

Five-Year Vision Plan for the Economy of the Advantage West Region: 2004-2009

In response to the North Carolina General Assembly's requirement (S.L. 2002-126, Section 8.3)¹, this plan contains:

- I. Realistic economic development goals for the AdvantageWest region;
- II. A profile of the clusters of innovation expected to drive the future job market of the region and its four sub-regions; and
- III. A corresponding plan for developing the necessary higher-education curricula to prepare the region's workers for that future job market.

This plan was developed through the active involvement of a task force of public university chancellors, community college presidents, and AdvantageWest board members, staff and consultants in 2003 and early 2004. Local economic developers, entrepreneurs and other civic leaders were also asked for their input, and several recent consultant reports informed the development of strategies for the region. The sections of this plan correspond to each of the three required elements above.

Section I. Economic Development Goals for the AdvantageWest Region

For the years 2004-2008, the region will pursue the following four goals:

GOAL 1: Grow and support several "clusters of innovation" in regional niches with education, infrastructure, services, and technology transfer (see Section II of this plan for a complete discussion of those clusters)

GOAL 2: Establish a regional think tank to lead strategic thinking and policy development about the economy

GOAL 3: Change the culture of educational institutions (K-12, community colleges, and universities) and the expectations and skills of workers to meet the needs of growing companies in clusters of innovation.

GOAL 4: Establish "Tier 2" level of broadband Internet service for the entire region by 2008.

¹ Requires the development of a five-year vision plan for each of the economic development regions in the State. "At a minimum, each vision plan shall determine the realistic economic development goals and the future job market in that region and shall identify community college and university courses currently offered or needed to effectuate the vision plan."

The key strategies the region will use to realize each of these goals are listed below. Each of these is discussed further in the full report.

GOAL 1: Grow and support several “clusters of innovation” around regional niches with education, infrastructure, services, and technology transfer

Strategy 1A: Implement best practices in innovation-based and cluster-based strategies for economic development (*see report section 3 for a menu of these best practices*)

- ❖ Support the formation of industry-driven networks that can innovate together and speak with one voice to state and federal government

Strategy 1B: Develop education curricula to support the region’s clusters of innovation

- ❖ Work with state to fast-track new programs that relate to the priority clusters

Strategy 1C: Attract and retain star faculty to lead innovation within clusters

- ❖ Promote the attraction and retention of creative people as an economic development strategy

Strategy 1D: Develop regional infrastructure to support the region’s clusters

- ❖ Develop the specific infrastructure – e.g., transportation corridors, attractive downtowns, online networks, and business support services -- that firms in the priority clusters need most

Strategy 1E: Support innovators and entrepreneurs in all clusters

- ❖ Bridge gaps in information, relationship networks or capital for aspiring, lifestyle, and growth entrepreneurs, and recognize innovators in all sectors of the economy

In addition to these cross-cutting strategies, the Vision Task Force has discussed strategies to support specific clusters, including advanced manufacturing, biotechnology and bioprocessing, crafts, tourism, value-added agriculture, and others.

GOAL 2: Institutionalize capacity for strategic thinking, research, policy development, collaboration and leadership on the regional economy

Strategy 2A: Establish and sustain a strong leadership development program

- ❖ Train local citizens, including youth, to understand the new economy and the continuous innovation and collaborative partnerships necessary to sustain it

Strategy 2B: Strategize for economic development across local boundaries and sectors

- ❖ Educate citizens and local officials about the benefits of cooperating with neighboring jurisdictions to establish a strong business climate

Strategy 2C: Think strategically about workforce development to support the continuous innovation of the region

- ❖ Continue to include education leaders in economic development planning, and also include entrepreneurs and workforce development boards

Strategy 2D: Think strategically about infrastructure planning for the future economy

- ❖ Revisit current plans to ensure investments provide competitive advantage to companies that are poised to grow and stay in western NC

Strategy 2E: Align public services with business and citizen needs, and measure results

- ❖ Re-engineer government to focus on taxpayers and customers, and report results annually

Strategy 2F: Change state policy that impedes the competitiveness of the region

- ❖ Revisit the state’s policy on worker’s compensation, the allocation of the Small Cities Community Development Block Grant, and the lack of tax incentives for R&D

GOAL 3: Change the culture of educational institutions (K-12, community colleges, universities) and the expectations and skills of workers to meet the needs of growing companies in clusters of innovation.

Strategy 3A: Work with state-level education boards to set policy that helps the economic competitiveness of AdvantageWest and other N.C. regions

- ❖ Encourage University of North Carolina, N.C. Community College System and Department of Public Instruction boards to revisit and update their institutional mission statements and statewide goals.
- ❖ Encourage those same boards 1) to change both incentives and resource allocation formulas to achieve revised statewide goals that include innovation and job creation, and 2) to assess institutions' performance on that basis.
- ❖ Simplify and shorten curriculum review processes for higher education programs
- ❖ Re-think end-of-year testing in K-12 schools

Strategy 3B: Work with the N.C. General Assembly to increase the budget flexibility for community colleges and public universities to assist them in achieving the economic development goals of the state.

- ❖ Adjust the formulas for funding each institution to be forward-oriented and performance-based

Strategy 3C: Change culture within the region's educational institutions

- ❖ Develop short-term technical certification programs for high school and post-secondary students
- ❖ Provide incentives, entry portals and liaisons to faculty to engage in public service, product innovation and entrepreneurship in and for the region
- ❖ Encourage faculty to meet frequently with different CEOs around the region to stay current on competitiveness issues and spur collaborative ventures

Strategy 3D: Conduct ongoing public relations campaign to inform the expectations and skills development of workers and students

- ❖ Teach soft skills related to work ethic in K-12 schools
- ❖ Engage CEOs of growing companies to co-sponsor career fairs and classroom visits to describe what they do and will need from workers
- ❖ Teach entrepreneurship as well as the skills required to work for others

GOAL 4: Establish "Tier 2" level of broadband Internet service for the entire region by 2008.

Strategy 4A: Work with federal and private sector partners to create the equivalent of a Major Point of Presence on the Internet for the entire AdvantageWest region from Murphy to Boone by 2009.

Strategy 4B: Create affordable access to broadband Internet for entrepreneurial Internet-based businesses, in part through the telecenters in Murphy and Sparta.

Strategy 4C: Bring the available broadband Internet to existing industry, to help connect them more quickly and directly to vendors and suppliers in major metropolitan area markets, research universities, federal labs, and other partners within their clusters of innovation.

A complete discussion of each goal and strategy above is included in the full report.

Section II. Clusters of Innovation for the AdvantageWest Region

The future job market for western North Carolina will be determined by 1) the degree of innovation among companies and universities within the region; 2) the influences of Metro Atlanta, Greenville/Spartanburg, Charlotte, and other large markets in the southeast; and 3) state and federal economic policy. This plan is intended to give the Advantage West region a competitive advantage by focusing on the clusters in which it has the strongest assets for growth and innovation, as well as to work with policy makers to create the most favorable business climate possible for the region.

The Advantage West region of 23 counties (see map) is about the size of the State of Maryland and has a variety of economic drivers both in and outside the state. The region is sometimes discussed in terms of various sub-regions, including the Highlands or southwest mountains “west of the Balsams,” the Asheville metro/I-26 corridor, the foothills or industrial crescent, and the High Country or northwest. The fast-growing metro Atlanta region, the Greenville-Spartanburg corridor in South Carolina, the Tri-Cities (Johnson City/Bristol/Kingsport) area of Tennessee, as well as the Winston-Salem and Charlotte metro areas of North Carolina, are all strong markets for the AdvantageWest region.



As the Atlanta region in particular experiences diseconomies of scale from growing too rapidly, western North Carolina has a unique locational advantage in attracting entrepreneurs to grow their businesses in proximity to that market but with a more relaxed quality of life.

Relative to North Carolina (and the nation), the AdvantageWest region's industries with a demonstrated competitive advantage are: recreation and tourism, retirement and second homes, arts and crafts, vehicle parts assembly, metalworking, chemicals and plastics. Section 2 of the supporting report provides the background analyses.

In recent years, promising regional niches are emerging in advanced manufacturing, IT, food production, health care, the commercialization of native plants, environmental sciences, home-based crafts, and homeland security. These could flourish to national competitive advantage with additional innovation.

The table on the next page shows ten clusters that the Vision Task Force believes are appropriate targets of innovation and focus for at least the next five years. These ten reflect both 1) the clusters strongest in the nationally comparable secondary data for the AdvantageWest region, and 2) the knowledge of Task Force members and other stakeholders about more current, innovative activity on the ground in the region. Many of these are indigenous to the region and cannot easily be exported or replicated elsewhere in the U.S. Within each of the ten overall categories, several examples and specific niches are listed as a starting point.

However, the Vision Task Force recognizes that continuous innovation will lead to new products that haven't even been invented yet, and that other niches within these overall clusters will emerge, as well as new combinations at the intersection of one or more of those in the table. In addition, while the focus here has been on private businesses, targeting should also include state and national agencies, associations, foundations and institutes that will provide innovation and substance to the clusters. Civic and social entrepreneurship can help stimulate private entrepreneurship and vice-versa.

The AdvantageWest region's strategies will focus on developing infrastructure to support innovation, with the hope and trust that the innovation will define the most competitive niches and clusters for the future. One purpose of this plan's Goal 2, establishing a regional process for strategic thinking, is to revisit and retool the cluster-based strategies on a regular basis to respond to new opportunities in the global marketplace.

**Ten Clusters of Innovation
that Leverage the Advantage West's Regional Assets**

<p><u>Advanced manufacturing-related</u> Automobile components, 2nd & 3rd tier Advanced materials & composites (incl. ceramics) Chemicals and plastics Metalworking Optics Professional services: architecture, engineering, finance, law</p>	<p><u>Arts, crafts and design-related</u> Home-based entrepreneurs and artisans Niche wood products and furniture Graphic arts Architects Historic preservation Set design Arts education and training</p>
<p><u>Communications and IT-related</u> IT/software Distance education and training Multi-media, incl. film, TV, video Internet-based businesses in many sectors</p>	<p><u>Environment-related</u> Alternative/renewable energy Environmental sciences Value-added natural resources, including minerals Environmental reclamation</p>
<p><u>Food-related</u> Wine and culinary arts Food horticulture, processing and packaging, including organic Regionally-branded food products</p>	<p><u>Health care-related</u> Health care delivery (hospitals, labs and specialized medical services) Medical equipment and materials field testing and manufacturing</p>
<p><u>Life sciences and agribusiness-related</u> Native plant commercialization, including biotechnology Nutraceuticals² Biomanufacturing Sylviculture and horticulture Nontoxic pest management</p>	<p><u>Recreation and tourism-related</u> Eco-tourism Heritage tourism Hospitality Outdoor attractions and services Outdoor recreation equipment</p>
<p><u>Retirement-related</u> Construction of second homes Continuing care retirement communities Gerontology Adaptive technologies for the elderly Senior services, activities and work</p>	<p><u>Security-related</u> Forensic sciences Homeland security technologies Criminal justice</p>

² Nutraceuticals (often referred to as phytochemicals or functional foods) are natural, bioactive chemical compounds that have health promoting, disease preventing or medicinal properties. Nutraceuticals are used in the production of various compounds in the food industry, the herbal and dietary supplement market, the pharmaceutical industry, and combinations of the above.

Section III. Higher-Education Curricula to Prepare the Region's Workers for the Future Job Market

The leadership of the higher education institutions in the AdvantageWest region is committed to developing the necessary programs to prepare the regional workforce to staff and lead the companies in the current and future clusters that drive innovation and economic growth for the region. Those programs include not just innovative curricula and certificate programs but leadership development, policy seminars, executive education, and R&D partnerships with business leaders.

As Goal 3 above suggests, in order for the region's colleges and universities to be more nimble in responding to changing economic requirements, they will need state-level policy, review processes and funding to become more nimble as well. In particular, they are asked to

- ❖ Simplify and shorten review processes for responsive and innovative curricula
- ❖ Develop short-term technical certification programs for high school and post-secondary students

As part of the background work for this plan, the workforce programs of the region were mapped to the ten clusters of innovation from Table 1. There are already strong university and commercial capacities and assets in many of the niches listed in the table. There is great potential for enhancing, to national-class status, the education and training programs in the region so that they can prepare an innovative workforce for the region's emerging economy. The first priority focus areas should be:

- ❖ Pharmaceuticals and medical technologies
- ❖ Biotechnology, biomanufacturing and bioinformatics
- ❖ Vehicle parts assembly
- ❖ Chemicals and plastics
- ❖ Advanced materials and composites
- ❖ Medical equipment and materials manufacturing
- ❖ Gerontology and technologies for the aging
- ❖ Alternative/renewable energy
- ❖ Environment-related programs
- ❖ Food processing, packaging and nutrition
- ❖ Forensics
- ❖ Homeland security and navigation technologies
- ❖ Outdoor recreation equipment
- ❖ Materials science and research for the crafts industry
- ❖ Distance learning to support home-based businesses

