



Invent the Future: Quality, Innovation, Results: The 2006 - 2012 Strategic Plan Update

Engagement Scholarship Domain

As Virginia's senior land-grant university, Virginia Tech is committed to engaging its intellectual assets to address the economic and social needs of communities around the commonwealth, the nation, and the world. This commitment is based on the university's motto *Ut Prosim* (That I May Serve) and is founded on principles of an engaged university:

- Engagement cuts across and is embedded in all missions.
- All disciplines of the university are expected to participate.
- Faculty involvement and rewards are tied directly to scholarship and quality outcomes.
- Relationships with communities and partners are defined as being
 - bi-directional and reciprocal;
 - partnership-based, i.e., parties make investments in and get benefits from specific projects; and
 - mutually respectful of the strengths and needs of all parties and involved in a regular, healthy exchange of ideas.

Overarching goal of the Engagement Scholarship Domain: Engage in strategic partnerships that enhance the economic and social well-being of individuals, families, businesses, and communities around the commonwealth, the nation, and the world, and enrich and strengthen the university's discovery and learning missions.

Goal I: Connect the university's discovery, learning, and engagement assets through partnerships with both the public and private sectors to advance the economic vitality of the commonwealth and the quality of life of its citizens.

Our society is shifting to an innovation-based economy. As such, the sustainable competitive advantage of the U.S. will be in higher-value products and services versus low-wage labor. This trend has led federal, state, and local government officials; representatives from businesses and communities; and individuals to look to institutions like Virginia Tech to enhance their economic competitiveness and long-term success. The outcomes these stakeholders are expecting from

knowledge generated through discovery in a robust research program include new jobs, better paying jobs, increases in wealth, and an improved quality of life.

Virginia Tech's mission states: "The university creates, conveys, and applies knowledge to expand personal growth and opportunity, *advance social and community development, foster economic competitiveness, and improve the quality of life*" (italics added). Virginia Tech is committed to its leadership role and contribution to the economic vitality of the local region, the Commonwealth of Virginia, and the world.

The university is one of the region's largest employers with thousands of faculty and staff. The purchases by employees and students are a major driver of local commerce. Additionally, Virginia Tech's many campus-based athletic, cultural, and professional education events annually bring to the region hundreds of thousands of visitors who pump millions of dollars into the local economy.

The direct and residual contribution of the university's \$270 million in sponsored research stimulates significant job growth. For example, each \$1 million investment in research generates approximately 31 new jobs. The transfer of faculty-created technology to the marketplace manifests itself in the creation of spin-off companies, licensing to existing companies, additional research and technical assistance projects, and public/private partnerships.

To nurture this increased emphasis on commercialization, the university has invested heavily in additional personnel to assist faculty in these new ventures.

Also, through the Virginia Tech Foundation, the university has provided leadership to the development and growth of the nationally recognized Corporate Research Center (CRC). As a showcase of entrepreneurial enterprises, the CRC currently has more than 120 companies and 1,800 employees and significant expansion is anticipated over the next six years.

In addition, the Virginia-Maryland Regional College of Veterinary Medicine engages in translational research and medical services contributing to the economic vitality of the region.

As Virginia's senior land-grant university, Virginia Tech is uniquely positioned to be a significant partner in the commonwealth's economic strategy. The university annually produces thousands of technology-savvy graduates, most of whom enter the workforce, and the state's largest number of doctoral degree holders. Continuing and professional education programs annually reach more than 50,000 professionals through short courses, conferences, seminars, and workshops. Thousands of other working adults receive graduate credit courses and degree programs at the six Commonwealth Campus Centers and through distance and distributed learning programs. Additionally, faculty members

provide technical assistance, consulting, applied research, and service learning activities with students to improve businesses and communities across the state.

Virginia Cooperative Extension continues to be a vital contributor to the competitiveness of the agricultural, health, and life-sciences sectors of Virginia's economy. Through its extensive network of 107 local Extension offices, six 4-H educational centers, and 13 Agricultural Research and Extension Centers across the state, Virginia Cooperative Extension provides research-based information and technologies that contribute to the well-being of individuals, families, and communities across the commonwealth.

In the economically distressed Southside region of the commonwealth, the university helped create and supports the Institute for Advanced Learning and Research (IALR) in Danville. IALR currently has over \$20 million in four sponsored research foci, each with a commercial dimension, to transform the economy of Southside.

The university is working with state and local leaders to establish regional research and development centers in four other distressed communities in Virginia, each focusing on a major existing business cluster. The university continues to support the Southside Business Technology Center in Martinsville that provides strategic planning and business development services to businesses in Southside, Virginia's Philpott Manufacturing Extension Partnership, and other agencies and organizations that contribute to the state's overall economic program.

With the National Capital Region becoming increasingly important to the economies of both the state and the nation, the university will leverage and grow its presence there to better access the unique opportunities and assets that exist in the region. Program ventures include expanded research programs targeted at key sectors of the federal agenda; high-end professional education programs for business, the technology sector, and government; and new collaborations with non-government and international organizations.

In today's world, the full success of the university's economic vitality commitment is contingent upon connections to an ever-emerging global marketplace. The university's international strategic plan articulates a bold vision that includes existing or planned programs in Switzerland, Asia (India and China), Dominican Republic, Egypt, Mexico, and Africa.

Additionally, the university will leverage its position as the third largest university recipient of funds from USAID to expand and enhance programs that address the economic health of impoverished regions of the world, as well as connect opportunities in these regions with Virginia interests.

Strategies:

- Increase commercialization activities emanating from faculty research, including the number of public/private partnerships initiated, patents filed, spin-off companies created, licensing income generated, and research and technical assistance projects completed with businesses located in the Corporate Research Center and across the commonwealth.
- Increase research, education, and outreach interactions with international organizations and businesses with commercial interests in Virginia.
- Increase enrollments in Extension, continuing education, and lifelong learning programs that educate, train, retain, and retrain the workforce in targeted fields with skills necessary to contribute to a strong economy.
- Establish regional research, development, and innovation centers.
- Lead economic and community development efforts in targeted regions such as Roanoke/New River Valleys, Southside, and Southwest Virginia.
- Create and leverage partnerships with local, national, and international organizations uniquely accessible in the National Capital Region.

Performance Measures:

Number of patents filed by faculty, staff, and students.

Number of companies created from faculty research activities.

Number of participants in Extension and professional and continuing education programs.

Number of regional research, development, and innovation centers developed and implemented.

Goal II. Foster communities that value all cultures, languages, lands, and people by strengthening the international and multicultural expertise of students, faculty, staff, alumni, and constituents.

The university's commitment to enhanced international and cross-cultural awareness and understanding is based on the recognition that its graduates live and work in a world that is culturally diverse, interdependent, and interconnected economically. The university must educate students to contribute and thrive in this global environment. The success and societal contributions of Virginia Tech graduates depend upon their familiarity with the world beyond the borders of the U.S.

To be competitive domestically, Virginia Tech must be competitive internationally. The university recognizes that international research and scholarship contribute tangibly to the university's competitiveness and provide opportunities for faculty members to make important contributions to the economic well-being and quality of life of people around the world.

Breakthrough innovation frequently involves international collaborations, making the increasingly global character of university engagement valuable to the university's mission. Virginia Tech must have effective practices for

internationalization and diversity in order to compete with highly regarded peer institutions around the world. Investments comparable to other world-class universities are necessary to attract the best students and facilitate internationally acclaimed research and scholarship.

Virginia Tech will invest in transformative institutional change to strengthen its position as a world-class university of scholarly innovation, instruction, and outreach. The university will advance its international position by enhancing program activities at the Center for European Studies and Architecture and through the development of new international venues. By 2012, the university will have at least five international initiatives that will serve as hubs for program expansion in key regions of the world. The initiatives may involve facilities and services to support regular faculty and student exchanges, research and teaching collaborations, and new engagement ventures that address global issues

Woven into the strategy is a participatory process that involves all stakeholders who are key partners with the university's work and contributors to the following mission and vision for the university's international position: