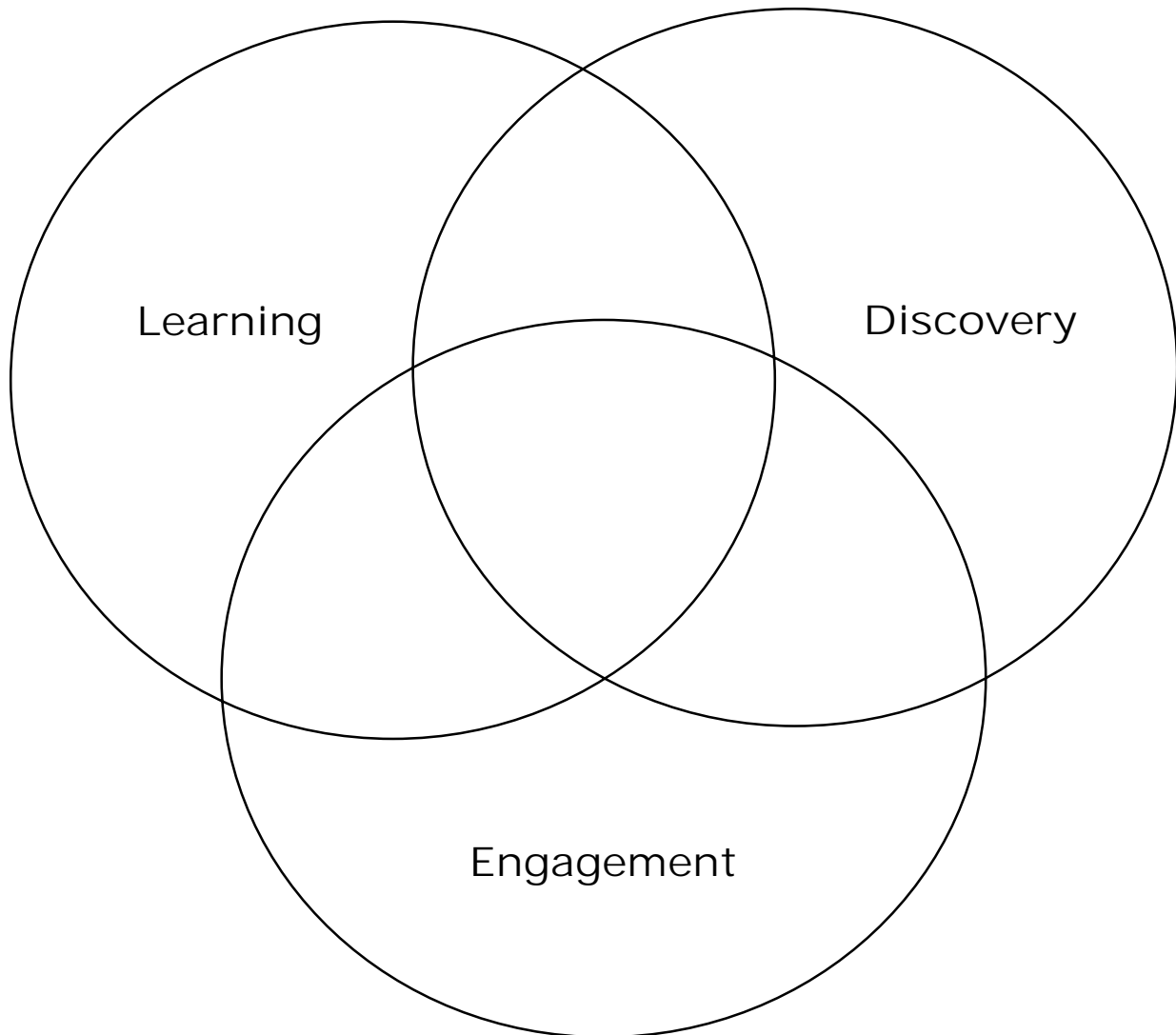


BECOMING THE BEST LAND-GRANT UNIVERSITY



Strategic Plan for 2000-2005:

Pursuing Excellence as Iowa's *Engaged* Land-Grant University

April 2000

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

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Iowa State's Aspiration: Becoming The Best Land-Grant University

The aspiration to become the nation's premier land-grant institution was set forth in the strategic plans for Iowa State that guided the University's development from 1990 to 1995, and from 1995 to 2000. This aspiration will continue to guide our development during 2000-2005 (i.e., fiscal years 2000-2001 through 2005-2006). The people of Iowa expect Iowa State University to become the nation's premier land-grant university, and Iowa State is committed to fulfilling that expectation. Over the past 10 years, Iowa State has made considerable progress toward this aspiration, and the new plan enables us to build on this progress.

To fully realize our aspiration through this new plan, we will embrace the concept of:

- **A responsible *Engaged Institution*¹ characterized by:**
 - *Responsiveness* to our clients and stakeholders
 - *Respect for partners* in education
 - *Academic neutrality* in serving as a resource
 - *Accessibility* for all of our constituencies
 - *Integration* of our mission with our responsibilities
 - *Coordination* among university entities working in concert with each other
 - *Resource partnerships* with government, business, and the non-profit world

By embracing these special characteristics of an *Engaged Institution*, Iowa State will more effectively fulfill its mission and responsibilities.

With a tripartite mission — learning, discovery, and engagement — the premier land-grant university achieves quality and balance of efforts in overall performance in

these three areas through efficient and accountable resource allocation. For Iowa State University to be the premier land-grant university in the nation, it must be superior in fulfilling its mission for the state of Iowa.

As an *Engaged Institution*, Iowa State's tripartite functions will become more responsively and productively involved with our constituent communities; and we will represent the ideals of sharing and partnership by recognizing and respecting what our partners bring to the table. We will work in collaboration with others and expand partnerships with other educational institutions, government, and the private sector, building upon each others' strengths and focusing on what each can do best.

Publicly stating our aspiration expresses our willingness, desire, and commitment to stretch ourselves in our effort to continuously improve what we do as individuals and as a University community. How we work toward our aspiration is as important as achieving it.

Aspiring to be the premier land-grant university in the nation also implies that we strive for excellence as measured by national standards. There is no single measure by which we can track our progress. Instead, there are multiple indicators representing all aspects of our mission that we will examine over time.

Our commitment to accountability and rigorous assessment of progress toward our aspiration to become the best, as Iowa's *Engaged* land-grant university, will be further recognized when the national educational community looks to Iowa State as the model of excellence to be emulated by other land-grant universities.

¹ *Returning to Our Roots*
THE ENGAGED INSTITUTION
Kellogg Commission on the Future of State
and Land-Grant Universities. February 1999.

Iowa State's Core Values

As we work toward creating an environment where continual learning serves the promises of a better world, all members of the Iowa State University community are called upon to act in harmony with our core values²:

Land-Grant Values: Reflecting our heritage and in achieving our aspiration, we embrace and operationalize our land-grant values of access to education and success, learning (encompassing practical and liberal education), discovery (encompassing basic and applied research), and engagement with society (encompassing service and outreach).

Excellence: We strive to continuously improve in the areas of learning, discovery, and engagement. Excellence embraces creativity, change, and innovation in order to engage and serve all stakeholders, including students, faculty, staff, administration, alumni, families, state and federal government, business, industry, communities, and citizens.

Quest for Knowledge: Through diverse perspectives, questioning, and discovery, we challenge ourselves to create new knowledge; and transmit, preserve, and apply our knowledge for life-long learning, and the promises of a better world.

Shared Leadership: In a community based on shared responsibilities and decision-making, we are empowered to take responsibility for continuous learning, and are mutually accountable to our stakeholders.

Integrity: Trust and trustworthiness, together, must characterize our words and our actions – as individuals and as a University. We expect that our actions will be consistent with our words; that we will demonstrate honesty and ethical behavior, and will address the needs of others.

Commitment: We enthusiastically strive to improve our University, and we eagerly accept diverse challenges and opportunities both at work and in the community. We pledge to make wise use of resources available to us, including financial resources, time, ability, and facilities that the institution provides.

Collaboration: We work with a broad range of constituencies to bring synergy and diverse viewpoints to the University. Sharing and dialogue foster two-way learning within the University, and with other academic institutions, business, industry, government, communities, families and citizens. We first listen and then respond to the needs of a broad range of constituents, providing opportunities for collaborative knowledge creation.

Mutual Respect: Genuine caring among individuals fosters diverse viewpoints and opinions, and shows that the skills and capabilities of all stakeholders are valued. We value community and continuous learning in the interest of civility, social justice, and upholding shared decision-making.

Inclusiveness: As a land-grant university, we are committed to the principles of equal access and opportunity. We constantly challenge ourselves to be proactive in protecting and advancing the interests of diverse populations and cultures, disenfranchised populations, and in breaking the barriers due to gender, race, physical abilities, economic level, and social status. We are committed to going outside our traditional constituent populations, to make higher education at Iowa State financially affordable, and geographically accessible.

Global Perspective: In today's fast-paced and ever-changing world, higher education must become a network that links students, faculty, business, industry, government, and community. We think globally to shape our actions, in order to better serve our constituencies in their quest to realize the promises of a better world.

² Adapted from the draft of core values developed by the Shared Leadership for Institutional Change (SLIC) team at Iowa State University, under the auspices of the Kellogg Foundation.

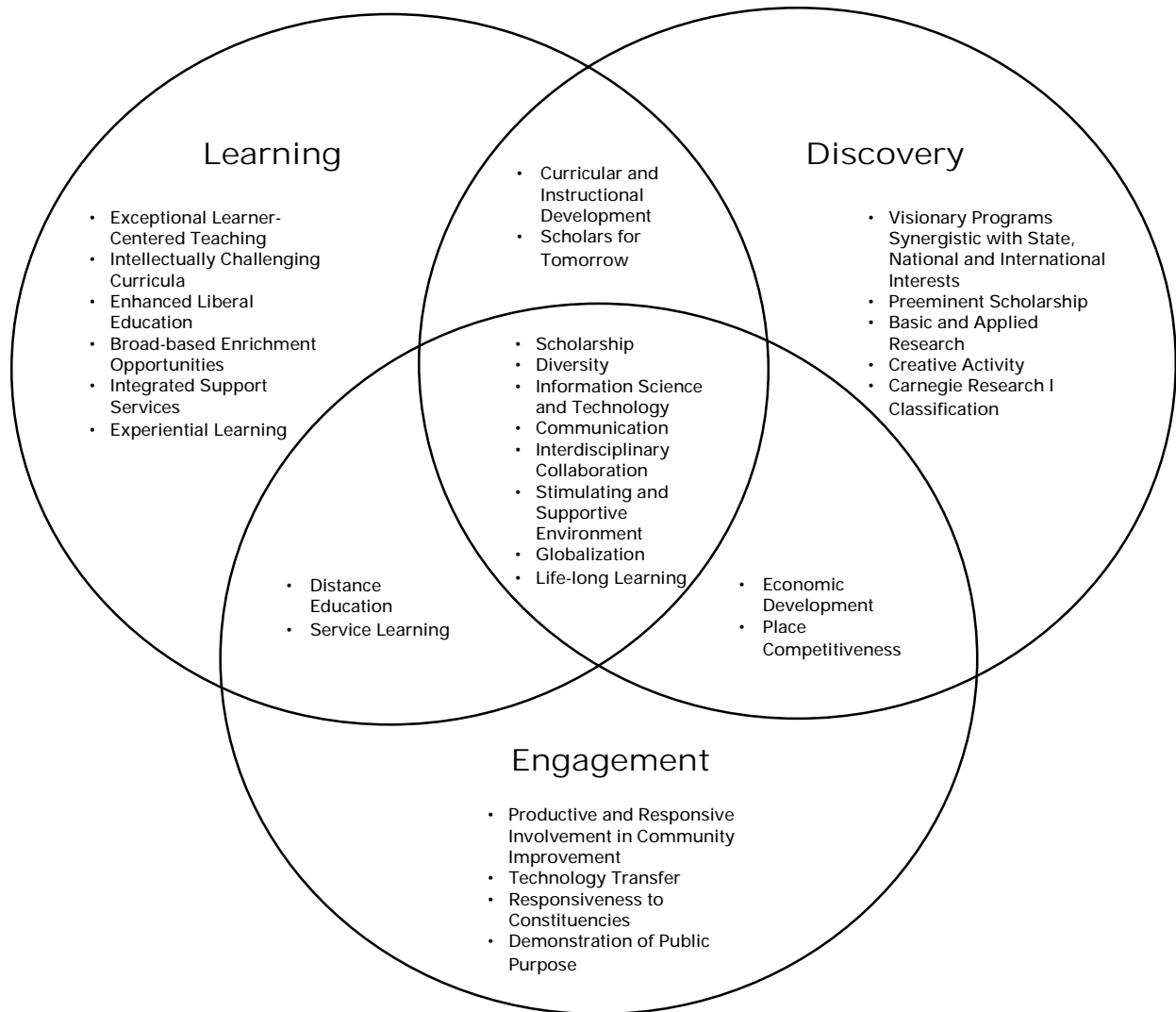
Iowa State's Culture

Iowa State University is committed to its core values and believes that “people”—students, faculty, staff, administrators, and other constituencies—are the lifeblood of the University. Together with diversity among people and the values, cultures, knowledge, expertise, and commitment they bring, we develop, enrich, and implement our strategic plan with a common vision and common goals. Through our culture:

- We demonstrate our commitment to the land-grant values, and our connectedness to the land and the citizens of our state. We demonstrate our sensitivity and responsiveness to the needs of our state, the nation, and the world
- We value, embrace, and reflect human and intellectual diversity, inclusivity, and dignity in the environments we create, nurture, or influence to fulfill our mission and realize our aspiration
- We safeguard academic freedom by nurturing an environment that encourages critical thinking, free inquiry, open communication, collaboration, and life-long learning
- We empower all of our constituent interests in endeavoring to become the best, and we expect to be accountable to ourselves, our stakeholders, our Board of Regents, and the public
- We recognize shared responsibilities among our various constituencies and benefit from shared decision-making and governance
- We draw from our state a strong work ethic and we demonstrate prudence in resource allocation
- We constantly develop and implement best ideas and best practices, in support of our aspiration to become the best
- We recognize individual and collective contributions and the role each of us plays in working together toward our aspiration

Strategic Plan Concept

Pursuing Excellence as Iowa's *Engaged* Land-Grant University



Iowa State University of Science and Technology
2000-2005 Strategic Plan

Strategic Plan Concept: The *Engaged* Land-Grant University

In its strategic plan (April 1998), the Board of Regents, State of Iowa, has identified four *Key Result Areas* as follows:

- **Quality** - *Become the best public education enterprise in the United States.*
- **Access** - *Provide access to educational, research, and service opportunities within the missions of the Regent institutions.*
- **Diversity** - *Establish policies to encourage continuous improvement of the climate for diversity, and ensure equal educational and employment opportunities.*
- **Accountability** - *Meet the objectives of the Board and institutional strategic plans, and provide effective stewardship of the institutions' state, federal, and private resources.*

Consistent with these expectations, and commensurate with Iowa State's core values and culture, we will strive to realize our aspiration by embracing the concept of:

- **A responsible *Engaged Institution* characterized by:**
 - *Responsiveness* to our clients and stakeholders
 - *Respect for partners* in education
 - *Academic neutrality* in serving as a resource
 - *Accessibility* for all of our constituencies
 - *Integration* of our mission with our responsibilities
 - *Coordination* among university entities working in concert with each other
 - *Resource partnerships* with government, business, and the non-profit world

As Iowa's *Engaged* land-grant university, the central theme of our new plan concept is the intersecting and integrative relationships involving:

- **Learning**
- **Discovery**
- **Engagement**

Learning

Iowa State believes that learning is at the heart of our University. It occurs in many contexts, and by all members of the University community. As a land-grant institution, Iowa State University is among world leaders in providing post-secondary access. However, *access to success* through Iowa State University will mark our commitment to enhancing learning, and it will be accomplished by providing exceptional learner-centered teaching, services, and enrichment opportunities; and by paying attention to lifelong learning needs of a learning society.

Discovery

As a *Carnegie I* university with the tradition of *Science with Practice*, Iowa

State believes that discovery and innovation characterized by preeminent scholarship—encompassing research, creative activities, teaching/learning, and extension/professional practice—will mark our commitment to discovery, thereby enhancing our national and international distinction. Institutional agility and interdisciplinary collaboration will allow Iowa State to undertake bold visionary initiatives with special attention to ethics and social, economic, and environmental responsibility.

Engagement

As Iowa's *Engaged* land-grant university, Iowa State will synergistically devote its knowledge and expertise toward increased responsive and productive involvement in improving Iowa's communities and the larger society, at home and abroad. This will be marked by our commitment to sharing—to enrich and to learn, two-way partnerships with internal and external constituencies to achieve shared goals, and demonstrate the public purposes of Iowa State University.

Strategic Plan Goals, and Characteristics

Iowa State's three strategic plan goals devolve from the plan concept illustrated by Iowa's *Engaged Land-Grant University*, and set the parameters of our quest to transform Iowa State into the nation's premier land-grant university:

1. **Enhance learning through exceptional learner-centered teaching, services, and enrichment opportunities**
2. **Promote discovery and innovation characterized by preeminent scholarship, including increasingly interdisciplinary and collaborative activities**
3. **Engage with key constituents through synergistic sharing and partnership of knowledge and expertise to address needs of communities and society**

These overriding goals intersect with each other to fully reflect the characteristics of our *Engaged* land-grant university. Thus, it is important to illustrate both the individual characteristics of each goal, and their intersecting and integrative relationships.

Common to all three goals, we will particularly attend to:

- Promoting scholarship – with its emphasis on originality, critical analysis, and peer review – emanating from our quest for excellence
- Preserving and enhancing human and intellectual diversity consistent with our core values and culture
- Establishing international leadership in information science; integrating and effectively using information technology and computation services; and enhancing learning and quality of student life through coordinated administrative and academic information services
- Communicating and collaborating with our constituent stakeholders
- Encouraging and supporting interdisciplinary collaboration
- Enhancing and sustaining an intellectually stimulating and a supportive University community that encourages best ideas and best practices, and nurtures extracurricular activities
- Encouraging globalization initiatives for a better understanding of the multicultural and international world in which our future graduates will live and work
- Promoting life-long learning

At the intersection of Goal 1 and Goal 2, we will particularly attend to:

- Preparing the scholars for tomorrow by facilitating student learning experience through discovery and innovation at both undergraduate and graduate levels
- Improving student learning through curriculum development and instructional innovation to keep pace with the changing world marketplace

At the intersection of Goal 1 and Goal 3, we will particularly attend to:

- Enhancing service learning experiences for undergraduate as well as graduate students through hands-on community service opportunities, and internship opportunities that complement career objectives
- Expanding distance education opportunities to serve the needs of place-bound citizens

At the intersection of Goal 2 and Goal 3, we will particularly attend to:

- Strengthening initiatives to stimulate economic development, with a special emphasis on environmental stewardship and enhancing human resources
- Increasing Iowa's quality of life and thus place-competitiveness as the place of choice to live and work

These University-wide goals and characteristics provide the overall framework for the strategic plans for each of the units within the University—Provost (including each academic college), Business and Finance, Student Affairs, and External Affairs—working in concert to realize Iowa State's aspiration. Thus, reflecting their respective missions and goals, the various units will develop their own strategic plans consistent with the overall framework of the University plan.

Within this overall concept, Iowa State University describes its strategic plan goals along with characteristics that follow.

Goal 1: Enhance learning through exceptional learner-centered teaching, services, and enrichment opportunities

Iowa State believes that learning is at the heart of our University. It occurs in many contexts, and by all members of the University community. As a land-grant institution, Iowa State University is among world leaders in providing post-secondary access. However, *access to success* through Iowa State University will mark our commitment to enhancing learning, and it will be accomplished by providing exceptional learner-centered teaching, services, and enrichment opportunities; and by paying attention to lifelong learning needs of a learning society.

The predominant characteristics of this goal will be:

- A broad range of intellectually challenging curricula that prepares graduates for successful and rewarding lives in a rapidly changing world – with emphasis on developing skills in critical thinking, information management, team-based learning, problem-solving, and the skills needed for life-long learning
- Enhanced liberal education – to ensure that all undergraduate students develop literacy in science and technology; environmental awareness; communication skills; information research and analytical skills; humane and ethical values; knowledge of the intellectual, historic, and artistic foundations of our culture; understanding of individual and social behavior; and multicultural and international awareness and appreciation
- A community of motivated students and faculty committed to their respective responsibilities toward learning
- Critical understanding by all students of the ethical, social, historical, environmental, and economic implications of science and technology
- Demonstrated strength in all graduate programs, with distinctive targeted professional masters programs, and selected doctoral programs of national and international reputation (mostly in or related to science and technology)
- Innovations in effective teaching and learning programs supported by faculty and staff development opportunities; widespread emphasis on student-centered learning environments; increased interdisciplinary and collaborative teaching and learning; and student and faculty involvement in collaborative scholarship, peer review, and open discourse
- Effective use of assessment data to improve teaching and learning based upon clearly formulated intended learning outcomes
- Increased student, faculty, and staff diversity, with due regard to breadth of academic and supportive programs
- National competitiveness in attracting high achieving students
- Ubiquitous use of information technology, and its integration into curricula; and prominent programs of international leadership in information science and technology
- Library resources, including electronically accessible resources, and services necessary to support the depth and breadth of Iowa State’s educational programs
- Collaborative connections between academic affairs and student affairs that collectively enhance the learning experience
- A multitude of experiential learning opportunities—especially through real-life settings, cooperative study, internship, and study-abroad program opportunities
- Increased level of support and funding for improving learning opportunities and initiatives that involve innovative, exploratory, and developmental approaches

- Easily accessible student support services that effectively attend to the needs of a diverse student body including services and programs for nontraditional students, and special populations
- Campus safety as an asset, and supportive campus infrastructure and services,
- classrooms, and laboratory facilities, that enhance learning experiences
- Continuous improvement in student retention and graduation rates, and in career placement competitiveness

Goal 2: Promote discovery and innovation characterized by preeminent scholarship, including increasingly interdisciplinary and collaborative activities

As a *Carnegie I* university with the tradition of *Science with Practice*, Iowa State believes that discovery and innovation characterized by preeminent scholarship—encompassing research, creative activities, teaching/learning, and extension/professional practice—will mark our commitment to discovery, thereby enhancing our national and international distinction. Institutional agility and interdisciplinary collaboration will allow Iowa State to undertake bold visionary initiatives with special attention to ethics and social, economic, and environmental responsibility.

The predominant characteristics of this goal will be:

- Preeminent scholarship—encompassing research, creative activities, teaching, and extension/professional practice—that will sustain and enhance Iowa State’s national and international distinction; and information/library resources and services that sustain and enhance preeminent scholarship
- Excellence in basic and applied research by building on Iowa State’s strengths and where Iowa State University has a significant competitive advantage; national and international recognition in scholarship, creation of new knowledge, and opening of new frontiers
- National recognition through focused emphasis on research programs related to agriculture, veterinary medicine, natural and social sciences, engineering, technology, environmental stewardship, and economic development
- Nationally recognized innovations to enhance effective teaching and learning, including distributed learning technologies
- Bold visionary initiatives in basic and applied research that feature the unique strengths of Iowa State and mark its contribution in addressing the needs of the state and contemporary world society
- International recognition of leadership in information science, and technology innovation; and pervasive use of this technology in various dimensions of scholarship
- Increasing numbers of faculty and staff with national and international recognition—such as members of national academies, fellows of professional societies and institutions, and recipients of awards of excellence
- Interdisciplinary collaboration in both basic and applied research involving diverse faculty, staff, and students across the University, and with other institutions in the nation and abroad
- Effective programs for success of students in their involvement in discovery and innovation, and preparation of tomorrow’s scholars
- Increased level and partnership among sources of funding for research – to provide funding stability and flexibility for undertaking new initiatives
- Continued recognition as a *Carnegie I* university—a national measure of research performance

Goal 3: Engage with key constituents through synergistic sharing and partnership of knowledge and expertise to address needs of communities and society

As Iowa's *Engaged* land-grant university, Iowa State will synergistically devote its knowledge and expertise toward increased responsive and productive involvement in improving Iowa's communities and the larger society, at home and abroad. This will be marked by our commitment to sharing—to enrich and to learn, two-way partnerships with internal and external constituencies to achieve shared goals, and demonstrate the public purposes of Iowa State University.

The predominant characteristics of this goal will be:

- National leadership in demonstrating sharing and partnership characteristics by engaging the citizens of Iowa as joint stakeholders in Iowa's future
- Demonstrated understanding of the needs of Iowa communities, addressing those needs, and taking a leadership role in Iowa's economic development
- Demonstration of successful two-way partnerships and collaboration in responding to the needs of contemporary society in the state, the nation, and in other nations seeking such partnerships
- Expanded outreach and extension by increased integration with discovery and innovation initiatives; and with student learning experiences, such as through service learning programs
- Nationally competitive record of technology transfer consistent with Iowa State's orientation toward science and technology
- Positive impact in the state's stewardship of the environment, and in the improvement of quality of life to attract graduates to remain in or return to Iowa to live and work
- Systematic expansion of degree program offerings through distance education to meet the needs of place-bound citizens, including specialized programs meeting the needs of a growing workforce
- A balanced mix of knowledge-based and skill-based continuing education (non-credit) opportunities to serve the ongoing needs of workforce development
- A rich variety of life-long learning opportunities for alumni and other citizens of a learning society
- Significant support of alumni and other partners in strategic initiatives
- Widespread use of information technology and resources, and application of advanced technology capabilities in expanded extension and outreach programs, in distance education, and in programs involving collaboration and partnership

University-wide Strategies to Achieve Goals

A set of University-wide strategies for each goal will serve as Iowa State's primary strategies. As primary strategies, they define the overall scope of initiatives that Iowa State will craft, each of which will then have concomitant strategies.

With regard to relationship and articulation within the broader educational environment and marketplace, we will implement our strategic plan in accordance with the guidelines and expectations of the Board of Regents, State of Iowa, reflecting the public characteristics of governance. We will work collaboratively with the other Regent institutions as appropriate in order to complement each other with our strengths. We also will maintain a working relationship with the Iowa Coordinating Council for Post-High School Education (ICCPHSE) that will serve the best interests of our constituent stakeholders.

We recognize that strategies can change or be modified based on circumstances and results. Thus, the University-wide strategies are designed to provide a flexible overall framework. The University-wide initiatives will be designed and implemented based on annual or multi-year priorities and action plans. It is understood that many more strategies will need to be developed for specific initiatives at unit-level strategic planning.

The major University-wide strategies during 2000-2005 to achieve Iowa State's goals will be premised on a platform of three basic characteristics:

- Excellence in educational programs that is affordable to students
- Commitment to attracting and retaining world-class faculty and staff, along with competitive employee compensation and support for success
- Institutional agility and resource flexibility in order to capture emerging opportunities, and to be readily and creatively responsive to the needs of constituent stakeholders at the state, national, and international levels

Based on this premise, the major University-wide strategies to achieve Iowa State's 2000-2005 strategic plan goals will be as follows.

Strategies for Learning (including but not limited to the following):

- Expand and emphasize student-centered learning environments (such as *Learning Communities*) engaging academic variety and student diversity, with the goal of providing a holistic and collaborative approach to learning; learning through discovery, experience, and innovation; and effective use of information
- Continue to increase student, faculty, and staff diversity with due attention to underrepresented populations
- Enhance student recruitment at both undergraduate and graduate levels to reach annual enrollment targets; to attract high achieving students; to provide access and opportunities to those qualified but disadvantaged; and to maintain balance among residents and nonresidents, including international students
- Expand student financial assistance from both public and private sources, with due regard to competitive recruitment of qualified students, cost of education and student need, enrollment characteristics, scholastic achievement, and educational enrichment
- Continually develop information technology and its widespread access, and use it as a catalyst in the execution of other strategies, especially in the creation of new mechanisms for effective engagement of service

- Systematically improve and expand academic facilities—classroom, library, laboratory, and studio spaces—to support innovative teaching and learning
- Support faculty for innovation in learning/teaching/assessment; attend to appropriate class size for necessary student-faculty interaction; expand interdisciplinary and collaborative teaching and learning experiences
- Integrate student support services, including engaging the academic and nonacademic sectors of support—Provost, Business and Finance, Student Affairs, and External Affairs
- Expand service learning experiences for students through hands-on community service opportunities and internship opportunities that complement their career objectives
- Continue to expand and enrich student learning through international experiences and other outstanding enrichment programs
- Selectively enhance academic programs for national and international distinction (mostly in or related to science and technology)
- Effectively communicate and promote institutional achievements and faculty, staff, and student accomplishments among the constituent stakeholders, and enhance national and international visibility
- Conduct formal assessment of student outcomes at the University level at least every other year and, more frequently, assess the outcomes and effectiveness of academic programs, courses, and targeted initiatives in the interest of continuous improvement

Strategies for Discovery (including but not limited to the following):

- Nurture and support the initiatives and interests of both accomplished and promising faculty members to succeed in their endeavors of scholarship, and knowledge creation
- Pursue a limited number of targeted programs, based on Iowa State’s strengths, that are synergistic with state, national, and international interests
- Systematically maintain and improve scientific, technical, and physical facilities to provide an optimum level of support for discovery; support leadership initiatives; and selectively create state-of-the-art laboratories and enhance related resources
- Increase interdisciplinary and collaborative endeavors; increase the engagement of students in various dimensions of scholarship; and increase the infusion of scholarship into curricula
- Form a base for ubiquitous use of information technology (such as through the *Project Acropolis* proposal and the electronic library); and invigorate the pursuit of world-class initiatives in information technology with the potential of national and international recognition (such as *Virtual Reality – C6*)
- Selectively undertake bold visionary world-class initiatives (such as the *Plant Sciences* initiative), based on Iowa State’s strengths, that are central to the interests of the state, and are of national and international significance and priority
- Continue vigorous pursuit of sponsored funding, engaging increased numbers of faculty and staff, and employing interdisciplinary and collaborative approaches
- Effectively communicate and promote institutional achievements and faculty, staff, and student accomplishments among the constituent stakeholders, and enhance national and international visibility
- Systematically promote career achievements of faculty and staff and assist with their nomination for and induction into prestigious national and international academies and professional societies, institutions, or organizations

Strategies for Engagement (including but not limited to the following):

- Systematically involve Iowa State's constituent stakeholders as clients in periodically assessing their needs and priorities, and in building stronger relationships by nurturing their interests
- Effectively deploy Iowa State's critical resources—knowledge and expertise—toward understanding the needs of Iowa communities, and addressing them with visionary initiatives (such as *Extension 21*) involving multidisciplinary issue teams
- Develop two-way partnerships and collaborative approaches to respond to the needs of Iowa communities, and other contemporary societies in the nation and the world
- Expand targeted distance learning degree programs in areas of Iowa State's strengths
- Vigorously pursue licensing and patenting of Iowa State's discovery and innovation with an emphasis on advancing economic development in Iowa, and national/international technology transfer
- Provide leadership to improve Iowa's environmental quality and workforce development through initiatives that enhance the state's place competitiveness, public sector competitiveness, and private sector competitiveness
- Enrich student learning through community service and service learning programs
- Employ widely accessible use of up-to-date information technology in all Extension and outreach activities in the state, nation, and abroad
- Provide leadership in enhanced programming for youth development
- Enrich student extracurricular experiences through broad-based programs in student life and leadership development
- Expand student practicums, experiential projects, and community-based activities focused on bringing information science and technology expertise to the community, including the expansion of partnerships with Iowa schools using internet technologies
- Provide quality cultural and athletic events that engage the interest and support of our constituencies by meeting their needs
- Systematically communicate to Iowa State's constituent stakeholders, as well as to national and international target audiences, Iowa State's progress toward strategic plan goals and the aspiration of becoming the nation's premier land-grant university
- Assess citizen satisfaction of Iowa State's performance at least every three years, focusing on the views of constituent stakeholders

Measuring Progress: Performance Indicators

Iowa State University will annually measure progress on its strategic plan goals using a number of key indicators of progress. At the University level, the following areas will measure overall progress. Specific elements within these areas will serve as distinct performance indicators that may be subject to periodic adjustments in response to emerging national and/or local issues and trends. International, national and peer competitiveness will be central to assessing progress toward achieving the goals of the strategic plan and *Becoming the Best Land-Grant University*.

- Enrollment: undergraduate, graduate; science and technology disciplines; diversity; resident and non-resident; distance education enrollment; non-credit continuing education enrollment; level of student financial need met by aid
- Retention, graduation, and career placement rates (including further education): undergraduate, graduate; diversity; resident and non-resident; science and technology disciplines; success in professional certification; national competitiveness
- Student Achievement and Satisfaction: student outcomes assessment – intended outcomes, and outcomes achieved; accountability, and improvement; satisfaction with student life opportunities and involvement
- Advancement in information science and technology: international leadership characteristics; advances in information technology infrastructure, access, and services for learning, distance education, and scholarship; electronic library resources and services
- Faculty/staff characteristics and competitiveness: composition, diversity, compensation, national and international recognition through academy and professional society memberships, scholarly publications, citations, awards
- State appropriation level: total base appropriation; one-time funds and capital appropriation; national competitiveness
- Sponsored funding: total sponsored funding and by FTE; science and technology funding; funding distribution by sponsor type; national competitiveness
- Academic program characteristics: quality based on program review by peers; liberal education content; national ranking of selected programs – a limited number of programs including focus on science and technology
- Responsive engagement: programs addressing needs of communities and society; active engagement of stakeholders; economic development/technology transfer through income generating licenses and patents; lifelong learning opportunity programs; clients served, outcomes assessment, client satisfaction
- Advancement in institutional support services and infrastructure: development and implementation of best ideas and practices, awards and recognition; new facilities; facility repair and improvement; integrated support services bridging administrative and academic support; exemplars of national recognition
- Private giving: total funds raised (gift income, i.e., outright gifts; new pledges, and deferred commitments); synergistic characteristics with strategic plan priorities; national competitiveness (with land-grant peers, Big 12, and selected institutions recognized for distinctive programs)
- Constituent relations: internal and external communication, and periodic assessment of internal and external “citizen” awareness and satisfaction

Peer Comparison

As a subset of the areas of overall measures of progress, a set of key benchmark measures will serve to assess Iowa State's progress on competitiveness with peer institutions. These benchmark measures represent various characteristics of major land-grant universities in the nation, and have been developed with significant input from a representative group of institutions belonging to the National Association of State Universities and Land-Grant Colleges (NASULGC). These key benchmark measures are grouped as "input" and "output" measures as follows.

Input Benchmark Measures

- State and federal appropriations as fraction of total operating budget
- Tuition revenue as fraction of total operating budget
- Cost of education per FTE resident and nonresident undergraduate student
- Financial aid disbursed per FTE undergraduate student
- Proportion of underrepresented students/faculty/staff as compared to proportion of state's underrepresented population
- Student credit hours per FTE faculty
- Average undergraduate class size
- Fraction of FTE tenured and tenure-track faculty that are directly involved with undergraduate learning
- Fraction of FTE tenured and tenure-track faculty considered as discovery-active
- Fraction of FTE tenured and tenure-track faculty time devoted to discovery
- Fraction of FTE graduate students supported by sponsored funds, and average funding per FTE graduate student
- Fraction of FTE tenured and tenure-track faculty time devoted to engagement

Output Benchmark Measures

- Price of education per FTE resident and nonresident undergraduate student
- Indebtedness per undergraduate student at graduation
- Undergraduate retention rates regressed against standardized test scores – after years 1, 2, 3, and 4
- Undergraduate graduation rates regressed against standardized test scores – at years 4, 5, and 6
- Career placement rate including fraction of graduates placed in field of major, and mean/median of starting salaries (within six months after graduation)
- Success rate of graduates in professional licensure
- Fraction of graduates proceeding to advanced studies (within six months after graduation)
- Total sponsored funding and sponsored funding per FTE faculty
- Faculty scholarly output resulting from peer reviewed discovery on a rolling three-year basis
- License agreements, patents, and initiation of start-up companies signifying technology transfer through engagement
- Number of clients served in the state and as fraction of state's population served by engagement
- Employers' assessment and graduates' self-assessment of preparedness five years after graduation

Funding the Plan

Iowa State University's Strategic Plan for 2000-2005 is based on the following revenue assumptions:

State Appropriations: Increases in state appropriations, beyond inflation and employee compensation increases, will be pursued for targeted initiatives that directly address state needs and/or national priorities of vital interest to the state. New and/or major increases will be pursued for bold visionary initiatives.

Tuition Revenue/Enrollment: In accordance with the Board of Regents policy adopted in 1999, tuition revenue will reflect annual increases based on the Higher Education Price Index (HEPI) and a premium for improving quality (to date, maintained at 2%). This represents an increase above annual inflation level. Iowa State's enrollment is projected to grow from 26,110 students in 1999-2000 to nearly 27,250 students in the next five years based on current estimations and an aggressive recruitment campaign. In particular, significant increases are projected for nonresident enrollment.

Reallocations: Iowa State has demonstrated a culture of significant internal reallocations for many years. Since 1996, Iowa State has been annually reallocating at least 2% of its general fund budget in accordance with the directive of the Board of Regents, State of Iowa. Similar reallocations will continue during this strategic plan period involving both centralized reallocation and decentralized reallocation with various units.

Sponsored Funding: Following a record level of \$199.2 million in 1988-1999, sponsored funding is assumed to grow by

an average of at least 10% per year due to major programmatic initiatives—in research, instruction, public service, student aid, fellowship and training, facilities and equipment—supported by aggressive and entrepreneurial activity of faculty and staff. While increase in reimbursement of indirect cost is difficult to project, it can be assumed at an average of at least 5% per year due to increased sponsored funding, coupled with greater efforts to obtain full indirect cost reimbursement.

Private Funding: Following record private fundraising of \$124 million and record gift income of \$108 million in 1998-1999, private funding (gift income) is assumed to stay above \$100 million per year, and possibly grow based on campaign initiatives as they develop, and/or opportunities that might occur. Most private funds will be targeted to new programmatic initiatives; scholarships, internships, and fellowships; endowed chair/professorships, and new facilities and equipment. An emphasis would be placed on securing endowed funds.

Revenues from Licenses/Patents: Revenues from licenses and patents showed remarkable growth during the 1995-2000 strategic plan period, exceeding the target of \$1.5 million per year by nearly 50%. A new target will be established commensurate with the prospects for technology transfer resulting from visionary initiatives in discovery and innovation.

Funding from these sources will be utilized in concert to achieve the goals of the strategic plan. In various cases, one source of funds may leverage another in order to build strategic partnerships in launching new initiatives.

The strategic plans of the University, colleges, and major support units will provide the overall framework that will guide all major budget decisions of the university. This intrinsic relationship between planning and budgeting, along with performance indicators to measure outcomes and progress, reflect Iowa State's commitment to the Regents' expectation of effective stewardship of institutional, state, federal, and private resources.

Appendix A

Iowa State's Land-Grant Heritage

Iowa State University is an internationally prominent university that seeks to become even better. Iowa State's aspiration to be the nation's premier land-grant university is closely linked to the University's historical and continuing mission as Iowa's land-grant university.

The enduring educational philosophy that characterized the nation's first land-grant colleges contains four key elements that are as relevant today as in the late 1800s. These defining characteristics are: access regardless of race, creed, gender, or economic background; the marriage of practical and liberal education programs; a balanced and broad notion of scholarship including both applied and basic research; and service to the people of Iowa through outreach programs that help them make better decisions.

Iowa State University embraces its land-grant heritage and responsibilities with an institutional orientation toward science and technology. Building on the University's tradition of strength in science and technology, and the synergy between these areas and the liberal arts and social sciences, Iowa State seeks to become even stronger and more distinguished in its teaching, research, and outreach efforts.

Iowa State University is dedicated to educational service of the highest standard, and encourages the highest aspirations and intellectual development of all students, faculty, and staff. It challenges them in the quest for new knowledge and its transmission, preservation, and application for the betterment of society.

Iowa State University recognizes its responsibilities to a wide range of constituencies, addresses their needs and concerns, and draws from the potentials of its various constituencies, particularly its alumni, to improve and support the University.

Iowa State University is a community that is inspired by the beauty of its surroundings and dedicated to intellectual excitement and creativity. It is a community where ideas are vigorously debated and rigorously tested, that understands the value of science and technology in today's world, and that appreciates the richness of human experience expressed through the arts and humanities. Iowa State University is a community reaching out both to translate knowledge into action and to serve as a resource for strengthening and enhancing the social, economic, and physical environment of the state, the nation, and the world.

Three ideas, each closely tied to our land-grant heritage, capture the spirit of Iowa State University:

"Science with Practice" — ISU's motto that appears on the University's seal.

"We come to college not alone to prepare to make a living, but to learn to live a life," — quotation of M. J. Riggs, a graduate of the class of 1883, whose words are etched in stone above the stairs in the west entrance of the Memorial Union.

"It is simply service that measures success," — statement made by alumnus George Washington Carver

Appendix B

Mission, Role, and Scope Statements

Mission Statement

Iowa State University of Science and Technology is a public land-grant institution serving the people of Iowa, the nation, and the world through its interrelated programs of instruction, research, extension, and professional service. With an institutional emphasis upon areas related to science and technology, the University carries out its traditional mission of discovering, developing, disseminating, and preserving knowledge.

Iowa State University provides high quality undergraduate programs across a broad range of disciplines, as befits the institution's stature as a university. In its dedication to excellence in learning, the University strives to instill in its students the discernment, intellectual curiosity, knowledge and skills essential for their individual development and their useful contribution to society. A common goal of undergraduate education is to assure that all students, regardless of disciplinary major, acquire literacy in science and technology, an understanding of humane and ethical values, an awareness of the intellectual, historical, and artistic foundations of our culture, and a sensitivity to other cultures and to international concerns. Consonant with its role as a teaching and research institution, Iowa State University has a strong commitment to graduate education that, at both the master's and doctoral levels, emphasizes the development of professional, research, and scholarship skills.

As an integral part of the learning process, Iowa State University fosters the discovery and dissemination of new knowledge by supporting research, scholarship, and creative activity. The University also uses existing knowledge to address problems and issues of concern to the state of

Iowa in particular, as well as to the national and global community. The University's endeavors in discovery and innovation are supported by public and private resources and are conducted in an environment of open scientific inquiry and academic freedom.

Engagement through extension, professional service, and continuing education activities is achieved through innovative and effective outreach programs that provide the people of Iowa, and beyond, with practical knowledge and information derived from leading discovery, innovation, and learning/instructional efforts at Iowa State University and elsewhere. Through engagement, the University stimulates and encourages progressive change.

Iowa State University enrolls academically qualified students who represent diverse age groups, socio-economic levels, racial ancestries, ethnic heritages, and international cultures, and who provide a gender balance. Through the use of a variety of educational opportunities, advanced instructional technologies, and student services, the University supports the development of both traditional and non-traditional students, preparing them for citizenship and life-long learning in a rapidly changing world.

Finally, Iowa State University participates in international efforts to alleviate world hunger and poverty, to prepare students and faculty to be productive and responsible citizens of the world, and to contribute to increased cultural, educational, economic, scientific, and socio-political interchange and understanding between and among Iowans and other members of the world community.

- **Through its mission, Iowa State University supports the Board of Regents, State of Iowa, in becoming an exemplary model of governance and stewardship of resources, and the best enterprise of public education in the United States.**

Role Statement

The role of Iowa State University is defined by the institution's status as the state of Iowa's land-grant university and by its relationship to the other institutions of higher education within Iowa.

- Iowa State University must strive to develop and maintain learning, discovery, and engagement programs that fulfill the responsibilities of a major land-grant institution.
- Iowa State University shares with the other public institutions of higher education within Iowa the joint responsibility of providing a full range of high quality educational opportunities. Coordination among these institutions with respect to programs, clientele, and geographic areas is necessary to ensure that the priority needs of all Iowans are addressed and to avoid unnecessary duplication.
- Iowa State has a statewide system for extension education and information dissemination.
- Iowa State continues to be a leading higher education institution with institutional emphasis on science and technology.
- Consistent with its historic role, Iowa State University contributes to the economic development of the state of Iowa by attracting public and private organizations seeking proximity to leading authorities in particular fields, by participating in technology transfer, and by assisting efforts to strengthen and diversify the economic base of Iowa.
- Iowa State University assumes responsibility for helping to protect, maintain and improve Iowa's natural resources through the discovery and diffusion of knowledge and technology.

Scope Statement

Consistent with the University's role and mission statements, the current scope of Iowa State University is described below.

- Iowa State University of Science and Technology, a broad-based university with

an orientation towards science and technology, has sufficient scope and depth in its learning, discovery, and engagement functions to enable it to continue to be a distinguished land-grant university. In addition to its undergraduate and graduate work in the physical, biological, mathematical, and social sciences, it will maintain and develop strong undergraduate programs in the arts and humanities, and will offer such master's and Ph.D. programs in this area as are justified to meet the needs of the state of Iowa and to maintain the overall strength and desirable balance of the University as a whole.

- In Iowa State University's professional programs, principal emphasis will be given to the maintenance and development of strong programs in the sciences, agriculture, engineering, veterinary medicine, design, education, business, and family and consumer sciences. Interdisciplinary programs are offered that seek to combine the perspectives and methods of more than one discipline to better address the questions and problems confronting Iowa, the nation, and the world. The international efforts of Iowa State University are to be expanded and enhanced.
- Iowa State University will offer no major under-graduate or graduate programs in law, library science, human medicine, dentistry, pharmacy, nursing, hospital administration, occupational therapy, physical therapy, or speech pathology.
- Future programs will be determined by the continuing assessment of existing programs and of developing needs. Programs will be curtailed or eliminated when the assessment of need and resources dictates that the resources could be better used for other programs. The University approaches the addition of new programs with considerable caution. Generally, new programs are fashioned out of existing programs in response to developing needs. But if the University is to remain vital, it must be prepared and able to develop, at appropriate times, new programs that are within its general mission and that meet the changing needs of the students and society.

