

## Our Opportunity

The role that universities play in economic development has increased significantly over the past several years. We are more engaged in the process than ever before and firmly believe this trend will continue.

This statewide initiative creates a network of university resources to support new, emerging and ongoing critical industry clusters across North Carolina.

With current funding, North Carolina universities are at the forefront of this proactive economic development trend. Additional resources will allow us to grow that leadership position.

### James J. Zuiches, Ph.D.

Vice Chancellor  
Extension, Engagement, and Economic Development  
North Carolina State University

“The skilled textile workforce coupled with the invaluable resources available at North Carolina State University made our decision to relocate to North Carolina very easy.”

**JOE BERASI**  
President  
Vescom America  
Henderson, NC

“From the very beginning of our site search, NC State helped us understand the tremendous benefits of collaborating with the community colleges and universities of North Carolina.”

**DON A. BLAKE**  
Director Strategic Initiatives  
Spirit AeroSystems, Inc.  
Kinston, NC

“Access to people and programs at NC State was a primary factor when deciding where to locate our Center for Packaging Innovation.”

**JACK GOLDFRANK**  
President, Center for Packaging Innovation  
MeadWestvaco  
Raleigh, NC

“BTEC training has been excellent. In fact, we have brought some employees from our West Point, Pennsylvania facility here because no one in that area offers anything comparable.”

**AGNES SPEIGHT**  
Manager, Public Affairs  
Merck & Co.  
Wilson, NC

**James J. Zuiches, Ph.D.**  
Vice Chancellor for Extension, Engagement,  
and Economic Development  
**North Carolina State University**

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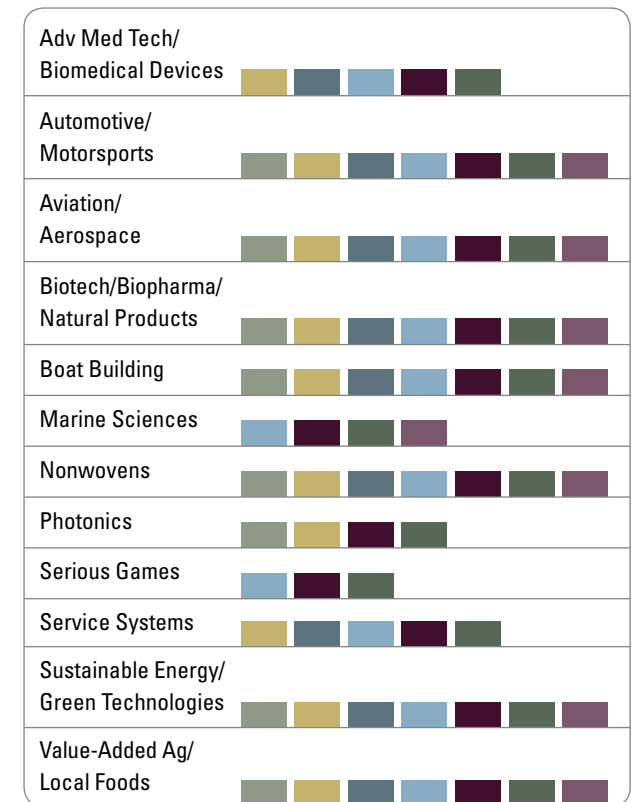
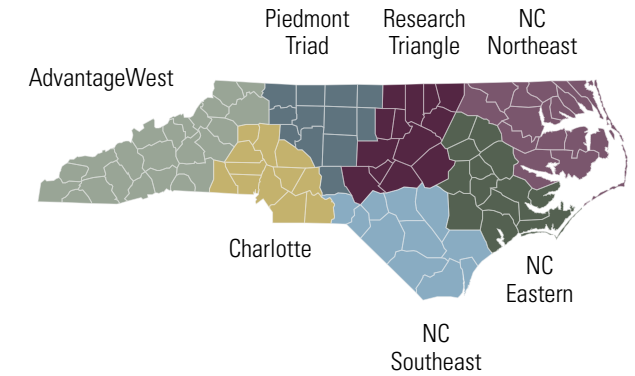
# THE UNIVERSITY'S ROLE IN JOB CREATION 2009 – 2011



## Entrepreneurs, Industry Clusters and Economic Development

A multi-campus response to University of North Carolina Tomorrow, from NC State University and its partners, with funding for the initiative from the North Carolina General Assembly, foundations and public and private organizations.

## University Engagement by Region



Moving forward, the 16 campuses of the UNC system can—and must—play a more active role in the economic development of our state.

## University Economic Development Initiatives—Industry Clusters

### ADVANCED MEDICAL TECHNOLOGIES / BIOMEDICAL DEVICES

Executed a Spring 2008 biomedical textiles and device innovation symposium. Created an AMT portal for NC State, including comprehensive value chain tools. Planning to implement the portal statewide. [www.ncsu.edu/amt](http://www.ncsu.edu/amt)

### AUTOMOTIVE / MOTORSPORTS

In partnership with the NC Department of Commerce, UNC Campuses, community colleges and industry partners, NC State is developing a strong supply chain network, database and strategic plan for promoting the growth of this cluster. The Advanced Transportation Energy Consortium (ATEC) has been created.

### AVIATION AND AEROSPACE

The Kenan Institute for Engineering, Technology and Science, NC Department of Commerce, NC Community College System, several of the UNC Campuses, and the National Aerospace Development Center are partnering in workforce development, technology leadership and marketing this cluster. A North Carolina Center for Aerospace Research and Development (NC CARD) will be created.

### BIOTECH / BIOPHARMA / NATURAL PRODUCTS

The Small Business Technology and Development Center, NC Biotech Center and other partners are developing a strategic plan to attract new biotech, biopharma and natural products companies to the state, and help existing companies expand. BTEC, BRITE at NCCU, and other UNC campuses actively support this industry. North Carolina Biotechnology Center funded a Center of Innovation at the Bent Creek Institute.

### BOAT BUILDING / MARINE TRADES

The Small Business Technology and Development Center and the Industrial Extension Service are providing training and technical assistance for entrepreneurs and existing boat building businesses. UNC Campuses statewide are active in this cluster. Golden LEAF Foundation provides cluster support. [www.ncwaterways.com](http://www.ncwaterways.com)

### MARINE SCIENCES

ECU, UNC-W, NCSU, UNC-CH, ECSU, the NC Biotech Center and local economic development organizations are creating a regional network of assets, new marketing materials and a strategic plan to support and grow this cluster. North Carolina Biotechnology Center funded a Center of Innovation. [www.ncmarinescience.com](http://www.ncmarinescience.com)

### NONWOVEN TEXTILES

With more than 80 partners, The Nonwovens Institute at NC State is engaged in research, product development, testing, and economic development initiatives statewide. [www.thenonwovensinstitute.com](http://www.thenonwovensinstitute.com)

### PHOTONICS

NC State's Technology Entrepreneurship and Commercialization (TEC) program is connecting businesses with UNC-C, NCSU, WCU, ECU and Duke to develop and commercialize new technologies. [www.carolinasphotonics.com](http://www.carolinasphotonics.com)

### SERIOUS GAMES

NC State has created marketing materials and a user-friendly web site to promote available resources to industry partners, and is engaging other UNC Campuses, Duke University and several community colleges in this large and growing industry. Applications include simulation technologies for the Department of Defense, and the healthcare industry. <http://dgrc.ncsu.edu>

### SERVICE SYSTEMS

An emerging cluster in finance, energy, education, retail and healthcare that integrates technology and process management. NC State's Colleges of Management and Engineering provide cluster leadership.

### SUSTAINABLE ENERGY / GREEN TECHNOLOGIES

Several UNC Campuses are studying wind, solar, biofuel, and other green technologies in support of sustainable construction and development.

### VALUE-ADDED AGRICULTURE / AQUACULTURE / LOCAL FOODS

The Small Business Technology and Development Center and the Cooperative Extension Service are developing professional expertise to support rural entrepreneurs in the agriculture and natural resources industries. W.K. Kellogg Foundation endowed support for the Center for Environmental Farming Systems. [www.cals.ncsu.edu/value-added](http://www.cals.ncsu.edu/value-added)

## Outline of the Precision Marketing Process and Status of Twelve Targeted Sectors

WHO	Economic Developers	University	Economic Developers	University and Economic Developers	University and Industry	END RESULT
WHAT	Engage university experts to identify industry sectors with significant growth potential.	Identify key assets related to specific industry sectors, and develop a list of companies for future outreach.	Create marketing materials, which highlight university resources that can directly benefit industry partners.	Partner to promote state and university assets.	Collaborate to provide businesses access to resources, supply well-trained university graduates and develop new products.	Companies relocate and expand in NC to be close to university assets, creating new jobs and investing in our communities.
STAGES OF PRECISION MARKETING PROCESS — STAGE 1 — STAGE 2 — STAGE 3 — STAGE 4 — STAGE 5 — RECRUITMENT						
ADVANCED MED TECH	●	●	●	●	●	
AUTOMOTIVE / MOTORSPORTS	●	●				
AVIATION / AEROSPACE	●	●	●	●	●	●
BIOTECH / NATURAL PRODUCTS	●	●	●	●	●	●
BOAT BUILDING / MARINE TRADES	●	●	●	●	●	●
MARINE SCIENCES	●	●	●	●		
NONWOVENS	●	●	●	●	●	●
PHOTONICS	●					
SERIOUS GAMES	●	●	●	●	●	
SERVICE SYSTEMS	●					
SUSTAINABLE ENERGY / GREEN TECHNOLOGIES	●	●				
VALUE-ADDED AG / LOCAL FOODS	●	●	●			

“Continued investment by the state in research and development projects in the UNC system is imperative to recruiting world-class R&D companies to our state. Many innovations and discoveries are taking place in our university system and, with continued support, our state stands to benefit from future investments.”

**Research Triangle Regional Partnership**  
2008 Research Triangle Economic Development Legislative Action Agenda

“The North Carolina Economic Developers Association (NCEDA) encourages the General Assembly to provide funding for major system and campus research and economic development initiatives that respond to identified statewide economic development needs, including implementation of the UNC Economic Development Portal.”

**North Carolina Economic Developers Association**  
2007 Legislative Agenda