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President's Report to Board of Trustees, 1986-1987

Clemson University

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As South Carolina’s land-grant university, Clemson fulfills a three-part mission: teaching, research and public service.

Founded by Thomas Green Clemson in a bequest to the state, the University occupies 1,400 acres, part of which borders Lake Hartwell. Surrounding the campus are an additional 20,860 acres of University farms and woodlands available for research, plus another 10,447 acres throughout the state. As some 12,000 Clemson students crisscross the tree-lined campus to classes, many walk right by the homeplace of Clemson’s famous father-in-law, South Carolina statesman John C. Calhoun.

Today the Calhoun land is strategically located near one of the South’s fastest growing business corridors: just 12 miles from Interstate 85, about halfway between Atlanta and Charlotte.

On the eve of our 100th year—we begin celebrating the Centennial on April 6, 1988—we are aggressively seeking ways to use Clemson’s resources to enhance the economic development in our state. We are focusing on the 21st century and the compelling need to compete in a global economy.

To increase the research and public service that attract new industry and jobs and to continue excellent undergraduate teaching are our primary goals.

We move toward the Second Century committed to an industry-education-government partnership for economic progress—a partnership unrelenting in its search for new technologies, new products and new markets.

Getting into position—focusing on our goals with the urgency that global competition demands—best characterizes Clemson University’s activities in 1986-87.
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PRESIDENT'S MESSAGE

Eager to meet the future.

This report summarizes the activities of a critical year in our University's history, a year of strategic planning and accelerated action. Our aim has been to position ourselves to fulfill our land-grant mission in terms relevant to South Carolina's economic progress. We've used these months to get a head start on our second hundred years of teaching, research and public service.

The most significant activity of the 1986-87 academic year has been the development of our action plan, "Clemson University: The Second Century." It outlines the five areas we are emphasizing to make South Carolina competitive in a global economy: agriculture and food, engineering and basic science, marketing and management, quality of life, and textiles.

The plan underscores our continuing commitment to quality teaching and our determination to expand graduate teaching and research opportunities in directions that potentially can create and sustain higher paying jobs and a better quality of life for people throughout the state. Success requires a partnership for investment between the state's research universities, state government and industry.

Developing the Second Century plan stirred a sense of urgency across our campus. Throughout this report, you'll see evidence that we've already taken significant steps in each emphasis area. The world will be watching as our research scientists in agriculture begin testing biotechnology products. Other examples include the breakthrough robotics designed by researchers in our Advanced Manufacturing Center that could eliminate the need for humans to do hazardous work; a new degree program in language and international trade to prepare students for international marketing opportunities; development of new composite materials and fibers by engineers and textile scientists that could launch new manufacturing industries in the state; and a national center to solve the student dropout problem in high schools.

As this report went to press, we announced the signing of the largest research contract in Clemson's history. Under an agreement with the U.S. Defense Logistics Agency, Clemson will establish and operate a state-of-the-art demonstration facility to manufacture men's short-sleeved military shirts. Over the next three years, the contract will bring to the University at least $3.5 million for interdisciplinary research and demonstration projects related to apparel manufacturing. With options for extension for two more years, the agreement has a potential maximum value of $10 million. Funding will come from the federal and state governments, private industries and the University.

Governor Carroll Campbell and U.S. Representative Butler Derrick, both of whom were on campus for the announcement, provided critically important support in the effort to win the contract. Governor Campbell made a key point when he said winning the contract shows that Clemson can successfully compete for advanced research funding.

This capability for major research, combined with the commitment of South Carolina's leaders, provides a solid foundation for a major push during the 1988 legislative year to gain a long-term commitment of state resources for research and other top priorities in higher education.

As we begin the observance of our Centennial, we see the future in sharp focus. Our mission is clear, and our priorities are set. I hope you'll join us in our pursuits as we move into our second hundred years.

Max Lennon
1986-87 HIGHLIGHTS

In several respects, our year at Clemson University paralleled that of our state government: We had to overcome some serious financial difficulties. Despite University growth, the state could fund less of Clemson’s needs than in the past and called for another budget cut mid-year of more than $2.6 million in educational and general and land-grant programs.

It’s a tribute to our faculty, staff and students that we overcame crowded classrooms, unfilled or frozen teaching and staff positions, insufficient equipment, and other obstacles. In a word, we persisted, and it paid off with fresh achievements across campus.

Research grants and contracts increased 67 percent to $18.6 million, up $6.5 million over the previous year. Sponsored programs and unrestricted expenditures totaled $48.9 million, up $10 million over the previous year. Clemson ranked 89th in the top 100 research universities in the nation.

Total private giving reached an all-time high of $16.6 million. A record $7.3 million was received from private sources to support Clemson’s academic programs. Unrestricted annual giving to the Loyalty Fund reached a record $875,241, while gifts from corporations, foundations and associations climbed to a record $3.4 million. Gifts for athletic scholarships contributed through IPTAY totaled $5 million. A special Athletic Academic Endowment for non-athletic scholarships, supported by the Athletic Department and by matching corporate gifts to IPTAY, now totals more than $867,000.

- Clemson awarded 268 scholarships to freshmen, the largest number ever.
- Five new research centers and institutes began operating:
  - Center for Computer Communications Systems
  - National Dropout Prevention Center
  - Emerging Technology Development and Marketing Center
  - Institute for Recreation, Travel and Tourism
  - Center of Excellence in Science and Mathematics Education

- An Agri-Biotechnology initiative was launched, highlighted by a partnership with Monsanto Company, to field test a genetically engineered microorganism.
- Dr. Art Young, an internationally known scholar, was chosen for the Campbell Chair, the nation’s only fully endowed chair in technical communications.
- Construction began on a new 40,000-square-foot computer center in the Clemson Research Park.
- A new $11.9 million chemistry building was built and dedicated.
- Two graduate degrees and four new undergraduate programs were instituted:
  - Ceramic Engineering (Ph.D.)
  - Building Science (M.S.)
  - Language and International Trade
  - Fine Arts
  - Philosophy
  - Landscape Architecture

- A College of Engineering researcher, Yuan Zheng, won the Presidential Young Investigator Award, the third winner from Clemson in the National Science Foundation program’s four-year history.
Two Clemson faculty members were selected to serve four-year terms as chief readers of advanced placement examinations. Physics professor Ed Gettys and biology program director Doris Helms will oversee the reading and grading of essay portions of advanced placement tests in their respective disciplines. (Of only 21 faculty readers nationwide, Clemson now has three.)

The South Carolina Agricultural Experiment Station celebrated its 100th anniversary. Establishment of what was then called the South Carolina Agricultural Farms and Station was followed in 1887 by adoption of the Hatch Act, which set up the national system of agricultural experiment stations to conduct basic and applied research in agriculture and related fields.

The Strom Thurmond Institute was awarded $125,000 to assist in developing a statewide water policy, part of a four-year, $1 million grant from the South Carolina Water Resources Commission. To date, the institute has received $875,000 for the project.

Five out of five students nominated for study grants and scholarships through the Fulbright program received awards.

Five outstanding Clemson graduates received the Alumni Association’s highest tribute, the Distinguished Service Award: Bob Campbell ’37, who built his Gaffney-based business from a two-quarry operation to one with five large, efficient quarries and a heavy industrial supply business; Bob Brooks ’60, whose Eastern Foods Inc. of College Park, Ga., makers of “Naturally Fresh” salad dressings and sauces, has grown into a $50-million-a-year business; John Tice ’55, who as owner and founder of Tice Yarn Inc. of Dalton, Ga., pioneered machinery that today is considered state-of-the-art for the U.S. carpet yarn industry; George Bennett ’55, who set athletic fund-raising records at Clemson and at Vanderbilt before becoming Furman University athletic director; and Winston Lawton, Sr. ’37, founder of Lawton Oil Company, which today distributes more than six million gallons of products a year.

UNDERGRADUATE TEACHING
A basic, firm and unshakeable commitment.

Clemson has a long and proud tradition of undergraduate education, of preparing young people for the world in which they will live and work. This commitment to teaching is basic, firm and unshakeable. Our quest for great teachers—and the opportunities through private support to bring them to our campus—is a paramount concern. An outstanding example of how a private gift can bring an internationally known scholar to the Clemson classroom is the Bob Campbell Chair of Technical Communications, the only such fully endowed chair in the United States.

The gift of more than $1 million from Bob and Betsy Campbell of Gaffney supports a joint program in the colleges of Engineering and Liberal Arts. Thanks to the Campbells, every Clemson engineering student will have the highest quality verbal and written communications training available today. The appointment of Dr. Art Young, a widely recognized scholar, to fill this chair secures Clemson’s national leadership in shaping the emerging field of technical communications.
Classroom teaching excellence is highly prized on Clemson's campus. The highest honor a faculty member can earn is presented by the students themselves through the Alumni Master Teacher Award. Dr. Mike McDonald, associate professor of management in the College of Commerce and Industry, was chosen for the award in 1987. Well known as a scholar and continuing education teacher as well, McDonald exemplifies Clemson's land-grant mission of teaching, research and public service.

The academic strength of Clemson's students continues to rank high. The entering freshman Scholastic Aptitude Test score average of 1,025 is a Clemson record. In addition, Clemson's 1986 fall semester freshmen entered with enough advanced placement credits to rank the University 33rd in the nation in that category. A record number of 1986 freshmen, 268 students, entered Clemson with scholarships.

Nurturing scholarship throughout the undergraduate years is the mission of Calhoun College, the oldest and largest honors program in South Carolina with 467 students. Calhoun College observed its 25th year in 1987—what better birthday tribute than a record 37 students who were graduated with senior departmental honors.

In the fall 1986 semester, we began accepting students in two new undergraduate programs, marketing and packaging science. The marketing degree, offered in the College of Commerce and Industry, meets a growing demand in that field.

The degree in packaging science is offered in the College of Agricultural Sciences. Packaging and related activities constitute the third largest industry in the country. In South Carolina, 224 food processing-related industries employ almost 18,000 people.

We broadened our undergraduate curriculum further with four additional degree programs approved for fall semester 1987.

Combining modern languages with agricultural economics, parks and recreation management, or marketing, the B. A. degree in language and international trade prepares students for the international business arena. Such a combination is growing in demand as we meet competition on a global scale.

A degree in philosophy is now available to students through the newly created Philosophy and Religion Department in the College of Liberal Arts.

In the College of Architecture, students majoring in landscape architecture, the only such program in the state, will study the natural, social and technological sciences as well as the specifics of landscape architecture.

Also in the College of Architecture, a bachelor's degree in fine arts is a logical extension of our excellent master's program in that field. The program emphasizes practical applications of art as it affects people's lives, such as textile and packaging design.
GRADUATE TEACHING
Emphasizing advanced study to advance South Carolina.

Graduate teaching at Clemson University goes hand-in-hand with our commitment to research and extension. But we seek opportunities for immediate contributions as well as future-oriented breakthroughs in technology. An important example is Clemson's designation as the Center of Excellence in Science and Mathematics Education by the Commission on Higher Education. The program unites our College of Education and the departments of Biology, Mathematics, Physics and Computer Science with public school teachers. This five-year intensive effort to raise science and math teaching standards will affect South Carolina’s future dramatically.

Two additional graduate degrees were approved for fall 1987, both directly related to the state's economic development.

A new master’s program in building science helps fill a need long felt by the construction industry.

The Department of Ceramic Engineering now offers a Ph.D., rounding out a curriculum that literally launched an industry. From a handful of eight companies employing 1,200 people, the industry today produces $800 million in products each year and employs more than 14,000 people with a payroll of more than $165 million. One of only two of its kind in the Southeast, the program will be the only engineering program in South Carolina with a primary emphasis on the inorganic materials processing and producing industry.

Another program aimed at increasing excellence in public schools is the Advanced Placement Summer Institute for teachers of biology, physics, mathematics, computer science, English, Spanish, United States history and European history. The third annual institute, in the summer of 1987, brought the number of teachers who sought this graduate education to 350. Major funding for the program comes from the South Carolina Department of Education.

A doctoral program in food technology began in the fall semester 1986. It is one of seven such programs in the South and the only one in South Carolina.
Following its own statewide study, the Commission on Higher Education commended our environmental systems engineering program for its excellence.

Major research contracts are providing a significant boost to graduate study in two other areas. Clemson’s Mathematical Sciences Department was awarded a $3.2 million contract from the U.S. Office of Naval Research to support basic and applied research in computational analysis and discrete mathematics. Of nearly 1,000 proposals submitted by 175 universities under the new federal University Research Initiative program, Clemson’s was one of only three awards in mathematical sciences.

A Department of Defense grant for $343,093 to the Computer Science Department expands TECNET (test and evaluation community network), which links more than 100 Defense Department research sites involved in simulated weapons test research.

The prestigious Close Fellowship, donated by Springs Industries, Inc. of Fort Mill and given annually to two top incoming graduate students, was awarded to Erik Karlsen Reed of Mauldin, who graduated in electrical engineering from Clemson, and Robert Allen Kneuper of Burke, Virginia, who graduated in economics from George Mason University. Both graduated with 4.0 (all A’s) grade-point averages. The renewable fellowship pays the recipient $12,000 per year, helping Clemson recruit the nation’s top scholars.

The International Services Office has moved to the Graduate School and has expanded its activities in keeping with initiatives related to international trade. Clemson’s international students represent approximately 84 nations.

At 1986-87 graduations, the University awarded 543 master’s degrees and 64 doctorates.

**STUDENT DEVELOPMENT**

*Developing the whole person.*

We continue to attract exceptional students. In the 1986-87 freshman class, 37 percent ranked in the top 10 percent of their high school class; 63 percent were in the top 20 percent; and 93 percent were in the top 50 percent. The average Scholastic Aptitude Test score for entering freshmen was 1,025, a Clemson record.

Advanced standing was granted to 481 entering freshmen through the College Board Advanced Placement program. Together their earned credit hours totaled 4,785.

The career services office took several steps to enhance job-search assistance for graduating seniors. An employer data base is now accessible from selected computer terminals across campus. The same terminals can be used to secure appointments for interviews. Recruiters from 390 companies held 6,191 interviews.

The Cooperative Education program continues to expand. Combined earnings of the 614 participants topped $3.65 million.

Mechanical engineering cooperative education student Andy Castro gains practical experience in robotics while working this semester at a local industrial firm.
TOTAL ENROLLMENT
Fall 1986
Forest and Recreation Resources 3.8%
Agriculture 6.0%
Education 15.7%
Architecture 4.2%
Nursing 2.9%
Liberal Arts 7.6%
Engineering 25.0%
Commerce and Industry 22.0%
Non 1.1%

About 68 percent of the student body received financial assistance totaling approximately $23 million.

Programs to enhance students' personal development, such as the peer leadership training program for emerging leaders, the career exposition which attracted 56 companies, and special activities for black awareness, continue to receive emphasis.

The Office of Student Development received a $29,000 grant from the Governor's Office to develop a campus alcohol awareness program.

Clemson's University Union thrives. Programming, including more than 800 events last year, spans social, cultural, educational and recreational interests. Its reach includes faculty and townspeople as well as the student body.

Participation in the intramural program has almost tripled in 10 years.

In Athletics
Clemson enjoyed one of its most successful athletic years ever, winning seven Atlantic Coast Conference championships: football; women's cross country, swimming and tennis; and men's indoor track, tennis and golf.

Bob Boettner, swimming; Cliff Ellis, men's basketball; Andy Johnson, women's tennis; and Wade Williams, men's track, each won ACC Coach of the Year honors.

Academic All-Americans:
Kitty Christian of Neshanic Station, N.J., women's swimming.
Chris Sherman of Albuquerque, N.M., volleyball.
James Rootes of Atlanta, Ga., soccer.

Athletic All-Americans and Academic All-Americans:
Engelise Driehuis of The Netherlands, women's tennis.
Jason Griffith of Orangeburg, golf.
Denise Murphy of Alexandria, Va., volleyball.

NCAA Postgraduate Scholarship:
Matt Frooman of Clemson, men's tennis.
RESEARCH AND THE SECOND CENTURY
Helping to create the future.

To make sure our efforts and resources are targeted to the right areas for South Carolina’s future, we undertook a process of serious self-scrutiny and planning early in 1986.

From these efforts came “Clemson University: The Second Century,” our strategic plan for achieving excellence in education, research and public service. The plan was endorsed by the President’s Advisory Council, 30 leaders in business, government, education and civic affairs. It emphasizes a continuing commitment to teaching and calls for an increased commitment to research and public service.

At the same time we joined the state’s other research universities, the University of South Carolina and the Medical University of South Carolina, in calling for a research investment act to boost economic development. Together we challenged South Carolina’s leadership to form a partnership for economic progress.

Since then at least seven other groups and agencies concerned with job creation and a better life for South Carolinians and others in our region have echoed or endorsed our call for an all-out drive toward the future. The National Governors’ Association urged that we “build a bridge between the classroom and the marketplace....” The Southern Growth Policies Board said we must “increase the economic development role of higher education” and “increase the South’s capacity to generate and use technology.”

The state Science Advisory Committee for Economic Development recommended investing one percent of the annual state budget in science education and research. The S. C. Commission on Higher Education unveiled “The Cutting Edge,” its plan for excellence that calls for up to $35 million a year for research grants and matching research incentive funds.

Others recommending a major investment in higher education include the State Coordinating Council for Economic Development, the Alliance for Science and Business and the S. C. Research Authority.

During the year we have nurtured, honed and polished the Second Century plan. And results are already evident, as noted in this report. It is a dynamic plan, changing as conditions change and opportunities surface. We’ll complete some projects and add others in their place. But every effort will address one of five crucial areas:

Agriculture and Food: Applying biotechnology to increase plant and animal production through genetic engineering and the use of naturally occurring microorganisms. Clemson researchers also are working on applications to degrade toxic wastes and pesticides in the environment, control plant pests and diseases, and process food products.

Engineering and Basic Science: Focusing on materials (especially biotechnology products, chemically synthesized materials, semiconductors, ceramics and composites) and on manufacturing (including computer-aided processes).

Marketing and Management: Helping create managers who speak the language of technology as fluently as the language of commerce, with marketing emphasis.

Quality of Life: Emphasizing human and natural resources in such areas as wellness programs, community planning, gerontology, water resources, travel and tourism.

Textiles: Maintaining high productivity in the U.S. textile industry along with developing new processes, products and markets, including work in such areas as nonwoven materials and advanced engineering fibers.
1986-87 Research Highlights.

As the Second Century plan evolved, the faculty stepped up their vigorous pursuit of support for research and academic programs. By year’s end, grants and contracts had increased 67 percent to $18.6 million, up $6.5 million over the previous year.

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<thead>
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<th>Academic Year</th>
<th>Amount of Awards</th>
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<td>1985-86</td>
<td>$11,141,625</td>
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<tr>
<td>1986-87</td>
<td>$18,634,151</td>
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Last December we celebrated a first: A National Science Foundation survey reported in The Chronicle of Higher Education ranked us 89th among universities spending more than $30 million on research from all sources. Our place on this elite list was based on 1984-85 spending, which totaled $32.3 million from state and local government, federal sources and institutional funds. We ranked just below Vanderbilt University and just above Emory University. We were the only South Carolina school on the list, which also included Georgia Tech, North Carolina State, the University of North Carolina and Duke University as 29th, 39th, 41st and 42nd, respectively.

We ranked 76th among American universities and colleges for grant dollars received from the U.S. Defense Department.

In a year of big stories, one with far-reaching implications for South Carolina’s economy is Clemson’s agreement with the Monsanto Company to field test a genetically engineered microbial tracking system. Scientists in our colleges of Agricultural Sciences and Sciences will conduct the field test at the Edisto Research and Education Center in Blackville. If field tests prove successful, Clemson and Monsanto will significantly advance applied biotechnology by providing a way to safely track genetically engineered materials in the environment. Monsanto has granted $607,000 for the 18-month research project.

Biotechnology product sales are expected to top $2 billion a year by 1990. Clemson’s cutting-edge research and other initiatives in biotechnology could help attract industries to the state.

Here are highlights from other research programs under way in the five areas for emphasis identified in the Second Century plan:

- More than a dozen faculty members in chemical, ceramic and mechanical engineering and textiles are developing a major research program in advanced engineering fibers at Clemson. Grants totaling more than $1.5 million are being directed at these new high-tech materials, including $100,000 from NASA and $200,000 through the federal University Research Initiative program in conjunction with Carnegie-Mellon University. South Carolina is in a prime position to become a manufacturing center for these new materials because many can be produced, with a few modifications, on equipment standard to most modern textile plants in the state.
Clemson’s English Department has received a three-year, $175,000 grant from Vermont’s Bread Loaf School of English at Middlebury College to establish the S. C. Rural Writing Network. The aim is to improve students' writing skills as a way to encourage critical thinking and increase learning. Five elementary and secondary schools across the state were involved the first year. In addition, the department will participate in BreadNet, a computer network that links schools across the country, and a series of community-based literacy programs.

The Mathematical Sciences Department received a $3.2 million contract from the U. S. Office of Naval Research to support basic and applied research in computational analysis and discrete mathematics. Of nearly 1,000 proposals submitted by 175 universities, contracts were awarded to 70; Clemson's was one of just three in mathematics. The contracts were awarded under the new federal University Research Initiative program.

A National Dropout Prevention Center was established at Clemson by the National Dropout Prevention Fund, which was founded by South Carolina native Esther Ferguson. Grants of $30,000 from the Exxon Foundation, $50,000 from the Appalachian Council of Governments and $25,000 from General Foods Corporation funded the programs. The center's mission is to serve as a clearinghouse for research information on the dropout problem and on ways to reverse the trend.

With its land-grant mission, Clemson's campus is statewide. A variety of marine research projects are conducted at the University's Sea Grant Consortium laboratories in Charleston.

A membrane filtration system developed by Clemson food science and engineering researchers produces more bite-of-the-apple taste in apple juice. On one apple farm, the filtration system was expected to increase revenue to $1.8 million this year, more than tripling income in a two-year period. The filtration system has also been used in the textile industry to remove dyes and to filter out low-level hazardous wastes in nuclear energy plants. Clemson owns the patent and shares in the income from sales in a joint venture with CARRE, Inc. of Seneca. The filtration system won the highest national award for significant development in food processing equipment from Food Processing magazine.

The Emerging Technology Development and Marketing Center will stimulate the creation of new emerging technology business ventures. It will link Clemson University's technical and business resources with entrepreneurs, small scale and start-up companies, and existing companies who wish to introduce new products. The center will also assist the State Development Board in attracting new technology-based industry. The ultimate goal is to increase jobs.
PUBLIC SERVICE
Serving people where they live and work across the state.

The goal of Clemson's public service program reflects our land-grant heritage: to bring to all South Carolinians the practical and relevant benefits of education and research. While the Cooperative Extension Service in our Division of Agriculture and Natural Resources is our largest public service program, other colleges and their faculty also offer programs which improve people's lives, either by giving them new skills or advanced training, enhancing their personal lives, or improving their communities.

The following are 1986-87 highlights:

Architecture and Planning Studies
- Communities throughout South Carolina benefit from studies and design projects prepared by College of Architecture students. Work completed includes a neighborhood improvement program for the Green Avenue Civic Association of Greenville and plans for downtown redevelopment in Florence and Jefferson. In Anderson students proposed plans for improving the Anderson County Courthouse, which would also preserve the historical integrity of the circa-1850 building. The feasibility of a wellness center for the Dillon area, integrating outpatient and preventative health care services and facilities, was studied in conjunction with Saint Eugene Community Hospital.

Continuing Education
- The College of Engineering took its program of seminars, workshops, short courses, conferences and professional engineering reviews to nearly 5,000 people. Emphasis areas included advanced manufacturing, biotechnical processing, ceramic engineering, bioengineering and advanced materials and fibers.
- The College of Nursing held 55 seminars and conferences that reached more than 2,000 people.

- In the College of Commerce and Industry's Professional Development program, more than 16,000 people got advanced training. In textiles more than 46 separate conferences on technical, state-of-the-art topics attracted 2,168 participants, both all-time highs. In the in-house training division, a total of 3,588 people participated at 66 companies.

The Strom Thurmond Institute of Government and Public Affairs
- Using data available through its statewide water policy research program, the institute completed an expanded study for Pickens County related to a countywide water-sewer plan, industrial site locations and other economic development activities.
- More than 150 elected and appointed officials in city and county government across the state participated in basic skills training sessions sponsored for the third year by the institute in cooperation with the University of South Carolina.
- The institute assisted the College of Architecture's Planning Studies Department in a study of the economic impact of the Clemson Research Park. The study was prepared for the South Carolina Research Authority.

Associate dean and director of The Nursing Center Dr. Sara Barger does a health screening test on young Matthew Dellinger—one of the center's services to the public.
The institute brought 20 South Carolina secondary teachers to campus for the fifth annual Seminar on Government and Politics.

A conference exploring state and local responses to domestic terrorism, held at Myrtle Beach, attracted federal, state and local leaders.

The institute's third annual Conference on Volunteerism focused on recruiting, retaining and motivating volunteers. More than 200 people attended the one-day session in Columbia.


Cooperative Extension Service Activities

Extension administrators and county agents directed a massive relief effort to drought-stricken farmers. More than 600,000 bales (18,000 tons) of donated hay were distributed by using a computer program developed by agricultural economists and Extension administrators.

A computer network that has saved the College of Agriculture thousands of dollars in communication costs is now offered to the public. CUFAN (Clemson University Forestry and Agriculture Network) covers topics ranging from weather to home horticulture to home economics and commercial agriculture. CUFAN includes the capability to send electronic mail to other subscribers who contract with Clemson and pay a monthly charge.

CUMAP, the Clemson University Management Assistance Program, helps farmers develop management skills needed to survive the current agricultural depression. It also helps farm families deal with the accompanying stress. Included are a toll-free information hotline, farm financial management and marketing workshops in 30 counties, a financial management newsletter, investigation of alternative crops, programs explaining legal and financial options, and financial analysis management plans for approximately 500 South Carolina farm operations.

Four of the six major vegetable packing houses saved hundreds of thousands of dollars in two years after adopting a Clemson-developed procedure to assure a "fresh from the farm-just picked" look in packaged produce. It involves putting produce through a chlorine bath that enhances the look of the produce and improves its ability to withstand rigors of shipping and handling.

EFNEP, Clemson's Expanded Food and Nutrition Education Program, helped 5,000 homemakers and 7,000 youths in limited resource families learn better nutrition and health skills and develop positive life attitudes and behavior.
Clemson People
Meet twelve who make a difference.

When asked what sets our University apart from others, Clemson people often become speechless. That Clemson spirit we’re so well known for is difficult to explain—an illusive, intangible thing. More concrete is this truth: It’s the collective achievements of many individuals that actually determine our degree of success. On these pages you’ll meet 12 people whose gifts for sharing ideas, discovering new knowledge and serving others one-on-one make the critical difference.

Yuan Zheng, associate professor, Department of Electrical and Computer Engineering
Walter Cox, president emeritus
Mable Wynn, assistant professor, Department of Parks, Recreation and Tourism Management
Page Crouch, Alumni Professor, Department of Industrial Education
Tullie Fellers, honor graduate, May 1987
Barrett Lawrimore, County Extension director, Charleston County
Dixie Goswami, professor, Department of English
Art Young, Campbell Professor of Technical Communications, Department of English
Pat Padgett, administrative assistant, College of Nursing
Mike McDonald, associate professor, Department of Management
Jean Tulli, administrative specialist, Continuing Engineering Education
Mario Gooden, honor graduate, May 1987

Yuan Zheng

It was an awkward performance, but a flawless one. Yuan Zheng’s two-legged walking robot captivated an audience of scientists as it made its debut at a Chicago engineering exhibition in March.

Nicknamed CURBi (for Clemson University Robot Biped), Zheng’s 3-foot, metal-legged creation with its motor-driven joints promises to take great strides past its tracked, wheeled and stationary ancestors that are now familiar sights in industry. Zheng, who came to this country from Shanghai, China, in 1979, is the first researcher in the United States to design and build a practical, working model of a robot that walks like a human. Called “dynamic walking,” the robot shifts its weight to one side, lifts its foot and takes a step, losing balance momentarily and then regaining it by setting that foot down.

Zheng and his colleagues in the Department of Electrical and Computer Engineering believe bipedal robots, like CURBi, could one day evolve as walking devices that would replace wheelchairs or provide mechanized braces to restore movement in paralyzed arms and legs. Zheng’s work has attracted $50,000 in grants from the Savannah River Plant near Aiken because his robots could prove especially useful to the nuclear industry, eliminating the need for humans to work in high-risk areas.

“We made it walk,” says Zheng, “so that’s proof that our technology is at the stage where we can simulate human locomotion.” Next comes an integrated sensor system to allow it to navigate uneven terrain and, eventually, artificial intelligence that could include a camera to add vision. A colleague, Dr. J.Y.S. Luh, is working on coordinating arms.

Zheng, who came to Clemson in 1984 after earning his doctorate at Ohio State, will get help for his research from a $25,000 grant, renewable for five years, he received as a Presidential Young Investigator Award winner. He is Clemson’s third award winner in the program’s four-year history. Industry and additional National Science Foundation matching grants could bring the total to $100,000 a year.
Walter Cox

To say the name "Dean Cox" is to define Clemson University's spirit, to describe its dedication to the personal development of young men and women and to understand its devotion to serving the people of South Carolina. Only rarely does one person embody the life of an institution as much as the example of Walter Thompson Cox.

A native of nearby Belton, Dean Cox began his Clemson career 52 years ago as a freshman cadet, and except for a year of military service, he's been here ever since. As a student he commanded the Cadet Corps and played on the 1940 Cotton Bowl football squad. During the '40s he held several athletic posts—assistant football coach, business manager, baseball coach, recruiter and IPTAY promoter. During the '50s he directed public relations and alumni affairs, assisted the president and helped direct Clemson's critical transition from military to civilian status. Then in 1955 he became Clemson's first vice president for student affairs, a post he held for three decades. During his tenure, enrollment grew from 2,700 to more than 12,500, and he presided over many milestones as we grew from a small military college into a major state university, including the enrollment of women and the peaceful desegregation of the student body. He left that post in July 1985 to become our 10th president, serving until March 1986. More recently he was acting vice president for institutional advancement. He retired April 30 from full-time Clemson employment and now works on a part-time basis as consultant to the president and the institutional advancement division.

On Sept. 5, hundreds of friends and former students (more than 57,000 have graduated from Clemson while he has been on the staff) said "thank you" in the most fitting way possible: A special dinner was held in his honor highlighting the establishment of the Walter T. Cox Scholarship Endowment, which, so far, has reached about $50,000. Income from the endowment will help students year after year honoring him with a lasting tribute to his lifetime of service.

Mable Wynn

February's cold, biting winds blew in something warm and wonderful last year when the Clemson Players presented "The Wiz," the delightful musical based on the "The Wizard of Oz." The smash hit played to full houses for seven performances, combining the talents of more than 80 actors, dancers, musicians and production staffers.

The crowd-pleasing choreography and musical direction was the work of Mable Wynn, assistant professor in the Department of Parks, Recreation and Tourism Management. "She made dancers out of everyone," says a colleague. "When the cast sang 'Believe in Yourself,' everyone really did—because Mable did. She gave each person on stage part of her own magic."

A native of Demopolis, Alabama, Wynn spent her early childhood in Tuskegee where she graduated from Tuskegee High School. After getting her bachelor's degree at Hampton Institute in Hampton, Virginia, she earned a master's degree in dance from Springfield College in Massachusetts.

Sharing with others—both her dance talents and her time—is as natural as breathing for Wynn. Besides her full teaching load, she directed a musical production for a Southern Regional 4-H conference for volunteers and a workshop for 4-H campers. In addition to her work with the Clemson Players, she contributes time to community theater and dance events across the state.
Page Crouch

A photographic study of Page Crouch might be titled "Teacher in Motion." He's constantly in action on behalf of his students, the graphic communications program he's brought from an informal elective in 1968 to the B. S. degree offered since 1982, and the graphic arts and printing industry that's growing in the Carolinas.

It's easy to get his attention, however, when you're talking his agenda: how to give students the optimum education, whether they are planning to teach or work in the industry; how to create relevant experiences for students through internships and hands-on use of state-of-the-art equipment; and how to serve a growing industry that already employs more than 37,000 people in the two Carolinas, plus several thousand more in in-house printing operations, with continuing, relevant training services.

"When you're a student, you're mostly aware of the high standards he demands," says Ed Wylie, now vice president for sales at Washburn Graphics in Charlotte. "You've got to be able to handle a lot of time-consuming lab assignments, as well as the classwork. He expects your best efforts consistently. Then when you get into the printing industry, you begin to understand that he gives just as much, with the same quality, to training and updating people already out here.

Crouch, Clemson and the Printing Industry of the Carolinas (PICA) are well-known for a unique, individualized, self-paced curriculum commonly known as "the PICA curriculum." Crouch also has directed the development of modular training materials for the Foundation of the Flexographic Technical Association. Recently he was the first educator ever to receive a "Key Employee Award" from the National Association of Printers and Lithographers.

Crouch is one of 17 Alumni Professors at Clemson, an honor bestowed by the Alumni Association for leadership and dedication to undergraduate teaching.

Tullie Fellers

Tullie Fellers of Camden is one of those students who leaves you shaking your head in amazed admiration. With a double major in chemistry and German, she's now in Heidelberg, Germany, where she's researching medical applications for fluorine chemistry at the Institute of Cancer Research. Her all-expense-paid fellowship for this study is made possible by the German Academic Exchange through the Fulbright Foundation.

But before she left for Germany, she heard applause for several other top Clemson honors. At graduation, she received a Faculty Scholarship Award for her perfect 4.0 (all A's) and the Norris Medal, given annually to the "best all-around" graduate for exceptional scholastic achievement and leadership ability. Earlier, on Honors and Awards Day, she received the Algernon Sydney Sullivan Award, Clemson's top nonacademic honor, for service to her community. She has been a volunteer for the Muscular Dystrophy Association, the American Diabetes Association and the National Junior Tennis League.

Outside the University, she has received the American Institute of Chemists Award, a Warwick Chemical Foundation Fellowship and an Arnim Award for excellence in German language and literature. To no one's surprise, she's listed in "Who's Who Among College Students in America."

Margit Sinka, associate professor of German and coordinator of the Fulbright grant proposals, says it's no surprise either that Fellers attracted the attention of the Fulbright committee. "Her double major is attractive—students with broad backgrounds in science and the liberal arts are always strong candidates." Sinka says Clemson recognizes potential Fulbright candidates early and encourages them to take language courses, especially German, since Germany awards more Fulbrights than any other country. Since 1979, Clemson has had 21 of 24 applicants to Germany accepted.
Barrett Lawrimore

Officially he’s known as Charleston County’s Extension director, but his colleagues and clients—who include both rural and city folk—think of him as the consummate county agent. By any name, Clemson alumnus Barrett Lawrimore ’55 shows us every day what “improving the quality of life for South Carolinians” means in practical terms.

His programs for tomato pest management and cucumber marketing keep these industries viable for Charleston County growers even in tough economic times. His innovative master gardener program, now a model for other counties and other Southeastern states, puts current gardening information into thousands of hands through trained volunteers. Charleston’s 4-H program, a national model for activities that reach urban youth, has 10,000 participants, including 800 who attended camping sessions last summer.

Since 1971 a citizens committee initiated by Lawrimore has conducted an award-winning community improvement and beautification project called Charleston Pride. Other projects, such as hands-on experience in home repairs, low-cost home decorating, and vegetable gardening, help people with limited resources raise their standard of living.

The hallmark of every Lawrimore-led program is participation by volunteers—their recruitment, training and nurturing has attracted special recognition from the Governor’s Office. In nominating Lawrimore for the Alumni Award for Distinguished Public Service, which he received in 1986, a colleague said he has “an unusual ability to identify and remove obstacles so others can achieve greater success, an astute observation considering that more than 500 volunteers are helping the Charleston County Extension office do its job.

Dixie Goswami

During the summer, while we South Carolinians swelter in the heat, Clemson’s Dixie Goswami teaches writing in the cool Vermont mountains at Middlebury College’s Bread Loaf School of English. Her summer students are teachers, and the program that attracts them has been described as an academic boot camp. After five summers, which could include study in England, the teachers earn master’s degrees from Middlebury. But the greatest benefactors are the students these teachers return to each fall. These teachers of writing become writers themselves, thus fulfilling the philosophy behind the program: Writing underlies all effective teaching and learning.

Goswami, who earned her master’s degree at Clemson in 1967 and has taught English here since 1984, has helped forge a Middlebury-Clemson-South Carolina partnership that identifies the University and the state as places where writing is important.

The partnership owes its start to a $1.5 million anonymous gift to Middlebury with instructions to spend it all on improving the writing of children ages 4 to 14. To date, $175,000 of the money has been awarded to South Carolina through Clemson’s Department of English. Over a three-year period, the funds will be at work in five rural schools: Morrison Elementary and Edwards Junior High in Clemson, Tamassee-Salem High School in Salem, Gilbert High School near Lexington, and Beck Elementary in Georgetown. During the project, the schools will help launch the nation’s first statewide computer writing network, called BreadNet, which will link them by modem to classrooms across the country where students are being taught by alumni of the summer Bread Loaf program.

The idea is that writing to a real audience is different from writing for class assignments. For example, students in Montana share what they’ve written about ranching and calf roping with teen-agers from South Carolina who describe life in the mountainous regions of Oconee County, where legend tells of love between two Indians in enemy tribes.

As coordinator for Bread Loaf’s National Writing Grants Program, Goswami in a five-year period will oversee a series of community-based literacy programs and a project in Maine on writing to learn science and math, as well as the S. C. Rural Writing Network and BreadNet.
Art Young

Art Young, who holds the Bob Campbell Chair of Technical Communications, has come to Clemson to help solve a national problem: Too many engineers and other professionals aren’t able to write and express ideas clearly. It’s the No. 1 complaint from business and industry, and companies spend millions each year trying to fix it.

Young says the problem has become more critical as the pace of technology has increased. “Because there’s so much to learn, there’s a tendency to think there’s no time to teach communications skills in engineering courses, or to think that it’s something students should learn in English class. But it’s important for students to write in an engineering environment—like they will in a company someday.”

Integrating writing with technical skills doesn’t just produce better writers, says Young, it produces better engineers.

Young comes to Clemson from Michigan Technological University, where he headed the department of humanities. While at Michigan Tech, where two-thirds of the students were studying engineering, he introduced a program for "writing across the curriculum.” He has taught faculty in all disciplines why and how to integrate writing, along with reading, talking and listening, into the everyday life of the classroom.

At Clemson, Young is working with faculty members to further develop the effective technical communications program already under way, thanks to five years of generous support from Bob and Betsy Campbell of Gaffney. A 1937 alumnus, Campbell’s interest in technical communications stems largely from his own experiences during 44 years in the quarry business.

“I’ve dealt with a lot of engineers and other professionals who knew what they were talking about but had trouble expressing themselves—verbally and in writing. They’d ramble,” he says. “A good engineer is one who can get his ideas across in five minutes or on one page… Business leaders tend to ‘turn off’ people who go on and on. Valuable ideas are lost that way.”

With the Campbells’ support, six Clemson faculty members developed a manual, “Effective Technical Communications,” which guides students through oral communications and the use of graphics, as well as the written word. The manual, which is now being published by Ginn Press of Lexington, Massachusetts, has already been adopted by three other universities.

The Campbell Chair—and the subsequent appointment of a recognized scholar such as Art Young—has opened the way for Clemson to become a national leader in the technical communications field.

Pat Padgett

Pat Padgett’s reputation for getting things done—already legend in the College of Nursing—now has a No. 1 ranking with the rest of campus. Under her leadership, the Commission on Classified Staff Affairs had its most productive year ever.

Following up a University-wide survey in January, the commission got approval for an employee recognition program and a program to train supervisors in optimum use of the employee performance management system. Padgett also presented to the president and his cabinet classified staff views or concerns about pay increases, the wellness program, computer access to personnel policies, staff response to campus parking proposals and changes in leave policy.

“I know the president and others in the administration value staff opinion and suggestions,” says Padgett. “They show this by including staff on key committees like telecommunications, parking and traffic, facilities planning and others. And we’re included on many college and department search committees when there’s an administrative position to fill.” Besides representing the commission on several committees, Padgett chairs a committee studying child-care needs of faculty and staff.

She’s a working mother herself—daughters Amanda and Emily were both born after she joined Clemson in 1974. In the dean of nursing’s office, where her responsibilities have steadily increased, she manages the budget process, personnel matters and many special programs and projects. Being able to get things done extends to her personal life too. Besides her wife-and-mother role, she’s president of the parent support group at Emily’s day school in Anderson and works with 3rd and 4th graders at her church. Says Padgett of her active year as commission chair, “I’ve learned many valuable lessons, not the least of which is organization and time management.”
Mike McDonald

When Mike McDonald was a junior at Georgia Tech, it occurred to him that his greatest pleasures were associated with the academic environment, and he’s been a committed teacher and scholar ever since. But his success, say students who chose him 1987 Alumni Master Teacher, lies in his ability to combine what’s in the book with everyday business. Plus, he practices what he teaches. As David Rhyne, a former student who now teaches management himself at Auburn, puts it: “He practices participatory management in the classroom. But at the same time, he lets students know up front what the course standards are.”

McDonald gets his “real world” experience at the source. Throughout his 11 years at Clemson, he has consulted with organizations ranging from county hospitals to textile giants like Milliken and Fieldcrest-Cannon. And he has taught thousands in continuing education programs sponsored by Clemson’s Office of Professional Development. “I thrive on helping people work through problems,” he says. “And every time I teach a PD course, I pick up a new example to use in my classes at Clemson. Every situation is new.”

Away from work, McDonald uses gardening as therapy. He has a renovated cabin in five acres of hardwood on a little stream—and a cat named Buddy. He uses the language of the gardener to summarize his philosophy of life, perhaps revealing what makes him a master teacher: “When you’re green you grow; when you’re ripe you rot. I hope I never get to the point where I quit being a student myself.”

Jean Tulli

She began in 1979 by answering a call to help one child in Oconee County have a merry Christmas. Because she immediately saw a greater need, one became 25 with a little help from some friends. The next year, because of their concern for the area’s abused and neglected children, Jean Tulli and four other women found sponsors for 275 children who were under the care of Oconee’s Department of Social Services. This success led Tulli to reason that they could help Pickens County children as well.

Thus was born Helping Hands, Inc. The number sponsored at Christmas grew to 500 and eventually to 700. To the Christmas project was added year-long fund raising through a thriving Helping Hands Thrift Shop. Then in August 1984 a dream was realized: the opening in Six Mile of Helping Hands Shelter, a safe haven for children who may need to spend just a day or stay six months.

A long reach from one merry Christmas to a well-staffed emergency home? Not for this Clemson staff member whose vision and energy match the size of her heart. Last April Tulli received a 1987 Jefferson Award from Greenville’s WYFF-TV. One of five in a field of 300 nominees, she was cited as a person who “best defines the true spirit of volunteerism—people helping people.”

Today the pace continues. Her own three daughters grown, she now is “head mother” and director of the shelter, a large country home that accommodates as many as 20 children at a time. And there’s an additional fund-raiser, the annual Helping Hands art auction. All this is in addition to her successful 10-year career in Clemson’s College of Engineering where she now coordinates continuing education programs.

Tulli traces her awareness of the neglected or abused child’s needs to her family’s home in Smithfield, N. C. She says, “We often took in kids in need.” Actually, she thought that’s what “adopt a child for Christmas” meant when she first saw the ad back in 1979. As it turned out, there was a very serious need for the emergency shelter. “I never thought I’d see it in my lifetime,” she says. But the scores of people she inspired to make it happen never doubted it.
Mario Gooden

When Mario Gooden was a high school student in Orangeburg, he considered attending several colleges—Carnegie-Mellon, Illinois Institute of Technology and the University of Tennessee among them. But he chose Clemson. "The architecture program has an excellent reputation, and the program itself is better than at many other schools," he says. "I also liked the fact that it's close to home, so transportation was easier and less expensive." But he didn't spend his time going home every weekend. He says good time management and a degree of sacrifice were necessary to do well both inside and outside the classroom. "Getting involved keeps you from getting isolated," says Gooden, advice he offers for other black students who choose Clemson. He gave much of his "free time," for example, to the student chapter of the American Institute of Architects, which he served as president, and to Alpha Phi Omega, a national service fraternity. He even spent part of his last spring break on a four-member accreditation team evaluating the architecture program at the Hampton Institute in Virginia. Still, he graduated last May with a 3.8 grade-point ratio in what most people agree is one of Clemson's most demanding majors. His high academic standing combined with his involvement in campus organizations led to his nomination for a Rhodes Scholarship. But the honor Gooden says was most unexpected was his selection for the prestigious Algernon Sydney Sullivan Award, presented annually to a male student, a female student and a non-student for their high ideals of living and generous and selfless service to others. "Frankly I was floored," he says. "It's a great honor because there are so many excellent students here." This fall Gooden moved his involvement in service to others to another campus. He's at Columbia University, where he's working on a graduate degree.

PRIVATE SUPPORT

Gifts surpassed the $7 million mark for the first time.

Private giving to support Clemson's academic programs reached a record $7.3 million—breaking the $7 million mark for the first time. The effort also set records in three other categories:

- Unrestricted gifts to the Loyalty Fund: $875,241, up 18 percent from last year.
- Number of individuals contributing to the Loyalty Fund: 12,643, up nearly 1,000 from last year.
- Gifts from corporations, foundations and associations: $3.4 million, up 2 percent from the previous high in 1984-85.

Our student-operated phonathon continued its success in obtaining gifts from previous donors of less than $100—6,391 pledges for $205,242.

The market value of the permanent endowment of the Clemson University Foundation has surpassed $22 million, of which $15 million earns annual income. Deferred gifts totaling $1.2 million were established this year. The total includes 20 life insurance policies, a charitable remainder unitrust, two charitable remainder annuity trusts, and a gift to the pooled income fund. Deferred gifts received through bequests and the Pooled Income Fund totaled $1.5 million. Of this amount, $1.4 million represents the assets of two charitable remainder annuity trusts established by the late George McDonald of Anderson for his wife, Jeanne. When Mrs. McDonald died in October 1986, Clemson began receiving the income from the trusts. The McDonald gift, which will total approximately $70,000 annually, will provide scholarships and fellowships ranging from $500 to $5,000 per year each. The agreement calls for the Faculty Senate to determine distribution among majors in a way that is economically and culturally beneficial to the state.
Other significant gifts include:

- The Callie Jones Shirley fund, established by her descendants for the Robert Muldrow Cooper Library, now totals some $600,000. It ranks among the seven largest gifts ever made to Clemson, is the library's largest source of private support and includes the largest single gift ever made to the library.

- A $117,430 gift from Texas Instruments will assist the Bioengineering Alliance, comprising Clemson, the University of South Carolina and the Medical University of South Carolina. This cooperative research project could revolutionize the $628 million-a-year orthopedic implants industry.

- A gift of more than $50,000 for an annuity trust from J. E. Mundy will fund a graduate fellowship in electrical and computer engineering. It's the fourth such trust he has set up. Two others fund another fellowship and scholarship in the same department, while another provides the College of Nursing's Evelyn Marguerite Wilson Mundy Professorship, named for his late wife. In addition, Mundy convinced his friend, Clyde V. Madren Sr., to establish a similar $50,000 trust for civil engineering scholarships.

### 1986-87 Private Support

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<td>Alumni</td>
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<td><strong>Grand Total</strong></td>
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Susan M. Edwards is an R.C. Edwards Scholar majoring in chemical engineering.

### CLEMSON UNIVERSITY FOUNDATION

**COMBINED FUNDS PERFORMANCE RANKINGS**

January 1, 1986 - June 30, 1987

<table>
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These figures are from Mercer-Meidinger, the consulting firm that tracks the performance of the three investment companies that manage the Clemson University Foundation's assets.
FINANCIAL HIGHLIGHTS
A financially sound institution.

As with any major land-grant research university, Clemson’s most significant sources of revenues are from state appropriations, sponsored programs and academic fees. In 1986-87 current fund revenues totaled $203.4 million and expenditures totaled $203.3 million, representing an increase over 1985-86 from $194 million and $194.4 million respectively. Combined appropriations for educational and general and public service activities totaled $93.7 million for 1986-87, a 1.3 percent increase over 1985-86. The decline in the proportion of revenues from state appropriations from 47.7 percent in 1985-86 to 46.3 percent in 1986-87 was offset by the growth in Clemson’s grants and contracts awards, from $11.1 million in 1985-86 to $18.6 million in 1986-87.

In another measure of performance, expenditures for sponsored programs and unrestricted research grew from $38.9 million in 1985-86 to $48.9 million in 1986-87, advancing Clemson’s position of leadership as one of the top 100 research universities in the nation. Comparing the distribution of expenditures from 1985-86 to 1986-87 shows no significant changes during the year.

As a result of another mid-year budget cut in 1986-87 of $2.6 million in educational and general and land-grant programs and more severe reductions in 1987-88, Clemson undertook a comprehensive University-wide budget assessment. The assessment focused on establishing a clear relationship between planning and budget allocations. In addition, enhancements in productivity were initiated through a variety of cost-containment measures. As the pages of this report have shown, faculty, administrators and staff chose to focus on the exciting challenges and opportunities of the University’s second century and made significant headway in positioning Clemson for the twenty-first century and next year’s Centennial celebration—in spite of the current financial environment.
## Major Construction in Progress
### 1 July 1986 - 30 June 1987

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<th>Project</th>
<th>Type of Facility</th>
<th>Estimated Project Cost</th>
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<td>New Chill Water Facility</td>
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<tr>
<td>Howard L. Hunter Chemistry Building/</td>
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<td>New Chemistry Building Auditorium</td>
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<td>Godfrey Hall Renovation</td>
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<td>Indoor Tennis Center</td>
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<td>Soccer Stadium</td>
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<tr>
<td><strong>Total:</strong></td>
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<td><strong>$26,525,848</strong></td>
</tr>
</tbody>
</table>

Clemson's $11.9 million Hunter Chemistry Laboratory complex is the University's newest academic facility.

The Pee Dee Research and Education Center in Florence is a beautiful, contemporary facility and the newest addition to South Carolina's Agricultural Research Experiment Station.
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*Deceased

IN MEMORIAM
One who played a vital role in preparing the University for its position of leadership in the second century was Robert R. Coker, who died on September 28 as this report was being produced. Mr. Coker was one of the most respected and influential leaders of agriculture in the past 30 years. He served the University as a life trustee for more than a quarter of a century.

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