

**Appendix B:
NC State University
Public Policy Response to
UNC Tomorrow Report**

Institute for Science and Technology – Engaged Public Policy

UNC-T recommendation: 4.7, 4.1, 4.4, 4.6

Type: New Program

Description

To provide knowledge-based research and intellectual leadership that serves the state, nation, and world by applying science, technology, and engineering to public policy, NC State will establish an Institute of Science and Technology - Engaged Public Policy. InSTEPP is a new initiative that will engage faculty and students in scholarly research, education, and outreach on public policy issues dealing with energy and the environment, security, and STEM education. InSTEPP's academic program will focus on public policy studies.

An inventory of public policy work at NC State reveals particular strength in teaching and research in public policy; research and outreach in energy, the environment, and environmental engineering; and research in computer and bio-security. Work in these three research areas spans several colleges, uniquely positioning InSTEPP to engage in multi-disciplinary and interdisciplinary work, thereby broadening its impact. Faculty in eight colleges and two institutes are actively engaged in public policy work on energy and the environment. Also, numerous faculty are actively engaged in security public policy work (e.g. College of Engineering, College of Humanities and Social Science, College of Veterinary Medicine, and College of Management).

Other areas in which NC State is positioned to contribute to public policy through its research and extension include analysis and recommendations on social, economic, and behavioral aspects of aging, family and social welfare issues, and education policies for youth.

InSTEPP's extension and outreach program will tap into existing programs including the Institute for Emerging Issues, Solar Center, Institute for Non-Profits, Natural Research Leadership Institute, and the proposed Center for Democracy and Civic Engagement. In educational extension, the institute will build on NC State's historical commitment to STEM education of students and the workforce. It will seek to understand and propose public policy actions that strengthen STEM education.

InSTEPP's educational outreach will seek to transfer the results of research conducted within the institute by developing dynamic educational materials and creating new multi-disciplinary degree programs. For example, to support the security focus, we will propose to establish a joint J.D./Ph.D. program between the UNC Law School and the NC State College of Engineering. Although there is interest in such a degree program, NC State currently has no means of supporting it in a way that is typical in an M.D./Ph.D. program. As a model for this new program we will look to the program currently co-sponsored by Emory University's Medical School and Georgia Tech's College of Engineering. Such a program will address critical workforce shortages in security engineering and information technology.

Partnerships

InSTEPP will seek to partner with UNC-CH's Applied Public Policy Center, the UNC School of Law, and other UNC campuses. In addition, it will seek to partner with the North Carolina EPA and Emergency Management Homeland Security Branch. Finally, we will partner with universities across the nation in collaborative projects, with federal and state agencies, and with industry.

Implementation

The NC State Public Policy Task Force is currently developing a strategic plan and implementation plan for InSTEPP. Elements of the management structure will include an academic advisory board, a government and industry advisory board, and a scientific advisory board. The task force will also develop a three-year timeline to engage the colleges and departments, and establish key performance indicators for evaluation and reporting. The report of the task force will be finalized in June 2008.

The task force will charge InSTEPP with meeting these objectives:

- Proactively identify and analyze emerging public policy needs.
- Be flexible and responsive to societal needs.
- Produce an annual report, noting impacts of NC State's public policy research and engagement.
- Create two new domain-specific degree programs in environmental/security and engineering public policy/law.
- Create communication mechanisms for wide dissemination.
- Translate research for public and governmental policy and decision makers.
- Provide a clearinghouse for legislature, media, industry, and the public.
- Obtain external funding.

Funding

Future costs:

One-time costs	New recurring costs	New state appropriations	Campus (re)allocation	Grants & contracts	Gifts	Receipts	Other
	\$3 million	40%	20%	25%	15%		

Responsibility

The NC State Public Policy Task Force will be responsible for launching this initiative. The Office of Extension, Engagement, and Economic Development will provide support to the task force. The Office of the Provost, the vice chancellor for research, and the Graduate School will be involved in establishing and approving the institute.

Assessment

We will track public policy initiatives and evaluate them to determine accomplishment and impact at local, regional, state, national, and global levels. We will measure outcomes and assess societal impact. To demonstrate societal impact of our education and engagement efforts, we will track linkages to educational programs and specific public policy efforts throughout the state. We will publish our results and report them to key stakeholders.