

MAINTAINING QUALITY IN A TIME OF CRISIS



1979-80 Annual Report of Edward J. Boling, President
The University of Tennessee
To The Board of Trustees. June 19, 1980



Members of the UT Board of Trustees, photographed at the annual meeting on June 19, 1980, are, front row, left to right: Elaine McReynolds; UT President Edward J. Boling; Gov. Lamar Alexander, chairman; Harry W. Laughlin, vice chairman; Charlotte Parish; second row: Wayne Fisher; Marcia A. Echols; Steven Gill, 1979-80 student trustee; Steven Hyers, 1980-81 student trustee; Paul J. Kinser; R. Lee Winchester; A.B. Long, Jr.; (third row): Dr. Wayne Brown, executive director, Tennessee Higher Education Commission; Clyde M. York; Ben S. Kimbrough (succeeds York, July 1, 1980); Scott Probasco, Jr.; T.O. Lashlee; Dr. Marcus J. Stewart; James A. Haslam, II (succeeded Dr. Frank P. Bowyer, June 1, 1980); Edward Cox, commissioner of education; Tom Elam; Buford Goldstein; and William M. Johnson. Absent: Jere Griggs, commissioner of agriculture; and Ann Baker Furrow.

THE BOARD OF TRUSTEES, 1979-80

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Student Member
 Steven Gill

*Resigned April 26, 1980; succeeded by James A. Haslam II,
 June 1, 1980.

Maintaining Quality in a Time of Crisis

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As 1979-80 comes to a close, The University of Tennessee is at a cross-roads. One road, a relatively easy ~~one~~ because it leads downhill, is marked "mediocrity." The other way, a difficult road for it has a steep upgrade, is identified as "quality." The year ahead will find the University on one of these roads.

A further allusion to roads traveled seems applicable to the University's situation at this time. A competent engineer would never apply a smooth and shining surface to an inferior road base. To do so would invite serious trouble, for before long the surface is broken and full of potholes, and the entire road is soon impassable.

The University of Tennessee will find it increasingly difficult to maintain a smooth, shiny surface of quality education if it must rest upon an eroding base of public support.

Our main challenge is: How can we maintain quality in academic, research, and public service programs while ~~caught~~ in the squeeze of ~~inflation~~ and an eroding base of state support?

We understand and appreciate the position in which the Governor, his administrators, and the legislators find themselves with respect to state ~~finances~~. The state purse strings, which have been gradually tightening, were given a sharp tug this year. The appropriation for operating UT in 1980-81 represented ~~only~~ a 6.9 percent increase over the 1979-80 state allotment—about half the current inflation rate and the smallest percentage increase in recent years. We accept the rationale of passing a greater part of the cost of higher education on to the students, although we deplore the need for doing so, and we fear that some worthy



UT President Edward J. Boling

students will be denied a college education ~~because~~ of the necessity. We can accept the reality of our times, but we are reluctant to lower the quality of education offered.

For years we have been trying to "make do" with funds eroded by inflation. We have stretched dollars rubber ~~thin~~ to cover a growing number of students and programs and to maintain quality. Despite fiscal hardships, I believe we have been able to keep the stamp of "quality" on most of these programs.

Many individuals, businesses, and industries of this state and nation believe in the worth of our statewide programs so strongly that they have given generously of their substance to improve and enrich

them. We are nearing the successful completion of the *Tennessee Tomorrow* campaign to raise \$35 million to keep the "quality" stamp on our academic, research, and ~~public~~ service programs. But if ~~the~~ support of state dollars is not sufficient to pay basic costs, the funds we receive from private donors will not do the work for which they are intended. One simply cannot ~~build~~ a fine, ~~durable~~, high quality road on a thin, eroding base.

For the past five years, the ~~percentage~~ of the University's total annual resources represented by state appropriations has ranged between a high of 38.9 percent in 1977-78 to a low of 36.0 percent in 1979-80, the year now ending. The state appropriation for the coming year, while the ~~highest~~ ever voted by the legislators, is not expected to increase the percentage of state funds in the 1980-81 budget; and it falls \$5 million short of covering the mandated salary increase ~~and~~ longevity pay for faculty and staff and the inflation factor. For this reason we are obliged to raise fees, ~~ranging~~ from 13.5 percent for in-state ~~undergraduate~~ students to as much as 42 percent for ~~students~~ in some of the professional fields such as medicine. Obviously, our ability to make actual progress or to continue to expand programs which Tennesseans want and deserve is severely curtailed.

How is quality defined or measured? There are several ways. It can be measured in the abilities and ~~reputations~~ of faculty and staff—and we are fortunate to have top quality people to teach, conduct research, and serve the state population. For much of this quality, we can thank private donors. Twenty years ago, for instance, we had only one or two endowed chairs or professorships. Today we

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have several dozen, thanks to gifts from individuals and corporations.

Another way to measure quality is by physical facilities. Thanks again to private donors as well as state tax dollars, the University has buildings and laboratories that bear the stamp of quality.

Perhaps the most important way to measure quality is by the performance of students and alumni. I am happy to say that our students rank with the best in the nation, and our alumni fill positions of responsibility and trust in all walks of life.

More and more, we are seeking ways to demonstrate the quality of our educational programs through comparisons against well-defined external standards. As an example, a group of seniors in the College of Business Administration at Knoxville were given the undergraduate assessment tests prepared by the Edu-

cational Testing Service in six business subject areas. The performance of our seniors on this test placed them in the top 30 percent of all who took the test nationally. At the same time, it was significantly better than their performance on the ACT test taken before entering UT as freshmen. We can conclude only that our College of Business Administration is doing a superb job of bringing its students to higher levels of achievement.

At the same time, it will be extremely difficult to maintain this quality in the face of increasing student demand and declining resources. This fall, for the first time we shall find it necessary to limit undergraduate enrollments in the UTK College of Business Administration to maintain present high standards.

I believe we have been able to maintain quality in the past year despite double

digit inflation. *Tennessee Tomorrow* dollars are already being put to work on our campuses and by our nonacademic units to maintain quality programs. We have tightened our belts to prevent "fat" or waste in our operations. Low-producing programs are being eliminated. Some positions that have fallen vacant have not been filled. Energy conservation has been a priority on all of our campuses for several years. Travel has been curtailed, probably to the detriment of some of our service efforts.

We leave the 1970s with the satisfaction of a job well done by our diverse campuses and units. Their achievements in the final year of the decade, along with their problems and needs, are reflected in the following pages of this report.

The Trustees
of
University of Tennessee

in commendation of the Faculty have conferred on
Susanne Brandon Elkins

the degree of
Bachelor of Science

Developed and Honors the wants of pertaining
of the diploma granted and the Seal of the
University of the President of the University and the
of the Trustees are the wants of the

Knoxville

Successful efforts to improve instruction, reaffirm common intellectual goals of the University, and expand research and service activities all reflected UT Knoxville's commitment to quality in 1979-80.

In a year in which the campus recorded its second largest headcount enrollment—30,390 students—UTK units also attracted a record research contract and received the largest outright private gift ever made to the institution.

Academic Programs Change, Grow

A coordinating committee for general education was appointed to help conduct a two-year study of general education in each of the undergraduate colleges and schools. In another interdisciplinary effort, the Colleges of Business Administration, Engineering, and Liberal Arts presented a campuswide seminar on "Technology, Society and The Common Good: The Energy Question."

An "alternative period" at the end of each quarter was established to encourage a variety of methods of student evaluation.

The School of Architecture, in cooperation with TVA's Architectural Branch, offered a weekly lecture series featuring internationally recognized experts on energy-efficient design.

The College of Business Administration expanded its executive-in-residence program to include administrators from the public sector as well as business leaders. The College also hosted the Southeastern Intercollegiate Master of Business Administration Competition.

The American Council of Education for Journalism accredited the College of Communications' public relations and professional master's programs and reac-

credited the news-editorial sequence in journalism and the advertising program. The Department of Broadcasting was granted an FCC construction permit for a student-run FM radio station.

A "New Day Program" offered by the Evening School in UTK's Division of Continuing Education brought credit courses in liberal arts to adult students in West Knoxville.

The College of Education initiated a new master's degree in teaching of reading and implemented a new major in dance in the School of Health, Physical Education, and Recreation. The Tennessee Higher Education Commission approved a trans-college program leading to the Ph.D. degree in education.

The College of Engineering continued to make progress in recruiting minority and female engineers; 284 blacks and 464 women were enrolled.

To improve coordination and extend available resources, the textiles and clothing program as well as the interior design and housing program in the College of Home Economics were merged into one department.

Demand for legal education continued strong at UTK despite general declines nationally. Firm and agency placement visitations at the College of Law increased by 300 percent in the last several years.

The National Endowment for the Humanities approved a challenge grant



Lindsay Young, center, Knoxville attorney, gave UTK its largest outright gift ever—securities valued at \$1 million. UTK Chancellor Jack Reese, left, and Dr. Robert Landen, dean of the College of Liberal Arts, discuss the use of the gift to support 10 professorships.

which could generate up to \$4 million for programs in the College of Liberal Arts. For every \$3 UTK raises in new non-federal funds for humanities programs in the next three years, NEH will give the University \$1—up to a total of \$1 million in federal funds.

UTK's largest college also established a seven member Liberal Arts Board of Visitors to advise the dean on curricular matters and other issues affecting the intellectual growth of the college.

Largest Research Grant Ever

The University's largest research contract—\$37.4 million from the U.S. Department of Energy—was awarded to build a coal-fired magnetohydrodynamics (MHD) plant at the UT Space Institute. The MHD process produces more energy per ton of coal than conventional methods and results in less pollution.

UTK joined with Vanderbilt University, the U.S. Department of Energy, and Union Carbide's Nuclear Division in building the Joint Institute for Heavy Ion Research. The structure at Oak Ridge National Laboratory will be used in cooperative atomic, molecular, and nuclear physics programs.

UTK electrical engineering researchers discovered a new form of microwave emission from plasma (a high temperature state of matter) and a simple method of generating such microwaves. These findings may be applicable in developing new technologies for radar, communications, and fusion energy production.

By developing drugs which contain short-lived radioactive elements, a UTK chemistry professor is helping doctors to diagnose health problems more accurately.

The UT Transportation Center began a four-year project with the city of

Knoxville to test the use of electric vehicles in city driving. A management science professor is developing computer models which can be used to forecast industrial use of energy.

Research by a UTK civil engineering professor indicated that rebuilding strip mined slopes to something less than the federally required "original contour" may be more effective in reducing erosion. UTK archaeologists worked seven days a week, ten hours a day, excavating prehistoric Indian and colonial settlements before the sites were covered by Tellico Lake.

The Bureau of Educational Research and Service is working on a National Institute of Education grant to



Shelving in UTK's crowded main library has been increased in height to more than nine feet in many areas, and aisles have been narrowed to as little as 26 inches. While such conditions make library use difficult for everyone, they represent particular obstacles to handicapped persons.

promote participation in educational research by women and members of minority groups.

UTK and the University of Amazonas in Brazil agreed to engage in joint research efforts in alternative energy production, agriculture, ecology, and life sciences. The UT Center for International Research and Development was established to assist in the development of such programs.

Public Service Aids Tennessee

The Center for Business and Economic Research in the College of Business Administration produced a wide range of public service forecasts for state government and industry using its Tennessee Econometric Model.

UTK's Computing Center began conducting seminars for users of the center who do not reside in Knoxville.

Addition of an on-line computer data base enabled the UTK Library to expand services to other libraries in Tennessee.

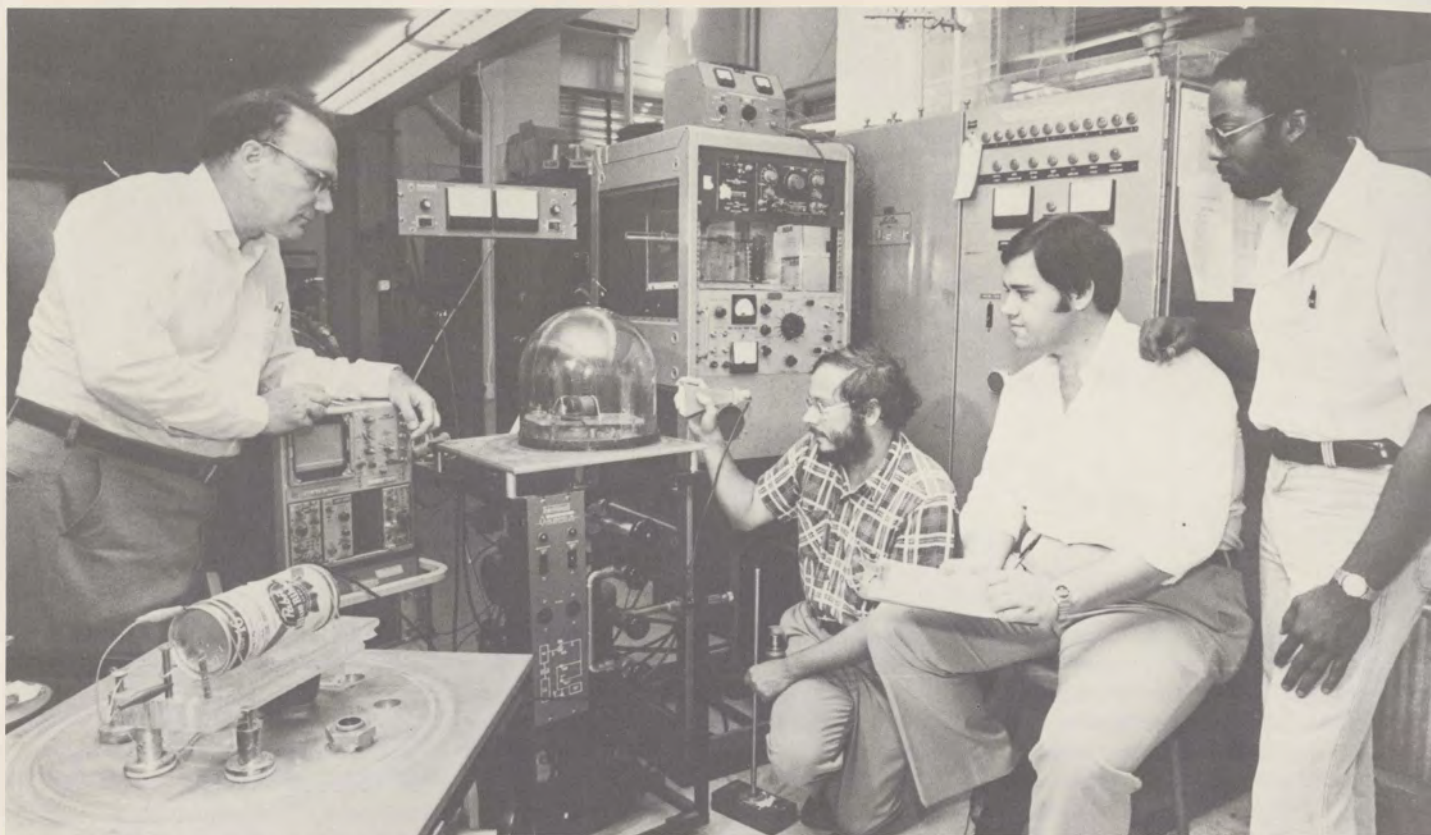
In addition to coordinating car pooling and van pooling activities in the Knoxville area, the UT Transportation Center broadened its efforts to develop ride sharing programs in communities throughout Tennessee.

UTK was selected as the international headquarters of the Association for Continuing Higher Education, a professional group which seeks to help its members from more than 400 colleges and universities provide better continuing education programs.

Tennessee Tomorrow Attracts Support

The Tennessee Tomorrow private gifts campaign continued to benefit UTK academic programs in 1979-80.

Knoxville attorney Lindsay Young



Electrical engineering researchers discovered a new form of microwave emission from plasma and a simple method of generating these microwaves. Dr. Igor Alexeff, left, explains the maser function to engineer Fred Dyer and students David Smith and Dave Bramlett.

gave the University its largest outright gift ever—securities valued at \$1 million. The funds will support eight faculty professorships in the College of Liberal Arts and one each in the Colleges of Law and Veterinary Medicine.

Other large gifts included \$50,000 from Robertshaw Controls Corporation salary supplements for professorships in the College of Engineering; \$50,000 from the W.P. Toms Foundation for salary supplements for professorships in the College of Law; and \$50,000 from the General Shale Products Corporation for scholarships in the School of Architecture.

The Special Gifts phase of the *Tennessee Tomorrow* campaign and the law campaign both were launched in 1979-80.

Students Garner Honors

UTK students earned high honors in national competition for their performance in academic, extracurricular, and athletic activities. A team from the College of Agriculture placed third in national soil judging competition. The UTK Panhellenic Council was chosen the second-ranking Panhellenic organization in the country.

The *Daily Beacon*, *Volunteer* yearbook and *Phoenix* literary magazine all received top commenda-

tions for content and design from their respective national evaluating agencies.

The performance of Volunteer and Lady Vol athletes—as teams and individuals—brought UTK new regional and national prominence. The women's basketball team finished second in the nation, and the men's team was invited to the NCAA regional tournament. The football team capped off a winning season with a trip to the Bluebonnet Bowl.

UTK athletes won the national men's doubles championship in tennis; the men's golf team placed sixth in the NCAA, and the women's track team finished fourth in the nation. These efforts and conference championships in other sports explain why UTK men and women dominated the SEC in all-sports competition.

An addition to Neyland Stadium increased its capacity to more than 90,000 seats for the 1980 season, making it the nation's second largest college football stadium.

Changes Occur in Administrative Areas

The campus community was saddened by the death of Dr. Fred Peebles on April 21, 1980. He headed the UTK College of Engineering for 12 years and was

a national leader in engineering education. Associate Dean Kenneth Stair was appointed acting dean.

Dr. William Byas was named UTK's first dean of special student services. He is responsible for coordinating UTK's Educational Advancement Program, services to the handicapped, and minority student activities.

Dr. Kenneth Heathington returned to direct UT's Transportation Center after serving as deputy director of the National Highway Traffic Safety Administration.

The UTK Retention Committee continued to work with deans and faculty, professional staff in service units, and students in planning institutional efforts to reduce attrition. Student Affairs Division efforts aimed at increasing retention included implementation of the FACT (Freshman Aid Coordinating Team), a student program to help freshmen adjust to college life. The Office of Admissions and Records began new programs to help re-entry, transfer, and returning students. Scholarships and financial aid were awarded to a record 9,226 students.

All residence halls were filled as the academic year began, and a portion of East Stadium Hall was used for student housing for the first time in ten years. Hopecote, the University's guest house, was opened in 1979.

A Small Business Purchasing Program developed in Business Services has significantly increased the volume of purchases from minority and small firms.

Approximately 90 percent of UTK clerical and support staff participated in an employee attitude survey conducted by the UTK Personnel Department. A major effort will be made to respond to concerns expressed in the survey. Personnel's preretirement counseling program was expanded, and a UTK Retirees' Association was established. Both programs have been well received by participants.

Concerns for the Future

A new main library at UTK is critically needed to relieve current safety and access problems and more adequately support instructional and research programs.

Severe space shortages force UTK's library to operate far above capacity and with a 29 percent reduction in study and research space since 1973. At the same time there have been increases of

20 to 25 percent in the size of the collection and the student body.

Funds for faculty and staff salaries and for operating and equipment budgets continue to be among UTK's pressing needs. UTK ranks eleventh among thirteen comparable universities in the South in state appropriations per full-time student. Inflation and previous funding inadequacies make increased appropriations essential to maintain quality.

Energy costs, another major concern, have been reduced by more than a quarter-million dollars through conservation measures in the past two years. Since 1977, "savings" have totaled more than \$260,000, of which more than \$177,500 are in annual recurring savings. Because of soaring energy costs—up 442 percent at UTK since 1970—the savings in many cases represent potential costs which were avoided by conservation.

UTK's Computing Center initiated seminars for users of the center who do not reside in Knoxville.



The Lady Vols basketball team, led by national "Coach of the Year" Pat Head, ranked second in the nation in 1979-80. Three Lady Vols were selected for the U.S. Olympic women's squad.

Center for the Health Sciences

Possibly the most exciting event at the Center for the Health Sciences this year was the completion, opening, and dedication of the E.P. and Kate Coleman College of Medicine Building. Faculty and staff began moving during March, and the dedication ceremony was held May 1. The Coleman College of Medicine Building, dedicated to research and teaching, is the first "home" the college has had since its formation in Memphis in 1911.

The Center for the Health Sciences' goal for the *Tennessee Tomorrow* campaign was \$9 million. Considered the largest single fund raising endeavor in the history of Memphis, *Tennessee Tomorrow* obviously will have a dramatic impact upon not only UTCHS, but the quality of life for all citizens of the mid-South for generations to come. In addition, a successful conclusion of UTCHS' *Tennessee Tomorrow* campaign will represent the beginning of a new era in the University's development program.

Memphis area campaign co-chairmen, Frank Norfleet and Dr. Bland Cannon, along with Sam Cooper, chairman of the Chancellor's Roundtable, provided the volunteer leadership for the UTCHS *Tennessee Tomorrow* campaign. This support will greatly enhance the University's abilities to attract and retain outstanding teaching and research faculty and provide needed research facilities and equipment. Working with Norfleet, Cannon, and Cooper as major gifts phase co-chairmen were Ray Cummins and Irv Bogatin.

The special gifts phase was co-chaired by Jim Crews, Bill Fondren, and Madge Harrison. The phase's goals were to broaden the base of private gift support and generate further community awareness for the UTCHS program. More than 400 area businesses and individuals were contacted, with more than \$220,000 contributed from over 100 contributors.

Personnel, Departmental Changes

Dr. Roland H. Alden, dean of both the College of Basic Medical Sciences and the Graduate School-Medical Sciences, retired July 1, 1979, after serving the University in various capacities for more than 35 years. Dr. John L. Wood, associate dean of the Graduate School, was appointed acting dean while a committee seeks applicants for the position.

The College of Basic Medical Sciences has been absorbed into the College of Medicine. These preclinical departments will continue to teach basic sciences to students of all colleges on the campus.

Dr. Marie C. Josberger became dean of the College of Nursing July 1, 1979. Dr. Josberger had formerly been associate professor and associate dean of the College of Nursing at Wayne State University in Detroit.

Events Affect Quality

Other events which may have long-



David Coombes, left, vice chancellor for the UT Medical Center, and UTCHS Chancellor T. Albert Farmer, Jr., discuss plans for the center. In the background is UT's William F. Bowld Hospital.

term effects on the quality of UTCHS programs include the following.

- The William F. Bowld Hospital has been acquired from the Shelby County Commission through a long-term lease exchange for the former West Tennessee Chest Disease Hospital. This acquisition provides the college with a teaching hospital staffed by UT employees and managed by the University.

- With the hospital exchange, The University of Tennessee Medical Center at Memphis has become a reality. Only a referral ambulatory care facility is needed to complete the medical center as planned by college leaders.

- The state legislature approved \$8 million for the construction of the long awaited UTCHS Library/Nursing Building. Construction should begin later this year. The legislature also approved preplanning funds for an animal care facility.

- The College of Medicine renegotiated its relationship with the Faculty Medical Practice Corporation, P.C. The new arrangement increases the likelihood that the practice plan will generate a stable contribution to the college's financial position.

- Standards of academic performance for all undergraduate programs have been clearly delineated.

- All programs offered by UTCHS are fully accredited. The College of Medicine underwent an accreditation visit by the Liaison Committee on Medical Education. The survey team said it was recommending a six-year full accreditation.

- Improved internal management has enabled the College of Medicine to establish categorical funds to support new research and innovations in medical education.

- The funding formula for medical education developed by the Tennessee Higher Education Commission affords the College of Medicine realistic prospects for the future. The THEC funding formula and improvements in educational and clinical

facilities were key factors in the college's accreditation survey.

- UTCHS leadership has resulted in additional reimbursement from the Memphis and Shelby County Hospital Authority for professional services provided by the faculty to medically indigent patients at the City of Memphis Hospital.

- The College of Dentistry faculty finalized the revision of its four-year curriculum. The most unusual portion of the curriculum is the comprehensive patient care concept in the fourth year.

- The College of Dentistry Faculty Development Committee has made great strides in improving faculty effectiveness in teaching. Laboratory, clinical, and lecture teaching methods are included in in-service programs.

- Dentistry's cancer research grant was renewed, enabling the departments of oral diagnosis and removable prosthetics to develop their teaching program further in early recognition of cancer and post-surgical cancer treatment.

- The initial phase of the College of Dentistry's Remote Site Training Program for upper level dental students was initiated and will be in full force in July 1980. Under this program all upper level students will have worked in a remote site area from four to six weeks prior to graduation. The cooperation of dentists throughout Tennessee and Arkansas has made this program possible.

- A four-year interdisciplinary medical ethics curriculum was developed for medical students during the year.

Graduate Programs Reviewed

During the year, the Graduate School completed a two-year survey of individual graduate training programs. Emphasis was on quality of training provided by the program and quality of the graduates. Three programs received commendation from the Graduate Council; one has been continued with recommendations for improvement; two were put on probation pending improvements, and three are still under construction. Subsequently, one of the programs under probation has shown improvement and resumed recruitment of students.

- A task force undertaking definition of the mission of the Graduate School completed its study and presented its report to the chancellor. The M.S. degree program in nursing has been transferred to the College of Nursing.

- The Graduate Council recommended a number of changes to improve program quality. One change gives the faculty final responsibility for assessing the quality of student performance. The student's faculty committee continues to



New home for many College of Medicine departments is the E.P. and Kate Coleman College of Medicine Building, designed as a research facility, committed primarily to clinical sciences, clinical investigations, and clinical education programs.

oversee his program, decides whether he has passed the examination, and approves the dissertation. All applicants to the Graduate School now must take the Graduate Record Examination.

- The College of Pharmacy faculty studied the present B.S. and Pharm. D. programs. Both curricula were revised to permit greater emphasis on clinical pharmacy practices at all pharmacy sites without significantly decreasing the basic science components of the programs.

- Within the College of Community and Allied Health, the Department of Physical Therapy entered into several service contracts with facilities in the area, which allow the department to provide patient care in addition to its educational function. Service contracts have been completed with UT Hospital and Les Passes Rehabilitation Center, providing additional clinical facilities for students and faculty.

- The medical technology program was changed from a 3-1 program (i.e., three years of preprofessional work and one year of professional work on the UTCHS campus) to a 2-2 program. This decompresses the intensity of the curriculum and improves the program by providing the students additional clinical experiences. The College of Community and Allied Health has closed its program in radiologic technology due to inadequate funds.

- The College of Nursing developed and implemented seven new courses for senior year students under the revised undergraduate curriculum. Course and total curriculum evaluation by students was completed. The college also developed contractual arrangements with

three outside groups to provide a limited amount of primary health care by faculty in these clinical settings. The college received a grant from the Department of Health, Education and Welfare to improve geriatric nursing and establish a primary care clinic for the elderly.

- At the Knoxville unit, significant progress was made to expand medical, research, and education programs. Reorganization of educational and research components under the College of Medicine is complete. Progress was made in planning the new hospital pavilion. The Harry H. Lyons, Sr., Family Practice Center is nearing completion, and the new surface parking facilities soon will be under way. The hospital recorded the largest patient load in its history, and the size of the educational and research programs continues to increase.

Research Support Constant

The level of extramural support for research has remained constant this year compared to the level of funding in 1978-79. However, the number of faculty receiving research grants increased 7 percent. In addition, two new research training grants have been received.

UTCHS continues to make tremendous progress and to have major needs:

- The College of Dentistry needs to develop a practice plan.

- The College of Medicine needs the continuation and upgrading of the THEC funding formula, improvement in its practice plan, continued improvement in extramural support and the development of plans for an ambulatory pavilion.

- There is a general need to renovate existing buildings. Major needs will continue to be the replacement of aging and increasingly inefficient heating, cooling, and electrical services. Major equipment purchases must be made to replace existing equipment for the support of academic programs. Most equipment currently used to support academic programs is more than ten years old. With the prospect of resources becoming ever more scarce in the future, replacement of equipment and maintenance of physical facilities will become increasingly difficult.

Martin

Despite the probability of continued funding shortages during the 1980s, The University of Tennessee at Martin's new administration and existing excellent faculty have a renewed commitment to the maintenance of quality programs in both undergraduate and graduate areas.

Although funds are limited for new programs, the upgrading of existing programs continues. More academic reorganization to improve efficiency and make offerings more responsive to students' needs are future goals.

UTM's academic reputation remains high in the region, as indicated by an increase in enrollment of valedictorians from West and Middle Tennessee. Plans for the coming year include more emphasis on quality in every academic program with some disciplines perhaps realigned or merged for efficiency.

Despite annual declines in the number of high school graduates in the UT Martin area and nationwide trends toward the stabilization or decline of enrollments in higher education institutions, there was a 21 percent increase in the number of first-time freshmen at UTM in fall quarter 1979. The total headcount enrollment was the second largest in UTM's history. Another increase in entering freshmen is predicted for fall 1980.

These figures reflect the results of greater emphasis being placed on personal attention to students, parents, and counselors at regional high schools.

Graduate Enrollment Up

Graduate enrollment also continues to increase with more than 400 graduate students enrolled last fall. New graduate programs in business administration account for some of the increase. There also are more graduate students in the curri-



UTM students at work in a chemistry laboratory.

culum and instruction program of the School of Education.

Threatening healthy enrollment figures, however, is the rise in tuition costs caused by the failure of state appropriations to keep up with inflationary operating costs of the University. Food and housing fees have risen, too, and the student has been caught in the budgetary squeeze.

For this reason, scholarship monies have become even more vital, especially for financial needs of the academically superior student. Mr. and Mrs. J.W. Forbes of Memphis made a \$100,000 gift to the Martin campus during the year to endow a scholarship fund for academically superior students. Another gift from the estate of Mrs. Fannie Glass Hedgcock established a \$100,000 endowment for scholarships for Weakley County students. These gifts, plus other *Tennessee Tomorrow* scholarship contributions, have

tripled UTM's endowed scholarship funds for the academically superior student. UTM's *Tennessee Tomorrow* leadership was directed by co-chairmen Jim Glasgow of Union City, King Rogers of Dyersburg, and Ray Smith of Camden, Tennessee. These individuals and their many volunteers were instrumental in securing gifts that are having a positive effect on all academic areas of the University.

Utilize Federal Aid

Since retention of students is often directly related to maximum utilization of federal aid programs, UTM has streamlined the financial aid delivery process to accommodate students through improved use of computer facilities.

Advanced Institutional Development Program grants have made possible an increase in UTM's computer capacity, facilitating UTM's response to student needs and enhancing retention efforts. The three-year grant, now in its second year, also has been an important factor in the growth of the Counseling Center and the Student Learning Center. The latter includes three labs for remedial instruction in reading, writing, and math.

The remedial instruction offered in the Learning Center labs is available to all students but is especially directed toward the qualified admission student who otherwise might not be able to continue in school. UTM's qualified admissions program has enabled many low achievers to graduate with creditable grade averages.

Another effort toward student retention is early "on-line" registration direct from terminal to computer, which speeds up and simplifies registration and class scheduling.

A growing intramural and recreational sports program, which makes maxi-

mum use of the modern physical education complex facilities, also aids in student retention.

Programs Attract Students

In the academic area, UTM's computer science program attracted a large number of students last year. A new interdisciplinary degree in public administration has proven popular with pre-law students. Designed for those interested in careers in public service, the program includes courses in arts and sciences, business, and political science.

There also has been an increase in business administration majors. These students and the surrounding business community will benefit from the Tom K. Hendrix Chair of Private Enterprise, established during the past year by Tom E. Hendrix, president of HENCO, Inc., Selmer, Tennessee. A selection committee continues its search for a holder of the chair.

To upgrade academic quality, UTM faculty are given leave to complete terminal degrees, and a number have received special stipends from national foundations for summer study. The prestigious Fulbright award went to a UTM professor last year, and this summer a UTM Fulbright recipient will be studying in France. Chancellor Charles E. Smith will travel to Brazil in August on a one-month Fulbright appointment. He will consult on the development of a graduate program in university administration at the Federal University of Santa Catarina.

Enhancing the regular curriculum, a Pacesetter Summer Honors Program has been added for the first time in 1980. Outstanding high school juniors throughout the state will have the opportunity of taking special courses for college credit.

Numbers of UTM students admitted

to professional and pre-medical schools continue at a high level, and nursing students again scored above the national average on national nursing examinations.

Athletic Program Receives Boost

Faced with an athletic program that continued to require an increasing subsidy from the University and sub-par revenues from gate receipts, Chancellor Smith, during his first week as UTM's Chancellor, appointed an Intercollegiate Athletics Study Committee to take a comprehensive look at UTM's athletic program. One of Chancellor Smith's first steps was to name Ray Mears, former UTK basketball coach, as UTM's new athletics director. Mears has named Art Tolis, former LSU assistant coach, as head basketball coach, and Lynn Amedee, former UTK football assistant, as head football coach. A season ticket campaign headed by baseball's Hank Aaron has already quadrupled last year's football sales. Additionally, gifts from the private sector are at an all time high.

Special Need Has Been Met

A special committee on financial exigency has provided a plan for dealing with extreme financial eventualities. Preparing in advance for reductions in funding, the committee hopes to avoid crisis decisions that would affect personnel and programs adversely.

Future Bright

Even though funding resources during the 1980s remain a primary question, UTM has good reason to be optimistic about the future.

● The legislature approved preplanning money for the construction of an

agricultural pavilion that will benefit UTM's School of Agriculture and draw the West Tennessee agricultural community closer to the campus.

● Enrollment figures for the 1980-81 year point toward a 14 percent increase in entering freshmen.

● Tennessee Tomorrow has provided numerous gifts to the University and has set the stage for a more comprehensive development effort in the 1980s.

● Community support and awareness of the campus have increased.

● Faculty remain dedicated to the proposition of providing the best undergraduate education in the South.



Hank Aaron, all-time major league home run leader, is shown with UT Trustee Tom Elam at the UTM football banquet, at which Aaron was the principle speaker.

Chattanooga

There were a number of significant qualitative accomplishments at UT Chattanooga during the past year despite the continued inflation and limited funding. These accomplishments involved curriculum and programmatic changes, faculty improvement, facilities, and students. Planning was intensified to enhance institutional excellence.

After three years of study and debate, the faculty adopted a new general education program. The program contains requirements from the major disciplinary areas, including mathematics and laboratory science requirements. A new category of core courses representing the major disciplinary areas was adopted along with a more specific English composition requirement. A permanent committee will certify courses offered as part of the general education program. The general education requirements will become effective with the freshman class in fall, 1982.

Self studies prompted curriculum changes in the School of Business and the Department of Criminal Justice. The communications degree program was revised, and the faculty was strengthened.

A day of testing was initiated for graduating seniors this year. The students took several tests and answered a survey to measure the effectiveness of institutional services.

Two significant qualitative advances were made regarding faculty: more minority faculty were added, and UC Foundation funds helped expand faculty development activities.

Two projects of immediate benefit to students were completed this year. The Brock Scholars Program, an interdisciplinary honors effort, received funds to en-



Entrance to the \$6.2 million Fine Arts Center, new home for the Department of Art, Music, Theatre, and Speech.

dow the scholarship portion of the program. The National Merit Conference brought to the campus the largest number of exceptional students ever.

A study was completed of services for students who are inadequately prepared academically for higher education. Planning for better coordination of services is in the early stages.

Self Study Aids Planning

One of the largest planning projects initiated during the year at UTC was the self study required for reaccreditation by the Southern Association of Colleges and Schools. Eleven committees comprised of 160 faculty members and 40 students completed initial drafts demonstrating UTC's effectiveness in meeting the 11 standards of the association. The self study will be completed with visitation by the on-site committee in the spring of 1981. This self study also will be the basis for updating the long range plan for the

next five years. Planning for academic equipment was also completed for a five year span. A special planning project undertaken this year by the physical and natural sciences departments is aimed at developing an interdisciplinary approach to energy problems on the undergraduate level. This project, supported by a UC Foundation grant, may produce curricular revisions.

A major program in bibliographic instruction began this year with funding from the Lyndhurst Foundation. The same grant made possible acquisition of periodical back files, microforms, books, films, and reference materials. The addition of a specialist to launch a campuswide program of bibliographic instruction was made possible by the Lyndhurst grant. The program will help develop a solid foundation in knowledgeable and efficient use of the library.

Finally, relocation of a number of academic departments resulted in improved facilities and laboratories in the Department of Geosciences and the School of Engineering. For engineering, the move produced a 50 percent increase in space and the acquisition of a number of special purpose laboratories.

Student Recruitment, Retention Aided

Student recruitment was more effective this year because of two major activities—the direct application process through the American College Testing Program (ACT) and UTC's participation in the Guidance Information System (GIS), an extensive data base of occupational, educational, and financial aid information. Using a dial-in mechanism and portable terminals, admissions counselors gave high school students information on

careers, institutions, requirements, and resources for financial aid. The GIS system also will be used on campus to counsel students about careers.

The Report of Academic Progress (RAP), an individualized computerized program of degree requirements and academic progress, to be initiated next fall for new transfer students and entering freshmen, will provide each student and adviser a report of academic progress each semester.

Both the GIS and RAP were made possible by the gift of a computer and supporting equipment from Hewlett-Packard.

Inflation, Funding Levels 'Scissor' Campus

UTC's needs and problems are undoubtedly no different from those of other campuses. Faculty salaries, operating budgets, and equipment are hard hit by inflation and by low state funding levels, creating a "scissors" effect. Services are being reduced. More part-time faculty, fewer support personnel, and lowered appropriations for equipment cause problems in accreditation. Experienced faculty are being lured to other states. Despite careful planning and allocation of resources, UTC is not making the progress toward its goal of excellence that has been made in past years.

Graduate Program, Research Grow

UTC's graduate program continues to grow. A total of 232 master's degrees were conferred by UTC in 1979. Graduate degrees were awarded in music for the first time and in criminal justice for the second year. These new programs contributed to the 45 percent increase in graduate degrees this year.

Enrollment gains in the graduate division were significant for the fourth consecutive year. A total of 717 students enrolled in the graduate division last fall, a 33 percent increase over the previous year.

The Division of Continuing Education offers credit classes through evening, weekend, and off-campus programs. Courses also are held on campus and in plants to meet the needs of Chattanooga businesses and industries. Several in-service workshops have been provided on campus for Chattanooga teachers, and 46 programs are scheduled for the summer months.

Continuing Education is beginning operation of two new public service grants funded by CETA Title II. The Displaced Homemakers project proposes to establish a model service delivery program for women who wish to enter or re-

enter the work force and establish financial independence. The project conducted by the Joint Venture Training Center for Early Childhood proposes to establish a model child care facility and training component for QETA eligible parents.

Research funding at UTC has increased from almost nil in 1974 to \$400,000 last year. Meanwhile, \$1.38 million came into UTC through state and federal grants.

Campaign Goals Achieved

UTC has met with success in achieving its six major *Tennessee Tomorrow* campaign goals:

- To purchase an additional interactive academic computer.
- To support substantial library acquisitions.
- To create an endowment for the University Scholars (now Brock Scholars) program.
- To add to the endowment for faculty development and secure a number of endowed professorships.
- To create an endowment for a Center for Economic Education and an associated chair of free enterprise.
- To support acquisition of performance equipment for the new Fine Arts Center and to create an endowment for a yearly series of performances.

One interactive computer for academic use was purchased at the end of the first year of the campaign. Another computer valued at \$99,000 was given to the University in 1979 by the Hewlett-Packard Company.

Chattanooga's Lyndhurst Foundation gave the UTC Library \$394,000 for books, periodicals, and other materials and equipment. Additional support has been allocated for the development of a five-year program of bibliographic instruction.

In December the former University Scholars program for gifted students received a grant of \$500,000 from the Lyndhurst Foundation. The program was renamed in honor of William E. Brock, Jr., who for many years served on the board of the University of Chattanooga and the subsequent UC Foundation. With the allocation of an additional \$1 million of unrestricted *Tennessee Tomorrow* gifts, the Brock Scholars program is sufficiently endowed to provide full scholarships for up to 80 students.

Faculty development has been strengthened by upgrading of the Ochs Chair of Government and endowment of an engineering professorship by the Chattanooga Manufacturers Association.

A major gift from the late J. Burkett Miller initiated the Center for Economic

Education, and other gifts have completed the endowments for the Center and the Scott L. Probasco, Jr., Chair of Free Enterprise.

The UTC Fine Arts Center will open this summer. Unrestricted gifts to the campaign will help support programs and equipment needs of the fine arts departments during the first years of the center. Funding from the Dorothy Patten Trust and the UC Foundation will make possible a series of performances by artists of national stature. Other gifts are needed to finish equipping this facility.

Athletic, Annual Funds Successful

Our ongoing fund drives, the Athletic Fund and the Annual Development Fund, have continued successfully. The Athletic Fund contributes to the maintenance of high quality athletic programs, and the Annual Fund supports scholarships, special academic projects, and equipment needs. Contributors to this fund have doubled in the last five years, and the percentage of alumni contributing is higher than ever. These two funds have brought in more than \$1 million in the last three years.

There are still unfilled needs in UTC's campaign goals, but the work done during the *Tennessee Tomorrow* campaign will continue to bear fruit in the years ahead because of increased local awareness of the campus' accomplishments and potential.



Computers are an important aspect of UTC life, both in the academic computing program and in the Report of Academic Progress to be initiated this fall.

Institute of Agriculture

College of Agriculture

Enrollment in the College of Agriculture declined slightly this year—from 1,804 in 1978 to 1,775 in 1979. Graduate students increased about 6 percent, but numbers of undergraduates were down about 1.5 percent from the previous year. Because of serious shortages of faculty and operating funds, some reduction in enrollment must occur if program quality is to be maintained.

Courses in farm income tax management, plant disease diagnosis, insect diagnostic clinics, landscape design, landscape contracting, landscape management and professional practices were added. Supporting courses in plant materials, floriculture, and nursery management were revised and updated.

Student accomplishments continue to be impressive. Four students in plant and soil science placed third in the national soil judging contest, and a Middle Tennessee sophomore honor student was recognized as high individual. Livestock and meats judging teams took top honors in the southeastern judging contests, and other teams made good showings in regional and national competition.

Because of shortages of administrative time, faculty, clerical support, and funds, student development activities have been reduced.

College of Veterinary Medicine

The College of Veterinary Medicine enjoyed its first full year in the new Veterinary Teaching Hospital. The charter class of 39 students graduated in June 1979. The second full-sized class, 80 students, enrolled in September 1979. The number to be admitted in September 1980 will be 60.

Herd health programs at the Middle



An agricultural extension agent discusses farm planning with a Resource Management farmer.

Tennessee Experiment Station and the Ames Plantation continue to provide practical clinical experience for students. Construction of the building at Middle Tennessee for clinic facilities and teaching space is almost complete.

New outreach programs are flourishing at the Tobacco Experiment Station in Greeneville, Wilson Livestock Market, and Wilson Feedlot in Newport. Another beneficial outreach clinic teaching program is with the Department of Correction.

Postgraduate residencies are offered by the Department of Urban Practice, and the Department of Rural Practice offers three one-year internship programs to graduate veterinarians. The Tennessee Higher Education Commission approved the college's graduate program in comparative and experimental medicine.

Again this year the college's faculty development program was supported primarily by funds from the National In-

stitutes of Health Biomedical Research Development Grant. The college held its First Annual Conference for Veterinarians March 4-6, 1980.

Through the use of National Institutes of Health funding, the college has developed centralized resources in electron microscopy, chemical analysis of toxic substances, and immunology techniques.

Agricultural Experiment Station

Approximately 200 research projects involving more than 800 experiments were conducted in four major areas: 1) increasing the quality and quantity of food; 2) improving the quality and production of fiber; 3) improving nutrition and food safety; and 4) improving the quality of life of people.

The research staff of 102 project leaders released 293 publications. More than 4,000 persons participated in 10 special field days.

The improved salary base made it possible to employ highly trained young scientists to replace faculty who retired or resigned. Improved facilities such as the Agricultural Engineering Building under construction at Knoxville and machinery repair and storage facilities at the West Tennessee Experiment Station will improve the research effort.

Some examples of research accomplishments follow:

- Entomologists have been investigating a new approach to controlling the European corn borer by irradiating the pupae with gamma rays, thereby altering genetic composition. The second generation of moths was almost completely sterile because of inherited sterility.

- Liquid swine waste worked into the soil produced corn yields comparable

to those with recommended chemical fertilizer applications.

- Scientists induced short pauses in laying chickens after about six or seven months of production by drastically changing the feeding or watering pattern. Paused birds returned to production when normal feeding was resumed, with production higher than before.

- In a strip mine reforestation experiment, soil was excavated and mixed with organic matter, limes, and fertilizer, and the mixture was placed in the hole. Pine seedlings grown for five months in the greenhouse were planted in the amended soil and irrigated once. Survival after the first year was 98 percent and 90 percent after the second year, compared with only 69 percent with seedlings planted in the conventional manner.

- Analysis of resources available on 40 small farms in East Tennessee indicates that increased production of burley tobacco offered the best opportunity for improving net farm income. Net income increased by 56 percent on these farms from an average of \$3,277 to \$5,115.

- Lead poisoning is reported to be the most common cause of death in farm animals, and it also poses serious health problems to humans. Research with the College of Veterinary Medicine indicated high levels of Vitamin B1 or thiamin given to lead-intoxicated laboratory animals improves chances of survival.

In the Agricultural Experiment Station, operating costs consisting of such items as laboratory equipment, animals, seed, fertilizer, and chemicals comprised about 30 to 35 percent of the total budget with the remaining 65 to 70 percent going to salaries. In recent years, most of the increases in funds have been allocated to salaries with no substantial increase in operating funds. Unless additional funding can be obtained, the research base upon which Tennessee farmers depend will become less productive.

Agricultural Extension Service

Agriculture continues to make a large contribution to Tennessee's economy. Cash receipts in 1979 to Tennessee producers total more than \$1.8 billion, and the multiplier effect contributes additional billions through employment, processing, manufacturing, and related agricultural service industries.

The Agricultural Extension Service program emphasis continues to be related to the projections contained in the 1985 report. The projection said Tennessee farms could market \$1 billion worth of crops and livestock by 1985 at 1970 prices. Progress is on schedule.

Increasing price risk has drawn greater attention to marketing of farm products. The Extension Service has taught techniques for evaluating pricing options, risk position, and the role of a marketing plan for field crops. Four sessions attracting 240 growers were conducted with a regional marketing cooperative.

An expanded marketing program for fruit and vegetable growers began in 1979. Leading produce buyers were enlisted to help producers improve packaging, grading, and scheduling of production. Other state agencies provided funds for a produce inspector, now located in Knoxville, and for statewide market information by toll-free telephone. Sixty growers and educators attended the first of a proposed statewide series of direct marketing conferences, and summer farmers' markets are being developed in several counties.

Special educational efforts on electronic marketing are under way in cooperation with the Tennessee Department of Agriculture. Meetings were held to increase farmer understanding of the futures market and how it can be used to **reduce price risk**.

The Resource Management, Rapid Adjustment, and Resource Management Conservation Programs, cooperative efforts of the Agricultural Extension Service, Tennessee Valley Authority, and selected farm families, show that net farm income can be increased by adjusting resource use. Data for 294 Resource Management farmers completing the program over the past ten years show a 101 percent increase in net farm income during six years. For 65 farms completing the four-year Rapid Adjustment program since 1963, average net income increased almost four-fold.

Recent surveys show reproductive efficiency is the biggest problem facing the beef cattle industry. An intensified educational program to improve reproductive efficiency has been developed. With 948,000 beef cows and 230,000 replacement heifers in the state and reproductive efficiency being only 70 percent, this means that beef cattle producers were losing over \$116 million annually. The Extension staff prepared educational materials on nutrition, management, selection, and herd health and their roles in reproductive efficiency. Staffs in 89 counties held educational meetings attended by 3,241 beef producers.

In the area of Community Resource Development, AES provided educational leadership in the development of people, environmental improvement, the acquisition of community facilities, and economic development throughout Tennessee. More than 6,500 local officials and lay

leaders were asked to evaluate their communities in the areas of agriculture, conservation, and housing. Educational programs addressing top local concerns are being conducted. A special program, IMPAC, emphasized educational home economics to help families manage in a time of inflation.

Fifty-seven thousand families received educational information on inflation-fighting and energy conservation. Twenty-eight thousand home demonstration club members benefit from Extension home economics training.

The 4-H youth program, involving youngsters in grades four through 12 and Young Farmers and Homemakers aged 18 through 30, is an important part of the Agricultural Extension Service youth education program. For the fourth consecutive year, Tennessee ranked first in the nation in the number of 4-H Club members.

Successful completion of the *Tennessee Tomorrow* campaign will provide funds for improving the 4-H training facilities at Milan, Columbia, Crossville, and Greeneville.

Salary adjustments between December 1976 and November 1979 brought the average salary of Tennessee Extension agents from twelfth to sixth in the 13 southern states. The average salary of state specialists moved from thirteenth to fourth.

Armistead Becomes Vice President

Dr. W.W. Armistead became vice president for agriculture last fall, heading the statewide UT Institute of Agriculture. Dr. Armistead, former dean of veterinary medicine, succeeded Dr. Webster Pendergrass, who retired last summer after 43 years with the University.

Continuing Education

Center for Extended Learning

During 1979-80, the Center for Extended Learning recorded more than 4,000 new enrollments in 385 college credit, high school, and non-credit independent study courses.

Among new offerings are courses from the UT Martin criminal justice external degree program; in English, foreign languages, office administration, and zoology from UT Knoxville; and in radiologic technology from the Center for the Health Sciences.

CEL produced two new television/videotape programs in its "Commentaries on the Classics" series and a six-segment series on art development. These programs are available to schools and are broadcast on Tennessee public television stations. A college credit course, "Improving Instruction in Reading," is being extended by videotape from UT Chattanooga.

Under a federal grant from the Tennessee Higher Education Commission, CEL conducted a year-long project to develop plans for resource sharing in continuing education among Tennessee's post-secondary institutions.

The Undergraduate Cooperative Education office saw considerable growth of interest in cooperative education. As a result, 136 UTK co-op students learned the practical side of their academic interest with 51 employers.

The Center looks to the year ahead with a mixture of optimism and apprehension. A need for individualized instruction and practical education, and a demand for services to the general public and agencies such as Tennessee's Teaching Centers are threatened by reduced state funds and probable declines in student enrollment due to fee increases.

Department of Library Services

New materials added this year included a bibliography of Tennesseana to "Tennessee Heritage," originally published in 1965. The department continues to administer the statewide reading program of the Tennessee Federation of Women's Clubs and to assist individuals in the clubs to prepare talks and papers.

Books are sent to students taking courses by correspondence, to teachers and librarians, and to other individuals about the state. Plays from the Drama

Loan Service are sent to directors of speech and theatre in schools, colleges, universities, and little theatre groups. Information on playwrights, costumes and sets, and original Broadway productions is available.

The drastic increase in the cost of books, magazines, and postage makes it imperative that the department have more funds for operating.

Department of Radio Services

The department reached a milestone this year with the beginning of 50,000-watt FM radio station WUTC at the Chattanooga campus. The station covers the lower East Tennessee area and shares programming and expenses with WUOT in Knoxville. The FCC awarded a license to WUTC in May 1980. The station operates 19 hours a day, seven days a week.

WUOT and WUTC joined the satellite age in March. They now receive national, regional, and special programming by way of WESTAR I, orbiting over the equator. WUOT was host to several hundred at the station's thirtieth anniversary celebration.

Budget restrictions continue to be a problem. Further erosion of university support will result in reduced federal support through Corporation for Public Broadcasting grants. The University Development Office is presently working with the department to design an ongoing local fund raising campaign.

State Training Office

The State Training and Technical Assistance for Head Start contract, which UT had held for 13.5 years, was extended through September 1979. As of September 30, the contract was awarded to another institution. A protest was developed by the department staff, the Division of Continuing Education, and University attorneys and processed with the associate general counsel of the U.S. General Accounting Office. As of March 6, 1980, the Department of Health, Education, and Welfare had sustained UT's protest and proposed corrective action.

The Child Development Associate Program served 34 Head Start teaching staff with a field supervision and academic program leading toward assessment and a national credential for compe-

tence.

A proposal was submitted to the National Institute of Education for research on a collaborative supervision model for training. Preliminary proposals were submitted to the Administration for Children, Youth and Families; Allied Health; Tennessee Department of Human Services, Title XX; and F.I.P.S.E.

Television Services

The Department of Television Services added color studio facilities, a computer based video editing complex, and a large videotape duplication center. With these facilities and personnel, the following services are provided:

- Color and monochrome distribution of undergraduate television material on the UTK campus, educational videotape material to hospitals, high schools, junior colleges, industrial plants and other educational institutions, and videotape material to other UT campuses.

- Television monitoring receivers in many classroom buildings and student dormitories.

A long running series, "Ag Science in Action," is distributed on commercial and educational broadcast stations statewide. Editing and distribution of videotape "news releases" to more than 20 commercial and educational stations in Tennessee is another service of the department.

Engineering assistance, remote television facilities, and editing facilities are provided for the Johnny Majors television show, which is distributed to several Tennessee stations. The department also supplies engineering assistance for the videotape playback of most home UTK basketball games.

Engineering consultation services for UT Chattanooga, UT Martin, the UT Space Institute, and other UT centers are provided by the department. Provision of training and technical facilities to teach advanced courses for the UTK Department of Broadcasting is another responsibility.

Institute for Public Service

During the past fiscal year, the staff collectively provided assistance on nearly 15,000 requests from government and industrial officials and offered 800 training programs.

Several of these efforts to improve the efficiency and effectiveness of the public or private operation are noteworthy in this time of economic uncertainty.

Governmental Cost Savings

Since the passage of "Proposition 13" in California, local government officials have found voters reluctant to expand existing tax sources or approve new ones. The resulting inability to offset the effects of inflation has caused many officeholders to reexamine previously unpopular economy measures. One such procedure was "curbside" garbage pick-up, which had never been attempted in Tennessee.

In early 1979, UT's Municipal Technical Advisory Service was asked by the city of Maryville for help in evaluating a change from "backyard" to "curbside" collection. Conversion to an automated service operated by one person was recommended as the most financially efficient. This past year, Maryville implemented the first automated collection system in the state, with operating cost savings projected at more than \$130,000 annually. Other Tennessee cities are examining the Maryville system.

Energy Conservation

To help Tennessee's businesses and governments control energy usage, agencies of the Institute have provided energy related assistance since the early 1970s.

Two years ago, three IPS agencies—Center for Industrial Services, County Technical Assistance Service, and MTAS—became subcontractors to the Tennessee Energy Authority in its pilot energy extension service program. Energy audits identified millions of dollars in annual savings that could be realized by government facilities and industrial complexes. The program, funded by the U.S. Department of Energy, was expanded to the entire state in January.

Improved Productivity

Helping government offices and business firms improve personnel job perfor-

mance is an important aspect of all IPS activities. One project involving multi-faceted possibilities for improving productivity occurred in Shelby County this year.

With federal funding provided by the National Science Foundation, MTAS and 12 cities created the Tennessee Innovation Group (TIG) to study new approaches to some traditional problems. Millington, Germantown, and Bartlett requested that TIG examine the use of mini-computers in the three cities. The cities received a report recommending in-house computer systems that would:

- Improve productivity in functions for which cities currently rely on outside computer services.
- Add significant capability to existing staff, particularly the ability to provide current financial management information, previously unavailable but needed by decision makers.
- Provide for automation of several municipal functions not previously computerized, thus promoting additional productivity improvements.
- Offer the only alternative to adding new personnel at an annual cost higher than the initial cost of purchasing hardware and software.

While the final decision remained with each city, the TIG study showed that significantly improved productivity could be realized by using minicomputers.

Expanded Service

Since 1977, CTAS has helped officials in several counties convert existing personnel-intensive accounting systems to more efficient computerized reporting services provided by the Local Government Data Processing Corporation (LGDPC).

One of the first to take advantage of LGDPC's low-cost batching services was Rutherford County. Under the process implemented in 1977 with CTAS assistance, accounting clerks coded all transaction forms and shipped them to LGDPC's Columbia office for processing. As a result of improved hardware capability, LGDPC offered Rutherford County the option of converting from this batching process to an "on-line system" whereby personnel in the county would use their own computer terminals to enter data directly.

In January, CTAS helped the county convert to the new system, which offers

quicker access to information and a personnel reduction of nearly 50 percent.

Funding Problems

While each of these projects demonstrates the capability of IPS personnel to provide diverse, cost-beneficial assistance, the continued viability of the organization is compromised each year by an inability to keep pace with increasing costs.

The latter part of the 1970s brought a continuing erosion in permanent state funding to support the existing public service agencies, particularly MTAS and CTAS. Without the commitment of the cities and counties to provide more than 55 percent of their base assistance program, personnel cutbacks required during the past few years would have been even more severe.

Delivery of top quality technical assistance and training programs continues to be a priority of all IPS agencies. However, as requests continue to demand more sophisticated and time consuming assistance, the annual level of program output will be adversely affected unless program expansion is forthcoming.

Hutchison Named Vice President

Robert S. Hutchison, acting vice president since August 1979, was named permanent vice president for public service in June. Since 1974 Hutchison has served as IPS executive director. Prior to that, he served for 11 years as executive director of the Government-Industry-Law Center, forerunner of IPS.



Richard Eddy, right, senior field engineer with UT's Center for Industrial Services, and Jim Dye, president of Weldynamics, examine plans for the firm's new plant.

Systemwide Developments

UT's four-campus enrollment continued to increase moderately during 1979-80 despite predictions of enrollment decline on the national level. The court-ordered merger last July of UT Nashville into Tennessee State University, however, reduced the total UT enrollment as shown in the accompanying table. Total head-count enrollment increased in 1979 at the Knoxville, Chattanooga, and Martin campuses. There was a slight decrease at the UT Center for the Health Sciences.

Raises, Fee Increases

Operating appropriations totaling nearly \$130.3 million for UT in 1980-81 were approved by the General Assembly and the state administration. The appropriations are an increase of more than \$8 million over the previous year.

UT faculty and staff will receive raises averaging 7.2 percent. Longevity pay, which some UT personnel received for the first time last year, will be increased and extended to more employees.

The state appropriations necessitated the largest student fee increases in recent history. Increases range from 13.5 percent for in-state undergraduates to 42 percent for medicine and veterinary medicine students. The revenues generated by the fee increases were anticipated by the state when the budget recommendations were prepared.

Physical Facilities Grow

UT has awarded construction contracts worth more than \$28.1 million since July 1, 1979. Total value of projects under construction during 1979-80 is \$64.5 million.

Two major projects were completed during the year—the E.P. and Kate Cole-

Fall quarter enrollments for 1978 and 1979 for UT's five campuses were as follows:

Campus	1978	1979
Knoxville	29,720	30,391
Center for the Health Sciences	2,764	2,720
Martin	5,090	5,163
Chattanooga	7,104	7,545
Nashville	5,419	*
Total	50,097	45,819

*UT Nashville merged with Tennessee State University. (Source: Office of Institutional Research)

man College of Medicine Building at the Center for the Health Sciences in Memphis and the Fine Arts Building at UT Chattanooga.

Major projects under construction are the Sports Arena/Physical Education facility at UT Chattanooga, an addition to Neyland Stadium at UT Knoxville, alterations and an addition to the Agricultural Engineering Building at the Institute of Agriculture at Knoxville, and improvements at the Clyde Austin 4-H Training Center.

Projects in the design phases total \$73.5 million. They include an addition to UT Hospital in Knoxville, an addition to the Claxton Education Building at UT Knoxville, an academic building addition and physical plant space at the UT Space Institute at Tullahoma, and the Library-Nursing Building at UTCHS in Memphis.

Capital outlay and major maintenance projects funded by the 1980 General Assembly are: \$8 million for a Library/Nursing Building at UTCHS in Memphis; \$1.7 million for Pathology Building

renovation, also at UTCHS; \$750,000 for renovation of the east end of Alumni Memorial Gymnasium at UT Knoxville; \$300,000 for renovation of the Clyde Austin 4-H Training Center, Institute of Agriculture; and funds totaling \$825,000 for elimination of architectural barriers to the handicapped at UTC, UTK, UTM, and UTCHS.

Federal Actions Noteworthy

Federal legislation and federal funding affect the University in many ways. The institution has continued input at the federal level and constantly monitors effects of federal actions on UT. Among developments during the past year are the following.

The Middle-Income Student Assistance Act has brought substantial increases in the number of students assisted at UT. Overall student aid increased from \$8.7 million in 1978-79 to \$12.3 million in 1979-80, and in the BEOG program 5,402 students received \$3.9 million

in 1978-79 while 7,771 students received \$6.8 million in 1979-80. Also, modifications in the Guaranteed Student Loan program led to a quadrupling of the use of this program on UT campuses during the past year.

Basic research continued to receive strong support in the 1979 and 1980 federal budgets as well as the initial 1981 request.

Continuing conflicts over capitation grants in the health sciences are of concern. The Congress refused requests from the administration to cut off these funds and undertook a program to reduce capitation gradually. The administration has resubmitted its proposals, and debate continues.

Both the House of Representatives and the Senate are considering reauthorizations of the federal involvement in health manpower development. The ad-

ministration promises to veto either of the bills if they are passed. The future for federal involvement in the training of physicians, dentists, pharmacists, and veterinarians is clouded.

The President has submitted two budgets this year. The debate over major rescissions of 1980 money and major cuts in 1981 to achieve a balanced budget continues. UT agrees with the necessity of balancing the budget and is willing to absorb its share of the cuts. But the University is resisting cuts which it feels are more than its "fair share" and is working closely with higher education associations to strike an appropriate balance.

President Receives UT Book

The first volume of *The Papers of Andrew Jackson*, published by the University of Tennessee Press, was presented to President Carter April 17 at the White

House. Present at the ceremony were Dr. Sam Smith, editor of the volume; Carol Orr, director of UT Press; and Dr. Charles Smith, UT Martin chancellor who formerly headed UT Nashville. The project was begun at UTN by Dr. Sam Smith, then transferred to UTK when UTN was merged with Tennessee State University.

The Jackson papers are expected to fill 16 volumes when completed. The project includes correspondence, business accounts, memorandums, legal documents and other papers of the nation's seventh president.



President Carter was presented copies of the first volume of *The Andrew Jackson Papers*, published by the UT Press. At the White House ceremony were the co-editors, Dr. Sam Smith, extreme left, former UT Nashville history professor, and Mrs. Harriet Chappell Owsley, extreme right. Also attending the ceremony was Dr. Charles Smith, UT Martin chancellor and former chancellor of UTN.

The University of Tennessee

Budget Summary 1979-80 and 1980-81

UNRESTRICTED CURRENT FUNDS*
(1980-81 Budget Adopted at Board Meeting June 19, 1980)

	Actual Expend. and Transfers 1979-80	Proposed Budget 1980-81
Chattanooga	\$19,065,472	\$20,291,848
Knoxville (including Knoxville Campus, Evening School, School of Social Work and Testing Bureau)	111,580,682	119,418,556
Martin	16,316,117	18,364,386
Space Institute	2,872,500	3,524,190
Center for the Health Sciences Memphis Campus, College of Medicine, Memorial Research Center at Knoxville Clinical Centers at Knoxville and Chattanooga Family Practice Clinics at Memphis, Jackson, Knoxville and Chattanooga	45,070,408	46,044,644
Agricultural Experiment Station	11,609,027	11,456,515
Agricultural Extension Service	13,150,629	14,197,256
Veterinary Medicine	5,136,115	5,462,886
Municipal Technical Advisory Service	873,191	969,934
County Technical Assistance Service	675,938	908,789
Statewide Programs (including Continuing Education, Institute for Public Service and Universitywide Administration and Services)	9,765,582	7,697,794
TOTAL	\$236,115,661	\$248,336,798
	Estimated Revenue 1980-81	
Student Fees	\$ 38,490,626	
State Appropriations	130,289,600	
Federal Appropriations	9,151,301	
Gifts, Grants and Contracts	8,399,321	
Sales of Educational Activities	9,190,420	
Sales of Auxiliary Enterprises	45,856,242	
Other Sources	6,959,288	
TOTAL	\$248,336,798	

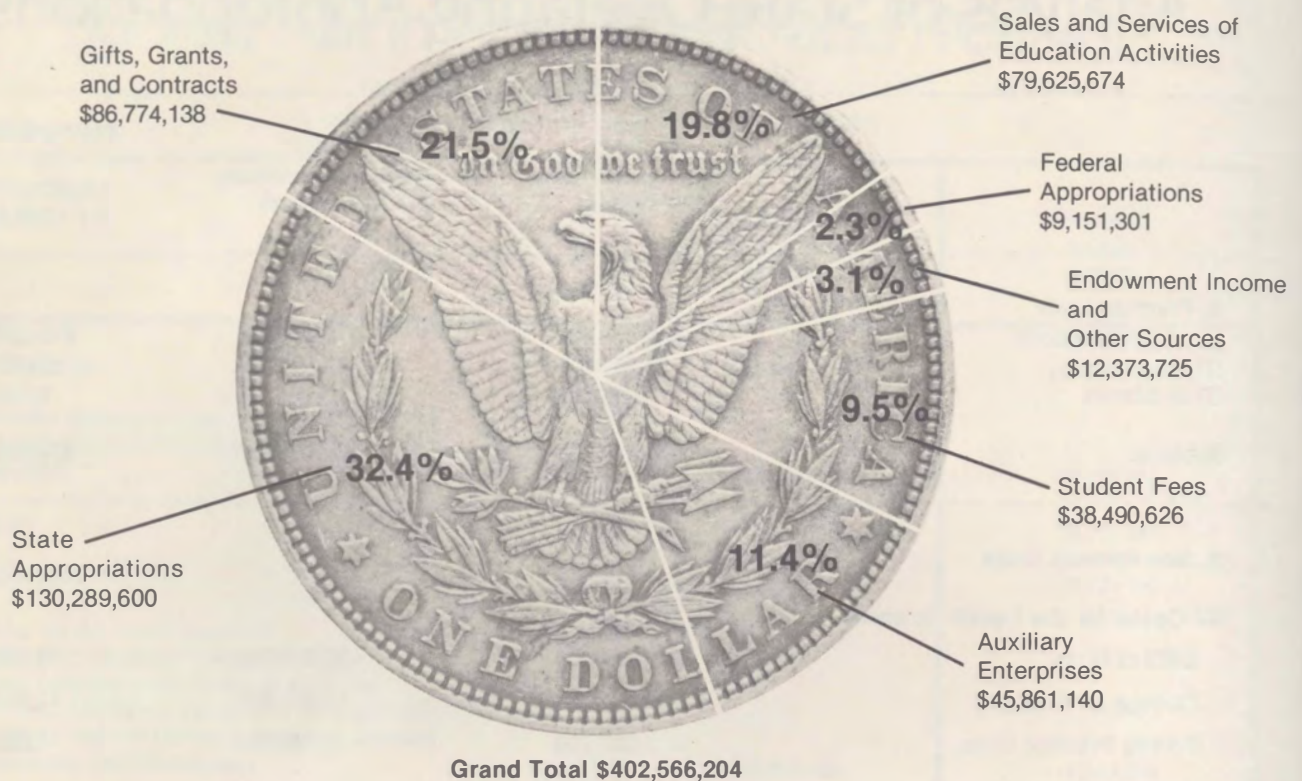
*Includes all entities except hospitals.

Analysis of State Operating Appropriations

	Actual Appropriations FY 1979-80	THEC Recommendations FY 1980-81	Appropriated by Legislature FY 1980-81
A. Formula Units			
UT at Chattanooga	\$10,434,200	\$11,902,000	\$10,929,100
UT, Knoxville	51,050,500	59,824,700	55,003,700
UT at Martin	8,804,000	10,007,900	9,196,300
Subtotal	\$70,288,700	\$81,734,600	\$75,129,100
B. Non-Formula Units			
UT Center for the Health Sciences			
UTCHS Units	\$18,079,900	20,655,300	19,185,400
College of Medicine	10,751,100	12,351,800	11,293,200
Family Practice Units	1,806,700	2,141,200	1,882,300
UT Space Institute	1,192,800	1,494,100	1,302,700
Agriculture			
Agricultural Experiment Station	4,566,600	5,448,100	5,049,500
Agricultural Extension Service	7,360,300	8,551,000	8,043,900
Veterinary Medicine	4,361,600	5,126,200	4,719,900
Public Service			
Institute for Public Service	1,171,300	1,317,000	1,219,900
Municipal Technical Advisory Service	386,500	455,900	411,000
County Technical Assistance Service	299,900	358,800	317,800
Continuing Education			
Division of Continuing Education	656,600	760,900	698,800
UT Administration	926,600	1,084,800	1,036,000
Subtotal	\$51,559,900	\$59,745,100	\$55,160,400
GRAND TOTALS	\$121,848,600	\$141,479,700	\$130,289,500

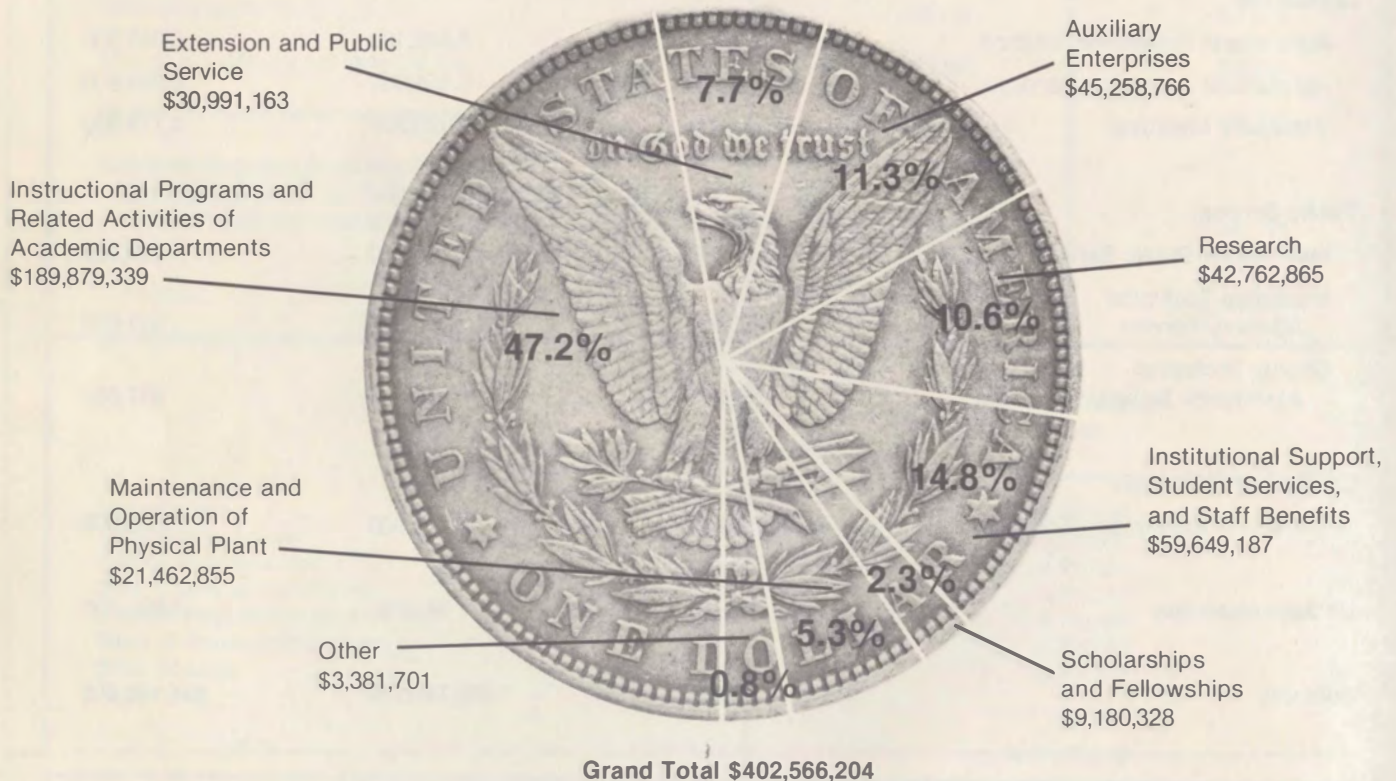
Where UT's Money Comes from...

Resources Budgeted 1980-81*



...and Where it Goes

Uses of Budgeted Resources 1980-81*



*Includes unrestricted, restricted, and hospital funds. Also includes restricted staff benefits which have not been reported previously.

Development

As the University enters the 1980s we find ourselves at a strategic crossroads in our development program. At the close of the 1970s, the University was in transition, moving from an emphasis on bricks and mortar to an emphasis on people and programs. During the decade the University's development program, with the leadership of the Development Council, moved from \$4 to \$5 million a year to a \$10 to \$11 million annual private support level. This was accomplished through the efforts of the Development Council and the *Tennessee Tomorrow* fund campaign.

Recent events on both the federal and state levels have created some disturbing implications for higher education and made private support more important than ever. We are also nearing the end of the University's first capital gifts campaign. The intersection of these two events creates the strategic crossroads for the development programs.

Without question, *Tennessee Tomorrow* has been the most successful development venture ever undertaken by the University. A firm foundation has been laid for the future. Final campaign totals will be reported at the fall Development Council meeting, but we know the campaign will reach the minimum objectives. The Council has appointed a committee to present a view of a well planned future for UT's private support program to coincide with the final *Tennessee Tomorrow* fund report.

Funding Trends Ominous

Hard work is essential to maintain the momentum the campaign created in UT's statewide system and to improve programs for present and future students. Countering our private giving successes are potentially damaging trends in state and federal funding for higher education. These trends, plus a general public tendency to oppose tax increases, resulted in the revamping of next year's state budget.

All of this means support from the private sector is more vital than ever. The goals of *Tennessee Tomorrow* included funds for student scholarships, faculty salary supplements, library materials, instructional equipment, and program improvements. The need for such funds is greater now than ever before.

Campaign Spin-Offs Pleasing

Spin-offs from our efforts in the *Tennessee Tomorrow* fund campaign are gratifying. Faculty and staff are more involved in the development process. We are broadening the base of support for the University from individuals, corporations, and foundations who have never before financially supported UT. We continue to make progress with those who had policies not to support publicly assisted universities. And, we are better informing the people of the state of the importance of private support for the State University.

Some major gifts received during the 1979-80 fiscal year through the *Tennessee Tomorrow* fund include:

- \$1 million from Knoxville attorney Lindsay Young to establish 10 professorships. Additionally, a major portion of this gift will be used toward the National Endowment for the Humanities challenge grant which will bring UT \$1 million if the University raises \$3 million for the humanities.

- \$500,000 from Harry Lyon of Gatlinburg, Tennessee, for equipment for the University Hospital's Intensive Care Nursery and family practice programs in Knoxville.

- \$125,000 from the International Mineral and Chemical Company.

- \$100,000 from South Central Bell Telephone.

- \$200,000 from Dunbar Abston to estab-

lish the Frank Norfleet Forum at the UT Center for the Health Sciences.

- \$700,000 from the Robert Wood Johnson Foundation for a rural health care program at UTCHS.

Leadership Aids Fund Raising

UT is fortunate to have outstanding business and professional men and women serve on its Development Council and in leadership positions in the *Tennessee Tomorrow* campaign. All have worked tirelessly on behalf of the University. We owe a debt of gratitude to Alma Reagan, chairman of the UT Development Council; Bob Condra, vice chairman of the council; John Harper and Dr. Andy Holt, national co-chairmen of *Tennessee Tomorrow*, and John Fisher, national vice chairman of the campaign, Bill Stokely and Bill Swain, national co-chairmen of the corporate gifts division, and Jim Irvine, state chairman, also deserve recognition.

Tennessee Tomorrow has proven the University can attract significant private support. The leadership of the Development Council and the *Tennessee Tomorrow* fund will help the University move forward from the strategic crossroads that the development program faces as we begin the 1980s.



Guests at the dedication of the E.P. and Kate Coleman College of Medicine Building who joined in unveiling the plaque were, left to right, UT President Edward J. Boling; Lt. Gov. John Wilder; Mrs. Eleanor Story, niece to Mrs. Coleman; John Hux, attorney of the Colemans' and Ned Ray McWherter, speaker of the Tennessee House of Representatives.

Alumni Affairs & Annual Giving

The University's program of alumni activities and annual giving continues to generate support for the institution from alumni and other University friends throughout the nation.

The National Alumni Association is the volunteer organization that provides leadership and directs assistance from more than 1,800 alumni volunteer workers each year. The following alumni programs combined with more than 130 alumni chapter meetings in 1979-80 to bring together some 20,000 UT alumni throughout the country:

- The annual Alumni Leadership Conference.
- Women's Activities Committee continuing education seminars.
- Homecoming and class reunion activities at the Knoxville, Chattanooga, Martin, and Memphis campuses.
- The alumni tour program.
- Professional school activities.
- Undergraduate Alumni Council activities at UTK, UTC and UTM.
- Annual Giving campaigns.

Active UT alumni chapters are operating in most of the 95 counties in Tennessee and in 50 cities outside the state. Some of these chapters are composed of two or more combined counties, since few alumni live in some of the smaller counties, but the total program of alumni activities and annual giving is taken to all alumni chapters each year. We continue to examine additional areas throughout the nation where UT alumni chapters are needed.

The Annual Giving Program continues to generate record amounts of support, going over the \$1 million-a-year mark for the fifth consecutive year. The year now ending has produced another record, with \$1,561,405 being given by alumni and other friends (the table compares annual giving for 1978-79 and 1979-80.) The Annual Giving Program remains among the top five such fund raising programs among all public institutions of higher education in the United States and Canada. During this past year, the Annual Giving Program was recognized by the Council for Advancement and Support of Education for its sustained performance.

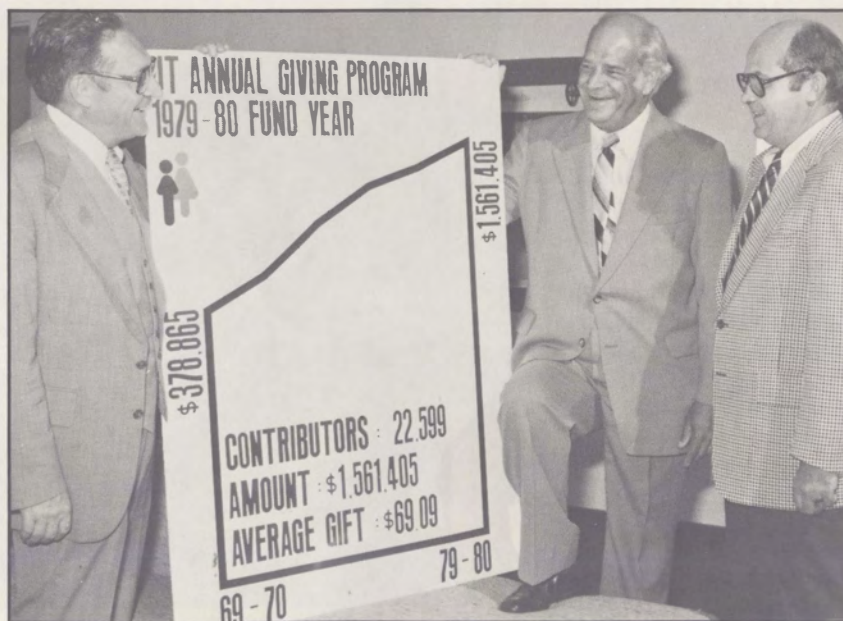
	1978-79	1979-80	NET CHANGE
Number of Contributors	23,086	22,599	-487
Dollar Total	\$1,488,846	\$1,561,405	\$72,559
Average Gift	\$64.49	\$69.09	\$4.60

The two-part alumni phase of the *Tennessee Tomorrow* fund has been conducted this year. During April, May, and June 1979, personal solicitation campaigns were held among current members of the Presidents Club, University 500, and Century Club to generate specific gifts and pledges for *Tennessee Tomorrow*, over and above what these special gift club members already contribute on an annual basis. During the fall and winter, personal solicitation campaigns were held throughout the state, asking persons who contributed \$25-\$99 last year to consider joining the Century Club. Approximately 300 increased their annual contribution to the Century Club level. During the final few months of the alumni phase of *Tennessee Tomorrow*, all noncontributing UT alumni will be contacted through direct mail and/or tele-

phone campaigns to encourage them to contribute.

The alumni tour program continued to expand its scope this year. Rather than utilize charter aircraft as in the past, all alumni tours for 1980 were scheduled on regular commercial airlines, offering larger aircraft for greater comfort. Alumni tours planned for 1980 include trips to the Caribbean, Australia/New Zealand, the People's Republic of China, the Western Mediterranean, Munich/Prague/Vienna, and Yugoslavia.

The partnership between the University and the National Alumni Association involves key alumni volunteers in nearly all phases of University activity. Their interest, concern, commitment, time, and effort represent the primary reasons for the success of the total program of alumni affairs and annual giving.



Examining annual giving figures for 1979-80 are, left to right, UT President Edward J. Bolling, Dr. James W. Hall, national chairman of annual giving, and Dr. Joseph E. Johnson, executive vice president and vice president for development.

The Year Ahead

I believe it is obvious from the foregoing reports that our campuses and units have lived up to their commitment to quality in 1979-80; but it is equally clear that problems exist and that these problems will be aggravated by the budgetary limitations under which we must operate in the year ahead.

As noted previously in this report, the University of Tennessee will move into the 1980-81 fiscal year on one of two roads. It would be easy to say, "Our hands are tied" and follow the course of least resistance that leads to mediocrity. But we have an obligation to the citizens of Tennessee, our students and their parents, and to our alumni and friends who have supported the University through the gifts to the *Tennessee Tomorrow* campaign to continue providing a margin of excellence in all of our programs. We are not certain how rising fees and inflation will affect enrollment, but we have an obligation to people of all ages who seek an education at our campuses. We must see that they are not short-changed in the quality of training they receive. We must keep our commitment to quality and strive to attain excellence insofar as we are able.

For years our professors and staff personnel have done an excellent job of building and maintaining quality despite limited budgets. Their track record indicates an ability to perform well in the face of adversity. As never before in recent years, this ability will be tested in the year ahead.

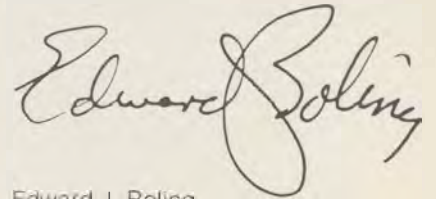
If we must retrench in 1980-81, we should take care to do the least amount of damage possible to our programs and our people. We have an obligation to the people who have worked long and hard to give The University of Tennessee its reputation for quality education. If the work force must be reduced, it should be done largely through attrition, by not filling positions as they become vacant. Necessity demands that we be extremely careful about granting tenure and giving promotions.

We shall take a hard look at programs of marginal quality and at the number of graduates produced. If these programs cannot be improved, it may be necessary to terminate them or phase them out, so that we can concentrate on areas in which we are strong.

We must be sure that every tax dollar—in fact, every dollar we receive from all sources—is wisely used. We must continue to conserve our resources, especially energy.

Energy shortages and inflation, coupled with legislative demands to curb travel, work a particular hardship on our extension personnel and programs, which require helping our citizens on farms and in factories, business places, and governmental agencies throughout the state. In the year ahead, these restrictions pose a serious challenge for our historical land grant mission. The people of Tennessee, the Governor, and the legislature must carefully weigh the value of our land grant services to the state in the years ahead.

As noted previously, we understand the state's fiscal problems and we want to express our appreciation for the support we receive from the Tennessee Higher Education Commission, Governor Lamar Alexander, Commissioner Lewis Donelson, Lieutenant Governor John Wilder, House Speaker Ned Ray McWherter, and members of the General Assembly. We also are appreciative of the dedicated work of the University's Development Council, which is guiding the *Tennessee Tomorrow* campaign to a successful conclusion, and the continued support given by the National Alumni Association and the private support organizations of the four academic campuses. We are especially indebted to the administrators, faculty, staff, and students throughout the entire University system for their contributions to quality education.



Edward J. Boling
President

MAINTAINING
QUALITY IN A TIME
OF CRISIS



NOVEMBER 1980

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