundations. “Beneficial effects from offshore wind project installation and operations include creating habitat comparable to artificial reefs, with increased biodiversity, abundance, and biomass,” the report states. However, the report also says that “underwater noise, particularly noise caused by foundation installation activities, may cause mortality or injury to marine mammals, fishes, invertebrates, and sea turtles.”

Karly Lohan with the Southeastern Wind Coalition, a group that advocates for offshore wind energy, said construction and installation will happen with carefully.

“Part of the benefit of not being the first commercial wind farm in the United States is there are technologies that did not exist 10 years ago,” Lohan said. “There are going to be technologies that exist in 10 years that don’t exist now to mitigate noise.”

One noise mitigation measure that is used now is called a bubble curtain. Devices generate air bubbles underwater around the base of a turbine where installation is happening. The “curtain” of air bubbles absorbs some of the construction noise.

Fishermen also have questions about how wind turbines will withstand hurricanes.

“[Operators are] going to turn off the turbines if there’s a severe hurricane coming. They’ll pause the use of the turbines. Also, they’re able to feather the direction of the blades,” Lohan said. “The wind is obviously going to be coming in one direction when there’s a hurricane. They can feather at the direction of the blade, so there’s less surface area into the wind, so you’re not going to have a blade ripping off.”

Moving forward

Lohan sympathizes with the difficulties fishermen are facing. “It’s challenging, because offshore wind is in its infancy in the United States,” said Lohan. “But the good news about turbines being put in federal waters is we have that four step BOEM regulatory process. So we’re not putting turbines in the water overnight. It is many years down the road. There’s a very extensive environmental review process that’s going to happen.”

Lohan conducts community outreach and public engagement in New Hanover and Brunswick counties. Lohan is advocating for the state to create an environmental technical working group. Ideally, this group would serve as a dedicated assembly to hear concerns and answer questions about any potential impacts to wildlife.

She’s also working on establishing a forum to talk to fishermen in southeastern North Carolina.

“I’ve been working closely with both commercial and recreational groups to create a structure for that meeting. We want to talk about economic development and any economic opportunities that exist for fisheries,” Lohan said. “We want to talk about the regulatory process and provide clarity on how that works and what has been done so far in terms of environmental review, and the opportunities to still be involved.”

Overall, fishermen in North Carolina want more collaboration, transparency, and engagement with officials working on offshore wind. They feel like they haven’t seen enough of that so far.

Skinner said he’s looking forward to learning more and having more conversations in the future.

“What I’d like to see for the folks I represent and myself is a dedicated, focused fisheries stakeholder process,” Skinner said. “Something that’s defined just as a fisheries process. We need education. We need to have input. [We need to] have regular meetings, discussions, updates on what’s occurring, what could occur and new studies that are coming out. And that’s what I’d love to see come out of it.”

ECU OUTERBANKS CAMPUS LEADS RESEARCH WITH STATEWIDE IMPACTS



BY ABBEY SLATTERY
WRAL DIGITAL SOLUTIONS
JULY 7, 2022
[HTTPS://WWW.WRAL.COM/ECU-OUTER-BANKS-CAMPUS-LEADS-RESEARCH-WITH-STATE-WIDE-IMPACTS/20362412/](https://www.wral.com/ecu-outer-banks-campus-leads-research-with-state-wide-impacts/20362412/)

Home to the Coastal Studies Institute, East Carolina University's Outer Banks Campus promotes interdisciplinary research to further innovation. Spanning 213 acres of marshes, wetlands and estuarine ecosystems, East Carolina University's Outer Banks Campus is a researcher's dream come true.

Home to the Coastal Studies Institute — or CSI, which is spearheaded by ECU — the Outer Banks Campus brings researchers and instructors from ECU, North Carolina State University, Elizabeth City State University and the University of North Carolina campuses in Chapel Hill and Wilmington together to research coastal topics that impact the region, the state and the country as a whole.

By bringing so many institutions together, CSI promotes a unique method of research.

“Here at the coast, we are extremely interdisciplinary — we understand that you can't study the coast without understanding the people and policy, and incorporating that into the research. A lot of the work that's done here isn't just focused on the physical environments or biology — it really is bringing people, the economy and the policy into the equation when we start studying the environment,” said Reide Corbett, Ph.D., the executive director of CSI and dean of Integrated Coastal Programs at ECU. “It really is the interaction between the environment and people that makes the coast unique and brings some of the challenges to heart. When you look at the researchers that are here, we have anything from a traditional engineer to an anthropologist to a human geographer to a marine geochemist. We bring all of these different disciplines together and focus on how we can impact our coast.”

Since so many disciplines are present on the coast, the technology used for research greatly varies, from instruments that measure waves and water quality to aerial satellites that map the extent of mangrove decline.

For undergraduates and graduate students, there are plenty of opportunities to contribute to the research at CSI. In the spring, ECU students have the chance to spend an entire semester helping out with coastal research.

That emphasis on interdisciplinary research is consistent within academics at CSI, as well.

“Students come here and take a full load of courses — we offer around five classes in anything from traditional oceanography class to anthropology to art,” said Corbett. “For us, it's all about being able to come to the coast and experience multiple disciplines. It's not just for biology majors — it's for anybody interested in the coast —

and we try to provide a curriculum that represents that.”

Programs at the Outer Banks Campus also give students the opportunity to complete an internship in the community or to work directly with faculty on some of their ongoing research. In fact, Corbett even had a student working with him this past spring on beach nourishment, the process of adding sand or another sediment to replace eroded sections of shoreline.

“The student working with me was involved in historic turtle data in an area where some nourishment had been done. She had the chance to go out in the field with me and collect data in preparation for a nourishment that was taking place in a nearby town. This was a freshman who was able to automatically get involved in real-world problems and real-world research that we are undertaking here at the Coastal Studies Institute,” said Corbett. “There are all sorts of opportunities for students at the undergraduate level to come out, take courses and get involved in the community, whether it’s through an internship or doing research with faculty.”

The Waves to Water competition is perhaps the culmination of CSI’s emphasis on using interdisciplinary research to make a community impact — and getting students involved, as well. Funded by the U.S. Department of Energy, the competition promotes the advancement of ocean and renewable energy technologies.

The full competition took place over two years with over 50 teams, all culminating in the final event hosted in April. The four remaining teams deployed devices they developed from Jennette’s Pier in Nags Head and put them in a real-world scenario. They were required to use only energy harnessed from the waves to convert salt water into drinking water.

In the end, around \$3.3 million was given away in prizes, courtesy of the Department of Energy.

“It was a pretty remarkable experience for us, as well as for these competitors. They use it as an incentive to really push the envelope of innovation and get engineers and scientists thinking about how we can accomplish the next big thing,” said Corbett. “For areas along the coast that maybe don’t have a freshwater resource, this device could be deployed to provide that source. When we have a major storm and it cuts off our water supply, this would provide fresh water to a community. By developing these different prizes, the competition helps us take the next steps toward innovation.”

The winner of the competition, the Oneka Snowflake, took home \$500,000.

By providing a home for this type of groundbreaking research, ECU is generating a new appreciation for what can be accomplished on the coast of North Carolina.

“We recognize the significance of the coast, and we’re making more people aware by developing the faculty and the student resources out here on the coast to engage with some of the changes that are taking place,” said Corbett. “We recognize that this is an important area for the state of North Carolina, and we want to be here to support the East — that’s what ECU’s mission is all about. We can’t support it if we aren’t here, and this work is helping us understand the changes so that we can be a part of the solutions.”

PIERS OF THE OUTER BANKS: JENNETTE'S PIER



BY SUMMER STEVENS
THE COASTLAND TIMES
MAY 22, 2021

<https://www.thecoastlandtimes.com/2021/05/22/piers-of-the-outer-banks-jennettes-pier/>

In the early 1930s, there was an old shipwreck in Kill Devil Hills and the Jennette brothers noticed that people were climbing on top of it to fish. The wheels started to turn and they realized that the community was in need of a better solution. So, in 1939 the family opened the Outer Banks' very first pier to the public: Jennette's Pier.

The Jennette family owned the pier for decades as it was destroyed and rebuilt a number of times due to wood deterioration and storms. In 2001, the property came close to being sold to a developer. Word got out and in an effort to save the historically significant and community-loved pier, the state took it over, placing the pier under the umbrella of the Aquarium Society. The original plan was for the pier to serve as a research outpost for the aquarium – collecting fish and ocean water – but it quickly became clear that Jennette's Pier could function as its own entity and it was placed under the North Carolina Department of Natural and Cultural Resources.

But in September of 2003 Hurricane Isabel swept through the Outer Banks and changed Jennette's Pier forever. The storm completely wiped out the pier, leaving only the pier house. The state then began imagining a massive reconstruction project to accomplish multiple goals: to construct a pier that could withstand a large category 3 hurricane; to build a pier house that could offer educational programs and classes for the community as well as host wedding receptions; and to make the entire facility environmentally efficient.

In 2009 the state broke ground on a 24-month, \$25 million dollar project to accomplish these goals. The result was a 1,000-foot concrete pier with wind turbines; and a new two-story pier house with event rooms and a large banquet hall, aquariums and a gift shop; a geothermal heating and cooling system that services the entire building; and an innovative closed-system wastewater treatment system. Jennette's Pier was designed with other conservation efforts, including passive solar designs (for example, specific porch roof dimensions and window height to reduce heating and cooling needs), pervious pavers in the parking lot to assist with storm water retention and air hand dryers in the restrooms.

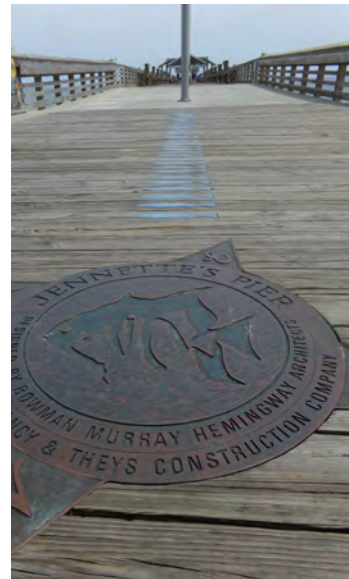
But to the average fisherman, it's just a great place to fish.

"People have fished here with their families for generations," said the pier's communications manager Daryl Law. The pier offers the popular "Family Fishing," which offers everything needed to learn how to catch fish – two hours of instruction, reels and rods and bait and tackle. The "Fishing 101"-style class is offered weekdays from 9 to 11 a.m. all summer long; registration is recommended. The cost is \$14 for adults and \$7 for children.

Like all piers in the Outer Banks, fishing fees includes a blanket license, which means anglers do not need to acquire an additional fishing license when fishing off the pier. Individual or family fishing passes can be purchased for three days, seven days or one year. More information is available online. Those just wanting to stroll the 1,000-foot pier can pay the walk-on rate of \$2 for adults, \$1 for children and free for North Carolina Aquarium members. Entrance to the pier house's aquariums and interactive science-based displays are free for everyone.

Jennette's Pier has been a popular destination for tens of thousands of school students who come to learn about coastal environments, the beach and the ocean. "Busloads of students come out here and catch their first fish," said Law. "They love it."

Throughout the year, Jennette's Pier provides space for community events like the Eastern Surfing Association Championships. The Mid-Atlantic Regionals were held April 30 to May 2, and Easterns tournament is scheduled for September 19-25. The popular Skim Jam will be July 17-18. Jennette's Pier will host a blood drive July 21 from 1-6 p.m. May through October, the pier is open from 6 a.m. to 9 p.m. For more information, visit <http://www.ncaquariums.com/jennettes-pier>.





AREAS OF GROWTH &
GIVING OPPORTUNITIES

SUPPORT OUR MISSION

Support the research, education, and outreach activities of ECU Integrated Coastal Programs and the Coastal Studies Institute by making a donation to our Foundation. Your generous gift will help support opportunities for undergraduates and graduate students, community outreach and capital growth needs.



A BIGGER VISION

Located on Roanoke Island in the Outer Banks of North Carolina, the ECU Outer Banks Campus is home to ECU's Integrated Coastal Programs (ECU ICP) and the Coastal Studies Institute (CSI). This college-level academic unit is the umbrella organization for coastal and marine sciences at ECU. ECU's Integrated Coastal Programs are dedicated to trans-disciplinary research, high-quality academic programs, and meaningful community engagement. The program uses an interdisciplinary approach and scientific advances to provide effective solutions to complex problems while helping coastal communities, ecosystems, and economies thrive.

UNDERGRADUATE SEMESTER EXPERIENCE AT THE COAST

Our semester long programs provide students interested in coastal resources, science, and management the opportunity to immerse themselves in an environment where courses are hands-on with field and lab-based experiences. We have established a Coastal Scholarship and Coastal Fellows program for students spending at least one full semester on ECU's Outer Banks Campus. Greater support for this scholarship is needed.



ART & SCIENCE FELLOWSHIP

Linking art and science has been a part of CSI since the beginning. We have worked with faculty across the College of Fine Arts and Communication through the years, but this could establish a formal partnership. This fellowship would provide the resources necessary to bring a faculty member to the Outer Banks Campus for a full semester to participate in the courses associated with the Semester Experience at the Coast.



YOUTH & K-12 PROGRAMS

Community outreach and engagement is central to our mission. CSI outreach staff provide standards-based field and lab experiences for K-12 students and teachers throughout the school year on the ECU Outer Banks Campus. Day camps provide summer learning opportunities for youth and are based on coastal themes including marine biology, ecology, oceanography, engineering, maritime archaeology, and the intersection of art and science. These hands-on programs foster student interest in STEM fields through experiential learning and inquiry-based discovery.



850 NC 345, Wanchese, NC 27981 - 252-475-5400
www.coastalstudiesinstitute.org
DONATE NOW at <https://coastal.ecu.edu/donate>

CHANGING STUDENT LIVES

Josh, an alumnus of the program highlighted the Semester Experience at the Coast as “the best college experience [he] ever had”. While Marco, another alumnus, noted that his internship “[gave him] experience in a field [he] hopes to make a career out of.”



Marco Agostini, Semester Experience alumnus

DISTINGUISHED PROFESSORSHIP IN MARITIME HISTORY

Distinguished Professorships are a major priority for ECU. Distinguished Professorships allow the University to recruit and retain outstanding leaders in this area while providing much needed support for educational, research and outreach priorities. This professorship would be aimed at recording, teaching and preserving our coast’s rich maritime history.



CAPITAL PROJECTS

STUDENT HOUSING

Growth of the Outer Banks Campus will require some dedicated housing for undergraduate and graduate students. Although the Friends of Elizabeth II Guest House has provided adequate resources to date, a holistic, informed and inclusive approach to housing our students must be considered moving forward. This will require a significant capital campaign if we are to develop dedicated housing (at least in part) for undergraduate, graduate and staff needs.



OUTDOOR CLASSROOM & BOARDWALK

This gift creates a welcoming space for the NC OBX community and our students to learn about coastal processes, interact with the water’s edge, and engage in real-world examples, concepts, ideas and course content from a classroom that includes a walking boardwalk from upland, across march, access to the shoreline, and over Croatan Sound.



CAMPUS RENEWABLES

CSI and the Outer Banks Campus is a beacon of cutting-edge research and education in the northeast region of the State. We lead the NC Renewable Ocean Energy Program for the State. We have a Gold certified LEED facility. However, we have no renewable energy resources on our campus. CSI should consider new partnerships and opportunities for demonstrating the capability of cleaner energy resources along our coast. We are interested in roof-top solar, EV charging stations, and demonstration wind turbines.



ECU

INTEGRATED COASTAL PROGRAMS

COASTAL & MARINE SCIENCE RESEARCH

ECU's Integrated Coastal Programs (ICP) is a leader in coastal and marine research, education, and engagement. The program uses an interdisciplinary approach and scientific advances to provide effective solutions to complex problems while helping coastal communities, ecosystems, and economies thrive.

ECU ICP includes the Coastal Studies Institute (CSI). Led by East Carolina University, in partnership with NC State, UNC Chapel Hill, UNC Wilmington and Elizabeth City State University, CSI focuses on integrated coastal research and education programming centered on responding to the needs, issues and topics of concern of the residents of eastern North Carolina.

RESEARCH

The interdisciplinary research of ECU ICP and CSI spans the natural and social sciences and includes faculty with expertise across a variety of coastal and marine fields. State of the art facilities provide the needed infrastructure to support the wide variety of field and lab research.



EDUCATION

Engaging educational programs for undergraduate and graduate students provide experiential learning opportunities in a research focused environment that promotes problem solving and science application methods.

OUTREACH

Community engagement and outreach are key components of the mission of ECU ICP and CSI. Faculty and staff work with local communities, including K-12 students and teachers, organizational groups, municipal officials and the general public to provide educational programming that highlights research and responds to community needs.



A COASTAL RESEARCH AND EDUCATION CAMPUS

Located on historic Roanoke Island, ninety miles east of Greenville, NC, ECU's Outer Banks campus overlooks the waters of Croatan Sound. The 213 acre campus is surrounded by coastal marshes and maritime forests, with a deep harbor leading to the second largest estuarine system in the nation and the Atlantic Ocean. The campus is the primary home for ECU's Integrated Coastal Programs and the inter-institutional Coastal Studies Institute, providing direct access to coastal habitats to support research, academic programming, and engagement.



Sustainable Design

LEED (Leadership in Energy and Environmental Design) gold certified, ECU's Outer Banks Campus helps set an example for the community on sustainable design and construction. As part of this programming, the campus supports sustainable landscaping with the use of native plants, multiple stormwater constructed wetlands, a rainwater harvesting cistern system to recycle water for non-potable usage, on-site wastewater treatment, passive solar, geothermal heating and cooling systems, regionally sourced construction materials and an exceptional indoor environmental quality and design innovation.



Research Support

Research on the Outer Banks Campus is supported by a fleet of vessels and autonomous vehicles. Our vessels range from small personal watercraft, large pontoon boat for large groups, to the 42 foot Miss Caroline outfitted with an A-frame and capable of working multiple days in the open Atlantic Ocean. Our scientists are trained to operate multiple autonomous platforms, including fixed wing and multi-rotor unmanned-aerial systems and an autonomous hydrographic survey vessel. This broad range of support vehicles provide students and faculty access to a wide range of coastal and open ocean environments.



Classrooms & Laboratories

The Research and Administration Building supports a broad range of academic programs and research. Multiple classrooms (24-80 seats) outfitted with smart technology allow classes to connect directly with students and faculty on main campus or anywhere in the world. Seminar-style rooms provide collaborative space with virtual connectivity. Laboratories throughout the building support a wide range of research, including estuarine ecology, coastal engineering, fisheries ecology, biology, maritime history, coastal processes, and geospatial modeling.



THE NORTH CAROLINA RENEWABLE OCEAN ENERGY PROGRAM

MARINE RENEWABLE ENERGY RESEARCH & DEVELOPMENT

Based at the Coastal Studies Institute (CSI), the North Carolina Renewable Ocean Energy Program (NCROEP) advances inter-disciplinary marine energy solutions across UNC System partner colleges of engineering at NC State University, UNC Charlotte, and NC A&T University. It is the mission of the the NCREOP to use renewable ocean energy wisely to effectively and economically power North Carolina's Blue Economy and in the process create jobs and economic opportunities. The NCROEP leadership team consults with a technical advisory committee with representatives from industry, government and academia.

STRATEGIC PRIORITIES

- Advance interdisciplinary research & collaboration to bring new ocean energy technologies to clean energy market.
- Promote testing & validation to improve efficiency, reliability, & reduce operation and maintenance costs of ocean energy solutions.
- Inspire innovation, stewardship, and Blue Economy development through public & academic engagement.
- Lead holistic environmental assessments for development of regulatory guidelines for responsible ocean energy advancement.

CURRENT RESEARCH & PROJECTS



Ongoing Research

NCROEP is currently funding 18 inter-disciplinary marine energy research projects across partner institutions as well as on-going marine energy resource and environmental assessments. NCROEP researchers are leading advanced applied research efforts in over \$5.3 million in externally funded renewable marine energy projects.



ETIPP

Since 2020, the Coastal Studies Institute has been serving as one of six Community-Based Partners in the DOE Energy Transition Initiative Partnership Project. This project is focused on advancing resilient, clean energy solutions for islands and remote communities. Local Project partners include the Town of Nags Head and Ocracoke Island.



Waves to Water

CSI was a DOE partner in supporting the \$3M contest to accelerate the development of small, modular, wave-powered desalination systems capable of providing potable drinking water in disaster relief scenarios and remote coastal locations. The final DRINK phase was hosted at the NCROEP testing platform at Jennette's Pier, Nags Head, NC in the Spring of 2022.



AMEC

The Atlantic Marine Energy Center (AMEC) is a university led consortium (UNH, CSI, ECU, Stonybrook & Lehigh Univ.) designed to address the ongoing needs for research and development and testing to advance marine renewable energy technologies towards commercialization and to develop solutions to power the blue economy.

ECU DEPARTMENT OF COASTAL STUDIES

SEMESTER EXPERIENCE AT THE COAST

AN INTERDISCIPLINARY LEARNING EXPERIENCE

Spend a Spring semester at the ECU Outer Banks Campus on Roanoke Island, taking your studies to the North Carolina coast in this interdisciplinary residential (housing available) undergraduate program. This semester-long program provides students interested in coastal resources, science, and management to immerse themselves in an environment where courses are hands-on with field and lab-based experiences.

- Smaller classes (~20 students) with strong faculty and student interaction
- Classroom instruction connected to active learning opportunities at the coast and real-world applications
- Interdisciplinary courses spanning the natural and social sciences
- Students gain skills in geospatial analysis, and complete many courses toward a minor in coastal sciences
- A remarkable coastal setting surrounded by diverse freshwater, estuarine and marine ecosystems
- Access to cutting-edge coastal research labs
- Open to science and non-science majors
- Faculty guided undergraduate research projects and internship opportunities



FOR MORE INFORMATION: <https://coastal.ecu.edu/coastalstudies>
CONTACT: coastal@ecu.edu
ECU Outer Banks Campus - 850 NC 345, Wanchese, NC 27981

SEMESTER EXPERIENCE

A T T H E C O A S T

FACULTY & RESEARCH AREAS

Dr. Reide Corbett - Dean and Director, Integrated Coastal Programs. Fields of interest: Nutrient cycling, shoreline change, estuarine sediment dynamics, coastal geomorphology, marsh accretion.

Dr. Linda D'Anna - Research Scientist. Fields of interest: Cultural and social considerations in our understanding of coastal and estuarine systems and resilience of social-ecological systems

Dr. Lindsay Dubbs - Research Scientist. Fields of interest: Biogeochemistry and ecosystem-scale ecology; influence of offshore energy generation on coastal marine ecosystems.

Dr. David Griffith - Professor. Fields of interest: Environmental change and migration, coasts as borders, labor and immigration, fishing communities.

Dr. Nadine Heck - Assistant Professor. Fields of interest: Marine conservation and natural resource management issues that lie at the interface of ecological, social, and institutional systems using a mix of social science and geospatial methods.

Dr. Andrew Keeler - Professor. Fields of interest: Climate change mitigation policy, sea-level rise, energy economics.

Dr. David Lagomasino - Assistant Professor. Fields of interest: Use of satellite, airborne, drone, and ground measurements to identify areas of coastal resilience and vulnerability. Relationships between remotely sensed spatial data and stakeholder exposure and sensitivity issues for coastal/wetland management and ecosystem valuation.

Dr. Jim Morley - Assistant Professor. Fields of interest: coastal ecology, fisheries ecology, climate variability influence on marine populations, habitat use and transitions between life stages in marine species.

Dr. Michael Muglia - Research Assistant Professor. Fields of interest: Understanding high frequency variability of the Gulf Stream, quantifying hydrokinetic energy resource from the Gulf Stream, water mass dynamics off of NC.

Dr. Siddharth Narayan - Assistant Professor. Fields of interest: Coastal hazards and sustainable adaptation solutions, applied science for policy and decision-makers coastal ecosystems restoration and management for risk reduction.

Dr. Kimberly Rogers - Assistant Professor. Fields of interest: Evolving sediment dynamics at the land-sea boundary, incorporation of social science methods to examine how institutions influence the flow of water and sediment in coastal areas, quantitative and qualitative approaches, agent-based modeling, institutional and geospatial analyses, ethnographic survey techniques.



FOR MORE INFORMATION: <https://coastal.ecu.edu>

CONTACT: coastal@ecu.edu

ECU Outer Banks Campus - 850 NC 345, Wanchese, NC 27981

WASHINGTON COUNTY

Established in 1799 out of Tyrrell County, Washington County was named for the first president of the United States, George Washington. Plymouth serves as the county seat, named in recognition of the Pilgrim colony that landed in Plymouth, Massachusetts.

Washington County has a population of just over 11,000, and there are three incorporated towns.

With the Chowan River and Albemarle Sound forming the northern boundary of the county, fishing and maritime trades have been a mainstay of income and commerce for the area.

The town of Plymouth has embraced ecotourism, developing and promoting adventures like fishing, hunting, boating, kayaking, nature and birding trails.



Despite its proximity to the coast, much of the county is considered a remote agricultural area with fertile land. Agricultural products include corn, soybeans, peanuts, tobacco, cotton, cabbage, sage, and potatoes, along with livestock like hogs and poultry.

Along with fishing, maritime and farming, manufacturing plays a big part in the economy of Washington County. Products produced in the county include wood pulp, paper, plywood, lumber, pallets, clothing, rope, and processed peanuts.

With the growth of agri-business in the area, the Tidewater Research Station was established in 1943. The station encompasses 1,558 acres. Research studies conducted at the station involve field crops, livestock, aquaculture, horticulture, and soil and water. The station also hosts the Northeast Regional School of Biotechnology and Agriscience, an early college high school providing STEM education in agriscience and biotechnology.

On the Purple and Gold Bus Tour, we will explore Pettigrew State Park in Creswell. There, we will learn more about Native American history in the area, ECU research and archaeological digs, and preservation of artifacts, including dugout canoe relics -- dating as far back as 2400 B.C. -- discovered at the bottom of Lake Phelps.

SOURCES

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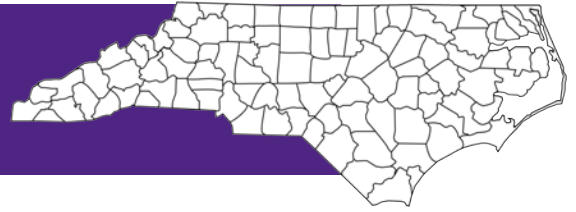
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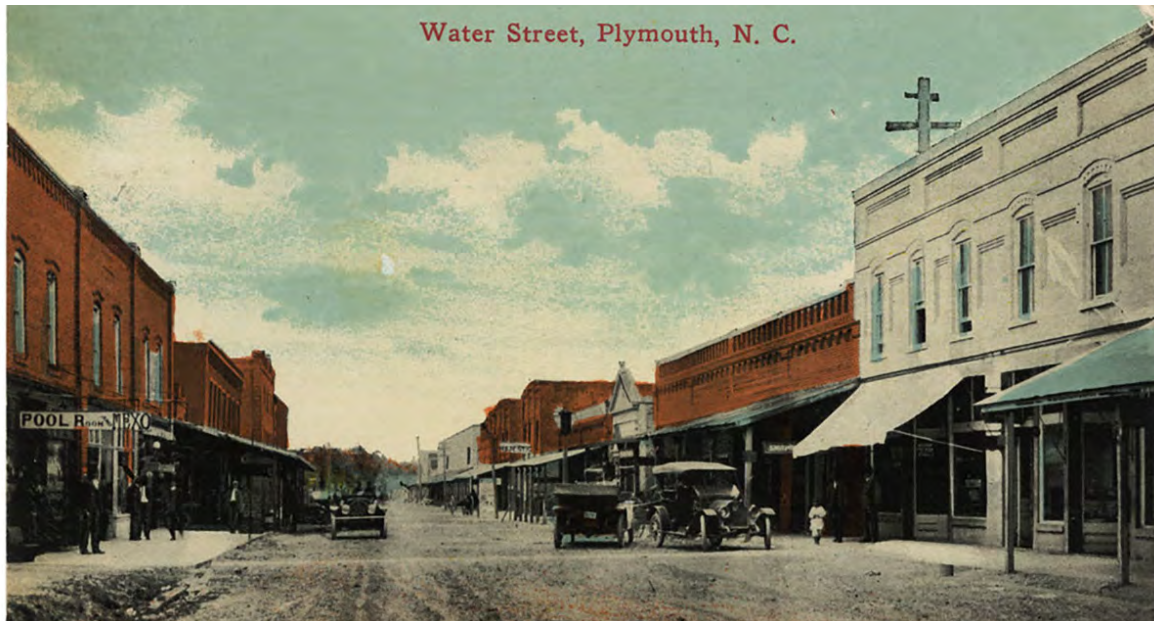
WASHINGTON COUNTY SPEAKER



Jim Trostle
Superintendent
Pettigrew State Park

Jim Trostle serves as the superintendent for Pettigrew State Park. In this role, he is responsible for the planning and organizing of operations, managing the budget and park's resources, developing policy and procedures and maintaining trusted relationships with the community. As superintendent, Trostle has a bachelor's in parks and recreation and is a certified law enforcement officer.

QUIET WASHINGTON COUNTY RICH IN COASTAL NC HISTORY



BY ERIC MEDLIN
COASTAL REVIEW
APRIL 25, 2022

<https://coastalreview.org/2022/04/quiet-washington-county-rich-in-coastal-nc-history/>

The earliest permanent settlement of North Carolina by Europeans occurred north of the Albemarle Sound. But increased migration and the desire for land soon pushed those settlers outside of this limited area.

The men and women who moved south of the Sound found a swampy, inhospitable region. Their perseverance helped create Washington County, at one time a prosperous county that gave the state several of its most famous leaders.

The story of Washington County is one of isolation, success and an eventual renewal on the banks of the Roanoke River.

Following the earliest settlement of the Albemarle region in the late 17th century, English immigrants to North Carolina craved more arable land for tobacco cultivation. While some went west, others moved south across the Albemarle Sound.

Early North Carolinians also secured land grants on several of the area's major rivers. One of these was the Roanoke River, which starts in Virginia and enters North Carolina near present-day Roanoke Rapids. The community that later became Plymouth, located on a bend of the Roanoke River, was first settled in 1727, according to the North Carolina Gazetteer. Other communities like Roper and Mackeys grew up around the county's creeks and on the sound.



The area south of the Albemarle Sound remained sparsely populated for several decades. Over time, an increase in population led to the need for more counties. In 1729, the section of North Carolina north of former Bath County and south of Albemarle Sound became Tyrrell County. In 1799, Tyrrell County's westernmost section became

Washington County, named for George Washington.

According to “The formation of the North Carolina counties, 1663-1943” by David Leroy Corbitt, the eastern boundary was a line “beginning at Bull-point ... to the centre of the Indian swamp, where the road crosses ... [extending] to the west end of lake Phelps... to [the] Hyde county line.” An 1801 annex gave Washington County all of what was then known as Indian Swamp.

In the antebellum period, Washington County was defined by some of the largest plantations in North Carolina. The Roanoke River and Albemarle Sound were ample sources of transportation. Tobacco and corn were planted in the rich soil of river-adjacent districts. The county also had communications with the northern side of Albemarle Sound by way of Mackey’s Ferry. The ferry operated for more than 200 years and was a key link between the older communities north of the Albemarle and the growing regions to the south and west.

The most prized plantation in the county was Somerset Place, which was founded by a group led by Josiah Collins on Lake Phelps in the 1780s. According to the plantation’s National Register of Historic Places nomination, Collins was a political leader in the state who acquired a massive amount of land, built mills, and introduced agricultural methods new to North Carolina such as rice cultivation. A nearby plantation owner, James Johnston Pettigrew, became a famed Confederate general that was killed at Gettysburg.

As in the rest of the state, slave labor was prevalent. Over 40% of the county’s population was enslaved, according to the Hergesheimer map of 1860. Somerset Place has become noteworthy not only as a center for antebellum wealth but also a site of memory for the hundreds of enslaved African Americans who lived there in the 19th century.



In the 1980s, historian Dorothy Spruill Redford traced the lives of many of these families and helped organized a reunion of around 1,500 descendants of slaves and their owners. The reunion garnered national attention and a number of prominent visitors, including the North Carolina governor and “Roots” author Alex Haley, according to the New York Times.

In his introduction to Redford’s “Somerset Homecoming,” Haley wrote that when he learned of the project, “I was thrilled — thrilled not just at what was happening there that day, but for the connections that such a gathering of families spoke of — for the thread that ran back through the generations and will most surely run ahead into the future.” Redford’s work transformed the interpretation of slavery at Somerset Place and other plantations throughout the South.

During the Civil War, Plymouth played an important role in an often-ignored campaign late in the conflict. In 1864, the Confederacy attempted to take back eastern North Carolina from the Union. Confederate Gen. Robert F. Hoke, along with the ironclad ram Albemarle, launched an exceptional raid that defeated Union leaders Henry W. Wessells and Charles W. Flusser and led to Confederate control of Plymouth.

The victory was short-lived, for Hoke was recalled back to Virginia a few months later and the Union reoccupied the town for the remainder of the war. Research has shown that the Confederates were also responsible for war crimes against African Americans after recapturing the area.

Following the war, Washington County embarked on an economic project like those of surrounding counties in eastern North Carolina. Much of the county remained agricultural. Tenant farming replaced the plantation system, and some farmers moved from tobacco and corn to peanut and truck farming. But in some areas, indus-

try began to take a hold.

This industry centered on Plymouth, where the population doubled between 1900 and 1910. Plymouth became a center for the manufacture of wooden handles, lumber, and paper. Industrial prosperity led to the construction of the neoclassical Washington County Courthouse in 1919.

J.B. Smoove J.B. Smoove

During the 19th and 20th centuries, numerous notables called Washington County home. These included stage director Augustin Daly, author and activist Don Brown, and NFL linebacker Charles Bowser.

Comedian J.B. Smoove, known for his work on HBO's "Curb Your Enthusiasm," was born in Plymouth and often visited his maternal relatives there.

These famous residents did not lead to prosperity in the county, however. Following the decline of industry, Washington County became one of the poorest in the state. Unemployment remained high and the town of Plymouth emptied out, losing population every decade from 1970 to the present.

Today, Washington County is showing signs of renewal. Farms still dominate the landscape, and agriculture remains the primary economic engine. But the county is also starting to attract tourism. Somerset Place and Pettigrew State Park attract thousands of visitors each year. Plymouth has been the site of new development, especially on its waterfront. There are new restaurants and several museums in the town, along with several historic restoration projects.

The county's towns also benefit from Outer Banks traffic because of their location on U.S. 64. But because of its distance from the beach or major towns such as Elizabeth City or Greenville, Washington County will likely remain a testament to North Carolina's agricultural, small-community past.



LAKE PHELPS REELING FROM DROUGHT



BY TYLER NEWMAN
CHOWAN HERALD
OCTOBER 23, 2022

https://www.dailyadvance.com/chowan/communities/hyde-tyrrell-washington/hyde/lake-phelps-reeling-from-drought/article_acf94120-a496-59cb-8d3c-7934d35c813f.html

Water levels at Washington County's Lake Phelps have been concerningly low as of late, a potential indicator of monthslong drought conditions.

North Carolina's second-largest natural lake, five miles south of Creswell and 20 miles south of Edenton, is the centerpiece of Pettigrew State Park, situated along the shoreline.

Water levels in mid-October were, at first glance, at least a foot or more lower than they were around the same time last year.

As a result, a new "shoreline" has developed, full of cracked and muddy canyons that soak like sponges upon each step, while the edge of the lake has receded anywhere from 20 to 75 yards on the north shore.

"I've never seen it this low," said Pettigrew State Park Superintendent Jim Trostle. "This is a result of the drought, as you may know this lake relies on rainwater to recharge since nothing flows into the lake."

One of the state's cleanest lakes, Lake Phelps is a rainwater collection, meaning no tributaries or rivers flow into it. The water levels exist solely due to rainfall – without any, the lake may dry up.

The last water level reading at the lake by the N.C. Division of Water Resources was on Aug. 2 and recorded, for the most part, that levels had fallen on average since the spring.

There are several groundwater users around Lake Phelps that funnel water from local canals, including Oak River Farms and James Farms.

Anna Gurney, with the N.C. Department of Environmental Quality, said that Pungo Lake to the southwest is also seeing low water levels, which could point to drought rather than human activity.

"It appears Pungo Lake, which is southwest of Lake Phelps, is also low, which would indicate localized drought

is the impact and not groundwater users in the area,” Gurney said.

Klaus Albertin, Water Resources Engineer and Chair of the N.C. Drought Management Advisory Council, said that the advisory council meets every week to discuss drought indicators including field reports, such as one from the Chowan Herald.

“Much of the coastal plain has been very dry since last fall. The rainfall we’ve gotten seems to have come in heavy, brief events that have only had temporary impacts,” Albertin said. “Even after Hurricane Ian, areas that got five inches of rain quickly saw dry soils and low streamflow again. Because of the heavy rain events, most areas are only a couple of inches off from the normals but conditions do seem to be much worse.”

The North Carolina Drought Monitor paints much of northeastern North Carolina under no drought currently, but that could change in the future.

Dr. Michael Piehler, professor at UNC Chapel Hill and Director of the UNC Institute for the Environment, who has done research at Lake Phelps before, said water levels are “lower than any time when we were actively engaged in the area.”

Any drought situation in 2022 is still much less severe than in 2007, the most recent exceptional drought, in which North Carolina recorded its driest calendar year ever and many towns nearly ran out of water.

In the short-term, chances of rain increase early next week when moisture lifts north from the Gulf of Mexico, according to the National Weather Service.

In the long-term, NOAA’s Climate Prediction Center is expecting below average precipitation for the next three months.

PETTIGREW A HIDDEN GEM AMONG STATE PARKS



BY CORINNE SAUNDERS
COASTAL REVIEW
JULY 1, 2019

<https://coastalreview.org/2019/07/peittigrew-a-hidden-gem-among-state-parks/>

Tucked away from the traffic, Pettigrew State Park's charm is found in its unique combination of scenery, wildlife and history.

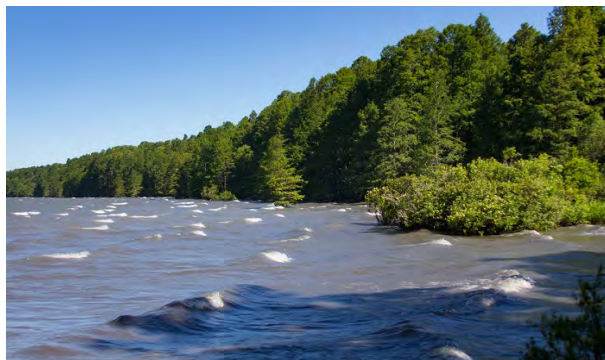
A main feature of the park is Lake Phelps, which is the state's second-largest natural lake, and a rarity for eastern North Carolina: It's not stream-fed. As a large rainwater collection, Lake Phelps is thus among the state's cleanest lakes, according to the park website.

The lake measures 7 miles east to west and 5 miles north to south, with a circumference of 21 miles, according to Charlotte Davis, a Pettigrew park ranger. "Despite the size of it, it's pretty shallow," Davis said, noting the average depth is 4.5 feet and the deepest section is 9 feet.

The park is 5,830 acres, said Jim Trostle, another park ranger, not including the 16,600-acre lake. The main park land is by the lake, but separate sections of property are along the Scuppernong River and outside of Columbia. "We're very spread out," Trostle said.

Visitors have sometimes expressed surprise that there are no alligators in Lake Phelps, but despite its many boaters and swimmers, the park has never received an alligator sighting report.

Jim Trostle



"Most of the time, our lake's really clear, when it's not white-capping," Davis said. This does not create plausible "ambush" conditions for alligators.

Park visitors may very well encounter bears, however, which is news to many of them.

"For some reason, people are surprised there are bear here," Trostle noted. "They always think of them being in the mountains." He sees them "almost daily."

Davis said it makes sense the bear population is significant at Pettigrew. “There are nuts and berries in the woods, fish in the lake (and) crops in the fields,” she said. “People come from everywhere to hunt bear” in land surrounding the park – no hunting is allowed on park grounds.

Time and land use are believed to have shifted the lake’s location.

“We think the lake might be moving slowly westward,” Trostle said. “In part, that may be storm-driven.”

From looking at maps of the lake’s coastline dating back 150 years, “we know it’s shifted,” Trostle said. Staff observations also lead them to believe the lake is slowly moving: “Part of the trail that’s usually not flooded had water on it for months,” he said.

Human activities also contribute to changes, Davis stated.

“Over the years, the use of the land has changed,” she said. “All this used to be swamp. The early settlers called it the ‘Haunt of Beasts.’”

Before much of the land was converted into farmland for plantations, the swamp, dense vegetation and bountiful bugs kept early settlers away.

But the bane of some people’s existence is the subject of scientific research now.

Trostle said a group from Old Dominion University in Virginia is conducting a study in the park on climate change effects, as measured by Gulf Coast ticks: “To see if their range is expanding.”



Algonquin Artifacts

Unlike newly arrived Europeans, Native Americans frequented the lake and surrounding forests for seasonal hunting and fishing. Algonquin artifacts spanning 11,000 years have been found in the area, with some dated back to as early as 8,000 B.C.E., according to the park website.

A wildfire in the mid-1980s was fought with water from Lake Phelps, which took the water level down to as low as 1 foot in places, according to Christy Maready, park administrative associate.

“Artifacts became visible — clay pots and canoes,” Maready said.

Thirty Algonquin dugout canoes, including some whole canoes and some parts, were found, and about 13 were removed, she said. The largest canoe, measuring 36 feet, is now housed in the North Carolina Museum of History in Raleigh. The oldest was carbon-dated back 4,000 years. Native Americans sunk their canoes in between seasons.

“They would purposely sink them, as a way of preserving them,” Trostle said of the canoes. “They don’t get bugs in them either (underwater). They didn’t have a way to haul them.”

Two of the cypress canoes were displayed at Pettigrew State Park when Davis, 35, was young, she recalled. They are currently at an East Carolina University lab being restored, and once Pettigrew receives a visitor center, the hope is to bring them back, she said.

This fall will mark the Pettigrew’s 32nd annual Indian Heritage Week. Area schoolchildren — usually fourth-graders — come learn about the lifestyle of the area’s original residents and help work on burning and

scraping out the inside of a replica canoe another park ranger crafted, Davis said.

The park headquarters showcases a variety of Algonquin artifacts, including fishhooks and projectile points, such as those used for spears.

Trostle turned a stone ax head over in his hands. “This was probably a week’s worth of work,” he said, explaining how the Native Americans repeatedly chipped little pieces off the stone then sanded it smooth. A display case also features reproduction clay cooking pots and a mortar and pestle set, among other artifacts and informational displays.

Also in the room with the artifacts are stuffed species of mostly local origins — everything from bears to tundra swans to nutria. An elk hails from the western part of the state, and a boar came from Johnson County. Just one animal remains a point of contention.

“People say they’ve seen them (here),” Davis said, referencing a stuffed mountain lion. “I’m open minded. I have a lot of family who are farmers; but they’ve seen something.”

“I’ll believe it when I see it on a trail cam,” Trostle quipped, citing the lack of photographic evidence.

Wind, Waves & Recreation

Lake Phelps is wind driven. Winter generally brings a north wind.

“A north wind means the south side of the lake is rough, (but) we’re fine,” Davis said. Summer often heralds a south wind, where the tables turn, and the lake by park headquarters is choppy.

A public canoe trip on Lake Phelps scheduled for June 21 was cancelled because of waves of 1-2 feet. “Today’s the first day of summer, and it’s a south wind,” Trostle noted, laughing about the wind switching that morning exactly.

Park staff schedule at least one public canoe trip every month during the summer. Canoe the Scuppernong, slated for June 8, was cancelled due to thunderstorms. The next venture, also on the Scuppernong River, is set for July 19. The park hopes to eventually have a system to be able to rent out its eight, two-seater canoes, Davis said.

Spring and fall are the busiest seasons at Pettigrew, with visitors hiking, paddleboarding, kayaking, boating, fishing and camping.

“Last summer a lady paddleboarded almost the entire circuit of the lake — 21 miles,” Davis said.

“We’re a trophy bass lake,” Davis added. Fishermen are limited to keeping five bass, but bass must be thrown back if they’re smaller than 14 inches or larger than 21 inches, she explained. Fishermen also regularly catch yellow perch, bream and catfish.

Many people take advantage of the park as an economically friendly way to visit the beach. A \$28 campsite easily beats a \$250 hotel room on the Outer Banks, Davis said. “Instead of going to the beach and spending lots of money, they stay the night (here), go to the beach and come back for the night.” These visitors come from all over the state, but also from other countries, Davis said, naming Canada, Switzerland, Germany and Australia.

Pettigrew State Park has 13 regular campsites and a group camp that can accommodate 30-35 people. Scouting, church and family groups often use that camp, Davis said.

“Astronomy is big here,” Trostle noted. “Some of the darkest skies in Eastern North Carolina are here — there’s not a lot of light pollution.”

A Rocky Mount-based astronomy club frequents Pettigrew, offering free, informal programs for visitors.

“They’ll bring their huge telescope and tell people about what they’re looking at in the sky,” Trostle said. This year, one such event was planned for April, and one is being organized for the fall.

Summertime brings visitors as well, “but there comes a point in time when it just gets too muggy,” Davis said.

Winter brings the birders.

Tundra swans take refuge for the winter in the many lakes in eastern North Carolina, including Lake Phelps, Pungo Lake and Lake Mattamuskeet, Davis said. They generally show up in late November or early December and stay until February. Last year, 28,778 tundra swans were seen in a 15-mile radius. “Some years it’s been in the 35,000 range,” Davis said.

Tundra swans are joined by snow geese, which numbered 34,435 last year, and a variety of ducks. The tranquility of the lake can morph into cacophony at times.

“Especially when they’re flying right on top of you, they can get very vocal,” Davis said. “During the winter, people are amazed at how much waterfowl we have.”

Symbiotic Relationship

The park enjoys a symbiotic relationship with Somerset Place, a former plantation that the North Carolina Department of Natural and Cultural Resources maintains as a State Historic Site. Somerset Place is located within Pettigrew’s boundaries, and is a hike of only a few minutes from the park headquarters down a quarter-mile wooded boardwalk trail that skirts the lake. Park employees built the boardwalk themselves rather than contracting it out. “it was a labor of love,” Davis said.

Some people are drawn to take the free tours exploring how life was on a 19th century plantation and end up visiting the park as well, while others start at the park and end up at Somerset, Davis said.

Pettigrew State Park is named after James Johnston Pettigrew, a Civil War Confederate general whose plantation was next to Somerset, Maready said. The Pettigrew Family Cemetery can be reached by hiking a roughly mile-long trail from the park’s headquarters.

Two other state parks receiving similar numbers of visitors as Pettigrew each year: Weymouth Woods Sandhills Nature Preserve in Southern Pines, with 67,000 visitors, and Mayo River State Park in Rockingham County, which sees 74,000, Davis said.

Interested large groups of visitors can request use of the state’s two big canoes, which are 29 feet long and hold up to 14 people each. The state parks share these and send them as available based on advance scheduling. School groups, scouting groups and 4-H camps in nearby counties regularly schedule these canoes at Pettigrew, Davis said.

Park programs are free, weather-dependent and require advance registration. Park headquarters is located at 2252 Lake Shore Road in Creswell. The office number is 252-797-4475.



MARTIN COUNTY

Established in 1774 out of Halifax and Tyrrell counties, Martin County was named for Josiah Martin, the last royal governor of North Carolina. With a population of just over 22,000, Martin County sits 80 miles from the Outer Banks, 90 miles from Raleigh, and 60 miles from the Virginia border.

Williamston was the county's first incorporated town and serves as the county seat. Settled along the banks of the Roanoke River, Williamston was the shipping hub for tar, turpentine, and other products for the area.

The Roanoke River is the county's northern boundary. The river flows 410 miles from the Blue Ridge Mountains in southwestern Virginia through northeastern North Carolina to the Albemarle Sound. A dam was constructed in 1953 to ease the effects of the flood-prone river.



Visitors can explore the Roanoke River Paddle Trail, experience excitement at the East Carolina Motor Speedway, take in a rodeo or horse show at the Senator Bob Martin Eastern Agricultural Center or follow the colorful Quilt Trail.

With roughly half of the county's land classified as farmland, the region is home to over 50 food industry producers. While you'll see fields of corn, cotton, and tobacco, major regional crops include soy beans and peanuts. Honey-roasted peanuts actually originated in Martin County.

Manufacturing facilities like Flagstone Foods and Domtar Paper Company are the top job producers in Martin County. Paper, farm machinery, and textiles are just some of the products manufactured. Martin County Public Schools follows manufacturing as a top employer in the county.

On the Purple and Gold Bus Tour, we will visit the Martin County Schools Innovation Campus in Williamston. The Innovation Campus is a newly opened public school that offers STEAM-focused curriculum and Career Technical Education. The \$7 million facility is currently helping students from Riverside High School and South Creek High School go from school to the workforce.

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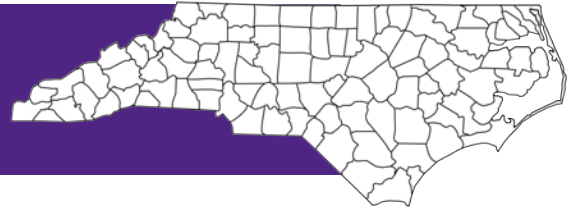
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MARTIN COUNTY SPEAKERS



Shannon Cecil **K-12 Curriculum and Instruction and Federal Programs** **Martin County Schools**

Shannon Cecil earned her bachelor's in biology at Campbell University (1996), master's in educational leadership and curriculum and instruction at East Carolina University (2012), and her doctorate of educational leadership and superintendent licensure at East Carolina University (2017). Cecil began her career in education as an 8th grade mathematics and science teacher at West Edgecombe School in Rocky Mount, North Carolina. She served as the Assistant Principal at Pactolus school in Pitt County for four years before becoming Principal at Rodgers Elementary School in Martin County. She served as Principal at Rodgers until January 2020 when she assumed the role of Principal at Riverside High School in Martin County. On January 1, 2023 Dr. Cecil became the Director of K-12 Curriculum & Instruction and Federal Programs for Martin County Schools.



Kristy Christenberry **Curriculum Instructional Management Coordinator** **Martin County Schools**

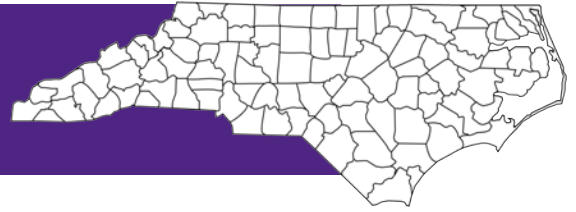
Kristy Christenberry has served 23 years in public education in various roles, including teaching middle and high school Business and Information Technology, serving high and middle schools as a Career Development/Special Populations Coordinator, Assistant Principal at the middle/high school level, serving as a Director of Testing & Accountability and PowerSchool, Director of CTE, and most recently as a CTE Coordinator for Martin County Schools. Christenberry oversees Career Development, Special Populations and Curriculum and Instructional Management for CTE. Her goal is to provide quality CTE Career Development experiences for all students and support CTE teachers as they lead our students into the future college and career ready. Building partnerships with local business and industry as well as the local community college is of high importance. She believes in performance based learning and offering as many engaging high level experiences as possible.



Vernetta Griffin **Business Technology Teacher** **Martin County Schools**

Vernetta Griffin has been working for the Martin County School System since October 2002. Her journey began at East End Elementary as a Computer Technician where she had the opportunity to work closely with various principals, teachers, and students. There she trained students and staff on numerous technology equipment, programs as well as how to troubleshoot and resolve technological issues. Griffin's love for children and previous 17 years of business experience pulled her toward teaching technology. She began teaching "Keyboarding" at East End Elementary and E.J. Hayes Elementary School. After 2 years, she transitioned to Riverside High School as a CTE Business Teacher.

MARTIN COUNTY SPEAKERS



James Guard
Director of Career and Technical Education
Martin County Schools

James Guard has been in education for 30 years. Guard received his bachelors in agriculture education from NC State. In 2008, he received his Administration License so he could become a school administrator. Guard has served as a high school agriculture teacher for several different school systems across multiple NC counties, and as a principal at 3 different schools over the course of 11 years before moving into his current role.



Tabitha Miller
Vice President, Academic Affairs
Martin Community College

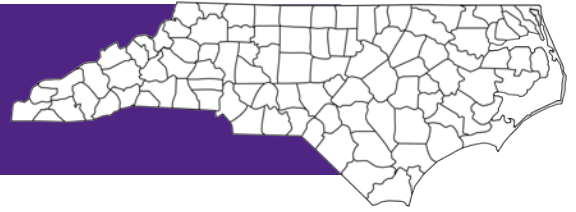
Tabitha R. Miller received her doctorate in rhetoric, writing, and professional communication from East Carolina University. Her research interests include developmental education and culture. She received her master's in multicultural literature from East Carolina University with her focus on Belizean Literature. As the Vice President of Academic Affairs and Chief Academic Officer at Martin Community College, her priorities center on student success and breaking down barriers to access opportunities to explore potential career journeys for all students. She supports collaboration with other community colleges in order to broaden the opportunities for Martin students, as well as improving student access to global opportunities that include expanding cultural knowledge and engagement through virtual learning and campus cultural events.



Will Prettyman
Career Management Teacher
Innovation Campus

Will Prettyman has spent 13 years in education. For the last five years, Prettyman has worked with North Carolina BioNetwork, which is part of the NC Community College System. Recently, Prettyman has returned to Martin County Schools to teach career management, drone technologies, and advanced manufacturing. He has a strong desire to make students aware of opportunities available to them and allow them to experience different career options to enhance their lives.

MARTIN COUNTY SPEAKERS



Rebecca Revels
Health Science Teacher
Innovation Campus

Rebecca Revels is a health science teacher at Martin County Schools, Innovation Campus. Revels is in her second semester as a health science teacher. Prior to teaching, she worked in healthcare as a physical therapist assistant in a skilled nursing facility. Revels graduated from Martin Community College with an associates degree in physical therapy in 2014, and became a NC State Licensed Physical Therapise Assistant. She brings excitement in learning about healthcare by providing current trends and information from the healthcare world. Revels wishes to incorporate information from many areas of healthcare to educate students on the many opportunities available in the healthcare setting.



Colby Riggins
Academically or Intellectually Gifted Coordinator
Martin County Schools

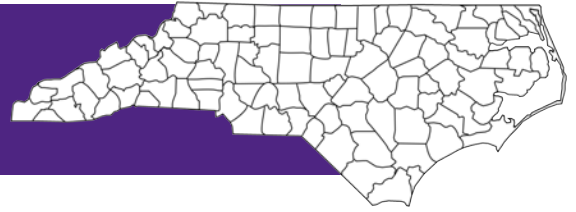
Colby Riggins is the AIG (Academically or Intellectually Gifted) Coordinator for Martin County Schools. She is a native of eastern NC, as well as an alumni of East Carolina University. Riggins earned her bachelor's in secondary math education from ECU in 2009 and her master's in secondary math education in 2020. She has been with Martin County Schools for a total of 14 years. Recently, she attended the AIG program through ECU to add on a teaching license in gifted education; which led her to her current position for MCS. Before this current role she was a middle school Instructional Coach and taught middle and high school math for 11 years. Riggins believes in educating the "whole child" meaning developing them educationally, intellectually, socially, and emotionally by creating a safe and positive learning environment where students can share ideas and take risks.



Heather Smith
Teacher
Innovation Campus

Heather Smith is a teacher at Martin County Schools Innovation Campus. She has been working as an educator for 4 years. Smith's journey in education began in 2019 at NERSBA where she taught classes within the realm of animal science and horticulture. As an agriculture teacher and FFA advisor, her goal is to provide students with a safe learning environment and to teach them about the importance of agriculture and how it impacts every aspect of our lives. Smith hopes to prepare students for life after high school with a variety of public speaking, job readiness skills, and knowledge that allows a smooth transition into the next chapter of their life.

MARTIN COUNTY SPEAKERS



Shawn Smith
Career Coach
Martin Community College

Shawn Smith received his bachelor's degree in liberal studies/Education from Longwood University in Farmville, VA. After college, he was a special education teacher for high functioning Learning Deficiency Students in Fairfax County, VA. He specialized in History and Science instruction as well as remediation instruction for state exams. As the Career Coach for Martin County Schools at Martin Community College, he guides and assists students with their long-term goals as well as assists in their enrollment into dual-credit classes at the college while they are still in high school.



Vinya Ward
Health Science Teacher, HOSA Advisor
Innovation Campus

Vinya Ward earned her bachelor's in nursing from ECU in 1992 and completed her board certification as a teacher in health science career and technical education in 2010. Ward has been a perioperative nurse for 31 years and has been teaching future healthcare professionals for 17 years. She still works as an operating room nurse at ECU Health and Martin General Hospital. Ward enjoys sharing her passion for the healthcare profession with students by bringing real life experiences and current trends into the classroom.



Jason Wynne
BTSP Coordinator and Beginning Teacher Trainer
Martin County Schools

Jason Wynne has 15 years of experience as an educator and former principal. He has served students in Beaufort, Bertie, Martin and Pitt counties. His passion is encouraging and empowering educators to be bold in the classroom and attempt different practices to reach all learners. As the BTSP Coordinator and Beginning Teacher Trainer, Wynne has the opportunity to work with young educators and make a positive impact to keep them in the field of education.

INNOVATION CAMPUS OPEN



BY DEBORAH GRIFFIN
THE DAILY ADVANCE
DECEMBER 16, 2021

https://www.dailyadvance.com/innovation-campus-open/article_e6876d67-0b74-5f72-95d0-2468df75fa22.html

On Sunday, Martin County Schools finalized the completion of a dream five years in the making.

The state-of-the-art, MCS Innovation Campus, designed to transform education in the county, was declared officially open as county commissioners and board of education members snipped a celebratory stretch of yellow ribbon at a ceremony for the community.

“Today, we turned a new page in the chapter of the education of the children in the county,” said newly elected MCS Board of Education Chair Van Heath. Heath was voted in as board chairman at the Dec. 6 board meeting, replacing Barbara Council.

The Martin County Innovation Campus, a \$7 million project, will begin hosting classes in January.

The old Roses shopping center at 407 East Boulevard in Williamston has been transformed into a 60,000 square-foot teaching facility that will offer career and technical education courses, helping students become career-ready upon graduation.

The idea was first put into motion in 2016.

“This project has been a long time coming, but creates a lot of promise,” Heath said.

“We will now provide, for those planning to go straight into the workforce from high school, an opportunity to enter the workforce with usable skills. And for those planning to further their education, we will be able to provide them a leg-up on the future,” he added. “I look at this campus with older eyes and wish I were a student again and had the opportunity to learn at this facility.”

Heath praised board members Barbara Council and Keith Harrell for their efforts.

“I’ve been chairman for six days. Ms. Council was chair for the past three years and provided the leadership to get this campus open. She and Mr. Harrell put a lot of time in to bringing this project to fruition,” he said.

The \$7 million project was funded by the Martin County Commissioners, a local Capital Outlay Fund, and a Public Schools Needs Based Capital Building Fund.

Martin County Commission Chairman Ronnie Smith spoke to community members and leaders who gathered

for Sunday's celebration.

"This facility will create a way of reaching the potential of students, who haven't had these opportunities before," he said.

Smith recently read an article about the number of inventions created by students in the last two years.

"They are changing the way our world operates today. This is what I foresee coming out of this facility in the years to come," he added.

The Innovation Campus, an extension of Riverside and South Creek high schools, will offer students such classes as health sciences, business/entrepreneurship, computer technology/drone technology and advanced manufacturing.

Designed by Oakley and Collier Architects and completed by A.R. Construction, the redesigned building offers multiple non-traditional classrooms.

Doug Chesson, of A.R. Construction said, "I am so impressed by our county commissioners and our board of education for having the insight to conceive and put this facility into play. It would have been easy for us — as we are losing population and as we are losing students — to sit back and say, 'We are just going to take care of ourselves and let our students go where they want.'

"What we are doing is creating a facility that will keep our kids here. I congratulate you," he said.

"We were very pleased to be a part of this. We helped with the facility, now it is up to you guys to let it be all it can be," he added.

Al Chesson, also of A.R. Construction said the building was "a great team effort."

Some of the construction had fallen behind deadlines because of supply chain issues.

"Despite some delays, we got to the finish line," said Chesson. "It is a wonderful facility. I look forward to what it is going to mean to future students and future citizens of Martin County."

Jim Guard, director of career technical education and instructional technology for MCS, will oversee the Innovation Campus.

"In 2015, the leadership of Martin County had visions of transforming education in Martin County Schools," Guard said. "The days of traditional four-year colleges were transforming to certificates, diplomas, two-year degrees and job-ready training and the idea of a Martin County career technical center was born."

Guard said the building is in existence today because of the leadership and teamwork of, "the Martin County Board of Education, the Martin County Board of Commissioners, Martin County Economic Development Commission, Martin Community College, the town of Williamston, Oakley and Collier, A.R. Chesson, three superintendents, a creative and smart financial officer and site superintendent Seth Manning — who kind of became the quarterback of the project."

Courses begin in January.

"The ninth through twelfth grade component will open in the spring of 2022 with career and technical education courses in business, finance and health sciences. We will expand in the fall of 2022 to the areas of advanced manufacturing, drones, industrial arts, biotechnology just to name a few," Guard said.

"The K-12 component will also begin in the Spring of 2022. Students will have the opportunity to participate in programs under the STEAM umbrella. This will include experiential learning activities in the areas of science, technology, engineering, arts and mathematics," Guard added.

"The beauty of this facility is its ability to change and adapt to our students and community as it changes, now and in the future. I am very excited because it is going to give our students the opportunity to be 21st-century

ready,” he said. “And it is going to offer new programs to our district and deepen our relationships with Martin Community College and area industry.”

The Innovation Campus will also be used to train MCS staff to educate current students, and teach the next generation of students, he added.

Superintendent Dr. David Fonseca said, “I am super-excited for the possibilities for our students. Originally, the campus was for high school students for career and tech education program. But we are going to start bringing in kids as young as pre-Kindergarten. Then elementary, and middle school. The purpose is to ensure our students are exposed to what career and technical education is about.”

Fonseca thanked everyone involved in making the new building a reality. He thanked present and past members of the board of commissioners and board of education.

“Without their leadership vision and support, this facility would not be a reality,” he added.

Future courses will include those in manufacturing, industrial arts, digital arts, three-D graphics, coding and gaming design and biotechnology.

MCS will offer school bus transportation to and from both South Creek and Riverside high schools.

Catered meals, prepared either E.J. Hayes or Riverside High School, will be served out of the campus’ Canteen.



RESEARCH CONNECTION PROGRAM FOSTERS MENTORING RELATIONSHIP, OPPORTUNITY TO



BY MATT SMITH
ECU NEWS SERVICES
JANUARY 5, 2021

<https://news.ecu.edu/2021/01/05/community-connections-secu/>

For many nonprofits, it's not just their mission that defines them, but the connections they build within their communities.

East Carolina University sophomore Vedika Modi learned about the importance of those connections during her internship with the Martin-Pitt Partnership for Children this fall as part of the State Employees' Credit Union (SECU) Public Fellows Internship (PFI) program.

The public health and English double major, who has aspirations of pursuing a medical degree, stepped out of the classroom and navigated COVID-19 restrictions to help strengthen the partnership's connections with parents and children across its two-county service area.

"I really didn't know how much assistance the partnership offered," Modi said. "When I was looking for an internship, I believed in the partnership's goals and mission statement, but the level of work that's required to do the things they do blew my mind. This internship taught me that there's an invisible framework that supports parents and children in our community that, until you're a part of it, you never realize is there."

That framework provided by the Martin-Pitt Partnership for Children has stood since 1998 when the organization was founded as one of 76 Smart Start partnerships in North Carolina. The nonprofit provides families, childcare providers and early childhood educators with programs that promote kindergarten readiness, supplies access to early childhood literacy tools, help fund high quality childcare experiences, and more.

As part of her internship, Modi was responsible for researching and scouting new locations for stand-alone book lending libraries and analyzing data to determine where their placement could have the greatest impact in Martin and Pitt counties.

"One of our most expansive goals includes increasing early childhood literacy in our communities," said Amanda Parmelee, Martin-Pitt Partnership for Children community outreach director. "One way we do that is by placing stand-alone book lending libraries in areas that have shown a need for greater access to reading materials. Vedika has canvassed areas around Greenville to find new locations for our libraries, increasing the number of touch points where parents can find books that will help prepare their children for school."

Building those connections with local businesses and education leaders wasn't easy during a pandemic. Instead of working on location at the partnership's offices, Modi worked from home. Instead of meeting parents at events, she filled out spreadsheets.

"It's been difficult," Modi said. "What I envisioned for the project was so much different than what it's been. Not being able to meet with others in person is tough, but it's made me figure out how to work in a different environment.

"However, I knew I was in good hands when Amanda offered to move me back to Charlotte if we had to leave the dorms. Those are the kinds of people they have working at the partnership. They're willing to do whatever it takes to help those in the community."

"If this is going to be my community for the next four to eight years, I realized I have to give something back. I can't just be a visitor here. If you don't give back to your community, it's not really your community.

- Vedika Modi, public health and English double major



Parmelee added that the partnership takes Modi's internship role seriously because it's a sign that the SECU and ECU believe in the work the partnership is doing in the community.

"It's recognition of the importance of our mission and vision," she said. "But it's also an opportunity for students to learn about all of the great things happening in Greenville outside of ECU. Internship programs like PFI give students a sense of ownership over projects that impact their communities; it allows them to put down roots."

Those connections to her new community continue to grow for the Charlotte native.

"I've always lived in a city," Modi said. "It was a transition, but I've really found myself loving it here. If this is going to be my community for the next four to eight years, I realized I have to give something back.

"I can't just be a visitor here. If you don't give back to your community, it's not really your community."

The SECU Public Fellows Internship program at ECU connects the university and regional communities through projects that address community-identified priorities. Students are placed in government and nonprofit positions that allow them to develop leadership, analytical, problem solving, communication and project management skills.

RETHINKING SCIENCE EDUCATION: MCS TO BENEFIT FROM GRANT



BY SARAH STALLS
THE ENTERPRISE
JANUARY 21, 2023

https://www.reflector.com/enterprise/features/school_news/rethinking-science-education-mcs-to-benefit-from-grant/article_6282324d-56e9-5061-a203-643928ce667b.html

A recently received grant will allow some Martin County Schools' science educators to meet students outside the traditional classroom box.

The Center for Inquiry-Based Learning (CIBL) has been awarded a \$25,000 Ribbon of Hope Grant from the North Carolina GlaxoSmithKline Foundation.

The award will be used to fund a hands-on science initiative in Martin County for two years. Students in grades four through eight will be the beneficiaries.

CIBL's innovative project combines its signature inquiry-based science with citizen science, which includes connections to science researchers throughout the state and the United States.

"This grant will provide our students with hands-on examples and activities that will support science vocabulary along with key science concepts that are taught in the classroom," explained Cliff Hudson, previous STEM Coordinator for Martin County Schools.

The science teacher turned administrator applied for this opportunity prior to transitioning roles.

Thanks to this grant, science is not the only thing on which students will be educated. Critical thinking skills will be tested and developed.

"These student activity packs also focus on scientific inquiry, which will require our students to think critically along with written communication and ask, 'I wonder' statements," Hudson said.

"Stronger critical thinking will better prepare our students for test taking along with preparing them to be successful in the working world," explained Hudson.

"Inquiry-based learning helps students make their own connections about what they are learning, and their curiosity helps them engage and gain a deeper understanding of topics and content," he concluded.

CIBL contributed funding to support initial teacher training, which began on January 5 and 6. This is in addition to ongoing science coaching and implementation support.

“CIBL’s mission has always been to support North Carolina teachers with the most engaging, integrated, hands-on STEM curriculum and through this amazing project we are able to do just that in Martin County,” said Rachael Polmanteer, CIBL’s Resource Development Director.

“We are thankful for this opportunity and look forward to the students being able to experience hands-on science and participate in real scientific research through citizen science,” Polmanteer added.

Maggie Balengia, a science teacher at South Creek Middle School, attended the initial training, which used the same kits the students will be using.

“This grant will provide my eighth graders an opportunity to see the science they have been learning about in action; and get a real-life example or experience of the content covered to make the content come to life,” she explained.

When asked what the biggest benefit of this initiative may be, Balengia responded, “[Students] will see the real-world implications of what we learn about in the classroom and understand that the science we go over is not abstract/imaginary.”

Cristy Johnson, a teacher from Jamesville Elementary School, also took part in the training and is ready to get her students working on the material.

“I’m excited for the hands-on activities/lessons that are ready for me to implement with my kids,” Johnson said, expressing additional excitement over the fact she does not have to search, find, gather and buy materials for such activities,” Johnson said. “I would love more, and I haven’t even been given the first one yet for them to use.”

The North Carolina GlaxoSmithKline Foundation is an independent self-funding 501© 3 nonprofit organization supporting activities that help meet the educational and health needs of today’s society and future generations. Since its creation in 1986, the foundation has granted over \$88 million to support North Carolina projects and programs emphasizing the understanding and application of science, health, and education at all academic and professional levels. Visit their website at www.NCGSKFoundation.org.

CIBL is a North Carolina nonprofit with a mission to support North Carolina K-8 teachers with training and the most engaging, integrated, hands-on STEM curriculum materials that promote creativity, collaboration and communication. For more information, visit their website at www.CIBLearning.org.

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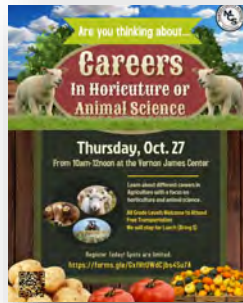
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- ⇒ National Beef Quality Assurance Cow/Calf or Feedyard Certification
- ⇒ National SafeTractor & Machinery Operation Certification
- ⇒ Certified Welders Certification
- ⇒ Intuit Quickbooks Certified User
- ⇒ Conover Credential Workplace Readiness
- ⇒ Express Employment Professionals Career Preparedness Certification
- ⇒ Adobe Certified Professional (Illustrator, Photoshop, InDesign, and Premiere Pro)
- ⇒ FAA Trust
- ⇒ NCCDOT NC UAS Operator Permit/CFR 14 Part 107 UAS Remote Pilot Certification



The mission of Career and Technical Education (CTE) is to empower students to be successful citizens, workers, and leaders in a global economy. CTE programs benefit students through hands-on experience in future majors/career fields, allowing students the opportunity to explore their interests, and giving students the chance the ability to think creatively and problem solve.

WORK-BASED LEARNING (WBL): WBL includes opportunities that allow schools to go beyond the classroom and into the community to develop student competencies. Such opportunities include:

- Internships
- Job Shadowing
- Career Fairs
- Guest Speakers
- College Tours
- Business Tours



STUDENT CLUBS: Students who participate in Career & Technical Student Organizations (CTSOs) demonstrate higher levels of academic engagement, career self efficiency, and employability skills than other students, and the more students participate in CTSO activities, the better the results. It's the fun part!

For more information...

Kristy Christenberry, 252-792-8812/kchristenberry@martin.k12.nc.us

FIND YOUR PATHWAY TO SUCCESS IN CTE.....

MARTIN COUNTY SCHOOLS



Engaging Hands On Learning,
Articulated Credit to MCC and
Credentialing Opportunities

Career & Technical Education

Career and Technical Education is an educational model that helps students discover their skills and passions related to career development. CTE aligns secondary and post-secondary education to labor market demand and provides students with the technical, academic, and employability knowledge and skills they need for success.



WHO TAKES CTE CLASSES?

Students who:

- Want to have hands-on experience in their future career
- Want a head start with work-based learning
- Want tuition free courses that are costly after graduation
- Want a well paying job
- Want skills to be successful in college
- Want to explore careers and special interests

CHOOSING YOUR FUTURE CAREER PATH

- What interests me most?
- What am I good at?
- What are my favorite subjects in school?
- What values are important to me?
- What are my career interests?

HERE ARE THE FACTS

- **DROPOUT PREVENTION:** CTE students are more motivated and interested in their coursework because of its connection to the real world.
- **BETTER CAREER PROSPECTS:** CTE students participate in programs that lead to employment in high-skill, high-wage, high demand occupations or professions.
- **CREDENTIALING:** Students can earn various credentials to be more marketable in the employment arena .
- **COLLEGE CREDIT:** Students who enroll at a community college within two years of their high school graduation date can receive college credit for specified courses but must meet given criteria. (Articulated Credit)
- **CREDIT BY DEMONSTRATED MASTERY:** Students can earn various credentials in CTE by successfully challenging the CTE Proof of Learning and presenting a project.



CTE COURSE OFFERINGS:

ADVANCED MANUFACTURING:

- Advanced Manufacturing I[^] & II[^]

AGRICULTURE:

- Animal Science I[^]
- Animal Science II Companion Animal
- Animal Science II Food Animal Honors[^]
- Agricultural Mechanics I[^] & II Honors[^]

BUSINESS, FINANCE, AND INFORMATION TECHNOLOGY:

- Business Essentials (previously POB&F)
- Business Management I & II
- Google Productivity Suite[^]
- Accounting I[^]
- Adobe Visual Design I[^] & II[^]
- Adobe Video Design[^]

CAREER DEVELOPMENT/STEM:

- Career Management[^]/STEM

DRONE TECHNOLOGY:

- Drone Fundamentals & Drone Technology I[^]

FAMILY & CONSUMER SCIENCES:

- Food & Nutrition I[^] & II[^]
- Culinary Arts I[^]
- Principles of Family & Human Services

HEALTH SCIENCE:

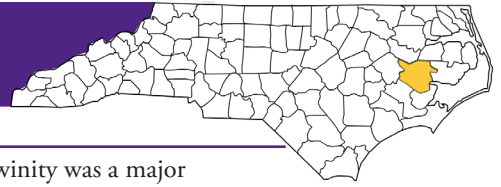
- Health Science I[^] & II[^]
- Biomedical Technology
- Nursing Fundamentals Honors[^] & Pharmacy Tech. Honors[^]

MIDDLE SCHOOL COURSES:

- Computer Skills and Applications/Exploring Careers
- STEM 101/Exploring Careers

[^] Course has a credentialing opportunity

BEAUFORT COUNTY



ABOUT

Established in 1705 out of Bath County, Beaufort County received its formal name in 1712 from the Duke of Beaufort, Henry Somerset. Washington, named after President George Washington, serves as the county seat. The county also includes North Carolina's oldest town, Bath, which was established in 1705.

Other communities located in Beaufort County include Aurora, Belhaven, Chocowinity, Pantego, River Road, and Washington Park.

Natural water features, including the Tar and Pamlico rivers and the Pamlico Sound, played key roles in developing Beaufort County's early economy. The county served as an early port during the 18th

century and Chocowinity was a major railroad hub of the Norfolk Southern Railway in the early 1900s.

Beaufort County was also the home of ECU's fifth president, John Decatur Messick. Other notable residents include American Revolutionary War Colonel James Bonner, former NBA player Richard Coffey, and Willie Williams, who served as the Vice President and CIO of the Navy-Marine Corps Relief Society.

Beaufort County's historical and cultural attractions include the Bath Historic District, the Beaufort County Courthouse, and the Bonner House.

DEMOGRAPHICS ^{1,2}



POPULATION:

46,994

NC RANKING:

55th

*ranked HIGH to LOW out of 100 counties

	COUNTY	NC AVG	US AVG
BLACK	25%	21%	13%
WHITE	72%	69%	73%
HISPANIC	8%	9%	18%
MEDIAN AGE	46	39	38
RENT ≥ 30% INCOME	44%	41%	51%
FAMILIES HEADED BY A FEMALE	32%	29%	28%
PROJECTED 2025 POPULATION	47,128	11.1M	337.2M

EDUCATION ^{3,4,5,6}



HIGH SCHOOL GRADUATION RATE:

89%

NC: 86% | US: 86%



THIRD GRADERS READING AT GRADE LEVEL:

46%

NC: 57% | US: 68%

	COUNTY	NC AVG	US AVG
STUDENT EXPENDITURE K-12	\$10,071	\$9,377	\$12,201
STUDENTS RECEIVING FREE OR REDUCED LUNCH	96%	58%	77%

COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:
Beaufort County Community College

HEALTH ^{1,5,8}



PRIMARY CARE PHYSICIANS PER 10,000:

4

NC: 8 | US: 26

	COUNTY	NC AVG	US AVG
DENTISTS PER 10,000	4	5	8
GROCERY STORES PER 10,000	2	19	21
CANCER INCIDENCE PER 10,000	41	47	44
HEART DISEASE DEATHS PER 10,000	18	16	20
UNINSURED ADULTS	12%	11%	9%
OBESITY	31%	33%	42%

ECONOMY ^{1,2}



MEDIAN HOUSEHOLD INCOME:

\$45,212

NC RANKING:

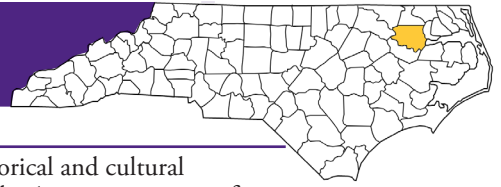
53rd

*ranked HIGHEST to LOWEST out of 100 counties

	COUNTY	NC AVG	US AVG
UNEMPLOYED	5%	4%	4%
LIVE IN POVERTY	19%	15%	13%

LARGEST EMPLOYER: Beaufort County Schools

BERTIE COUNTY



ABOUT


Established in 1722 from Chowan County, Bertie County was named in honor of two of the first Lord Proprietors of North Carolina, Henry and James Bertie. Windsor serves as the county seat.



Other communities located in Bertie County include Aulander, Colerain, Indian Woods, Lewiston Woodville, and Roxobel.


Bertie County includes the Chowan, Roanoke, and Cashie rivers, giving the area rich, fertile farmland. Early land was settled by the Tuscaroras before the 1711 Tuscarora War between the tribe and English settlers.

Bertie County's historical and cultural attractions include the American version of Windsor Castle, Hope Plantation, the Sans Souci Ferry, the King-Bazemore House, and a local zoo. The American version of Windsor Castle was at one time the home of George T. Winston, who later became president of the University of North Carolina at Chapel Hill, North Carolina State University, and the University of Texas.

The county hosts several events and festivals, including Chicken on the Cashie, a Fun Day in the Park at Windsor, and the Tee and Sea Festival.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 18,947 NC RANKING: 84th *ranked HIGH to LOW out of 100 counties</p>	BLACK	62%	21%	13%
	WHITE	35%	69%	7%
	HISPANIC	2%	9%	18%
	MEDIAN AGE	45	39	38
	RENT ≥ 30% INCOME	39%	38%	41%
	FAMILIES HEADED BY A FEMALE	40%	29%	28%
	PROJECTED 2025 POPULATION	18,930	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 84% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 70% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$11,325	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	100%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 5 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	45	47	44
	HEART DISEASE DEATHS PER 10,000	17	16	20
	UNINSURED ADULTS	12%	11%	9%
	OBESITY	34%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$35,527 NC RANKING: 97th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	23%	15%	13%
	LARGEST EMPLOYER:	Perdue Farms Incorporated		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

CAMDEN COUNTY



ABOUT

Established in 1777 out of Pasquotank County, Camden County was named for Charles Pratt, First Lord Camden. The city of Camden serves as the county seat.


Other communities located in Camden County include Old Trap, Shiloh, and South Mills.



Camden County is an attractive destination for naturalists, featuring a variety of activities for boaters, fishers, and swimmers. The county is home to the Great Dismal Swamp, which covers 175


square miles along the Virginia border.

The preservation is one of the most important sanctuaries for black bears in the eastern United States and serves as a breeding ground for migratory song birds.

Camden County's historical and cultural attractions include the Camden County Courthouse, the Milford Historic House, the Sanderlin-Prichard House, and the Shiloh Baptist Church.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 10,867 NC RANKING: 96th *ranked HIGH to LOW out of 100 counties</p>	BLACK	14%	21%	13%
	WHITE	83%	69%	73%
	HISPANIC	3%	9%	18%
	MEDIAN AGE	41	39	38
	RENT ≥ 30% INCOME	42%	38%	41%
	FAMILIES HEADED BY A FEMALE	24%	29%	28%
	PROJECTED 2025 POPULATION	10,585	11.1M	337.2M

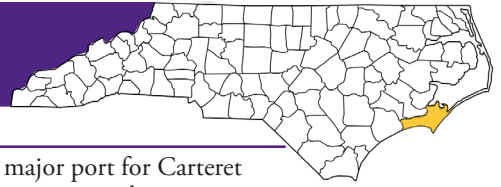
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 86% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 59% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$9,806	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	22%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 2 NC: 8 US: 26</p>	DENTISTS PER 10,000	0	5	8
	GROCERY STORES PER 10,000	0	19	21
	CANCER INCIDENCE PER 10,000	35	47	44
	HEART DISEASE DEATHS PER 10,000	20	16	20
	UNINSURED ADULTS	8%	11%	9%
	OBESITY	20%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$64,572 NC RANKING: 8th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	9%	15%	13%
LARGEST EMPLOYER:		Camden County Board of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

CARTERET COUNTY



ABOUT

Established in 1772 out of Craven County, Carteret County is named in honor of the Earl of Granville and Lord Proprietor of North Carolina, Sir John Carteret. Beaufort, the third oldest town in North Carolina, serves as the county seat.


Other communities located in Carteret County include Atlantic Beach, Cedar Point, Emerald Isle, Morehead City, Newport, and Pine Knoll Shores.


Carteret County had a diverse group of early inhabitants, including the native Tuscarora, as well as German, French, Quaker, and Scotch-Irish settlers.


Beaufort served as a major port for Carteret County in its early history, as industries in the county produced tobacco, meat, and fish.

The county also produced pitch, rosin, tar, and turpentine for shipbuilding. In 1858, Morehead City was established as a railroad town, creating the county's greatest economic draw that remains the same today – tourism.

Carteret County's historical and cultural attractions include Cape Lookout National Seashore, Cedar Island National Wildlife Refuge, Croatan National Forest, and Fort Macon State Park.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 69,473 NC RANKING: 39th *ranked HIGH to LOW out of 100 counties</p>	BLACK	5%	21%	13%
	WHITE	90%	69%	73%
	HISPANIC	4%	19%	18%
	MEDIAN AGE	49	39	38
	RENT ≥ 30% INCOME	36%	38%	41%
	FAMILIES HEADED BY A FEMALE	27%	29%	28%
	PROJECTED 2025 POPULATION	73,594	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 86% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,954	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	73%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 82% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Carteret Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 7 NC: 8 US: 26</p>	DENTISTS PER 10,000	5	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	49	47	44
	HEART DISEASE DEATHS PER 10,000	16	16	20
	UNINSURED ADULTS	11%	11%	9%
	OBESITY	29%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$57,194 NC RANKING: 19th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	11%	15%	13%
LARGEST EMPLOYER: Carteret County Board of Education				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

CHOWAN COUNTY



ABOUT

Chowan County, established in 1681, is one of the oldest in North Carolina. It was formed out of the Albemarle Precinct and land that was originally settled by the Weapemeoc tribe. Edenton serves as the county seat and was the site of the Edenton Tea Party – one of the earliest organized political actions by women in United States history.


Other communities located in Chowan County include Hancock, Rockyhock, Ryland, Selwin, Tyner, and Valhalla.



Chowan County's historical and cultural attractions include numerous historical home sites that stand at over 200 years old


and the Chowan County Courthouse – the oldest courthouse in North Carolina.

The county is also home to the second oldest church building in North Carolina, St. Paul's Episcopal Church, built in 1736.

The county boasts scenic attractions including Bear Swamp, Bluff Point, Cherry Point, Dillard Millpond, and Edenton Bay. Chowan County also hosts the Edenton Christmas Candlelight Tour, the Edenton Peanut Festival, and the Edenton Tea Party Celebration.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 13,943 NC RANKING: 89th *ranked HIGH to LOW out of 100 counties</p>	BLACK	35%	21%	13%
	WHITE	62%	69%	73%
	HISPANIC	4%	9%	18%
	MEDIAN AGE	46	39	38
	RENT ≥ 30% INCOME	31%	38%	41%
	FAMILIES HEADED BY A FEMALE	31%	29%	28%
	PROJECTED 2025 POPULATION	13,905	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 92% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 56% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$10,980	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	62%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: College of the Albemarle Edenton - Chowan Campus			

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 10 NC: 8 US: 26</p>	DENTISTS PER 10,000	5	5	8
	GROCERY STORES PER 10,000	1	19	21
	CANCER INCIDENCE PER 10,000	42	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	9%	11%	9%
	OBESITY	27%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$46,519 NC RANKING: 61st *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	16%	15%	13%
LARGEST EMPLOYER: Edenton-Chowan Schools				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

CRAVEN COUNTY



ABOUT


Established in 1712 out of Bath County, Craven County was named for Carolina Lord Proprietor Earl of Craven. New Bern serves as the county seat. In early North Carolina history, New Bern served as the capital of the state until Raleigh became the permanent center of government in 1788.


Other communities located in Craven County include Cove City, Dover, Havelock, and Vanceboro. The county also includes a number of bodies of water, including Catfish Lake, the Neuse River, and the Palmetto Swamp.


Craven County is the home of Pepsi-Cola. Pepsi was developed in New Bern by pharmacist Caleb Bradham who sold the drink to his

customers as “Brad’s Drink.” The county is also home to the state’s first newspaper, the *North-Carolina Gazette*, which was first printed in 1751.

Craven County’s historical and cultural attractions include the Atlantic Dance Theater, the Fireman’s Museum, the New Bern Civic Theatre, the Tryon Palace historical site, and Union Point Park. The county also hosts the Bridgeton Blueberry Festival, the Chrysanthemum Festival, and the Festival of Colonial Life.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 102,139 NC RANKING: 27th *ranked HIGH to LOW out of 100 counties</p>	BLACK	22%	21%	13%
	WHITE	70%	69%	73%
	HISPANIC	7%	9%	18%
	MEDIAN AGE	37	39	38
	RENT ≥ 30% INCOME	37%	38%	41%
	FAMILIES HEADED BY A FEMALE	26%	29%	28%
	PROJECTED 2025 POPULATION	102,434	11.1M	337.2M

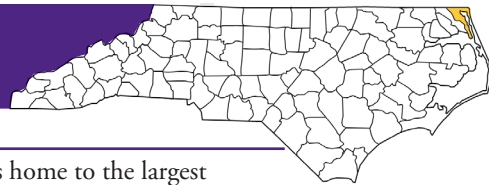
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 87% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,430	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	66%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 45% NC: 57% US: 68%	<p>COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Craven Community College</p>		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 8 NC: 8 US: 26</p>	DENTISTS PER 10,000	5	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	50	47	44
	HEART DISEASE DEATHS PER 10,000	17	16	20
	UNINSURED ADULTS	11%	11%	9%
	OBESITY	27%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$52,687 NC RANKING: 36th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	15%	15%	13%
<p>LARGEST EMPLOYER: Department of Defense</p>				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

CURRITUCK COUNTY




ABOUT


Established in 1668 as precinct of Albemarle County, Currituck County is named for the Native American word “Coratank,” which means wild geese. The city of Currituck serves as the county seat. Currituck County is the northeastern-most county of North Carolina and was one of the state’s first colonial ports.


Other communities located in Currituck County include Coinjock, Corolla, Knotts Island, Sligo, and Tulls Creek.

Currituck County is home to the largest population of Banker ponies, which descend from Spanish mustangs. Historians believe the mustangs were brought to North Carolina in the 1500s on a Spanish expedition.

The county is also home to the Currituck National Wildlife Refuge and is an important vacation spot for sportsmen and outdoor admirers.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 27,763 NC RANKING: 72nd *ranked HIGH to LOW out of 100 counties</p>	BLACK	6%	21%	13%
	WHITE	90%	69%	73%
	HISPANIC	4%	9%	18%
	MEDIAN AGE	43	39	38
	RENT ≥ 30% INCOME	45%	38%	41%
	FAMILIES HEADED BY A FEMALE	19%	29%	28%
	PROJECTED 2025 POPULATION	29,980	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 95% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,770	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	29%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 61% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: College of the Albemarle's Regional Aviation and Technical Training Center		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 2 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	4	19	21
	CANCER INCIDENCE PER 10,000	32	47	44
	HEART DISEASE DEATHS PER 10,000	21	16	20
	UNINSURED ADULTS	13%	11%	9%
	OBESITY	26%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$69,964 NC RANKING: 5th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	10%	15%	13%
LARGEST EMPLOYER: Currituck County Board of Education				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

DARE COUNTY



ABOUT


Established in 1870 and named after Virginia Dare, America's first English-born child in the colonies, Dare County was established out of Tyrrell, Hyde, and Currituck counties. Manteo serves as the county seat, receiving its name from a Croatoan Indian who helped establish the Roanoke Island Colony.



Other communities located in Dare County include Kitty Hawk, Nags Head, Wanchese, Kill Devil Hills, and Southern Shores.


Dare County, part of North Carolina's Outer Banks, has 85 miles of uninterrupted coastline. The county is also home to the infamous Lost Colony, established in 1585 by Sir Walter Raleigh.

The first successful flight by Wilbur and Orville Wright occurred at Kill Devil Hills in 1903. The brother's accomplishment is memorialized at the Wright Brothers National Memorial.

Historical and cultural attractions in Dare County include the Cape Hatteras National Seashore, the Fort Raleigh National Historic Site, the North Carolina Aquarium, and the Pea Island National Wildlife Refuge.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 37,009 NC RANKING: 66th *ranked HIGH to LOW out of 100 counties</p>	BLACK	3%	21%	13%
	WHITE	93%	69%	73%
	HISPANIC	8%	9%	18%
	MEDIAN AGE	47	39	38
	RENT ≥ 30% INCOME	44%	38%	41%
	FAMILIES HEADED BY A FEMALE	25%	29%	28%
	PROJECTED 2025 POPULATION	39,864	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 95% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 69% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$11,564	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	35%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: College of the Albemarle - Dare County Campus College of the Albemarle - Roanoke Island Campus			

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 9 NC: 8 US: 26</p>	DENTISTS PER 10,000	5	5	8
	GROCERY STORES PER 10,000	5	19	21
	CANCER INCIDENCE PER 10,000	42	47	44
	HEART DISEASE DEATHS PER 10,000	15	16	20
	UNINSURED ADULTS	13%	11%	9%
	OBESITY	26%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$59,381 NC RANKING: 15th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	9%	15%	13%
LARGEST EMPLOYER:		Dare County Schools		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

DUPLIN COUNTY



ABOUT


Established in 1750 out of New Hanover County, Duplin County was named for Sir Thomas Hay, Viscount of Dupplin, who served on the Board of Trade and Plantations. Kenansville serves as the county seat.


Other communities located in Duplin County include Beulaville, Calypso, Magnolia, Rose Hill, Wallace, and Warsaw. The county is known for its water features, including the Cape Fear River, Maxwell Millpond, Muddy Creek, and Picadilly Bay.


The county's early economy revolved around its tar and pitch industries. Today, Duplin County's agricultural industry sustains

its economy with a focus on cotton, corn, tobacco, and textiles. The county is also home to North Carolina's oldest winery – Duplin Winery – which was established in the 1970s and sells 450,000 cases of wine annually.

Duplin County's historical and cultural attractions include the Cowan Museum, Dickson Farm, Liberty Hall Plantation, and the Kenansville Historic District. The county hosts an annual beach music festival.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 58,741 NC RANKING: 48th *ranked HIGH to LOW out of 100 counties</p>	BLACK	24%	21%	13%
	WHITE	71%	69%	73%
	HISPANIC	22%	9%	18%
	MEDIAN AGE	41	39	38
	RENT ≥ 30% INCOME	37%	38%	41%
	FAMILIES HEADED BY A FEMALE	29%	29%	28%
	PROJECTED 2025 POPULATION	60,720	11.1M	337.2M

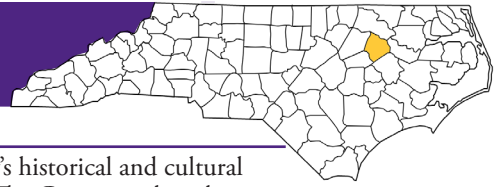
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 84% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,664	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	97%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 52% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: James Sprunt Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 3 NC: 8 US: 26</p>	DENTISTS PER 10,000	2	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	41	47	44
	HEART DISEASE DEATHS PER 10,000	16	16	20
	UNINSURED ADULTS	17%	11%	9%
	OBESITY	25%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$41,764 NC RANKING: 75th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	21%	15%	13%
LARGEST EMPLOYER: Butterball, LLC				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

EDGECOMBE COUNTY





ABOUT


Established in 1741, Edgemcombe County was named for Richard Edgemcombe, a member of British Parliament and a Lord of Treasury. Tarboro serves as the county seat. It is the state's ninth oldest incorporated town. The oldest town incorporated by African Americans, Princeville, is also found in Edgemcombe County.

The largest city in Edgemcombe County is Rocky Mount, home to Hardee's and Rocky Mount Instruments. Other communities located in Edgemcombe County include Conetoe, Leggett, Macclesfield, Pinetops, Princeville, Sharpsburg, Speed, and Whitakers.

Edgemcombe County's historical and cultural attractions include The Grove, a colonial-era plantation and former residence of American Revolutionary War veteran and North Carolina statesman Thomas Blount, and the historic Tarboro Town Common — a large park that includes several memorials.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 51,472 NC RANKING: 53rd *ranked HIGH to LOW out of 100 counties</p>	BLACK	58%	21%	13%
	WHITE	39%	69%	73%
	HISPANIC	5%	9%	18%
	MEDIAN AGE	42	39	38
	RENT ≥ 30% INCOME	41%	38%	41%
	FAMILIES HEADED BY A FEMALE	38%	29%	28%
	PROJECTED 2025 POPULATION	49,798	11.1M	337.2M

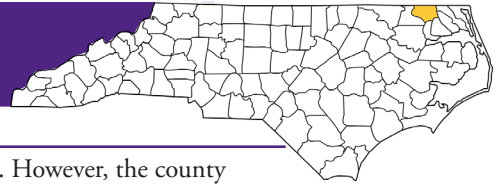
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 83% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,863	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	90%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 77% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Edgemcombe Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 4 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	44	47	44
	HEART DISEASE DEATHS PER 10,000	20	16	20
	UNINSURED ADULTS	10%	11%	9%
	OBESITY	21%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$36,866 NC RANKING: 87th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	6%	4%	4%
	LIVE IN POVERTY	24%	15%	13%
LARGEST EMPLOYER: City Of Rocky Mount				

SOURCES: ¹ NC Health Data Explorer ² NCIOM ³ NC School Report Cards ⁴ NC Office of State Budget and Management ⁵ NC DPI Statistical Profile State Per Pupil Expenditure 2016-17 | "About" information provided by the North Carolina History Project

GATES COUNTY



ABOUT


Established in 1779 out of Chowan, Hertford, and Perquimans counties, Gates County was named for Revolutionary War hero General Horatio Gates. Gatesville serves as the county seat.


Other communities located in Gates County include Hall, Haslett, Holly Grove, Hunters Mill, Mintonville, and Reynoldson.


Gates County is known for its religious history, including Middle Swamp Baptist Church and Savage's United Methodist Church – two churches that preached to integrated congregations until the

American Civil War. However, the county was also the first in the state to summon a military company to aid the Confederates after North Carolina seceded from the Union.

Gates County's historical and cultural attractions include the Gates County Courthouse, the Great Dismal Swamp Canal, Merchants Millpond State Park — which is famous for its cypress trees — and Reid's Grove School, a historic Rosenwald school.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 11,562 NC RANKING: 93rd *ranked HIGH to LOW out of 100 counties</p>	BLACK	33%	21%	13%
	WHITE	63%	69%	73%
	HISPANIC	1%	9%	18%
	MEDIAN AGE	47	39	38
	RENT ≥ 30% INCOME	33%	38%	41%
	FAMILIES HEADED BY A FEMALE	25%	29%	28%
	PROJECTED 2025 POPULATION	11,750	11.1M	337.2M

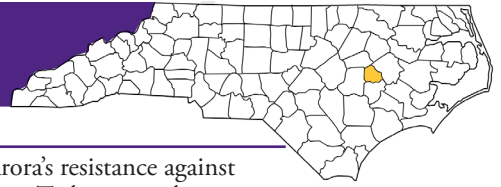
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 94% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$11,340	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	49%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 55% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 0 NC: 8 US: 26</p>	DENTISTS PER 10,000	0	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	29	47	44
	HEART DISEASE DEATHS PER 10,000	15	16	20
	UNINSURED ADULTS	7%	11%	9%
	OBESITY	23%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$50,750 NC RANKING: 32nd *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	14%	15%	13%
LARGEST EMPLOYER:		Gates County Board of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

GREENE COUNTY



ABOUT


Originally named Glasgow County after Secretary of State James Glasgow, Greene County was established in 1791 out of Dobbs County, honoring General Nathanael Greene after Glasgow was charged with making fraudulent land grants. Snow Hill serves as the county seat.


Other communities located in Greene County include Hookerton, Maury, and Walstonburg.


The main assault of the Tuscarora War occurred in modern day Greene County, as Colonel Maurice Moore set fire to the Tuscarora's Fort Neoheroke (or Nooherooka) in 1713. The fall of the fort led to

the end of the Tuscarora's resistance against invading white settlers. Today, agriculture remains the largest industry in Greene County, along with livestock production.

Greene County's historical and cultural attractions include the Greene County Courthouse, the Neoheroke Fort Site, and the Zachariah School, a historic Rosenwald School.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 21,069 NC RANKING: 80th *ranked HIGH to LOW out of 100 counties</p>	BLACK	35%	21%	13%
	WHITE	60%	69%	73%
	HISPANIC	15%	9%	18%
	MEDIAN AGE	41	39	38
	RENT ≥ 30% INCOME	45%	38%	41%
	FAMILIES HEADED BY A FEMALE	32%	29%	28%
	PROJECTED 2025 POPULATION	20,844	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 91% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$10,370	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	97%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 40% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 3 NC: 8 US: 26</p>	DENTISTS PER 10,000	3	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	43	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	17%	11%	9%
	OBESITY	21%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$39,837 NC RANKING: 77th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	23%	15%	13%
LARGEST EMPLOYER:		North Carolina Department of Public Safety		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

HALIFAX COUNTY




ABOUT


Established in 1758, Halifax County was named for the Earl of Halifax and President of the British Board of Trade and Plantations, George Montagu-Dunk. The town of Halifax serves as the county seat. Halifax County is best known as the home of the 1776 Halifax Resolves, which allowed North Carolina delegates at the Second Continental Congress to work with other colonial delegates in their efforts to break free from British rule.


Other communities located in Halifax County include Brinkleyville, Butterwood, Conoconnara, Enfield, Faucett, Littleton, Palmyra, Roanoke Rapids, Roseneath, Scotland Neck, and Weldon.

Cash-crops (tobacco, cotton, and others sold commercially) were the basis of a once-thriving economy in Halifax County. Industrialization and advances in transportation, including the railroad, decreased reliance on moving goods by rivers, like the Roanoke, which runs through Halifax County.

Halifax County's historical and cultural sites include natural attractions such as Lake Gaston and Medoc Mountain State Park. Halifax County also hosts Halifax Day, which is a celebration of the Halifax Resolves.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 50,010 NC RANKING: 54th *ranked HIGH to LOW out of 100 counties</p>	BLACK	53%	21%	13%
	WHITE	41%	69%	73%
	HISPANIC	3%	9%	18%
	MEDIAN AGE	43	39	38
	RENT ≥ 30% INCOME	43%	38%	41%
	FAMILIES HEADED BY A FEMALE	38%	29%	28%
	PROJECTED 2025 POPULATION	48,859	11.1M	337.2M

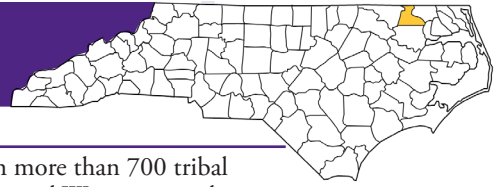
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 84% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$13,777	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 40% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Halifax Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 6 NC: 8 US: 26</p>	DENTISTS PER 10,000	2	5	8
	GROCERY STORES PER 10,000	4	19	21
	CANCER INCIDENCE PER 10,000	47	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	12%	11%	9%
	OBESITY	31%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$35,502 NC RANKING: 96th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	6%	4%	4%
	LIVE IN POVERTY	26%	15%	13%
		LARGEST EMPLOYER: Halifax Regional Medical Center		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

HERTFORD COUNTY



ABOUT


Established in 1759 out of Chowan, Bertie, and Northampton counties, Hertford County was named in honor of Francis Seymour-Conway, the Marquess of Hertford, England. Winton serves as the county seat.



Other communities located in Hertford County include Ahoskie, Como, Harrellsville, and Murfreesboro.


Soil and water resources in Hertford County sustained its early inhabitants. The Tuscarora, Chowanoc, and Meherrin tribes lived in the region and the Meherrin tribe is recognized by the state of

North Carolina with more than 700 tribal members residing around Winton near the Meherrin River.

Hertford County's historical and cultural attractions include the John Wheeler House, the Murfreesboro Historic District, and the William Rea Store in Murfreesboro – one of the oldest commercial buildings in North Carolina. Hertford County is also home to Chowan University, established in 1848.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 23,677 NC RANKING: 76th *ranked HIGH to LOW out of 100 counties</p>	BLACK	59%	21%	13%
	WHITE	35%	69%	73%
	HISPANIC	4%	9%	18%
	MEDIAN AGE	42	39	38
	RENT ≥ 30% INCOME	43%	38%	41%
	FAMILIES HEADED BY A FEMALE	39%	29%	28%
	PROJECTED 2025 POPULATION	23,349	11.1M	337.2M

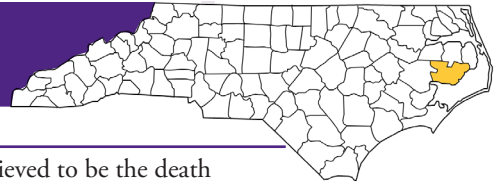
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 86% NC: 88% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 52% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$11,190	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Roanoke-Chowan Community College Chowan University			

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 10 NC: 8 US: 26</p>	DENTISTS PER 10,000	2	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	37	47	44
	HEART DISEASE DEATHS PER 10,000	16	16	20
	UNINSURED ADULTS	11%	11%	9%
	OBESITY	35%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$41,028 NC RANKING: 82nd *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	22%	15%	13%
LARGEST EMPLOYER: Vidant Medical Center				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

HYDE COUNTY



ABOUT


Established in 1705 out of Bath County, Hyde County was chartered as Wickham Precinct before becoming Hyde Precinct seven years later. The precinct's name was officially changed to Hyde County in 1739 after Bath County was abolished. Swan Quarter serves as the county seat.



Other communities located in Hyde County include Engelhard, Fairfield, Germantown, Last Chance, Nebraska, Ocracoke, Scranton, and Stumpy Point.


While Hyde County's population is just 5,757, the county draws many tourists. Ocracoke hosts the largest number of visitors, as tourists come to see its lighthouse and location on the Outer Banks.

Ocracoke is also believed to be the death place of famed pirate Blackbeard, who used North Carolina's waterways to hide from the British Navy.

The county is also recognized for its four wildlife refuges, including the Alligator River, Mattamuskeet, Pocosin Lakes, and Swanquarter National Wildlife Refuge. Fishing, boating, and other recreational activities are prevalent in the county.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 4,937 NC RANKING: 99th *ranked HIGH to LOW out of 100 counties</p>	BLACK	30%	21%	13%
	WHITE	67%	69%	73%
	HISPANIC	10%	9%	18%
	MEDIAN AGE	41	39	38
	RENT ≥ 30% INCOME	52%	38%	41%
	FAMILIES HEADED BY A FEMALE	29%	29%	28%
	PROJECTED 2025 POPULATION	4,975	11.1M	337.2M

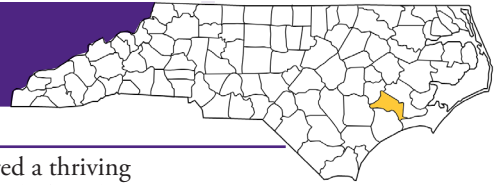
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 91% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 58% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$18,802	\$9,337	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 6 NC: 8 US: 26</p>	DENTISTS PER 10,000	0	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	39	47	44
	HEART DISEASE DEATHS PER 10,000	20	16	20
	UNINSURED ADULTS	17%	11%	9%
	OBESITY	22%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$39,663 NC RANKING: 79th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	9%	4%	4%
	LIVE IN POVERTY	24%	15%	13%
	LARGEST EMPLOYER:	Hyde County Board of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

JONES COUNTY




ABOUT



Established in 1779 out of Craven County, Jones County was named for aristocrat and anti-federalist Willie Jones. Trenton serves as the county seat.


Other communities located in Jones County include Maysville, Pleasant Hill, and Pollocksville. The county is also known for the Trent River, named after the Trent River in England; the Great Dover Swamp, which covers much of the northern portion of the county; and Hofmann Forest, the nation's largest forest laboratory.

Jones County featured a thriving agricultural economy before the American Civil War, but many farms and plantations were destroyed during the war. Tobacco and lumber farmers carry on Jones County's farming tradition today.

Jones County's historical and culture attractions include the Foscue Plantation House, the Grace Episcopal Church, the John Franck House, and the Lavender-Barrus House.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 9,419 NC RANKING: 97th *ranked HIGH to LOW out of 100 counties</p>	BLACK	31%	21%	13%
	WHITE	66%	69%	73%
	HISPANIC	5%	9%	18%
	MEDIAN AGE	49	39	38
	RENT ≥ 30% INCOME	42%	38%	41%
	FAMILIES HEADED BY A FEMALE	31%	29%	28%
	PROJECTED 2025 POPULATION	10,012	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 95% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$14,040	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	59%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		
 <p>THIRD GRADERS READING AT GRADE LEVEL: 55% NC: 57% US: 68%</p>				

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 5 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	47	47	44
	HEART DISEASE DEATHS PER 10,000	20	16	20
	UNINSURED ADULTS	16%	11%	9%
	OBESITY	24%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY</p> <p>MEDIAN HOUSEHOLD INCOME: \$38,158 NC RANKING: 67th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	25%	15%	13%
LARGEST EMPLOYER:		Jones County Board of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

LENOIR COUNTY



ABOUT


Established in 1791 out of Dobbs County, Lenoir County was named for Speaker of the Senate and Revolutionary War soldier William Lenoir. Kinston serves as the county seat.



Other communities located in Lenoir County include Deep Run, Dawson, Institute, Graingers, La Grange, and Pink Hill.


Lenoir County played a significant role in the history of the American Civil War, hosting the Battle of Kinston in 1862 and the Battle of Wyse Fork in 1865. Artifacts from the CSS Neuse,

a Confederate ironclad gunboat that was purposely sunk in the Neuse River to avoid Union capture, are also available to tour in Kinston.

Lenoir County's historical and cultural attractions include the Atlantic and North Carolina Railroad Freight Depot, the La Grange Presbyterian Church, and the Lenoir County Courthouse. Minor League Baseball's Down East Wood Ducks, a Class-A affiliate of the Texas Rangers, plays home games at Grainger Stadium in Kinston.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 55,949 NC RANKING: 50th *ranked HIGH to LOW out of 100 counties</p>	BLACK	39%	21%	13%
	WHITE	55%	69%	73%
	HISPANIC	8%	9%	18%
	MEDIAN AGE	43	39	38
	RENT ≥ 30% INCOME	39%	38%	41%
	FAMILIES HEADED BY A FEMALE	34%	29%	28%
	PROJECTED 2025 POPULATION	56,175	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 85% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 41% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$9,097	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	100%	58%	77%
	<p>COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Lenoir Community College</p>			

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 7 NC: 8 US: 26</p>	DENTISTS PER 10,000	4	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	51	47	44
	HEART DISEASE DEATHS PER 10,000	21	16	20
	UNINSURED ADULTS	13%	11%	9%
	OBESITY	28%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$39,402 NC RANKING: 91st *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	23%	15%	13%
<p>LARGEST EMPLOYER: Sanderson Farms, Inc.</p>				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

MARTIN COUNTY



ABOUT


Established in 1774 out of Halifax and Tyrrell counties, Martin County was named for Josiah Martin, the last royal governor of North Carolina. Williamston serves as the county seat.


Other communities located in Martin County include Bear Grass, Darden, Everetts, Gold Point, Hamilton, Hassell, Jamesville, Oak City, Parmele, and Robersonville.


The Roanoke River served as an important trade route through Martin County, allowing the county's industries in tar, pitch, turpentine, forest, and meat products to grow the county in its early development. Today, the county sees an influx of naturalists for

hunting and fishing recreation that the river and regional dams offer.

Martin County's historical and cultural attractions include Fort Branch, a renovated Confederate fort, the Darden Hotel, the Martin County Courthouse, and the Green Memorial Church, which in 1963 held civil rights "Freedom Rallies" for 32 days featuring over 400 protesters.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 22,440 NC RANKING: 78th *ranked HIGH to LOW out of 100 counties</p>	BLACK	42%	21%	13%
	WHITE	55%	69%	73%
	HISPANIC	4%	9%	18%
	MEDIAN AGE	46	39	38
	RENT ≥ 30% INCOME	48%	38%	41%
	FAMILIES HEADED BY A FEMALE	35%	29%	28%
	PROJECTED 2025 POPULATION	22,148	11.1M	337.2M

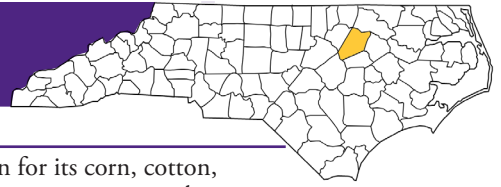
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 77% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$11,521	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	86%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 52% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Martin Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 4 NC: 8 US: 26</p>	DENTISTS PER 10,000	3	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	48	47	44
	HEART DISEASE DEATHS PER 10,000	21	16	20
	UNINSURED ADULTS	10%	11%	9%
	OBESITY	27%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$40,090 NC RANKING: 94th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	20%	15%	13%
		LARGEST EMPLOYER: Baxter Healthcare Corporation		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

NASH COUNTY




ABOUT


Established in 1777 from Edgecombe County, Nash County was named for Francis Nash, a general who served under George Washington during the Revolutionary War. Nash was killed in the Battle of Germantown in 1777 before the county was officially created. Nashville serves as the county seat.


Other communities located in Nash County include Bailey, Castalia, Middlesex, Red Oak, and Spring Hope. The county shares three towns with other counties, including Rocky Mount (Edgecombe), Sharpsburg (Edgecombe and Wilson), and Zebulon (Wake). Other natural features in the county include the Tar River, the White Oak Swamp, and the Moccasin, Swift, and Deer Branch creeks.

The county is known for its corn, cotton, cucumber, livestock, sweet potato, soybean, and tobacco production. Nash County is also the home of North Carolina Wesleyan College, which was established in 1956 and serves 1,500 students.

Nash County's historical and cultural attractions include the Country Doctor Museum, the Nash County Historical Association, The Imperial Center for the Arts and Sciences, and the Tank Theatre.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 94,298 NC RANKING: 30th *ranked HIGH to LOW out of 100 counties</p>	BLACK	41%	22%	13%
	WHITE	49%	71%	76%
	HISPANIC	7%	10%	19%
	MEDIAN AGE	42	39	38
	RENT ≥ 30% INCOME	51%	53%	51%
	FAMILIES HEADED BY A FEMALE	32%	29%	28%
	PROJECTED 2025 POPULATION	98,652	11.1M	337.2M

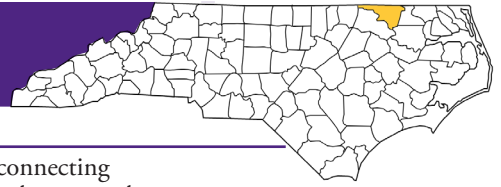
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 87% NC: 88% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,063	\$9,377	\$12,20
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	77%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 39% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Nash Community College North Carolina Wesleyan College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 6 NC: 8 US: 26</p>	DENTISTS PER 10,000	4	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	41	47	44
	HEART DISEASE DEATHS PER 10,000	19	16	20
	UNINSURED ADULTS	10%	11%	9%
	OBESITY	32%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$49,537 NC RANKING: 48th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	15%	15%	13%
	LARGEST EMPLOYER: Pfizer Hospital US			

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

NORTHAMPTON COUNTY



ABOUT

Established in 1741 out of Bertie County, Northampton County was created for travelers' convenience. Those living in the area needed better access to a courthouse. Northampton County was created to serve that need. It received its name from James Compton, Earl of Northampton.

Jackson has served as the county seat since its incorporation in 1823. Jackson was named after the seventh president of the United States, Andrew Jackson. Other communities located in Northampton County include Gaston, Garysburg, Margarettsville, Rich Square, Seaboard, Severn, and Vulture.

Northampton County was home to the first railroad to cross into the state. The track was constructed in 1833 by the Petersburg

Railroad Company, connecting Northampton to a trading post along the Roanoke River. The county is also known for its horse racing and breeding. Mowfield Plantation in Jackson sheltered the state's greatest thoroughbred horse, Sir Archie, who went on to sire racing greats Boston, Lexington, Man O'War, and Timoleon.

Northampton County's historical and cultural attractions include the Cedar Grove Quaker Meetinghouse, the Jackson Museum, the Lee-Grant Farm, the Northampton Memorial Library, and the Peebles House. The county hosts the annual Northampton County Farm Festival.

DEMOGRAPHICS ^{1,2}



POPULATION:
19,483
NC RANKING:
83rd

*ranked HIGH to LOW
out of 100 counties

	COUNTY	NC AVG	US AVG
BLACK	56%	21%	13%
WHITE	40%	69%	73%
HISPANIC	2%	9%	18%
MEDIAN AGE	50	39	38
RENT ≥ 30% INCOME	47%	38%	41%
FAMILIES HEADED BY A FEMALE	34%	29%	28%
PROJECTED 2025 POPULATION	18,529	11.1M	337.2M

EDUCATION ^{3,4,5,6}



HIGH SCHOOL GRADUATION RATE: 79%
NC: 86% | US: 86%



THIRD GRADERS READING AT GRADE LEVEL: 49%
NC: 57% | US: 68%

STUDENT EXPENDITURE K-12	\$14,317	\$9,377	\$12,201
STUDENTS RECEIVING FREE OR REDUCED LUNCH	97%	58%	77%

COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:
None

HEALTH ^{1,5,8}



PRIMARY CARE PHYSICIANS PER 10,000: 1
NC: 8 | US: 26

DENTISTS PER 10,000	1	5	8
GROCERY STORES PER 10,000	1	19	21
CANCER INCIDENCE PER 10,000	43	47	44
HEART DISEASE DEATHS PER 10,000	16	16	20
UNINSURED ADULTS	14%	11%	9%
OBESITY	21%	33%	42%

ECONOMY ^{1,4,9}



MEDIAN HOUSEHOLD INCOME: \$37,146
NC RANKING: 92nd
*ranked HIGHEST to LOWEST
out of 100 counties

UNEMPLOYED	5%	4%	4%
LIVE IN POVERTY	21%	15%	13%

LARGEST EMPLOYER: Lowes Home Centers, Inc.

ONSHOW COUNTY




ABOUT



Established in 1734 out of Carteret and New Hanover counties, Onslow County was named for Speaker of the British House of Commons Sir Arthur Onslow. The area was settled by Europeans after the Tuscarora War of 1711. Jacksonville serves as the county seat.


Other communities located in Onslow County include Holly Ridge, North Topsail Beach, Richlands, Sneads Ferry, and Swansboro. The county is also home to Camp Lejeune – a U.S. Marine Corps Base that spans 150,000 acres and has an approximate population approaching 114,000.

Onslow County's history has been marked by several military moments, including county residents participating in quelling a Tory uprising in 1776 in Wilmington, N.C.; an 1820s slave rebellion that saw eight slaves attempt to seek freedom in the Onslow County swamps; the manufacturing of ships for the War of 1812; and the growth of Camp Lejeune during World War II.

Onslow County's historical and cultural attractions include two large antebellum plantation homes – the Palo Alto and Avirett-Stephens plantations – and Alum Spring, a historic sulfur spring located at Catherine Lake.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 197,938</p> <p>NC RANKING: 13th</p> <p>*ranked HIGH to LOW out of 100 counties</p>	BLACK	14%	21%	13%
	WHITE	75%	69%	73%
	HISPANIC	13%	9%	18%
	MEDIAN AGE	26	39	38
	RENT ≥ 30% INCOME	35%	38%	41%
	FAMILIES HEADED BY A FEMALE	25%	29%	28%
	PROJECTED 2025 POPULATION	220,451	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 91%</p> <p>NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$8,678	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	44%	58%	77%
	 <p>THIRD GRADERS READING AT GRADE LEVEL: 37%</p> <p>NC: 57% US: 68%</p>	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Coastal Carolina Community		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 4</p> <p>NC: 8 US: 26</p>	DENTISTS PER 10,000	4	5	8
	GROCERY STORES PER 10,000	1	19	21
	CANCER INCIDENCE PER 10,000	55	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	9%	11%	9%
	OBESITY	28%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$50,278</p> <p>NC RANKING: 50th</p> <p>*ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	13%	15%	13%
		LARGEST EMPLOYER: Department of Defense		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

PAMLICO COUNTY



ABOUT


Established in 1872 out of Craven and Beaufort counties, Pamlico County was named for the Pamlico Sound which borders the county to the east. Bayboro serves as the county seat.


Other communities located in Pamlico County include Arapahoe, Hobucken, Mesic, Oriental, and Vandemere. Other natural features in Pamlico County include Bay City Pocosin, Cedar Island, and Dawson Creek.


Fishing and sailing helped grow Pamlico County as a tourist destination, with Oriental earning the "Sailing Capital of North Carolina" moniker. The county hosts numerous boat races each year,

including the Oriental Cup Regatta. The county is also known for helping establish the North Carolina Public Schools transportation system, becoming one of the first counties to offer motorized bus transportation.

Pamlico County's historic and cultural attractions include the Grist Mill, the Pamlico County Drama Club, and Reel Cotton Gin. The county also hosts the annual Pamlico County Croaker Festival in honor of the region's fishers.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 12,726 NC RANKING: 91st *ranked HIGH to LOW out of 100 counties</p>	BLACK	18%	21%	13%
	WHITE	76%	69%	73%
	HISPANIC	4%	8%	18%
	MEDIAN AGE	52	39	38
	RENT ≥ 30% INCOME	31%	38%	41%
	FAMILIES HEADED BY A FEMALE	25%	29%	28%
	PROJECTED 2025 POPULATION	13,302	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 95% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$14,293	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	71%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 60% NC: 57% US: 68%	<p>COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Pamlico Community College</p>		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 7 NC: 8 US: 26</p>	DENTISTS PER 10,000	2	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	50	47	44
	HEART DISEASE DEATHS PER 10,000	15	16	20
	UNINSURED ADULTS	10%	11%	9%
	OBESITY	21%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$46,728 NC RANKING: 40th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	13%	15%	13%
<p>LARGEST EMPLOYER: YMCA</p>				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

PASQUOTANK COUNTY




ABOUT


Established in 1668 from the Albemarle Precinct, Pasquotank County gets its name from the Native American word “pask-e-tan-ki” meaning “where the current divides the fork.” The county is defined by its waterways and is bordered by the Pasquotank and Little rivers.


Elizabeth City serves as the county seat. Other communities located in Pasquotank County include Morgans Corner, Nixonton, and Weeksville.

The county is home to Elizabeth City State University, established in 1891, which enrolls about 1,350 students per year.

Pasquotank County is known for its shipping, boating, fishing, and diving industries, while serving as an Intracoastal Waterway hub. Local attractions include the Arts of the Albemarle Center, the Dixie Land Speedway in Elizabeth City, and the Elizabeth City State University Khan Planetarium.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 39,824 NC RANKING: 62nd *ranked HIGH to LOW out of 100 counties</p>	BLACK	37%	21%	13%
	WHITE	58%	69%	73%
	HISPANIC	5%	9%	18%
	MEDIAN AGE	39	39	38
	RENT ≥ 30% INCOME	41%	38%	41%
	FAMILIES HEADED BY A FEMALE	31%	29%	28%
	PROJECTED 2025 POPULATION	39,734	11.1M	337.2M

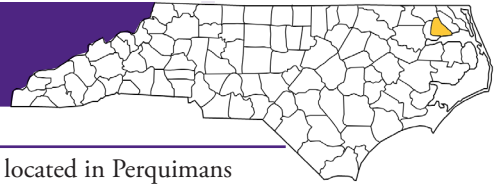
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 78% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,900	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	72%	59%	74%
	THIRD GRADERS READING AT GRADE LEVEL: 50% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: College of the Albemarle - Elizabeth City Campus Elizabeth City State University		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 8 NC: 8 US: 26</p>	DENTISTS PER 10,000	4	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	44	47	44
	HEART DISEASE DEATHS PER 10,000	26	16	20
	UNINSURED ADULTS	12%	11%	9%
	OBESITY	33%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$50,558 NC RANKING: 45th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	16%	15%	13%
LARGEST EMPLOYER:		Pasquotank County Board Of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

PERQUIMANS COUNTY



ABOUT


Established as a precinct from Albemarle Precinct in 1668, Perquimans County was first settled by the Yeopim and Weapemeoc tribes.



In 1662, English settler George Durant struck a land deal with the chief of the Yeopim tribe, allowing him to settle land in the county between the Little River and Albemarle Sound. The document is one of the oldest surviving land deeds in North Carolina. The county has also been part of many early political disputes, including Culpeper's Rebellion in 1677 and Cary's Rebellion in 1711.


Other communities located in Perquimans County include Chapanoke, Belvidere, Durants Neck, Snug Harbor, and Winfall.

The town of Hertford serves as the county seat.

Perquimans County's historical and cultural attractions include the Alfred Moore House, the Newbold-White House, the Piney Woods Friends Meetinghouse, and the Thomas Nixon Plantation. Local festivals include the Hearth and Harvest Festival, the Perquimans County Indian Summer Festival, and the Spring Fling and Old-Timers Game.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 13,463 NC RANKING: 90th *ranked HIGH to LOW out of 100 counties</p>	BLACK	24%	21%	13%
	WHITE	74%	69%	73%
	HISPANIC	3%	9%	17%
	MEDIAN AGE	50	39	38
	RENT ≥ 30% INCOME	62%	38%	41%
	FAMILIES HEADED BY A FEMALE	26%	29%	28%
	PROJECTED 2025 POPULATION	14,258	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 93% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 55% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$11,013	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	54%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 4 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	39	47	44
	HEART DISEASE DEATHS PER 10,000	20	16	20
	UNINSURED ADULTS	11%	11%	9%
	OBESITY	22%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$47,162 NC RANKING: 49th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	5%	4%	4%
	LIVE IN POVERTY	15%	15%	13%
LARGEST EMPLOYER:		Perquimans County Schools		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

PITT COUNTY



ABOUT


Established in 1760 after the annexation of Beaufort County, Pitt County was named for British statesman William Pitt. A regional courthouse and prison were built within the county, with the county seat set in Martinsborough – renamed Greenville – in 1787.


Other communities located in Pitt County include Ayden, Bethel, Black Jack, Calico, Grifton, Grimesland, Pactolus, Simpson, and Stokes.


Pitt County is home to East Carolina University, established in 1907, and features historic structures including the College View

Historic District in Greenville, the Ayden Historic District in Ayden, and the James L. Fleming House in Greenville.

Pitt County's historical cultural attractions include the Ayden Arts and Recreation Center, the Dance Arts Theatre, the Greenville Museum of Art, and the Walter Stasavich Science and Nature Center. The county hosts annual festivals such as the Ayden Collard Festival, the Farmville Dogwood Festival, and the Winterville Watermelon Festival.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 180,742 NC RANKING: 15th *ranked HIGH to LOW out of 100 counties</p>	BLACK	35%	21%	13%
	WHITE	57%	69%	73%
	HISPANIC	6%	9%	18%
	MEDIAN AGE	33	39	38
	RENT ≥ 30% INCOME	46%	38%	41%
	FAMILIES HEADED BY A FEMALE	36%	29%	28%
	PROJECTED 2025 POPULATION	194,033	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 86% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,192	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	67%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 53% NC: 57% US: 68%	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: ECU Pitt Community College		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 14 NC: 8 US: 6</p>	DENTISTS PER 10,000	9	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	42	47	44
	HEART DISEASE DEATHS PER 10,000	16	16	
	UNINSURED ADULTS	10%	11%	9%
	OBESITY	36%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$47,437 NC RANKING: 39th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	23%	15%	13%
		LARGEST EMPLOYER: Vidant Medical Center		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

TYRRELL COUNTY




ABOUT



Established in 1729 out of Bertie, Chowan, Pasquotank, and Currituck counties, Tyrrell County was named for Lord Proprietor Sir John Tyrrell. The county was established to provide those living in the region better access to a courthouse, a jail, and other government buildings. Columbia serves as the county seat.


Other communities located in Tyrrell County include Fort Landing, Frying Pan Landing, Gum Neck, Kilkenny, Newfoundland, and Woodley.

The Secotan and Tuscarora tribes originally inhabited Tyrrell County. Archaeologists have discovered Native American artifacts in the county, including pots and weapons from before the colonial era.

Tyrrell County's historical and cultural attractions include the Columbia Historic District, the Columbia Theater Cultural Resources Center, the Pocosin Arts School of Fine Craft, and the Pocosin Lakes National Wildlife Refuge – an 110,000-acre conservation site that serves as one of the largest ecosystems for black bears on the east coast.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 4,016 NC RANKING: 100th *ranked HIGH to LOW out of 100 counties</p>	BLACK	37%	21%	13%
	WHITE	55%	69%	73%
	HISPANIC	7%	9%	18%
	MEDIAN AGE	46	39	38
	RENT ≥ 30% INCOME	38%	38%	%
	FAMILIES HEADED BY A FEMALE	27%	29%	28%
	PROJECTED 2025 POPULATION	3,727	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 92% NC: 86% US: 86%</p>  <p>THIRD GRADERS READING AT GRADE LEVEL: 50% NC: 57% US: 68%</p>	STUDENT EXPENDITURE K-12	\$14,230	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	58%	78%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 3 NC: 8 US: 26</p>	DENTISTS PER 10,000	0	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	46	47	44
	HEART DISEASE DEATHS PER 10,000	17	16	20
	UNINSURED ADULTS	13%	11%	9%
	OBESITY	19%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$35,300 NC RANKING: 97th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	6%	4%	4%
	LIVE IN POVERTY	23%	15%	13%
LARGEST EMPLOYER:		Tyrrell County Board of Education		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

WASHINGTON COUNTY



ABOUT

Established in 1799 out of Tyrrell County, Washington County was named for the first president of the United States, George Washington. Plymouth serves as the county seat.


Other communities located in Washington County include Creswell, Lake Phelps, Pea Ridge, and Roper. Natural features in the county include the Albemarle Sound, the East Dismal Swamp, and the Roanoke and Scuppernon rivers.



Washington County's economy revolves around manufacturing and agriculture, including corn, livestock, plywood, lumber, sage, and tobacco. The county is home to Somerset Place, one of


the state's most prosperous plantations during the American Civil War.

The plantation housed over 800 slaves at its peak and today serves as a reunion place for slave descendants.

Washington County's historical and cultural attractions include Buncombe Hall, the Plymouth Historic District, the Pocosin Lakes National Wildlife Refuge, the Port O' Plymouth Roanoke River Museum, and the Washington County Arts Council.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 11,580 NC RANKING: 92nd *ranked HIGH to LOW out of 100 counties</p>	BLACK	48%	21%	13%
	WHITE	46%	69%	73%
	HISPANIC	5%	9%	18%
	MEDIAN AGE	46	39	38
	RENT ≥ 30% INCOME	58%	38%	41%
	FAMILIES HEADED BY A FEMALE	42%	29%	28%
	PROJECTED 2025 POPULATION	11,584	11.1M	337.2M

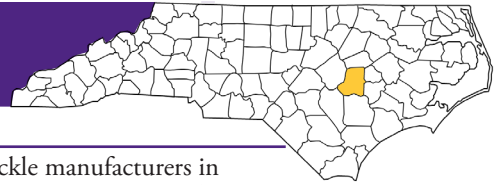
		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 82% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$13,376	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	99%	58%	77%
	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES:	None		
 <p>THIRD GRADERS READING AT GRADE LEVEL: 51% NC: 57% US: 68%</p>				

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 3 NC: 8 US: 26</p>	DENTISTS PER 10,000	1	5	8
	GROCERY STORES PER 10,000	3	19	21
	CANCER INCIDENCE PER 10,000	44	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	12%	11%	9%
	OBESITY	19%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$35,979 NC RANKING: 90th *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	6%	4%	4%
	LIVE IN POVERTY	22%	15%	13%
LARGEST EMPLOYER:		Domtar Paper Company, LLC		

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

WAYNE COUNTY



ABOUT


Established in 1779 from Dobbs County, Wayne County is named after one of George Washington's most respected generals, "Mad Anthony" Wayne. Goldsboro has served as the county seat after the first county seat, Waynesboro, was dissolved after the American Civil War.



Other communities located in Wayne County include Dobbersville, Dudley, Eureka, Mount Olive, Seven Springs, Pikeville, and Walnut Creek.


The county is home to the Mount Olive Pickle Company and the University of Mount Olive. The Mount Olive Pickle Company is

one of the largest pickle manufacturers in the United States since it's opening in the 1920s. The University of Mount Olive serves 3,250 undergraduates.

Wayne County's historic and cultural attractions include the birthplace of Governor Charles B. Aycock, Goldsboro City Hall, Goldsboro Civic Ballet, and the Wayne County Museum. The county hosts annual festivals such as the Fremont Daffodil Festival, the North Carolina Pickle Festival, and the Wayne Regional Agricultural Fair.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 123,131 NC RANKING: 25th *ranked HIGH to LOW out of 100 counties</p>	BLACK	31%	21%	13%
	WHITE	64%	69%	73%
	HISPANIC	12%	9%	18%
	MEDIAN AGE	38	39	38
	RENT ≥ 30% INCOME	39%	38%	41%
	FAMILIES HEADED BY A FEMALE	33%	29%	28%
	PROJECTED 2025 POPULATION	128,239	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 81% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,272	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	91%	58%	77%
	 <p>THIRD GRADERS READING AT GRADE LEVEL: 57% NC: 57% US: 68%</p>	COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Wayne Community College University of Mount Olive		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 5 NC: 8 US: 26</p>	DENTISTS PER 10,000	3	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	49	47	44
	HEART DISEASE DEATHS PER 10,000	18	16	20
	UNINSURED ADULTS	13%	11%	9%
	OBESITY	36%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$44,416 NC RANKING: 73rd *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	4%	4%	4%
	LIVE IN POVERTY	20%	15%	13%
	LARGEST EMPLOYER: Wayne County Public Schools			

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project

WILSON COUNTY



ABOUT


Established in 1855 out of Edgecombe, Johnston, Nash, and Wayne counties, Wilson County was named after Colonel Louis D. Wilson, a former soldier and legislator who died during the Mexican-American War. The city of Wilson serves as the county seat.


Other communities located in Wilson County include Black Creek, Elm City, Lucama, Saratoga, and Stantonsburg.


Wilson County was the home of the Wilson Female Academy, which was founded in 1859 and then converted into the Wilson Collegiate Institute until its closing in the 1890s. Barton College, a four-year, private, liberal arts college, is located in Wilson.

The county promoted itself as “The World’s Greatest Tobacco Market” as tobacco and cotton played a key role in its early industrial history. Wilson is the original home of BB&T, which was founded in the 19th century. After World War II, the county attracted other industries, including pharmaceutical plants, to the region. Pharmaceutical companies include Sandoz, Merck, and Fresenius Kabi USA.

Wilson County’s historical and cultural attractions include the Branch Banking building, the North Carolina Museum of the Coastal Plains, and the Wilson Central Business-Tobacco Warehouse Historical District.

		COUNTY	NC AVG	US AVG
 <p>DEMOGRAPHICS ^{1,2}</p> <p>POPULATION: 81,801 NC RANKING: 35th *ranked HIGH to LOW out of 100 counties</p>	BLACK	40%	21%	13%
	WHITE	51%	69%	73%
	HISPANIC	10%	9%	18%
	MEDIAN AGE	41	39	38
	RENT ≥ 30% INCOME	41%	38%	41%
	FAMILIES HEADED BY A FEMALE	35%	29%	28%
	PROJECTED 2025 POPULATION	86,366	11.1M	337.2M

		COUNTY	NC AVG	US AVG
 <p>EDUCATION ^{3,4,5,6}</p> <p>HIGH SCHOOL GRADUATION RATE: 79% NC: 86% US: 86%</p>	STUDENT EXPENDITURE K-12	\$9,059	\$9,377	\$12,201
	STUDENTS RECEIVING FREE OR REDUCED LUNCH	66%	58%	77%
	THIRD GRADERS READING AT GRADE LEVEL: 53% NC: 57% US: 68%	<p>COMMUNITY COLLEGES & 4-YEAR UNIVERSITIES: Wilson Community College Barton College</p>		

		COUNTY	NC AVG	US AVG
 <p>HEALTH ^{1,5,8}</p> <p>PRIMARY CARE PHYSICIANS PER 10,000: 6 NC: 8 US: 26</p>	DENTISTS PER 10,000	3	5	8
	GROCERY STORES PER 10,000	2	19	21
	CANCER INCIDENCE PER 10,000	42	47	44
	HEART DISEASE DEATHS PER 10,000	17	16	20
	UNINSURED ADULTS	12%	15%	12%
	OBESITY	22%	33%	42%

		COUNTY	NC AVG	US AVG
 <p>ECONOMY ^{1,4,9}</p> <p>MEDIAN HOUSEHOLD INCOME: \$43,877 NC RANKING: 81st *ranked HIGHEST to LOWEST out of 100 counties</p>	UNEMPLOYED	6%	4%	4%
	LIVE IN POVERTY	20%	15%	13%
<p>LARGEST EMPLOYER: Truist Financial</p>				

SOURCES: ¹ US Census ² NC.Gov Projected County Population ³ Kids County Data Center ⁴ NC Office of State Budget and Management ⁵ NC Health Data Explorer ⁶ NC DPI Statistical Profile State Per Pupil Expenditure 2019-2020 ⁷ Sheps Health Workforce ⁸ CDC ⁹ US Bureau of Labor Statistics | "About" information provided by the North Carolina History Project