

Agenda for Excellence

1995-2000

To the University Community

Five years ago, in November 1995, a strategic plan for the University, the *Agenda For Excellence*, was published in these pages. The plan established a series of nine goals for the University for the five years through the end of the year 2000. It was the culmination of many months of discussion among the President, the Provost, deans, administrators, faculty and students, and the plan was endorsed by Penn's Academic Planning and Budget Committee.

Ten months later, in September 1996, as part of the *Agenda*, the University published a series of six institution-wide academic priorities. At the same time, and as a further contribution to the *Agenda*, President Rodin also published an open letter to the Penn community in which she announced several initiatives to enhance recruitment and retention of under-represented minority students and faculty. Then in January 1997, each of the twelve Schools published its own strategic plan, informed by and supporting the *Agenda*.

Five years have passed since November 1995, and the time has come to report on how Penn has fared in accomplishing the goals of the *Agenda* and the six academic priorities. The report that follows is the product of several months of analysis by the working group named below, which was appointed last fall by the President, the Provost and the Executive Vice President. It has been reviewed by the deans and senior officers of the University; it also has been the subject of review and discussion by this year's Academic Planning and Budget Committee. Please note that the report covers the original nine goals, the six academic priorities and minority recruitment and retention, and, in so doing, it considers progress in the individual Schools in a multitude of ways. It does not, however, attempt to review the full strategic plans of the individual Schools that were published four years ago.

Happily, Penn's progress has been remarkable over the past five years. With enormous credit to the faculty, students and staff who grace this campus, our academic rankings have risen, faculty accomplishments have continued apace, student selectivity has increased, research funding has greatly expanded, administrative restructuring has moved far forward, revitalization of the West Philadelphia community around Penn has accelerated, globalization has increased and fundraising has broken records.

We invite you to send any comments and reactions you may have by May 25, 2001, via e-mail to plan@pobox.upenn.edu.

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Mission of the University

The University of Pennsylvania's roots are in Philadelphia, the birthplace of American democracy. But Penn's reach spans the globe.

Faithful to the vision of the University's founder, Benjamin Franklin, Penn's faculty generate knowledge that is unconstrained by traditional disciplinary boundaries and spans the continuum from fundamental to applied. Through this new knowledge, the University enhances its teaching of both theory and practice, as well as the linkages between them.

Penn excels in instruction and research in the arts and sciences and in a wide range of professional disciplines. Penn produces future leaders through excellent programs at the undergraduate, graduate, and professional levels.

Penn inspires, demands, and thrives on excellence, and will measure itself against the best in every field or endeavor in which it participates.

Penn is proudly entrepreneurial, dynamically forging new connections and inspiring learning through problem-solving, discovery-oriented approaches.

Penn research and teaching encourage lifelong learning relevant to a changing global society.

Penn is a major urban university that is committed to strength and vitality in each of its communities. In this connection, Penn will:

- Encourage, sustain, and reward its faculty; nurture, inspire, and challenge its students; and support and value its staff;
- Strengthen and appreciate the diversity of its communities;
- Support free expression, reasoned discourse, and diversity in ideas;
- Pursue positive connections to the city, state, and region and a mission of service to its neighbors in West Philadelphia;
- Develop and support its connections to alumni and friends; and
- Foster the growth of humane values.

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STRATEGIC GOAL 1

The University will solidify and advance its position as one of the premier research and teaching universities in the nation and in the world.

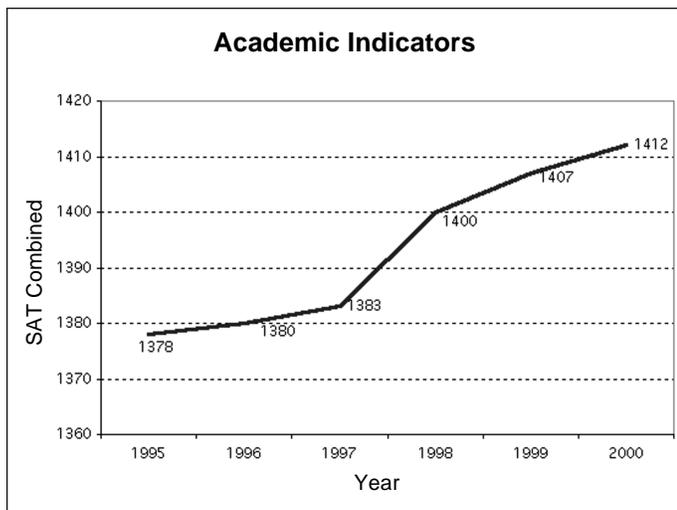
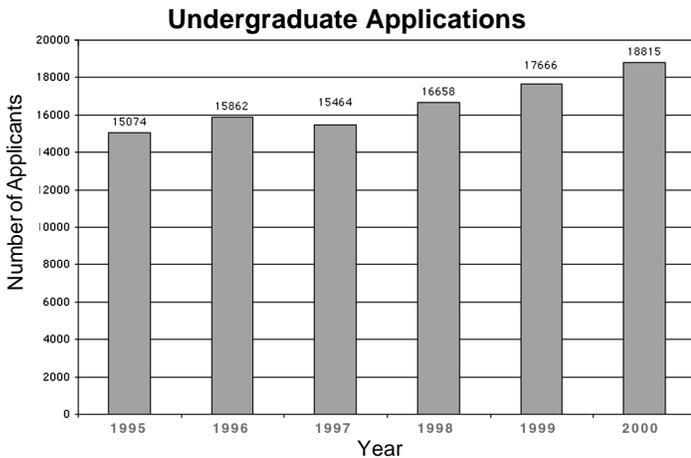
This was clearly established as the preeminent goal. Each of the subsequent goals was in service of this first, simple statement of purpose. Because a world-class research university must succeed fully on two educational levels—undergraduate and graduate/professional—Goal 1 was subdivided to reflect this fact. Subgoal 1(a), which follows, sets forth Penn's ambition for its undergraduate programs:

Subgoal 1(a). Penn's exceptional undergraduate programs will position it among a select group of research universities as a school of choice for the ablest undergraduates in the nation and in the world. To enhance its ability to fulfill its mission, the University will be considered among the top ten in undergraduate education.

There is a great deal of evidence that Penn's undergraduate programs have been notably strengthened and enhanced over the past five years. Much of this evidence will be presented here in response to the several strategic initiatives that were published beneath subgoal 1(a) in the *Agenda*. This same approach will be followed throughout this report, i.e., goals and strategic initiatives will be reprinted as they appear in the *Agenda*, and relevant accomplishments will be grouped around them. Here and elsewhere in the report, however, examples of important progress will also be offered that may not correspond neatly to particular strategic initiatives devised five years ago. These simply reflect the evolution of priorities over time—and of the University itself.

As preface to what follows, it is remarkable to note the rise in Penn's ranking as an undergraduate institution. Since 1994, according to *U.S. News and World Report*, Penn's national rank has risen from #16 to #6. Penn is also attracting more accomplished cohorts of students every year.

Our applications have risen dramatically and the yield has improved steadily over this period. Since 1994, applications have risen from approximately 13,700 to 19,000, with the yield increasing from 47% to 55.5%. The number of early decision applicants surpasses all previous highs. Penn received 2,833 applications for early admission into the Class of 2005, a 10.4 percent increase over last year's total of 2,570. Penn has clearly accomplished the goal of being considered a school of choice for the ablest undergraduates in the nation and in the world.



Strategic Initiatives for Subgoal 1(a)

I. Implement the 21st Century Project for the Undergraduate Experience.

A. Promote curricular reform and innovation through the Provost, working with the Council of Undergraduate Deans.

1. Conduct regular curriculum reviews.
2. Expand cross-school and cross-disciplinary programs.

B. Expand undergraduate research and service-learning opportunities.

1. Establish an undergraduate research resource center.
2. Seek external support for expanded undergraduate research.

C. Develop collegiate model to provide setting for new undergraduate experience.

D. Take steps to improve advising.

1. Expand the role of faculty as mentors and clarify the roles and responsibilities of the professional advising staff.
2. Improve the technology used to provide information on the many academic options at Penn.
3. Enhance departmental communication with students through advanced electronic technology.

E. Assure excellence in undergraduate teaching.

1. Establish a teaching resource center that offers opportunities for all faculty to improve their teaching.
2. Create additional incentives for excellent undergraduate teaching.
3. Develop and promote the use of technology in teaching.

F. Improve student services.

1. Restructure student services to better support the models developed in the 21st Century Project.

A. Promote curricular reform and innovation through the Provost, working with the Council of Undergraduate Deans.

1. Conduct regular curriculum reviews.

The College: Starting in the fall of 2000, the College has implemented a Pilot Curriculum. Approximately 200 of the 1600 entering freshmen in the Class of 2004 are participating in the pilot, in which the ten courses of the General Requirement are replaced with four team-taught interdisciplinary courses designed to give students an introduction to broad areas of knowledge and inquiry. In addition, students in the pilot are required to undertake a research experience in their major. Increased emphasis is also placed on the development of oral communications skills. Students in the pilot develop a comprehensive academic plan to be worked out in consultation with their primary advisor. At the end of five years, the faculty of the School of Arts and Sciences will decide whether to extend the Pilot Curriculum to all students, based on an evaluation of educational outcomes by the Pilot Evaluation Committee. Currently, the committee is identifying measures and conducting interviews with students, faculty and advisors.

The College also has added new offerings for all students: (1) a Quantitative Skills Requirement was introduced for students entering in the fall of 1998; (2) Speaking Across the University was established in 1999 and now sponsors courses with a significant oral communications component.

Wharton: Over the past decade the Wharton School curriculum has increased its emphasis on an international perspective, as embodied in a foreign language requirement and a Global Environment requirement; an increased emphasis on oral and written communication skills; and required leadership education for all students. The curriculum underwent a two-year review by the Undergraduate Curriculum Committee in AY 1996-97 and 1997-98.

Engineering and Applied Science: Currently, there are two initiatives underway affecting the undergraduate curriculum in SEAS. The first initiative is focused on the freshman year experience and is examining a common core of course material such as technical writing, ethics, webpage design, and library use. Focus groups are used to define steps that need to be taken. The second initiative is focused more broadly on developing new boutique programs; balancing the majors and the core; reviewing the role and purpose of the Bachelor of Applied Science Degree; incorporating professional education into the curriculum; globalizing the undergraduate experience; incorporating biological sciences into engineering education; and expanding the role of technology inside and outside the classroom. The Engineering Deans Advisory Group, a SEAS student organization, gives monthly input and feedback directly to the school Deans.

In addition, new courses, including CSE 100 (Computer Science and Engineering) were developed for non-SEAS students in order to provide additional opportunities for technology education desired by students in the College and Wharton. Enrollment in CSE 100 will increase next year due to student demand, and additional courses are being designed. The School appointed Senior Fellow Thomas Cassel as director of a new program in Engineering Entrepreneurship, another innovative and very

popular course. We streamlined our communications to incoming freshmen and improved on our advance registration processes for them.

Nursing: Critical to the excellence of the undergraduate Nursing program is the integration of research opportunities for students. All undergraduates must now complete a culminating analysis of the evidence-base in a relevant research area. In addition, a serious effort has been underway for several years to ensure linkages of undergraduates to faculty researchers. Undergraduate students also have several opportunities to broaden their educational experience beyond the campus. In addition to the School's long-standing exchange programs in Israel and the United Kingdom, the School has launched exchange programs in Mexico and in Canada.

2. *Expand cross-school and cross-disciplinary programs.*

Interdisciplinary and cross-school programs are one of Penn's great strengths not only in graduate and professional studies, but at the undergraduate level as well. Students can select a major in one school and take elective courses, a minor or a second degree in another school. Thanks to the continuing development of interdisciplinary programs over the past five years, no other institution in America can offer an undergraduate student more opportunities for cross-disciplinary study in joint and dual degree programs.

New joint and dual degree programs established since 1995 include:

The Program in Nursing and Health Care Management: Focuses on the dynamic changes in the delivery and financing of health care services in the United States. The curriculum allows students to gain expertise in patient care as well as in business and management.

Computer and Cognitive Science: Artificial Intelligence: A cross-disciplinary program associated with the Institute for Research in Cognitive Science, the Department of Computer and Information Science in SEAS and various departments in the College at Penn.

Environment and Technology: Integrates a rigorous environmental engineering education with an understanding of the complex scientific, technological and political aspects of environmental problems.

The Nursing and Computer Science Program: Prepares professionals for careers in the emerging field of health-care information and management systems and combines a strong foundation in computer technology with the clinical skills and knowledge unique to nursing.

New submatriculation programs offered at Penn include:

BA/MS.Ed. Program: Students in the College and SEAS may submatriculate into GSE. The program allows students to complete requirements for both an undergraduate degree and a MS.Ed. with a fifth year of study.

Juris Doctor Program: Undergraduate students in their fourth year of study at Penn can submatriculate into the Law School's JD program and combine the broad overview of their undergraduate studies with the professional focus of preparation in the law, usually in six years.

BA/MCP Program: Students majoring in Urban Studies may submatriculate into the Master of City Planning program to obtain the professional skills needed to work in the field of urban affairs and planning. This reduces the length of their combined degrees from six years to five.

Intensive Major in Architecture: The architecture major in the College has been modified to allow a small number of the most promising students to begin taking graduate level courses while completing their undergraduate degree, thereby shortening the length of time to receive a M.Arch degree to two instead of three years.

Key examples of Penn's numerous cross-disciplinary programs are:

Health and Societies: Based in History and Sociology of Science, this new major focuses on the relationships between health and societies and prepares students for careers in the health professions, or specialization in such fields as law, government, journalism and business. A capstone seminar is required as well as a research project or practicum.

Molecular Life Sciences: Offered to undergraduates interested in pursuing careers in the biological sciences, including medicine and biological research. These Vagelos Scholars participate in summer research internships, for which they receive support, during at least two, and ideally four, summers.

Digital Media Design: Offered by SEAS, Annenberg, and GSFA. Students receive a foundation in the theoretical, artistic and aesthetic aspects of Digital Media Design as well as theory and research on viewers' responses to and uses of visual media, including individual psychological reactions and broader socio-cultural effects.

B. Expand undergraduate research and service-learning opportunities.

1. *Establish an undergraduate research resource center and service-learning opportunities:* The Center for Undergraduate Research and Fellowships (CURF) was created in the fall 2000 semester. Located in the newly-renamed Arts, Research and Culture House, CURF will serve as a central clearinghouse for all undergraduate students interested in participating in research and/or applying for post-baccalaureate fellowships. CURF also houses Penn's University-wide honors programs, the Benjamin Franklin Scholars and University Scholars programs.

Penn is one of the nation's leaders in sponsoring academically-based service-learning courses, with over 75 such courses being offered in such disciplines as Anthropology, Classical Studies, English, Economics, Education, Linguistics and Landscape Architecture. Offerings range from a course on Health in Urban Communities, which prepares Penn undergraduates to develop a curriculum and teach health topics to nearby middle school students, to a seminar on the Literature of Social Vision that involves students and faculty from both Penn and West Philadelphia High School. Student participation in these courses is enhanced by a roster of service opportunities sponsored by Civic House, the University's new hub for community service activities.

2. *Seek external support for expanded undergraduate research:* Penn is actively seeking funds in support of CURF's work. Among the new funds that have been created are the Vagelos undergraduate research funds, which include stipends for all summer research projects and financial aid for the Vagelos scholars. Such funds greatly enhance the Center's ability to fund undergraduate research.

C. Develop a collegiate model to provide a setting for the new undergraduate experience.

Recognizing the importance of better integrating students' residential experiences with their intellectual life, Penn created a new College House system in the fall of 1999. The system consists of a network of twelve College Houses, each of which has:

- A Faculty Master who is a tenured faculty member who lives in and directs the intellectual life of the House;
- A House Dean who is a live-in academic advisor and operations director for the House;
- At least one Faculty or Senior Fellow who is a faculty or senior staff member who lives in and provides students with academic advising and programming; and
- Access to academic support services provided through the Wheel project.

The twelve College Houses, which accommodate almost 5400 undergraduates from all four undergraduate schools and from all years of undergraduate study, are microcosms of this research university, where students, faculty, and staff teach and learn in an environment that does not know the arbitrary limitations of class "room" and class "time." While all Houses are open to all students, more than twenty Residential Programs within the Houses allow students with common academic interests to live and work together. Demand for on-campus housing has greatly increased as a result of the establishment of the College House system, indicating students' positive response.

The Houses are a new locus for primary academic and college-life advising, with House Deans providing first-line support for students. They are also fully integrated into the College of Arts and Science's new arrangement of freshman advising. Further, in collaboration with the College of Arts and Sciences, more than a dozen credit courses have been held in the College Houses over the past two years, and that program has now been expanded to include all four undergraduate schools. The Penn Reading Project, which serves all first-year students, is organized by the Office of College Houses and Academic Services, and house councils provide student leadership opportunities in all the Houses.

The Houses have also provided academic support, bringing help that is "smarter than your roommate" to students when and where they need it—at home and after the classrooms and offices have closed. The online and in-person "Wheel" delivers advising in mathematics, writing, library research, foreign languages, CSE, and career services around the clock. The Wheel's strongest "spoke" is computing, where Penn's team of College House ITAs run computer labs in all the Houses and provide quick help for hardware and software problems.

Hubs

To complement the College House system, two student-initiated hub facilities have been developed where the entire University community can come together. These hubs, Civic House and Kelly Writers House, are novel enterprises that have drawn national attention and praise for the range of innovative programs they offer.

As a venue for programs and resources for students engaged in meaningful community service activities and projects, Civic House has strengthened ties

between Penn students and our West Philadelphia neighbors.

Kelly Writers House, meanwhile, has grown into one of the most vibrant spaces on campus. Each week, more than 500 writers, readers, and literature lovers converge on this House to engage in informal intellectual conversation with professors and to partake of lectures and readings by prominent scholars and national, local, and aspiring novelists, essayists, and poets. Students, faculty, and staff are also drawn to the cornucopia of writing classes, tutoring programs, and other opportunities for meaningful interaction at Kelly Writers House.

The success of Civic House and Kelly Writers House has encouraged plans for other hubs, including one for Management and Technology.

D. Take steps to improve advising.

• Expand the role of faculty as mentors and clarify the roles and responsibilities of the professional advising staff

Beginning in 2000, the College undertook a major overhaul of its advising system. The Dean of the College created a new position, Dean of Freshmen. The Dean of Freshmen is responsible for coordinating all academic services for the freshmen class as well as serving as Director of Academic Advising for the College. In the new system, each freshman is assigned to a primary advisor who is either a member of the teaching faculty, a College House Dean, or a member of the professional staff. The College has also increased its support and training of advisors and is currently exploring methods of integrating its advising program more closely with the College House system.

At Wharton this fall, professional advisors went on the road by visiting all Management 100 classes during pre-registration. With TAs by their side, the advisors ran academic and peer panels to help freshmen plan their spring schedules. Also, with the help of the College House Deans, academic advisors conduct basic advising sessions in the College Houses. Wharton also provides webCafé—virtual classrooms—to every section of Management 100: the largest core required course in the nation to supplement traditional classrooms with web-based meeting rooms. Each e-room houses the course instructor, academic advisor, TA, and four student teams. By housing instructors, advisors, and students in their own virtual meeting rooms, webCafé provides new avenues for exchange outside of class times, fosters curricular innovation, and supports academic and peer advising.

The undergraduate advising program at the School of Nursing has been considered a model in the University since its inception in the early 1980s. Upon admission to the School, undergraduates are assigned a faculty advisor who remains with them throughout their time at Penn. The School's newly developed Office of Academic Services provides intensive and ongoing orientation sessions for advisors and backup advising support for students when needed.

Advising remains a top priority in SEAS:

- All faculty in SEAS advise undergraduates.
- SEAS played an instrumental role in the development of electronic course planning worksheets, and advising materials are on the web.
- SEAS has made dramatic improvements in its peer advising activities, including organizing and running programs to train peer advisors. The School sponsors a Leadership Workshop series, and each department has a dinner in the fall for any interested students, but especially for freshmen. Considerable informal advising occurs as well as selection of majors.
- EAS 101 is a course designed to help Curriculum Deferred students select a major.

• Improve the technology used to provide information on the many academic options at Penn and enhance departmental communication with students through advanced electronic technology

Penn-In-Touch was among the very earliest applications to provide web accessible, direct access to students for all their registration and financial information and transactions. Recently expanded (Penn-In-Touch 2000), it now includes the Advisor-In-Touch system which provides up-to-date academic information in a web-based system for all academic advisors as well as students. In addition, a new curriculum planning guide for students and a graduation audit system for the School offices came online in October 2000.

In 1999 VPUL and ISC partnered to develop an online calendaring system to provide a mechanism to enter and display University events. The primary constituents of the web-based calendar are the undergraduate and graduate student associations; it gives them the ability to notify the larger community of student-oriented events.

E. Assure excellence in undergraduate teaching.

• Establish a teaching resource center that offers opportunities for all faculty to improve their teaching

The School of Arts and Sciences introduced the Center for Teaching and Learning in July 1999. Its mission is to help standing faculty, adjunct

faculty and teaching assistants achieve excellence in the classroom. It accomplishes its mission by individual consultation with faculty and by special seminars and workshops. The response to the center has been positive. Several instructors have reported improvement in their course evaluations, and most found that interaction with the center gave them greater confidence in preparing for courses and teaching individual classes. In its first two years, the center has been able to provide individual assistance for over 85 instructors and has interacted through departmental and other presentations with approximately 100 more instructors. Future plans call for increased individual consultation, broader coverage of departments and development of specific programs for graduate assistants.

• Create additional incentives for excellent undergraduate teaching

The new annual Penn Prize for Excellence in Teaching by Graduate Students was first awarded in April, 2000. This prize, supported by a gift from President Rodin, is notable for two things: all nominations are made by former or current undergraduate students of the nominees, and it is open to graduate students in all schools and graduate groups.

In addition to the Lindback awards, the School of Arts and Sciences has added several new means of rewarding distinguished teaching:

The Edmund J. and Louise W. Kahn Professorship for Faculty Excellence was established in 1997 to recognize an outstanding scholar who is also a distinguished and innovative teacher.

The Edmund J. and Louise W. Kahn Award for Educational Excellence honors the collective teaching efforts of a department or program.

Three new SAS teaching awards were established in Spring 2000, honoring innovation in teaching, mentorship of undergraduate research, and distinguished teaching by an assistant professor.

The Wharton School continues to offer ten Excellence in Teaching Awards to the best undergraduate instructors each year, and an annual award for the best graduate student instructor.

The Annenberg School has created a term professorship awarded to a faculty member for outstanding undergraduate teaching. Lindback award winner Carolyn Marvin holds that appointment.

The School of Nursing developed two new awards designed to recognize the teaching and advising skills of faculty. The Undergraduate Advisor's Award acknowledges those members of the faculty who demonstrate commitment to students through their knowledge, accessibility, and responsiveness. The Academic Support Staff Teaching Award recognizes excellence in teaching by members of the academic support staff, who are crucial to the success of the School's academic programs.

• Develop and promote the use of technology in teaching

University-wide, Penn's Information Technology (IT) Roundtable created the New Tools for Teaching initiative to investigate instructional technology tools for faculty. The first result of New Tools for Teaching has been deployment of Blackboard Course Info. The suite of Blackboard tools includes e-mail lists, discussion boards, web-based information (including audio and video files), among others. Blackboard is used for course support in the College, Engineering, Education, Fine Arts, Medicine, Nursing, Law and Annenberg, with approximately 10,000 students in 2000-2001.

In this project, ISC and the Library are partnering with the schools to link information services around the campus in support of education. Enrolled students are loaded into Blackboard automatically, using data from the Student Record System in the Data Warehouse, with accounts and passwords from ISC's PennNet Authentication System, to a server and distributed over the network to students and faculty anytime, anyplace. During classes, web pages are displayed on computers and projectors installed through the Central Pool Classrooms Technology Services group. Students get support using Blackboard through Residential Computing and faculty get support through their Local Support Providers.

Many of the services provided through Blackboard were already available at Penn as stand-alone services. Blackboard makes the services easier to use, such as the creation of course web pages, course discussion groups, mailing lists and so on. However, the online quizzing functionality of Blackboard is new. Faculty can now create quizzes easily. Through the Mellon Engineering Program, engineering faculty use quizzes to prepare students for laboratory experiments. Students are required to take the quizzes before the lab begins, so the students find out what they need help with at the beginning of the lab session, rather than after the experiment is done and the report does not work. In introductory Economics courses, weekly quizzes assure that students are keeping up with the material and learning the basic concepts. Rather than finding out how they are doing after the first midterm, students know how they are doing every week.

In addition to direct course support, Blackboard is used for many other activities in support of education. The Mellon Writing Program uses Blackboard as its principal method of communication with students working to satisfy the writing requirement. This is an online community, conducting discussions, posting assignments and reviewing each other's

papers through the web. Academic Support Programs provides old exams from a variety of undergraduate courses.

SEAS has also designed a flexible, high-tech classroom for digital videotaping and video conferencing, containing 20 laptop computers for participant interaction. This classroom provides distance learning opportunities such as the collaborations between SEAS and Lehigh University using joint classroom lectures. SEAS is planning a similar pilot venture with Edinburgh University. The Annenberg School has also created a computer integrated teleconferencing classroom and conducted its first cross-country class in it.

In October 2000, the School of Nursing opened the Mathias J. Brunner Instructional Technology Center which will significantly augment education through state-of-the-art simulations and learning opportunities. In addition, the school expanded its use of distance education to the pediatric nurse practitioner masters programs. Classroom transmissions are now being sent to St. Jude's Children's Research Hospital in Memphis, Tennessee as well as to several locations throughout the Commonwealth.

F. Improve student services

• Restructure student services to better support the models developed in the 21st Century Project.

The *Agenda* charged the Division of the Vice Provost for University Life to restructure student services to better support the models developed in the 21st Century Project. VPUL staffing was reengineered, some programs were outsourced, and a number of functions were reduced and/or eliminated.

The division consolidated the number of VPUL departments from a high of 34 units in FY 1995 to a current total of 15 departments grouped in five related clusters. New Student Orientation, the Pre-Freshman Program, PENNCAP tutorial and learning resources, mentoring programs, veterans, and pre-college support programs were consolidated into one Department of Academic Support Programs. Administrative support functions were streamlined, the physical locations of most services were shifted to a single, on-campus, residential location, and management oversight was vested in a single director. VPUL also consolidated facilities support, including student program spaces, departmental offices, campus union, student performing arts, fraternity and sorority houses, and University classrooms, into one unit.

In addition, VPUL eliminated a number of positions and replaced them with staff who could meet newly-mandated needs, such as a Learning Disabilities Specialist; University Alcohol Coordinator; Communications Director; Perelman Quadrangle Facilities Operations staff; PAACH staff; and La Casa Latina staff.

The division continues to offer a wide variety of important student support services such as career services; academic support; counseling, psychological and psychiatric services; health education and alcohol/drug abuse services; volunteer and community services; and social and cultural services. VPUL also helped to create new resources and services such as La Casa Latina, the ARCH (Arts, Research and Cultures House), and PAACH. The addition of an expanded student union complex—including Perelman Quadrangle and new performing arts facilities—has provided wonderful new spaces and choices for Penn students.

Campus Express, a new approach to service delivery, has been implemented by the Division of Business Services to give students one-stop shopping, more interactive communication and high quality customer service. In particular, it:

- Provides students enhanced features and essential information “real time”—in an integrated format.
- Decreases the time and hassle spent accessing services from various departments in the fall.
- Reduces administrative processing.
- Directly supports the overall IT Advisory Board vision for building comprehensive solutions.

Business Services has also greatly improved campus dining services, with the following highlights:

- Almost 6,600 meal contracts as of 9/30/00
- An integrated kosher dining service for daily meals and special occasions
- New contract with Aramark for vending services, which includes the Strothers Co., a minority-owned Philadelphia-based firm
- The renovation of Hill Dining Hall in September 1999, on time and on budget
- The successful opening of all food venues in Perelman Quad.

Student Financial Services has undergone a transformation over the last five years, focusing on reducing liability, increasing revenue and improving services to students and parents.

Undergraduate students admitted to the class of 2005 will be able to utilize PennPlan Online, a new program that helps students and their families develop a plan for the cost of attending Penn. It provides an

interactive worksheet and tutorial to help guide new Penn families through this often difficult decision-making process. Other PennPlan features include:

- The ability to view financial aid letters on-line and an explanation of what each component means and what must be done to fulfill the requirements to obtain the award.
- Estimate monthly payments using different financing options
- Tailoring budgets and expenses to meet specific needs

Students also can experience dramatically enhanced campus retail options at their doorsteps. (More details on retail development are provided later in this report under goal 3.)

II. Identify and secure financial resources to support the initiatives of the 21st Century Project.

The 21st century Project was funded by a grant from the Pew Charitable Trusts, supporting several innovative initiatives in the *Agenda for Excellence*. Many of the initiatives have now been incorporated into the ongoing budgets of the Schools and other units. Specific new gifts by trustees and others have provided funding for:

- The Penn Humanities Forum

The Humanities Forum was launched in 1999 to foster collaboration across SAS's humanities departments, to explore connections among the humanities, social sciences, natural sciences, and Penn's professional schools, and to create links between Penn humanists and the Philadelphia community. Its first two interdisciplinary efforts and seminars have focused on human nature and style.

- Fox Leadership Program

The Fox Program was established to provide students with training in leadership skills within the liberal arts environment of the College; it includes the very popular Lessons in Leadership program which brings to campus successful College alumni from a variety of job sectors, and sponsorship of courses with a public speaking component.

- Kelly Writers House and Civic House

Trustee and other gifts have supported space and programming for student-initiated “hub” facilities which complement the College House system.

- Perelman Quadrangle

\$40 million was raised for more than 40 named spaces in the renovated and expanded complex at the historic heart of Penn's campus. In addition, the first phase of the \$60 million development program for the College House project has moved forward.

III. Launch an initiative to raise funds for the University's financial aid endowment.

For undergraduate aid, the endowment has increased by \$116 million, reaching 58% of the *Agenda* goal to date. Trustee challenge grants have had a particular impact in leveraging smaller gifts, many of them from younger alumni. 386 new financial aid funds have been created to date during the *Agenda*, 64 of them by young alumni. The highest FY01 priority is to create additional challenge opportunities to help reach \$200 million goal by the end of FY03.

IV. Enhance activities that improve Penn's attractiveness to undergraduates.

A. Continue to promote Penn aggressively as an institution that educates the best students and produces future leaders.

- **Update and reinvigorate all admissions materials**

Five years ago the University launched a web site that included a home page and supporting pages for the Office of Undergraduate Admissions. Since that time, the Admissions site has emerged as a primary information source for prospective students and parents. The site has been redesigned twice, most recently during the summer of 2000. The summer 2000 redesign was done in collaboration with the four undergraduate schools so that the site would emphasize Penn as a premier academic institution. The addition of an online virtual tour of Penn's campus allows prospective students to get a feel for the attractiveness of Penn's large urban campus. It also now includes pertinent information about the admissions process, an on-line information request and application and travel schedules for the Admissions staff. The site currently receives between 40,000-50,000 hits per week. Last year we received approximately 12% of undergraduate applications from on-line sources.

Admit packets, admission videos and other publications have also been redesigned, and in student surveys administered by the Admissions Office applicants most often rate the publications and web site as very good or excellent. Only campus visits surpass these as a positive source of

information among the admitted group.

• Strengthen efforts to recruit and enroll underrepresented minority students and programs aimed at their retention

Every admissions officer is charged with minority recruitment. This represents a change in practice from five years ago. The minority recruitment program (MRP) has a director, assistant director and program assistant, but instead of relying on these individuals to execute all minority recruitment activities, Penn expects them to lead, direct and supplement the efforts of each regional director. This approach, which is team oriented, has paid positive dividends. Regional directors are responsible for developing strategies that reach talented students within their designated recruitment areas. The MRP staff initiates programming which includes Fall Open House and Scholars, arranges tours and information sessions for special groups and serves as liaisons to on-campus organizations and facilities like the UMC, La Casa Latina and the Latino Coalition. The number of minority applicants has risen, and the percentage of the class that is comprised of underrepresented groups reached an all-time high for the class of 2004.

Minority student retention: Starting in 1996, Director of Institutional Research Barney Lentz has chaired a University-wide committee charged to examine issues of minority student retention at Penn. This committee analyzed data and implemented changes in procedures that, among other things, improved student interactions with Student Financial Services. Retention of minority students has improved over the past several years. The Council of Undergraduate Deans (CUD) is taking an active role in monitoring this issue, and the Provost has now appointed a new standing committee that reports to CUD and to the Pluralism committee of the University Council. The committee, chaired by a faculty member, will examine data on the retention of minority students; examine the academic careers of minority students at Penn to determine patterns of success as well as areas needing improvement; and recommend programs designed to improve the experience of minority students at the University.

• Improve local transportation services for students

Although transportation services were not specifically highlighted in the *Agenda*, they have been much improved since 1995, making it easier for students to take part in the vibrant city life of Philadelphia. Campus Transportation (Penn shuttle service, handi-vans, Center City and West Philadelphia circuits) has been expanded to a wider territory, with more hours, and greater frequency, reaching a peak of 483,200 rides in fiscal 1998. Penn also has instituted and subsidized a line of student-oriented passes with SEPTA that encourage more extensive student usage of public transportation. And the new University Circulator (or "LUCY") began van service around University City in the summer of 1999. The system is operated by SEPTA through a contract with the University City District, and the service is free to University students, staff, and faculty.

B. Develop new and up-to-date recreational athletic facilities.

\$13.5 million has been raised since 1995 for improvement of campus recreation facilities, including trustee David Pottruck's \$10 million naming gift for renovation and expansion of Gimbel Gymnasium. The new Pottruck Center, Katz Fitness Center, Murphy Field, Bower Field, Palestra renovations, women's locker rooms and training rooms are examples of our progress.

A major gift of \$10 million for new athletic facilities from trustee George Weiss was announced in January 2001. This gift—and the prospect of new and improved facilities—will significantly help Penn's recruitment of scholar-athletes.

DRIA, in conjunction with the Office of Admissions and with the support of the Deans of the undergraduate schools, has implemented a plan to achieve the following goals:

- Ensure that student-athletes are academically representative of the overall admitted class.
- Give coaches a reliable sense of admissions outcomes.
- Allocate admissions slots fairly and strategically among different teams, prioritizing those sports that have the greatest chances of success.

V. Enhance student career placement services to provide excellent support for all students in a competitive job market.

Over the past five years, Career Services has improved service to students, alumni, employers, and others through extensive staff development and the expanded use of technology. All permanent job listings, as well as internships, are now online. Career Services was a founding member of an online internship consortium with several national research universities. Penn students now have access to over 18,000 internships annually throughout the country, up from 3,000 five years ago. In addition, graduate students can consult our funding database of pre- and post-

doctoral fellowship opportunities.

Current students and alumni can also access the Penn Career Network to find alumni mentors who provide career advice on a particular industry, field, function, or geographical area. Further, students using the On-Campus Recruiting Service to find work after graduation have had, for four years, a web-based system, developed in-house, to research companies and to bid and sign up for interviews. Students can also go to the website to find out which letters of recommendation are in their credentials file and when a request to have recommendations sent was mailed.

Penn is one of the only universities in the world that puts the results of its graduates' Career Plans Survey online, with salary averages by school, major, and career field. Employers can easily see what salary they should offer to be competitive at Penn, and students can see what the market is paying. The Career Services site last year received almost 4 million hits from around the world.

Career Services also makes effective use of e-mail distribution lists. Students sign up to receive regular, sometimes daily, e-mails from counselors. Last year, nearly 8,000 undergraduates and almost 5,000 graduate and professional students were on at least one list. Thus, Penn students can now get career advice from a trained counselor well beyond the usual business day.

Subgoal 1(b): Penn's academic departments and programs will be considered among the top ten in the United States or will develop and implement strategies for moving toward the top tier. Penn's doctoral and professional programs will be the programs of choice for the ablest graduate and professional students in the nation and in the world.

By way of introduction, below is a table showing School rankings from *U.S. News and World Report* in 1995 and 2000. Several schools have measurably advanced. Note that the well-grounded GRC rankings of graduate departments and disciplines, last done in 1995, will not be undertaken again for another two years, so there is no available comparison.

School	1995	2001
Medicine	7	4
Nursing (graduate programs)	3	2
Social Work	18	11
Veterinary Medicine/Science	NR	2
Business (MBA)		
(Ranked Number 1 in <i>Business Week</i> and <i>Financial Times</i>)		
	2	4
Law	11	10
Education	10	8
Engineering (graduate programs)	31	30

In addition to the rankings in the preceding table, below are merely some of the significant advances that have occurred over the past five years in the graduate or professional programs of the twelve schools.

School of Arts and Sciences

- Structural operating deficit eliminated
- Faculty compensation significantly improved
- Numerous departments ranked in the top echelon by *U.S. News*, including: English, Economics, History, Mathematics, Psychology, Sociology
- Improved fundraising: \$30 million in subscriptions in FY 2000
- Life sciences building project underway
- Reconstituted graduate support packages in the humanities and social sciences to make them competitive with any program in the country.

Wharton School

- Rated the leading business school in the world
- Huntsman Hall on schedule: more than \$120 million raised
- Wharton West: development of a comprehensive program agenda, based in California, which will focus on strengthening the Wharton School's ability to serve the global business community.

Engineering

- First new building underway in 35 years: New Computer and Information. Science building, Levine Hall under construction, and 10 new faculty chairs identified.
- Planning is underway for a second building: Whitaker Building, which will provide facilities expansion to support a major increase in biomedical/bio-technology research in SEAS and across the campus.
- Increased level of energy and focus on excellence under new administration
- Membership in the National Academy of Engineering (NAE) has almost doubled in the last five years which puts SEAS in the top 10

Law

- Silverman Hall completed
- Student quality maintained against severe competition
- Key faculty retained despite raids from competitors
- Rapid expansion of International Graduate Law Program and creation of exchange program with foreign law schools.
- Ranked 3rd in nation in articles published by faculty in major law reviews.

Medicine

- 2nd in nation in receipt of NIH funds
- Completion of BRB II/III and other research space
- Completion of Future of Medicine development campaign
- Completion of Curriculum 2000
- Continuity in face of Health System financial troubles

Dental Medicine

- Construction of Schattner Building, a 70,000 square foot clinical facility, well underway.
- Establishment & expansion of Dental Care Network largely complete
- Outstanding assessment of School quality by external accreditors
- Launched an internet-based continuing education and public information site.

Veterinary Medicine

- Annual state funding stabilized and then expanded
- \$18 million state capital appropriation secured for new teaching & research building
- Two hospitals ranked among the best in the world
- Clinical funding up 60% from \$11 million in 1996 to \$17.6 million in 2000
- 58% increase in research awards to \$20 million in FY2000
- Increase in student selectivity

Nursing

- High ranking (#7) among nursing schools in receipt of NIH funding.
- All Ph.D. students are fully funded and GRE scores have increased from 1025 in 1997 to 1210 for September 2001 incoming class.
- Completed fiscal analysis of master's programs to identify those that should be closed or consolidated. To date, one program has been closed and six have been consolidated. Three additional programs are targeted for consolidation in the coming year.

Social Work

- Ranked 6th in nation in faculty publications in peer-reviewed journals
- All doctoral students fully funded and among the nation's top SW graduate students
- Numerous faculty have won prestigious national awards in social work

Graduate School of Education

- Rise in national rankings
- Ph.D. acceptance rate dropped from 36% to 24%, and yield up from 50% to 72%
- Renovation of main facility well underway: it will vastly improve student space, technology and academic program space
- Total research awards doubled from \$45 million to \$96 million.

Graduate School of Fine Arts

- Architecture program ranked 5th in national survey, landscape architecture ranked 4th by Gourman, historic preservation tops in field, and city planning on track to break into top ten
- Digital Media Design is one of leading programs of its kind
- Addams Hall completed to house courses in fine arts and architecture
- Practice professorships created
- Design studios converted into digital design studios

Annenberg School for Communication

- Recently concluded a two year renovation of the school designed to reconfigure graduate student space, increase research and seminar room capacity, add a teleconferencing center and serve as home for Annenberg Public Policy Center.
- Opened a Washington APPC program in the National Press Club in 1996.
- With \$13 million in grant funding, the APPC is taking the Student Voices model—a national project to increase political engagement and communication skills among high school students — to other cities around the country.

Strategic Initiatives for Subgoal 1(b)

I. Have each school develop or update its own strategic plan by June 1996, to ensure that it includes the steps necessary to attain or maintain superior academic status by the year 2000. As part of this plan, each school should articulate steps to:

A. Conduct regular departmental reviews.

B. Reenergize or restructure those departments that are vital to the core mission of the school or the University, that are below the school's standard of excellence.

C. Support and encourage efforts among the schools to reward faculty based on criteria for excellence such as teaching achievements,

publications, citations, and grants received.

D. Continue working to attract and retain underrepresented minority and women faculty.

II. Establish a rigorous, normative protocol for external review and assessment of each school and inter-school program every five to seven years.

III. Infuse the Research Foundation with new capital by raising money to support areas of research where Penn has clear competitive advantages or where the return on seed money is likely to be high.

IV. Directed by the Provost's Council of Deans, make strategic investments in current and developing cross-disciplinary fields where Penn has or could have nationally recognized strengths.

V. Ensure that Penn's doctoral and professional programs will be the programs of choice. Take steps to:

A. Pursue increased funding for graduate education and training.

B. Encourage innovative and efficient teaching and research groupings of faculty.

C. Seek development of new areas of collaboration in graduate training across the University.

D. Strengthen efforts to attract and retain underrepresented minority and women graduate and professional students.

E. Provide greater opportunities for student interaction across graduate and professional school boundaries, and enrich campus life for graduate and professional students.

F. Conserve resources by eliminating duplication of course offerings across and within schools.

VI. Establish a review process for graduate and professional programs that emphasizes measures such as admission selectivity and ability to place graduates.

A. Each School should conduct regular reviews to assess progress in achieving the school's strategic goals.

Normative School reviews have been a major product of the *Agenda for Excellence* and are discussed in a later section of this report. Below is a list of internal departmental reviews regularly conducted in individual Schools:

School of Arts and Sciences: SAS has continued its well-established system of reviewing departments approximately every seven years. Each review takes place in three parts (self-study, internal and external review) over the course of three semesters.

Wharton: Every five years, Wharton conducts an internal review of each department examining teaching, research, and service activities, and an evaluation of the department's annually-updated five-year plan. An external advisory group composed of faculty from peer institutions analyzes the report of the internal review committee and submits findings and recommendations to the Dean.

School of Engineering and Applied Science: Under the new administration, SEAS has embarked on a renewed effort to review and critically assess all academic units. The first departmental reviews (Materials Science and Engineering & Electrical Engineering) are planned for this year. All centers are being reviewed as well.

Medical School: The School of Medicine formally reviews its academic departments, centers, and institutes on a six-year schedule. The reviews are conducted by review committees appointed and charged by the Dean. The review process includes a site visit by several external consultants who are nationally known physicians/scientists from other institutions, with expertise closely related to the department under review.

Veterinary Medicine: Department reviews were instituted in 1994. The first was the Department of Clinical Studies, New Bolton Center, with all the other departments reviewed since that time. The School has also reviewed the Center for Animal Health and Productivity in 1998 and will work through the other centers of excellence on a regular basis.

Graduate School of Fine Arts: In the past five years, GSFA has undergone external reviews of the Fine Arts department, Fels Program in Government Administration, and a University review of the historic preservation program. Accreditation reviews were also conducted for Architecture, Landscape Architecture, and City and Regional Planning.

Graduate School of Education: In April 1999 the GSE Standing Faculty formally adopted review guidelines that put each of its four academic Divisions on a five-year cycle of self-study and curriculum review. The process is designed to explicitly address University and School strategic goals, our urban and international academic emphases, and student and academic markets.

School of Social Work: SSW reviews progress toward strategic goals annually. Goals are revised as necessary, and a new strategic plan is developed every five years.

B. Each School should energize or restructure those departments that are vital to the core mission of the school or the University, that are below the school's standard of excellence, and that have failed to show substantial improvement. Phase out those departments that are neither central to the mission of the school or University, nor markedly ascending in quality.

The Schools of the University have taken this charge very seriously. Resources have been directed to strategically important departments with particular needs, and, in certain other cases, departments have been closed or given new focus. Examples follow.

School of Arts and Sciences: In its 1999 strategic plan, SAS identified six departments (English, History, Biology, Psychology, Political Science, and Economics) for strategic investment. These departments have the greatest potential to create new knowledge and achieve undisputed national distinction; represent fundamental components of an undergraduate liberal arts education; and make important contributions to valuable interdisciplinary and interschool programs (two thirds of the Class of 2000 majored in a subject based in one of these departments). These departments now receive about 50% of the faculty search authorizations in the School and are the focus of its most important facilities initiatives (Life Sciences Quadrangle for Biology and Psychology, renovation of Bennett Hall, return of History to College Hall). SAS phased out the Department of Folklore and Folklife as of 7/1/99; the four faculty became members of other departments related to each professor's most relevant discipline.

Wharton: Wharton has reviewed its portfolio of classes and requirements to remove historically low-enrollment courses and majors. Wharton has also redefined the mission of the Public Policy and Management Department, now known as "Business and Public Policy," to de-emphasize public management and to invest in the broader issue of business-government relations, particularly in an international context. In addition, corporate finance and entrepreneurship have reemerged as important fields in terms of the intellectual challenges and student demand.

School of Medicine: In keeping with its status as one of the country's premier medical schools, the School of Medicine launched a wide range of cutting-edge research centers while restructuring and implementing the curriculum to better prepare tomorrow's physicians for the future of medicine.

As one of the nation's leading recipients of NIH funding, the School of Medicine continued to create research centers that have put Penn on the leading edge of teaching, discovery, treatment, and cure. Among the new centers launched were:

- Center for Clinical Epidemiology and Biostatistics
- Center for Bioethics
- Human Genetics Center
- Center for Experimental Therapeutics
- Institute for Medicine and Engineering
- Center for Research on Reproduction and Women's Health
- AIDS and HIV Research Center
- Center for Developmental Biology

Meanwhile, Curriculum 2000 has shifted the emphasis of medical education to preventive medicine and to the integration of subject materials across disciplines. Learning is more active and self-directed, and doctors are taught to be lifelong learners.

Veterinary Medicine: The School has created multi-disciplinary centers of research excellence. The goal of the Centers is to increase opportunities for basic and clinical scientists to engage in collaborative research, increase opportunities for NIH funding of clinically applied research, and hasten the application of advances in basic research to clinical practice. The new centers are:

- The Center for Germ Cell Research and Animal Transgenesis
- The Center for Comparative Medical Genetics
- The Marie Lowe Center for Comparative Oncology
- The Center for Infectious Disease Research
- The Center for Aquaculture, and Aquatic Animal Medicine
- The Allam Center for Exercise Physiology and Sports Medicine

School of Engineering and Applied Science: SEAS has focused on an ambitious effort to energize and restructure the school. SEAS has a new office for research that is charged with overseeing and invigorating the research enterprise in the school and increasing the level of interactions with industry. In keeping with the strong interdisciplinary culture at Penn, SEAS formed interdisciplinary centers in the areas of nanotechnology and human modeling and simulation, centers that cut across school and departmental boundaries. New fund raising efforts have led to new programs designed to improve the infrastructure and to increase the level of activity in bioengineering and computer and information science. New committees in nanotechnology, computational science and neuroengineering are engaged in inter-departmental faculty searches for the best candidates in strategic areas without making departmental affili-

ation a primary consideration.

The Law School: The Law School has built on its broad range of interdisciplinary enterprises by collaborating with the Schools of Medicine and Social Work to form the Center for Children's Policy, Practice and Research (CCPPR), which is dedicated to helping and protecting abused and neglected children. The School also launched the *Journal of Constitutional Law* to cultivate innovative scholarship, promote critical perspectives, and revitalize the traditional study of Constitutional law. Finally, the Law School established the Institute for Law and Philosophy, a joint project with the Philosophy Department that support scholarship, symposia and teaching jurisprudence.

Graduate School of Education: Beginning in 1998, GSE began a comprehensive restructuring of the Educational Leadership Division (ELD), GSE's largest academic division. Restructuring the division included re-engineering of administrative functions, elimination of two academic specializations, reorganization of the other specializations to make them more in-line with student and labor-market demands, and total reconceptualization of the teacher education program.

Teaching, Learning & Curriculum (TLC) and Teacher Education prepares graduates for a number of careers, including positions in teacher education within universities and colleges, staff development positions within state and district departments of education, and leadership positions in schools.

The urban agenda continues to be central to GSE's identity and goal-setting as a school. GSE's academic specializations continue to address urban affairs in coursework, associated service-learning opportunities in West Philadelphia schools, and research projects.

Graduate School of Fine Arts: GSFA has rebuilt the graduate programs in Fine Arts and City and Regional Planning, by adding new faculty and leadership, and changing curricula. Across the school, steps were taken to encourage cross registration across disciplines, and new courses were launched that are jointly offered. A design studio was launched in London, working with the Architectural Association.

Nursing: Anticipating the drop in NIH funding, the School added resources to the Center for Nursing Research with two staff members dedicated to grantsmanship and technical support, statistician support, and a faculty consultant for grant development and completion of data-based manuscripts. The Director of the Center for Nursing Research is closely monitoring all RFPs, status of grants, and faculty productivity. Division Chairs have completed a careful analysis of faculty workloads and have adjusted teaching assignments to enhance research and scholarly activity. Proposal submissions have increased. With a grant from The John A. Hartford Foundation, the School opened a Center for Geriatric Nursing Excellence (one of only five in the country). The School's Center for Health Outcomes and Policy Research, Geriatric Nursing Excellence, and Urban Health Research have excelled in research outcomes and the collection of the Center for the Study of the History of Nursing is considered premier, attracting nursing history scholars from around the world.

The School completed a fiscal analysis of its master's programs in 2000 in order to identify those programs that should be closed or consolidated. Three programs are targeted for consolidation in the coming year.

C. Each School should support and encourage efforts among the schools to reward faculty based on criteria for excellence such as teaching achievements, publications, citations, and grants received.

Examples include:

The School of Arts and Sciences continues to evaluate and compensate faculty according to well-established standards of scholarship, teaching, and service. SAS has moved aggressively to enhance mean faculty salaries, which fall below those of our peer institutions, and this year the salary gap has been reduced. Also, in an effort to increase the availability of School-based discretionary faculty research funds, SAS established the Merriam Research Fund program in July 1999. A fund of \$5000 is awarded to faculty at the time of appointment as Assistant Professor and upon promotion to Associate and Full Professor.

The School of Medicine recognizes faculty achievement annually with an "Awards of Excellence" program. For the past five years, the School has augmented its longstanding education awards with four annual research awards and five annual clinical awards, named in honor of past and present Penn leaders.

Veterinary Medicine introduced the Dean's Awards for Leadership in Education. The awards are made on an annual basis and recognize faculty who provide exceptional leadership in educational programs, outstanding teachers, faculty who do an outstanding job as course organizers, or those who create innovative computer assisted learning programs.

In the *School of Social Work* the Dean meets with each faculty member to review their performance. The review includes scholarly productivity, externally funded research, teaching, service to the school, university and community and doctoral dissertations. These reviews serve as the basis for determining compensation decisions and rewards.

The *Graduate School of Fine Arts* initiated the G. Holmes Perkins Prize for distinguished faculty teaching, with the recipients selected from nominations by students.

The *Graduate School of Education* maintained and increased incentives for faculty research through matching stipends, research infrastructure support, and indirect returns on funded research. The school closely monitors quality of teaching (and, increasingly, doctoral student mentoring) through annual faculty self-evaluation and salary review.

The *School of Engineering and Applied Science* has created a new office for research and the position of the Deputy Dean with the responsibility of overseeing and invigorating the research enterprise in the school and increasing the level of interactions with industry. A new award to recognize excellence in research and to reward outstanding faculty have been instituted.

Named chairs continue to be an important means of rewarding faculty excellence and have been an important fund-raising priority in many of our Schools. Below is a listing of professorships endowed over the past five years:

Year	Endowed Professorships: Total \$87,446,000	School	Purpose
1997	Anonymous	WHA	Dean's Discretion
1997	Boettner Institute of Financial Gerontology	SSW/SAS	Financial Gerontology
1997	Clinical Practices of the Department of Anesthesia	MED	Anesthesia
1997	Sehoon Lee, WG'75	WHA	Dean's Discretion
1997	Pendergrass Education and Research Foundation	MED	Radiology
1997	Gerri Skirkanich & J. Peter Skirkanich, W'65	SEAS	Young Faculty
1997	Alvin L. Snowiss, C'52, L'55	LAW	Law and the Free Enterprise System
1998	Estate of Pamela H. Cole, NAF	VET	Young Investigators
1998	Robert L. Hart	MED	Bioethics
1998	Charles A. Heimbald, Jr., L'60	LAW	TBD
1998	Independence Foundation	LAW	Business Law
1998	The late Louise W. Kahn & the late Edmund J. Kahn, W'25	SAS	Faculty Excellence
1998	C. H. Lin, G'72	SEAS	Humphrey Chair in Chemical Engineering
1998	Joseph J. Melone, W'53, WG'54, GR'61/ Equitable Life Assurance	WHA	Dean's Discretion
1998	Miller Anderson & Sherrerd	WHA	Finance
1998	Estate of Olga Pompa	SEAS	Dean's Discretion
1998	Henry R. Silverman, L'64	LAW	Corporate Law
1998	Joanne Thomson Welsh, CW'52 & Raymond H. Welsh, W'53	SSW	Child Welfare
1999	Walter H. Annenberg, W'31, HON'66 & Leonore C. Annenberg, HON'85	SAS/ASC	Political Science
1999	Joseph J. Aresty, W'43	WHA	Leadership and Change
1999	Diver chair (multiple donors)	LAW	Dean's Discretion
1999	Robert A. Fox, C '52	SAS	Leadership
1999	Robert A. Fox, C '52	SAS	Leadership
1999	Goergen Foundation/Pamela T. Goergen & Robert B. Goergen, W'62	WHA	Entrepreneurial Management
1999	Estate of Mary Groff	MED	Neurosurgery
1999	Korea Foundation	SAS	Korean Studies
1999	Measey Foundation	MED	Surgery
1999	Estate of Adele Neissen	MED	Ophthalmology
1999	Oxford Foundation / Marilyn Ware, CW'67	MED	Alzheimer's
1999	Andrew S. Rachleff W'80	SEAS	Young Faculty/ Computer Science
1999	Joseph Sondheimer, NAF	WHA	International Economics & Finance
1999	Alberto Vitale, WG '59	WHA	Electronic Commerce
2000	Christopher H. Browne, C'69	SAS	Distinguished Professorship I-V
2000	Martin Bucksbaum Family Foundation	WHA	Real Estate
2000	Mark O. Winkelman, WG'73	WHA	Distinguished Scholars
2001	Walter H. Annenberg, W'31, HON'66 & Leonore C. Annenberg, HON'85	ASC	Director of Public Policy Center
2001	S. Samuel Arshat, L '34	LAW	Corporate Law
2001	Oliver Boileau, EE'51, GEE'53	SEAS	Electrical Engineering
2001	CIBC	WHA	e-Commerce and Entrepreneurship
2001	David B. Ford, WG'70	WHA	TBD
2001	Estate of Georgia E Hofmann	VET	Equine Medicine
2001	Margaret R. Mainwaring, WD'47, H'85 & A. Bruce Mainwaring, C'47	NUR	Nightingale Professorship
2001	George A. Weiss W'56	SEAS	Computer Science
2001	Michael D. Zisman, GEE'73, GR'77 and the Zisman Family Foundation	SEAS	Computer Science

D. Continue working to attract and retain underrepresented minority and women faculty:

After a systematic review of the status of women faculty, the Gender Equity Study in 2000 showed increases of women in SAS, Wharton and Engineering, for instance, after 1995, but decreases or leveling off in 1997. The study showed no salary differences by gender. The Deans are attentive to the issues, and will continue to use Penn's competitive salaries to recruit and retain top female faculty.

Since 1995, grants from the Provost's Reinvestment Fund for minority faculty recruitment expanded dramatically from \$132,960 in 1995 to \$472,755 in 2000. In addition, in 1998 the fund began to be used to retain as well as recruit faculty.

While the increase in total numbers is small because of some important losses to other Universities and to retirement, African American standing faculty have increased from 52 in 1995 to 68 in 2001; Asian faculty have increased from 99 in 1995 to 181 in 2001; and Latino faculty from 30 in 1995 to 44 in 2001.

Two new programs launched as part of the *Agenda for Excellence* have also helped to enhance faculty minority initiatives. The first, the Diversity Fund, is a yearly initiative for the funding of research and programs focused on study of or enhancement of diversity on the campus. In 1999 this program provided grants totaling \$208,000; in 2000, grants totaled \$229,296. The second new initiative is the DuBois Collective, a program established by African American faculty across the campus to enhance research by providing pilot dollars to faculty and doctoral students; providing dollars for national and international symposia; and providing release time from teaching for junior faculty to begin their research programs. This initiative, headed by Dr. Margaret Spencer from the Graduate School of Education, was awarded initial multi-year University funding of \$500,000.

II. Establish a rigorous, normative protocol for external review and assessment of each school and inter-school program every five to seven years.

"Normative" external reviews, not linked to accreditation nor signaling any concerns about the schools or centers, have been highly successful outcomes of the *Agenda for Excellence* process. These reviews have encouraged schools to reconsider and clarify various strategic goals, and they have been vital in measuring real progress toward these goals.

School and Center reviews began in February 1997, and have continued each semester since that time. The protocol for external review and assessment of the undergraduate, graduate and professional programs is as follows:

- Self study done by the school.
- A visit by selected distinguished external reviewers. Leaders from the highest ranked schools or relevant fields have participated in the reviews.
- A written report by the reviewers to which the dean of the school is asked to respond.

External reviews to date include:

- School of Nursing (1997);
- School of Social Work (1997);
- School of Dental Medicine (1997);
- Graduate School of Education (1998);
- School of Engineering and Applied Science (1998);
- Law School (1998);
- School of Veterinary Medicine (1999);
- Wharton (2000);
- Graduate School of Fine Arts (2000);
- Annenberg (2001).

Reports from the external reviewers have provided important insights about the schools' faculty, students and academic programs, the appropriateness of their strategic plans, and the quality of their leadership.

III. Infuse the Research Foundation with new capital by raising money to support areas of research where Penn has clear competitive advantages or where the return on seed money is likely to be high.

Since the Research Foundation was reconstituted in 1986, its three sources of funding have been the endowment for the Research Foundation, income from patents and licenses, and an appropriation from the University operating budget.

Prior to the adoption of the *Agenda for Excellence*, no patent or royalty revenue had been posted to the fund in 7 years. Compare this to Fiscal 2000: endowment income had increased by 66% to \$438,659, and technology transfer proceeds were over \$7 million.

The infusion of the proceeds from the technology transfer program has completely changed the University Research Foundation's ability to respond to research initiatives. The decision to reinvest a large portion of those funds in the URF endowment fund has ensured the continued ability to increase the number and size of the awards. The reservation of some portion of technology transfer proceeds has created for the first time the ability to respond to special opportunities and challenges in research.

IV. Directed by the Provost's Council of Deans, make strategic investments in current and developing cross-disciplinary fields where Penn has or could have nationally recognized strengths.

The University has made significant investments in strategic cross-disciplinary fields. Cross-school and interdisciplinary undergraduate programs were discussed earlier in this report.

V. Ensure that Penn's doctoral and professional programs will be the programs of choice. Take steps to:

• Pursue increased funding for graduate education and training.

School of Arts and Sciences: The School has taken several steps to improve funding packages for graduate students, thereby improving its ability to attract the best students. SAS will provide four and five-year non-service packages at the level of its William Penn and Benjamin Franklin Fellowships (previously reserved for only a few top students) to all incoming students in the humanities and social sciences beginning in 2001-02.

All graduate students receiving full financial support will be provided with health insurance for a period of up to six years via the Penn Student Insurance Plan at no cost to them. In addition to the new health insurance benefit—estimated at a cash value of \$1,400 per student—Ph.D. stipends will increase across the university. In 1999 SAS improved the value of its most elite fellowships, the Benjamin Franklin and William Penn. In 2000 the School raised the salary cap on graduate student earnings from University sources by 36% to ensure that students can devote their time fully to their studies without seeking outside employment.

Biomedical Graduate Studies has provided a full fellowship to every student in the program (except those who enter with a professional degree and are ineligible for predoctoral funding) through a combination of direct aid and appointments to training grants, individual fellowships, and—beginning in year three—research grants for the duration of his or her enrollment as a full-time student in good standing.

Nursing School: The Nursing School now funds all full-time doctoral students and discourages part-time study for the Ph.D. in nursing. This year there are 13 School funded, 12 grant funded, and 3 fellowship funded Ph.D. students, all of whom are full-time. SON's Ph.D. applicant pool remains relatively stable and the School admits annually at capacity (about 12 students per year).

Graduate School of Fine Arts: The school reduced its admission of doctoral students to the number that can be supported fully on research and scholarship support. Three years of funding is offered to all students who are admitted.

Increasing the quantity and quality of graduate students is a very important goal of the *School of Engineering and Applied Science*. As part of this effort, the School has increased its commitment to recruiting, doubled its commitment to providing financial support to students, and started on new initiatives that have already yielded graduate fellowships in new research areas in SEAS.

School of Social Work: SSW now fully funds its PhD students. The funding comes primarily from research grants. We are now competitive with the top SSW doctoral programs in the US. However, more needs to be done in the future with respect to financial aid for MSW students.

• Encourage innovative and efficient teaching and research groupings of faculty.

New and innovative groupings of faculty for teaching and research are being regularly established across the University.

Center for Children's Policy Practice and Research is a collaboration between the Law School, the School of Social Work and the School of Medicine. CCPPR seeks innovative solutions to the legal, societal, and health crises facing America's children. The Center will concentrate on interdisciplinary policy, research, practice and study among faculty and students in a number of schools and departments, centers and institutes. With its location in the Boston-Washington corridor and its commitment to leadership, Penn is in a unique position to create a national center that will change the direction of future policies for children.

The Cartographic Modeling Lab, a joint venture between the Graduate School of Fine Arts and the School of Social Work at the University of Pennsylvania, brings together faculty members and students across disciplines to collaborate on spatial research. The CML specializes in Geographic Information System (GIS) projects, with an emphasis on data integration, application development, and spatial analysis. Current projects span a wide variety of topics including public safety, social welfare, children and youth, housing, homelessness, the environment, public education, public health and political science.

Faculty from Engineering and the Wharton School are working together on multi-disciplinary research topics under the auspices of the Ackoff Center for Advanced Systems Approaches (A-CASA). The Center will examine the implications of netcentricity on a variety of topics

including organizational design, and knowledge management and will examine several issues related to sustainability in both "new economy" and traditional organizations.

Five percent of faculty in Biomedical Graduate Studies now hold appointments in the Schools of Arts and Sciences, Dental Medicine, Engineering, and Veterinary Medicine or hold adjunct appointments in Penn departments as researchers at the Wistar Institute or the Institute for Cancer Research of the Fox Chase Cancer Center.

• Strengthen efforts to attract and retain underrepresented minority and women graduate and professional students.

Efforts to attract women and minorities over the past five years have resulted in the following.

Graduate Students (1994-2000)	Overall Enrollment (%change in enrollment)	Women (change % of women)	Underrepresented Minorities (change % of minorities)
Arts & Sciences	-17%	4%	0%
Annenberg	39%	4%	-9%
Education	-28%	4%	1%
Engineering	-25%	0%	-3%
Fine Arts	-52%	20%	0%
Medicine	3%	2%	1%
Nursing	-20%	4%	10%
Social Work	81%	23%	-2%
Wharton	-3%	0%	0%

Professional Students (1994-2000)	Overall Enrollment (%change in enrollment)	Women (change % of women)	Underrepresented Minorities (change % of minorities)
Annenberg	-22%	25%	-6%
Dental	9%	5%	4%
Education	0%	-5%	0%
Engineering	80%	0%	0%
Fine Arts	-24%	9%	0%
Law	2%	6%	-1%
Medicine	-3%	3%	-7%
Nursing	-44%	-2%	0%
Social Work	-22%	0%	8%
Veterinary	0%	-2%	0%
Wharton	0%	2%	0%

Efforts are underway in all the Schools to improve these numbers. As one example of these efforts, Biomedical Graduate Studies program is working to strengthen the underrepresented minority applicant pool and encourage underrepresented minority students in general to consider careers in biomedical research, by training underrepresented minority undergraduates in its Summer Internships Program with a grant from the NIH and support from the Leadership Alliance (a consortium of 28 colleges and universities dedicated to increasing the numbers of underrepresented minority students in academic research).

• Provide greater opportunities for student interaction across graduate and professional school boundaries, and enrich campus life for graduate and professional students.

The Veranda on Locust Walk will house the new Graduate Student Center, costing \$1 million and providing a central site for Penn's graduate and professional students to socialize, study, create programming, and generally interact with one another across school boundaries. In addition to serving as a meeting place for graduate and professional students from across Penn, The Center will sponsor speaker series, research colloquia, and other programs to assist graduate and professional students in developing their careers.

VI. Establish a review process for graduate and professional programs that emphasizes measures such as admission selectivity and ability to place graduates. Set program size accordingly.

The Graduate Council of the Faculties conducts regular reviews of all sixty Graduate Groups, on a five-year schedule. In the School of Arts and Sciences, for example, as part of its procedures for reviewing departments, the School conducts a rigorous three-part evaluation (self-study, internal and external reviews) of each department's Ph.D. program, following protocols established by the School and by University's Graduate Council of the Faculties. Graduate groups that are not coterminous with a department are reviewed in conjunction with an allied department (e.g., Demography with Sociology, Ancient History with Classical Studies). The School reviewed 16 of its 33 graduate groups in this manner from 1996 through 2000.

The Graduate School of Education implemented a cyclical curriculum review for each of its four academic divisions. Each calendar year, one of the four divisions now undergoes a comprehensive review of its curriculum and degree program offerings.

Six Academic Priorities

Six academic priorities were determined to be the most compelling and strategic for Penn as an institution over the next five years. Each of them is multidisciplinary and serves as a kind of crosswalk among different schools and departments. As these priorities reflect, Penn has a long been a campus that encourages interdisciplinary research and teaching. Each of the six priorities has received considerable attention and investment since 1995, although progress has not been uniform among the six priorities. Immediate opportunities were seized and developed in some, while efforts in others got off to a slower start.

Life Science, Technology and Policy

During the past five years the University has made significant progress in recruiting faculty, raising resources, and developing the organizational structures and physical facilities needed to facilitate work in the emerging areas of genomics, proteomics and bioinformatics, as well as new developments within the fields of genetics, cognitive neuroscience, germ cell biology and transgenesis, and translational biological and biomedical research. Penn now boasts a major research presence in all areas of contemporary biomedical science and is a world leader in many, as the following accomplishments will show.

Much of the University's growth in NIH funding, for example, was fostered by the creation of 18 interdisciplinary institutes and centers that facilitated interaction among faculty throughout the University, sponsoring seminars and supporting core facilities. These institutes have provided a critical mechanism for integrating life science research on campus.

New Academic Centers in Life Sciences

The Leonard and Madlyn Abramson Family Cancer Research Institute. Made possible by a \$100 million gift from the Abramson family, the intent of the institute is to position itself in the vanguard of basic research into the causes of cancer and the development of the next generation of cancer treatments. The institute recently established a program in Cancer Genomics, a critical step for understanding the genetic basis of cancer development. One unique aspect of this component includes the collaboration with the Cancer Genetics Project at the Sanger Center.

The Center for Cognitive Neuroscience. Established upon the recommendation of a faculty planning committee appointed by the President to explore ways in which Penn could provide both a physical and intellectual focus for this emerging interdisciplinary field, this inter-school, interdepartmental center, aims to make Penn a national leader in the studies of mind, brain, and behavior. The center operates within the Mahoney Institute for Neurological Sciences in order to take advantage of the campus-wide neuroscience linkages, and also works closely with the Institute for Research in Cognitive Science.

Center for Animal Transgenesis and Germ Cell Research. Established to capitalize on more than 30 years of pioneering research in the development of transgenic techniques by scientists at the School of Veterinary Medicine, one of the major goals of the center is to develop new approaches for producing transgenic farm animals and understand germ cell biology.

The Department of Cancer Biology. Formation of this new basic science department complements existing departmental efforts in areas that overlap with cancer biology while providing a focused group of faculty interested in basic biological issues using cancer as a model system/core. Such a group of investigators and their associated laboratory, resources and teaching abilities provide a strong base for support, collaboration and advice to the broader membership of the Cancer Center as well as investigators in the basic science departments within both the Medical School and the Department of Biology.

Institute for Medicine and Engineering. Housed in the new Vagelos Building, the institute's mission is to stimulate fundamental research at the interface between biomedicine and the engineering/computation sciences that will lead to innovative applications in biomedical research and clinical practice. Research focuses on such areas as cardiovascular biology, engineering aspects of gene therapy, neuroengineering, and bioinformatics.

The Center for Bioinformatics. The center was created in 1997 to provide interdepartmental and interschool linkages between biomedical researchers in Arts and Sciences and Medicine, computer scientists in Engineering, and mathematicians in Arts and Sciences. The relatively recent emergence of bioinformatics and computational biology has been propelled by the explosion of new knowledge about the essential properties of life—as gleaned from the Human Genome Project and other similar efforts—along with rapid advances in computer technology.

Penn Center for Developmental Biology. Established in 1999 to promote interdisciplinary research in developmental biology, the center promotes research in the basic and medical sciences that will lead to novel, developmentally-based therapies for human research. Researchers in

Medicine, Arts and Sciences and Veterinary Medicine work in such areas as cell biology, informatics and functional genomics, gene and cell and human genetics.

Genomics Institute. The establishment of a University-wide Genomics Institute will spearhead future development in this critical area, fostering interdisciplinary projects that integrate biology, medicine, engineering and computer science; and link academics and industry. The institute will provide intellectual leadership in studying genomes and undertake large-scale analysis of gene products.

Faculty from SEAS and SAS have established a *Center for Nanoscale Science and Engineering*. This center promotes interdisciplinary educational and research efforts across campus. The center will be the forum for writing group proposals, establishing an industrial liaison program, and for identifying outstanding candidates for faculty recruiting.

The Institute for Adolescent Risk Communication. The Institute, funded by a \$25 million endowment from the Annenberg Foundation, will open in January 2002 and will focus on reducing adolescent smoking, illegal drug uses, gambling, risky sexual behavior, and suicide.

New Academic Programs in Life Sciences

Several new Masters Degrees in the Life Sciences have been developed:

Degree	Schools and Programs Involved
Master of Bioethics	School of Arts and Sciences and the School of Medicine
Master's of Environmental Studies	Departments of Biology, Earth and Environmental Science, and History and Sociology of Science
Master's Degree in Biotechnology	School of Arts and Sciences, the School of Engineering and Applied Science and the School of Medicine
Masters Degree in Health Leadership	Nursing/Wharton

New undergraduate majors include:

Major	Schools and Programs Involved
Molecular Life Sciences	Arts and Sciences, Medicine, Dental Medicine and Veterinary Medicine
Computer and Cognitive Science: Artificial Intelligence	Institute for Research in Cognitive Science, the Department of Computer and Information Science in the School of Engineering and Applied Science and various departments in the School of Arts and Sciences
Digital Media Design	School of Engineering and Applied Science and Arts and Sciences
Health and Societies	School of Arts and Sciences
Computer and Telecommunications Engineering	Nursing, School of Engineering and Applied Science
Nursing and Health Care Management	Nursing and Wharton

Several new minors in the life sciences have been established as well:

Minor	Schools and Programs Involved
Health Care Systems and the Biological Basis of Behavior	SAS and Wharton
Urban Health and Health Behavior	Nursing
Cognitive Science	Departments of Computer Science, Linguistics, Philosophy and Psychology
Nutrition	Nursing and College of Arts and Sciences
Nursing and Health Services Management	Nursing, Wharton, and School of Arts and Sciences
Health Communications	Nursing and Annenberg School of Communications

In addition, the School of Medicine has implemented an innovative new curriculum—called “Curriculum 2000”—that is designed to meet the needs and realities of medical education in the 21st Century. The curriculum treats medical education as a continuum, integrating the basic sciences and clinical medicine, and preparing students for the self-directed, life-long learning that will be essential for future physicians.

New Academic Facilities in Life Sciences

In order to remain at the cutting edge, Penn's faculty must have flexible and modern research facilities. The University must create an environment that breaks down the real or psychological barriers of school-based spaces that can impede collaboration and result in duplicative efforts. Our new facilities must—and do—have an interdisciplinary focus, enabling researchers to work as teams.

Penn has undertaken a remarkable amount of biomedical construction over the past five years. Nowhere on campus have larger investments been

made, as the following highlights make clear:

The Biological Research Building II/III. A 14-story, 384,000 net square foot state-of-the-art medical research facility that brings together some 800 researchers and support staff and a number of programs and departments that have programmatic affiliations. Including this new space, a total of 465,000 net square feet of new research space has been built over the past five years in the School of Medicine. Also during the past five years, the School of Medicine has renovated 395,000 square feet of existing research space, bringing them up to a standard that appropriately supports our current research mission.

Vagelos Laboratories of the Institute for Advanced Science and Technology. The Vagelos Laboratories provide Penn with 102,000 square feet of new, critically-needed space for cutting-edge research in bioengineering, chemistry, chemical engineering and medicine. Completed in 1997, they are designed to facilitate research that integrates engineering approaches to cell and molecular biology/biochemistry and include core facilities for tissue culture, molecular biology, radioisotopes and optical imaging.

The Margaret McGrath Rockefeller Laboratory in Animal Reproduction and The Marion Dille and David George Jones Laboratory in Animal Reproduction. These two laboratories, part of the Veterinary School's Center for Animal Transgenesis and Germ Cell Research, were constructed at a cost of \$4.2 million. The Rockefeller Laboratory concentrates on germ cell biology and animal transgenesis, while the Jones Laboratory focuses on the basic science aspects of germ cell research.

The Cell Engineering Laboratories. This multi-million renovation supports teaching and research initiatives across the Department of Bioengineering and the School of Medicine.

Leidy and Goddard Laboratories and the Mudd Building. Renovations in these three Biology buildings improved common research facilities for cell and molecular biologists and ecology/evolutionary biologists, helping to advance work in the life sciences.

Life Sciences Building. Plans are moving ahead for the construction of a new research hub that is to be built in two phases, providing more than 125,000 square feet for the Biology and Psychology Departments, the new Genomics Institute, and research space and advanced technology supporting core components in genomics, proteomics, and cognitive neuroscience. It is important to note, though, that Penn has faced difficulty in raising the capital funding necessary to meet the expanding and rapidly changing needs for life science research facilities.

Melvin J. and Claire Levine Hall. The School of Engineering has begun construction of a \$20 million facility that is intended to house the Department of Computer and Information Sciences, an essential partner for work in genomics.

Bioengineering Building. Engineering also is beginning a fund-raising effort to develop and construct a new Bioengineering Building.

Blockley Hall. Recent and planned renovations of Blockley Hall will provide 12,000 square feet of dry lab space for research in bioinformatics.

Mouse Genomics Imaging Laboratory. Planning has been initiated for a Mouse Genomics Imaging Laboratory that will provide key infrastructure for future research related to imaging instrument development, molecular imaging, genomics, and bioinformatics.

The life sciences clearly must remain a strategic priority for the University. With the recent completion of the human genome project, we have entered a new frontier in biological research. It is clear that the explosion of information emerging from large-scale approaches to complex biological systems will revolutionize life sciences research over the next few decades.

American and Comparative Democratic and Legal Institutions

The ACDLI initiative has attracted valuable new talent and introduced important program innovations that have helped to increase Penn's strength in this area.

In particular, Penn has added outstanding new faculty:

- John DiIulio (Political Science) was recruited from Princeton to become the Frederick Fox Leadership Professor of Politics, Religion and Civil Society. He is a major scholar of U.S. politics, criminology, public policy and management, and faith-based social programs in American government, and is a "public intellectual" whose essays frequently appear in popular journals and newspapers. He was asked by President Bush to direct the new White House Office of Faith-Based and Community Initiatives.

- Renowned Yale Professor Rogers Smith, who specializes in constitutional law and American political thought, will become the Christopher Browne Professor of Political Science this year. A younger political scientist, Mary Summers, will also leave Yale to become a senior lecturer in Penn's Fox Leadership Program.

- Jerome Maddox (Political Science) was recruited from Stanford

and has established himself as a leading young scholar of federalism and the dynamics of federal assistance to state programs.

- Antonio Merlo, the Lawrence R. Klein Associate Professor of Economics is an outstanding economist/political scientist, attracted from NYU to head the Institute for Economic Research. He has created an important new interschool seminar series in political theory and rational action.

- Larry Sherman (Sociology), the Albert Greenfield Professor of Human Relations is one of world's leading criminologists. He was recruited from the University of Maryland to revitalize the Fels Center of Government with a focus on state and local institutions.

The pace of advance in the Political Science department has been slower than hoped, but the appointments above are very significant accomplishments. The department remains weaker than it needs to be in American politics and still too small, but its expansion is ongoing and there are some promising prospects currently being actively recruited.

On a different front, the Law School has successfully hired six new faculty members, a rate of successful recruitment that is unprecedented in recent history. Although these new faculty are not all constitutionalists, there is increasing interest within the School's faculty in scholarship in these and other ACDLI-related areas: constitutional law; law and technology; law and medicine; law and communications; and corporate law.

Faculty with particular interests on these areas include:

- Kim Scheppele—recruited from the Political Science department at Michigan and a leading figure in comparative constitutional law, law and society, and political theory.

- Edward Rubin—recruited from the University of California at Berkeley and an internationally recognized expert on the law and politics of prison reform and administrative agency performance.

The Law School is actively searching for a major scholar who would link the School directly with the National Constitution Center, and be a bridge for fellows from the Center who will be housed at the Law School.

Other new programs at Penn have also added to ACDLI success:

Undergraduate Programs: The College program in Philosophy, Politics, and Economics (PPE), with its ACDLI-related focus, has become a very popular major that successfully integrates faculty from the Law School with faculty in three SAS departments. The College and Wharton also have established interschool minors in American Public Policy and Legal Studies and History.

Annenberg Public Policy Center: The Annenberg Public Policy Center was established by Walter Annenberg in 1994 to create a community of scholars within the University of Pennsylvania that would address public policy issues at the local, state and national levels. The Center focuses on Information and Society, Media and the Developing Mind, Media and the Dialogue of Democracy, and Health Communication.

National Constitution Center: The University is the Center's academic partner: faculty from History and Law have played a central role in shaping the Center's scholarly mission. The local presence of the Center has inspired several related projects at Penn: the McNeil Center for Early American Studies will award a biennial dissertation fellowship in constitutional history and the Penn Press will launch an important book series devoted to issues of constitutionalism.

Fels Center of Government: While not a new program, the Fels Center has been transferred into the School of Arts and Sciences and revitalized under the leadership of Larry Sherman, who has reenergized the Center's research mission, public outreach, and Master of Governmental Administration degree program.

Law School: Academic program developments in the Law School have also been positive. On the international front, the graduate law (LLM) program, which is filled principally with students from abroad, has expanded, international offerings have increased, and a solid connection has been made with the National Constitution Center. On the domestic side, the Law School greatly expanded the Institute for Law and Economics; created a joint degree program in Law and History; and established sub-matriculation programs with the undergraduate schools.

The analysis of American institutions should be a center of strength at the oldest American university in the city where American democracy was created. Penn has great strength in History, Economics and Wharton, and continuing weakness in Political Science. The Law School is highly regarded, but increasing strategic focus and a real growth in resources will be needed for it to fully realize its truly exciting potential.

There are unique advantages in public visibility to a University that is strong in law and politics. These areas have traditionally captured the public imagination like few other topics. The recent electoral events in Florida are just the latest example. A university with powerful programs in political science and law will necessarily be prominent on the public stage, and Penn should stay the course in ACDLI.

Management, Leadership and Organizations

The Wharton School. Wharton has a core mission that reflects the central principles outlined in this priority. All the School's research and teaching programs focus on responding, anticipating, and creating the changes that will drive management practice in broad categories of enterprises. Over the past five years, Wharton has instituted a number of new programs throughout the School and in partnership with colleagues throughout Penn that continue and reflect this commitment.

For example, Wharton has developed new degree concentrations: MBA concentration in technological innovation; MBA and undergraduate concentrations in e-commerce; undergraduate concentrations in communications and global analysis; and an interdisciplinary doctoral degree in Global Manufacturing Logistics in partnership with Lehigh University and sponsored by the National Science Foundation. It has also added new research and academic programs.

Wharton has begun distance and technology-enhanced learning initiatives such as Wharton Direct, Wharton-INSEAD CyberExchange, and the formation of learning lab for creation of technology-enhanced learning tools and new learning formats for traditional degree and executive program course material.

In addition to these intramural initiatives, Wharton has worked with its colleagues across the campus to develop new programming and expanded opportunities with inter-school and interdisciplinary focus: Undergraduate Program in Nursing & Health Care Management (N&HCM); Undergraduate University minors in actuarial mathematics, American public policy, biological basis of behavior and health services management, legal studies and history, nursing and health services management, organizations and environmental management, and urban real estate and development; and Executive Master's in Technology Management Program (EMTM) in partnership with the School of Engineering and Science; and Technological Innovation (MBA/MSE).

Wharton also offers dual degree programs with other schools:

Partner with Wharton	Degree offered
School of Law	JD/MBA
Communication	MBA/MA
Social Work	MBA/MSW
Medicine	MD/MBA
Dental	MBA/DMD
Veterinary	MBA/VMD
Nursing	MBA/MSN

School of Arts and Sciences. Leadership training is underway in SAS's Fox Leadership Program, established in 1998 with a generous gift by Trustee Robert Fox. Under the Fox Leadership Program, leaders from business, politics, academia, the arts and public service meet with small groups of College students in a series of structured and highly interactive programs throughout the academic year; freshmen in the College participate in a leadership program shortly after their arrival; curricular innovations have been included to enhance students' speaking skills; students have greater opportunities to practice leadership by participating in curricular and extracurricular activities in the community and have a chance to serve as mentors, trainers and leadership volunteers throughout their undergraduate years; and a public lecture by a world leader from politics or a variety of professions will be held each year.

Nursing. The rapid transformation of health care delivery and financing has created unprecedented leadership opportunities for nurses to influence the future direction of health care. In response to these emerging needs, the School has developed a masters program in Health Leadership. Graduates of this program will play a part in designing and delivering health care in communities, in national and international arenas, and within government, hospitals, health care systems, and related businesses.

Graduate School of Education. GSE has received a planning grant from the Carnegie Corporation to create a Center for Education Leadership. The center will subsume the school's professional development and outreach programs to Philadelphia schools, and expand GSE's technical assistance capacity. The center will be located in the professional development wing at the University-assisted PreK-8 school. Also, GSE has launched a new "Executive Program" in Higher Education Management: the program allows a select cohort of executives and senior managers to attain the Penn Ed.D. in two years, without interruption to their careers. The curriculum centers on the core management competencies and applied research skills that leaders at the most senior levels require.

The School of Social Work. To prepare graduates for practice in the 21st Century, new models of intervention are being generated to deliver the most effective and efficient practices at individual, family, community, organizational, and societal levels. Knowledge about the techniques of management and the disciplines of economics, law, politics, individual and group behavior, and social policy will form the foundation for direct and community practice alike. As social work is a multi-disciplinary

profession, students at the School are encouraged to structure their professional education across related disciplines in the University.

One of the goals of this priority has been to leverage Wharton's strengths and enhance the level of "management education" in other schools. The joint programs that have been listed help do this, but more needs to be done to help prepare Penn graduates in a variety of disciplines for management challenges they will face in the future.

The Humanities — Meaning in the 21st Century

The humanities at Penn rank in the top ten among research universities in the United States. The criteria substantiating this ranking include the high visibility and productivity of Penn's humanities faculty in their separate fields, the increasing quality of graduate students attracted to Penn, and the distinctive profile of Penn humanities resources. The rich resources of the library system in the humanities are well known. Further, unlike many other of our peer schools, Penn humanities programs draw on the strengths of our regional cultural and historical institutions and libraries, as well as Philadelphia's vital urban culture. Many scholars are attracted to Penn because of these resources: and our faculty makes extensive use of them. Penn humanities have a distinctive profile: Penn is an institution supporting the best kind of public humanities work — humanities teaching and programs that are rooted in the most rigorous scholarship but also accessible and engaged with the world around us.

Research and teaching in the humanities have advanced significantly since this area was identified as an institutional priority. Highlights follow:

- The Penn Humanities Forum was launched in 1999 to foster collaboration across the School's humanities departments, to explore connections among the humanities, social sciences, natural sciences, and Penn's professional schools, and to create links between Penn humanists and the Philadelphia community.
- In 1999 SAS received one of two planning grants in the Mid-Atlantic region for a proposal to establish Penn as one of ten National Endowment for the Humanities Regional Humanities Centers being created across the country. The proposal will be submitted in the summer of 2001 and, along with the Humanities Forum, will mark Penn as a leader in innovative interdisciplinary programs and public humanities work.
- A Center for Ancient Studies was established in 1996 to unify Penn's resources for the study of the ancient world.
- In 1998 SAS launched a program in Film Studies. It is currently searching for the first occupant of the Jaffe Chair in Film Studies in the department of History of Art; it is collaborating with the School of Fine Arts and the Annenberg Center in constructing new facilities for teaching film; it has instituted a film minor and a new undergraduate advisory board for Film Studies.
- Humanities faculty have participated in new academically-based community service courses in West Philadelphia schools, including courses on Plato's *Republic* and on the Theatre Arts.
- In 1998 SAS appointed a Language and Literature Task Force, which reviewed the School's policies and structures for the teaching of language and literature. Many of the Task Force's recommendations have been implemented, including the institution of a new Language Certificate, which offers an incentive to students for further language study; the creation of a Language Advisory group and a language web page; the development of new language/culture courses; and the overhaul of the language teaching programs in Romance Languages and German.
- SAS also oversaw significant advances in the application of new technologies to humanities teaching and research: professors in Classical Studies and English received major NEH grants for teaching with technology and SAS funded innovative programs in teaching Music theory with computer.
- The Kelly Writers House was founded as a "hub" for writing at the University; it has been a leader in creating a community of writers at Penn, and in bringing about new advances in the electronic dissemination of humanities programming.
- The Provost's Council on Arts and Culture was established in the fall of 1999 for the purpose of promoting artistic and cultural endeavors at Penn. The Council is comprised of the directors of all of Penn's major arts and culture venues. Its goal is to design and execute new cooperative initiatives which build on the centers' various strengths and provide mutual benefits. Current objectives include raising student awareness of the arts and culture opportunities available to them at the University and developing new audiences from throughout the Delaware Valley.

Finding resources for the humanities can be difficult. The first stage of the Penn Humanities Forum has been funded through a combination of endowment funds from the Mellon Foundation, gift funds raised by the School of Arts and Sciences, and the SAS operating budget. For the Forum to proceed to the next stage, in which visiting fellows and scholars will broaden and deepen its work, more funds will need to be raised.

The humanities have gained a new momentum at Penn. The humanities have emerged from the crisis of the “culture wars” into a new era of energy and commitment. The study of the humanities has always been the backbone of a liberal arts education, and after a decline in student interest in late eighties and the early nineties, commitment to the humanities is surging, because of new programs and new emphases that speak more immediately to student concerns. The humanities at Penn not only continue to show strength in traditional areas, such as ancient studies, but they have also established leadership in new fields of inquiry as a result of strategic attention.

The Urban Agenda

The Urban Agenda continues to be of central importance to several Schools within the University. A number of advances have been made, but Penn still lacks an organizing principle that would maximize the sum of the parts in this case. We have not yet found an effective way to leverage resources across the University to be seen as the preeminent place for urban research and scholarship. Nor have we adequately opened the doors for undergraduates interested in urban studies to benefit from the richness of opportunities across all twelve schools.

Under the leadership of GSE Dean Susan Fuhrman and in collaboration with Dr. Larry Sherman of the Fels Center, an Urban Agenda Committee was formed and has developed plans for integrating the study of cities and metropolitan regions more fully into the academic life of the University. The Committee has recommended the development of a University-spanning Urban Institute at Penn—which will be governed jointly by SAS, GSE, SSW, GSFA and Wharton.

Advances continuing within individual Schools include:

The Graduate School of Education. Urban education is one of two school-wide emphases. Professional development programs, such as the Philadelphia Writing Project, the Penn Literacy Network and the Penn-Merck Science Education Project, offer summer institutes and year-round support to thousands of local schoolteachers, and The Consortium for Policy Research in Education has conducted the evaluation of Philadelphia’s education reform efforts.

GSE has increased the extent to which urban affairs are addressed across disciplines through a Spencer Foundation Research Training Grant. Activities include an annual cross-University student research symposium on urban themes and a monthly Urban Education Research Seminar. GSE is also planning a grant proposal for an Advanced Studies Group that would provide opportunities for research centers to coalesce around urban themes and sponsor post-docs in urban education.

GSE’s teacher education program has made an explicit commitment to preparing teachers in urban settings. A result is that over 50 GSE student teachers are working in West Philadelphia’s elementary and high schools. The neighborhood preK-8 demonstration school will be instrumental in GSE’s continuing efforts to locate teaching, research and service activities in our West Philadelphia community.

The School of Nursing. In the realm of applied practice, faculty from the school are heavily involved in providing health services to underserved populations in Southwest Philadelphia, giving urban practice opportunities to many students.

In the realm of research, Nursing faculty have been actively involved in relevant projects, as the accompanying box demonstrates.

Nursing Research Programs in the Urban Agenda	
Dr. Loretta Sweet Jemmott	“Mother Son HIV Risk Reduction Intervention Project.”
Dr. Antonia Villarruel	“Latino Youth Health Promotion Project
Dr. Loretta Jemmott and Dr. John Jemmott	NIMH Phase IV HIV Prevention Clinical Trial
Dr. Ann O’Sullivan	Pregnant adolescents in West Philadelphia
Dr. Frieda Outlaw, Dr. Margaret Cotroneo, and Dr. Lenore Kurlowicz	An innovative contextual intervention to treat depression among low-income child-bearing African American women

Nursing undergraduates participate actively in urban clinical settings. The focus is neighborhood assessment using observational survey techniques, available databases, interviews, and interactions with community members. The goal is to identify two or three priority health problems, design an intervention, and carry it out. And, at the graduate level, community projects in a core course, “Concepts in Primary Care,” involve more than fifty students annually.

In addition, the School’s Penn Nursing Network, a multi-practice health care delivery network spanning the life cycle, opened in 1995. This network provides community-based, family-focused, and cost-effective quality healthcare services while fully integrating practice, education, and research. The Health Annex at the Francis J. Myers Recreation Center is a unique cooperative effort between the School of Nursing and the City of Philadelphia Departments of Recreation and Health. The practice promotes health and wellness, identifies illness needs, and delivers primary health care across the life span. The Living Independently for Elders (LIFE) Program is a risk-based program providing integrated acute and long-term care services for the frail elderly.

School of Social Work. SSW is involved in a number of Urban Agenda Initiatives. Dr. Mark Stern is involved in researching the social impact of the arts. Dr. Stern’s work is funded by the PEW and William Penn foundations. A national evaluation of welfare to work projects is being spearheaded by Dr. Roberta Iversen. Her work is funded by the Annie E. Casey Foundation. Dr. Ram Cnaan was the principal investigator of a study of 2000 religious congregations in Philadelphia that examined their involvement in delivering social welfare services. The study, which was funded by the Lilly Endowment, was the first study of its kind and is now being replicated in other jurisdictions by other scholars interested in this important contemporary issue. Drs. Richard Gelles and Carol Wilson-Spigner are leading a study of the impact of transferring the child protective service investigative function from the state public child welfare agency in Florida to law enforcement. Dr. Larry Icard is leading a large NIMH funded project designed to test the impact of family centered interventions as a strategy to prevent HIV/AIDS in large urban areas. Dr. Dennis Culhane is involved in the application of geographic information technology to social welfare planning and policy development in Philadelphia and in 26 other urban areas throughout the country.

The Graduate School of Fine Arts. GSFA has made good progress in focusing on urbanism in Philadelphia and beyond. Our city and regional planning program has increased its profile, and is attracting a large number of students. GSFA has recruited three outstanding new faculty to join the planning program: Eugenie Birch, a specialist on inner city change who is the new department chair; Jonathan Barnett, an urban designer; and Sidney Wong, an expert on inner city economic development.

The reinstated urban design certificate program is one of the three areas where GSFA offers a post-professional masters program in architecture.

In 1999, GSFA began using the Albert Grosser endowment to seed research projects across the school. The intention is to solicit research proposals each year, with a preference for those that can show early results and attract additional outside funding. The grants have funded studies of inner city housing developments, viewsheds from open spaces, the future of urban park planning, and the evolution of the urban form of Philadelphia.

School of Arts and Sciences: Highlights related to the Urban Agenda include:

- The Fels Center of Government, with a focus on municipal and state government, has been revitalized since its transfer into SAS in 1999 and the hiring of a new director, Larry Sherman
- The Center for Research on Religion and Urban Civil Society (CRRUCS) was established in 2000. Directed by Professor John DiIulio, it is dedicated to the empirical study of faith-based institutions in American cities
- The Jerry Lee Center for Criminology was established in 2000
- The dormant Graduate Group in Criminology was reformed and transferred to SAS from Wharton in 2000. It will be led by Larry Sherman, one of the leading criminologists in the world, and will involve faculty from six schools
- Undergraduate minors have been developed in Urban Education (with the Graduate School of Education) and Urban Real Estate and Development (with Wharton)

A continued academic emphasis on urban affairs can only benefit the University. As one illustration of this point, the University as a whole has invested many millions in the transformation of West Philadelphia, and all visible signs suggest that we have accelerated change in the area, and pointed it in the right direction. In addition, Penn’s recently completed master planning efforts laid the ground for a physical expansion to the East that reconnects Penn’s campus to Center City, thus further integrating Penn’s physical setting with its urban context. Scholars will be encouraged to evaluate whether individual programs have succeeded and, if so, on what terms.

Information Science, Technology and Society

The School of Engineering and Applied Science. At the center of this priority is SEAS, which is exploring how the computer can be used to understand language and the workings of the mind, and to understand how we can use new information technologies to foster learning and redefine the ways in which universities will serve society in the coming decades. Technology is taking the forefront in all facets of engineering and is the mainstay of our global society. With the site work begun on the new Levine Hall and the hire of the CIS Chair, SEAS is making strides in both physical and intellectual growth. The building will provide state-of-the-art facilities for teaching and research and the intellectual capabilities of scholars. The appointment of Dr. Fernando Pereira, recruited from Bell Laboratories, as CIS Chair brings a scholar of international renown who is a researcher in computational linguistics and artificial intelligence with particular focus on machine learning techniques in language and speech recognition. His priorities will include keeping undergraduate education abreast of rapid changes in technology and society; maintaining a strong, bold research program; and further developing links with other academic departments in the sciences and humanities.

SEAS has expanded technology facilities by designing a flexible, high-tech classroom for digital videotaping and videoconferencing containing 20 laptop computers for participant interaction. This classroom provides distance-learning opportunities such as the current collaboration between SEAS and Lehigh University using joint classroom lectures. SEAS is anticipating a pilot distance-learning program with Edinburgh University.

The new Engineering Entrepreneurship Program in SEAS has proven a success as it presents real-world case studies and prominent guest speakers to impart skills on how to bring high-tech ideas to practice in society. Experienced faculty designed a curriculum aimed at instilling in the students a passion for technological innovation.

CSE 100, Computer Science and Engineering, was developed to serve the needs of non-SEAS students across the University. The course's primary goals are to investigate the current and future political and economic impact of information technology on individuals and on individuals as members of society. The course demystifies information technology and prepares students for further self study. There is a strong demand for this type of course, and additional courses are being designed to meet the needs of the University community.

SEAS is cognizant of the importance of bringing technology to society at large and has incorporated this focus into community service projects. Opportunities abound for students to engage in technology-based community service projects both locally and globally. Locally, students serve as teaching aides and mentors in computer, math, science, and engineering classrooms in West Philadelphia's public schools and community centers. Globally, teams of our students are going to places like Quito (Equador), Pune (India) and Bamako (Mali) to serve needy communities through technology.

The School of Arts and Sciences. Complementing activity in SEAS, the School of Arts and Sciences is also directly engaged in this priority:

- It has taken an active role in the establishment of a Center for Cognitive Neuroscience and in the recruitment of faculty in this area.
- Together with SEAS, SAS is currently in the process of appointing new leadership for the Institute for Research in Cognitive Science in an effort to ensure the continued success of this distinguished entity.
- SAS has also added new undergraduate programs in biology, new concentrations in computational biology and mathematical biology, a new major in Cognitive Science, and the College is considering the creation of a certificate program in information technology.

Information science and technology, more now than five years ago, continues to play the most significant role in transforming the world. Investing in technology and technology-based programs must continue to be a top priority.

STRATEGIC GOAL 2

The University will aggressively seek greater research opportunities. Recognizing that vigorous research and the unimpeded pursuit of knowledge are at the heart of the University's mission, Penn will strive to attract an increasing share of the available research dollars, and will aggressively seek out new sources of support for research.

By any measure, Penn has successfully accomplished this goal. In 1995, the University had a 2% annualized growth rate in sponsored programs. Over the past five years the University has experienced an annual growth rate of nearly 11%, and the growth rate in FY2000 was 13%. During FY2000 the University received nearly \$540 million in externally funded sponsored programs compared to \$322 million in FY95. We rank 7 in the latest published (1999) ranking. The University developed several strategic initiatives to support this goal. They are recited below with summaries of progress made in attaining them.

• **Encourage faculty to seek increased funding support – through new incentives, mentoring for junior faculty and development of ways to increase grant support for graduate students. Also encourage faculty, particularly in disciplines without significant federal support, to seek research support from non-governmental sources such as corporations, foundations, and alumni.**

Penn faculty have been extraordinarily productive in research and scholarship over the past five years. Responding to a variety of School-based incentives as well as a wide range of opportunities to receive external support, both federal and non-federal, Penn faculty have been outstandingly successful. Examples of their success include the following:

- *School of Medicine:* In the most recent available ranking (FY99), the School ranked second in the nation in receipt of NIH funding, with a total of \$298.2 million, and for each of the last five years had the highest percentage increase in funding nationally.
- *Graduate School of Education:* faculty have more than doubled the total dollars available in multi-year active awards from \$45 million in FY 1996 to nearly \$100 million in FY2000. Over 80% of GSE standing faculty receive support from external sponsors, including all junior faculty in the School, who receive a research assistant until tenure and are matched with mentoring senior faculty. Penn GSE leads the nation in funded research per faculty member.
- *School of Arts and Sciences:* sponsored research increased at an 11% annual rate over the past five years.
- *The School of Nursing:* the School ranks seventh among all schools of nursing in the amount of research funding received from NIH and first among private schools of nursing.
- *The School of Dental Medicine:* The School ranks first in research funding per full-time faculty among dental schools.
- *School of Veterinary Medicine:* External research funding increased by 58% over the past five years from \$12.6 million to \$20 million. The School was third in the nation in receipt of NIH research dollars in FY99. An incentive program allows each department to keep 5% of ICR on its grants for discretionary use, and each department maintains an active research mentoring program for junior faculty.
- *School of Engineering and Applied Science:* A new Deputy Dean has been appointed to give unencumbered attention to the School's research agenda. As a result of this and other initiatives, external research funding reached an all-time high of \$240,000 per faculty member in FY2000, an increase of 3% over the preceding year. NSF has awarded LRSF \$17 million, the second highest grant of its kind in the nation, and the Commonwealth of Pennsylvania has awarded \$10.5 million to Penn and Drexel faculty to establish a nanotechnology center.
- *School of Social Work:* External research funding increased from \$1.9 million in FY97 to \$4.2 million in FY2000. The School has created three new multidisciplinary research centers that emphasize training faculty and doctoral students to prepare competitive research grants for NIMH and other federal agencies.
- *Graduate School of Fine Arts:* Important efforts are underway to develop an effective infrastructure and effective incentives for faculty to seek and secure external research funding. Significant grants have already been obtained for historic preservation (\$500,000 per year) and architectural history. A cartographic modeling laboratory developed with the School of Social Work is creating opportunities for funding from a range of city governments. Explicit recognition is now given to external funding success in assigning faculty salary increases.
- **Improve and increase research facilities in recognition of the**

critical role facilities play in securing incremental research funding, faculty recruitment, and the education of students.

Achieving the University's institutional goals in research, scholarship and undergraduate and graduate and professional education requires the preservation and promotion of an environment conducive to such activities. The development and maintenance of modern research laboratories and classroom facilities are critical to our standing as one of the premier research and teaching universities in the world; it is critically important that Penn have in place the facilities and infrastructure necessary to allow research, scholarship, and teaching to flourish.

Over the past five years, the number of new academic facilities across the campus has been substantially increased and their quality improved. Many of these are research buildings in the life sciences and were listed previously in the section on Six University Academic Priorities. In addition, a number of facilities have been completed, or are underway, that do not include traditional research laboratories but do provide space for research, practice, and teaching, as illustrated by the following examples.

Annenberg School for Communication—The Annenberg School was reconfigured and a third floor added to provide the school with space in which to accommodate its Public Policy Center, additional faculty offices, and a video conferencing center. An entrance to the building from Walnut Street was also constructed.

Charles Addams Hall—Housed in the former Skinner Hall, Charles Addams Hall provides 44,000 square feet on four floors for the undergraduate Fine Arts program, photography, undergraduate majors in Architecture, an animation lab, and an art gallery.

Graduate School of Education—Work is now underway for a complete interior and partial exterior renovation of the Graduate School of Education building that will enable the school to incorporate all of its academic programs within one building while providing technologically state-of-the-art classrooms and computing facilities, the replacement of the current HVAC system and the shift of the building's main entrance to Walnut Street. The renovated facility will house more student and classroom space and create an environment that is expected to foster a greater interaction among students, faculty and staff.

Huntsman Hall—Now under construction, Huntsman Hall will provide 300,000 square feet of classroom, study and activity space for Wharton's MBA and undergraduate programs, as well as offices, research space, and meeting rooms for the faculty. Tailored to Wharton's innovative curriculum, the building will support interactive learning, incorporate the latest technologies, and facilitate co-curricular learning opportunities, providing space for group study, student conferences and computing needs.

Melvin J. and Claire Levine Hall—Scheduled to open in the spring of 2002, Levine Hall will double the space available for Computer and Information Science (CIS) at Penn. Standing at six stories with 46,000 gross square feet of space, Levine Hall will be connected to SEAS's Graduate Research Wing (GRW) and the Towne Building at all levels with service from Walnut Street. In addition to CIS departmental offices, Levine will house 12 research labs, including the Robotics (GRASP) Lab, faculty offices, conference rooms, and a 150 seat bi-level auditorium. A Cyberlounge for students and faculty will be built in the old Towne garage, and an area for the Solar Car will be added to GRW. The School will have a new entrance on Chancellor Street (to be renamed Chancellor Walk), and there will also be a new pedestrian entrance to GRW on Walnut Street. Levine Hall will close the "U" shape of the Engineering complex around a landscaped courtyard called the Quain Quadrangle and will unite the school physically.

Library—The renovation of a number of library facilities during recent years has substantially improved research facilities for students and faculty. Among these renovations are the Van Pelt Reference and Electronic Research Center, which includes an electronic classroom; new teaching and seminar and group study rooms; and an Undergraduate Study Center that provides 24-hour library and academic information support to all faculty and students. Work is beginning on the Schoenberg Center for Electronic Text and Image, which provides state-of-the-art scanning and imaging of the Library's resources for the research needs of Penn students and faculty as well as scholars from all over the world through the internet; the creation of a film/multi-media center (jointly funded by the Library and the School of Arts and Sciences); construction of a new Medieval/Religious Studies graduate study; and additional computer labs.

Logan Hall—A total renovation of Logan Hall was completed as part of the Perelman Quad project. The building is home to the College of Arts and Sciences and the departments of Classical Studies, History and Sociology of Science, Religious Studies, and Philosophy, and also includes important classroom, social and cultural space on its ground floor.

Silverman Hall Renovation—The \$11.2 million Silverman Hall renovation and restoration project was completed, providing the Law School with a new conference center, upgraded classrooms and research space,

and a student lounge area. The 34th Street entrance was reopened and the Great Hall, Grand Staircase, and the exterior of the building restored.

Schattner Building—a 70,000 square foot facility for Dental Medicine is now under construction that will house a new patient admissions and emergency clinic, oral and maxillofacial surgery clinics and a specialized facility for medically compromised patients, including those with HIV. Plans for the building also provide for patient meeting areas, conference rooms and faculty offices.

University Museum—Construction is underway on the new 35,000 square feet Mainwaring Wing of the University Museum, which will provide state-of-the-art storage facilities for almost all the ethnographic objects in the Museum's collections from the Americas, Africa, Asia and Oceania as well as study and seminar rooms for students and scholars.

• Enhance the Library's ability to deliver electronic-based information and data to support research in all areas of the University.

The Library has built one of North America's leading academic digital libraries, providing desktop access to the electronic equivalent of a multimillion volume print collection. The digital library includes:

- a growing collection of networked electronic journals, nearly 4,000 titles at present
- twice the number of networked database as were offered in 1996
- the full-text of more than 110,000 digital books
- a digital image collection (currently 30,000 images and growing in support of GSFA and SAS programs)
- networked access to hundreds of digitized course reserve readings through Blackboard, and
- links to more than 4,000 academically useful web sites.

• Recognizing that the integration of theory and practice is one of Penn's hallmarks, update Penn's policies governing ownership and management of intellectual property and participation in external commercial activities, and improve Penn's ability to attract increased corporate support for technology transfer.

In November 2000, the Faculty Senate Executive Committee adopted a new statement, prepared by a joint Senate and Administration committee, on Policy and Procedures relating to Copyrights and Commitment of Effort. This new statement should resolve long-standing issues of intellectual property rights at Penn.

In the area of clinical trials, the Office of Research Services (ORS), in consultation with the Provost, a group of faculty active in clinical trials, and the Office of General Counsel developed Guidelines for the Consideration of Presidential Exceptions to University Patent Policy. Application of these Guidelines has already proven useful in resolving a number of contentious negotiations.

ORS also has been actively working in response to the increasing claims of research foundations and associations on University intellectual property. Working with the Center for Technology Transfer, ORS recently developed a white paper outlining proposed University responses to these kinds of requests and thereby establishing optimal expectations.

In addition, Penn's Center for Technology Transfer has refined its programs to:

- Move research results from the laboratory to the marketplace for the public good
- Retain, reward and recruit faculty and students
- Induce closer ties to industry, promote economic development and generate income

In FY2000 alone, CTT managed 1,331 transactions involving research services, intellectual property and enterprise functions. Benchmarks of CTT's success by FY2000 include: 226 patent applications, up from 45 in FY96; 56 industry sponsored research agreements, up from 28 in FY96; income generation of almost \$30 million, up from \$2 million in FY96.

• Streamline Penn's pre- and post-award processes to increase efficiency and to facilitate the pursuit and receipt of external funds.

The 1998 merging of the Office of Research Administration and Office of Research Accounting to create the Office of Research Services (ORS) has led to a number of initiatives to streamline Penn's pre- and post-award processes, to increase efficiency, to increase effectiveness of grants administration staff at departmental, school, and central levels of the University, and to facilitate the pursuit and receipt of external funds.

The ORS has improved internal business practices in the management of federal and non-federal grants, including the development of procedures to identify potential conflicts of interest, the reduction of grant administration system audit findings, the collection of over \$10.3 million in delinquent receivables since December 1999, and the improvement of account setup through technology and internal training.

The ORS also has developed a Basic Grantsmanship Course called "Sponsored Program Administration at Penn," which has been given to over 300 School and Center Business Administrators and other participants.

STRATEGIC GOAL 3

The University will manage its human, financial, and physical resources effectively and efficiently to achieve its strategic goals.

Subgoal 3(a): Penn will create a more responsive and effective planning, budgeting, and outcomes evaluation process to ensure that its resources support its academic mission.

- **Develop an integrated process of planning and budgeting.**
Complete the integration of the operating budget and the capital planning process.
Support school-based efforts to better integrate academic planning and budgeting.
Formulate University-wide financial policy, annual budgets, and operating plans for academic and administrative units.
- **Enhance institutional research to support the planning and budgeting process.**
- **Coordinate school and program evaluations; link the process with long-term resource planning.**
- **Seek to improve Penn's system of responsibility center management in order to achieve the most effective allocation of financial resources.**

Since the initiation of the *Agenda for Excellence* five years ago, the University of Pennsylvania has made major changes in the methodologies, practices and procedures that are employed across the institution for financial planning and resource allocation.

These changes have enabled the University and its component schools and responsibility centers to plan much more comprehensively and with much greater foresight than in the past for the realization of revenue, the successful development of new initiatives, and the articulation and implementation of realistic, achievable strategic goals. This in turn has greatly enhanced the ability of academic leaders and administrative managers across the institution to increase their efficiency and effectiveness and turn more of their visions into concrete reality.

Among the major changes in planning and financial management that have been realized over the past five years are the following:

Change # 1: The replacement of the prior budget planning process—in which budget plans were constructed only for the forthcoming fiscal/academic year—with a new planning process in which every School and Center now prepares a rolling five year financial plan each year for review by the University's senior officers.

Because the entire institution and each of its component parts always has a five-year prospective financial plan in place, academic leaders and administrative managers are now much better able to model the potential impact on their multi-year financial position of prospective capital projects, new tenure-track faculty hires, the development of new academic programs, and many other initiatives that require near-term decision-making but may not have material financial impacts on the institution and its component organizations for several years.

Change # 2: The development of new and much more detailed and comprehensive procedures for the review and approval of capital projects in a process that tightly integrates facilities planning and capital project financing with the development of each School and Center's operating budget.

A multi-disciplinary team involving representatives from Facilities Services, the Provost's Office, the Treasurer's Office, the Budget Office, and Central Development now reviews and fine-tunes every capital project proposal before it goes to senior officers and the Trustees for final review and approval.

Every project is now required to have a well-thought-out scope definition, a realistic professionally-developed cost estimate, a detailed and realistic financing plan, and a full income and expense cash flow projection before advancing through the review and approval process. No project can be initiated unless its scope has been reviewed and approved either by the Provost or by the Executive Vice President, as appropriate, for consistency with University and School/Center strategic plans.

Change # 3: The development of an "all funds" budget for each School and Center.

Every School and Center is now required to submit at least an outline budget for every fund group in which that School or Center has had revenue or expenditure activity over the past several years, or expects to have revenue or expenditure activity over the coming five year period.

The submission of an "all funds" budget for each School and Center—accompanied by summary actual "all funds" revenue and expenditure information for the most recently-completed three fiscal years—permits the Provost and the Executive Vice President to more realistically assess the total financial position of each School and Center whose budgets they review.

Change # 4: The incorporation of detailed "Input Assumption" information into each School/Center budget submission.

Each School and Center is now required to submit a detailed set of input assumptions data as part of their annual five-year budget submission. Actual results for each input for the most recently completed three years are also submitted, so prospective assumptions can be understood in the context of recent actual performance.

Input assumptions data enable the Provost, the Executive Vice President, the Deans and the Vice Presidents to better understand the goals and performance assumptions that undergird each School/Center budget submission. Most important, this non-financial data enables all participants in the budget planning process to assess whether each School and Center is making progress in achieving its strategic goals and improving on its levels of efficiency and effectiveness.

For Schools, key input assumption variables include new matriculants by degree and program, total enrollment by degree and program, numbers of course units taught, filled standing faculty FTEs, and non-standing faculty and associated academic support staff FTEs. Each School also submits a detailed plan outlining how their standing faculty positions are to be funded over the forthcoming five-year period. Material submitted by the Schools is augmented by supplementary material prepared by the Office of Institutional Research presenting actual data for each input assumption variable for each School over the past ten years. This enables the Dean and the provost to assess School goals for the forthcoming five year period against the backdrop of actual trends for the past decade.

Non-School Centers are required to submit "Service Delivery Goals" as part of their annual budget submissions. These Goals define the major service categories in which each Center provides services either to other Responsibility Centers within the University, to major campus constituencies such as students and faculty, or to other external parties. The "Service Delivery Goals" identify the major areas in which each Center expects to deliver service in the coming fiscal year, and present a measurable service delivery goal in each area so identified.

Change # 5: The simplification and rationalization of the University's procedures for allocating certain costs among the Schools and Centers.

The Provost and the Council of Deans carried out a major planning effort in 1999 to revamp the University's Allocated Cost system in order to enhance the transparency and predictability and equity of the cost apportionment methodologies then in place, and to increase incentives for the efficient use of space and other administrative resources.

Change # 6: Incorporation of a budgeting and financial planning component into each School and Resource Center external review.

External reviews for each School and Resource Center were called for in the *Agenda for Excellence* and are now standard operating procedure. The Provost's Office and the University Budget Office have worked closely together to ensure that an assessment and analysis of each School and Resource Center's recent financial performance, prospective financial plans, and overall financial capacity are an integral component of each external review.

Subgoal 3(b): Penn will broaden its administrative restructuring initiative to encompass all major administrative activities and processes, both in the central administration and in the schools.

- **Improve the quality and cost-effectiveness of service across the institution and establish appropriate measures to evaluate those services delivered on a regular basis.**

Reduce the cost of central and school administration by \$50 million over the next five years and reinvest these savings in support of University and school-based strategic priorities.

Standardize Penn's disparate procurement systems to achieve economies-of-scale and maximize savings on goods and services purchased annually.

Generate \$10 million at the central level in new revenues through entrepreneurial business ventures and better management of existing auxiliary enterprises.

- **Restructure Penn's Human Resources policies and programs.**
Provide administrative employees with greater opportunities to improve their skills, grow professionally, and enhance their careers within the University.

Strengthen the system of human resource development and performance review.

Work with all units of the University to ensure the maintenance of a humane and fair workplace environment for all employees.

Streamline, improve, and reduce the costs of Penn's benefit system while maintaining total compensation at levels consistent with those of peer institutions.

- **Restructure computing and telecommunications at Penn into a state-of-the-art system to improve the University's ability to gener-**

ate, use, and share data.

- **Implement a University-wide Public Safety Master Plan to reduce crime and enhance the security of people and property on campus and in adjacent neighborhoods.**
- **Upgrade the University's internal controls and compliance mechanisms to better manage business risks and increase accountability at all levels.**
- **Systematically implement measures to reduce the costs of building new facilities and maintaining existing ones, while improving the quality and timeliness of maintenance and housekeeping services on campus.**

In 1995, the University launched a comprehensive administrative restructuring program. To date, the EVP Center has pursued strategies in a broad number of administrative areas and processes that have focused on eliminating services that are no longer necessary, outsourcing services that can be performed more effectively by others, and reengineering core processes that must be performed by the University. Illustrative examples of success include:

Service Improvement and Cost Avoidance

- The restructuring of central departments has generated \$11 million in cost savings within the EVP Center, and has also generated \$23 million in other forms of savings.
- Restructuring efforts supported by the Division of Human Resources have resulted in approximately 600 position discontinuations, producing total savings of approximately \$28 million (including employee benefits). The restructuring of Penn's benefits programs has generated over \$8 million in savings and resulted in lower employee benefit rates.
- The Procurement Enhancement Project has leveraged Penn's buying power and reduced the costs of goods and services by over \$55 million through December 2000.
- The outsourcing of the administration of benefits enrollment, unemployment compensation, the employee assistance program, flexible spending accounts and records management, produced annual savings of more than \$300,000.
- A retirement call center was implemented without cost to the University by TIAA-CREF. This service is valued at over \$1.5 million a year.
- The new Faculty Club facility within The Inn at Penn freed Skinner Hall for academic purposes and also resulted in over \$500,000 in savings annually.
- The utility contract with PECO renegotiated by the Division of Facilities is projected to save \$10 million over the next seven years.
- The designed phase-in strategy for the Mod VII chiller avoided \$15 million in up-front investment.
- In 1998 the University entered into an innovative partnership with one of the food service industry's recognized leaders, Bon Appétit, a San Francisco-based contract food service company. Bon Appétit's role is to operate all food services in the Perelman Quad, serve as the primary Penn caterer, provide hands-on advice and best practices to the University's Campus Dining management, and assume management responsibility for residential dining at the University. With direct control over the purchase of food, hiring and training of staff, and implementation of Bon Appétit's national model for service delivery, the residential dining system restructuring is well under way.
- Facilities and Real Estate Services initiated a major restructuring of its varied departments in 1998. This effort streamlined operations, moved the service delivery closer to customers, and improved the quality and level of services. This effort included a partnership with Trammell Crow that focuses on managing Penn's aggressive Capital Program and its Real Estate Services.

New Revenue Generation

As the chart shows, \$35.156 million in new revenue has been generated during the past three years within the Division of Business Services and the Division of Finance—a top priority for both Divisions.

Source	Amount
Student Loan Sales	\$16.506 million
Bell Atlantic (one time payment)	\$2.5 million
MBNA credit card agreement	
One-time payment	\$6.375 million
Annual payments to date	\$1.425 million
Barnes & Noble Bookstore Contract	
One-time payment	\$1.15 million
Annual increase to net revenue to date	\$5.2 million
Conferencing and Guest Services	\$2.0 million
Total	\$35.156 million

Student Financial Services has developed an innovative program to sell student loans to investors. The program has generated \$16.5 million in new revenues to be used to improve student services and provide additional financial aid funding at lower rates to students.

The agreement to outsource the bookstore to Barnes & Noble provides Penn's students with a modern, full-service facility and guarantees the University an improvement to its net revenue of at least \$19.5 million over the life of the contract. In addition to an initial payment of \$1.15 million, Barnes & Noble has guaranteed the University that it will generate at least \$1.3 million in annual revenue to the University. Moreover, Penn and Barnes & Noble will share any gains in revenue above that target.

The decision to work with MBNA to offer a new campus card provided one-time revenue to the University of \$6 million—\$4 million of which was used to improve campus lighting. The annual payments of \$475,000 for five years are used to support Development and PennCard infrastructure maintenance.

Two major national meetings during the summer of 2000 (RNC and ResNet) were very successful and have helped propel initiatives such as Destination Penn. Annual revenue targets of \$1 million have already been exceeded. \$600,000 of this amount was used to fund the entrance drive to the Inn at Penn known as Steve Murray's Way. The balance will be used toward the Housing and Dining renewal program.

Improving the Quality of Campus Life

In 1995, Penn's overall campus environment was not adequately supporting the University's goal of attracting and retaining the best students and faculty. The campus and surrounding neighborhood were experiencing significant instances of crime. The operations and staffing in Public Safety were insufficient to effectively secure the campus, and Penn lacked the range of services and retail establishments customarily available at urban universities of Penn's size and stature. The neighborhood and environment surrounding the campus were in economic decline.

Restructuring introduced three strategies to improve the quality of campus life:

- Significantly upgrading the capacity of the Division of Public Safety.
- Pursuing retail establishments to locate in and around the Penn campus.
- Targeting investments to foster community and economic development in West Philadelphia.

Crime Reduction: \$13 million of one-time investments in the technology, operating budget, and facilities of the Division of Public Safety were made by Penn to reduce campus crime and provide more of a stable environment. Specific investments and improvements include:

- An increase of 40 police officers between 1996 and 2001. The department currently employs 99 sworn police officers.
- Relocation into a state-of-the-art building at 4040 Chestnut Street.
- In March 2001 the University of Pennsylvania Police Department was awarded national accreditation from the Commission on Accreditation for Law Enforcement Agencies (CALEA).
- The Detective Unit was revamped and fortified with additional seasoned investigators. It works closely with the Philadelphia Police Detective Units, as well as Federal and State Criminal Justice Agencies.
- Consolidation of campus-wide security guard services by contracting all security guard services with Allied-Spectaguard. This consolidation leveraged the buying power for the University, while at the same time producing more professional and effective security.
- In 1996, DPS standardized all security technology installed in University buildings.

These initiatives led to the following reductions in criminal activity between 1996 and 2000:

- 35% reduction in overall criminal offenses.
- 58% reduction in robberies and attempted robberies.
- 28% reduction in burglaries.
- 35% reduction in thefts.

New Retail Endeavors: In concert with the Public Safety initiatives, a parallel initiative has been introduced to increase the number and quality of retail establishments on and around campus. Investments in new commercial amenities and a welcoming investment climate will encourage further and higher levels of private investment to University City, thereby creating a vibrant level of daytime and evening street-life activity in the area. In addition to the projects below, over \$6 million has been spent on improving on-campus lighting and the streetscape.

Sansom Common, undertaken in 1997, is 300,000 square-foot commercial corridor in the heart of campus. The project features one of the largest academic bookstores in the country, operated by Barnes & Noble, the 238-room Inn at Penn and retail stores and restaurants. The Inn provides outstanding lodging and dining accommodations and features diverse meeting and banquet accommodations with approximately 18,000

square feet of flexible meeting space. Operated on Penn's behalf by the Hilton Hotel, the Inn at Penn includes a full-serve restaurant (The Ivy Grille) and houses the new Faculty Club.

The Left Bank at 32nd and Walnut Streets is the gateway to Penn. It is a seven-story Art Deco building that has been transformed from the old General Electric Building. In partnership with Penn, Dranoff Properties is developing and managing the property which features 282 studio, one, two, and three-bedroom apartments.

Other Key Restructuring and Reengineering Initiatives

Business Services

Parking Services: During the 1998-99 fiscal year, completed a long-term analysis of its operations and finances. As a result of the study, it became clear that costs were threatening to overwhelm revenues, which were far below market. Parking rates were consolidated and increased by approximately 19% in July 1999. A new parking pre-tax program was introduced at the same time to help mitigate the cost impact for Penn faculty and staff.

Ridership on all Penn shuttles has grown more than 600% over the last 10 years. During 1999, Transit Services were restructured and a new bus service was introduced, which helped avoid approximately \$200,000 of annual costs for the program.

Telecommunications and PennTrex Student Telephone Services: Business Services entered into two major contracts that reduced cost and improved services. A new two-year contract reduced average long-distance costs by 20% for interstate and international calling, and a new seven-year contract for Penn's basic telecommunications system resulted in annual cost savings of \$1 million.

New Business Development and Branded Products: created in 1999, this new department within Business Services supports the University's commitment to economic and business development through new product development, marketing and communications strategy. The office promotes new business initiatives including high technology acceleration, a series of unique licensed products based on the University's diverse and historic resources, such as the Museum, and further positioning University City as a recreational destination for retail shopping, dining and arts and culture attractions.

Facilities

Campus Development Plan: Nearly two years in the making, the Campus Development Plan creates a robust and integrated vision that positions Penn as a leading and active participant in the economic development and cultural health of Philadelphia and the region. It defines opportunities for growth and development and recommends strategies for implementation over the next 25 years.

Five working committees were established to explore key areas of inquiry with regard to their impact on campus life and learning. These committees examined the following topics:

- Academic and Scholarly Purpose
- Campus and Community Life
- Historic Buildings and Heritage
- Circulation and Service
- Maintenance and Operations

Facilities Renewal: Consistent with the Campus Development Plan, a building condition assessment has been done for all non-residential campus facilities. The replacement value of the assessed facilities is \$1.5 billion; the facilities renewal need is \$400 million. As a result of this study, annual facilities renewal funding from central sources has increased from \$6 million to \$12 million over the past several years.

Capital Approval Process: Facilities Services redesigned the capital approval process for capital projects with estimated costs greater than \$250,000 and instituted tighter financial controls for all construction projects. This revised procedure ensures that each capital project completes three review processes (programmatic, financial, and architectural) during the lifetime of a project cycle at a point in time when relevant information is available and highly certain. Efforts have resulted in the completion of 244 projects at 8% (\$14 million) below the associated aggregate approved budget since April of 1998.

Minority & Women-Based Employment Program: Recent large capital projects have included MBE/WBE targets within their executed base contracts. Through the end of calendar year 2000, \$110 million in construction contract awards have been made to MBE/WBE firms over the past five years.

Residential Initiatives: The renovation of the Quadrangle Residence is a 4-year, \$75 million, phased renovation of the historic residence hall, to be completed Summer 2002. At the same time, an ongoing campus

housing and dining renewal program is in the early stages of planning and development.

Real Estate

To ensure adequate opportunities and sufficient resources to pursue future campus growth over time, the University has purchased and developed certain key properties in University City, including:

- **University City Sheraton:** By acquiring and renovating this property just to the north of the campus, the University not only maintained a critically needed supply of transitional housing beds, but it also augmented Sansom Common's development to create a critical mass of retail and hospitality development adjacent to the core campus.
- **Christian Association Building:** After recently acquiring and renovating this landmark building located at the heart of the core campus, the University has provided space for The ARCH—Arts, Research and Culture House, while also securing a wonderful site for the long-term expansion of its academic programs.
- **The Left Bank:** In partnering with Dranoff Properties on this project, the University has freed up core campus office space via Facilities Services' relocation to 31st and Walnut Street, and simultaneously paved the way for the future redevelopment of the U.S. Postal Service properties along with the continuing upgrading of the campus' eastern gateway connections with Center City Philadelphia.
- **3401-59 Chestnut Street:** The University recently acquired this strategically-located, nearly three-acre parcel, and plans to pursue a mixed-use development on it.
- **Civic Center Properties:** With the University's almost-completed demolition of Center and Exhibition Halls, along with its recently-launched construction of a nearly 2,000 car parking facility in partnership with Children's Hospital, these properties soon will be ready to accommodate a dramatic future expansion of the medical services and life sciences area located just south of the University's core campus.
- **The Gutman Farm:** This large parcel of land and building donated to the Graduate School of Fine Arts was determined not to be a core strategic asset of the School. After extensive internal and external consultation, the University reached an agreement to sell the property which allowed the University to realize significant value and, through deed restrictions limiting development potential, contribute to open space preservation in Bucks County.
- **Wharton Sinkler Estate:** Located in Chestnut Hill, the Wharton Sinkler estate was sold at a price of over \$4 million. The sale of the property secured the long-term future of the historic Wharton Sinkler mansion while preserving the undeveloped character of the surrounding land.

Finance

Much of the restructuring undertaken by Finance over the past five years has been centered around improving and upgrading the Financial Management System (FinMIS) introduced in 1995-96. Penn has been a leader in the implementation of new financial systems, and although the implementation of FinMIS was lengthy, rough and complicated, it remains one of the few successful systems projects undertaken by a major research university in the country. FinMIS established new operating systems for purchasing, accounts payable, general ledger, salary management, and budget planning. The project also introduced the data warehouse at the University, which has become the principal repository for enterprise-wide data critical in both planning and day-to-day operations.

Some of the early achievements included:

- Creation of a chart of accounts that not only contains the structure necessary to comply with external financial reporting requirements, but also facilitates budget management under Responsibility Center Management (RCM)
- Reduction of purchase order cycle time from 3 - 7 days to 2 hours
- 97% of general ledger transactions system generated or electronically interfaced
- Allowed operating departments to create financial reports on demand with 2000 reports generated within the first week following month end
- Training for over 1300 end-users

In Student Financial Services, a comprehensive arrangement with Citibank, allows SFS to continue to offer needed loans to financially aided undergraduates; offer below market rate loans to students attending Penn's graduate and professional schools; and significantly reduce the potential contingent liability from the Wharton Loan. In addition, the "Forward Purchase Agreement" with PHEAA (the Pennsylvania Higher Education Assistance Agency) compensates Penn upon the sale of Stafford Loans. This arrangement results in recurring revenue of between \$4-5 million per year, which are used for financial aid.

Office of Investments recruited a Chief Investment Officer in 1998 to

manage endowment along with the Trustee Investment Board. The Office has actively begun a process aimed at rebalancing and diversifying the portfolio to produce enhanced long-term returns.

The Office of the Treasurer has been instrumental in developing new funding to facilitate University growth and investment. During the past five years, Penn has implemented \$325.8 million of external tax-exempt financing for these purposes.

Human Resources

The new retirement plan allows weekly-paid, non-exempt employees to participate in the same plan as faculty and monthly-paid staff. This ensures that all participants will receive a base contribution to their retirement account without making a contribution.

A web-based benefits open enrollment application is part of a broad effort to make HR a consulting organization rather than a transaction organization. The primary leader of this transformation has been the use of the web to replace paper-based administration. Other applications include course/event enrollment, job postings, and employee appraisal forms. Over 58,000 candidates have submitted their resumes electronically to the Penn resume database, which eliminated \$50,000 in copying and courier costs. The University was also able to redirect approximately \$500,000 in paper *Inquirer* ads to electronic web ads.

The Job Classification Redesign Project was completed in April 1998, ensuring that Penn's staff positions and compensation are competitive in the labor market. Further, the Position Inventory system provides a way to count and control positions and dollars, whether open or filled, by funding source, by job class family, and by month, down to the organization level.

Penn's Quality of Worklife (QOWL) initiative was introduced in 1995 to enhance faculty and staff opportunities for a constructive, productive, and positive work experience. QOWL initiatives include flexible work options, health and wellness promotion programs, employee assistance programs, dependent care referral, snow day childcare program, and the spring faculty and staff appreciation picnic, attended annually by more than 6,000 employees. In addition, the Models of Excellence Program was introduced in 2000 to identify and recognize outstanding staff contributions to the University.

The University training offices were combined to produce a more unified Learning and Education Unit, provide ease of access to University staff, improve service, achieve economies of scale, and utilize technology more effectively.

In labor management relations, Penn currently has approximately 1,100 staff members represented by five collective bargaining units. Human Resources has successfully negotiated nine contracts with these bargaining units. Joint labor/management task forces were established in the Facilities, Dining, Library, and Public Safety areas to improve service.

Office of Audit and Compliance

New leadership was recruited for the Office of Internal Audit in 1996, and the internal audit and compliance functions were structured into the Office of Audit and Compliance.

Strategic investments were made to establish a significant Corporate Compliance function focused on identifying opportunities for revenue enhancements and cost reduction. Penn was the first institution to proactively create a "corporate compliance" function charged with assessing "institutional-wide" compliance risk at a time when compliance functions were being established to focus solely on clinical billing issues. A construction audit initiative also was developed to focus on all major new construction and facilities renewal projects.

The University Trustee Committee on Audit and Compliance adopted the Committee of Sponsoring Organizations' (COSO) integrated internal control framework (IICF) as its internal control system in June 1997. IICF provides a facilitated training and assessment process that:

- Promotes building controls into business processes
- Emphasizes the importance of people
- Expands the focus on risks past traditional financial risks by focusing on strategic, compliance, operational, reputational and financial risks
- Promotes the achievement of business objectives
- Emphasizes that control is everybody's responsibility

By working with management throughout the University, OAC has enhanced revenues by \$1.2 million annually (\$5.9 million to date), as well as provided two one-time enhancements realizing more than \$8 million. In addition, through continuing cost reductions, the University has saved \$1.5 million over the past two years, and through one-time reductions, has saved \$880,000.

Significant progress was also made toward building in a process within the University's decentralized management structures to better anticipate, manage and/or mitigate risks.

Penn's model for the internal audit and corporate compliance function is recognized as the industry's benchmark, based on feedback from peer institution representatives and industry leaders.

Information Systems and Computing

ISC has partnered with schools and administrative centers to formulate and deliver the infrastructure, information access and applications that deliver the benefits in service, collaboration and efficiencies that information technology can provide. As the concept of E-Business continues to expand, Penn is responding to the challenges and opportunities by increasing focus on self service. E-Business encompasses a wide range of systems that are progressing from informational web sites to systems that facilitate both web-based interactions (BEN, PennERA, PennInTouch, etc.) and information exchanges (on line personnel recruiting, Undergraduate Admissions etc.)

In the area of ECommerce/Business, a new system of Procurement (B2B) is based on an integrated EC strategy that is designed to ensure efficiency in all our commercial transactions. Authorized users may procure one-time low dollar goods and services from a retailer and authorize payment through a University credit card (PROCARD).

Penn's "business to consumer" (B2C) includes a suite of branded products and services available via the web (*ShopatPenn.com*) and a growing portfolio of fee-based transactional activities with external constituencies. Fee payment systems are also under development such as electronic payment of bursar bills and an electronic system to accept credit card authorized gifts (E-Giving).

In 1996, ISC implemented a comprehensive off-site recovery plan for the data center located at 3401 Walnut Street. This plan was developed and is maintained to provide capabilities to recover administrative systems that are essential for the University to conduct critical business processes within 36 hours following a disaster at the data center.

ISC Networking & Telecommunications is a new department begun in June 2000 in recognition of the need for support of the design and deployment of the next generation of PennNet, a multi-year, multi-phase project to enhance PennNet and prepare for the complete convergence of data, voice, and video technologies over one physical network.

Business Enterprise Network (BEN) is a major expansion and upgrade of the University's existing suite of financial systems. BEN is designed to facilitate a further shift from time spent on "transaction processing" by administrators to time spent on more forward looking activities. Improved capabilities include: electronic receipt and matching of invoices, electronic imaging and accessibility of accounts payable invoices, and the electronic transmission of approved purchase orders to supplies. Among the new BEN capabilities will be an on-line Travel Reservation System and an electronic Expense Reporting and Management System for travel and entertainment expenses are under development. The reservation system will allow Penn users to book travel arrangements while ensuring that they receive the lowest fares. The expense reporting function is intended to reduce reporting time and paperwork, provide electronic routing of expense reports for approval, and shorten the turnaround time for reimbursements.

ISC has also built a comprehensive prevention and awareness program with outreach to staff, faculty, and students to control external and internal misuse and abuse of University information and technical resources. Penn works in partnership with local IT staff to detect and correct infractions that threaten the safety and privacy of Penn's information as well as violations of the law (e.g., copyright infringement).

Among our Ivy+ peers, Penn is an acknowledged leader and innovator in the planning, implementation and support of campus-wide administrative systems (e.g., PennInTouch). Penn has shown aggressive leadership in E-commerce and in providing direct access to administrative information. Penn is also a recognized leader in Business Continuity Planning among higher education institutions.

STRATEGIC GOAL 4

The University will support strategic investments in master's programs and other programs of continuing education in the arts and sciences and in the professions, when they are consistent with Penn's academic mission and capacities and the needs of society.

To achieve this goal, the University, working with the schools, will take the following steps, among others.

- Encourage the creation and continuation of selected non-core master's and continuing education programs whose financial returns provide support for other strategic investments.

SAS—The School of Arts and Sciences has established six new degrees during the past five years and is coordinating the "Penn Programs for Working Professionals" marketing campaign for the University. All programs are at full capacity (except the M.Phil., which technically has unlimited capacity). The new programs are:

Program	AY00 Enrollment
Master of Bioethics	67
Master of Biotechnology w/SEAS	39
Master of Chemistry Education	20
Master of Environmental Studies	48
Master of Medical Physics	5
Master of Philosophy	33

SEAS—Four non-core master's programs were created within the School of Engineering and Applied Science during the past five years:

- Masters of Biotechnology (joint with SAS). A total of 39 students are currently enrolled in three tracks: Basic Biotechnology, Process Biotechnology, and Bioinformatics;
- Masters of Science in Telecommunications, currently enrolling a total of 88 students;
- Masters in Bioengineering, currently enrolling a total of 29 students; and
- Masters in Computer Information Technology, scheduled to start in 2001.

GSE—In 1999, the Graduate School of Education established an Office of Executive Education and Professional Development to address the many aims of this strategic goal. GSE's programs lead to state certification and continuing education requirements for teachers, administrators, and supervisors.

The new Instructional Leadership Program for Aspiring Principals was created in response to the national and regional need for highly qualified principals.

A non-degree part-time teacher certification, which is independent of a teacher education master's degree program, is now offered to aspiring teachers who are currently working as provisional teachers or interns with emergency certification.

The Summer Professional Development Program provides local educators and alumni with professional development courses and opportunities. For example, the Principals' Institute is a five-day program that focuses on continuous instructional improvement.

Wharton—The Wharton School also doubled enrollment in the Wharton Management Program, an eight-course, four-semester certificate-granting program for working professionals, starting in the spring of 1998.

- Identify fields in which Penn has comparative advantages relative to the market, and target development of new or expanded continuing education programs to meet the needs in these fields.

SAS has revitalized existing master's programs in a variety of ways:

- A joint Master of Arts/Science–Master of Science in Education was created with the Graduate School of Education in 1999 to provide discipline-specific training for secondary school teachers. Thirteen SAS programs are participating.
- The Master of Governmental Administration program was transferred to SAS upon the Fels Center's move to the School in 1999. Aggressive new recruitment efforts are under way to bolster enrollments, which fell during the mid-1990s.
- The Master of Science in Organizational Dynamics degree was formally refashioned as an SAS-based professional Master's degree in 1999. An external review of the degree was conducted in 2000.
- The Master of Liberal Arts program has added several new concentrations.
- English Language Programs (ELP) added a new program in Conversation and Culture in AY98 and has expanded its tailored programs, including a program for Goldman Sachs' international operation. Total ELP enrollment increased by 13.5% from FY96 to FY00.

College of General Studies has expanded or created several non-credit

certificate programs:

- Fundraising certificate expanded (new enrollees in AY00: 84)
 - Communications certificate established AY98 (new enrollees in AY00: 39)
 - Certificates in Executive Administration for Non-Profit Organizations and Program Management for Non-Profit Organizations established AY01.
 - IT@Penn, a new certificate program in information technology in which Penn partners with ExecuTrain, was launched in January 2001.
- CGS also added a small post-baccalaureate program in Clinical Psychology in AY97; enrollment in AY00 was 7.

Wharton's Executive Education programs currently produces 17 percent of Wharton's overall budget revenue and reaches 10,000 executives each year. Because they now operate almost as many executive education courses as can be handled (209 programs) in their existing facility, future growth will come from continued innovation in the types of courses that we offer, dual venture relationships for international courses, and expansion of the Wharton Direct product line.

The School has also developed a new platform focusing on the lifelong learning needs of senior executives: the Wharton Fellows Program, a post-MBA experience providing in-depth preparation in critical emerging business topics.

The e-Business Program is the first offering within the new Wharton Fellows Program. The program was created and will be delivered by more than 75 Wharton faculty members, in addition to other industry experts.

In 1999, Wharton launched a new executive education product, Knowledge @Wharton. This free, interactive websource provides worldwide access to the work of Wharton faculty. Knowledge @Wharton allows users to research content in 14 areas, and includes analyses of business trends, interviews with industry leaders and Wharton faculty, articles on recent business research, book review, conference reports, and hyperlinks to related websites.

The Wharton West program, to be based in California, will include programs for working executives as well as a California-based executive MBA degree cohort.

In SEAS, the Executive Masters of Science in Engineering was expanded into a joint program with the Wharton School, and is now the Executive Masters of Technology Management (EMTM). The program is thriving and its enrollment has grown to 264 students.

GSE's Higher Education Division is piloting a new executive program leading to an Ed.D. in Higher Education Management. This new doctoral program is designed for higher education managers, and is modeled on executive MBA programs at leading business schools. Plans are also being pursued to house their leadership work in a new center for education leadership. With a grant from the Carnegie Corporation innovative continuing education programs are being offered for aspiring school principals, and for non-traditional teaching candidates. Partnerships are also being established with school districts, funders and national organizations to establish GSE as a major source of continuing professional education for aspiring and current educators nationwide.

The School of Nursing's annual Penn Macy Institute brings together academic practice resource teams from schools of nursing in research intensive environments to work with faculty and staff of the School of Nursing and its Penn Nursing Network, as well as other regional and national experts on issues related to academic practice. The Post-Masters Teacher Education Program utilizing adult learning techniques, has been developed to meet the needs of nurses and midwives who have not had the opportunity to participate in a formal program of teacher preparation.

- Support the efforts of the schools to develop continuing, life-long professional learning experiences for their graduates and others, particularly in areas where continuing education has been mandated by professional certification bodies.

The School of Dental Medicine has entered into an agreement with IntelliHealth, an award-winning health information internet company, to develop a new dental web. A first-of-its-kind, full-service portal, this new online service will be accessible through the IntelliHealth web. Penn Dental faculty will be the primary resource for content development, providing information for articles, answers to oral health questions, and material for online continuing education courses.

In 1997, the School of Dental Medicine began working with the Caliber Learning Network, Inc., and CEHP (Continuing Education for the Healthcare Professional), a subsidiary of Henry Schein, Inc., to deliver programs of continuing dental education. "PennDentaLink" is a collaboration that will leverage the knowledge resources of the School of Dental Medicine with the facilities of the Caliber Learning Network, which brings the live interaction of traditional class-rooms to the distance learner, and the marketing and distribution expertise of Henry Schein, Inc., a leading dental supplier.

GSE's teacher education and professional development programs meet, or are being designed to meet, new requirements for continuing licensure in Pennsylvania and New Jersey. GSE is now recognized by the American Psychological Association as an approved Continuing Education Provider. Our Psychology in Education Division and office of Executive Education and Professional Development are planning courses and continuing education opportunities for regional professionals.

• Building on the model of the Dental School, establish computer-based connections with alumni that will permit life-long learning at sites remote from the University.

Wharton has been involved in a number of distance learning activities over the past six years. These have included proprietary satellite systems of delivery of live content with two different companies, stand-alone CD-ROM and Internet-based products, and live Webcast programs.

Penn Advance is a distance learning program offered by the College of General Studies as an innovative part of its mission to extend educational opportunities to a diverse and talented group of students. Penn Advance courses include live, interactive online class meetings and office hours as well as on-demand multimedia, threaded discussions, self-quizzes, and other activities. Students from all over the world participate, including current Penn students, Penn alumni, academically talented high school students, and adult students.

Alumni Education courses for the Summer 2001 semester include:

- Problems of Interpretation: Visual Art
- Introductory Economics: Micro
- Mechanics for the Health Sciences
- Personality psychology
- American Musical Theatre

Kelly Writers House links alumni and the parents of alumni with the academic ferment of the University with book discussions by e-mail. The discussions are a spin-off of Alumverse, a poetry discussion group conducted entirely via e-mail, which attracted more than 150 alumni. Alumverse operated from January to June 1996.

• Establish a rigorous, normative, market-based protocol for review and assessment of each of these master's and continuing education programs every five to seven years.

While most of the programs mentioned above have been established during the last five years, and have therefore not yet been reviewed, all are under the direction of faculty bodies within the appropriate Schools.

STRATEGIC GOAL 5

The University will plan, direct, and integrate its government and community relations to enhance its missions of teaching, research, and service. The University also will clarify and strengthen the links between its academic programs and the public service performed by its faculty, students, administrators, and staff.

To achieve this goal, the University, working with the schools, will take the following steps, among others.

• Strengthen relationships with the executive branch, Congress, and federal research agencies and work aggressively with them to influence program development and policies that support the scholarly and teaching activities of private research universities.

Relationships between the University and the executive branch, Congress and federal agencies are strong, durable and productive. The President of the University, the Vice President for Government, Community and Public Affairs, the Office of Federal Relations, and the deans and senior officers of the University have worked very hard to produce this outcome.

Research Funding—Federal Relations has worked to maintain congressional momentum for increased budgets for research (especially for NIH, NSF, DOD, DOE, and NASA). Penn was a founding member (with Harvard and MIT) of "The Science Coalition," a university and industry group dedicated to increasing federal funding for science. The Science Coalition is widely credited with both securing major increases in NIH funding and also playing a key role in convincing Congress that other fields of science (particularly the other science agencies mentioned above) should receive significant increases in funding.

Higher Education Policy—The Office of Federal Relations has sought to affect federal policies impacting higher-education institutions so that Penn can maintain its position as one of the nation's premiere research institutions. Areas in which the Office has worked effectively include federal tax policy (not-for-profit provisions, research and experimentation tax credits, tax treatment of employer-provided education assistance, etc.), immigration/H1B visas, student financial aid, and the recent presi-

dential review directive affirming the long-term importance of the University-government research partnership.

Regulatory Developments—The various research agencies are constantly revising regulations and publishing new regulations that impact both the faculty members who receive grants and the University's overall research function. In addition, other federal departments and agencies publish regulations that have potential direct or indirect impact on the University. The Office of Federal Relations monitors regulatory developments and helps University faculty and administrators participate in the public comment process.

Advancing Penn's Research Mission—The Office has worked closely with Deans and faculty members to determine their needs, accompany them on trips to Capitol Hill, and better advance Penn's research agenda in Washington.

The Office staffs Dr. Rodin's service on the AAU Executive Committee, Presidential Committee on Science and Technology (PCAST), and the Brookings Institution board. The President's active involvement with these organizations has supported Penn, and Dr. Rodin, as a leader in higher education and research. Charles Vest of MIT is the only other university president serving on PCAST.

Republican National Convention—This Office was instrumental in establishing the coordination and framework for the University's involvement with the Republican National Convention held in Philadelphia during July/August 2000. This event presented a unique opportunity for the University to strengthen relationships with key government and civic leaders at the federal, state, and local levels, as well as provides an opportunity to showcase the University to the international media and delegates from across the country.

Develop and Promote Positive Legislative and Regulatory Health Care Initiatives—In partnership with the Associate Vice President of Government Relations for UPHS, significant progress has been achieved for the University of Pennsylvania Health System, including:

- A grassroots advocacy campaign for BBA relief which led the nation in e-mail participation; passage of BBRA of 1999; and enactment of legislation valued at \$24 million to Health System over 5 years. The Health System was awarded Delaware Valley Health Council of HAP Advocacy Award for 1999 for these efforts.
- Reversal of HCFA position on reimbursement for Medicare Disproportionate Share/General Assistance Days calculation, providing almost \$30 million to Health System.
- 14.7% increase in NIH appropriations with targeted increases in capital funding (NCRR) and extramural researcher salary caps, UPHS' top priorities.

• Continue to build and maintain effective relationships with the governor and state legislators.

Penn's relationships with Governor Ridge and with key state legislators are strong and stable, as evidenced by the following summary from the Office of Commonwealth Relations.

Commonwealth Appropriations—Over the course of the past five years Penn's annual Commonwealth appropriation has increased by \$5.4 million. Penn receives the largest amount of direct state support of any private college or university in the country. This is due, in large part, to the Veterinary School and its non-preferred appropriation this year. In 2000, the School received a 7.8% increase from the Commonwealth for a total of \$34.7 million. The Governor recognizes the important role Penn's School of Veterinary Medicine and its graduates play in maintaining the health, welfare and success of the Commonwealth's livestock, poultry, and equine industries.

Capital Budget Support—In the past two years Penn has received \$23 million in state capital budget support for two projects—\$5 million for the demolition of the Civic Center and \$18 million for the construction of a new Veterinary School teaching and research facility.

Legislative Initiatives/Problems—The Office of Commonwealth Relations has worked to avoid the imposition of intrusive or burdensome legislation or regulations. For example, the Associate Vice President of Commonwealth Relations served as the University's representative working with the Commission on Post-secondary Education for the 21st Century, a blue ribbon panel appointed by the State House to look at state policy changes to make college more affordable.

State Funding for Life Sciences Greenhouse—The Governor has indicated strong support for this project that would develop a new state program designed to provide financial support for research activity in science and technology with economic development applications. This year the Pennsylvania Technology Investment Authority will provide \$15 million for this type of research, with the Administration likely to substantially increase the funds in next year's budget.

The Commonwealth of Pennsylvania recently awarded a \$10.5 million grant that aims to establish the Philadelphia region as a high-tech hotbed of nanotechnology, which encompasses research in the life sciences, chemistry, physics, and engineering. The Center will be co-directed by Dr. David E. Luzzi, associate professor of materials science and engineering at Penn's Laboratory for Research on the Structure of Matter, and Dr. Kambiz Pourrezaei, professor of electrical and computer engineering at Drexel.

• Build partnerships with corporations, educational institutions, medical institutions, and others that have financially invested in Philadelphia, to share resources and services that strengthen the community.

Dr. Rodin served as one of five co-chairs that lead Mayor Street's Transition Team. One of the obvious benefits of this service is the opportunity it gave to showcase the talent here at Penn, which is now being utilized by the City:

- Executive Vice President John Fry is a member of the Philadelphia Industrial Development Corporation.
- Vice President for Budget Michael Masch is a member of the School Board of Philadelphia
- GSFA Dean Gary Hack: Chair of the Philadelphia City Planning Commission;
- Tom Lussenhop, Managing Director Institutional Real Estate: Member of the Redevelopment Authority;
- Rev. William Gipson, Chaplain: Member of the Human Relations Commission;
- Thomas Sugrue, Bicentennial Class of 1940 Endowed Term Professor of History & Sociology: Member of the Historical Commission.

President Judith Rodin was also appointed Chair of the New Economy Development Alliance's board of directors by Mayor Street. The NEDA will work to develop high-technology business growth in the greater Philadelphia area.

- **Consistent with the University's basic missions of teaching and research, work with the community to promote economic development and increase the quality of life in West Philadelphia.**
- **Continue efforts to increase University purchases from local businesses.**
- **Promote business partnerships, public safety, and transportation initiatives.**
- **Continue efforts to improve local elementary and secondary schools.**
- **Encourage the development of service-learning programs at the University, in furtherance of Penn's long-standing commitment to the integration of theory and practice.**
- **Encourage innovative opportunities for voluntary participation by Penn students, faculty, administrators, and staff in appropriate public service activities.**

Working collaboratively with local residents, businesses, neighbor institutions, public agencies and other partners, the University of Pennsylvania is engaged in a long-term strategic effort to enhance the quality of life in the neighborhoods west of campus. Penn's goal is to achieve and sustain a comprehensive renewal of its West Philadelphia community in the areas of housing, schools, retail and economic development, and safety and security. Based on consultation and discussions with community members, partners, and advisors, Penn is acting with them on a number of fronts simultaneously, because a piecemeal response to today's urban realities is doomed to failure.

Penn and its partners are working on a total of five different fronts that, taken together, will have a significant impact on the West Philadelphia neighborhood adjacent to the University:

- Safe, Clean, and Attractive Streets and Neighborhoods
- Excellent School Options
- High Quality, Diverse Housing Choices
- Reinvigorated Retail Options
- Increased Job Opportunities through Economic Development

Below is a brief summary of progress to date on these five fronts.

1. Clean and Safe/Neighborhood Services

University City District: The University City District (UCD), is a non-profit cooperative partnership, uniting the institutions, businesses, and communities of University City to improve the quality of life by making University City cleaner, safer, and more attractive.

The UCD was developed by Penn in cooperation with Drexel University, the VA Medical Center, West Philadelphia Partnership, Amtrak, the

University City Science Center, the University of Pennsylvania Health System, the United States Post Office, Philadelphia College of Pharmacy and Science, Children's Seashore House, and others. Its board of directors is chaired by John Fry. Its staff manages programs and services that enhance public space, increase public safety, assist homeowners and commercial and rental property owners, and promote University City attractions. Special UCS initiatives have included:

- 46 Safety Ambassadors deployed on foot and via bicycle to enhance public safety and provide pedestrian assistance; 30 deployed to provide trash removal, street cleaning and graffiti removal services.
- New UCD headquarters are shared by a Philadelphia Police sub-station, which houses 25 additional Philadelphia police officers and three supervisors.

The UCD is also leading a collaborative effort to install new signage, street furniture, and other public amenities and to market University City as a destination spot:

- UC Brite: In 1996, Penn created the UC Brite program with a goal of having sidewalk and house lights placed on private residences covering 123 square blocks to the west of Penn's campus. Penn provided initial financing and obtained funding commitments from other large landlords. Over 2,500 fixtures were installed at 1,200 properties.
- UC Green: The mission of UC Green is to promote sensible development, landscaping, and beautification of the public spaces in University City. The program is utilizing in-kind contributions and volunteer work Efforts include landscaping outdoor public spaces and renewing community streetscapes with the aid of high school students, Penn student volunteers, and residential neighbors.

2. Education

Creation of new Penn-Assisted Public School: In June 1998, a Memorandum of Understanding was signed by Penn, the School District of Philadelphia, and the Philadelphia Federation of Teachers to work collaboratively on creating a preK-8 neighborhood school. The school will be located on a site owned by the University at 42nd and Locust Streets and will accommodate between 600 and 700 students. It will be a "best practices" demonstration model within the Philadelphia Public School District and will provide extensive community programming. The planning process involved three community-based committees in educational programming, community programming, and facility/site-configuration, and included over 70 individuals from the community, teachers, the School District, and Penn. Design has been completed and construction has begun. The school will open with the first two classes (kindergarten and first grade) in September, 2001.

Penn is the lead partner in both the University City Cluster and the West Philadelphia Cluster Resource Boards and supports efforts at 24 schools in West Philadelphia.

Revitalization of the Henry Lea School: Penn's Graduate School of Education has made a commitment to work intensively with the school district and the teacher's union to revitalize the instructional program and school climate at an under-resourced local K-8 school. Education faculty are assisting the school in implementing a coherent curriculum, designing appropriate training and professional development for staff as well as parents, building a positive school culture and establishing a school library.

Teacher Education: Penn's teacher education program is now focused on providing a unique curriculum focused on West Philadelphia schools. 50-75 students a year undertake a year-long student teaching experience in West Philadelphia schools. The faculty works with the K-12 teachers and teachers-in-training to prepare them for positions in West Philadelphia schools.

The University has an extremely effective and broad-based service learning project with over 100 academic courses coordinated by Penn's Center for Community Partnerships, and is expanding the numbers of faculty, students, staff, and alumni involved in mentoring, community activities, and school-to-work programs at schools throughout West Philadelphia.

Faculty and students are involved in a wide range of collaborations with community-based organizations, community development corporations, churches, and local schools, coordinated by the Center for Community Partnerships and individuals schools and centers at Penn.

Through the West Philadelphia Improvement Corps (WEPIC) program, Penn currently staffs and supports community schools at Shaw, Sulzberger and Sayre Middle Schools. An additional community school site has been initiated at West Philadelphia High School and the Henry C. Lea School, the first K-12 community school in the city.

3. Residential Housing

Single-Family Acquisition and Rehabilitation Program: Penn has

purchased single-family properties to the west of campus that are in extremely deteriorated conditions, rehabilitating them to modern standards and re-selling them at market rates. An architect, several general contractors, and several sub-contractors for rehab work are from West Philadelphia. The University has provided approximately \$3 million to subsidize the cost of renovating these homes. To date, 20 properties have been acquired, rehabilitated and resold.

Enhanced Penn Mortgage Program: The University has substantially revised its mortgage program to encourage Penn affiliates to live in West Philadelphia. Partners include Mellon Mortgage, Berean Federal Savings Bank, Commerce Bank and GMAC Mortgage.

Provide financial benefits/incentives to live in West Philadelphia:

- \$15,000 one lump sum incentive, or
- \$3,000 per year for next seven years
- 214 homes have been purchased by Penn affiliates under this program to date.

Home Improvement Loan Program: Penn has developed an exterior home improvement program consisting of a \$7,500 matching grant to encourage renovation and façade repair of single-family homes owned by Penn affiliates in West Philadelphia. There have been 108 participants in this program to date.

Multi-Family Housing: The University is deeply involved in balancing the needs of its students and the requirements of a healthy multi-family property market with numerous moderate cost rental choices available for students and the general community. Penn's multi-family properties are an important stabilizing influence in the local market. Penn is constantly seeking additional means for achieving a well-balanced student/general community tenant base. Partners in this work include Fannie Mae, First Union Bank, the University of the Sciences in Philadelphia, and Trammell Crow.

4. Retail Development

Hamilton Square: Construction has progressed on a state-of-the-art facility at 40th and Walnut Streets that will include a multi-screen cinema, a fresh food market, and a parking garage. The \$20 million commercial component of this project is being entirely funded by private financing sources who are helping the University leverage its core investments in the neighborhood.

40th Street Redevelopment:

University City District, with support from Penn, developed the 40th Retail Market Study, the result of a series of meetings between University and community representatives to implement strategies for improving the retail corridor.

From 1997-99, Penn, the UCD, and community partners made streetscape improvements and façade improvements to 40th Street between Spruce, Walnut and Chestnut Streets. The City is extending these improvements further north, to Filbert Street, and south to Baltimore Avenue.

5. Economic/ Job Development

Penn Purchase Program: Penn is working to seize opportunities for business development in West Philadelphia through the use of Penn's substantial purchase power for everyday items and office equipment, as well as for construction services.

Buy West Philadelphia Program: Penn has a program to identify and purchase products from local and minority-owned businesses. In addition, Penn is working to create mentoring opportunities to help these businesses successfully grow and expand, especially through the Wharton Entrepreneurship Program.

In fiscal year 2000, over \$55 million in local purchases were made from West Philadelphia vendors, up from \$13.8 million in 1994.

Sansom Common Economic Opportunity Program: Penn has created a major retail and hotel complex adjacent to the campus. The University has been diligent about involving minority-, women-, and West Philadelphia-based businesses in all aspects of Sansom Common's development. The project has:

- Awarded over \$18 million in construction contracts to minority- and women-owned businesses, representing 43% of the total contract value, and employed minority and female construction workers for nearly 32% of over 200,000 total labor hours worked on the site.
- Hired 151 West Philadelphia residents and 559 Philadelphia residents to work construction.
- 38 residents of West Philadelphia are enrolled in a classroom training program that is preparing its participants to take and pass the apprenticeship tests given by building trade unions. Over 90 participants have graduated from the same program and passed the tests for various trade unions.
- Conducted a successful recruitment effort of West Philadelphia residents to staff over 50% of new employment positions created by Sansom Common merchants.

High Tech Business Incubator: The University has formed P2B, a subsidiary corporation that provides business development support to entrepreneurs. P2B provides access to the seed capital, advisory services and infrastructure needed to successfully launch new business.

The Keystone Opportunity Zone: Penn collaborated with the City of Philadelphia to secure "Keystone Opportunity Zone" (areas that are exempt from most state and local business taxes) designation by the Commonwealth of Pennsylvania for key development sites along Market Street West, the Upper Schuylkill River area of University City, and sites surrounding the Civic Center. KOZ designation will provide tax incentives to entice new and expanding businesses to locate in West Philadelphia.

Initiated the Retail/Customer Service Skills Training for 26 West Philadelphia residents (including Welfare-to-Work recipients) as participants in classes taught by the Community College of Philadelphia.

Conducted a dispatch training program with EDS. Fifteen students were selected to participate and those who complete the program will be certified and thoroughly prepared to work in an Emergency 911 Call Center or any dispatching office.

Center for Community Partnerships

As a precursor to, and a participant in, Penn's West Philadelphia Initiatives, Penn's Center for Community Partnerships continues to be the nation's leader and an international model in academic service learning and volunteer work in public service activities. Following are highlights from the Center's efforts over the past five years.

The Center has helped to develop three action research projects in which undergraduates' research and service learning play central roles. These research projects, which exemplify the integration of research, teaching, learning, and service, include:

- Urban Nutrition Initiative instructs students in the relationship between food, nutrition, and health in urban America.
- African American Culture and Literacy Research integrates courses, research, teaching, and volunteer programs to help improve the reading and literacy levels of students attending public schools in West Philadelphia.
- The Urban Environment: Environment Lead (Pb) as an Urban Pediatric Crisis – "Environmental Studies 404" and "Environmental Studies 405" courses have been engaged in a lead reduction study that links students to work at Shaw Middle School on education and outreach on lead.

Creation of New Academically Based Service-Learning Curricula (ABCS)—Penn is well poised to be considered the top research university in undergraduate education based on its expansion of research and service learning opportunities. The Provost's Seminar explores how academically based community services courses and projects might be developed and connected along the themes of Health and Society, Schooling and Society, Environment and Society, and Culture of Society.

A Model for Community Schools—Penn's higher education-assisted community schools model is being increasingly adapted across the country. The WEPIC Replication Project has continued to grow since its planning (1992) and first implementation (1994) grants from the DeWitt Wallace-Reader's Digest Fund. In 1994, three universities were funded to adapt the Penn model. The past five years have seen significant expansion of the WEPIC Replication Project with multiyear funding (1997-2000) from the Fund (\$932,000) as well as the Corporation for National Service (CNS) —Learn and Serve America (\$500,000). As a result, a total of ten colleges and universities participated in the project. In August 2000, the WEPIC Replication Project was awarded a three-year \$1.5 million grant under the new Community/Higher Education/School partnerships program of the CNS. A total of 21 colleges and universities will be participating by early 2001.

A New Eastward Vision: Development Along the Schuylkill River

Over the past five years, it has become apparent that to ensure that Penn has sufficient space to thrive and grow in the future, only one area of opportunity exists: portions of the U.S. Postal Service properties at 30th Street. If it is done properly, the redevelopment of these properties would not only benefit Penn, but would also create a dynamic new engine for spurring high-tech economic growth for the city and the region for many years to come.

The Keystone Opportunity Zone provides high-tech companies with the tax-free space needed for Philadelphia to compete with areas such as northern Virginia and Cambridge. The Science Center's current development of its "Port of Technology" building demonstrates the market-driven demand for new private research and laboratory space adjacent to Penn, Drexel, the University of the Sciences, and Children's Hospital.

As evidenced by the "Digital Greenhouse" and "Lightning Manufacturing" initiatives, Governor Ridge made harnessing the economic power of emerging technologies a high priority—and his administration is very interested in funding a similar project in the southeastern portion of the

State. The area's location between the campuses of Penn and Drexel sufficiently fulfills the needs of both institutions for critical future expansion space, without any resulting displacement of or disruptions to the residential neighborhoods of West Philadelphia.

A promising vision for the Schuylkill River Area would include:

- Mixed-use development project combining new high-technology commercial, research, supportive retail, and high-rise residential uses, along with space for the future institutional growth of Penn and Drexel.
- Optimization of Keystone Opportunity Zone tax benefits to spur the creation of a new high-tech hub for Philadelphia.
- Creation of critical linkages with the commercial vitality of Center City's "Market Street West" area.

Overall Project Benefits to the City of Philadelphia would include:

- Creation of thousands of new construction and permanent jobs for Philadelphia, and a resulting increase in the City's wage tax base and revenues.
- Further burnishing of the Philadelphia region's excellent reputation in the areas of health services, biomedical research, and higher education.
- Enhanced economic development potential for more technology transfer and start-up business activities.
- Institutional growth and long-range enhancement of the University of Pennsylvania and Drexel University.

STRATEGIC GOAL 6

The University will vigorously pursue efforts to increase significantly Penn's role as an international institution of higher education and research.

I. Stimulate and encourage international research and scholarly collaborations by Penn faculty and their counterparts outside the United States.

II. Promote the development of a strong international dimension within each of Penn's schools.

A. Plan programs to attract more international scholars.

B. Recruit those outstanding students from abroad who are likely to assume leadership roles in the academy, business, and government when they return to their home countries.

III. As part of the 21st Century Project for the Undergraduate Experience coordinate and enhance the development of a student experience at Penn that is global in its dimensions.

A. Encourage the schools in their continued development of an internationally enriched curriculum. Include a global perspective in a wide variety of courses and enhance foreign language competency and study abroad programs.

B. Foster greater interaction with local "international" communities and cultures.

IV. Strengthen Penn's international alumni relations.

I. Stimulate and encourage international research and scholarly collaborations by Penn faculty and their counterparts outside the United States.

In the diversity of its faculty, the nationalities of its students, the breadth of its scholarship, the air miles traveled by its deans and senior leaders, the University is clearly an international institution. At the same time, Penn has no focused central plan for internationalization, and still more needs to be done to bring the globe within Penn's classrooms and produce true citizens of the world in our graduates. But a great deal of progress has been made in the past five years, as the following highlights show.

- The World Wide Web is increasingly used to stimulate and encourage coordination of the schools' and centers' international programs, and in order to publicize Penn's achievements in this regard. A section of the Provost's homepage is now entitled "International Education and Research" and has hyperlinks to pages created by most of the schools concerning their international initiatives, as well as to the Web site of the Office of International Programs.
- Penn's International Health Forum is making remarkable progress in creating cross-school networks of scholars interested in international health research. The Forum was established in October 1996. Comprised of 13 faculty members and administrators from various schools and centers, the Forum seeks to develop interschool and interdisciplinary programs that focus on or include international health. Initial projects focus on Africa and India.

There are many examples of new international research collaborations. Here are a few:

- In February 1998 the Wharton School formed a partnership with the Singapore Institute of Management to establish a private business university in Singapore—The Wharton-Singapore Management University Re-

search Center. The Center will be located at SMU and established with funding from the Singapore government and will focus on topics such as techno-preneurship, knowledge transfer, and competition in emerging technology-based industries.

- The Indian School of Business is a one-of-a-kind institution created through a collaboration among 50 of the world's top corporations and two U.S.-based business schools — the Wharton School and the Kellogg Graduate School of Management. Located in Hyderabad, India, the school is scheduled to open in June 2001 and will offer a one-year MBA for qualified students with a minimum of two years of work experience.

- In 1995-96 the Center for Health Services and Policy Research in Penn's School of Nursing expanded U.S. based research on hospital workforce restructuring to seven countries which have comparable health care systems.

- In September 1997, Penn joined a consortium of six universities to cooperate in creating computerized texts of works by Boccaccio that will be made available on the World Wide Web.

Penn also benefits from the outstanding international achievements of some specific faculty members and programs—thus attracting international partners and receiving widespread acclaim. Examples follow.

- Ian MacMillan has long been an advisor to top officials of the African National Congress and the South African Congress of Trade Unions. In January-February 1999 the Snider Entrepreneurial Research Center brought a 30-person delegation of South African officials to the Penn campus for a customized three-week Wharton executive education program.

- The Center for Community Partnerships has taken leadership roles in a collaborative project with the Council of Europe on "Universities as Sites of Citizenship and Civic Responsibility" as well as in a partnership with the University of the Witwatersrand and other South African educational organizations.

- Two dual degree programs with international focus are very well known: The Lauder Program in International Studies and Business (MA/MBA) and the Huntsman Program in International Studies and Business (dual degree at the undergraduate level).

- In the recent national competition for U.S. Department of Education funding for area and language studies support has been awarded for Penn's East Asian and Middle East Studies, as well as for the African Studies undergraduate consortium that includes Bryn Mawr, Haverford and Swarthmore.

- In 1996-97 the National Endowment for the Humanities (NEH) awarded Penn's African Studies Center a two-year grant for an educationally innovative project on "Teaching and Learning about Africa through Modeling, the Internet, and Distance Learning."

- In 1996-97 the School of Dental Medicine was designated as a World Health Organization (WHO) Collaborating Center in Oral Infectious Disease Education, Research and Care. Penn's School of Nursing already houses a WHO Collaborating Center for Nursing and Midwifery Leadership.

- The International Literacy Institute (ILI) is supported jointly by UNESCO, the University of Pennsylvania, and the Penn Graduate School of Education. The focus is on literacy policy and research worldwide.

- The University Museum of Archaeology and Anthropology has a superb record of innovative research, with activities in 18 countries around the globe.

- Joyce Thompson of the School of Nursing was named U.S. representative to the Global Advisory Group on Nursing and Midwifery.

At least two of Penn's internationally-oriented Web sites have received national and international recognition.

- The homepage of the Museum of Archaeology and Anthropology is one of Penn's foremost outreach tools. Its newest feature, called "Virtual Stuff," includes images from a Museum gallery on the Greek World, photographs from "Eggi's Village", a multi-decade cultural anthropology project of Professor Peggy Sanday, and the Corinth Computer Project—showing city plans, the landscape, research bibliography.

- A second site is the "African Studies WWW," which is recognized as the authoritative site for African studies, from elementary education through college and graduate study, including applicability to government and business entities.

- A third site also deserves mention: the University Library has launched the Penn/Oxford University Press Digital Books Project, with funding support from the Mellon Foundation. Over the next five years the Library will publish on its Web site the full text of all new Oxford books in history, for use by University students and faculty.

II. Promote the development of a strong international dimension within each of Penn's schools.

With 3215 international students in 1999-2000, international students now comprise 17.6% of Penn's total enrollment (10.2% of all undergradu-

ates, 26.5% of all graduate and professional students). The number of visiting international scholars (mostly researchers) has increased quite steadily, from 1129 in 1995-96 to 1504 in 1999-2000.

Penn's campus programs for international students include "Passport to Penn." The program is designed to acquaint all newly arrived international students and scholars with the educational and cultural atmosphere at the University and in Philadelphia.

Through a challenge grant from the William and Flora Hewlett Foundation, Penn established an endowed discretionary fund for international studies in 1986. Income from the fund has provided modest research grants to Penn faculty in an annual competition.

III. As part of the 21st Century Project for the Undergraduate Experience coordinate and enhance the development of a student experience at Penn that is global in its dimensions.

As part of *Agenda for Excellence*, a committee of faculty and students initiated a project called Foreign Languages Across the Curriculum (FLAC) in 1995-96. The program joined WATU—Writing Across the University—and similar programs to create four key elements of undergraduate education. Some FLAC courses would appear as sections within upper-level courses, generally for seniors, and taught in a language other than English. A history course, for example, might include a section taught in Russian. Other courses, called "bridge FLAC" courses, were designed to develop a student's linguistic skills beyond Penn's proficiency level requirement, in a contextual situation.

Within the College, recent curricular initiatives recognize that graduates must be prepared to live in an increasingly interconnected world. Examples follow.

- A Latin American Studies major was approved in 1995-96. This new major is meant to be completed by undergraduates only in combination with another major, in order to prevent marginalization of the subject and to prepare students for employment after graduation. The major will eventually include Latino and Caribbean studies.
- In April 2000 the SAS faculty voted to create a new program designed to encourage students to pursue foreign language study beyond basic proficiency. The "certificate in language study" will offer recognition to students who choose to take advanced language classes but do not intend to fulfill the requirements of a major or minor in a language.

In spring 1998 the Wharton faculty voted to continue the school's increasing emphasis on globalization by revamping the Wharton undergraduate core curriculum and adding a new concentration in global analysis. The global analysis concentration involves a required semester studying abroad, at least one upper-level foreign language course, and three international business courses.

The Graduate School of Fine Arts initiated a number of new international programs, including an ongoing design studio in London, sponsored studios in Bogota, Maricao and Hsinchu, China, and new summer programs in China, Switzerland and Italy. International students account for approximately 30% of the enrollments in the school's professional programs.

A few Penn courses have been or are being revamped to include a distance-learning component involving students in other countries.

- "Comparing Health Care Systems in an Intercultural Context" links with a classroom at the University of Dortmund for teleconferencing and the course culminates in a study abroad field experience in early summer which brings our students together with health care practitioners, nursing students, as well as specialists in health care and nursing education, in Austria, the former Yugoslavia, Italy, Hungary, Netherlands and Germany.
- Plans are underway to link one or two tutorial groups in an introductory international relations course to classrooms in partner universities abroad via teleconferencing, so that the students can exchange perspectives on topics relevant to that particular region abroad.

In the past five years progress has been made in undergraduate study abroad, not only to have faculty committees regularly review existing options for our students but also to establish additional exchange relationships with peer institutions worldwide, which would gradually replace many current fee-charging direct-enrollment options and "island" programs (the latter are programs designed specifically for U.S. students). Since 1995-96, Penn undergraduates participating in exchanges has increased from 45 to 74 (with a commensurate increase in exchange students coming to Penn, from 31 to 60), and the number of institutions with which we have exchanges has grown from 14 to 24 (in 11 countries). Additionally, enrollment in undergraduate study abroad (semester and academic year) has increased in the past five years, from 402 to 559, with three years higher than 500 (512 in 1997-98, 537 in 1998-99, and 559 in 1999-2000).

- Strengthen Penn's international alumni relations
In November of 1998, President Rodin traveled to Mainland China and

Hong Kong and met with Chinese President Jiang Zemin and other high-level officials to strengthen a number of important relationships and development prospects. Other international development trips on several occasions have included Korea, Philippines, Singapore, Taiwan, Hong Kong and the United Kingdom.

Goh Chokong, Prime Minister of Singapore, visited campus in September 2000. Penn introduced him to the enormous capacity of our faculty in the life sciences and we are working towards forging important partnerships with Singapore. To further cultivate this relationship, Provost Barchi traveled to Singapore in December, 2000.

In May 2000, an inaugural reception honored all graduating international students during Alumni Weekend. The event was co-sponsored by the President, the Provost, Alumni Relations, and International Programs. In addition, the Development office now sponsors:

- Weekly updates to international club leaders from Alumni Relations staff.
- More than 40 events organized for international alumni in FY00, many featuring University leaders, deans, and faculty as speakers.
- Expansion of electronic communications facilitating the University's ability to communicate with its international alumni.

Other Development office achievements include:

- Alumni On-line Community contributed to steadily increasing access to University information via the Internet.
- *The Pennsylvania Gazette* now includes 5,000 international alumni in its mailing list, at no charge.
- School and Center alumni programs have also been active in their outreach to international alumni. Some recent examples:
 - Law School alumni leaders and administrators attended Penn Law European Society annual meeting; two-day conference attracted 80 European participants and laid groundwork for April 2001 meeting at Penn Law School for all international alumni of the School.
 - Engineering Dean and Director of Development traveled extensively in East Asia and met with alumni clubs in Hong Kong and Japan; Hong Kong event included students (and their parents) recently admitted to Penn.
 - Director of the College Houses and Academic Services spoke at a joint meeting of the Penn Club of Japan and the Japan GSFA Group about the College Houses Renewal Project.

STRATEGIC GOAL 7

The University will creatively deploy new technologies, recognizing that technology is revolutionizing the ways in which knowledge is acquired, created, and disseminated.

- **Make the implementation of new teaching technologies a University priority**
- **Ensure that there is sufficient support for training faculty, students, administrators, and staff in the use of new technologies**
- **Implement, through acquisition or development, state-of-the-art information systems that will improve the flow of information and electronic communication across the University**
- **Take advantage of new technologies that will improve Penn's academic, administrative, and capital planning processes**

Given the regularity and speed of technological advances, Penn is keeping pace with our institutional peers on most fronts of technology and, in a number of areas, Penn is in the vanguard, as the following will show: Penn's Classroom Technology Services program is considered a model of excellence among our peers in the New Media Centers Consortium.

The strength of College House Computing was recognized by its peers at other institutions by winning the bid to host the national ResNet Symposium in June 2000 and securing a position on the national ResNet Steering Committee. Over the next five years, College House Computing hopes to maintain the excellent level of technical support given to its undergraduates and to broaden the technical training opportunities offered to students living in residence.

Advances in teaching, scholarship, administration and campus life based on technology are summarized below:

Classroom Technology Services (CTS) was created by ISC, with funding provided by the Provost, in Fiscal Year 98. CTS supports faculty in the use of technology to enhance teaching and learning, and maintains and improves the equipment available for classroom use. It works in concert with the Provost's Classrooms Committee, which is charged with renovating Penn's central pool classroom and installing new technology for instructional use.

Technology in Penn's central pool classrooms has moved forward on several fronts. In support of PennAdvance (the College of General Studies' web-based distance-learning project) and other distributed learning initiatives, the Classrooms Committee, representatives from SAS, SEAS, GSE, and CTS have collaborated to develop the *Innovative Learning*

Space. This multimedia classroom was designed for flexibility in both layout and in the application of educational technology.

In addition to the Innovative Learning Space, individual Schools have made similar investments in their own classrooms, including ASC, GSE, Law, Nursing, and Wharton. For example, the Graduate School of Fine Arts completed an ambitious program of networking all of its design studios, so that over 400 students can work at individual work stations connected to networks. GSFA also created four computer labs with specialized equipment for digital graphics, modelling, animation and video.

Penn Video Special Interest Group (Video-SIG). ISC, in response to an increased demand for information about digital video technologies and their applicability within the classroom, helped convene Video-SIG with participation across multiple Schools and centers. The focus is to disseminate information about video and emerging technologies related to video to Penn faculty, staff, and students, as well as to assist faculty and staff in their integration.

Blackboard Pilot. ISC, along with SEAS and SAS, led the Blackboard pilot and larger-scale deployment. The goal of the ISC contribution was to help launch course support tools university-wide. In support of this goal, *New Tools for Teaching* committee members offered training sessions to faculty and staff. One finding from the fall 1999 Blackboard student survey (over 40% response rate): 83% of students who used Blackboard in their fall courses indicated that Blackboard CourseInfo “enhanced the quality of their courses.”

College House Computing and the IT Advisor Program: Almost four years ago the University implemented College House Computing and the IT Advisor Program. The goal of this program is not only to ensure that the personal computers of the undergraduates living on campus are functioning properly, enabling them to succeed in their coursework, but also to empower students to experiment with technology through training and project opportunities. This year, for example, ITAs successfully connected over 1,600 students before the first day of class and an additional 500 by the end of the first full week of school.

Information Security Training. One component of ISC’s overall plan to ensure the privacy and security of institutional data and systems is to proactively provide training to campus system administrators. Classes have been well attended, and response has been uniformly positive.

Internet2: The University of Pennsylvania is one of the 34 universities that helped launch the Internet2 Project in October 1996. Internet2 is the collaborative effort led by over 180 universities, working with partners in government and industry to develop advanced Internet technology and applications vital to the research and educational missions of higher education.

MAGPI, the Metropolitan Area GigaPoP in Philadelphia for Internet2, now provides Internet2/Abilene access to three prominent Philadelphia-area universities. Drexel, Lehigh, and Penn are UCAID members with research and educational applications appropriate for high performance networking. MAGPI is a high-performance network aggregation point in Philadelphia, and will be providing cost effective connectivity to Internet2 as well as other services to a number of regional primary and secondary participants.

An on-line Travel Reservation System and an electronic Expense Reporting and Management System for travel and entertainment expenses are under development. The reservation system will allow Penn users to book travel arrangements while ensuring that they receive the lowest fares.

Strategic Site License Fund. ISC continues to support this fund, established in FY 1996, to help subsidize license costs for the campus in three general areas:

- protection of University information and assets (e.g., anti-viral software)
- endorsement of University standards (e.g., network connectivity software)
- support for major cross-School academic initiatives (e.g., Maple for Calculus Instruction/and facilitating Systat software in public access labs in support of the Quantitative Skills Initiative).

Technologies in University Libraries. The Library has built one of North America’s leading academic digital libraries, providing desktop access to the electronic equivalent of a multimillion volume print collection. Further, the internationally recognized Schoenberg Center for Electronic Text and Image was established. The Center contains:

- the English Renaissance in Context, an NEH-funded resource for the teaching of Shakespeare. ERIC presents digital facsimiles of the First Folio and other original sources integrated with a multi-media set of instructional materials.
- digitalized manuscripts, exhibit materials, an internationally known and celebrated web site on the life and work of Marian Anderson, and numerous finding aids that make Penn’s great rare book and manuscript collections accessible to scholars’ desktops around the world.

The Library also partnered with Endeavor Information Systems in the development of the Web-based online library catalog and Library Management System. The resulting system, Voyager, bears Penn’s imprint, and has influenced the development and acceptance of Web interfaces as the norm for library catalogs.

Voyager provides:

- multiple search functions and the ability to link to other kinds of digital information (e-journals, databases and text documents)
- multitasking capabilities involving other software, such as bibliographic applications
- greater integration of print and electronic resources
- graphical user interface for improved technical processing efficiency used to execute book orders online, import vendor supplied cataloging into the bibliographic database and to electronically transfer invoices to Accounts Payable.
- online services such as book renewal, recall, and patron-accessible transaction reports, and e-mail notification and Web-based forms for 24/7 placement of Interlibrary Loan requests, reserve requests, and reference questions.

BorrowDirect is a collaborative lending service among Yale, Columbia and Penn that allows our users to request books directly from Yale and Columbia from Penn’s online catalog, and fulfills requests in about half the time of Interlibrary Loan.

With the Oxford University Press, Penn began an internationally recognized e-book project to study the scholarly uses and benefits of full-text e-books, and assess their impact on traditional publishing. The Penn/OUP Digital Books Project has been reported on in Knight-Ridder newspapers worldwide.

A chat reference service was implemented in Wharton’s Business Digital Library to provide real-time online access to reference help 24 hours a day/7 days a week.

Penn ranked 15th overall and top in the Ivies in the “1999 Yahoo’s Top 100 Most Wired Colleges.” The survey covers major aspects of a school’s wired life, including student web usage, network speed, network resources available, and number of laptop ports.

STRATEGIC GOAL 8

The University will effectively communicate to its various constituencies the ways in which it contributes to the advancement of society.

Effective institutional communication, both internal and external, for a university as large and decentralized as Penn is a constant responsibility and challenge. Not only is there always a plethora of “news” about research discoveries, institutional developments and campus events, there is often the obligation to manage one or more “crises”, as well, that threaten to distract time and attention. At the same time, the means or vehicles of communication have expanded as the world wide web and other information technologies have continued to evolve. This has created many new opportunities — and also new questions about how best to “reach” people.

In the past five years, the University has successfully communicated its most important messages. The evidence of this success lies in the preceding pages of this report that chronicle Penn’s rise in national rankings, increased admissions selectivity, growth in research funding, public sector impact and development expansion.

Illustrative media placements

1996

February: 50th anniversary celebration of ENIAC with Vice President Al Gore resulted in feature coverage in the *New York Times*, “Good Morning America,” Associated Press, and Reuters;

December: “NBC Nightly News with Tom Brokaw” aired a feature piece profiling Dr. Rodin as one of the most influential women in America.

1997

September: the *New York Times* featured the work of Richard Estes, School of Social Work, ranking social progress of 160 nations;

November: Dr. Rodin’s address to the AAMC on the qualities of leadership was reported in the *Washington Post*;

December: *New York Times* reported on the \$100 million donation from Leonard and Madlyn Abramson for cancer research.

1998

April: Psychology Professor Martin Seligman profiled in the *New York Times*;

December: *New York Times* feature story on Professor of Telecommunications David Farber.

1999

July: *New York Times* story on e-seminars at Penn;
July: *USA Today* feature on domestic violence focusing on research presented at Penn School of Social Work conference;
August: Sociology professor Elijah Anderson interviewed in *Newsweek* magazine on research from his book *Code of the Streets*;
November: *USA Today* features Linda Aiken, of the School of Nursing, on the effects of the burgeoning nursing shortage.
December: *Washington Post*, *New York Times*, *USA Today*, and AP reported on research published by Penn team in *Nature* magazine on King Midas' funeral feast.

2000

January: Professor Richard Gelles, School of Social Work, in the "CBS Evening News" commenting on the continuing custody battle over Elian Gonzalez;
February: President Clinton's visit for Penn's Granoff forum resulted in feature coverage in numerous outlets, including the *New York Times*, *Wall Street Journal*, *Washington Post*, AP, "ABC World News This Morning," and C-Span;
April: Professor Lawrence Sherman, Fels Center, was the sole guest on a "Nightline" discussion of school violence;
October: Chemistry Professor Alan MacDiarmid's Nobel Prize resulted in feature coverage in dozens of outlets, including the *New York Times*, *Washington Post*, "Newshour with Jim Lehrer" and Associated Press.
November: *BusinessWeek* magazine features Interim Dean Neville Strumpf on how children of aging parents can best make decisions regarding their care;
November: *The New York Times* features an article by former Dean Claire Fagin on the changing roles of nurses in society.
December: Dr. Rodin's op-ed on university/community revitalization published in the *New York Times*; *Newsweek* magazine features.

Innovations by Office of University Relations

- *The Pennsylvania Current*, a new bi-weekly campus tabloid covering news and features of interest to students, faculty and staff. *The Current* has won two gold medal awards for Excellence from the Council for the Advancement of Secondary Education (CASE).
- A local and national communications strategy for the five component parts of the West Philadelphia Initiative.
- A new website, "Our Commitment to West Philadelphia," highlighting the five component parts of Penn's neighborhood revitalization efforts.
- An ongoing program to encourage members of the faculty and others to write opinion pieces for submission to high-circulation publications in major markets. Opinions were published in more than three dozen prominent newspapers throughout the country.
- A program for meshing faculty expertise against breaking news stories by creating "One Stop Shopping Lists." These lists offer a selection of Penn faculty available to comment on various aspects of a breaking news story, and have resulted not only in an increase in faculty placements (2 dozen in national newspapers in 1999; a similar number in 2000), but an increase in reporters from around the nation and overseas calling Penn for experts. Recent examples include:
 - March 21, 2001 NPR's Setsuko Sato interviewed Law Professor Stephen Burbank to discuss the Bush administrations plan to end the role of the American Bar Association in selecting federal judges.
 - March 15, 2001 Donna Harrington Luecker of *USA Today* quoted Jeanne Vissa, director of teacher education in the Graduate School of Education, in story "Middle Schools Fail to Make the Grade."
 - March 13, 2001 Peter Kuriloff, professor in the Graduate School of Education, was the primary source quoted in *Christian Science Monitor* story, "When Special Education Discriminates."
 - Joe Turow, Professor in the Annenberg School for Communication, was primary source in Gary Levin's *USA Today's* March 7 piece, "Just How Real is Reality TV?"
 - Ram Cnaan, co-director of Penn's Center for Research on Religion and Urban Civil Society, provided background for David Reilly's *Philadelphia Inquirer* article on, Feb. 22, 2001, "Faith-Based Plan Raises Questions About Volunteers."
- Increased media coverage of developments in the sciences at Penn through the recruitment of an experienced science writer/editor, and the use of new media outreach tools, such as Eurekalert, a science and technology web posting mechanism under the auspices of the American Association for the Advancement of Science.

Crisis Communications

Universities are prone to experience "crises" of varying kinds given

their size, research mission, locations, prominence and other factors. Penn is no exception. Since 1995 the University has had to manage crises connected to crime, safety and security; UPHS financial troubles; gene therapy; and a range of other issues. To deal with such matters in an expeditious and effective way, President Rodin appointed in 1997 a crisis committee of top University officers including the Provost, Executive Vice President, General Counsel, Vice President and Chief of Staff, Vice President for Public Safety, and Director of University Relations. On more than one occasion this committee has convened to analyze, manage and communicate about a crisis to Penn constituencies.

Alumni Outreach

- Alumni Relations' strategic planning process developed an encompassing vision and model for building the University's strong, positive relationship with its alumni. Particular attention focused on development of alumni leadership groups, such as Agenda for Excellence Council, Trustees' Council of Penn Women, James Brister Society, and young alumni affinity groups.
 - Regional Advisory Boards have assisted in development of "Penn on the Road" program to showcase *Agenda* priorities. POTR programs have been offered in seven cities; four more cities scheduled for programs during FY01.
 - PennCares was developed to increase alumni engagement in community service projects through regional alumni clubs; 20 clubs have participated in annual PennCares events, and specific classes now participating in Penn Cares as part of planned reunion activities.
- Global Alumni Network (GAN) was created to update and reorganize domestic and international alumni club structure.
- GAN offers programming for alumni who live in areas not served by clubs, and for alumni who choose not to affiliate with local clubs.
 - GAN's "Partners With Penn" program, introduced in 1999, provides regional alumni clubs an outline of Penn's strategic goals and priorities, and incentives for helping to achieve goals for Penn.

Communications program:

- *PENNews* transformed from a freestanding, semiannual publication to an insert in the *Pennsylvania Gazette* three times per year.
- Increased readership from approximately 30,000 to more than 140,000.
- *Pennsylvania Gazette* has focused more than 30 articles on the *Agenda* and/or the six academic priorities, including academic programs, physical environment, and student living/learning experience.
- *The Essential Alumni Guide*: comprehensive annual directory of alumni resources across the University; 1st edition published September 2000 as a supplement to the *Gazette*.
- *People Supporting Penn*: annual donor recognition publication placing increased emphasis on gift impact.
- The Benjamin Franklin Society: new identity and improved marketing materials for undergraduate annual giving and reunion class giving in conjunction with raised minimum giving standards.
- *Penn Medicine* — The School of Medicine's primary vehicle for reaching its key audience of alumni and friends. The magazine is devoted to news, features, and commentary on faculty research, alumni achievements, and trends in the health care.
- *Bioethics.net* — Penn's Center for Bioethics comprehensive web site that furnishes information and news on the Center, while linking to news articles, commentary, research, and information worldwide. Billed as the Internet's first and largest web site of its kind, Bioethics.net is the most heavily visited bioethics site on the Internet (according to Medical Matrix).
- *OncoLink* — SOM also publishes, an online provider of free cancer-related information that has received awards and praise for providing cancer patients and their families with valuable and often empowering knowledge.
- *Knowledge@Wharton* — The Wharton School's free business and research online business publication.
- The *Wharton Alumni Magazine*, which is now published on-line, reaches 70,000 Wharton graduates worldwide.
- The Leonard Davis Institute of Health and Economics published reports that make its health policy research and education activities more accessible to students, policy makers, and industry leaders.

Electronic communications have expanded dramatically as planned for in the *Agenda for Excellence*.

- *Gazette* website provides convenient, immediate source of information for alumni worldwide.
- Development and expansion of the Alumni Web as part of Penn's Internet presence has included the creation of websites for international clubs and reunion classes.
- Alumni On-line Community and e-mail forwarding.
- New websites for fundraising priorities.

STRATEGIC GOAL 9

The University will identify and secure the funds required to support its strategic goals.

The Department of Development and Alumni Relations (DAR) has pursued *Agenda for Excellence* goals in a wide variety of programs and initiatives since the *Agenda's* inception in July 1996. Fundraising for defined priorities has been a core element of our program producing over \$900 million. The chart below provides a breakdown of results by priority area.

Agenda for Excellence	
<i>For the period July 1, 1996 through March 31, 2001</i>	
Gifts And Pledges	
Students	
U/G Financial Aid	\$131,000,000
U/G Experience / Perelman Quad	\$53,000,000
Grad/Prof Financial Aid	\$73,000,000
Residences / Recreation	\$34,000,000
	\$291,000,000
Faculty/Academic Programs	
Chairs / Faculty Support	\$111,000,000
Academic Programs	\$196,000,000
Academic Facilities	\$199,000,000
	\$506,000,000
Neighborhood Initiatives	\$2,000,000
Unrestricted/To Be Designated	
Unrestricted	\$58,000,000
To Be Determined by School	\$33,000,000
Holding Funds (designations pending)	\$13,000,000
	\$104,000,000
Total	\$903,000,000

Overall fundraising during the four and a half years of the *Agenda* has exceeded \$1.24 billion (compared with the \$1.4 billion raised during the seven years of The Campaign for Penn that concluded in 1994). This aggressive growth is reflected in the \$312.5 million in gift receipts added to the University's endowment thus far during the *Agenda*. It is also evident in the dramatic increase in the number and size of the largest gifts to Penn. More than 30 gifts of \$5 million or more have been raised to date during the *Agenda*, for a total of \$325 million – double the number of such gifts made during the entire Campaign for Penn.

Specific new gifts have provided funding for:

- Creation of the Humanities Forum
- Fox Leadership Program
- Vagelos Scholars Molecular Life Sciences Program
- Establishment of Kelly Writers House
- Perelman Quadrangle – \$40 million raised for more than 40 named spaces in the renovated and expanded complex at the historic heart of Penn's campus.

The first phase of the \$60 million development program for the College Houses project has moved forward:

- The Quad Renewal Project has raised \$9.3 million toward its \$35 million goal, with pending gift solicitations totaling \$8 million and new gifts totaling at least \$15 million expected to close during FY01.

Undergraduate aid:

- Endowment has increased by \$116 million, reaching 58% of the *Agenda* goal.
- Challenge grants have had a particular impact (e.g., Trustee Challenge, Riepe Challenge, Kelly Challenge) in leveraging smaller gifts, many of them from younger alumni.
- 386 new financial aid funds have been created to date during the *Agenda*, 64 of them by young alumni.

Graduate aid:

- \$66 million has been raised; 66% of the \$100 million *Agenda* target for graduate fellowships.
- Notable successes include the Gamble Scholars and 21st Century Endowed Scholars Fund at the Medical School.

New recreational athletic facilities.

- \$13.5 million raised to date for improvement of campus recreation facilities.

- **Identify other University initiatives in the strategic plan that require external development support.**

Endowed Chairs:

- Approximately \$81 million of the \$92 million raised for faculty support has created 42 endowed chairs.

Academic Programs:

- *Agenda for Excellence* gifts have provided support for a number of new and expanded graduate programs.
- Goergen Entrepreneurial Management Program
- Zell/Lurie Real Estate Center endowment
- Boettner Center of Financial Gerontology
- Annenberg Institute for the Study of Democratic Institutions
- Korea Foundation's Korean Studies Program
- Securing support for two interdisciplinary programs and facilities – Bioengineering and Life Sciences – is an important priority for FY01.
- See also undergraduate academic programs described above under Strategic Goal 1.

Academic Facilities:

- \$194 million raised for new and renovated academic facilities.
- Wharton's Huntsman Building project accounts for \$122.4 million of the total.
- University Museum concluded fundraising campaign for the Mainwaring Wing with \$15 million toward construction and additional monies for endowment; moving ahead with plans for a substantial renovation program within the existing Museum complex, thanks to a \$16 million commitment from Charles Williams.
- Dental School's Schattner Center currently stands at approximately \$13 million.
- More than \$7 million committed to Engineering's Levine Hall for Computer and Information Science.
- GSFA's Addams Hall project completed, as additional fundraising efforts are pursued for named spaces within the building.
- Change in direction for SAS facilities projects for Biology and Psychology; now combined into larger Life Sciences initiative, including a new building. Fundraising progress to date totals approximately \$4.2 million.

- **Identify and engage alumni and trustees to assure that the fundraising goals are met.**

Agenda for Excellence Council has played important role in development planning, personal philanthropy, and "door-opening" to build support for the *Agenda*.

Other leadership groups closely involved in fundraising include:

- Penn Fund
- Trustees' Council of Penn Women
- University Committee for Undergraduate Financial Aid
- College House Advisory Board
- James Brister Society

Expansion of activities targeted toward young alumni participation has been a priority. More than 20 on-campus and regional events were held during FY00; 14 events and activities have been held thus far in FY01.

Identification of new prospects has been priority of DAR's Market Research and Analysis Office (MRA).

- Prospect pool has increased 8% per year during the period FY97-2000, for a current total of 20,411 prospects.
- At the \$1 million+ level, the pool has grown by 14% annually, to more than 1,022 prospects.
- Targeted Industry Program has begun in four industry sectors: High Tech, Biotech, Venture Capital/Finance, and Media and Entertainment.
- More than 150 new prospects identified through this new approach, which has also yielded extensive information sources including company and contact lists.
- Targeted Industry Program capabilities have assisted in development of prospect lists for several other development initiatives, including the Penn Breakfast Forum, the College House Project, the Medical School's Women's Health Project, and the 125th Anniversary of Women at Penn Celebration

Involve international alumni in the development process.

DAR has focused considerable attention on building development relationships abroad.

- During the past five fiscal years, international gifts to Penn have totaled \$54.2 million.
- Rated prospects from outside the U.S. have also risen, during the past year alone from 735 to 947; 148 rated with a giving ability of \$1 million+.
- International alumni serve in a variety of volunteer leadership capacities, among them the University's Board of Trustees, school boards of overseers, and center advisory bodies. Some 26 international parents serve

on the Parents Program Executive Board.

- Wharton's three international executive boards in Asia, Latin America, and Europe involve 84 members representing 37 countries. Active participation by Executive Board members in regional annual meetings; all members closely involved as volunteers and donors in Campaign for Sustained Leadership.
- Regional Wharton alumni meetings attended annually by about 1,000 international alumni. Recent meetings in Manila and Buenos Aires each drew approximately 300 attendees. (See also comments above under Strategic Goal 6.)
- **Maintain a top-five ranking in gift receipts among peer institutions**

by launching a new University/schools fundraising drive for initiatives targeted in *Agenda for Excellence*.

During *Agenda for Excellence*, Penn has maintained and improved its fundraising position among the top tier of universities.

- Within its Ivy/MIT/Stanford peer group, Penn has begun to move up in the rankings, even in the context of comprehensive campaigns at several of those institutions.
- Ranked sixth in FY97, the first year of the *Agenda*, Penn moved to fifth in the most recent year for which comparative statistics are available (FY99).
- Penn's average growth rate of 19% over the past five years, the highest of the Ivy/MIT/Stanford Group, is nearly five times greater than the average annual growth rate for the group as a whole.

Agenda for Excellence, 1995-2000
is the fourth in a series of planning documents issued
by the University of Pennsylvania.

The earlier reports were:

*Agenda for Excellence:
The Strategic Plans of the Schools,*
(*Almanac Supplement* January 21, 1997)

Six University Academic Priorities
(*Almanac Supplement* September 24, 1996)

The Agenda for Excellence,
(*Almanac Supplement* November 21, 1995)

Comment on the *Agenda for Excellence, 1995-2000* may be sent via e-mail
by *May 25, 2001* to *plan@pobox.upenn.edu*