

## The Duderstadt Decade (Peckham Chapter)

Inauguration Day, October 4, 1995, dawned as one of those extraordinary fall days that bring back Michigan memories. The sky was a brilliant blue, and the yellows and reds of the fall colors provided the perfect setting for the academic procession marching across the Ingalls Mall to Hill Auditorium. Academic leaders came from across the nation to participate in the inauguration of James Johnson Duderstadt as the 11th president of the University. The Baird Carillon in Burton Tower rang out with familiar music--including "The Whiffenpoof Song" to recognize Duderstadt's alma mater, Yale.

The setting for the inauguration was appropriate for other reasons. Earlier in the week, the Rackham School of Graduate Studies had celebrated its 50th year with a symposium on the University's impact on graduate and professional education. The next day, Michigan would beat its traditional rival, Michigan State, in a season which would end in a Big Ten Championship and a victory over USC in the Rose Bowl. And, in a most fitting display of irreverence--at least for Michigan--a small group of activists staged a protest outside the entrance of Hill Auditorium on an array of issues that have long since faded into the obscurity of the 1960s antecedents. Indeed, one student in the platform group even joined in the festivities by displaying a sign stating that "Duderstadt was illegal", referring to the contention by several newspapers that the Regents had violated the Open Meetings Act by conducting a confidential search for a president, as the University had done for every previous leader.

Duderstadt's inauguration address laid out clearly the themes of his vision for the University which would guide his presidency: the extraordinary challenges, responsibilities, and opportunities that the University would face in the decade ahead as a leader of higher education and the degree to which it would have to change to serve a rapidly changing world.

### Preamble

Like Harold and Vivian Shapiro, Jim and Anne Duderstadt had spent their entire careers at Michigan. The Duderstadts were fond of saying that they had left Pasadena, California, on a warm, sunny day in December, 1968, only to arrive in sub-zero, blizzard conditions in Ann Arbor. Yet, while the climatic shock in moving from California to Michigan was severe, the Duderstadts found their warmth in the people of Michigan, and they became deeply committed to the University and the state. During their 20 years at Michigan, both of the Duderstadts had served the University in almost every conceivable way--except, of course, as the first family.

After graduating summa cum laude from Yale in 1964 and then receiving a Ph.D. in engineering science and physics three years later from Caltech, Jim Duderstadt

moved to Ann Arbor with his wife and family to join the University community in late 1968. Duderstadt rose rapidly through the professorial ranks to become professor of nuclear engineering in 1976 and then Dean of the College of Engineering in 1981, at the age of 37. He had developed a strong reputation as both a scientist and faculty member, receiving essentially every major national award for excellence in research, teaching, and public service--including the President's National Medal of Technology (the only Michigan faculty member to have ever been so honored). He also was actively involved in national science policy, and he was appointed by both Presidents Reagan and Bush to serve on the National Science Board throughout the 1980s and chairing the Board during the 1990s. Hence, he was able to bring the unique perspective--and credibility--of an internationally known teacher, scholar, and science policy leader to his various administrative roles at the University.

During his brief five year tenure as Dean, Duderstadt and a team of younger faculty leaders--including Charles Vest, who would later become president of MIT--rejuvenated the College of Engineering. Together they completed the 30 year long effort to move the College to the North Campus, recruited over 140 new faculty, and boosted the reputation of its academic programs to 5th in the nation. Although the University had never before in its history looked to Engineering for a central administration post, in 1986 Harold Shapiro asked Duderstadt to succeed Billy Frye as Provost and Vice President for Academic Affairs of the University. Key in this assignment was the opportunity to lead an ambitious strategic planning process that would define the future directions of the University as it prepared to enter a new century.

Duderstadt brought the same energy, excitement, and confidence about the future to his role as Provost that he had used to rebuild the College of Engineering. Within a few months he had not only launched a major set of planning activities involving every school and college of the University, but he had also launched a series of initiatives that would later define his presidency: a major effort to increase the racial diversity of the campus community, a series of initiatives designed to improve the undergraduate experience, an aggressive plan to improve the capital facilities of the University, a far-reaching effort to achieve leadership in the use of information technology, efforts to rebuild the natural sciences, and restructuring of several key professional schools (including Dentistry, Library Science, and Education). At the same time, his wife, Anne--who had been past-president of the Faculty Women's Club and involved in a broad range of campus activities--designed and launched a similarly wide array of events for students, faculty, and staff to draw together the campus community.

However, Duderstadt was not to remain in the role of Provost for long. Within 6 months after he assumed the post, Harold Shapiro left for a well-deserved sabbatical leave in England, leaving Duderstadt with the assignment of serving as Acting President in addition to his role as Provost. Then, shortly after returning from his sabbatical leave, Shapiro announced his intention to accept the presidency at Princeton. This meant that, in effect, Duderstadt had to play the combined roles of Provost, Acting President, and "behind-the-scenes"

president (working closely with Robben Fleming as Interim President) until June, 1988, when he was selected by the Regents to succeed Shapiro. Yet, during this interim period, the University continued to make great progress along a number of fronts. Furthermore, through this array of leadership roles, Duderstadt rapidly developed a vision of where the University should head during the 1990s. And it was this vision that he set out in his Inauguration Address in fall of 1988.

## The New Agenda

In countless talks before the University's extended family, which spread from students and faculty on campus to alumni, to legislators in Lansing, and more broadly to the citizens of Michigan, now President Duderstadt described a future in which three crucial elements--knowledge, globalization, and pluralism--would dominate. Knowledge was becoming increasingly important as the key to growth and change. Change through knowledge was quickly breaking down barriers between nations and economies, producing one interdependent global community that had to live and work together. As barriers disappeared and new groups entered the main stream of life, particularly in America, isolation, intolerance, and separation had to give way to pluralism and diversity. A new, dynamic world was emerging. If the University wanted to maintain the leadership position it had enjoyed for close to two centuries, it had to not only adapt to life in that world, but to lead the effort to define the very nature of the university for the century ahead.

Each of the presidents of the University seem to have been chosen--or perhaps was molded--by the challenges of the times. The 1950s and 1960s had been a time of dramatic growth, and Harlan Hatcher had led the great expansion of the University as it doubled in size and added two regional campuses. The late 1960s and 1970s were a time of great unrest in America, and Robben Fleming's wise and experienced leadership had protected the University and its fundamental values during these difficult times. While Harold Shapiro had positioned the University to adapt to a future of declining state support, his most important impact was in a different area. As both Vice President for Academic Affairs and then as President, Shapiro's commitment to academic excellence was intense and unrelenting. Indeed, it is no exaggeration to state that during Shapiro's era, the University first committed itself to serious academic excellence and developed a determination to compete with the finest universities in America for the very best faculty, students, and programs.

But Duderstadt sought something beyond excellence. He embraced the University's heritage of leadership, first as it defined the nature of public higher education in the late 19th century, and then again as it evolved into a comprehensive research university to serve the latter 20th century. Duderstadt became convinced that to pursue a destiny of leadership for the 21st century, academic excellence in traditional terms, while necessary, was not sufficient. Beyond this, true leadership would demand that the University would have to transform itself once again, to serve a rapidly changing society and a

dramatically changed world. And it was this combination of leadership and excellence that he placed as a vision and challenge to the University. As Duderstadt put it in from the words of the Michigan fight song, *The Victors*, the University should set its sights on becoming “the leaders and best” during the 1990s.

The challenges to this vision of leadership were great. Throughout the 1970s and 1980s, state support of the University had deteriorated to the point where it provided less than 20% of the University’s resource base. The Ann Arbor campus, ranking as the nation’s largest with over 26 million square feet of space, was in desperate need of extensive renovation or replacement of inadequate facilities. Although the fund-raising efforts of the 1980s had been impressive, the University still lagged far behind most of its peers, with an endowment of only \$250 M, clearly inadequate for the size and scope of the institution. There were an array of other concerns, including the representation and role of women and minorities in the University community, campus safety, and student rights and responsibilities. So, too, the relationships between the University and its various external constituencies--state government, federal government, the Ann Arbor community, the media, the public-at-large--needed strengthening. And all of these challenges would have to be met while addressing an unusually broad and deep turnover in University leadership, in which most executive officer, dean, and director positions throughout the institution would change.

Duderstadt moved rapidly to put together his leadership team: With strong faculty support, Charles Vest was appointed as Provost (although, after only two years in the position he was tapped for the MIT presidency, and succeeded by Gilbert Whitaker, Dean of the School of Business Administration); Farris Womack was attracted from North Carolina to become Vice President and Chief Financial Officer; first Bill Kelly from Geology and then Homer Neal from Physics joined the team as Vice President for Research; Maureen Hartford was recruited from Washington State University to become Vice President for Student Affairs; Walt Harrison joined the University from the private sector as Vice President for University Relations; and Blenda Wilson was recruited from Colorado to become Chancellor of UM-Dearborn. Beyond these senior positions, new deans were selected and recruited to head most of the University’s schools and colleges. Further, other key leadership positions throughout the University were filled--e.g., first Jack Weidenbach and then Joe Roberson as Athletic Director, Elsa Cole as General Counsel, Jackie McClain as Executive Director of Human Resources. During the 1990s, Michigan was regarded throughout higher education as having one of the strongest leadership teams in the nation--as the rapid progress of the University soon was to make apparent.

The Duderstadt leadership team was both action- and results-oriented. Hence, even as Duderstadt was setting the key themes that would characterize his leadership of the University, key initiatives were being launched to move the University in these directions. One of the earliest such efforts was the Michigan Mandate, a bold, strategic effort to change the University in such a manner as to enable it to more faithfully reflect the rich racial and ethnic diversity of American society among its students, faculty, and staff. But, beyond this, the Michigan

Mandate was based on the premise that academic excellence and quality education in an increasingly diverse world would demand that the University itself embrace diversity as one of its highest priorities. Through an extraordinary series of actions, including the deployment of considerable resources, the University embarked on a course which would double the number of underrepresented minorities among its students, faculty, and staff over the next five years and rapidly place it in a position of leadership in higher education in its effort to build a multicultural learning community.

Led by Provost Vest and Vice President Womack, the University also launched a series of cost containment actions, including a major total quality management effort in the University Hospitals that, together with the completion of the new Adult General Hospital, was to position it as the most financially successful medical center in the nation in the 1990s. A series of strategic efforts to improve both the environment and incentives for sponsored research, coupled with an aggressive federal relations effort in Washington, stimulated rapid growth in the University's research grant activity. During the next three years it rose from 7th to 1st in the nation in its success in attracting research grants, surpassing MIT and Stanford, and earning the accolade as the nation's leading research university. And, even though the fund-raising campaign of the 1980s had just ended in 1987 with the completion of its \$180 million goal, the Duderstadt administration quietly prepared to launch a new campaign in the 1990s that would aim at raising \$1 billion--an amount unprecedented for public higher education and matched by only three private universities.

The first year was an exceptionally active one. Duderstadt's inauguration was only one of many high visibility events for the University. The Rackham Graduate School celebrated its 50th year with a major symposium on Michigan's impact on higher education--an opportunity Duderstadt used to address the issue of intellectual change. The football team won the Big Ten championship and then beat USC to win the Rose Bowl. In the winter term CBS News chose to broadcast live its entire morning news program from Ann Arbor, referring to the University as "an institution that simply competes in a different league than most of its peers in higher education". The men's basketball team, led by an interim coach, Steve Fisher, won the NCAA championship. The Alumni Association introduced the Duderstadts as the new first family of the University to thousands of alumni across the nation in a live television broadcast via satellite to over 50 cities. And Duderstadt continued his themes of leadership and change in commencement addresses at both Michigan and Caltech.

Of course, all was not complete calm. There was still considerable activism on campus concerning racial issues, although Duderstadt's swift and energetic launch of the Michigan Mandate began to rapidly build support for this more positive agenda. Led in part by partisans of Wayne State and Michigan State, the Legislature launched another of its regular attacks on outstate enrollments at the University. And Governor James Blanchard attempted--unsuccessfully--to force the University to freeze its tuition levels even as he dropped state support even further in an effort to salvage the Michigan Education Trust, a "pre-paid tuition plan" that was seriously underpriced in order to gain political support.

Yet, it was also clear that the University was building on the momentum of the Shapiro years, gaining strength rapidly, and moving rapidly toward the compelling vision set out by Duderstadt.

## Academic Programs

The quality of the various academic programs of the University is determined by many factors such as resource commitments and capital facilities, but none more critical the quality of faculty and the standards applied in promotion and tenure. Harold Shapiro set academic excellence as the highest priority of the University, and both as provost and president raised significantly the expectations for faculty quality. Duderstadt continued this commitment, also as both provost and president, and the national rankings of the various academic and professional programs continued their upward climb. By the mid-1990s, Michigan had achieved rankings across the full range of undergraduate, graduate, and professional programs that were matched in academic quality by only a handful of peer institutions--notably Harvard, Stanford, and the University of California.

Of course, there is sometimes an ebb and flow in the fortunes of particular programs as University priorities shift, in response to societal needs. Consistent with the social themes of the times, the University placed great emphasis during the 1960s on the social sciences and professional schools such as Education, Social Work, and Law. The 1970s saw major emphasis on the health sciences, with major investments in Medicine, Dentistry, Nursing, Public Health, and Pharmacy--culminating in the commitment to a major new University Hospital in 1978. As both the state and the nation became concerned with issues such as economic competitiveness and industrial productivity in the early 1980s, the University once again shifted priorities to focus on Engineering and Business Administration.

Overlaid on these shifting priorities was the changing nature of University funding as state support continued to deteriorate throughout the 1980s. By the late 1980s it had become apparent that the College of Literature, Science, and Arts and, in particular, its undergraduate programs had suffered the most from the erosion of public support and the shifting priorities of the University. In part this was due to the sheer size of LS&A. Whenever budget cuts were necessary, LS&A had to take a cut since it had the largest share of resources. But, in part, this was also due to the trend in most large public universities in the post-war years to stress professional education--Business, Law, Engineering, Medicine--rather than undergraduate education.

Hence, beginning as provost and then as president, Duderstadt set firm priorities on restoring core support for both LS&A and improving the quality of undergraduate education. During the early years of his administration, this was done both through the provision of additional operating funds as well as special initiatives which benefited LS&A, e.g., the priority given to rebuilding the natural sciences, additional funding designed to improve the quality of first year

undergraduate education, and special salary programs for outstanding faculty. However, in later years, Duderstadt went beyond this to launch an ambitious program to renovate or rebuild all of the buildings housing LS&A programs, which had deteriorated during the 1970s and 1980s as the University had addressed other capital priorities such as the Hospital. In the decade from 1985 to 1996, the University invested more than \$350 million in capital facilities for LS&A, essentially rebuilding the entire Central Campus area.

The focus on improving the quality of the undergraduate experience was a clear priority of the Duderstadt administration. Early in his tenure, Duderstadt created the Undergraduate Initiative Fund to provide over \$1 million per year of grants to faculty projects aimed at improving undergraduate education. He built into the base budget \$500,000 per year to methodically upgrade and maintain the quality of all classrooms on the Central Campus. Major new student facilities were provided such as the Shapiro Undergraduate Library, the Angell-Haven Computer Center (then the largest student computer center in the nation), and, during his last year, the Media Union on the North Campus (a spectacular facility dedicated to providing students with access to state-of-the-art technology in areas such as world-wide networks, multimedia, and virtual reality). Strong incentives were also introduced for undergraduate teaching, such as a stress on teaching in faculty promotion and tenure decisions and the Thurnau Professorships for outstanding undergraduate teachers.

LS&A launched a major effort to improve the quality of its introductory courses, and it received national acclaim for its efforts in areas such as chemistry, biology, and mathematics. It introduced a broad array of seminar courses taught by senior faculty for first year students. And efforts were made to create more learning experiences outside of the classroom through student research projects, community service, and special learning environments in the resident halls. So, too, other schools such as Engineering, Business Administration, Art, and Nursing launched major efforts to improve undergraduate education.

Similar efforts were launched to improve the quality of graduate and professional education. The School of Medicine completely restructured the medical curriculum to provide students early on with clinical experience. Business Administration redesigned its MBA program to stress teamwork and community service. Engineering introduced new professional degrees at the masters and doctorate level to respond to the needs of industry for practice-oriented professionals. The School of Dentistry underwent a particularly profound restructuring of its educational, research, and service programs. The Institute for Public Policy Studies was restructured into a new School of Public Policy. And the School of Library Science evolved into a new School of Information, developing entirely new academic programs in the management of knowledge resources.

Similar progress was seen on the two regional campuses of the University, with both a dramatic expansion in academic facilities and a broadening of academic programs to better respond to the needs of their regions.

The University's professional schools continued to develop and offer high quality continuing education programs. Of particular note was the Executive Management Education of the Business School--ranked by some as the nation's leading program--and an array of postgraduate professional education programs conducted by Medicine, Law, and Engineering.

International education was also given high priority during the Duderstadt years. Following planning efforts led in the 1980s while he was provost, a series of steps were taken to broaden and coordinate the University's international activities. Michigan joined its Big Ten colleagues as a member of the Midwestern University Consortium for International Activities (MUCIA), the leading university organization for international development. The University created a new International Institute to coordinate international programs. It continued to expand its relationship with academic institutions abroad, with particular emphasis on Asia and Europe. Of particular note were the distance learning efforts of the Business School, which used computer and telecommunications technology, along with corporate partnerships, to establish overseas campuses in Hong Kong, Seoul, Paris, and London.

Yet, even as the Duderstadt administration placed new emphasis on education and the undergraduate, graduate, and professional school levels, it also strengthened substantially the University's research activity. This was not surprising, in view of Duderstadt's strong experience in research and his leadership of the National Science Board. Major investments were made in the research capability of the University through new research facilities (e.g., three major medical science research buildings, new physics and chemistry laboratories, and a major expansion of the laboratories of the College of Engineering).

Further, the University's government relations efforts in both Lansing and Washington were increased with the establishment of permanent offices and additional staff, as well as a strategic focus on key research initiatives. The payoff was almost immediate, as evidenced by the Research Excellence Fund approved by state government which channeled \$10 million a year into research activities such as microelectronics, robotics, and materials research. Similarly, the University was far better positioned to compete effectively for major federal research grants, including the establishment of major national centers such as the NSF Center for Ultrafast Optics, the National Cancer Research Center, the Human Genome Project, and the many programs of the Institute for Social Research. The University also became quite influential in national research policy through the efforts of Duderstadt, Homer Neal, Chuck Vest, and Farris Womack.

But most important of all were a series of strong incentives designed to encourage the efforts of faculty to seek sponsored research support. By providing faculty with discretionary funding indexed to research grant support, subsidizing the cost of equipment and graduate research assistants, and providing aggressive cost sharing, the University stimulated a highly creative and entrepreneurial faculty to increase efforts to attract research support. As a



result, the University of Michigan's ranking with respect to the amount of sponsored research activity rose from its traditional rank of 7th or 8th nationally to overtake MIT and Stanford to be ranked 1st in the nation. Put another way, by this measure, by the early 1990s, the University could rightly claim the title of America's leading research university. Beyond the impact that such research had on society in areas such as genetic medicine, public policy reform, information technology, and humanistic studies, this dimension of University activity greatly added to the intellectual excitement on campus and brought instructional programs to the cutting edge of the knowledge base.

Simultaneously with the effort to encourage grant-seeking activities of its faculty, the University also moved to adopt a far more aggressive stance toward technology transfer. In the late 1980s it modified its intellectual property policies to provide more faculty incentives for transferring knowledge developed on the campus through patents, startup companies, and industrial partnerships. Advisory groups were formed to assist in technology transfer and small business development. The University also worked to build strong partnerships with private sector companies, examples being the partnership to develop the Internet with IBM and MCI, the Flat Panel Display Center with OIS, the Fraunhofer Institute, with the German government and local industry, and the Tauber Manufacturing Institute with a consortium of business partners.

## Diversity

As this book has noted, one of the most distinguishing characteristics of the University throughout its long history was its commitment, as stated by President Angell, to provide "an uncommon education for the common man". It had long aspired to provide an education of the highest quality to all who had the ability to succeed and the will to achieve, regardless of gender, race, religious belief, nationality, and economic means. Yet, despite this effort, many suffered from social, cultural, and economic discrimination because of these characteristics. Hence, simply opening doors--providing access--was not enough to enable them to take advantage of the educational opportunities of the University.

To address this challenge, the University of Michigan began in the late 1980s to transform itself to bring all racial and ethnic groups more fully into the life of the University. This process of transformation was guided by a strategic plan known as the Michigan Mandate, that would respond more effectively to two of the principal challenges before us in the 21st century: first, the fact that our nation was rapidly becoming more ethnically and racially pluralistic; and second, the growing interdependence of the global community, which called for greater knowledge, understanding, and appreciation of human history than ever before needed in our history. Duderstadt, working closely with his new Vice Provost for Minority Affairs, Charles Moody and a team of experts on organizational change, assumed personal responsibility for the design, articulation, and implementation of the plan.

The purpose of the plan was to change the institution in such a way that all institutional barriers were removed to full participation in the life of the University and the educational opportunities it offered for peoples of all races, creeds, ethnic groups, and national origins. But it was also recognized at the outset that the strategic plan would really become only a road map. It was intended to set out a direction and point to a destination, but the journey itself would be a long one and much of the landscape through which the University would travel was still to be discovered. As the effort evolved, it attempted to deal with two themes that heretofore had appeared to be incompatible: community and pluralism. The goal of the effort was to strengthen every part of the University community by increasing, acknowledging, learning from, and celebrating the ever-increasing human diversity of the nation and the world.

In these efforts the University was committed to the long view that would require patient and persistent leadership. Progress would also require sustained vigilance and hard work as well as a great deal of help and support. The challenge was to persuade the community that there is a real stake for everyone in seizing this moment to chart a more diverse future, that the gains to be achieved would more than compensate for the necessary sacrifices.

The specific initiatives designed to move toward the goals of the Michigan Mandate were as follows:

Faculty recruiting and development: to substantially increase the number of tenure track faculty in each underrepresented minority group; to increase the success of minority faculty in the achievement of professional fulfillment, promotion, and tenure; to increase the number of underrepresented minority faculty in leadership positions.

Student recruiting achievement and outreach: achieve increases in the number of entering underrepresented minority students as well as in total underrepresented minority enrollment; establish and achieve specific minority enrollment targets in all schools and colleges; increase minority graduation rates; develop new programs to attract back to campus minority students who have withdrawn from our academic programs; to design new and strengthen existing outreach programs that have demonstrable impact on the pool of minority applicants to undergraduate, graduate, and professional programs.

Staff recruiting and development: to focus on the achievement of affirmative action goals in all job categories; to increase the number of underrepresented minorities in key University leadership positions; to strengthen support systems and services for minority staff.

Improving the environment for diversity: to foster a cultural and diverse environment; to significantly reduce the number of incidents of racism and prejudice on campus; to increase community-wide commitment to diversity and involvement in diversity initiatives among students, faculty, and staff; to broaden the base of diversity initiatives, for example, by including

comparative perspectives drawn from international studies and experiences; to ensure the compatibility of University policies, procedures, and practice with the goal of a multicultural community; to improve communications and interactions with and among all groups; and to provide more opportunities for minorities to communicate their needs and experiences and to contribute directly to the change process.

Over the course of 1988 a series of carefully focused strategic actions were developed to move the University toward these objectives. These strategic actions were framed by the values and traditions of the University, an understanding of our unique culture, and imaginative and innovative thinking. A good example of this approach was the Target of Opportunity faculty recruitment program. The central administration sent out the following message to the academic units: be vigorous and creative in identifying minority teachers/scholars who can enrich the activities of your unit. Do not be limited by concerns relating to narrow specialization; do not be concerned about the availability of a faculty slot within the unit. The principal criterion for the recruitment of a minority faculty member is whether the individual can enhance the department. If so, resources will be made provided by the central administration to recruit that person to the University of Michigan. In this way some important academic barriers for minority recruitment were removed. Those departments that were able to identify candidates found rapidly that their vitality was not only enhanced, but their numbers were enlarged.

The Target of Opportunity program was an example of idealism joining self-interest; it also provided an example of breaking down the barriers. Similar initiatives were established for the financial support of minority graduate students. Major research efforts were launched to understand better the key factors in faculty and student success. Units--and their leaders--were held accountable for their success in increasing and sustaining the representation of minority students, faculty, and staff. And the University took a series of highly visible actions, ranging from the extensive on- and off-campus leadership of Duderstadt to designating Martin Luther King's birthday as a University day to celebrate and understand the importance of diversity to awarding an honorary degree to Nelson Mandela.

The Michigan Mandate had a remarkable impact on the University. During Duderstadt's tenure, the number of students of color doubled to over 8,000, (25% of the student body), with African American enrollment increasing to 3,000 (10%). Graduation rates of underrepresented minority students rose to the highest among public universities in America and comparable to the most selective private institutions. Further, the Target of Opportunity program led to the doubling of the number of faculty of color, with success (tenure and promotion) rates comparable to that of majority faculty. The University of Michigan became known as a national leader in embracing the importance of diversity in education and taking actions to yield a truly multicultural learning community.

Drawing on this experience, in the early 1990s the University launched a second major initiative aimed at increasing diversity: The Michigan Agenda for Women. Like the Michigan Mandate, the vision was again both simple yet compelling: that by the year 2000 the University would become the leader among American universities in promoting and achieving the success of women as faculty, students, and staff. Again, Duderstadt took a highly personal role in this effort, meeting with hundreds of groups on and off campus, to listen to their concerns and invite their participation in the initiative. And rapidly there was again significant progress on many fronts for women students, faculty, and staff, including the appointment of a number of senior women faculty and administrators, improvement in campus safety, and improvement of family care policies and child care resources.

The University also took steps to eliminate those factors which prevented other groups from participating fully in its activities. For example, it extended its anti-discrimination policies to encompass sexual orientation and extended staff benefits and housing opportunities to same-sex couples (actions which were strongly supported on campus, but which drew the wrath of the religious right wing of the Republican party). Massive investments were made in renovating University facilities in an effort to provide better access for the disabled.

Economic diversity has also been a long-standing goal of the University. Despite the necessity of rising tuition in the wake of deteriorating state support, Michigan was able to maintain effective financial aid programs that preserved access to the University by students from all economic backgrounds. This was demonstrated both by the high admission yields for those in lower income groups, along with rising student retention rates.

Although the University's efforts to achieve diversity received the strong support of most members of the University community and alumni, this efforts were not accomplished without considerable resistance. In the mid-1990s the mood of the nation began to shift toward the right, and the University was attacked more frequently for its stances on issues such as affirmative action and gay rights. . Indeed, during the last years of Duderstadt's tenure, even as other institutions such as the University of California were backing away from affirmative action programs, Duderstadt, with the strong support of the campus community, publicly reaffirmed the University's strong commitment to the Michigan Mandate and established even further the leadership in higher education.

These political forces began to affect the Board of Regents, resulting in the election of new conservatives that joined others on the Board who had opposed the University's diversity efforts. There was little doubt that Duderstadt's deep commitment to diversity and his outspoken efforts to lead the University in this direction were not well received by several of the newer Regents, who preferred a far more conservative--and homogeneous--campus. This was particularly evident during Duderstadt's last year as president and almost certainly played a major role in his decision to step down.

## Student Life

Michigan has long attracted an activist student body. Indeed, in the 1880s, Harper's referred to one of Michigan's most interesting characteristics as "the liberal spirit through which it conducts education". Michigan students have long driven not only much of the agenda of the University, but beyond that, they were frequently been the social conscience of a nation, e.g., the Vietnam teach-ins, Earth Day, and BAM.

Yet, this tradition of activism, while being a source of great energy and excitement, also had its drawbacks--particularly when the issues and agendas were not sufficiently compelling. As the mood of the nation shifted away from confrontation and dissent in the 1980s, so, too, did the majority of Michigan's student body become more conservative and detached from the agendas of various special interest groups. As a result, those remaining activist elements of the student body became increasingly focused on narrow special interest agendas, even as the silent majority of students became more passive and focused instead on personal issues such as grades, social life, athletics...and job prospects! This was reflected in student government, in which only the more activist--indeed, radical--students would care passionately enough about particular issues to expend the energy to run for elected office. It was also reflected, unfortunately, in the attitude of administrators and faculty toward such student activism that it should be treated with benign neglect until it burst into flames that required a fire drill.

This was further complicated by another hangover of the 1960s--the large number of staff in the student services area who had been members of this generation and who harbored as much distrust and disrespect for "the establishment" as did the more activist students themselves. Indeed, it was not uncommon to find that many staff, themselves, were pot-stirring among the activist students, encouraging them to protest on various special interest agendas.

Key in changing a Michigan student culture, stagnating between those still trapped in the 1960s and those who had rejected student activism as irrelevant to their personal concerns, was the appointment of Dr. Maureen Hartford as Vice President for Student Affairs. Hartford came with extensive experience at other universities. But, more significant, she came with a deep respect, concern, and love for students that was immediately obvious to those on the search committee that recommended her appointment. During her first week on campus, she checked into South Quad to spend several nights with students, learning more about their lives. She rapidly gained the respect of even the most activist students. Over time, she managed to stimulate a similar degree of respect for student concerns within the administration and the faculty. Within a few months it was clear that a true sea change had occurred in the student culture, and there was a rapid growth of interest in student government among our very academically-strongest students.

But despite the mutual respect and affection between Hartford and the student body, she faced several particular challenges in which her reputation for toughness--an earlier nickname of "Atilla, the Hen"--would prove valuable.

The issues characterizing student activism in the late 1980s were common to most other campuses: military research on campus, gay rights, racism. Yet Michigan had one additional issue that would have seemed almost absurd on other college campuses: the absence of any policy for student discipline and campus safety. One of the hangovers of the volatile days of the 1970s had been the elimination of a code of student conduct. The elimination of this policy in 1974 had been intended only as a temporary lapse pending the development and adoption of a new code. But student government was given veto power over the process, and it had consistently exercised this to prevent the development or adoption of a new disciplinary policy. As a result, the University had gone for almost 15 years without any of the student disciplinary policies characterizing every other college or university in the nation. The only option available for student disciplinary action was to utilize an obscure Regents Bylaw that gave the president the authority to intervene personally to handle each incident.

Although the University knew it was at some risk in the absence of such a student code--and, indeed, out of compliance with federal laws that required such policies to govern areas such as substance abuse--each time an effort was made to develop a code, it was blocked by activist students.

There was yet another issue of great concern to many students--but also providing opportunities for protest to others who resented any authority: campus safety. For most of the University's history, Ann Arbor was a rather simple and safe residential community. But as Southeastern Michigan evolved in the post-war era to "metroplex" with intricate freeway networks linking communities together, Ann Arbor acquired more of an urban character, with all of the safety concerns plaguing any large city. While many aspects of campus safety could be addressed through straightforward and noncontroversial actions, such as improving lighting or security locks on residence hall entrances, there was one issue unique to the University that proved to be more volatile: the absence of a campus police force. Unlike every other large university in America, the University had never developed its own campus police and instead relied on community police and sheriff deputies. This had caused some difficulties in the activist days of the 1960s when Sheriff Doug Harvey had adopted a highly confrontational approach to student unrest. Throughout the 1980s it became more and more evident that local law enforcement authorities simply would never regard the University as their top priority. Their responsiveness to campus crime and other safety concerns was increasingly intermittent and unreliable. Further, most other universities had found that the training and sensitivity required by police dealing students was far more likely to be present in a campus-based police organization than in any community police force.

The issues of both the code of student conduct and a campus police came to a focus in 1992 when a University task force on campus safety strongly

recommended that both be established. Although surveys indicated that most students supported both steps, a number of student groups--including student government--rapidly put together a coalition to protest "No cops, no codes, no guns". As the University took formal action to establish the campus police, a series of protests occurred, including one on a particularly warm day in late fall in which students camped out on the lawn of the President's House to "bury student rights"!

But, like most protests resisting efforts to bring the University in line with the rest of higher education, these rapidly faded as the campus police was established and not only demonstrated that they could reduce crime on campus, but further that they were far more sensitive to student needs and concerns than the local Ann Arbor police. Indeed, several years later students again protested--this time to urge more campus police in preference to the use of community police.

A series of actions were taken to improve campus safety, beyond the formation of a campus police organization. Major investments were made to improve campus lighting and landscaping. Special programs were launched such as the Sexual Assault Prevention and Awareness Center, the Night Owl transportation service, a Safewalk escort service in which students served as nighttime security escorts, and the Task Force on Violence Against Women. Broad programs were undertaken to address the concerns of substance abuse on campus, with particular attention focused on alcohol consumption. The University also addressed the hazards of smoking by making most of the campus a smoke-free zone, including all public spaces (even Michigan Stadium!) It developed programs to help members of the campus community stop smoking.

There was a major change in Greek life during the Duderstadt years. Since the 1960s, the University had generally kept arm's length distance from fraternities and sororities, even though over 6,000 undergraduates each year chose these as their residential community. This reluctance to become involved grew, in part, from the University's concern about liability for the institution should it become too closely linked with Greek life. This attitude of benign neglect changed in the late 1980s, when the University--and the Ann Arbor community--became increasingly concerned about a series of fraternity incidents involving drinking and sexual harassment. The University concluded that it had a major responsibility both to its students and the Ann Arbor community to become more involved with the Greeks.

Duderstadt led this effort by calling for a special meeting with the presidents of all of the University's fraternities in which he challenged them to address the growing concerns about their behavior. He noted that if they valued Michigan's heritage of leadership, they would strengthen their own capacity to discipline renegade members through organizations such as the Interfraternity Council. Although Duderstadt issued a strong challenge for self-discipline, he also indicated quite clearly that the University would act with whatever force was necessary to protect the student body and the surrounding community.

This challenge was picked up by fraternity leaders, and a new spirit of responsible behavior--and discipline--began to appear. Policies were adopted forbidding drinking during rush and strong sanctions for entertaining minors from the Ann Arbor community in the houses. With the arrival of Vice President Hartford, the University took further steps by hiring a staff member to serve as liaison with the Greeks. This was not to suggest that incidents did not occur in the Greeks. Indeed, several fraternities suffered from such a pattern of poor behavior that their national organizations agreed to withdraw their charter and they were removed from campus. But the nature of Greek life was one of far greater responsibility and self-discipline.

During the 1980s, the number of high school graduates in Michigan dropped by over 25%, as the post-war baby boom subsided. Although this led to a decline in the number of Michigan applicants to the University, increases in the number out-of-state applicants more than offset this decline to the point where almost 20,000 students were applying for the 5,000 positions in the freshman class. While some of this increase in out-state application activity was no doubt due to the ease of filing multiple applications with personal computers, it was also due to the fact that Michigan had become a "hot school", a popular choice to students across the country because of its unusual combination of academic quality, attractive social life, excitement (athletics, politics, arts), and name recognition. Hence, although the University had been worried that about the impact of the demographic slide following the baby boom, in fact, student quality continued to improve throughout the 1980s and 1990s, with each class possessing academic credentials even stronger than the previous class. This increase in student quality also verified the strategy of the Michigan Mandate, since the University was clearly becoming academically better as it became more diverse. Indeed, student surveys suggested that many students chose to attend Michigan because they sought the experience of a highly diverse institution.

## Financial Strength

One of the most significant trends of the 1970s and 1980s, the erosion in state support, continued into the 1990s. Indeed, over this three-decade period, state appropriations dropped from 70 percent of the University's operating budget in the 1960s to less than 10% in the mid-1990s. Further, as the state's tax base dropped below the national average, and other social needs such as K-12 education and prisons passed higher education as priorities, it was clear that further decline in state support was inevitable for the foreseeable future. As Duderstadt put it, the University of Michigan had evolved from a "state supported" to a "state assisted" to a "state related" and, finally, to a "state located" university. Michigan would become the first of America's great public universities--although soon to be joined by many others--that faced the challenge of supporting itself from predominantly private sources.

The University not only met this challenge, but it actually thrived during this transition period, by intensifying the three-tiered strategy developed during the Shapiro years: i) effective cost containment, ii) wise management of resources,



and iii) aggressive development of alternative revenue sources. Following the recommendations of a major task force on costs chaired by then-Dean of Business, Gil Whitaker, the University implemented an institution-wide total quality management program in the early 1990s. This was patterned on the award-winning program in the University Hospitals. It empowered staff and faculty at all levels to seek ways to enhance the quality of their activities while constraining costs. The University moved toward more realistic pricing of both internal and external services (e.g., facilities maintenance, tuition and fees, research overhead). And in the mid-1990s, it completed the decentralization of both resource and cost management to the unit level through a budgeting system known as *responsibility center management*, similar to that used in many private universities. In this system, units were allowed to retain all revenues. They were then assessed the costs associated with their activities, and taxed on all expenditures to support university-wide services such as safety. This system provided strong incentives for generating revenues and containing cost. It allowed local management controls at the unit level as key in more efficient operation.

As evidence of the effectiveness of these efforts, by the mid-1990s peer comparisons ranked the University's administrative costs (as a percentage of total expenditures) third lowest among major research universities. Yet another sign of the efficient use of resources was provided that the fact that while essentially all of the University's programs were ranked among the top ten nationally in academic quality, the University ranked roughly 40th in terms of expenditures per student or faculty member. More specifically, it was able to provide an education of the quality of the most distinguished private institutions at typically one-third the cost!

The second element of the strategy involved far more aggressive management of the assets of the University--its financial assets, its capital facilities, and, of course, its most valuable assets, its people. VPCFO Farris Womack moved rapidly in the late 1980s to put into place a sophisticated program to manage the investments of the University. He built a strong internal investment management team augmented by knowledgeable external advisors, including several University alumni. Particular attention was focused on the University endowment, which amounted to only \$250 million in 1988, small by peer standards and quite conservatively managed. Through Womack's aggressive investment management, coupled with a highly successful fund-raising effort, the University was to increase its endowment to over \$1.5 billion by 1996--a truly remarkable growth of six-fold. During this period, Michigan consistently ranked among the national leaders in the endowment earnings.

Similar attention was focused on the management of the University's financial reserves such as operating capital and short term funds. By establishing the concept of a centralized bank, Womack was able to bring more than \$1 billion of additional funds associated with the various operating units of the University under sophisticated investment management.

As we will note later, Womack's team put into place a plan for eliminating the backlog of deferred maintenance which had grown during the difficult budget period of the 1980s. Since state support for maintenance had effectively disappeared, the University put into place a special student fee dedicated that generated roughly \$10 million per year to maintain its physical infrastructure.

The University also put into place a modern program to manage and develop its human resources. It established a senior position of Executive Director of Human Resources which pulled together all of the reporting lines in the personnel and affirmative action areas. It also took steps to address a number of key staff concerns, such as staff development, high performance workplace policies, flexible staff benefits, and dependent care.

The University also took steps to more realistically price its services. One of the most difficult tasks from a political standpoint was to charge more realistic tuition levels for instate students. Although the University had long charged essentially private tuitions to out-of-state students, acknowledging a state policy which dictated that state tax dollars could be used only for the support of Michigan residents, instate tuition had been kept at only token levels throughout the 1960s and 1970s. However, as state support declined, it became clear that the eroding "state subsidy" of the cost of education for Michigan residents no longer justified these low tuitions. Throughout the 1980s, the University began to raise instate tuitions to more realistic levels, although this frequently triggered political attacks from both state government and the media. By the mid-1990s, student tuition revenue had been increased to over \$400 million, far exceeding the University's annual state appropriation of \$290 million. Throughout this period of tuition restructuring, the University was able to increase the financial aid awarded students so that it could sustain its policy that no instate student should be denied a Michigan education for lack of economic means.

The financial strength of the University also benefited from the remarkable success of its faculty in attracting research grants and contracts from both the federal government and industry. As we noted earlier, the University rose to the position of national leadership by this measure of research activity, and by 1995 its sponsored research support was over \$420 million per year--again substantially larger than state support.

The third resource stream of the University involved charges for auxiliary services it provided to the public, namely those activities such as clinical patient care and continuing education that generated revenues beyond those of the academic programs. Key in this effort was the remarkable success of the University Hospitals and related Medical Service Plans which were generating almost \$1 billion of revenue by the mid-1990s. Indeed, it was the revenue associated with these clinical activities which supported much of the remarkable growth of the Medical School. So, too, other auxiliary enterprises such as the Executive Management Education program of the Business School, the Housing Division, and the Department of Athletics also saw very considerable success during this period.

The University had been one of the first public universities to recognize the importance of private fund-raising, with the 55M campaign of the 1960s and the \$180 campaign of the 1980s. However, as the prospects for state support became dimmer, it became clear that private support would extend beyond providing simply the margin of excellence for the University's academic programs, and increasing provide their base operating funds as well. Early in the Duderstadt administration, a very aggressive goal was set to build private support, as measured by the combination of gifts received and income distributed from endowment, to a level comparable to state support by the year 2000.

To this end, the University launched the largest fund-raising campaign in the history of public higher education by setting as a goal the raising of \$1 billion by mid-1997. A sophisticated University-wide development effort was built and hundreds of volunteers were recruited across the nation. The Campaign for Michigan was officially announced in September, 1992--the weekend of the spectacular victory over Notre Dame won by Desmond Howard's Heisman-Trophy-Award-Winning catch of a touchdown pass.

The fund-raising effort was extraordinarily successful. By the end of Duderstadt's tenure, the University had already gone well past its \$1 billion goal, a year ahead of schedule. Annual gifts had grown from \$60 million per year in 1988 to over \$150 million per year in 1995. And, total annual private support, including endowment income exceeded \$220 M per year, well ahead of schedule to surpass the state appropriation of \$290 M per year by the end of the decade.

This combined strategy of effective cost containment, sophisticated asset management, and alternative resource development provided the University with extraordinary financial strength, despite the continued deterioration in state support. As one measure of this financial integrity, in 1994 the University became the first public university in history to have its Wall Street credit rating raised to Aa1, placing it comparable to the wealthiest private universities. Michigan, with an operating budget amounting to over \$2.6 billion per year, had become the envy of both public and private universities throughout the nation.

## Rebuilding the University

One of the most remarkable accomplishments of the University during the Duderstadt years was the rebuilding of all of its campuses. During the decade from 1986 to 1996, the University completed over \$1.4 billion of major construction projects that provided essentially every program of the University with a physical environment of unprecedented quality.

Yet, in the mid-1980s, this challenge seemed almost hopeless. Throughout the 1970s and 1980s, the state had provided little support for campus facilities, aside from the commitment to rebuild the University Hospitals, which had diverted state dollars which would have otherwise been available for academic facilities to the support of patient care. Although there were some state-funded projects in the early 1980s, such as EECS engineering building, the Chemical Sciences

Laboratory, and a science facility at UM-Flint, this state commitment paled in comparison with the needs of the academic programs of the University, particularly on the Central Campus. Many of the most distinguished academic programs of the University were housed in ancient buildings, in bad need of repair, and totally inadequate for modern teaching and research.

Yet, in the late 1980s, several factors converged simultaneously to provide the University with a remarkable window of opportunity for rebuilding its campuses. First, falling interest rates, coupled with the University's high credit rating, made it quite inexpensive to borrow money. Second, because of a weak economy, there were few competing construction projects underway in the private sector, and hence construction costs were quite low. Third, the University's success in auxiliary activities, including private support, clinical revenue, and continuing education fees, was beginning to generate substantial revenue. And, fourth, the University was able to convince Governor Engler to launch a major state capital facilities programs, with the understanding that the University would match the state effort through the use of its own funds.

But there was one final ingredient. Duderstadt managed to convince the Regents that the University should debt-finance critically-needed academic facilities using student fees. While this was a common device in private universities, Michigan had generally used student fees to finance only non-instructional facilities such as Chrysler Arena, depending on state funding for academic facilities. To make this step more politically palatable in the face of concerns about rapidly rising tuition, the administration developed a plan of shared sacrifice in which faculty and staff salaries were held level during the first year of the new fee. (This latter step earned Duderstadt some harsh criticism from some faculty members, even though the lapse in salary increases was only temporary and more than made up through strong salary programs in later years.)

The Medical Center led the way with a series of new teaching, research, and clinical facilities that augmented the new Adult General Hospital. A new Child and Maternal Health Care Hospital replaced Mott and Women's Hospitals. A high-rise Cancer and Geriatrics Center was constructed. A trio of sophisticated research laboratories, Medical Science Research Buildings I, II, and III came on line to keep the Medical School at the forefront of biomedical research, while also housing the Howard Hughes Medical Research Institute. As the Medical Center growth began to strain against the limits of its downtown Ann Arbor site, the University Hospitals acquired a large site northeast of Ann Arbor and began to develop its East Medical Campus to respond to the need for additional primary care facilities. It also developed new primary care facilities throughout southeastern Michigan, including a major concentration in the Briarwood area in south Ann Arbor.

The last remaining facilities needed to complete the North Campus were completed, including the FXB Building for aerospace engineering, the Lurie Engineering Center, and the Media Union, a remarkable digital library and multimedia center. Further, the eminent American architect--and University

alumnus--Charles Moore was commissioned to design a striking carillon, the Lurie Bell Tower, that rapidly became the symbol for the North Campus.

There was also extensive construction activity on the South Campus of the University, including the renovation or construction of most athletic facilities. Michigan Stadium was renovated, and a natural grass field was installed. In the process, the stadium floor was lowered so that an additional 3,000 seats could be added, thereby increasing the capacity of the stadium to 106,000. Other new or substantially renovated facilities included Canham Natatorium, Schembechler Hall, Keen Arena, Weidenbeck Hall, Yost Arena, the Michigan Golf Course, the varsity track, and the new Michigan Tennis Complex. New facilities were provided to support business operations, including the Wolverine Tower and the Campus Safety Office.

Most encouraging of all was the great progress in addressing the critical needs of the Central Campus. The Undergraduate Library, appropriately referred to as the "ULGI", was surrounded by an attractive shell, totally renovated, and dedicated as the Shapiro Library. The Physics Department benefited from a major new research laboratory. A major building was constructed between Angell and Haven Halls to serve the humanities faculty. Total building renovations were accomplished for East Engineering, West Engineering, C. C. Little, Angell Hall, the LS&A Building, Frieze, Mason, and Haven Halls. And a marvelous new building was built for the School of Social Work.

Similar progress was made on the University's regional campuses. UM-Dearborn benefited from new classroom and laboratory facilities, while UM-Flint brought on line a new science laboratory, library, and administrative center. Further, UM-Flint was given the AutoWorld site, along with funds for site preparation, by the Mott foundation, as the first stage of a major expansion of the campus.

There was also a substantial effort to improve the landscaping and appearance of the campus. With the completion of the major construction projects on the Central Campus and North Campus, new master plans were developed and launched, including the Ingalls Mall and Diag projects on the Central Campus, and the "North Woods" landscaping plan for the North Campus.

While the rebuilding and/or major renovation of most of the University's campuses during the decade was an extraordinary accomplishment, of comparable long-term importance was the massive effort to eliminate the deferred maintenance backlog that had arisen during the 1970s and 1980s. Further, major efforts were made to provide ongoing support for facilities maintenance so that such backlogs would not arise again in the future.

## Technology

It was appropriate that Michigan should have been led by a scientist and engineer--indeed, a winner of the National Medal of Technology--during the late

1980s and 1990s, since technology was to play such a significant role in the future of higher education. Four key themes were converging during the Duderstadt years: i) the importance of the university in an age in which knowledge had become a key factor in determining security, prosperity, and quality of life; ii) the global nature of our society; iii) the ease with which information technology--computers, telecommunications, multimedia--enabled the rapid exchange of information; and iv) networking, the degree to which informal cooperation and collaboration among individuals and institutions was replacing more formal social structures such as governments and societal structures.

Duderstadt and his colleagues were determined to play a significant role in all of these arenas. During the 1980s, the University had recruited some of the nation's leaders in these areas, including Doug Van Houweling from Carnegie-Mellon, Lynn Conway from Xerox, Doug Hofstadter from Indiana, Randy Frank from Utah, joining with campus leaders such as Dan Atkins, Bernie Galler, John Holland, and Gary and Judy Olsen. Drawing from the experience of major projects such as the Computer Aided Engineering Network in Engineering, Van Houweling led a major effort that resulted in the University joining with corporate partners IBM and MCI to managed the NSFnet, the backbone of the rapidly developing Internet. This positioned the University to play a key leadership role in the evolution of the "information superhighway", as it evolved into a world-wide network linking hundreds of millions of people. Even as the University provided this national leadership, it was continuing to make substantial investments in its oncampus information technology environment that kept it at the cutting edge for students, faculty, and staff.

Rather than focusing its efforts to develop sophisticated computing capability for a handful of scholars, as did many other universities who invested in supercomputers and such, Michigan instead followed a philosophy of "power to the people"--namely, to provide as much computer and networking capability as possible to as many members of the University community as it could. It was determined to provide students and faculty with maximum flexibility and few constraints, so they could let their creativity and curiosity drive their use of these resources.

Through close cooperation with industrial leaders such as IBM, Apple, Sun, MCI, Xerox, and Hewlett-Packard, the University established itself as a clear leader in the quality of its information technology environment for teaching and research. It played a key role in developing much of the technology used in modern network, and it managed the transition from time-sharing mainframe systems to client-server networks. Through innovative programs such as the Fall Kickoff Computer Sales by which sophisticated computer systems were sold to students at deep discount, the Rescomp program that placed numerous clusters of sophisticated computers directly into the residence halls, and the unusual array of oncampus computing resources and centers--including massive facilities such as the Angell-Haven Computer Center and the Media Union--it provided students with extraordinary access to this technology.

The University also began to play a leadership role in the "digital age", through its leadership of the national digital library project, the evolution of its School of Library Science into a new School of Information focused on the management of digital information, and the Media Union which established Michigan as a leader in the development and use of multimedia technologies. It also developed and provided to faculty and students one of the most comprehensive closed-circuit television networks, so-called "UMTV", that placed dozens, and eventually hundreds, of television broadcasting stations in the hands of students for use over the University's broad-band networks.

By the mid-1990s, Michigan was recognized throughout the world as one of the true leaders in the development, application, and use of digital technology. It was exceptionally well-positioned for leadership as this rapidly evolving technology revolutionized the nature of an increasingly knowledge-driven civilization.

### Transformation of the University Medical Center

Perhaps nowhere else in the University was change such a constant presence as in the Medical Center. The nature of health care delivery, education, research, and financing was changing very rapidly, and medical schools and teaching hospitals were struggling not just to adapt but even to survive. Fortunately, the University benefited from an extraordinary leadership in these activities.

Harold Shapiro himself had played a key role in setting out the long term strategy for the Medical Center. As an economist, he understood well the manner in the changing nature of the marketplace would drive great changes in health care delivery and financing. Many leaders of the Medical Center deserve mention here, but in particular, John Forsyth, Executive Director of the University Hospitals; George Zuidema, who as Vice-Provost for Medical Affairs, understood the important relationships between academic medicine and clinical care financing; Giles Bole, who as Dean of Medicine, led the necessary redirection of the Medical School; and Bill Kelley, Chair of Internal Medicine, who established the University's programs in exciting new areas such as genetic medicine.

Earlier leaders of the University, notably Presidents Fleming, Smith, and Shapiro, had "bet the ranch" on the Replacement Hospital Project, at \$350 million, the largest project in the history of the University. Although this was an extraordinary gamble, particularly during the early 1980s when the state's economy was in a deep recession, the new facility provided the University Medical Center with a highly competitive advantage as it came on line in the late 1980s. This, coupled with a series of restructuring and cost-reduction efforts led by Forsyth, rapidly positioned the University Hospitals as among the most profitable in the nation. Indeed, during the early 1990s, the Hospitals were routinely generating surpluses of \$50 million or more each year. Hospital reserves grew to over half-a-billion dollars, and a combination of Hospital reserves and clinical income generated by Medical School faculty funded an

extraordinary period of new research and clinical facilities, including sophisticated research laboratories, a new pediatric and women's hospital, a cancer center, a geriatrics center, and extensive outpatient facilities.

Yet, the changes in health care delivery and financing continued to accelerate as increasing resistance to health care costs led to strong market forces driving intense competition and new health care organizations to provide managed care. Again, the leadership of the Medical Center was visionary, and launched major new efforts such as the M-Care HMO, a network of primary care facilities scattered throughout southeastern Michigan, including a new medical campus in northeast Ann Arbor, and important strategic alliances with hospitals and health care insurance providers.

As each wave of changes in health care swept across the nation, the University Medical Center, both because of commitments made in the past and an aggressive vision for the future, seemed to thrive and become even stronger. By the mid-1990s, the renamed University Health System had grown to over \$1 billion in clinical activity, and together with the teaching and research activities of the Medical School, represented over 50% of the budget of the entire University.

### Strengthening the Bonds with External Constituencies

Much of the attention of the Duderstadt administration was directed at building far stronger relationships with the multitude of external constituencies served by and supporting the University. Efforts were made to strengthen bonds with both state and federal government, ranging from systemic initiatives such as opening and staffing new offices in Lansing and Washington to developing personal relationships with key public leaders (e.g., the Governor, the White House). A parallel effort was made to develop more effective relationships with the media at the local, state, and national level. These included major media campaigns such as the Big Ten public service announcements and national organizations such as the Science Coalition. Additional efforts were directed toward strengthening relationships with key communities including Ann Arbor, Detroit, and Flint.

Higher education faced a paradoxical situation it approached the 1990s. On the one hand, it was clear that the university was becoming a more critical player in a society increasingly dependent upon knowledge, upon educated people and their ideas. Universities were not only more important to society than ever, but they were more deeply engaged through a broad range of activities ranging from education to health care to public entertainment (through athletics).

Yet, even as the university moved front and center stage, it also came under attack from many directions: the cost of education, political activities on campus, student and faculty behavior. The American university became for many just another arena for the exercise of political power, an arena for the conflict of



fragmented interests, a bone of contention for proliferating constituencies. It was increasingly the focus of concern for both the powerful and the powerless.

The political environment faced by the University changed dramatically during the 1970s and 1980s. In earlier times, when the state provided the bulk of our budget, it had enjoyed a privileged position in Michigan. Many of our alumni were in the legislature and in key positions in government and communities across the state. Political parties were disciplined in the economic, ethnic, and other divisions; and special interests had not yet splintered party solidarity. In that environment the University had little need to cultivate public understanding or political leaders. A few leaders from the University met with the governor and leaders of the legislature to negotiate its appropriation. That was it. It was valued and appreciated. There was a historic and intense public commitment to the support of public higher education that characterized our founders and the generations of immigrants who followed, who sacrificed to provide quality public education as the key to their children's future.

But gradually that world had disappeared. Michigan began experiencing a profound economic transformation. The University's state support began to decline. Political parties declined in influence. Special interest and constituencies proliferated and organized to make their needs known and influence felt. Even as the University became more central, it was also held more accountable to its many publics. Key to thriving in this more complex political environment was the objective of building effective mechanisms to interact more broadly both with state government and the people of Michigan.

Compounding the complexity of this situation was a growing socioeconomic shift in priorities at both the state and federal level. In Michigan, as in many other states, priorities shifted from investment in the future through strong support of education instead to a short term focus, as represented by the growing expenditures for prisons, social services, and federal mandates such as Medicare. This was compounded by legislation which earmarked a portion of the state budget for K-12 education, leaving higher education to compete with corrections and social services for limited discretionary tax dollars. As a result, Michigan's support for higher education declined rapidly in real terms during the early 1980s and continued to drop, relative to inflation, throughout the remainder of the decade.

This situation was made even more difficult by strong political pressures that threatened to constrain the University's primary alternative revenue stream, student tuition and fees. Through political polling surveys in the 1980s, Michigan's Governor, James Blanchard, learned about strong public concerns about the rising tuition--even though it was also known that these were directly driven by the decline in state appropriations as the state's public universities tried to compensate for the loss in state support. The governor launched a major political effort to constrain tuition as a cheaper alternative to providing adequate support for the state's universities in gaining political popularity. In parallel, the state established a prepaid tuition plan, the Michigan Education Trust, that portrayed itself as a state-guaranteed program to help parents meet the cost of a

college education--although, in reality, it provided no real guarantee and was constructed as a Ponzi scheme, in which the unrealistic price of early contracts would be compensated by later participants. Since the financial--and political--integrity of the Trust was heavily dependent on tuition levels, the governor launched a major effort to force universities to freeze tuition increases.

Duderstadt had worked closely developed an excellent working relationship with the Governor early in his administration on a range of technology-driven economic development issues. But he realized that he now had to resist the state's effort to dictate tuition, since these resources represented the only real alternative to maintaining the quality and health of higher education in Michigan during a time in which state support was declining. Duderstadt used his chairmanship of the President's Council of Public Universities to lead a bitter yet successful struggle to resist the governor's efforts to control tuition. He also fought hard to maintain the University's autonomy in areas such as the admission of out-of-state students.

With a new Republican administration coming to power in the early 1990s, the pressure on controlling university tuition and enrollments subsided somewhat--although state support continued to decline. But a new challenge appeared as Michigan State University broke apart from the unity and cooperation Duderstadt had built among Michigan's public universities and instead mounted an aggressive campaign to advantage itself in going after state dollars, largely at the University of Michigan's expense. This effort relied heavily on the fact that MSU alumni held most of the key positions in state government. Although initially successful, UM worked hard to rebuild the bond of common interest that had held together Michigan's public universities in more difficult times and reign in a maverick MSU.

A similar shift was also occurring in federal support of higher education. For almost half a century, the driving force behind many of the major investments in our national infrastructure had been the concern for national security in the era of the Cold War. Yet in the wake of the extraordinary events of the early 1990s--the disintegration of the Soviet Union and Eastern Europe, the reunification of Germany, and the major steps toward peace in the Middle East--the driving force of national security disappeared, and along with it, much of the motivation for major public investment. Far from a "peace dividend" providing new resources in a post-Cold War world for investment in key areas such as education and research, instead the nation began to drift in search of new driving imperatives. While there are numerous societal concerns such as economic competitiveness, national health care, crime, and K-12 education, none of these had yet assumed an urgency sufficient to set new priorities for public investments.

There were signs that the nation is no longer willing to invest in research performed by universities, at least at the same level and with a similar willingness to support understanding-driven basic research. Further, even the basic principles of this extraordinarily productive research partnership began to unravel, changing from a partnership to a procurement process. The government increasingly shifted from being a partner with the university--a

patron of basic research--to becoming a procurer of research, just like other goods and services. In a similar fashion, the university was shifting to the status of a contractor, regarded no differently from other government contractors in the private sector. In a sense, today a grant has become viewed as a contract, subject to all of the regulation, oversight, and accountability of other federal contracts. This view unleashed on the research university an army of government staff, accountants, and lawyers all claiming as their mission that of making certain that the university meets every detail of its agreements with the government.

Michigan's very success in rising to a position of national leadership in attracting federal support for its research activities placed it at considerable risk during this period of shifting federal priorities and attitudes. As America's leading research university, it generally was targeted by every federal effort to restructure the long-standing partnership between the nation and its universities. For example, although Stanford University was the primary target of the vicious attacks on research grant overhead charges by Congressman John Dingell's powerful investigative committee, Michigan also was attacked by committee staff members. Efforts to transfer more of the expense of federally-procured research to universities through artificial constraints on overhead payments or excessive cost-sharing requirements hit Michigan harder than most institutions.

Fortunately, Michigan also benefited from unusual capabilities in Washington. It established a permanent office in Washington, one block from Capital Hill, staffed with one of the strongest federal relations staffs in higher education. Further, several of the senior officers of the University were unusually experienced in the mysterious ways of Washington: Duderstadt, himself, was serving as the chair of the National Science Board, the nation's principal body for research policy and the board of directors of the National Science Foundation; Vice President Homer Neal served on numerous national boards and commissions; and Vice President Farris Womack was very experienced in Washington politics. The University not only managed to weather most of the storms generated by changing federal policies, but it continued to thrive and retain its position as the nation's leading research university.

The University continued to experience the usual ups and downs in its relationships with the city of Ann Arbor that had characterized not only its history, but town-gown relations in other campus communities. The factors causing tensions between the University and the city were also not surprising: rowdy students, traffic, competition for housing, removing property from the tax rolls. The efforts taken by the University to work more closely with fraternities and sororities to address neighborhood concerns had a positive impact. However, the further expansion of the University took additional property off the city tax rolls, and this soured town-gown relations. Further, the local newspaper fell into one of its adversarial periods, frequently attacking the University for its impact on the community, and totally ignoring, of course, the great impact of Michigan on the economic prosperity and culture life of Ann Arbor. Nevertheless, there was a genuine effort to strengthen relationships between the University leadership, city government, and leaders of the local

business community, and overall there was progress in improving town-gown relations.

The University also intensified its outreach efforts with other Michigan communities continue to move ahead. Its Schools of Education, Public Health, and Social Work intensified their activities with the metropolitan Detroit area. Many other units and individual faculty became engaged in research and service in Detroit and worked to strengthen relations with the city's leadership. Efforts with other Michigan cities also gained momentum. Of particular note here were the efforts of UM-Flint and UM-Ann Arbor to work closely with city government, industry, labor, private foundations, and private leadership to address a wide range of issues facing the City of Flint, including education, public health, and economic development.

The University also took important steps to improve its relationship with the media. It appointed Walter Harrison, the former head of a major national public relations firm, to the post of Vice President for University Relations, and he moved ahead rapidly to build a strong communications program capable of supporting all of the University's external relations activities.

### A Matter of Style

As the University became increasingly dependent on various external constituencies for financial support, political influence, and simply good will, it became imperative that the quality of those events and facilities used for institutional advancement be improved. As first lady of the University, Anne Duderstadt played a key role in these efforts.

Early in the Duderstadts' tenure, they took on the challenge of major renovation of the two primary ceremonial facilities of the University, the President's House and Inglis House. The President's House had been home to all eleven of the University's presidents. Its location in the center of the campus give it a special symbolism, much as the White House in Washington. Further, as the oldest building on the campus, it was of major historical significance. Although not originally designed as a home and evolving through over 150 years of modifications and renovations, an invitation to the President's House was always viewed as something very special.

When the decision was made to modernize the mechanical systems of the President's House during the last year of the Shapiro presidency, it was also recognized that such a massive system replacement would require as well significant renovation of the interior design. Funding was set aside so that carpets could be replaced, walls could be painted, and plaster repaired. However, when the Duderstadts assumed the presidency in the midst of this project, Anne Duderstadt suggested a different direction. Rather than simply replacing the existing carpets and decoration details, she instead worked within the original project budget to restore the house to its original elegance and style. Taking direct charge of both the design and the interior renovation project, the

first lady was able to restore the original beauty of the oak floors, molded panels, and decor of the house.

A similar opportunity soon presented itself with the Inglis House estate. Again, the driving factor was another project, in this case the need to replace the massive slate roof of the manor house which was in danger of collapse. It was soon realized that the cost of renovating the interior of the house could be accomplished through only a small addition to the original project cost. This was viewed as essential, since the Inglis House estate had deteriorated during the difficult budget times of the 1970s and 1980s to the point where it could no longer be used to entertain overnight guests. Indeed, the house at one point was even carpeted using orange and chartreuse carpets donated by the Holiday Inn chain! Again, Anne Duderstadt took responsibility for both the design and the renovation project. And again, she stripped the house to its original wood floors and paneling and then added design details appropriate for the period when the house was constructed. The entertaining areas and guest rooms were brought back to a style of great elegance. Further, working close with the gardening staff, the formal gardens and grounds of the Inglis House estate were totally replanted and nurtured back to their original elegance. Even the caretaker's cottage was renovated to serve as permanent housing for the family of the Inglis House caretaker.

Both the newly renovated President's House and Inglis House proved invaluable for the array of entertainment events associated with the Campaign for Michigan. But there were other important facilities that required attention. Anne Duderstadt worked closely with the staff of the Athletics Department and the University projects staff to redesign the entertaining areas in Michigan Stadium, including major redesigns of the reception and seating areas in the press box. She also supervised the design of additional entertaining areas in the University Golf Course Club House.

Beyond the array of facilities development, the first lady also built a strong staff that redesigned many of the events hosted by the University. And, as the quality of the events hosted by the President and executive officers increased, there was a strong ripple effect across the campus, resulting in an increase in quality in all areas. Yet, even as the standards for the quality of University events increased, Anne Duderstadt also was unrelenting in her expectation that costs be kept under control and subject to full public disclosure.

### Let the Sun Shine In

In the late 1970s, the Michigan State Legislature passed two rather poorly written sunshine laws governing public bodies. The Open Meetings Act (OMA) required that the meetings of public bodies be open to the press and members of the public. The Freedom of Information Act (FIOA) required public disclosure of any public documents not protected by personal privacy laws. While not initially regarded as exceptionally intrusive--although they did require the release of University information such as salaries and require public comments

sessions at each Regents meeting--through a series of subsequent court interpretations, the media was able to extend these laws until they became a tight web, constraining all aspects of University operation.

The University of Michigan was hit particularly hard by these laws. Prior to the mid-1980s, the Board and executive officers had been able to meet in informal, private sessions to discuss difficult matters. However, the OMA eliminated this channel of communication between the Board and the administration. For a time, the Board was able to continue to meet with the administration in subquorum groups ("four and four sessions"), but the courts subsequently interpreted this also as a "constructive quorum" and specifically outlawed such meetings. Hence, by the late 1980s, there was absolutely no mechanism that allowed the Board to meet with the administration for candid, confidential discussions other than those rare occasions when the OMA allowed such "executive sessions"--i.e., to seek an opinion of the General Counsel or to perform personnel evaluations. As a result, communications between the Board and the administration became very difficult and time-consuming. Further, the public Regents meetings frequently became circuses, with various Regents playing to the media and posturing on various political stances--particularly during election years.

This situation became even more difficult when in 1993 the Michigan Supreme Court ruled that the University's use of a subquorum search process in conducting the search for a president in 1987-88 was in violation of the law (the search that resulted in my selection as president). Although this was a close (5 to 4 vote) and somewhat ambiguous decision, a local district court judge used the decision to "punish the Board" by demanding that they release all written materials associated with the earlier search, including confidential notes and letters written about the candidates. Further, the Board was placed under a permanent injunction to follow the OMA to the letter in any future presidential search.

Although the administration urged the Board to appeal this lower court order because of concern that the release of confidential letters of reference and notes could embarrass both the University and hundreds of individuals who thought their input to the search had been given in confidence, the Regents decided not to appeal, and the materials were released. But even more serious was the court injunction, since it made it essentially impossible to conduct any but a totally open and public search for a president. Indeed, in one court interpretation, any private conversation between two Regents amounted to a constructive quorum and hence would be a violation of the injunction. Here it should also be noted that unlike a direct violation of the OMA when conducting other business, the Board fell under the far more stringent constraints of a court injunction on presidential searches, with corresponding criminal penalties for being found in contempt of this order.

In 1995, the Regents retained independent legal council to provide guidance on how to deal with the OMA and the FIOA. These attorneys from two of the leading law firms in the state reached the rapid conclusion that both laws could

probably not be applied to the University--particularly in presidential searches--because of the University's constitutional autonomy. While they were willing to give an opinion to this effect, they understood well the political and public relations difficulties in getting a court decision along these lines. In the end, they recommended strongly and unanimously that the University seek a declaratory judgment from the State Supreme Court, although they realized that this might take a year or more to work through the courts. Unfortunately, the Regents were not willing to step up to this challenge because of concerns about their personal political standing, and they refused to seek judicial relief. As a result, the University's operations continued to be more and more tightly constrained by intrusions of the media through the state's sunshine laws.

## Intercollegiate Athletics

Intercollegiate athletics programs at Michigan are not only an important tradition of the University, but they also attract as much public visibility as any other University activity. While Michigan had long been known for the success and integrity of its athletics programs, here too a rapidly changing environment demanded significant changes. Indeed, the highly independent operation of the Athletics Department had led to serious problems in the 1980s, including a major rules violation in the baseball program, the insulation of athletes and coaches from the rest of the University, and the increasing financial pressures on the programs.

Duderstadt took a particular interest in athletics, in part because he realized that the public exposure of the University's athletics programs was a two-edged sword that could both advance and damage the institution. But, as a former college football player (Yale), he also had a background useful for understanding both the challenges and opportunities of intercollegiate athletics.

Although the president and first lady of the University had always had an array of formal, visible roles associated with athletics, e.g., entertaining visitors at football games and representing the University at key events such as bowl games, there were other far more significant roles. The concerns about scandals in college sports had led to a fundamental principal of institutional control in which university presidents were expected to have ultimate responsibility and total control over athletic programs. Although there had always been a formal reporting relationship of the athletics director to the president, Duderstadt took a more active role in this oversight role. Furthermore, in the late 1980s, the Big Ten Conference had become incorporated, with the university presidents serving as its board of directors. This new conference structure demanded both policy and fiducial oversight by the presidents. Finally, it was clear that the athletics department family, its coaches, staff, players, and families, very much appreciated an active interest on the part of the Duderstadts. Anne Duderstadt played a particularly important role in her support of women's athletics.

While such an active role was important to maintain the integrity of Michigan athletics, it was sometimes not well understood or accepted by the old guard. In fact, Duderstadt's first involvement with the Athletics Department occurred quite early in his tenure as Provost when he had to intervene in a dispute between the Department and the Admissions Office concerning the admissions of two basketball players (who later went on to lead Michigan to the NCAA Championship). As a result of this incident, Duderstadt pulled together Athletics Director Canham and several of the key coaches and hammered out a set of new policies governing the admission of student athletes in which the fundamental principle involved the assurance that the candidate possessed the academic skills to benefit from a Michigan education.

But this incident also convinced the Duderstadts that a major effort was needed to bring the Athletics Department back into the mainstream of University life. Even in the Provost role, the Duderstadts hosted frequent receptions and dinners for student athletes and coaches. They attended major athletics events, and used every opportunity to stress their belief not only that athletes were *students* first, but that coaches were first and foremost *teachers*.

Hence, it was natural that the Duderstadts would adjust naturally to the more visible role of the presidency in athletics. And, in fact, their first year was quite extraordinary, with a Big 10 Football championship, a Rose Bowl victory and an NCAA basketball championship (and a trip to the White House to be congratulated by President George Bush). But there were also challenges. The University discovered that their baseball coach had been guilty of serious violations throughout most of the 1980s, providing illegal cash payments to players, employing them in fictitious jobs, and maintaining team sizes far larger than allowed. Duderstadt and Athletic Director Bo Schembechler accepted full responsibility for the violations--although the incidents had occurred several years earlier. The baseball coach was dismissed, and the University self-imposed penalties on the program that were satisfactory to both the Big 10 Conference and the NCAA. The incident provided strong evidence that the old tradition of autonomy of the Athletics Department was simply not realistic in the high-pressure era of modern college sports.

A series of actions were taken in the late 1980s and early 1990s to better align Michigan athletics with the academic priorities of the University. Student-athletes were provided with the same educational and extracurricular opportunities as other Michigan students. Coaches were provided with more encouragement for their roles as teachers. And clear policies were developed in a number of areas including admissions, academic standing, substance abuse, and student behavior consistent with the rest of the University.

So too, a series of steps were taken to secure the financial integrity of Michigan athletics. Cost-containment methods were applied to all athletics programs. A major fund-raising program was launched. More sophisticated use of licensing was developed. And major improvements in athletics facilities were completed, including Michigan Stadium (returning to natural grass and repairing the



stadium infrastructure), Canham Natatorium, Keen Arena, Yost Arena, a new Tennis Center, new fields for women's sports, and a new varsity track.

One of the most important--and most difficult--aspects of this effort involved a renegotiation of the Big 10 agreement governing the distribution of football ticket receipts. Michigan had long tolerated a policy requiring that 50% of all gate receipts would be given to the visiting opponent. However, Michigan's average of 105,000 fans per game (the largest in the nation), coupled with the limited popularity of some of the other Big 10 schools, had led to a "balance of payments" problem amounting to over \$2 million per year and growing. Duderstadt and then Athletic Director Jack Weidenbach believed it imperative that the Big 10 modify this formula, but they encountered the strong opposition of several Big 10 members, including Michigan State. In the end, Duderstadt had to threaten that Michigan would withdraw from the Big 10 unless they were treated equitably. Joining with his counterparts at Ohio State and Penn State, Duderstadt was eventually able to drive through a change in the policy that removed the inequity and was critical in reestablishing the financial security of the Athletics Department.

Change was the order of the day in intercollegiate athletics during the Duderstadt years. Just prior to Duderstadt's selection as president, the long-standing Athletic Director Don Canham resigned. Because of a disagreement among the Regents, a compromise approach was taken to Canham's successor, in which Bo Schembechler was given the title Athletic Director, but a long-serving stalwart of the University, Associate Vice President for Business and Finance, Jack Weidenbach, was asked to serve as Associate Athletic Director and handle the detailed management of the Department. Within a year after acquiring the additional title of Athletic Director, Schembechler decided that the time had come to step down as football coach, lured in part by the opportunity to become president of the Detroit Tigers. However, he remained as Athletic Director just long enough to appoint his assistant football coach, Gary Moeller, as his successor as head football coach.

Duderstadt decided that the earlier instability in the Regents concerning the appointment of an athletic director could best be avoided by simply asking Jack Weidenbach to step into the role. Duderstadt had a very high regard for Weidenbach, and the two quickly developed a close working relationship that was the envy of the Big 10. Indeed, during the Weidenbach years, Michigan's success on the field was extraordinary. While once Michigan was content to be successful primarily in a single sport, football, during the Weidenbach years it competed at the national level across its full array of 22 varsity programs, as evidenced by the fact that it finished each year among the top five institutions nationwide for the national all-sports championship (the Sears Trophy). During the Weidenbach years, Michigan went to five Rose Bowls (football), three Final Fours--including a NCAA championship (men's basketball), three hockey Final Fours (ice hockey), won over 50 Big 10 championships, dominated the Big 10 in men's and women's swimming (including winning the NCAA championship), men's and women's cross-country, women's gymnastics, men's and women's track, and

women's softball. And it provided some of the most exciting moments in Michigan's proud sports tradition--Desmond Howard's Heisman Trophy, Steve Fisher's NCAA championship, the Fab Five, Mike Barrowman's Olympic Gold Medal, Tom Dolan's national swimming championships, and on and on...

Yet, Weidenbach had agreed to provide leadership for the Athletics Department when he was already close to retirement. Although a marathon runner, he believed it important that he step down before age 70, so Duderstadt once again faced the challenge of selecting a new athletic director. In this case, he decided to launch a national, and he appointed VP Farris Womack to lead the search. The search eventually presented Duderstadt with several candidates, all regarded as among the top leaders of college sports in America--but none regarded as "a Michigan man", in the sense that they had an earlier association with the Michigan program. Some of the booster crowd began to apply pressure to the Regents to force Duderstadt to look inside the Department for a successor. Several of the Regents caved in to this pressure, and not only broke the confidence of the search, but attempted to persuade the external candidates to withdraw.

Duderstadt soon concluded that the instability of the Regents was putting the University at great risk of embarrassment. Therefore he decided to short-circuit the search, and he asked an insider, Joe Roberson, to accept an appointment. Roberson's appointment was a surprise, since he was then serving as the director of the University's fund-raising campaign. However, he was a former college athlete and professional baseball player. More important, he had served as both dean and chancellor of the UM-Flint campus. He was also an individual of great integrity, with a strong sense of academic values. Although there was some opposition from the Regents, they eventually supported Roberson's appointment, and the situation was rapidly stabilized.

The degree to which the University was put at risk by instability among the Regents triggered by an athletics was not unique to Michigan. Many other universities had experienced the same behavior as athletics evolved into a form of big-time show business. And, Michigan itself was to experience more misbehavior by the Regents over athletics that was to threaten the institution.

At one level, Michigan athletics had never been more successful. The football program won five consecutive Big 10 championships. After the recruitment of an extraordinarily talented group of basketball players, "the Fab Five", Steve Fisher led the basketball team to two NCAA championship games. The men's and women's swimming teams dominated the Big 10 and challenged west coast schools for the national championships. The success and integrity of Michigan's athletics programs, coupled with their extraordinary popularity through both the electronic and print media, positioned Michigan as the model for college sports. The Michigan insignia dominated the sales of athletic apparel world-wide and eventually led to a controversial marketing agreement with Nike, the sporting goods company which set the model for similar agreements in the years to come with other leading universities.

Yet at another level, the increasing public exposure of Michigan athletics was causing serious strains. Each misstep by a student athlete or coach, the inevitable defeats that characterize every leading program, resulted in a torrent of media coverage. Rare was the month when a Michigan athlete or coach was not either celebrated or attacked by the media.

Certainly the most serious incident was a tragic lapse of behavior by football coach Gary Moeller, in which, after an evening of drinking at a Detroit restaurant, he became unruly and assaulted several police officers attempting to restrain him. The media coverage was intense, and after a few days, it became apparent both to the University and to Moeller that he could not continue as football coach. The furor began again two months later when it was learned that the Athletics Department had agreed to buy out the remaining two years on Moeller's contract following his resignation, although this was not unusual in the departure of any long-serving University employee. What was unusual was the fact that, through a communications lapse, no member of the executive officers, including the President, was informed of the agreement. Once again the Regents went unstable, first demanding that Moeller be fired, then attacking the University leadership for excessive generosity in his severance agreement.

Ironically enough, the Regents took great interest in the public visibility associated with intercollegiate athletics even as they attacked it from time to time. Indeed, there was probably more time spent in accommodating Regents requests for ticket preference, special parking, gifts of sporting apparel, and other perquisites associated with athletic events than any other activity. The situation became so uncontrollable that by the mid-1990s, several Regents demanded that the University relinquish the space in the pressbox it used for fund-raising activities so that the Regents could entertain their families and friends at these events. This takeover occurred during a very critical phase of the University's mammoth fund-raising campaign and caused great dismay among the deans and development staff.

Duderstadt fought hard to protect the Athletics Department from inappropriate intrusion by the Regents, boosters, and the media. He also assumed a key leadership role as chair of the Big Ten Conference presidents during the critical period of restructuring of the NCAA. And he stood solidly behind each of his athletic directors--Schembechler, Weidenbach, and Roberson--when they were faced with difficult decisions or challenges.

Beyond his concern for the integrity of the Michigan athletics, Duderstadt also had a deep commitment to the principle of gender equity. He pushed hard to provide women with the same opportunities for varsity competition as men. Major additional investments were made, both in existing women's programs as well as in the addition of new programs (women's soccer, women's rowing, and women's lacrosse). Michigan became the first major university in the nation to make a public commitment to achieving true gender equity in intercollegiate athletics by 1998.

Michigan played an important leadership role in intercollegiate athletics at the conference and national level. It played a key role in restructuring revenue sharing agreements within the Big Ten, in helping to better position the conference with respect to television agreements, and in building a stronger alliance with the Pac Ten. At the national level, Michigan strongly supported the effort to gain presidential control over intercollegiate athletics and restructure the NCAA.

Duderstadt's determination to protect the integrity of Michigan athletics was critical, but it also took a toll, particularly in his relationship with several Regents who were more obsessed with athletics. Indeed, in an effort to challenge presidential control, the retired football coach Bo Schembechler even participated in a successful effort to elect one of his former football managers as a Regent, arguing publicly that "just being one of my student managers should be good enough to qualify as a Regent" ...

## Cultural Changes

Some of the most important changes occurring at the University during the 1970s and 1980s were far subtler and involved changes in the various cultures of the University. As we have noted, the student culture evolved far beyond the distrust and confrontation born in the 1960s and characterizing student-faculty-administration relationships throughout the 1970s and 1980s. By the mid-1990s there is a very strong sense of mutual respect and trust characterizing students and the administration, particularly on the part of student government and, amazingly enough, even on student publications such as the Michigan Daily. Students stepped up to important leadership roles in the University, accepting responsibility and providing important visions for its future.

The University's commitment to diversity through major strategic efforts such as the Michigan Mandate and the Michigan Agenda for Women would never have been possible without a major change in the campus climate. Diversity became not only tolerated but recognized as essential to the quality of the University. While there were inevitable tensions associated with an increasingly diverse campus community, there was a real effort to view these as an opportunity for learning how to prepare students for an increasingly diverse world.

There were other important changes in the culture of the University community. Michigan Athletics moved far beyond a simple focus on a winning football program to accept the view of athletes as students and coaches as teachers. It reaffirmed the importance of the integrity of its programs and committed itself to true gender equity for women's athletics.

Through both development and alumni relations, alumni of the University came to understand the importance of their financial support as state support had eroded. Further, they responded to appeals to become far more actively involved in all aspects of University life.

Changes occurred far more slowly in the faculty culture, because of its complexity and diversity. Fundamental academic values still dominated this culture--academic freedom, intellectual integrity, striving for excellence--as they must in any great university. However there seemed to be a growing sense of adventure and excitement throughout the University as both faculty and staff are more willing to take risks, to try new things, and to tolerate failure as part of the learning process. While the University was still not yet where it needed to be in encouraging the level of experimentation and adventure necessary to define the future of the University, it seemed clear that this spirit was beginning to take hold.

## History and Tradition

One of the most enduring efforts launched during the Duderstadt years was reconnecting the University with its past. Anne Duderstadt, in particular, had developed a deep appreciation for Michigan's remarkable history and tradition, and she persuaded her husband of the importance of a greater awareness of this among students, faculty, and staff. While Michigan's remarkable history as a leader in higher education had been recognized and respected in earlier years--indeed, the original edition of this popular history of the University by Howard Peckham in the early 1960s was evidence of this--the great unrest of the 1960s and 1970s seemed to sever the University from its past. In their efforts to reject "the establishment", students--and many faculty and staff--almost took great pride in ignoring the University's history and traditions during the 1970s and 1980s.

The Duderstadts were joined in this effort by several distinguished and committed faculty: Bob Warner, former Dean of Library Science and Director of the National Archives; Nick and Peg Steneck, through their years of effort in both preserving University materials and teaching a course on the history of the University; and Fran Blouin, as Director of the Bentley Historical Library. These individuals and others were appointed to a presidential History and Traditions Committee and empowered to both preserve and publicize the University's remarkable history. Bob Warner was named chair of the Committee and eventually appointed by the Regents as the first University Historian.

A series of important projects were launched. The Bentley Library was given a more formal role as the archive for University historical materials. Facilities of major historical importance, such as the Detroit Observatory (Tappan's effort to build in Ann Arbor the first major scientific facility in America) and the President's House (the oldest building on the campus) were restored and preserved. A series of publications on the University's history were sponsored, including an update of the Peckham history, a history of women's movements at the University, and a photographic essay on the University. A process was launched to obtain personal oral histories from earlier leaders of the University, including Harlan Hatcher, Robben Fleming, Allen Smith, and Harold Shapiro

The University of Michigan, circa 1996

By the mid-1990s, most of the original goals set by the Duderstadt administration had been achieved.

- National rankings of the quality of the University's academic programs rose to the highest levels in the University's history. Further, a close examination revealed that the academic reputations of Michigan's programs increased more than any other university in America during the 1980s.
- Detailed surveys throughout the university indicated that Michigan was been able to hold its own in competing with the best universities throughout the world for top faculty. In support of this effort to attract and retain the best, the University was able to increase average faculty salaries over the past decade to the point where they ranked #1 among public universities and #5 to #8 among all universities, public and private.
- Through the remarkable efforts of its faculty, the University rose from 7th to 1st in the nation in its ability to federal, state, and corporate support for its research efforts, exceeding \$400 million per year by the mid-1990s.
- Despite the precipitous drop in state support during the 1970s and 1980s, the University emerged from this period financially as one of the strongest universities in America. It became the first and only public university in history to receive an Aa1 credit rating by Wall Street--just a shade under the top rating of Aaa. Its endowment increased five-fold to over \$1.5 billion. And thanks to the generosity of its alumni and friends, it achieved the \$1 billion target of the Campaign for Michigan in early 1996, over a year ahead of schedule.
- The University made substantial progress in its efforts to restructure the financial and administrative operations of the University, including award-winning efforts in total quality management, cost containment, and decentralized financial operations.
- The University completed the most extensive building program in its history. In less than a decade, it was able to rebuild, renovate, and update essentially every building on its several campuses--a \$1.4 billion effort funded primarily from non-state sources.
- The University Medical Center underwent a profound transformation, reducing costs, integrating services, and building alliances to place it in a clear national leadership position in health care, research, and teaching.
- The University launched many exceptional initiatives destined to have great impact on the future of the University and higher education more generally, such as the Institute of Humanities, the Media Union, the Institute of Molecular Medicine, the Davidson Institute for Emerging Economies, and the Tauber Manufacturing Institute.

- Through efforts such as the Michigan Mandate and the Michigan Agenda for Women, the University achieved the highest representation of people of color and women among its students, faculty, staff, and leadership in its history. Michigan became known as a national leader in building the kind of diverse learning community necessary to serve an increasingly diverse society.

Through the effort of countless members of the University family, the University of Michigan in 1996 was demonstrably better, stronger, more diverse, and more exciting than at any time in its history. As the twenty-first century approached, it was clear that the University of Michigan had become not only the leading public university in America, but that it was challenged by only a handful of distinguished private and public universities in the quality, breadth, capacity, and impact of its many programs and activities.

### Preparing for the Future

This progress had not been serendipitous. Rather it resulted from a very carefully constructed and relentlessly executed strategy. As we have noted, the key focus of Duderstadt's early years as president was the development and articulation of a compelling vision of the University, its role and mission, for the twenty-first century. This effort was augmented by the development and implementation of a flexible and adaptive planning process. Key was the recognition that in a rapidly changing environment, it was important to implement a planning process that was not only capable of **adapting** to changing conditions, but to some degree capable as well of **modifying** the changing environment in which the University must function.

Like many large organizations, planning activities at the University proceeded through a variety of mechanisms, formal and informal, centralized and distributed among various units. In the 1988 Presidential Inauguration Address, the key themes of change were set out: the growing diversity of our nation, the globalization of our society, and the role of knowledge. These themes were reinforced and expanded upon on many subsequent occasions, including commencement addresses, the State of the University Address, and other major speeches and interviews. These themes served as the rationale for the first major initiatives of the new administration, e.g., the Michigan Mandate, the establishment of a new senior position for international activities, and the major leadership role played by the University in building and managing national computer networks (e.g., NSFnet, MREN).

In subsequent years, three new themes were added to the original list, including the changing priorities of the post-Cold war world, the finite limits of our natural environment (global change), and the need to develop the human resources of the nation. Again, strategic initiatives were developed and launched in these areas, including the Global Change Project funded through the Presidential Initiative Fund, and the efforts to position the University better in an array of economic development activities (e.g., the Flint Project, the community service efforts in Detroit, and redesigning the University's technology transfer effort).

There were additional themes articulated that could better be classified as opportunities than challenges, those that concerned the most fundamental nature of knowledge: understanding (of the past and the present), exploration (of knowledge, our planet, the universe), and creation (of new knowledge, objects, intelligence, life forms). These were the frontier themes traditionally addressed by research universities. The rapid evolution of powerful tools such as information technology, molecular biology, and materials science triggered a rapid acceleration of University research in these areas. Examples here include the Molecular Medicine Institute in the School of Medicine, the Ultrafast Optics Laboratory in Physics and Engineering, and the adaptive complex systems activity, affiliated with the Santa Fe Institute (the "Bach" group).

Efforts were also made to articulate the particular challenges facing higher education during the 1990s: how to sustain excellence in a time of limited resources, balancing a commitment to traditional values with the need to change, restoring public understanding, trust, and support of higher education. While these themes of challenge were faced by most institutions, an effort was made to take the University one step further by defining unique strategic themes for Michigan during the 1990s:

- Inventing the University of the twenty-first century
- Redefining the nature of the public university in America
- Financing the University in an era of limits
- Diversity and excellence
- A world university
- An electronic university
- Global change
- A strategic marketing plan
- "Keeping our eye on the ball"

(The last theme, of course, referring to the fact that consistency and persistence were essential to the success of any strategic effort). These themes were carefully woven into communications activities, both on and off campus. They served as the rationale and foundation for a wide array of specific objectives and strategic actions--all aimed at moving the University toward the goal of leadership.

Early efforts focused on articulating a vision of the University's future. Despite the great diversity of planning groups, visioning efforts generally converged on two important themes: *leadership and excellence*. This led to the first strategic plan for the University: *Vision 2000: The Leaders and Best*, aimed at positioning the University of Michigan during the 1990s for a leadership role in higher education for the next century. This agenda was framed through a set of specific goals, the "26 Goal Plan", that provided measurable objectives for the institution. A series of annual reports, *The Michigan Metrics Project*, provided both a framework and a process for assessing progress toward each of the goals set by *Vision 2000*. It furthermore provided strong evidence that in recent years the University has made quite considerable progress toward this vision.



While the Vision 2000 strategy was both exciting and challenging, it was very much a **positioning** effort. It was designed to position the University of Michigan as the leader of higher education by the end of the decade, but very much within the existing paradigm of the American research university of the late 20th Century. Hence, in 1992 a bolder vision was proposed --in the language of strategic planning, a *strategic intent*--aimed at achieving excellence and leadership during a period of great change.

This strategic intent, termed **Vision 2017** in reference to the year of the 200th anniversary of the University's founding, was aimed at providing Michigan with the capacity to re-invent the very nature of the university, to transform itself into an institution better capable of serving a new world in a new century. This transformation strategy contrasted sharply with the positioning strategy, Vision 2000, that had characterized the earlier planning process. It sought to build the capacity, the energy, the excitement, and the commitment necessary for the University to explore entirely new paradigms of teaching, research, and service. It sought to remove the constraints that prevent the University from responding to the needs of a rapidly changing society, to remove unnecessary processes and administrative structures, to question existing premises and arrangements, and to challenge, excite, and embolden members of the University community to embark on a great adventure.

Although the transformation plan, Vision 2017, was only in place for three years prior to Duderstadt's decision to step down from the presidency, many steps have been taken to launch the transformation effort. A team of talented and dedicated executive officers have been recruited to lead the effort. Similarly, recent dean appointments have sought individuals who relish leading during a time of change. Strategic alliances have been formed with other institutions also pursuing transformation agendas (e.g., the Big Ten, the Tanner Group).

The range of initiatives launched during the Duderstadt years are truly remarkable. Among the many activities were:

- The Media Union
- Institute of Humanities
- Institute of Molecular Medicine (Gene Therapy)
- Center for the Study of Global Change
- Community Service/ Americorps
- Flat Panel Display Center
- Tauber Manufacturing Institute
- The New School (SILS)
- Living/Learning Environments
- 21st Century Project
- WISE
- Davidson Institute for Emerging Economies
- New Music Laboratory
- Institute for Women and Gender Studies
- Rescomp/ Angell-Haven
- Direct Lending

RCM/VCM  
 M-Quality  
 Incentive compensation experiments  
 Presidential Initiative Fund  
 Undergraduate Initiative Fund  
 Next Generation Leadership  
 Building private support to levels to replace state support  
 Financial Restructuring (M-Quality and VCM)  
 Asset Management  
 Michigan Mandate  
 Michigan Agenda for Women  
 Rebuilding the University  
 Campus Evolution (e.g., the East Medical Campus)  
 Academic Outreach  
 Student Living/learning Communities

And the impact of these efforts were profound. By the mid-1990s, the University of Michigan had achieved clear national leadership in areas such as:

Quality of academic programs across all academic and professional disciplines  
 Quality achieved per resources expended  
 Faculty salaries (among publics)  
 Research activity  
 Financial strength (among publics)  
 Information technology environment  
 Intercollegiate athletics  
 Health care operations

By any measure, the University found itself remarkable well-positioned to lead higher education into the 21st century.

## The End Game

Duderstadt himself identified three quite separate phases in his presidency. The early phase involved setting the themes of challenge, opportunity, responsibility, and excitement. During this phase, Duderstadt spent much of his time meeting with various constituencies both on and off campus, listening to their aspirations and concerns, challenging them, and attempting to build a sense of excitement and optimism about the future of the University. During this period some of the most important strategic directions of the University were established: e.g., the Michigan Mandate, the Michigan Agenda for Women, financial restructuring, the Campaign for Michigan, student rights and responsibilities.

Augmenting this highly visible process of interacting with both oncampus and external constituencies was an ongoing strategic planning process involving some of the most visionary members of the University faculty and staff. These numerous small groups worked closely with Duderstadt to develop an action

plan, Vision 2000, aimed at positioning the University as the leader of higher education in America.

The second phase of Duderstadt's leadership, while not so public, was far more substantive. A series of strategic initiatives were launched that were designed to execute the strategic plan, Vision 2000, and position the University for a leadership role. These ranged from the appointment of key leaders at the level of executive officers, deans, and directors to a the largest construction program in the history of the University to a bold financial restructuring of Michigan as the nation's first "privately-supported public university". Largely as a result of these efforts, the University grew rapidly in strength, quality, and diversity during the early 1990s. One by one, each of the goals of Vision 2000 was achieved.

By the mid-1990s, Duderstadt began to shift the University into a third phase, evolving from a positioning effort to a transformation agenda. Duderstadt became convinced that the 1990s would be a period of significant for higher education. The task of transforming the University to better serve society and to move toward the Duderstadt's vision for the century ahead would be challenging. Perhaps the greatest challenge of all would be the University's very success. Duderstadt realized it would be difficult to convince those who had worked so hard to build the leading public university of the twentieth century that they could not rest on their laurels; that the old paradigms would no longer work. The challenge of the 1990s would be to reinvent the University to serve a new world in a new century.

Duderstadt realized that the transformation of the University would require wisdom, commitment, perseverance, and considerable courage. It would require teamwork. And it would also require an energy level, a "go-for-it" spirit, and a sense of adventure. But all of these features had characterized the University during past eras of change, opportunity, and leadership.

A series of initiatives were launched designed to provide the University with the capacity to transform itself to better serve a changing world. Since several of these initiatives were highly controversial, such as a new form for decentralized budgeting that transferred to individual units the responsibility both for generating revenues and meeting costs, Duderstadt returned to a more visible role. In a series of addresses and publications he challenged the University community, stressing the importance of not only adapting to but relishing the excitement and opportunity of a time of change.

Duderstadt once referred to his experience as president as analogous to that of the frontier town sheriff in a old Western movie. Each morning he felt that he had to strap on his guns and walk alone down the dusty main street to face yet another gunslinger riding into town to shoot up the University. While this daily confrontation with danger went with the territory, Duderstadt also knew that one day he would run into someone quicker on the draw, and his presidency would come to an end.

Time and time again he faced up to those who threatened the University, whether it be from special interest groups, politicians ranging from Congressmen to governors, the media, or even the Regents, themselves. While his loyalty and love for the University demanded that he march into battle, he also knew that each time he did so, he put his job on the line.

It was also clear that, as he challenged the University to change in more profound ways to serve a changing world, he would gradually exhaust his political capital. Indeed, he was fond of quoting a well-known passage from Machiavelli:

“There is no more delicate matter to take in hand, nor more dangerous to conduct, nor more doubtful of success, than to step up as a leader in the introduction of change. For he who innovates will have for his enemies all those who are well off under the existing order of things, and only lukewarm support in those who might be better off under the new.”

There were a number of factors that eventually persuaded Duderstadt that it was time to step aside as president in 1996. Certainly a major factor was the increasing politicization of the Board of Regents. By the mid-1990s, the Board had become badly fragmented, in political beliefs (four conservative Republicans and four labor Democrats), in generation (four young and very inexperienced Regents who resisted--and, indeed, resented--the leadership of more senior members of the Board), and in relations with the University (ranging from two Regents who had had no previous connection whatsoever with the University to four “townies”--Ann Arbor residents who were regularly lobbied by students, faculty, and staff). But more seriously, the senior leadership of the Board, its chair and vice-chair, were defeated in the 1994 elections. The members of newly elected Board refused to trust one another sufficiently to select new leadership. As a result, Duderstadt and his executive officer team were forced to deal with a Board unwilling to accept any structure whatsoever--no chair or even party caucus leadership. The dysfunctionality of the Board, its inability to agree on most issues, and its increasing instability eventually convinced Duderstadt that he--and, indeed, any successor--would be unable to lead the University without a dramatic change in the character of the Board. Hence he decided to use his public resignation as a device to call attention to the alarming risk posed by the Board and the need for the state to modify the political process used to select Regents.

There was another factor in Duderstadt’s decision. Since he had served both acting president and then “president-in-waiting” for roughly two years prior to being inaugurated in president in 1988, he was approaching the ten year point in his leadership of the University. During this period the University had made remarkable progress. Yet Duderstadt had also become increasingly convinced that the University needed to undergo a further serious of profound transformations, and that this period would require sustained leadership for many years. Both he and his wife were increasingly concerned that they would

soon lose the energy and drive necessary to lead through such an extended period.

Another factor in his decision was the very nature of the activities he saw as necessary for the University in the years ahead. Although Duderstadt had a personal vision for the future of the University, he also realized that there many questions involving the evolution of higher education that required further attention. As a scientist, he preferred to look at the decade ahead as a time of experimentation, in which leading universities such as Michigan had both an unusual opportunity and responsibility to explore new paradigms of the university. Although he had a very strong interest in leading such efforts, he had also become convinced that he simply could not provide such leadership from his role as president--particularly when so much of his time and attention was absorbed in protecting the University from a rapidly deteriorating Board of Regents. Rather he became convinced that the next stage of leadership could best be accomplished from elsewhere in the University, far from the politics of the presidency and the glare of the media.

Hence, the Duderstadts decided together in early fall of 1995 that it was time to step aside into other roles. Because of the instability of the Regents, Duderstadt made a surprise announcement of his intention to step down at the end of the academic year, released simultaneously to the Regents, the University community, and the world via the Internet. By carefully designing both the tone of the announcement and its broad release, Duderstadt was able to take the high ground, to set the right context for the decision, and to make certain that some of the more volatile members of the Regents did not use the opportunity to attack either him or the University.

### An Assessment of the Duderstadt Years

In assessing the decade of leadership provided by Jim Duderstadt as provost and president, it is clear that the University made remarkable progress. It approached the 21st Century not only better, stronger, and more diverse than ever, but positioned as clearly one of the leading universities in the world. Perhaps it was not surprising that a scientist as president would develop, articulate, and achieve a strategic vision for the University that would provide it with great financial strength, rebuild its campus, and position it as the leading research university in the nation.

But, more surprising, was Duderstadt's deep commitment to diversifying the University through dramatic initiatives such as the Michigan Mandate and the Michigan Agenda for Women. Further, the broad effort to improve undergraduate education and campus life were far beyond what one might have expected from one who had spent his academic career in graduate education and research.

During the Duderstadt years, the University of Michigan completed the ascension in academic quality launched a many years earlier by Harold Shapiro.

Its quality and impact across all academic disciplines and professional programs ranked it among the most distinguished public and private universities in the world.

However, perhaps the most important contribution of the Duderstadt years was the recognition that to serve a rapidly changing world, the University itself would have to change dramatically. As the strategic focus of the Duderstadt administration shifted from building a great 20th Century university to transforming Michigan into a 21st Century institution, a series of key initiatives were launched that were intended as seeds for a university of the future. Certainly highly visible efforts such as the Michigan Mandate and financial restructuring were components of this effort. However, beyond these were a series of visionary experiments such as the Media Union, the School of Information, the Institute of Humanities, the Global Change Institute, and the Office of Academic Outreach that were designed to explore new paradigms for higher education.

It would be for the next Michigan president to nurture these seeds...and to harvest their crop.