The 2005-2006 academic year is the first year under Iowa State University’s new 2005-2010 Strategic Plan, “Forward thinking.” This plan is the University’s roadmap to fulfilling its mission, to “create, share and apply knowledge to make Iowa and the world a better place,” and to achieving its vision, to be “the best at advancing the land-grant ideals and putting science and technology to work.” The plan identifies five priorities, and includes a set of goals within each priority.

The University’s progress on key performance indicators is documented in the attached statistical report. Following is a brief narrative summarizing some of the key projects and initiatives during the past year that have contributed to the University’s progress, listed by priority area of the Strategic Plan, as well as a concern about the University’s competitiveness for top faculty and staff.

**Priority: Education.** Strengthen undergraduate, graduate, and professional education to enhance student success at Iowa State University and beyond.

*Admissions Partnership Program (ISU and DMACC):* ISU and the Des Moines Area Community College (DMACC) have joined forces to make it more convenient for DMACC students who want to earn bachelor’s degrees to transfer to Iowa State. This program will provide benefits to help pave the way for academic success at both schools. While still at DMACC, students (before enrolling in ISU courses) will receive mentoring and guidance from both schools, access to career resources at ISU, opportunities for early orientation and registration at ISU, guaranteed acceptance in an ISU program (having met all college and program requirements), opportunities to live in ISU housing, and ISU student pricing for athletic and cultural events.

*ISUComm adopted:* The Faculty Senate voted to adopt the ISUComm curricular plan in fall 2005, thus the 2005-06 academic year marks the inauguration of the full implementation of this major curricular redesign. ISUComm is a comprehensive program developed by a faculty steering committee that is distributed over the entire undergraduate curriculum. Its goal is to help students develop skills and competence in written, oral and visual communication so they will be able to communicate with confidence, integrity and expertise in the varied contexts of their academic, professional and civic lives.

*ISU Learning Communities continue to rank among nation’s best:* One of Iowa State’s innovative academic programs has been recognized as one of the country’s best, according to the Fall 2005 U.S. News & World Report ranking. The learning communities program at ISU is celebrating a decade of success and is listed among the top 25 nationally. Currently, more than 2,200 students of all classifications choose to join one of the 57 learning communities, with approximately 50 percent of all ISU freshmen participating. One of the most successful learning communities is the Entrepreneurship and Innovation Learning Community, which is in its second year, and has expanded to 46 students from 31 in 2004. The one year retention rate for Fall 2004 learning community students was 90% compared to 82% for non-learning community students, and the 6-year graduation rate for learning community students was 76% compared to 62% for non-learning community students.

*Visual Literacy and Learning Program:* Enhancing and improving undergraduate education through visual literacy and learning into departmental curricula is the goal of several projects of University Museums. The program contributes to the ISUComm program and is being expanded each
semester to additional class sections. In fall 2006, more than 200 sections will include Visual Literacy and Learning (VLL) elements.

**Priority: Programs. Increase the number of graduate, professional and research programs that are among the very best -- especially in areas that build on University strengths and address local and global critical needs.**

**New College of Human Sciences:** The College of Human Sciences was formed on July 1, 2005, bringing together the departments and programs formerly housed in the colleges of Education and Family and Consumer Sciences. The inaugural dean, Cheryl Achterberg, joined ISU on September 1, 2005. This major reorganization followed the principles of the Policy on Academic Reorganization, and the planning involved a large number of faculty, staff, students and administrators who collectively helped to shape and define the new college. The combination builds on many collaborations and synergies that already existed between faculty in the departments of the two colleges, and it provides significant administrative and operational savings that are being used to support the academic programs.

**Supercomputer for biological and information sciences:** An NSF grant awarded to an ISU research team enabled the purchase of the first supercomputer on the ISU campus, which will significantly enhance the University’s capabilities in several key research and graduate education areas, including plant genomics, bioinformatics and biological statistics, computational biology, and electrical and computer engineering. Acquisition of the $1.25 million IBM Blue Gene/L model placed ISU among the top 10 universities with such supercomputing capacity in the country.

**Recruiting new faculty:** ISU has been very successful this past year in recruiting new faculty members with outstanding records that will enhance high-priority research areas. Examples include:

- Krishna Rajan was recruited into the Department of Materials Science and Engineering. He came to ISU after 18 years at Rensselaer Polytechnic Institute where he established the nation’s first program in materials informatics. He is also an expert in high-resolution microscopy and the nanostructural characterization of materials. He brought that pioneering spirit – along with an NSF international research and education center – to ISU, which will greatly enhance the university’s Institute for Combinatorial Discovery.

- The Department of Chemistry has hired two new faculty members with much potential. Emily Smith is joining ISU as an assistant professor in bioanalytical chemistry. She has the potential to be a world leader in the area of cellular imaging. Her research addresses important issues of clustering of cell membrane proteins, their interactions with extra cellular and cytosolic proteins, as well as the post-translational modifications of cellular proteins. Her presence will help strengthen not only Chemistry’s rankings but that of analytical chemistry. Teresa Windus has been hired as a full professor in theoretical and computational chemistry. She is an internationally recognized leader in theoretical and computational chemistry as well as in massively parallel computing. She will carry on a long and distinguished tradition of quantum chemistry at ISU.

**Advanced Neurotoxicology:** This effort is being led by Dr. Anumantha Kanthasamy, a very successful faculty member in Biomedical Sciences who has received more than $4 million in NIH funding since he arrived at ISU in 1999. Neurotoxicology bridges the scientific fields of toxicology and neuroscience and can affect the health of humans and animals, and significantly impact related industries, including agriculture, the economy, and the environment. This area of toxicology has
gained momentum due to growing awareness of neurotoxicity associated with drug abuse, food contamination and environmental links to neurodegenerative disorders, as well as due to emerging issues such as prion diseases, chemical warfare and bio-terrorism facing Iowa and the nation.

**Nutrition and Wellness Research:** This research effort has been established to enhance human health and promote the development of food-related industries in Iowa, and it was among the first to receive funding from the Biosciences Alliance of Iowa program. Researchers will evaluate the impact on human wellness of new foods and nutrient supplements produced from microorganisms, plants and animals. These new foods and food products are a result of the biosciences revolution that is sweeping agriculture. As the effort develops, organizers envision that it will expand its mission to include factors, such as physical activity, which interact with nutrition to determine wellness. A national search is underway to recruit a director for this initiative.

**New degree programs:** New graduate degree programs were approved by the Board of Regents in 2005-06 that build on University strengths, contribute to the Iowa economy and offer excellent career opportunities to students. They are: M.S. and Ph.D. interdepartmental programs in nutritional sciences, M.S. in seed technology and business, and Master of Fine Arts in creative writing and the environment.

**Center for American Intercultural Studies (CAIS):** Established in summer 2005 by approval of the Board of Regents, this academic unit supports research and teaching on the issues pertaining to the experiences of diverse ethnic and cultural groups of American society. The scholars and teachers working in CAIS develop curricular and co-curricular programs focused on ways that U.S. Latino, African American, American Indian and Asian American groups interact with one another, with the majority Euro American groups, and with the broader global community. In supporting scholarship and teaching in interethnic relations and intercultural understanding, CAIS commits its resources to assisting students and faculty in exploring and developing their potential as educated members of a diverse American community.

**Priority: Economic Impact. Translate discoveries into viable technologies, products and services to strengthen the economies of Iowa and the world.**

**Grow Iowa Values Fund:** The Office of the Vice Provost for Research announced the funding of nine grants from the Fall 2005 grants competition. The funding is intended to support a wide range of stages in technology development, from initial concept (prior to intellectual property disclosure) to proof of concept, to licensing and commercialization. The grants should result in new Iowa businesses and/or jobs based on ISU technology, and new ISU technology licensed to companies with an Iowa presence.

**ISU Scientists part of $29.5 million maize genome sequencing project:** ISU scientists are playing a major role in the $29.5 million, three-year project to sequence the corn genome, the most complex genome to be sequenced to date. Patrick Schnable, professor of agronomy and director of the Center for Plant Genomics, and Srinivas Aluru, professor of computer and electrical engineering, are leading ISU’s effort to assemble the DNA sequence data. This will allow scientists to more effectively develop corn with traits like enhanced nutrient composition for better food and feed, higher energy content for renewable fuel production, or improved characteristics for use in industrial raw materials. This will create new uses for corn and benefit both farmers and consumers.

**ISU a partner in global effort to sequence swine genome:** In January 2006, the USDA announced the award of a new $10 million National Research Initiative grant for an international effort to sequence the swine genome. Distinguished Professor Max Rothschild is one of nine project co-
directors based at seven institutions in four countries involved in the sequencing effort. (He has served as national pig genome coordinator for the U.S. Department of Agriculture since 1993.) By decoding the sequence of the pig genome, scientists can explore new ways to improve swine health and to increase the efficiency of swine production. The work of this research team will have a significant impact on U.S. agriculture.

**ISU Researcher’s work to boost ethanol production:** Brent Shanks, associate professor of chemical and biological engineering, is leading a research team that is working to develop chemical catalysts that could boost ethanol production by increasing the yield of fermentable sugars from corn. Such a process would allow ethanol producers to use all the sugars in corn, and it is estimated that it could boost ethanol production by 10-15 percent. The research is funded by grants from the National Science Foundation, the U.S. Department of Agriculture, and the U.S. Department of Energy.

**Priority: Iowa Life. Elevate the state’s appeal as a place to live, learn, work, and play.**

**Community Vitality Center:** During the past year, the Community Vitality Center (CVC) has launched several new initiatives to foster community entrepreneurialism for local revitalization. The CVC funds community-initiated projects and provides research-based information and best practices to Iowa community leaders. For example, Carroll County Extension received a CVC grant allowing area leaders and entrepreneurs to organize an entrepreneur’s network resulting in 27 entrepreneurs who are starting new businesses or serving as mentors. They share ideas and support one another in their goal to become more successful in their entrepreneurial enterprises and develop the capacity of their rural communities.

**Priority: University Life. Ensure that the University is a great place to learn and work.**

**Budget Model Development:** In spring 2005, President Geoffroy, charged a group to explore alternative methods of budgeting that will bring revenues, responsibilities, and expenses into better alignment in a way that will help Iowa State University more effectively accomplish its mission and reach its vision of “being the best at advancing the land-grant ideals and putting science and technology to work.” The exploration began with a symposium held in May 2005 featuring presentations by representatives from three other universities that have implemented alternative budget models. Since that time, the Budget Model Development Committee has spent considerable time developing alternative budget concepts for consideration by the University community. The development and review process is expected to culminate in a final decision on how best to proceed early in the 2007 spring semester.

**Campus Climate Study and Diversity Committee recommendations:** An implementation committee of the President’s Advisory Committee on Diversity (PACD) offered specific recommendations for moving the University community toward an environment that better values and welcomes diversity, following the recent Campus Climate Survey findings. In the fall of 2005, each vice president detailed the specific implementation plans in order to address these recommendations, and will make annual reports of their progress.

**ISCORE:** The 7th annual Iowa State Conference on Race and Ethnicity was held on March 3, 2006, with more than 450 people attending the lectures and participating in 27 concurrent sessions. One of the keynote speakers was Dr. Frank H. Wu, dean of the Law School at Wayne State University in Detroit.

**Big XII Conference on Black Student Government:** ISU hosted the 2006 Big XII Conference on Black Student Government, a completely student-managed weekend featuring nationally renowned
speakers; leadership, investment and management workshops; a large career fair; and community development activities. A planning committee consisting of 35 undergraduate students, eight graduate students and two staff advisors worked with 250 student and staff volunteers from several campus organizations and offices to plan and facilitate this conference for a group of more than 1,200 attendees, representing 80 institutions across the country.

Dining Contract: ISU Dining was awarded the contract to providing food service to the University community following a comprehensive bid proposal and review process that involved students and staff representing many parts of the University. ISU Dining, a unit within the Division of Student Affairs, presented an outstanding proposal and was selected to continue providing high-quality dining and catering services to the Iowa State University campus.

New & improved facilities: Construction of several new facilities was completed or begun in 2005-06 to improve and enhance the quality of student life at Iowa State. They include:

- The new Environmental Health and Safety Services Building was completed in August 2005, providing a state-of-the-art facility for management of hazardous materials and wastes.

- Construction began on the new Schilletter and University Village (SUV) Community Center, which will provide a gathering space for the residents of this campus neighborhood, many of whom are international students and their families. It is scheduled to open in April 2006.

- Construction began on the new Hixson-Lied Student Success Center, located on Beach Road, in proximity to several residence halls, to provide services directed to students in need of academic counseling, tutoring and testing. The center will also house the Christina Hixson Opportunity Awards program, and the new Rod and Connie French Athletic Academic Center. Expected completion date for the center is March 2007.

- An extensive renovation of the Memorial Union began in the spring 2006 to improve existing circulation routes and way-finding, provide a new accessible south entry to the Memorial Union, provide improved access to the parking garage, update selected meeting spaces, provide a strong “ISU” presence in the building, update and expand the University Book Store spaces, and provide mechanical/electrical/life safety upgrades. Renovations are scheduled to be substantially completed by October 2008.

Concern:

Faculty and staff salaries: Of considerable concern is an area where the University has not been able to make progress – faculty and staff salaries. Due to underfunding of the Regents Partnership Plan for Transformation and Excellence, faculty salaries at Iowa State have continued to lose ground to the University’s peer institutions, and now rank at the bottom of this comparison group. Competitiveness in faculty salaries is absolutely critical to Iowa State’s ability to attract and retain the top faculty and to the achievement of the goals of the University’s Strategic Plan. This is especially true in areas that are of critical importance to the economy of Iowa, such as the biological sciences, physical sciences and engineering.