

## NORTH CAROLINA AEROSPACE INDUSTRY

## NORTH CAROLINA

#### **RISE WITH US**

Largest manufacturing workforce in the Southeast. Lowest corporate income tax in the nation. Two deepwater seaports. North Carolina is where business fires on all cylinders. From the Wright Brother's first flight at Kitty Hawk to today's cutting-edge research, North Carolina continues its legacy as an aerospace leader. According to PwC, our state ranks fifth in the nation for aerospace manufacturing attractiveness. Dozens of top aerospace companies have major operations in North Carolina, including pioneers like GE Aviation, Honda Aircraft Company, HAECO, Cyril Bath, Raytheon Technologies, and Spirit AeroSystems.

Aerospace companies choose North Carolina for its winning combination of location, world-class workforce, existing industry strength, and business-friendly environment. Top-tier customized training programs support the industry's continued success. Home to more than 10.5 million residents, our state is the ninth largest in population and ranks third for highest net migration rate in the U.S. With a designation by *Forbes* as "Best State for Business" three years in a row, more business and individuals are becoming part of our community every day. Rise with us. Consider North Carolina for your next location or expansion decision.

#### WHAT CAN EDPNC DO FOR YOU?

The Economic Development Partnership of North Carolina (EDPNC) proudly serves as North Carolina's statewide economic development organization. The EDPNC recruits new businesses to the state, supports the needs of existing businesses, and connects exporters with customers around the globe.

#### We provide FREE assistance with:

- · Real estate and site identification
- Incentive and tax benefit inquiries
- Regulatory navigation
- · World-class workforce solutions
- Supplier and distribution connections
- Export services and global market expansion

For more information about North Carolina, contact the EDPNC at 919.447.7744 or clientservices@edpnc.com.

# NORTH CAROLINA'S AEROSPACE ADVANTAGE

AEROSPACE GROWTH

With 13% employment growth from 2015-2019 North Carolina's aerospace manufacturing sector has grown 3x the national average.

AEROSPACE COMPANIES

North Carolina is home to over 200 leading aerospace companies spread across the state. Major industry sectors include both airplane assembly and parts manufacturing.

AEROSPACE SUPPLIERS

Over 400 establishments make up North Carolina's aerospace supply chain, including engineering, composite, textile, manufacturing, and MRO companies.

SUPPLY CHAIN INPUTS

North Carolina's aerospace manufacturing industry purchases of 68% of its supply chain inputs from other businesses in the state.

#### NORTH CAROLINA'S AEROSPACE INDUSTRY LEADERS

















# PLENTIFUL & SKILLED WORKFORCE

5 1 +

Largely fueled by domestic in-migration, North Carolina has one of the largest labor forces in the U.S. From 2010-2019, North Carolina was among the top three states for net migration.

45K+

by 4%.

North Carolina is home to more than 25,000 Science, Technology, Engineering, and Math grads annually, ranking second for STEM grads in the Southeastern U.S.

North Carolina's engineering workforce has grown 18% over the past five years, leading the nation for engineering job growth.

North Carolina has the largest manufacturing

workforce in the Southeastern U.S. In the last five

years, the state's manufacturing workforce has grown

STEM 2

#### LABOR SUPPLY FOR TOP AEROSPACE OCCUPATIONS

North Carolina offers aerospace companies an abundant and affordable supply of labor. North Carolina's aerospace industry wages are about 9% below the national average.

Occupation	NC 2019 Jobs	NC Job Growth (2015 - 2019)	NC Median Annual Earnings	US Median Annual Earnings
Assemblers and Fabricators	68,295	3%	\$29,366	\$32,839
Mechanical Engineers	8,318	25%	\$82,742	\$87,360
Inspectors, Testers, Sorters, Weighers	19,984	11%	\$34,528	\$38,251
Software Developers and Programmers	49,928	16%	\$98,169	\$100,061
Machinists	12,003	5%	\$40,892	\$43,617
Aircraft Mechanics and Service Technicians	8,258	6%	\$56,992	\$62,920

Spirit AeroSystems in Kinston, North Carolina produces sections of the composite center fuselage for the Airbus A350 family of aircraft.

# THE PERFECT CLIMATE FOR GROWING TALENT

#### **UNIVERSITIES**

#### UNDERGRADUATE & GRADUATE DEGREES

North Carolina has 53 colleges and universities. The publicly-funded University of North Carolina System draws students from all over the world to its 17 campuses. The state's three Tier 1 research universities: North Carolina State University, Duke University, and the University of North Carolina at Chapel Hill, are at the cutting edge of education and R&D. North Carolina State University offers degree programs in aerospace engineering. The program has conferred more than 400 aerospace engineering degrees over the past five years.

#### **COMMUNITY COLLEGES**

#### **VOCATIONAL DEGREES**

The North Carolina Community College System (NCCCS) is the nation's third-largest community college system, pioneering the nation's most advanced vocational and technical programs. More than 680,000 students enroll at one of NCCCS's 58 campuses each year. NCCCS offers degrees and certificates relevant to the aerospace industry like aviation electronics, computer engineering, aviation systems technology, and welding. Spirit AeroSystems' Composite Center of Excellence at Lenoir Community College and Guilford Technical Community College's advanced aviation programs are examples of North Carolina's top-notch workforce programs designed to serve the growing aerospace industry.

#### **NCWORKS**

#### **CUSTOMIZED TRAINING PROGRAMS**

NCWorks is a free job screening, recruiting, and training program for new and expanding businesses. North Carolina's Customized Training program offers comprehensive training via our state's community colleges as well as customized curricula tailored to address the specific needs of the aerospace industry. In FY 2018-2019, the Customized Training program trained more than 38,000 employees from over 1,000 companies across the state, including GE Aviation and HAECO Airframe Services. Approximately 92% of the companies served were advanced manufacturers.

The Spirit AeroSystems
Composite Center of Excellence,
operated by Lenoir Community
College, provides workforce
training for aerospace
businesses in North Carolina.

#### MILITARY WORKFORCE

#### 4TH LARGEST MILITARY POPULATION IN U.S.

About 20,000 military personnel in North Carolina are projected to re-enter the civilian workforce each year. Many of these workers specialize in aerospace propulsion and ground equipment. Aerospace companies enjoy close proximity to military air operations. The Marine Corps Air Station at Cherry Point maintains a Fleet Readiness Center (FRC) that provides maintenance, engineering, and logistics support for Nawy and Marine Corps aviation activities.

### INDUSTRY RESOURCES TARGETED INDUSTRY SUPPOR

North Carolina has numerous entities that support aerospace businesses. Examples include:

- Institute for Transportation Research and Education (ITRE) at NC State University conducts air transportation research, training, and technical support activities for clients to address critical transportation issues.
- The NC Department of Transportation's (DOT)

  Division of Aviation maintains NC's aviation system

   from the development of the state's 72 public
  airports, to the administration of loans and grants.
  In 2018, the FAA selected the NC DOT as one of ten
  participants in its UAS Integration Pilot Program,
  which involves implementing drone programs
  to integrate emerging technology into existing
  regulations.
- The North Carolina Global TransPark, an industrial park and airport in Kinston, NC, offers an 11,500-foot runway, onsite rail, shovel-ready sites, warehouse facilities, a fiber optic network, an onsite Foreign Trade Zone, and a composite training facility.
- Located in the heart of the state, Piedmont Triad International Airport (PTI) is home to a cluster of top aerospace companies. PTI offers shovel-ready sites, immediate highway access, a robust aviation workforce, and the T.H. Davis Aviation Center, one of the best equipped aviation maintenance training facilities in the Southeast.

## UNMATCHED BUSINESS ENVIRONMENT

BEST STATE FOR BUSINESS

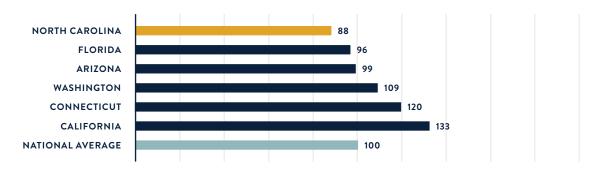
TOP STATE BUSINESS CLIMATE BEST STATE FOR BUSINESS - CNBC (2019) COMPETITIVE LABOR ENVIRONMENT
- Area Development (2019)

- Forbes (2019)

- Site Selection (2019)

#### LOW COST OF LIVING

The cost of living in North Carolina is well below that of other states with strong aerospace manufacturing clusters.



Source: C2ER State Cost of Living Index

#### LOW BUILDING COSTS

Average construction costs in North Carolina's metropolitan areas are up to 16% below the national average.

#### **AAA BOND RATING**

North Carolina is one of only four states to earn Standard & Poor's highest rating for over 55 consecutive years.

#### UNPARALLELED INNOVATION

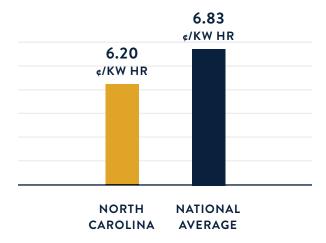
North Carolina businesses lead the nation in innovation with 70% patent growth over the past 10 years.

#### **RIGHT TO WORK STATE**

North Carolina is one of 27 right to work states.

#### LOW ELECTRICITY COSTS

NC's industrial electricity costs are **about 10% below the national average.** 



Source: Energy Information Administration

THE POSITIVE BUSINESS
ENVIRONMENT AND EMPLOYEE
WORK ETHIC IN THE REGION WERE
KEY FACTORS IN THE SELECTION
OF UNION COUNTY FOR THE
EXPANSION. OUR CONFIDENCE IN
NORTH CAROLINA IS VALIDATED BY
OUR INVESTMENT...

RICHARD HARSHMAN,
CEO. ATI SPECIALTY MATERIALS

Honda Aircraft Company, a world leader in the production of the most advanced light jets, operates its world headquarters, research and development functions, and manufacturing activities at the Piedmont Triad International Airport in Greensboro, NC. The company employs more than 1,700 people across the state.

## GO BIG. SPEND LESS.

CORPORATE INCOME TAX

North Carolina has the lowest rate among the 44 states that levy this tax. NC uses single sales factor apportionment.

525%
PERSONAL INCOME TAX

The standard deduction is \$10,750 for single taxpayers and married couples filing separately, \$21,500 for married couples, and \$16,125 for heads of households.

4 75 % STATE SALES & USE TAX

Counties levy an additional 2-2.75%. Sales tax exemptions are available for manufacturers, large fulfillment centers, and data centers.



There is no state-level property tax. Real and personal property taxes vary by local government. In 2019, N.C. had the 6th lowest commercial and 10th lowest industrial effective property tax rates in the U.S.

#### **INCENTIVES**

Targeted, performance-based incentive programs complement North Carolina's competitive cost structure. The Economic Development Partnership of North Carolina (EDPNC) helps companies navigate the incentive process.

#### JOB DEVELOPMENT INVESTMENT GRANT (JDIG)

JDIG is a performance-based, discretionary incentive program that provides cash grants to new and expanding businesses to help offset the cost of locating or expanding a facility in North Carolina. Companies can qualify for a JDIG based on the project location, number of jobs, and average wage. The grant amount is based on a percentage of the personal income tax withholdings associated with new jobs.

#### ONE NORTH CAROLINA FUND (ONE NC)

One NC is a discretionary cash-grant program that allows the Governor to respond quickly to competitive job-creation projects. Awards are based on the number of jobs, level of investment, project location, economic impact, and importance of the project to the region. Awards may be used in new or existing buildings for installation or purchase of equipment, structural repairs and/or renovations, construction and/or improvements to utility lines.

#### **PUBLIC INFRASTRUCTURE & TRANSPORTATION PROGRAMS**

NC offers a number of programs to fund public infrastructure development, including the Community Development Block Grant Economic Development Program, Utility Account, Rural Division's Economic Infrastructure Program, NCDOT's Rail Industrial Access Program, NC Railroad Company's NCRR Invests program, and the NC Department of Commerce's Joint Economic Development Program with the NCDOT.

#### **BUILDING REUSE PROGRAMS**

North Carolina offers two different programs that provide grants to renovate and upfit vacant industrial and commercial buildings including:

- Community Development Block Grant Building Reuse Program
- · Rural Division's Building Reuse Program

#### OTHER INCENTIVE PROGRAMS

- NCWorks Customized Training Program
- Foreign Trade Zones
- · NC Biotech Center Economic Development Award
- · Recycling Business Development Award Grants
- · Golden LEAF Foundation Grants
- Building Demolition Programs

## MARKET ACCESS & TRANSPORTATION

North Carolina's robust transportation infrastructure connects companies to domestic and international markets. Ten airports offer commercial services, including four international airports that connect North Carolina to major cities in the U.S. and abroad. North Carolina also has the second-largest state-owned highway system and major controlled-access arteries such as I-95 (running the length of the East Coast), I-85, and I-40 (running from North Carolina to California). Two deepwater seaports and an integrated rail system ensure that North Carolina companies can easily reach suppliers and customers.

#### **ROADS**

#### Second-largest state-owned highway system

North Carolina's highways stretch for more than 80,000 miles (129,000 km). The state's central East Coast location offers easy access to the country's most important transportation corridors.

Major controlled-access arteries include:

- · I-95, running the length of the East Coast
- I-40, linking North Carolina to California
- · I-85, stretching through the manufacturing heart of the Southeast

#### **PORTS**

#### Two deepwater seaports in-state with on-dock rail

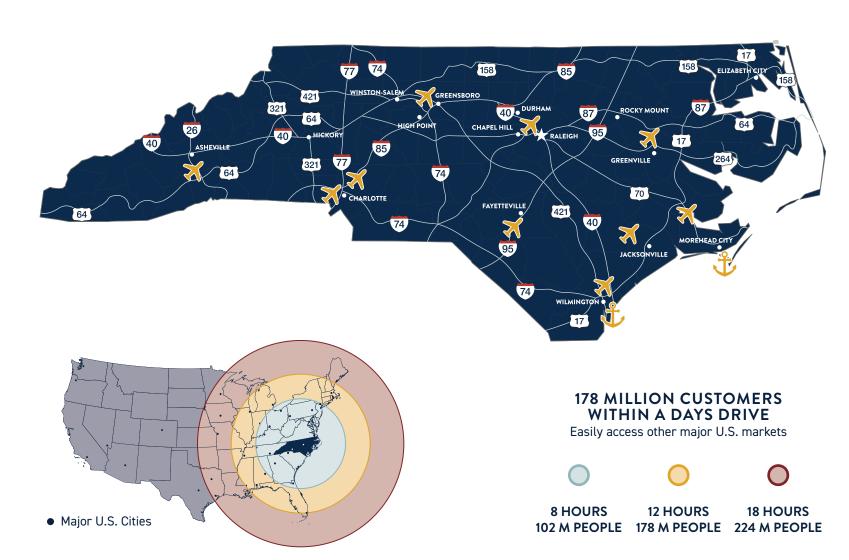
North Carolina's ports offer fast turn times and capacity for ships carrying up to 14,000 TEUs. An inland port in Charlotte provides easy market access. North Carolina companies also enjoy easy access to the Port of Norfolk and the Port of Charleston.

#### Port of Wilmington

- · Container and general cargo operations
- · Channel depth of 42 feet M.L.L.W.
- On-terminal cold storage facility and 1M sf of covered storage
- Next-day rail service to Charlotte inland port

#### Port of Morehead City

- · General cargo and bulk handling facility
- · Channel depth of 45 feet M.L.L.W.
- 1M sf of covered storage



#### AIR

#### The world's 7th busiest airport is located in Charlotte

Ten airports offer commercial services, including four international airports that provide easy access to global markets. International airports include:

- Charlotte-Douglas International Airport (CLT), world's seventh-busiest airport
- Raleigh-Durham International Airport (RDU), fifth in passenger satisfaction among large North American Airports
- Wilmington International Airport (ILM), home to the ILM Business Park with easy access to highways, rail, and the Port of Wilmington
- Piedmont Triad International Airport (GSO), a premier air cargo center and home to the FedEx Mid-Atlantic Air Hub

#### RAIL

#### Two Class 1 Carriers

North Carolina has more than 3,200 miles (5,100km) of track. Two Class 1 carriers, CSX Transportation (CSX) and Norfolk Southern (NS), offer direct service to North American markets and to all major ports along the U.S. East Coast.

- Intermodal service hubs in Charlotte (NS, CSX) and Greensboro (NS). Another planned for Rocky Mount (CSX) in 2021.
- Direct intermodal service from Port of Wilmington to CSX terminal in Charlotte
- Major rail yards in Lexington (NS) and Hamlet (CSY)
- 19 regional railroads, including six that connect to both NS and CSX railroads

With fast turnaround times, North Carolina's two deepwater seaports offer easy access to domestic and international markets. The Port of Wilmington has one of the highest crane productivity rates on the U.S. East Coast and is significantly less congested than neighboring ports. With 40 crane moves per hour and an average of 32 minutes for a dual truck move, it's no wonder the Port of Wilmington ranks as the most productive port in North America.

NORTH CAROLINA WAS CHOSEN FOR THE LOCATION, FOR THE UTILITY AND TRANSPORTATION ADVANTAGES, AND THE STATE CONTAINS AN EXCEPTIONAL WORKFORCE. IN ADDITION, WE CAN SERVICE OUR CUSTOMER BASE QUICKER AND PROVIDE MORE COSTEFFECTIVE TRANSPORTATION.

GERARDO MURAIRA,
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ECONOMIC
DEVELOPMENT
PARTNERSHIP of
NORTH CAROLINA