



*SHAPING
OUR FUTURE
UNIVERSITY OF SOUTH FLORIDA*

*REPORT OF THE **USF** PLANNING COMMISSION – SEPTEMBER 1992*



To members and friends
of the University community:

I am pleased to share with you the work of the USF Planning Commission, which for the past three years has been carefully considering the future direction of the University of South Florida.

This has been a difficult task, for USF is a comprehensive research university with many different programs and priorities. This report is an excellent summary of what the Commission has determined are the important opportunities and obligations for USF in the years ahead. The recommendations represent difficult choices that confronted the commission, as USF seeks to prepare for the changes that the new century will bring.

I commend Commission Chairman Gerry Meisels and Executive Director Barbara Sherman and all members of the Commission, listed at the back of this report, for very careful and thoughtful planning.

I will now ask the Commission to prepare specific operational details, timetables, and assignments for the implementation of this plan.

This is not a document to be placed on a shelf and forgotten. The Commission will stay in business continuously, though with changing membership, to assure that the plan is followed and adjusted as new opportunities and circumstances suggest.

Francis T. Borkowski
Francis T. Borkowski
President of the University

September 15, 1992

Shaping the Future

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Introduction

As a comprehensive research institution located in a fast-growing metropolitan setting, the University of South Florida has made enormous strides in the first thirty years of its history. USF's reputation in teaching, research, and service is well-established and still increasing. This progress results from the strong support of the Florida Board of Regents and the Florida Legislature, as well as from the special advantage of community advocacy and partnership. These circumstances, enhanced by the many fine contributions of a committed and competent faculty, now sustain the institution and advance its momentum.

The next major stage in the University's development will be affected by national and global forces that are already influencing America's social, political, and economic systems and that will continue to do so in the coming decades. The State of Florida is subject to these pervasive influences and will encounter other substantial forces and opportunities because of its unique geographic location, its population base, and its dynamic economy. The inevitable changes in the way Floridians will live and conduct business can be viewed as opportunities or as threats, but they cannot be halted, ignored, or avoided.

As one of Florida's three research universities assigned special roles and obligations by the State Legislature and the Board of Regents, USF must help prepare Florida, Floridians, and the nation for a future of change, of uncertainty, of flux, and of social, economic, and technological innovation. Not only must burgeoning educational needs be met, but also the advancement of knowledge and service to the community must be provided to support the economic health and leadership needs of the future. USF can meet its challenges only if it establishes itself as a nationally and internationally significant university, because the region and the state

must and do compete aggressively in these arenas.

USF is a young university that has experienced dramatic growth in many respects during the last two decades. With its maturing stature, it must establish a clear view of its future and of how it should fulfill its assigned roles. USF should not emulate traditional universities; neither should it ignore what can be learned from them. Its challenge is to understand the forces and directions that shape the external environment and use them as special opportunities to shape for itself a visionary but still realistic future that will best fulfill its mission, thereby leading it to become a model university of the 21st century.

The time is at hand to look carefully and deliberatively at the University and to develop a broad consensus--on the campuses, in the community, in the State University System, and in the Legislature--on the direction in which the University should move. As a first step, President Francis Borkowski established in the Fall of 1989 **The USF Planning Commission: Shaping the Future.**

The Commission was charged to provide leadership for the University community in planning strategically for its future. The Commission was given a broad-based charge and wide latitude in the conduct of its work. The President gave the following specific directions:

- To assess the most significant environmental and institutional factors that affect the University's operations;
- To address issues most critical to the University's long-term vitality and viability;
- To recommend courses of action that will keep the University focused and moving forward, in step with its environment over the long term, and that will provide a competitive edge

and distinctive identity for its future development.

In carrying out this charge, the Commission has relied heavily on special task forces that it established for major areas of study. **Task forces on Institutional Life and Culture, USF's Multi-Campus System, and Future Academic Frontiers** invested many months of work in the preparation of their reports and recommendations, all of which have subsequently been widely distributed within the University for comment and reaction by concerned constituencies.

The results of these efforts and the extensive investigations of the Commission itself provide the substance of this report, the first comprehensive statement by the Commission on its views of the future of the University. The work of the Commission will not stop with this publication. As an on-going deliberative body, the Commission will continue to monitor the University's internal and external environment for issues of strategic importance and to pursue aggressively actions for change that will best enable the University of South Florida to meet the challenges of the nineties and to shape its future in the next century.

The Planning Commission recognizes with sincere appreciation the dedicated work of members of the **Task Force on Institutional Life and Culture**, the **Task Force on USF's Multi-Campus System**, and the **Task Force on Future Academic Frontiers** for their invaluable assistance in the preparation of this report. Their concerns for the future of the University are exemplified by the investment of their personal and professional talents in this strategic planning process which has benefitted significantly from their insights and commitment to the University.

Statement of Institutional Purpose

The University of South Florida is a multi-campus, comprehensive, research university strongly committed to the balanced pursuit of excellent teaching, significant research, and useful public service. The University generates and disseminates new insights, knowledge, and forms of expression; it prepares students for their personal lives, professional careers, and contributions to society; and it serves its external communities through the citizenship and expertise of its faculty, staff, students, and graduates.

The University of South Florida is committed to supporting and nurturing the free expression of ideas. It embraces the role of the university as a social critic and conscience and respects and defends the rights of faculty, staff, and students to speak out and act responsibly upon the social implications of their knowledge. The University values an intellectually excellent, culturally diverse academic community of faculty, staff, and students. The University strives to provide an educationally challenging environment, within and beyond the classroom, that engages students and faculty in a common inquiry into the values of society and gives them a rational understanding of the need to accept and appreciate differences among people and cultures as a foundation for national and global welfare.

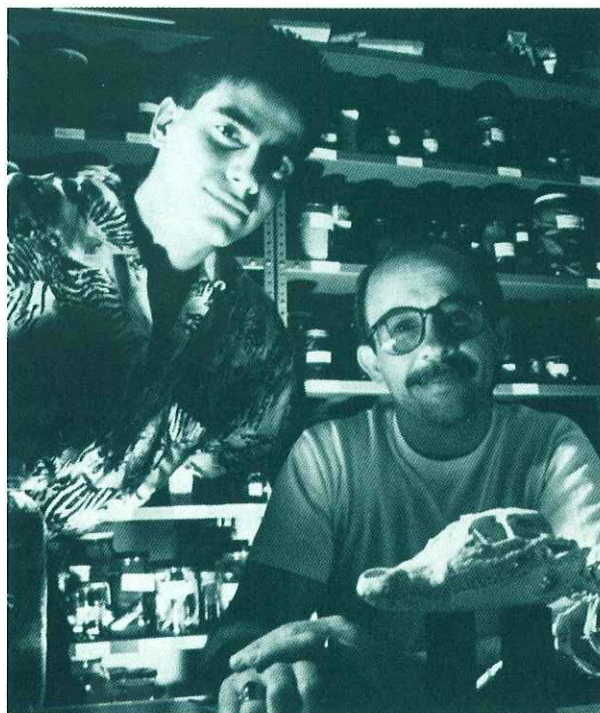
The three traditional activities of teaching, research, and public service are the foundation of the University's mission. In the conduct and delivery of its programs, the University recognizes the special characteristics of its students and the opportunities provided by the location of its campuses in thriving metropolitan areas on Florida's gulf coast. The University gives particular consideration to programs and activities that can build on these advantages to achieve national and international distinction.

As an institution dedicated to excellent teaching, the University's fundamental objective is to evoke in its students a lifelong commitment to

learning that enables them to become thoughtful, active, productive, and compassionate citizens. The University provides to all undergraduates a strong common curriculum in liberal education that balances the acquisition of general knowledge with the development of intellectual honesty, curiosity, creativity, critical inquiry, and personal values and ethics that include a commitment to advancing the society in which they live. Specialization in the major areas builds upon this strong liberal education and prepares graduates to enter graduate school or to embark directly upon their life's work. Advanced studies at the graduate and professional level enable students to work with faculty at the forefront of their disciplines, to increase their depth of knowledge and personal achievement, and to contribute to the advancement of their professions and the larger society. The University has high expectations of its faculty as inspirational teachers and of its faculty and its students as exemplary scholars.

As a comprehensive research university, the University is dedicated to the discovery of new knowledge, insights, and forms of expression through significant innovative research and other creative activity and to the preservation, organization, analysis, and synthesis of existing knowledge. As a leading publicly supported university, the University accomplishes its research mission by building on existing program strengths, by fostering effective, cross-disciplinary approaches, and by contributing to the resolution of social, cultural, economic, medical, and technological challenges facing the largely metropolitan populations of our state and country within the international community of the 21st century.

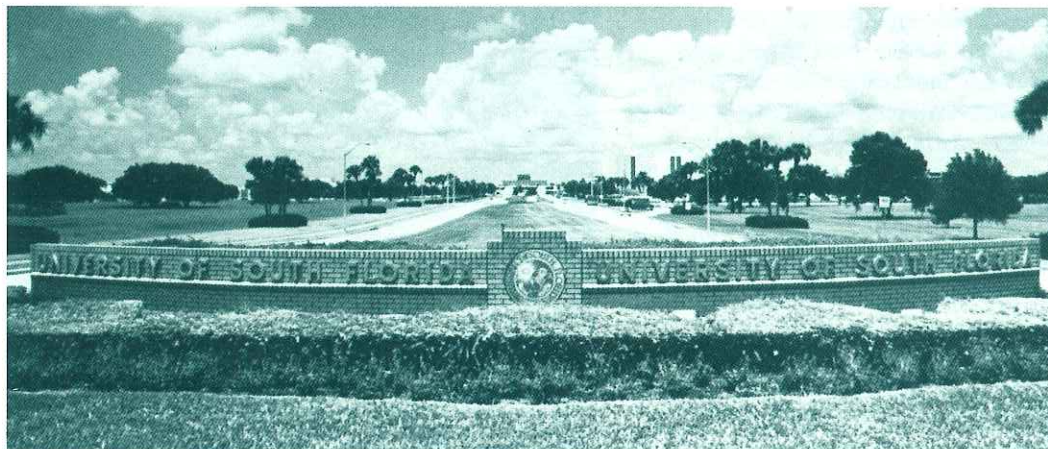
As an institution serving the region, state, and nation, the University actively encourages the use of the expertise of its faculty, staff, and students for the advantage of the larger community--to provide intellectual, cultural, health-related, and social services; to contribute to life-long learning opportunities; and to function



as a catalyst for improvements within its immediate cultural, economic, and social context. USF has the assigned responsibility to provide continuing education for a fifteen-county area.

Within the mission of the total university, the Tampa campus plays the central role. It incorporates a comprehensive range of teaching, research, and service functions and provides essential academic leadership and administrative services for the University's multiple campuses. The missions of the regional campuses at St. Petersburg, Sarasota, Fort Myers, and Lakeland emphasize programs that respond to demonstrated regional need for undergraduate upper level and master's level education. On a selective basis, regional campuses also undertake program initiatives involving special community interests and resources. The mission of New College at Sarasota is to provide a high quality, undergraduate, liberal arts education. The special strengths of all five campuses contribute to an integrated, diversified, and comprehensive university dedicated to educational quality and leadership.

Describing the University's Academic Foundations



USF Today

From its beginnings in the late 1950's when the University of South Florida was a single campus undergraduate institution dedicated to the process of learning, USF has expanded into a comprehensive research university located on five campuses throughout west-central Florida. USF serves more than 33,000 head-count students in ten colleges with more than 1650 full-time faculty, a budget of more than a third of a billion dollars, medical clinics and hospitals, a major mental health research institute, four public broadcasting stations, \$60 million annually in sponsored research, an endowment exceeding \$52 million including 38 Endowed Chairs, and more than 110,000 graduates.

Now the second largest of Florida's nine state universities, USF enrolls students from all of the counties of Florida, all of the states of the nation, and up to 90 countries around the world.

USF is home not only to a traditional student body, but also to a large number of students already in the workforce seeking their first degree, older students, professionals seeking to remain or become more competitive by continuing graduate study. Many students go to school part-time; the ratio of headcount students to full-time equivalents at USF is 1.9. (The ratio is even higher

on the regional campuses.) The University provides services to its diverse student population in ways that are different from those at traditional, residential colleges. Course delivery, academic advising, and a full range of student support services must be available at non-traditional times and in non-traditional formats as well as in the more usual fashion.

USF offers a wide array of programs with both basic and applied orientations. It confers 77 baccalaureate, 87 master's, and 23 doctoral degrees (including the M.D.) across a broad spectrum of traditional university disciplines, professional schools, and the health sciences. The faculty in these disciplines are making national contributions in their fields, and their commitment to quality education is central to the University's teaching, scholarship, and service mission. Despite its relative youth, the University has achieved national and international recognition for many of its programs.

USF takes pride in the strength and quality of its intellectual, scholarly, creative, and public service endeavors as exemplified by the University Honors Program, fine and performing arts contributions, marine science and psychology programs of excellence, the state's only College of Public Health, and the Florida Mental Health Institute. Examples of programs that make the University

especially distinctive are New College, Graphicstudio: Institute for Research in Art, the Suncoast Area Teacher Training program, the Executive MBA Program for Physicians, the Center for Urban Transportation Research, and the Suncoast Gerontology Center. The University's health sciences are prominent in research in cancer and immunological diseases, genetics, metabolism, and nutrition. The outstanding opportunities for partnerships between education and the private sector are enhanced by the University's metropolitan location as exemplified by university/community linkages between the College of Engineering and advanced technology industries throughout the state, between the College of Business Administration and the regional business community, between the College of Education and regional school districts, and between the Department of Marine Science and the U.S. Geological Survey in St. Petersburg.

USF As A Multi-Campus University

The organizational structure of USF's multi-campus university presents an array of challenges and opportunities. Original planning for the University contemplated only a single campus located in Tampa. Subsequently, Florida's philosophy of providing convenient access to higher education for all citizens led to the establishment of four regional campuses, and community interests led to the addition of New College. The structure is still in flux as the University adjusts to Board of Regents and Legislative initiatives that, during this decade, may replace the Fort Myers Campus with a tenth university.

The emergence and growth of regional campuses have been beneficial to the communities they serve. However, the effect of changing conditions and enrollments on the role

of these campuses and on their relationships to the Tampa Campus has never been addressed fully. In-depth study by the Task Force on USF's Multi-campus System and by the Commission makes clear that the campuses have both commonalities and unique qualities as well as both independent and interdependent needs. These circumstances require an integrated system that recognizes the differential strengths and stages of development of each campus in order to cultivate most effectively a synergistic, cohesive organization. That the campuses have diverse missions must be understood from the outset.

● **The Tampa Campus** is the heart of the system because of its size, resources, comprehensive academic programs, and administrative support services. The Colleges of Arts and Sciences, Business Administration, Education, Engineering, Fine Arts, Medicine, Nursing, and Public Health, and the Architecture program educate the full range of students from freshmen through post-doctoral fellows. Science and engineering laboratories, fine arts facilities, medical center clinics and hospitals, library, and computer center, as well as a diverse community of scholars, distinguish Tampa as a center for research and graduate study. Also located on the Tampa Campus are Army and Air Force ROTC programs, the Florida Mental Health Institute, and The Florida Policy Exchange Center on Aging. The campus provides residence hall living and supports a wide array of student services, cultural events, continuing education, recreational and inter-collegiate athletic activities, and public broadcasting through radio and television stations.

On the **regional campuses** the scope of academic programming is defined by the Board of Regents. Board parameters promote geographic access to selected academic programs for upper-level undergraduate students primarily in disciplines that do not require expensive laboratory facilities. The BOR guidelines also recognize the role of regional campuses in providing graduate offerings

in applied fields such as business and education in response to demonstrated student demand.

Degree program offerings on USF's regional campuses are consistent with Board policy. Nevertheless, within the policy and funding constraints, each campus is evolving a distinctive identity. The following section describes the special character of the regional campuses as they currently exist.

● **USF at St. Petersburg** has the largest student enrollment and resident faculty of the regional campuses, giving it broader, more diversified academic programs. The faculty stress personalized, interdisciplinary study. The Campus's proximity to and working relationship with the Poynter Institute for Media Study offer special opportunities for journalism students and faculty. The University's Department of Marine Science, a graduate research program of excellence, is located on the St. Petersburg Campus as is the Florida Institute of Oceanography, a State University System research support program.

● **USF at Sarasota** incorporates both **New College** and the **University Program** which share physical facilities and some administrative support services. The University Program is designed to serve students of the Manatee/Sarasota area. Business and education are the most heavily enrolled programs. The Ringling Museum, the Asolo Performing Arts Center, and the Sarasota Ballet of Florida provide special opportunities for academic initiatives and community service.

● **New College** at Sarasota enrolls approximately 500 residential students and is nationally known for its excellence in the liberal arts and for its non-traditional academic program. Studies are highly individualized and research oriented. New College attracts students with superior academic credentials from

the entire nation. The College is supported in part by private funding through the New College Foundation which has figured prominently in the development and growth of its academic programs and facilities. The distinctiveness of New College is well established.

● **USF at Fort Myers** serves five rapidly-growing counties in southwest Florida. The Board of Regents and the Legislature are planning a tenth university to begin operations in southwest Florida during the latter part of this decade. At that time, USF will no longer have a presence in the area. Until then, the Fort Myers Campus will continue to serve area students, most of whom are working professionals who attend on a part-time basis in the late afternoon and evening. A special initiative involving the Campus, the College of Education in Tampa, and the Lee County Public Schools Foundation has provided outstanding professional development opportunities for area teachers for several years. The Campus is immediately adjacent to Edison Community College with whom it shares many support services and facilities. Public broadcasting through radio and television is provided as an important community service.

● **USF at Lakeland** is designated by the Regents as a "Center", rather than a "Regional Campus" because of its small size. The Center serves a tri-county area in west-central Florida. The Lakeland Center's unusual facility and its instructional technology capability permit non-traditional delivery of courses to distant sites within the service area. Experimentation with the use of video, computer-assisted instruction, and audio systems of communication in offering university courses is the focus at this campus. Because of its proximity to Tampa, the Center provides limited support services for students and relies on Tampa Campus for most administrative services. It occupies a joint-use campus with Polk Community College.

In considering the future development of the University's multi-campus system, two critical issues have been identified:

- Campus size and program diversity for all campuses;
- Intercampus relationships--responsibility and authority for decision-making; recognition of individual campus needs.

Campus Size and Program Development

In recent years, planning for campus growth and program development has become increasingly centralized at the state level. The State's need to provide access to university level education for a rapidly growing population has prompted new system-wide enrollment policies.

The process for enrollment planning has shifted from the institution to the state, from a process based on individual universities' estimates of their growth to one that begins with a formula based on past institutional growth. At the institutional level, the application of this formula does not recognize particular regional or local circumstances. However, adjustments to institutional enrollment plans can be made annually by the Board to recognize special institutional circumstances not dealt with in the mathematical enrollment plan methodology.

The Legislature and the Regents allocate new resources to the universities according to the enrollment plan. Current practices limit the institution's flexibility in making decisions about the allocation of these resources among its campuses. In the past, consideration could be given to special opportunities and unforeseen needs that inevitably occur at one location or another during any given year. Resources were allocated when needed to recognize particular circumstances. Local communities,

the Board of Regents, and some legislators now urge strongly that appropriated enrollment funds flow to each campus directly as generated by the enrollment plan. Acceding to these pressures can have both positive and negative impacts on the campuses and reduces the flexibility of the University to prioritize growth and program development.

Recently, a new SUS process requiring ten-year enrollment projections has been instituted. These projections will serve as the basis for campus master plans for the development of physical facilities on every campus and are distinct from the enrollment plan. They will aid universities in their discussions with local governments on issues of growth management and concurrency. State-wide population growth is used as the primary basis for Tampa campus projections; regional campus growth is based on previous campus master plans.

Enrollment projections for USF included in the Regents' ten-year Campus Facilities Master Plan forecast increases of 45% for the total university, with 34% for the Tampa campus, between 1991/2 and 2003/4. These projections are uncertain and subject to numerous influences not under USF's control, such as population growth of the area from which USF draws a majority of its students, the economy, University budgets, national and local attitudes about the value of higher education, etc. Periodic adjustments to these projections will be made, but the estimates should always be considered tentative.

On the regional campuses, increased enrollment-generated resources will allow the addition of new and expanded programs, thus providing an academically more diverse environment that better meets the needs of local constituents. New College is projected to expand only modestly while retaining its character as a selective, rigorous, highly individualized liberal arts

college with a student to faculty ratio of only 10:1. Its success is vitally dependent on the support of the New College Foundation which allows the student-faculty ratio to remain low. New College growth must be paced and coordinated between state-appropriated and Foundation resources.

The Tampa campus is projected to grow proportionately more slowly than the regional campuses; it may be expected to add new degree programs primarily at the advanced graduate level since it already offers a fairly full complement of Bachelor's and Master's degrees. Certainly, budgetary realities impose constraints. USF does not intend to ask for new degree programs unless it is convinced that they will be programs of high quality needed by students, consistent with its mission, and well justifiable to the Board of Regents. USF will continue to place emphasis on program quality rather than on the number of degrees it can list in its catalogue.

New resources coming from the projected average annual growth rate of about 3% will be used not only to serve more students, but, concomitantly, to enhance the quality of existing programs and improve options within existing majors. An integrated, multi-campus planning process will be necessary to avoid unnecessary duplication of programs with limited demand, to foster inter-campus cooperative activities, and to enhance the special contributions each campus can make to the University as a whole and to each community that it serves.

An important long-range institutional planning consideration involves the concept of optimum campus size. This issue is often discussed by the Board of Regents and its staff, the Postsecondary Education Planning Commission (PEPC), in the universities and on the campuses. While no definitive national norms exist, an undocumented but generally-accepted

convention suggests that economies of scale for a university campus level off at around 25,000 full-time equivalent students (about 47,500 headcount at USF). Recent data developed by the Post Secondary Education Planning Commission and the Board of Regents, establish a minimum of 2,000 FTE students (about 5,600 headcount at USF) in order for a regional campus to be cost effective. These targets lead to the conclusion that USF's campuses should grow significantly more than current projections indicate if USF is to provide quality programs with optimum cost effectiveness. Obviously, each USF campus has the potential of helping Florida meet the demand for access of students to higher education. Further, USF's four campuses could accommodate at least an additional 30,000 headcount students before reaching maximum cost effectiveness.

Developing the full potential of the regional campuses requires up-front investment capital. USF has previously proposed a funding strategy which would allow regional campuses to grow faster than current methodology permits. It called for an approach similar to the Comprehensive University Presence (CUP) funding plan for Southeast Florida which is equally as critical for Southwest Florida as it was and is now for Southeast Florida.

The Planning Commission strongly supports the University's continuing efforts to obtain targeted program development funds that are essential to enhancing educational opportunities on the regional campuses.

Intercampus Relationships

An organizational issue of concern within the University, as well as with its external constituents, is the increasing desire of some regional campuses for greater independence from the Tampa Campus. Requests frequently arise for more independent authority in making decisions on academic programs, student services,

and administrative support systems. These requests raise both philosophic and operational concerns that have been considered at length by the Planning Commission and by the Task Force on USF's Multi-Campus University. Both groups recognize that, while the campuses need greater flexibility in decision-making, complete independence for any regional campus is precluded by constraints imposed by governmental agencies and accrediting bodies and by practical reasons such as size and resource availability. The regional campuses do not have the broad range of faculty expertise and leadership, the complexity of academic programs, or the critical mass of support staff necessary to sustain full independence. Both planning groups concluded, however, that revisions to institutional policies and operating procedures are needed in order to provide flexibility to the campuses, recognizing the rapidly changing external environment and the expansion of the University's comprehensive research mission.

The Task Force on USF's Multi-Campus University has described the relationships of USF's regional campuses to Tampa Campus as representing various stages of "coupling", i.e., a continuum from "loosely coupled" to "closely coupled," depending on the stage of a given campus's development. New College exemplifies a loosely-coupled relationship whereas Lakeland Campus is closely-coupled. Under the coupling concept, the relationships are not static but are free to adjust to changing conditions. The Commission has accepted this concept and has formulated it into sets of principles and policies to guide academic and administrative decisions. *Inter-Campus Academic Operating Guidelines* and *Inter-Campus Administrative Operating Guidelines* documents recognize that differences in mission, constituency, and programs create distinctive environments on the several campuses. In this context, the University can most effectively administer its multiple campuses by centralizing its

policy decisions and decentralizing its operating procedures. (The *Guidelines* are available for review in the Office of Academic Affairs, ADM 226.)

Because all academic programs are accredited on a university-wide basis, academic policy must be consistent across the campuses. The Provost, the Vice President for Health Sciences, and the College Deans bear the primary responsibility for degree program quality and adherence to accreditation standards. Regional Campus heads have the flexibility to make decisions on campus personnel and course offerings and are accountable for ensuring that their decisions meet program quality expectations and accreditation standards.

Administrative policy decisions are vested in the appropriate University Vice Presidents and Tampa Campus Directors. Regional Campus heads are accountable for adherence to these policies, which may be modified to reflect regional needs where appropriate and feasible. The University supports the principle of decentralizing to the regional campuses the authority to administer their programs in the manner most responsive to their needs, based on the availability and expertise of regional campus personnel to accomplish the necessary administrative functions.

As each campus strives to fulfill its individual mission, the overriding concern must be the University's goal of educational leadership and excellence. Each campus must be allowed the flexibility to exploit its individual strengths and special opportunities to achieve quality and earn distinction. The University, its faculty, and the constituent communities it serves will benefit most from a system that is responsive to diverse conditions, that capitalizes on the special talents and strengths of faculty specifically important to each campus, and that gives proper recognition to the contributions and performance of every faculty member.

Shaping the University for the Future

The Planning Commission has spent more than two years studying the University and its external environment to respond to the charge by President Borkowski to "Recommend courses of action that will keep the University focused and moving forward in step with its environment over the long term, and that will provide a competitive edge and distinctive identity for its future development."

Results of the Commission's extensive environmental study (Appendix A) and the comprehensive work of the Future Academic Frontiers Task Force (Appendix B) elicited many potential opportunities for university involvement. The Commission has selected as most appropriate those areas in which USF already holds a strategic advantage or those in which a compelling interest is indicated. Six broad Areas of Emphasis that will shape the direction of University programs throughout this decade have been identified in alphabetical order: **Educational Transformation; Environmental Challenges; Health and Human Welfare; Internationalization; Studies in Aging; and Technology: Its Creation, Its Use, and Its Implications.** These areas have been selected because they represent critical state and national needs and because they are of overarching concern and of broad interest across

the University. Significant accomplishments are expected to be achieved at USF in each area by the year 2000.

Each of the six Areas of Emphasis is described in the following pages. The most compelling aspect of each area, and the characteristic that they share, is the significant potential for cross-college, multidisciplinary intellectual study. Other qualities that support their inclusion on the list of selected areas are that an impressive base of faculty expertise and demonstrated accomplishment already exist. Building strength on strength will encourage faster progress and accelerate the momentum that is already taking place.

Another major factor in the selection of the Areas of Emphasis is their potential for capitalizing on the University's geographic environment to make nationally and internationally significant contributions. While not every aspect of every Area will be developed in this context, the University's location in its urban, coastal environment offers rich and varied opportunities for intellectual inquiry not available to many institutions. The advantages of this "natural laboratory" setting provide challenges that USF has both the responsibility and the opportunity to use to the fullest extent possible.

It is the intent of the Planning Commission that these Areas of Emphasis will provide the context for common academic goals and objectives and become the foundation for a process of self-directed events throughout the University. The Planning Commission urges the colleges, campuses, academic, and administrative units to develop individualized plans appropriate to their areas, ones that are consistent with the content of the University plan. Priorities and emphases will vary across the units, but those selected can be used as indicators of progress toward University-level goals and, as the process develops,

as criteria for measuring qualitative and quantitative results. It should be understood that in describing the Areas of Emphasis the Commission does not attempt to mention or give recognition to all of the important programs and activities that comprise the University. Many worthwhile endeavors will continue to provide the foundation essential to the overall mission of the University. USF will continue to support and value those efforts.

Areas of Emphasis

Educational Transformation

The quality of the processes and results of public school education, from pre-school to graduate school, affect society in direct and critical ways, for the education of the populace is the engine that drives the nation's economy, its institutions, and its culture. Widespread concerns exist about the ability of the schools to fulfill these responsibilities, concerns that are magnified by unfavorable international educational comparisons of U.S. students' performance. Many studies document the shortcomings of existing educational systems, yet few demonstrate effective ways to transform the current system into a significantly better one.

The University has an obligation to address this most critical problem facing the nation. The challenges must be addressed at all levels from pre-school to graduate school, and in specialized, continuing education. New ventures need to be implemented through a variety of systems through existing public schools, colleges, and universities; through initiatives with the business and professional community; or through novel groupings yet to emerge.

USF is well-positioned to assume a leadership role in research, development, and implementation of pro-



grams and processes that will restructure or transform education to yield quality results that meet the needs and expectations of a modern, changing society. New ventures should build upon the strengths of a variety of academic disciplines and professional schools at USF. The Colleges of Arts and Sciences, Education, Fine Arts, and the health sciences, as well as the Architecture program, all should be involved in interdisciplinary initiatives. Groups of faculty or organizational units within the University might collaborate, for example, to explore and develop with the schools new models for curriculum, school operation, and community involvement. In conjunction with these activities, new models for the preparation of professionals who work with or within schools must be developed. Initiatives to utilize new technologies should be undertaken and ventures to respond to specific continuing education needs should be implemented. Educational needs and challenges in today's society offer a compelling Area of Emphasis for USF. The University should intensify its leadership efforts to transform the educational system in order to provide the excellence that current expectations demand.

Environmental Challenges

Growing populations and advanced technologies have now provided humans with the ability to alter global processes to such an extent that the rate of natural cycles can be changed or even destabilized. Consequently, as the twentieth century draws to a close, the world is faced with a number of significant environmental problems, including ozone depletion, acid rain, emission of greenhouse gases, freshwater shortages, overfishing, the threatened extinction of numerous species, unsafe waste disposal, and the loss of rain forests and coastal wetlands. In this context, choosing between utilization and preservation of natural resources is an ominous task that demands wise use of the environment and close attention to the

long-term implications of human activity and technological development. Indeed, the contemporary world is presented with a series of difficult ethical and political questions: which forests should be harvested and which should be preserved in order to protect biodiversity and species habitats? What is the proper balance between concern for the economy and the need to reduce carbon dioxide emissions? To what extent should the use of pesticides and fertilizers be restricted in order to avoid contamination of food webs and the spread of coastal eutrophication? How should potentially scarce resources, such as freshwater, be distributed among urban, agricultural, and industrial users? These and other pressing environmental issues demand the attention of leading intellectual institutions.

In an age of global interaction and technological proliferation, balancing the needs of expanding human populations with the protection of an increasingly fragile environment is a challenge that the various disciplines and colleges of USF must address forcefully and imaginatively. As one of the largest and most diverse public institutions in the Southeast, USF has both the opportunity and the responsibility to recast its research, teaching, and service activities to focus on environmental concerns. The combined expertise of the faculty, staff, and students of the University represents a much-needed multidisciplinary pool of talent, ranging from oceanographers and geophysicists to ethicists and environmental historians. USF's potential as a leading contributor in the field of environmental studies is also enhanced by its location. The State of Florida—with its long, low-lying coastline, expanding population, and complex mixture of agricultural, mining, recreational, metropolitan, and natural wilderness settings—constitutes an expansive environmental mosaic, a regional laboratory in which the various options of future

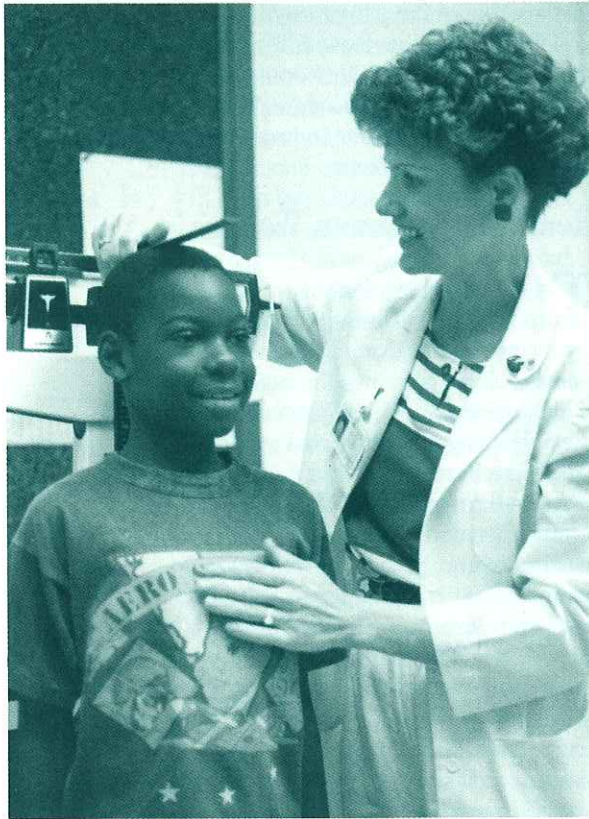
stewardship of the planet might be explored. All of the above factors should encourage the University of South Florida to take a leadership role in seeking solutions to pressing environmental problems.

Health and Human Welfare

The frontiers of science, as applied to health and human welfare, are awesome. For example, biomolecular science has the capability of identifying the human genome, i.e., of establishing accurately and completely the human genetic code. This provides the opportunity for both the intervention and the prevention of genetic defects at their source. The neurosciences, bringing together the basic and clinical sciences, are achieving a new understanding of the function of the brain. Research that increases our understanding of immunology may lead to the effective control of deadly diseases such as AIDS. The ramifications of immunology research extend into such major human problems as cancer, a disease that eventually affects one out of three people.

In the past, health and human welfare fell within the province of a few disciplines working relatively independently on their areas of concern. The health sciences and teaching hospitals were the locus of advanced knowledge about the science of health and the conditions leading to a healthy life style. There was sharp differentiation between the science of medicine and the level of knowledge and concern about health matters elsewhere in the University and the community.

Today, biomedical approaches alone no longer suffice as solutions to many health issues; anthropological, psychological, sociological, economic, and community viewpoints and knowledge must be considered. Concerns for health and human welfare, while always an interest of components of the modern university, are increasingly accepted as part of the responsibility of the total univer-



sity community. It is understood that many diseases can be prevented and their effects reduced by changes in life style. Because the nature and understanding of health problems has changed, because the health care system has become such a large component of the economy, and because society has become more knowledgeable and concerned about health, solutions to many problems come from a wide range of disciplines. The University now is challenged to become a bridge between a body of knowledge and expertise and its dissemination and application in the community.

New approaches to the health problems of the next century must consider the sociocultural, public policy, and ethical concerns as well as the biomedical aspects of health, illness, and disease; must emphasize the collective health problems of a community as well as the health problems of individuals; and must concentrate on proactive prevention of health problems as well as on

therapeutic treatment of them. The Commission's concern is with those areas where there is clearly an opportunity for interdisciplinary and intercollegiate efforts to produce major steps forward. It is in these areas that the Commission envisions a major priority for USF and a significant non-traditional university-wide role for the health sciences--the Colleges of Medicine, Nursing, and Public Health. The University has the capacity to bring together experts to address a number of specific areas that should receive special attention: neurosciences, immunology, cancer, and geriatrics; health and welfare of the family; early identification of and interventions with at-risk children in their homes, families, and schools; promotion of good health on the job and in the home; and psychosocial, cultural, and genetic factors in substance abuse, to mention only a few.

The University of South Florida is well-positioned to take the lead in innovative approaches to issues of health and human welfare because of its strength in basic sciences and in clinical science applications, and because of its expertise in other related disciplines such as anthropology, education, gerontology, humanities, psychology, and social work.

USF must take advantage of these assets by becoming a center for state-of-the-art research on health and human welfare, by promulgating methods and systems, and by training the individuals who deliver services related to these problems.

Internationalization

Explosive advances in communications, travel, and international commerce have brought people from all over the world into closer contact. No longer can a society live in isolation, its culture and science separated from others. Instead, a broader "global perspective," framed by an understanding of other social systems, increasingly will influence the form of our institutions. To make

the most of today's opportunities the modern university must be aware of its position in the international arena. International awareness necessitates bringing more of the world to the university and more of the university to the world.

To be well prepared for global commercial, cultural, and intellectual exchange, USF graduates need to understand and appreciate foreign languages and other cultures. The University of South Florida should go beyond the mandate to insure a student's proficiency in a foreign language and should foster in its students a sensitivity to cultural differences and an appreciation for the rich cultural mosaic of today's world by providing cultural interaction and by expanding the international content of the curriculum. To fulfill its mission, the University should actively and aggressively seek student and faculty participants from many cultural backgrounds. The diversified campus life resulting from these efforts will provide more of the social and cultural interaction that is vital to the development of the traditional student population.

In the areas of research and scholarship, the international context shapes and defines the successful university. Global communication has resulted in the rapid dissemination of new ideas to all corners of the world. Thus, an awareness of the research discoveries of others enlarges the pool of ideas, increases information, creates positive interactive effects, and acts as a fuel to speed the development of technology in science, engineering, architecture, and medicine; of erudition in the liberal and fine arts; and of research methodology in all disciplines. To increase the chances for success, the modern university scholar needs to be aware of advances everywhere and to be able to interact with his or her peers around the world. For this reason, cooperation between faculty members with internationally significant research interests and those with specialized knowledge of foreign language, customs,

and culture is desirable. Without the knowledge of the former and the aid of the latter, language or other barriers can impede the benefits of international research interaction.

The University of South Florida has some advantages that should be exploited in providing an international context for the education of its students and the research efforts of its faculty. The University currently enrolls a significant number of international students, has in place an international student and faculty exchange program, and offers a wide range of overseas education programs. USF's proximity to Central and South America and to the Caribbean, its history of local commerce with these areas, and the continuing integration of peoples from these areas into the population of Florida naturally encourage cultural and intellectual exchange with these neighbors. In addition, the State's vast coastline with several international ports-of-call and its international airport facilities provide access to peoples from all areas of the world. Present day global trends and the circumstances particular to USF require it to increase the diversity of its student and faculty populations, to increase the opportunities for contact and interaction between its students and faculty and persons from around the world, to increase the international components of its curriculum and research, and to increase cooperation among the members of its faculty so as to utilize more fully the breadth of their culturally diverse knowledge. In short, future plans need to recognize a larger and more diverse sphere of influence for USF students and faculty.

Studies in Aging

The population of older Americans is increasing rapidly, both numerically and as a proportion of the total population. The expectation of longer life for larger numbers of people has significant philosophical

and public policy implications for the nation; these, in turn, have many ramifications for older individuals and their families in their attempts to cope with the practical problems of day-to-day living.

At the state level, concerns of elder citizens are a governmental priority. At the federal level, recognition and awareness of aging issues are growing steadily, as reflected by funding increases for programs in aging, especially as they relate to health care and long term care.

Among the pressing issues raised by the increasing longevity of our population are not only health care and wellness, but also financial and economic effects, and quality of life concerns. Aging studies are inherently interdisciplinary, transcending traditional academic boundaries. Contributions from science and technology must be supplemented by a wide array of disciplines in the arts, humanities, social sciences, and others in order to provide broad perspectives and comprehensive solutions to the problems of an aging population.

The University of South Florida is situated in one of the greatest concentrations of older people in the world. Florida has the highest proportion of older people of any state in the nation. Census data of 1990 show that there are now 2.3 million Floridians age 65 and over, comprising 18% of the state's population. If any state can, and must, take the lead in addressing and solving the challenges posed by a large elder population, it is Florida.

USF already has a strong capability in a wide range of aging studies. Current major USF Aging Studies programs are found in the Colleges of Arts and Sciences, Medicine, Nursing, Public Health, and in the Florida Mental Health Institute. The systematic exploration of new fields of interest and the breadth of problems and challenges are expected to involve the participation of the Colleges of Business, Education, Engineering and

Fine Arts and the Architecture program. USF is the only metropolitan university in the State University System with a medical school, an advantage further enhanced by USF's network of four regional campuses, each located in an important Florida retirement area. The opportunities in USF's external environment and the existing strengths in aging studies at USF should encourage the University to exercise a leadership role in this area by becoming a state and national center for the study of aging.

Technology: Its Creation, Its Use, and Its Implications

The pervasive influence of technology on all aspects of intellectual, economic, political, and social endeavors during the next century will precipitate changes in the human condition as dramatic as those affected by the Industrial Revolution. The University must be at the forefront in creating new technologies and in preparing its students to use these technologies and to master their implications.

As a major comprehensive research university, USF continues to nurture a robust, supportive research environment in which the students and faculty continuously create new technologies as a result of their scholarly activities and research. The creation of technology is already an area of emphasis in many disciplines, but cross disciplinary research efforts should increase. Technologies to improve and safeguard the environment should emerge from collaborative efforts of natural science, engineering, medicine, and other disciplines. Technologies to improve the educational delivery system should naturally emanate from joint activities of the Colleges of Arts and Sciences, Education, Engineering, and Fine Arts. Medicine, Natural sciences, Engineering, and others should form alliances to create technologies in the biomedical and health fields. The College of



Business, the Architecture program, and the social sciences should play an important role in implementing new technologies and understanding their effects on society. One of the central elements of the University, its library, must undergo radical changes as technology transforms the way we acquire, store, and disseminate information.

As corporations deemphasize long-range research, the importance of the role of universities in maintaining the nation's scientific and technological expertise will increase. University/industry partnerships aimed at technology development and deployment will grow. USF should be actively involved in establishing these partnerships.

The wide-spread and increasing use of technology has far-reaching effects. Economic structures, political systems, and social directions are altered by technology. Artistic expression and the values of a society are shaped by it. Society in general and USF students in particular must understand technology and all its implications. For example, ethical issues raised by the study and practice of genetic engineering, the use of scarce resources, the limiting of access to costly medical services, and the politics of selective pollution controls, must be addressed throughout the curriculum. The University must prepare its students to be informed critics and perceptive visionaries within a technological world.

Institutional Strategies

The Commission's recommendation to emphasize the development of a limited number of areas sets the stage for USF to establish a distinctive identity and to make nationally significant contributions in these areas. This identity should be established within the context of a revitalized emphasis upon a strong liberal arts requirement. In order to accomplish these goals, the University must make consistent, long-term decisions that maintain this focus. Resource allocation and personnel decisions must be made in specific relationship to the goals of this plan and must be clearly communicated to those involved so that an environment of understanding, cooperation, collegiality, and interdependence of disciplinary specializations can evolve. Such attitudes should be a natural outcome of the plan's emphasis on broadly phrased objectives.

In support of these concepts, the Planning Commission has embraced a series of institutional strategies that it believes are essential to the accomplishment of the University's goals and to its long-term vitality and growing stature.

Strengthening the Multi-Campus Environment

Strategies to strengthen the University as a comprehensive university require attention to the qualitative dimensions of programs on all campuses and the recognition of the special contributions of each campus to the whole.

On the Tampa Campus, strategies to improve the educational experience for undergraduate students include:

- Expanding the University Honors

Program to approximately double its current enrollment;

- Establishing a university experience program for freshmen that offers mentoring and on-going support and provides a continuity of caring to foster academic success and a sense of belonging to the life and culture of the institution;

- Developing and implementing comprehensive processes and procedures that will ensure a high quality experience for students from the outset of recruitment through the completion of the sophomore year.

On the regional campuses, strategies to improve the educational experience include:

- Supporting the unique intellectual environment of New College and assuring that it continues to improve its innovative and stimulating curriculum;

- Providing liberal arts offerings on regional campuses adequate to meet local need and to support and enhance the professional programs;

- Increasing the number of resident faculty on regional campuses in order to improve the campus learning environment and to reduce the strain placed on Tampa Campus faculty to meet the instructional needs of the regional campuses;

- Ensuring that regional campuses have an appropriate number of resident, full-time faculty in a particular discipline before granting approval to offer a full degree program in that discipline;

- Limiting current and new degree programs to areas for which there is substantial demonstrated need;

- Ensuring that students can complete approved full-degree programs within, at the maximum, a three year period;

- Emphasizing graduate degree programs that support the needs of teachers and working professionals and that enhance the economic development of the region.

On all campuses, strategies to improve the educational experience include:

- Strengthening the liberal arts through fully implementing the new liberal education requirements;
- Enhancing cooperation with area community colleges through cooperative initiatives on curricular, access, and academic quality issues;
- Expanding and improving advising, career counseling, and mentoring for undergraduate students;
- Conducting a systematic review of all undergraduate course offerings and class scheduling to optimize the match between student needs and course availability and to ensure student progress toward a degree and graduation in an expeditious manner;
- Reviewing all aspects of support programs for students to ensure that all administrative services and support functions are provided equitably, effectively, and with consistent, sensitive concern for the educational, personal, and social well-being of all students.

Enhancing USF Libraries

The libraries are the single most important physical asset of the University. They play a central role in every facet of the University's mission. The Planning Commission recognizes the need to enhance the quality and quantity of library resources and recommends that action be taken to secure adequate and continued support for the several libraries.

A core collection of books, journals, and other informational materials must be available to support classroom instruction, research and

graduate study, as well as to serve the broader community. Further acquisition of core materials is needed to support the needs generated by the University's increased emphasis on the liberal arts and interdisciplinary studies; it is also imperative that the specialized needs of the graduate programs be addressed.

In addition to materials at hand, the University must have access to materials held elsewhere, identified through locally available data bases and national and international network connections. The process of determining those materials that must be available within the university and those that can be borrowed from other locations requires university wide cooperation.

Acquisition of materials represents only one direction for the libraries. The USF libraries must continue to move toward becoming part of the national and international electronic information network, regularly sharing their resources and accessing resources of universities, government, industry, and research institutes. Current automated library systems provide bibliographic information but as academic users increase their demands for full text and multimedia information resources, new and expanded delivery systems will be required. Recently approved federal legislation has established the National Research and Education Network (NREN) and will expand access to print formats. USF must be involved in the development of such networks. It must also position itself to take advantage of the wide range of new information technologies.

Encouraging Multidisciplinary Initiatives

The rapidity and complexity of change in all fields of human endeavor challenge the ability of society to chart effective courses that

will lead to the improvement of the human condition. Change must be thoughtfully anticipated and new frontiers must be reflectively examined before journeys begin. Universities must provide the central intellectual leadership in this process.

Academic institutions throughout the 20th Century have undergone explosive disciplinary fragmentation, leading to a proliferation of departments and specialties, and to an increasing narrowing of emphases in the research area. As a result, universities must make special efforts to develop the wider knowledge base that should form the foundation for society in the 21st century. In this context, the Commission believes that one of the greatest challenges and also one of the most fruitful areas for academic exploration lies in the gaps between traditional academic homes. A distinction is drawn between conventional interdisciplinary approaches, in which participating disciplines retain their identity, and integrative approaches, in which disciplinary identities become inter-related and even merged. The development of chaos theory, now an academic frontier that lies somewhere between mathematics, engineering, social science, and computer science, occurred almost in spite of traditional disciplines rather than as a result of the natural development of such disciplines.

At USF, a task force of distinguished faculty spent nearly a year identifying those areas that may emerge as academic research frontiers early in the next century, resulting in the kind of intellectual initiatives that make other institutions say, "We wish we had thought of that." The vast majority of the proposed academic frontiers involve multi-disciplinary and integrative approaches, attempting to chart new ground between established intellectual paradigms.

A young institution such as USF, with aspirations to make nationally leading contributions as a comprehensive research university, faces a

dilemma in how to position itself: if it seeks to emulate the older, established institutions, it must find the resources to create all the various specialties and sub-specialties that characterize mature graduate research universities. This is expensive--far beyond any realistic estimate of State resources in the foreseeable future; duplicative--since sub-specialties cannot be created *de novo* but must have in place the academic infrastructure that makes such specialties possible; and unlikely to result in the desired goal of national distinction--since the institution continually must both play catch-up and try to move to the cutting edge of the sub-discipline.

On the other hand, an institution that chooses to ignore the deeply entrenched academic disciplines risks gaining a reputation as an academic loner, reducing its access to traditional sources of funding and isolating itself from the academic mainstream and from the respect of its peers. In fact, integrative or interdisciplinary programs must be well-founded in traditional academic disciplines in order to be successful.

The challenge for an institution that aspires to national excellence, that recognizes short-term financial limitations, and that believes that the really exciting developments lie in new approaches that cut across established academic disciplines is how to institutionalize support for visionary integrative efforts.

The nurturing of an environment that allows faculty to pursue significant new areas of multi-disciplinary and integrative cooperation must be a central driving force for future intellectual progress. The Planning Commission recommends that the University balance the traditional strengthening of established academic disciplines by a competitive program requiring integrative research initiatives. The priorities for this competition should be on bringing together faculty from across the

colleges, on breaking down the barriers of organizational boundaries, and on the creative innovation and excellence of ideas and people.

The USF Faculty Integrative Research Initiatives (Appendix C) is a competitive awards program designed to draw on the enormous collective intellect of the faculty to propose and then to pursue new programs that anticipate the academic frontiers and needs of the citizens of the 21st Century.

The *sine qua non* of the Faculty Integrative Research Initiatives proposal is the recognition that it is the faculty who best determine the future course of research initiatives and who, therefore, must be empowered to make these decisions within the broadly-articulated institutional priorities.

Expanding Access Through Continuing Education

The Planning Commission believes that USF has both an opportunity and an obligation to offer extended education benefits to greater numbers of its constituents. USF's School of Continuing Education and some of the colleges already provide a variety of opportunities for credit and non-credit programs in the immediate Tampa area. However, only limited offerings of this type are available throughout the remaining fifteen county continuing education service area, and many unmet needs exist.

With the increasing rate of change in business and industry resulting from new technology, many working adults must return to the classroom if they are to keep up with those changes and remain competitive in their fields. In the professions, certification and licensure requirements are expanding the demand for higher education in order for practitioners to maintain their professional currency. The economic development

goals of the area list the availability of educational training and the updating of existing and potential employees as one of the highest priorities. Many adults also desire programs that will enhance their personal and their professional lives. All of these needs can be best met by university faculty with expertise in the various professional, scientific, social, cultural, and humanities disciplines.

The Planning Commission recommends that the University develop a strong continuing education presence throughout its service area that builds vital, innovative programs that match institutional strengths to community needs through flexible, responsive curricula.

All of the continuing education activities offered must be of a caliber worthy of the best standards of higher education and should in no way diminish the caliber of degree programs or the stature of the institution. In addition to fulfilling the University's service mission, expanding continuing education throughout the region benefits the institution through increased revenues, additional income for faculty, and greater utilization of facilities. In addition, the many possibilities afforded through developments in educational technology have significant potential to produce cost-effective delivery systems and to increase access for larger numbers of participants.

Diversifying Educational Delivery Systems

The Planning Commission recommends that USF aggressively promote the use of appropriate technologies to deliver educational programs, both credit and non-credit. While USF has been a leader in certain applications of educational technology such as television instruction and the Florida Engineering Educational Delivery System, it has not fully exploited the reservoir of technologies that are now available. Techniques for developing pro-

grammed instruction have been available for many years, but are largely unused. Exceptions within the University include the departments of anthropology, biology, chemistry, and physical education who have taken the lead in their use. The benefits resulting to students and faculty in these departments are potentially available throughout the colleges and campuses, if carefully designed and pedagogically sound programs are developed and if adequate technical support is provided. It is imperative that appropriate evaluation accompany the development and implementation of technology-based education delivery systems.

Programmed instruction using computer-learning modules with interactive video disks offers rapid access to information, problem-solving lessons, laboratory experimentation, and manipulation of variables, often accompanied by graphic material. Programmed instruction records the learning process, offers prompt feedback to students, and aids instructors in course management. The development of these and other educational technologies can be accomplished within the University or, in some cases, it can be obtained externally through consortia or other educational vendors. The investment costs of technology-enhanced learning systems are significant but they may be justified by more efficient use of faculty effort, by more effective student learning, and by increased access for larger numbers of students. Therefore, proposals for expanded usage will require thorough cost/benefit analyses.

The combined use of powerful personal computers, new storage techniques for the management of huge amounts of information, multimedia systems and advanced techniques for programmed instruction can be expected to have a dramatic impact on the process of higher education in this decade and will

surely exert a profound influence in the 21st century. USF should ensure that its students and faculty enjoy the benefits that technology can bring to the educational process. The University should encourage the interests of its faculty in keeping pace with national trends and should support the creative talents of those faculty who can provide innovative leadership in the development of visionary technology to enhance the learning process.

Improving the Organizational Environment

Organizing for Effectiveness

The Planning Commission, supported by the work of its three task forces, has set forth a series of significant visions and strategies that it believes have the potential to provide a competitive edge and distinctive identity for the future development of the University of South Florida. The Commission believes that USF is capable of becoming one of the outstanding universities of the 21st century and that it will successfully meet the challenges it encounters. The Commission recognizes, however, that just as new intellectual endeavors must define the institution's academic progress, new organizational systems and practices must be established to support the educational aspirations.

As a first step, the University must engage in a critical self-examination of its structure, policies, and procedures, with the goal of establishing an operating environment that most effectively supports the mission of the University and that permits maximum opportunity for the achievement of its goals.

The Planning Commission and the Task Force on Future Academic Frontiers recommend that the President develop an on-going



program to continuously monitor the expectations and requirements of USF's constituents and to determine the effectiveness and efficiency through which these University services are delivered. Through this program, the needs and desires of constituents can be identified, better communication established, successes and failures in delivering those needs and wants appraised, and appropriate reinforcement or corrective actions taken expeditiously.

Primarily, the Commission believes that the University must establish a culture of unwavering commitment to quality and to achieving higher standards of excellence in all that it does. This culture should be founded on a vision communicated to, and hopefully shared by everyone in the organization, now and in the future. To do this, an organizational climate should be cultivated in which the administration empowers and entrusts its service providers with the knowledge, ability, and authority to carry out their functions to the satisfaction of their constituents. Every effort must be made to remove



the barriers--bureaucratic, structural or otherwise--that prevent the University from achieving its commitment to quality.

The dramatic reduction in state support and the increasing severity of external demands require now, more than ever, a reformulation of the organizational environment. Only through significant and broad-sweeping transformation can the University meet the challenges that lie before it. Undeterred by fiscal hardships, USF must, therefore, proceed toward its vision by improving efficiencies, eliminating redundancy, and increasing the decision-making role for the faculty and staff, while simultaneously creating a work environment characterized by high morale and kindred spirit.

It is essential that the University's significant accomplishments of the past be sustained and

that the future be embraced with vision and shared values and the conviction that a vital community of learning will be maintained.

Institutional Life and Culture

The University's ability to foster a sense of community and common purpose is significantly affected by the quality of the environment within which it operates. Physical, social, cultural, and aesthetic surroundings directly impact the educational process for students and the working environment of faculty and staff. The importance of these factors was articulated by the Task Force on Institutional Life and Culture in its final report.

Based on this work, the Commission subsequently issued a comprehensive set of recommendations that addressed areas of vital interest to substantial numbers of University constituents. The full text and specific recommendations of the Commission are included as Appendix D. These recommendations focus largely on the Tampa campus because of the greater complexity of enhancing the quality of the environment on the University's largest and most comprehensive campus. The Commission expects that similar studies will be carried out by each regional campus which will recommend enhancements specifically tailored to its needs.

The breadth of the issues addressed in the report reflects the Commission's desire to promote an environment infused with a sense of common purpose, one where students, faculty, and staff conduct their daily activities in a satisfying and productive manner. A summary of the recommendations that support these goals follows.

1) The physical environment strongly affects the moods and feelings of campus community members as well as the very functioning of the institution. Recommended

enhancements include: a central integrated complex of facilities incorporating a University bookstore, food court, conference hall and theater, with adequate multi-level parking; the enhancement of both the interior and exterior environment through the renovation of lecture halls, classrooms, and lounges, and a more pervasive use of artwork and landscaping; a more effective signage system; and the creation of a physical structure to symbolize a unique identity for the university.

2) The quality of campus life for students and their satisfaction with the university experience affects their academic performance. Recommended actions include the expansion of available housing on campus and in the immediate environs, particularly housing accommodating the special needs of foreign students, married students, and students over the traditional age; the development of flexible staff scheduling in essential offices to insure the availability of student services for all students; and the expansion of the University reward system to reward faculty and staff who spend considerable time working with students beyond the requirements of their jobs.

3) The University has the responsibility to offer opportunities for prevention-oriented health care for faculty, staff, and students. Recommended action is the completion of facilities for a full-service Wellness Center.

4) The quality of worklife affects the morale and productivity of the University's support staff; consequently, the quality of service that they provide directly affects the successful accomplishment of the University's mission. Recommended action includes the aggressive expansion of the University's human resources development programs in order to increase employee effectiveness, job satisfaction, and institutional pride throughout the campus, and the development of a comprehensive University plan to expand the

use of technology throughout the administrative support areas of the University.

5) Access to adequate computer support is also essential for all students and faculty. Recommended action includes the expansion of academic computing services throughout the University to provide seven-day-a-week availability to computers and computer networks.

6) Broader participation by faculty, staff, and students in attending the many stimulating speakers and events brought to campus is highly desirable. Recommended action includes more effective promotion of scheduled artistic and cultural events through better publicity, more diverse scheduling of events, and an annual calendar of major events available to all segments of the University community. In addition, the University should sponsor and promote opportunities for the entire University community to interact on and off campus with those of different ethnic and cultural backgrounds and to gain international experiences through various overseas programs.

Since its issuance, the Commission's report on Institutional Life and Culture has begun to exert an influence on decisions involving campus facilities and programs. The Commission strongly urges that recommendations in the report be reflected in the University's 10-year facilities master plan now under development and included in operations and program planning enhancements during the coming years.

Campus Life— In Search of Community

The realities of campus life in the 1990's may seem antithetical to the concept of community with its embodiment of common interests, activities, and goals; the size and complexity of the University create academic and administrative structures that segment groups and

individuals, reduce their cohesiveness, and dilute their sense of common purposes. In its beginning, an aura of coherence guided the campus populated by students and faculty who appeared socially and economically similar. This is no longer the case. While the University celebrates the pluralism of racial, ethnic, and multinational participants that reflect the reality of the world in which its students will live, the articulation of larger loyalties, of common purposes, of shared values has not been consistently or demonstrably formulated.

The achievement of a coherent community is a challenge on hundreds of campuses around the country and is of such importance nationally that the Carnegie Foundation recently published a special report on the subject as it relates to students, entitled *Campus Life: In Search of Community**. The report offers thoughtful and insightful analyses and an integrative vision that defines the enduring values that serve as the foundation for a community of learning.

The Carnegie Report proposes six principles that can be used by the University in its day-to-day decision making and that, in the aggregate, define the kind of community that the University should strive to be. The Planning Commission embraces these principles and recommends their formal adoption as a University compact.

● First, USF is an **educationally purposeful** community, a place where faculty and students share academic goals and work together to strengthen teaching and learning on campus.

● Second, USF is an **open** community, a place where freedom of expression is uncompromisingly protected and where civility is powerfully affirmed.

● Third, USF is a **just** community, a place where the sacredness of the person is honored and where diversity is aggressively pursued.

● Fourth, USF is a **disciplined** community, a place where individuals accept their obligations to the group and where well-defined governance procedures guide behavior for the common good.

● Fifth, USF is a **caring** community, a place where the well-being of each member is sensitively supported and where service to others is encouraged.

● Sixth, USF is a **celebrative** community, one in which the heritage of the institution is remembered and where rituals affirming both tradition and change are widely shared.

The Planning Commission believes that the adoption of these principles will demonstrate the seriousness with which the University affirms these enduring values. As USF strives to build a vital community of learning, its success can be evaluated by the extent to which these principles are used in shaping policy and determining action. Implementing these principles will positively affect all who study, teach, and work at this University.

*The Carnegie Commission for the Advancement of Teaching. *Campus Life: In Search of Community*. Lawrenceville, N.J.: Princeton University Press, 1990.

Formulating a Plan of Action

The Planning Commission believes that its recommendations for *Shaping the University for the Future* represent appropriate directions and realistic aspirations for the University. The Commission has intentionally chosen an evolutionary rather than a revolutionary approach; it has sought ways to enhance the quality of USF by continually improving those things that are integral to its mission and by focusing the institution's creative energies on addressing critical state and national needs.

The transition of the planning process from long range visions to plans of action will necessitate the involvement of nearly all academic and administrative areas of the University. Program priorities must be articulated, specific goals and objectives must be developed, and resource requirements identified. The Planning Commission will devote significant energy toward the support, encouragement, and promotion of efforts throughout the institution that will lead, over time, to implementing its plans.

In identifying the Areas of Emphasis for academic initiatives, the Commission has stated its recommendations only in the broadest of terms that address over-arching College priorities and major University-wide issues. Because the Commission believes that new academic frontiers evolve continually, the planning process at this point is intentionally flexible so that within the broadly-stated goals each academic unit may identify for itself those programs that are of greatest interest and that hold the most promise for achievement. It is not the intent of the Commission to superimpose itself on the normal resource allocation process that is determined by enrollment considerations.

The Commission recognizes that USF's academic successes will be

attained only through the commitment of the faculty who must ultimately move the University toward its aspirations. In order to promote the Areas of Emphasis, the Commission anticipates the establishment of a confederation of faculty for each Area to encourage communication about mutual interests and to provide an environment where synergy across the University can be effected. When appropriate, the University should establish formal organizational structures, including Institutes, Centers, and new departmental alignments.

The Institutional Strategies recommended by the Commission are relatively specific in identifying intended outcomes. The implementation of these recommendations will require steering committees and/or administrative assignment of responsibility for action to particular organizational units. The Planning Commission will assist and support the University's academic and administrative leaders in developing appropriate implementation plans. The Commission will oversee an ongoing process of planning, implementation, and evaluation to ensure that successful outcomes take place.

The Planning Commission recognizes that the current economic climate of the Nation and the fiscal constraints of the State slow the immediate pace of progress toward the University's aspirations. This reality need not, however, alter its determination to shape its future in keeping with the times and the needs of its constituents. By focusing the talent and energy of the University community, progress will be made. Much can be accomplished with the judicious use of available resources. New resources--public and private--must be sought aggressively, garnered carefully, and invested productively. USF must shape its own future even without additional resources, using all of its considerable strengths to maintain a steady course, overcoming intermittent deterrents while keeping its

sights clearly focused on its ultimate objectives.

The University's regular processes for requesting state resources, for pursuing federal initiatives and other contract and grant activity, and for soliciting private giving should be formulated in ways that support the established priorities. Similarly, the use of these resources should reinforce progress toward goals, as should personnel decisions and recognition/reward structures.

While the Commission urges the general adherence of the University to the pursuit of the stated objectives, it also recognizes that unanticipated targets of opportunity can and will arise. In such circumstances, careful consideration and appropriate consultation should take place before substantial divergence from the plan occurs.

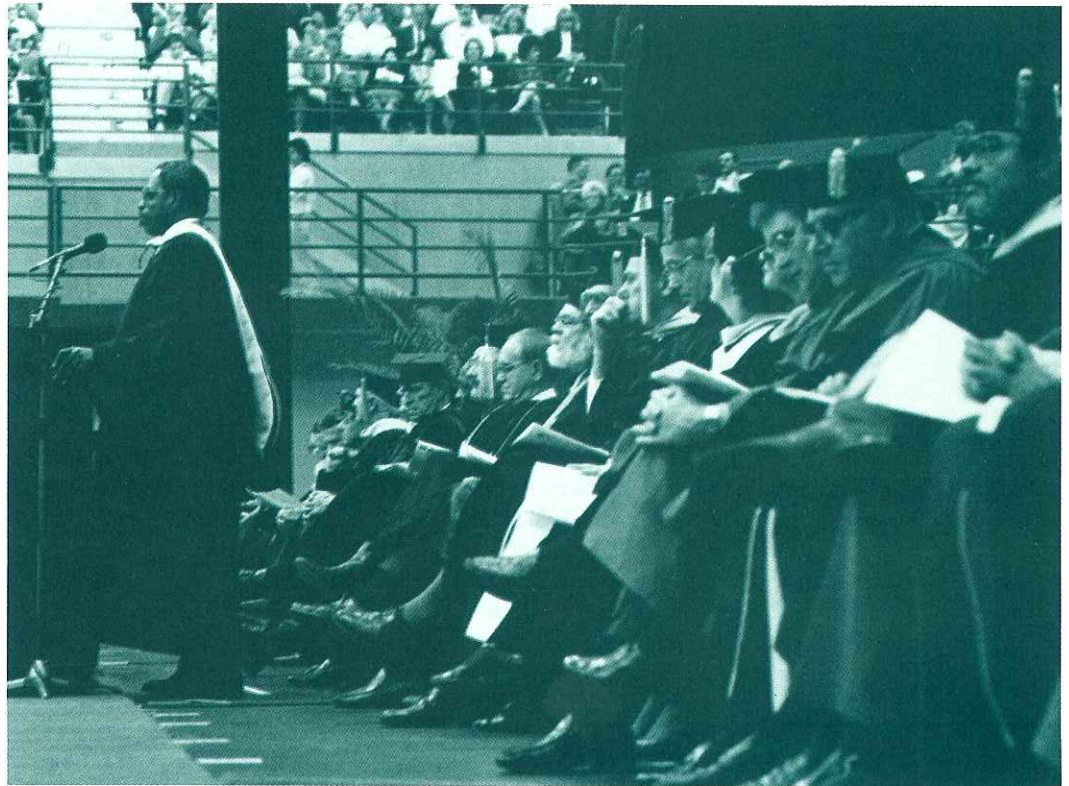
The Planning Commission intends to focus significant future attention on fostering strategies for improving the University's financial environment. Higher education in general and USF in particular can no longer rely on traditional state and federal appropriations for the flexible and discretionary levels of support that were provided in the past. The University must pursue competitive funding opportunities through new and aggressive strategies in order to accomplish its goals.

Shaping the University for the future means that USF must critically analyze, cultivate, and manage new linkages with its external constituents. It must expand partnerships with constituents with whom it has common interests and under circumstances whereby shared visions lead to strategic advantage in bringing about innovation and change.

This concept is exemplified by the new "Electric Vehicle and Solar Energy Research and Development Program" which is a joint effort of the College of Engineering with

partners in the private sector, public utilities, federal agencies, and city, state and county governments. All participants have a share of the program's vision and a stake in the outcomes. The program fosters innovation and leverages University resources to create knowledge leading to solutions to problems with world-wide significance.

Not all academic areas have equal potential to engage in such dramatically effective linkages. Nevertheless, it is critical that the University undertake an on-going and systematic process to identify and formulate opportunities for extending its relationships, expanding its partnerships, and improving its strategic advantage. The accomplishment of USF's visions for its future rests on the University's ability to conceptualize its role in innovative ways and to leverage its skills and resources in creative and sustainable directions.



Appendix A: Examining the External Environment

Recognizing that USF's future is shaped by outside forces as much as by internal ones, the Planning Commission has invested substantial time and energy in investigating factors at the national, state, and regional levels that potentially influence the University's long-range growth and development. An understanding of environmental forces, competitive conditions, and external opportunities and threats is essential to effective planning for the future.

The USF Planning Commission acknowledges that accurately forecasting the future is impossible and that caution is in order. Nevertheless, the inexact nature of forecasts does not preclude their use nor the possible benefits from subsequently derived insights. Rapidly changing external events will require frequent monitoring. The Planning Commission recognizes this requirement through the on-going nature of its deliberations and subsequent adjustments to its proposed course of action.

A summary of those environmental conditions that appear most relevant in influencing the University's development follows.

Economic Influences

The present economic recession should serve as a reminder of a basic economic wisdom: In the long run the economy grows at a fairly predictable rate, but in the short run expansions and contractions are unpredictable. Tremendous opportunities are available for those who plan for the inevitable "rainy day."

Several long-run trends are identifiable. The annual rate of real economic growth has averaged about 2.5 percent in the twentieth century, in spite of the significant ups and downs that plague the short run. In Florida, if net in-migration from other states and countries continues, the long-term growth rate will be somewhat higher than the national average. With a better understanding of the role of monetary and fiscal policy, a long-sustained period of economic depression

like that of the 1930's is not likely. Because the tourist trade is quite responsive to changes in income, fluctuations in the business cycle will be more pronounced in Florida. We should expect times of "boom" and "bust" to surround periods of modest expansion averaging two to three percent.

Inflation is not predictable but there is a stable relationship between nominal interest rates and the rate of inflation, the former being about 2.5 percentage points above the latter. That is, after adjustments for inflation, invested money can be expected to increase in purchasing power at the rate of 2.5 percent per year. Inflation can devalue a pledge, but money in hand can be protected from inflation by reasonably prudent investment.

In a politically stable world, the rate of growth and importance of international trade will increase. The world will become a more global market. Barring successful protectionist pressures in Washington or international war, trade with other countries will represent a growing part of Florida's export and import markets. With increased trade comes increased specialization. In the next few decades the U.S. will further decline in heavy manufacturing industries (more losses in steel, energy, and automobile production, and the beginning of the erosion of the U.S. share of airplane manufacturing). Information and computer technology are the U.S. growth industries. Particular attention should be paid to space manufacturing and to satellite technologies (particularly in Florida) and to data storage, transmission, and processing technologies. The medicine and health care industries will continue to grow.

The price of labor will continue to rise relative to the cost of capital. Following regulatory trends, this cost increase will be less in the form of wages and more in the form of mandated benefits--insurance, day care, safety, etc.--and in the paper work cost of maintaining a work force--tax documentation and EEOC filing requirements. Therefore, the cost of

labor intensive activities will rise more quickly than other activities.

The price of transportation and communication will continue to fall. The future community of university students will represent a more varied geographic background, and the amount of academic and scientific collaboration between spatially separated investigators will increase.

Social/Demographic Influences

Population demographics are dramatically changing the face of America. By the year 2000, the growth rate of older Americans (75 and over) will be the fastest while the growth in numbers of those in middle age (35 to 54) will be the largest. Minority populations will comprise nearly 30% of the U.S. population.

This decade will see an additional 2.7 million people making Florida their home, swelling the total population to nearly 16 million. Florida's population growth is not limited primarily to migrating retirees as popular lore alleges, but encompasses significant increases in nearly all age groups.

Florida's non-white population will exceed national trends in both rate of growth and percent of population by the end of the decade. Florida's black population will lead the nation in projected size of growth with an increase of 25% by the year 2000.

In 1988, 90% of Florida's population lived in metropolitan areas. The State's growth management legislation reinforces continuing development of urban and metropolitan areas. Growth in USF's service area will continue to outpace the state and nation. In the decade of the 90's, regional population will increase by over 600,000 or 19.5%. The number of high school graduates in USF's market area will grow by 34%.

Family households throughout the state and nation are changing with married-couple households declining and single-parent households increasing. Non-family households comprise

nearly 30 percent of all U.S. households and are projected to be 36 percent, or more than 40 million, by the year 2000.

Social issues of greatest concern to Americans include AIDS, crime, family violence, drug abuse, the homeless, and the environment. Concern about health care is rising as the costs for medical care escalate. The shortage of health-care professionals and the need for long-term care for the elderly and child-care for working parents are problems of increasing importance over the next decade.

For Floridians, quality of life issues, particularly the health of the individual, safety of life and property, and the state of the environment, will continue to grow in importance as key social concerns that demand public policy attention.

Influences of the Arts

Nationally, the arts have become part of mainstream American life. More people attend arts events each year than attend sports events or vote in a national election. Widespread recognition of their value is also reflected in the growth of private sector financial support provided for the arts, humanities, and culture. In Florida, too, it is increasingly recognized that the promotion of cultural resources is essential to the state's quality of life and important to its economy.

It should be noted that within the national arts community, universities are now viewed as a critical element in the maintenance of the arts in this country. Today, most artists and arts educators are trained within academia. Universities also play an important role in arts advocacy and audience development. Often, it is on a college campus that students are first introduced to the arts and begin lifetimes of arts appreciation. In addition, universities provide their students and surrounding communities with art that is affordable (or free), a critical factor in these difficult economic times.

Although the arts are certainly widely valued for themselves, the

practical connection between the arts, the economy, and quality of life cannot be ignored. Both business and individuals frequently make location decisions based on the quality of schools and the arts in a given area. Furthermore, cultural resources attract tourists. Therefore, cultural programs in our communities and schools will be important factors in determining the quality and quantity of Florida's growth in the next decades.

The west coast of Florida is one of the fastest growing areas in the nation. Here in the Bay area, most arts organizations are strong. The Arts Council of Hillsborough County lists over two hundred groups involved in architecture, historic preservation, arts education, and every discipline of artistic endeavor. However, the visibility of the arts among the general public could be higher. The focus of those concerned with a national campaign to "sell" the quality of life within the Bay area has been primarily on sports; cultural amenities, the arts, and education have been given less emphasis. More emphasis should also be given to arts education, particularly in the elementary schools, in order to achieve cultural literacy in our society.

It is important to note that in multicultural environments such as exist in Florida, the arts are an excellent forum to promote positive relationships among members of different races and cultures.

Political/Governmental Influences

As a publicly funded institution, the University of South Florida is particularly sensitive to political influences. It was created by the State of Florida and is responsive to the wishes of the State's Governor, its Legislature, and its Board of Regents. Demographic changes in the composition of Florida's political parties and major reapportionment of congressional and state legislative districts are creating new attitudes of partisanship.

Florida is suffering from a severe revenue shortage in the early 1990's that prevents the State from meeting its

needs as one of the largest and fastest growing areas of the United States. Neither the individual nor the combined efforts of the legislative and the executive branches have been able to reach effective solutions. Both bodies have been cognizant of the general mood throughout the State against increasing taxes. Voters have made it difficult to raise additional taxes for the support of public programs. Paradoxically, citizens expect the State to meet their increasing needs for health care, social services, transportation, education, and the like.

The combination of reapportionment, reelection, revenue enhancement, and the general poor economic climate do not bode well for prompt resolution. Even an optimistic appraisal suggests a period of several years before substantial improvements in funding the State's infrastructure needs can be expected. Faced with taxing limits and spending demands, political bodies rely increasingly on rules and regulations as a means to direct the flow of resources and exert influence. Accountability measures imposed on State agencies increase reporting requirements and demands on scarce resources.

In addition to the State, other legal or quasi-legal authorities charged with oversight of educational institutions are increasing their demands for accountability, labelled as outcomes assessment. Regional and professional accrediting bodies and governing boards each have their own expectations that require institutions to invest hundreds of work-hours and thousands of dollars in order to demonstrate compliance with requirements.

In Florida, the Legislature has historically mandated strict adherence to a variety of quality standards, such as CLAST and the Gordon rule, that it sets for the public post-secondary institutions. The State also tests graduates of many university programs as a requirement for state licensure in areas such as accounting, engineering, nursing, medicine, medical technology, etc. The 1990

legislation mandating new accountability standards is creating costly new systems for gathering and reporting data while offering only modest improvement in fiscal flexibility, the stated trade-off.

Education Influences

A national problem of major proportions is the growing concern for the quality of the country's public schools. Student performance on national tests continues to decline and students from the United States compare poorly with those of other countries in knowledge of mathematics and science. Large numbers of functionally illiterate adults are unable to compete successfully in the job market.

The public schools are undergoing a changing demography with increasing numbers of disadvantaged and culturally diverse students. Within the decade, minority students will make up approximately 50% of the country's public school enrollments. The majority of teachers will continue to be white females who speak only one language--English.

In Florida the enormous in-migration of families with school-age children is projected to increase public school enrollments by more than 600,000 (32 percent) between 1990 and 2000.

Increasing numbers of potential school drop-outs and at-risk students will necessitate special assistance through early intervention and child-care programs. The social problems of students and their families are causing schools to evolve into social service centers that must provide help in coping with daily existence so that learning can occur in the classroom.

In order to cope with educational quality concerns, significant reforms are occurring at national, state, and local levels. In teacher education, major initiatives call for more stringent criteria for entry into the teaching profession and for restructuring the teacher education curriculum.

The necessity for more stringent

requirements in admitting potential teachers to the profession comes at the very time that a shortage of teachers is projected. By 1995, American schools are expected to be short 700,000 qualified teachers. A special need exists to train a critical mass of minority teachers, especially black males, to be qualified to enter the teaching profession.

Shortages of faculty for colleges and universities are also projected for the latter part of the decade. While the shortage will be felt in many disciplines, it will be most acute in the science and engineering fields where faculty salaries fail to be competitive with salaries in the private sector.

Educational reforms are in progress to change the organization and management of public schools, giving teachers more responsibility for decision-making. Greater collaboration between schools and the business sector and between school teachers and university faculty holds promise for improving the educational process.

Within the post-secondary sector, issues in higher education continue to focus on quality and access. Demographic changes in students' ages, marital and parental status, employment status, etc. are forcing institutions to be more flexible in course delivery and to provide more comprehensive support services.

Enrollment planning is a complex issue of major proportion for all types of post-secondary institutions, for those whose enrollments are increasing as well as for those declining. Enrollment of foreign students continues to increase with more than half of them coming from Asian countries.

In Florida, the State faces a serious problem of access in both the Community Colleges and Universities. Erosion of State funding has caused the Board of Regents to cap enrollments at current levels, despite projections of underserving demand by approximately 80,000 students in the next nine years. Community Colleges, while mandated to

maintain open enrollments, are individually curtailing their acceptance of new students because of insufficient State support.

Competition for academically talented and culturally diverse students is keen across the nation and within the states. Scholarships, fellowships, and financial assistance to support recruitment programs are essential at both undergraduate and graduate levels. State and national assistance is inadequate to meet the State's needs, and this places additional pressures on the institutions to increase private funding.

Both state and national curricular concerns involve general education as well as the liberal arts, teacher education, and the production of graduates in engineering and the sciences to support the development of technology. Graduate education and research, long major interests of university faculty, are coming under increasing scrutiny because of the perception that investing energy in these areas leads to a neglect of undergraduate teaching. With changes in federal funding for research, universities are forming new partnerships with the private sector.

The State of Florida seeks to expand and diversify its economy through economic development efforts. The transition from a tourism and agriculture based economy to one based on high-value added industry utilizing high technology will require substantial additional investment in higher education in order for Florida to be nationally and internationally competitive. Universities must have scientific teaching and research laboratories supplied with state-of-the-art equipment to prepare students to make meaningful contributions in the technological work force. New Florida industries will not be created, companies will not be attracted to Florida, and existing companies will not flourish without a strong commitment to economic development through additional financial resources needed

to improve the quality of higher education.

Technology Influences

Technology is creating a revolution in the way that the people of developed countries live, learn, work, and play. Advances in technology are influencing medical research, the productivity of large and small manufacturing firms, the development of new products, increasingly sophisticated modes of transportation, and the creation of new industries, as well as structuring an information-based economy of global proportions.

Technology has permeated all aspects of human communication and has produced an environment that regards information as a strategic resource. Technological change occurs so quickly that it often moves faster than human decisions on how to use the technology. Research into human factors has recently begun to explore the integration of human beings and machines into a smoothly functioning system.

While the United States has led the world as the most advanced nation in science and technology, other nations are now equaling and sometimes surpassing this country's accomplishments. The State of Florida must ensure its ability to compete in national and international markets over the long term by providing a work force that is technologically literate and scientifically capable. This will require major changes in science education and greater investment in high technology research.

Appendix B: Future Academic Frontiers

The Task Force on Future Academic Frontiers spent nearly a year identifying areas that may emerge as academic frontiers early in the next century. The Task Force conducted in-depth interviews with many faculty and some administrators, individually and in groups. It considered more than 125 suggestions from faculty throughout the University. Subsequently, the Task Force submitted a comprehensive report to the Commission, including important recommendations on policy, procedure, and organizational changes, as well as twenty-five individual reports on a number of emergent areas that the members believed were of particular relevance to the University's future.

The Task Force report was reproduced in its entirety in a September, 1991 edition of *Inside USF* and distributed to all faculty and staff. The Commission then held meetings in eight colleges and the Florida Mental Health Institute to receive comments from faculty on the report. As a result of the meetings, several additional proposals were submitted from the colleges to the Commission for consideration.

After extensive study and review of this work and other pertinent material, the Commission reached several conclusions:

- That the concept of future frontiers is best defined in broad categories rather than in lists of specific topics;
- That the most fruitful areas of academic exploration lie in the gaps between traditional disciplines and in new approaches that cut across established academic structures and modes of inquiry;
- That the Commission should nurture an environment wherein faculty can pursue new areas of discovery as their best professional judgments lead them rather than being guided by prescribed specific goals.

These conclusions ultimately led to the Commission's recommendations for the six Areas of Emphasis and the Faculty Integrative Research Initiatives. The Commission recognizes that many of the specific proposals suggested for academic frontier designation have the potential to be competitive as a Faculty Integrative Research Initiative and for federal grants, private support, or other external funding. Those proposals which the Commission believes have the greatest promise are reproduced here.

Aging/Gerontology

Aging/Gerontology is the one area most frequently mentioned by diverse groups of faculty (FMHI, Medicine, Nursing, Public Health, Social Sciences) as a future academic frontier for USF. Currently the University has seven Institutes and Centers, four areas of emphasis, and a Department of Gerontology (which is currently applying for a Ph.D. program) engaged in teaching, research, and clinical services in Aging/Gerontology. A great pool of expertise is available, and on-going communication and discussion among these various units strengthens important sharing of information and ideas. Aging/Gerontology is a research area of national need, and in West Central Florida USF has the ideal research laboratory for the study of factors in the broad area of aging.

The University must foster the close coordination of all these Aging/Gerontology activities. The authorization of the Ph.D. program should be the focal point for the combining various centers and institutes, creating a new "Super Center" with the Ph.D. program pivotal to all activities. Such a coordinated center would be a strong dynamic attracting force for federal funds because of the high local population of the elderly. Other programs would also be affected and would be valid contributors, e.g., engineering (new devices to enhance life for the elderly), sociology, education (for re-training and adult education

programs), health communication, psychology, public health and public administration (policy), and small business programs.

Biomolecular Sciences

Life sciences, medicine, agriculture, and biotechnology of the future will be based on recent developments in molecular biology. Researchers at USF are actively involved in genetic engineering, molecular immunology, and protein chemistry; protein, DNA, and RNA sequencing; engineering in microorganisms, plants, and animals. This research has important medical, pharmaceutical, environmental, and agricultural implications. In the future, molecular biology will continue to be an area of increasing federal support and local economic growth.

The Institute for Biomolecular Sciences has developed a cooperative network comprised of some of the arts and sciences, medicine, public health, and engineering. USF has an excellent faculty in molecular and cell biology, biochemistry, medical and environmental microbiology, and immunology. The Institute is a foundation for growth and coordination of research in these areas. The University needs to continue to attract the best researchers in this field into the key departments of Biochemistry and Molecular Biology, Medical Microbiology and Immunology, Biology, and Chemistry. Separate doctoral programs in the College of Medicine and a continued expansion of molecular biology in the Biology Department and biomolecular chemistry in the Chemistry Department are warranted.

Community Health

Effectively coping with many of the health problems of the next century will require new approaches that consider the sociocultural as well as the biomedical aspects of health, illness, and disease; that place emphasis on the collective health problems of a community rather than

the health problems of individuals within the community; that concentrate on proactive attempts to prevent community health problems rather than on reactive attempts to treat them. A university can contribute to these efforts by becoming a center for state-of-the-art research on community health, and by training the individuals who deliver services related to these problems.

There are several specific areas within community health that should receive special attention. Emphasis should be given to the role of social, cultural, and psychological factors in the etiology of both physical and mental health problems. Among those that merit special attention are:

- the use of behavioral techniques to reduce illnesses, e.g., coronary heart disease and other cardiovascular disorders;
- the role of psychological, social, and cultural factors in the onset and treatment of certain kinds of cancers;
- psychosocial and cultural factors in substance abuse and other self-injurious behaviors;
- the use of health communication/social marketing techniques to develop more effective solutions to community health problems.

Most experts agree that there will continue to be certain infectious diseases (e.g., AIDS) that will not have immediate effective medical remedies. In such instances, community health will depend on the efficacy of nonmedical attempts to change attitudes and behaviors that further the spread of these diseases. Another aspect in community health is research and training on health care delivery and policy issues, such as cultural barriers to health care, unequal access, and the growing number of uninsured Floridians. The University of South Florida is uniquely well-positioned to take the lead in innovative approaches to

community health issues. In addition to its College of Medicine, the University includes the Colleges of Nursing and Public Health, the Florida Mental Health Institute, and strong graduate programs in disciplines related to community health issues (e.g., applied medical anthropology, communication, psychology, school psychology, and special education). Also, because the University is in a major urban center, it can provide a natural laboratory for research efforts and an excellent "market" for its graduates in disciplines related to community health issues.

Composites and Materials

Advanced materials and structures research and development rank high on the U.S. agenda of research initiatives. Engineering and chemistry developments are directed at areas such as nondestructive evaluation, fracture mechanics, corrosion protection, and coatings and adhesives. Composites are becoming more and more important in every-day living as essential resources are depleted. Researchers are also providing new insights into selective binding of materials. Novel substances are being designed to mimic highly specific activity of enzymes. In addition to contributing to the understanding of many natural processes, this research finds applications in the recovery of scarce metals and the purification of waste streams of toxic and radioactive materials.

At the University of South Florida, researchers in various disciplines (e.g., engineering, chemistry, biochemistry, biology, physics, and medicine) are involved extensively in new-materials research. Because of the variety of research and activities that span colleges and campuses, an effort to coordinate this field should be developed at USF to take advantage most effectively of opportunities for funding, sharing of information, and cooperative research efforts. Research in new materials

will be one key to the future and, as such, should be a priority at USF.

Cultural Systems Analysis

The changing demographics of the 21st century suggest that America—its classrooms, boardrooms, playgroups, and workplaces—will be different than ever before. By the year 2000, only 15% of the entering workforce will be Anglo-American males; by 2010, California will become the first majority non-Anglo-American state; early in the 21st century Hispanic-Americans will become the largest "minority group," African-Americans will become the second largest, and Islam will become the second largest religious group. The above statistics forecast changing cultural values. The University has a pivotal role to lead in understanding the new mix of cultural values that will define America in the next century.

Cultural Systems Analysis (CSA) focuses on how information is produced, circulated, and consumed. Information is received as the product of the cultural history of the producers, and reflects their cultural, class, and gender biases. According to the *Chronicle of Higher Education* (January 31, 1990), this approach provides a multidisciplinary perspective that "make[s] explicit connections between cultural forms, and between culture and politics."

Several major universities, such as Harvard, have established programs of study of Cultural Systems. To date, none has been formalized within the State University System of Florida. Yet, like California, Florida is experiencing rapid change in its demographic and cultural composition. USF is extremely fortunate to be able to draw on the demonstrated strengths of its faculty in a wide range of disciplines, including communications, anthropology, sociology, Afro-American studies, women's studies and literature for leadership in this Cultural Systems Analysis.

Educational Change and Restructuring

Never before has the education and reeducation of children, youth and adults been more fundamental to the continuing success of our society. The social institutions that emerged a century or more ago no longer seem able to meet the educational needs of our citizens. As the locus of responsibility for nurturing, informing and empowering has shifted, relatively unnoticed, from the home to society, the quality and effectiveness of these support activities has diminished. The traditional educational structures are not adequate to nurture the inventive and productive capacities of children who will live in the information age of the 21st century.

As our society changed over the years, new agencies were formed to address new needs. The resulting patchwork of agencies has proved unable to meet the challenges of our time. The conceptual and operational inefficiencies of this patchwork have limited the potential for success and assured that costs would be high relative to benefits realized. For these reasons reinvention of the institutions and the strategies that serve to nurture, inform, and empower children and youth is a frontier activity for our university and our society. A comprehensive program of interdisciplinary research will be needed to inform the structuring of new institutions and the development of policy.

Universities have made only marginal commitments to the preparation of teachers and non-teaching professionals, who, with the decline in the influence of the church and family, are increasingly becoming the first-line nurturers and informers of our children and youth. The preparation of professionals for education has been remanded to existing general courses for subject matter knowledge, and to specialists in pedagogy for professional preparation.

Needed are structures through

which universities, school districts, parents, and business can work together toward inventing new ways of nurturing, informing, and empowering children and youth. Needed to address this important frontier is an academic center which can coalesce the resources of the university in education, the natural, social, and health sciences and the arts. This center should work collaboratively with business, parents and government toward the development, implementation and evaluation of policies and new societal strategies which can effectively address these needs, and toward the development of academic programs which can prepare professionals to carry this important work forward.

Energy Utilization

The availability of efficient forms of energy for use in manufacturing, transportation, processing of materials, food preservation, and space heating and cooling ranks high on the agenda of research initiatives in the United States. Lessons of the mid 1970's energy shortages have been temporarily overshadowed by other national concerns but will emerge in the new future as energy consumption in the world continues to increase. Research on the use of various forms of renewable energy sources such as solar, wind, and biomass; new methods of energy conversion like fusion and advanced nuclear systems; and techniques for energy conservation at all levels of energy usage will become a high priority in the near future.

The University of South Florida currently has research activity and interest in energy utilization on-going in the college of Engineering in the mechanical, electrical, civil, and chemical engineering departments. Expertise also exists in the disciplines of architecture, biochemistry, physics, and chemistry. Because of the variety of research and activities that span colleges and campuses and the emerging importance of energy utilization, an effort to coordinate this

field should be developed at USF. It should be considered to be one of the Academic Frontiers for the University of South Florida.

Environmental Health

Many conditions of the environment create severe human health problems most of which are worsening as human populations increase and urbanization accelerates. Environmental Health is certainly an academic area of overwhelming importance locally, statewide, nationally, and internationally. It is also an area in which USF has great personnel strength and interest. Faculty at FMHI, in biology, chemistry, engineering, geology, marine science, medicine, nursing, public health, and social sciences have a deep and compelling interest in problems of Environmental Health and many are actively engaged in research on such problems. There has been no concerted effort, however, to bring such faculties together for a more unified approach to the solution of Environmental Health problems.

Four of the major areas of Environmental Health problems are those created by air pollution, water management--including water pollution--hazardous waste management, and occupational health and safety. All are of obvious major concern; all are areas that require a broad interdisciplinary approach--by engineers, natural scientists, medical scientists, and social scientists. For example, occupational health and safety involves a broad gamut of problems from designing safer car seats for infants, to improved treatment of severe burns, to minimizing mental stress of older workers who fear replacement because of age. The problem of water management becomes more serious daily. At USF it should involve the pollution of ground water as well as coastal water pollution; also, the distribution of potable water throughout Florida.

Declaring Environmental Health a Future Academic Frontier for USF should result in a better coordinated,

interdisciplinary approach to the solution of these problems of local and global importance.

Environmental Studies

Environmental degradation and resource depletion are two of the great problems facing humankind. Each year, for example, pollution induces thousands of human cancers; increasing population and development cause the extinction of more than 1,000 non-human species; erosion and urban expansion cause the loss of thousands of acres of arable land desperately needed to feed the world's ever-expanding population. The University has a duty to provide the information necessary to balance economic, environmental, and human interests, and help society solve environmental problems. The uniqueness and fragility of many Florida environments, the population pressures in the State, and the presence of many USF experts on environment related problems (for example, in architecture, biology, engineering, marine sciences, mathematics, and philosophy) create opportunities for a wide variety of environmental studies in many different fields. The presence of these many experts provides the opportunity of multidisciplinary studies. These include well established disciplinary specialties--analytical chemistry, community ecology, environmental aesthetics, environmental economics, environmental engineering, environmental ethics, environmental history, environmental law and politics, and environmental toxicology--as well as multidisciplinary fields, such as environmental impact analysis, quantitative risk assessment, and urban engineering and design.

Families and Children at Risk

The status of children and families at risk is one of the major concerns in our state and country. During the 1980s, there were significant increases in problems such as physical abuse, sexual abuse, psychiatric hospitalizations, educational problems, children living in

poverty, chronic physical health problems, and substance abuse. These changes in child well-being have been accompanied by continued shifts in the composition of families. More and more children are spending significant parts of their childhood in single parent households, and families are experiencing increased economic, social, and emotional strain. This is compounded in many Florida communities by the absence of supports from extended families. One study, released in February, 1991, and focusing specifically on children in Florida, identifies 28% of children between birth and three years of age as being at risk of developing handicaps or learning problems.

The significance of these problems is exacerbated by demographic changes that will result in a smaller percentage of the population capable of participating in the workforce in future years than is presently the case. Further, a higher percentage of the workforce will include individuals from minority groups, some of whom are at special risk for problems such as violence, dropping out of school, and teen pregnancy. These related problems have special significance for the business community which will increasingly require a highly trained workforce to compete on an international basis.

To address this area adequately, there should be a multidisciplinary focus involving, at a minimum, education, psychology, epidemiology, pediatrics, sociology, anthropology, psychiatry, and social work. At the present time, there is considerable expertise at USF upon which to build. This expertise exists in the Florida Mental Health Institute; the colleges of Education, Nursing, and Public Health; the departments of Special Education, Social and Psychological Foundations, Psychology, Criminology, and Anthropology.

Given the importance and severity

of the problem, and the strength that already exists at USF, this academic frontier presents an extraordinary opportunity for leadership in research, education, and training.

Hydrogeology

Given the municipal and agricultural pressures on both surface and ground water within Florida and the United States, USF has an obligation to provide leadership in the area of hydrogeology. This offers focus for the Geology Department much the way that coastal geology has become a major focus for geological oceanographers within the Marine Science Department and the geologists in USGS Center for Coastal Studies. It also promotes links between applied mathematics, computer science, and engineering by virtue of the various approaches to ground and surface water modelling that would develop on a continuing basis. Relations with the Marine Science Department will also be strengthened. The shallow west Florida shelf is roughly equal in area to the portion of Florida that is presently above sea level. Ground water modelling, inclusive of this region, will promote interactive studies.

Extremely serious problems of water availability and water management exist in other parts of the U.S.A. and many parts of the world. With these issues becoming of increasing importance in the 21st century, the opportunity exists for USF to lead nation-wide in hydrogeology.

Immunology and Immune Diseases

It has become increasingly clear in the last decade that immunology is a central biomedical research area. The University of South Florida has national and international stature in immunology and the immunological sciences. Because of the reputation and capabilities of faculty in the College of Medicine and other parts of the University in immunological sciences, this area of biomedicine will

grow here and be of great value for Florida and the nation.

In the past decade, it has again been widely recognized that there is a tremendous need to understand in more detail the immune mechanism and responses to microorganisms, especially since certain organisms, including the AIDS virus, can subvert the immune response and make an individual more susceptible to microorganisms commonly found in the environment and normally not a cause of disease in otherwise healthy individuals. Also, those who have immunodeficiencies caused by other situations, including aging, cancer, etc., are highly susceptible to lowly infective microorganisms in the environment. In Florida, there are many residents who are highly susceptible to infectious diseases because of two situations--those individuals who have depressed immune responses due to the acquired immunodeficiency syndrome caused by infection with the AIDS virus, and older persons whose immune system has waned.

It is well known that Florida has one of the largest numbers of AIDS patients in the United States. It is also recognized that Florida has the oldest population in the USA. Thus, the Florida population includes a significant number of individuals with increased risk for microbial infection because of aging, or infection with the immunodeficiency virus. In the last decade USF has taken a lead in both areas of research and it is reasonable to expect that during the next century the University will continue to contribute by becoming a center for state-of-the-art research in immunological sciences and for training individuals who deliver services related to immunology.

The areas that are being investigated by scientists at USF include the study of the immune system and its regulation, the immune mechanisms of inflammation, immunodeficiency diseases, allergic diseases, etc.; also,

other specific immune mediated diseases, immunosuppression and transplantation immunology, immunotoxicology, biotechnical applications of immunology, the immunology of infectious diseases, etc. These sciences have a direct relevance for the population of this State. It is apparent that further strengthening of immunology science programs at USF will permit the University to play a major leadership role in this area, not only for the State but also nationally and internationally.

Marine Sciences

From an environmental vantage point, marine sciences stand at the forefront of global environmental issues. With 75% water cover, and with air-sea interactions controlling the global climate, the habitability of the planet is largely determined by the oceans. This realization has led to major national and international programs. USF is fortunate to have in place a strong program in marine sciences at the St. Petersburg campus. This program consists of the basic biological, chemical, geological, and physical sciences directed toward understanding intrinsic ocean properties and the interactions between the oceans and the solid earth and atmosphere. The presence of the recently established U.S. Geological Survey Center for Coastal Studies at St. Petersburg will add support to this frontier.

The Marine Science Department has established programs in solid earth and intrinsic ocean components. The addition of a program in air-sea interaction is essential for keeping abreast of developments in biogeochemical cycling and climate dynamics. This will foster the development of interdisciplinary activities such as the development of sophisticated satellite instruments. New instruments could provide data currently not available. For example, with respect to greenhouse warming, the major atmospheric greenhouse gas is not carbon dioxide or other

trace gases, but simply water vapor. Yet, our understanding of cloud physics, cloud chemistry, and their effects upon the radiative heat balance of the coupled air-sea system remains inadequate. The potential linkages between the basic sciences at USF and marine science in these areas are clear. Additional linkages can develop with computer science and applied mathematics. The marine sciences also have direct relevance to the State of Florida, an ocean process-formed peninsula, which will be dramatically impacted by any changes in sea level or other ocean environment changes. By further strengthening the marine sciences program at USF, the University can play a leadership role in local, state, national, and international issues of environmental concern.

Microelectronics

It is widely projected that the electronics industry will be the world's largest industry by the year 2000. The explosive advances in microelectronics have facilitated the vast array of new consumer products from portable computers and communication systems to HDTV and the high technology defense systems which protect our freedom. Microelectronics has in the past ten years scaled from LSI to VLSI to ULSI with projected scaling in the future to less than 0.1 μm or the nanotechnology range geometries. Microelectronics and the nanotechnologies are therefore "must technologies" for the future because of their critical nature in terms of world economic competitiveness and defense technology superiority and their immense economic leverage for producing profits and jobs.

USF is uniquely positioned in the State University System as the USF Center for Microelectronics Research (CMR) has a rapidly growing national and international reputation. CMR is the only Type II center in the microelectronics field within the State University System. USF can therefore build on strength in the microelectronics area and aggressively

position itself to address the natural scaling to the nanotechnology region. USF can expand its present industrial support from Honeywell, AT&T, IBM, and United Technologies to the broader commercial applications in space, computers, bio-medical applications, and environmental control applications. These areas have enormous potential for entrepreneurial economic growth and the resultant creation of the desirable high-tech and manufacturing jobs which the State so urgently requires.

Neurosciences

The 1990's have been designated "The Decade of the Brain" by the United States Congress. This is in recognition of the explosive growth of the relatively new and interdisciplinary field of neuroscience which promises to illuminate one of the last remaining puzzles of biology and medicine - the functioning of the animal brain. In the last two decades, neuroscientists have utilized various approaches from the fields of biology, chemistry, computer science, engineering, psychology, physics and molecular biology to achieve major advances in our understanding of neural signalling systems, brain dysfunctions and aging processes in humans and fundamental advances in the understanding of the mechanisms of memory. More than 95 percent of what is known about brain function was found during the last ten years.

Neuroscience research has brought us to the brink of comprehending the most complex organ of the human body. USF has an opportunity to take advantage of faculty throughout the university who are actively involved in studies of the brain and brain/behavior relationships. Already researchers have developed working relationships between departments in the Colleges of Arts and Sciences, Medicine, Engineering, the Institute for Biomolecular Sciences, the Suncoast Gerontology Center and others. Now is the time to strengthen the existing basic and clinical neuroscience research and to attract the

brightest young researchers to these departments.

Regional and Global Studies

The incorporation of regional and global dimensions into the teaching, research, and public service function of the University seems natural given the University's geographic location, the broad perspective and knowledge already manifested by the faculty's scholarship on regional and international issues, and the diverse population within the service area. Drawing upon the models and techniques of cultural anthropology, regional geography, the social and environmental history of the *Annales* school, and comparative politics and economics, the burgeoning interdisciplinary field of regional and global studies focuses on place-specific analysis that reaches beyond traditional political or structural questions. At one end of the spectrum, the field involves limited or local case studies that "ask big questions in small places." At the other end, that of global studies, the field builds on the hypothesis that the whole is greater than the sum of its various parts (e.g., nation states, various regions of the world, different economic systems, various environmental problems and factors unique to specific regions or localities, value priorities specific to various societies or policies). The central questions of global studies are both analytic and synthetic: How can the humanities, natural sciences, and social sciences contribute to an understanding of the earth as a unit? What analytical tools are required to assess the globe as composed of interdependent cultural units?

The importance of regional and global studies is a major theme in the National Governors' Association Report, *America in Transition: The International Frontier*. This is consistent with Chancellor Reed's request (Council of University Presidents, July 11, 1989) that the State University System internationalize its curriculum and mission. USF has a solid foundation of faculty already

engaged in regional and global research. In regional studies, we are especially well-suited to conduct research concerning the Caribbean, Florida, and Japan. And in global studies, faculty in a wide range of departments, representing several colleges, are currently engaged in research or teaching that concerns the earth as a unit of analysis. At present, the faculty efforts in regional and global studies are dispersed and unfocused. But the potential for innovative research and education in this field is almost unlimited. If faculty members in various colleges and departments could develop ways to pool their respective insights into regional and global systems, USF could become a major contributing institution to an area of intellectual inquiry that will have enormous impact and importance in the 21st century.

Urban Modernization

Urban issues will dominate society by the turn of the century. Infrastructure replacement, including bridges, highways, utility grids, sewerage, and other aging urban support systems will all need to be modernized and/or rebuilt in imaginative ways. Individual and mass transportation are also problems associated with the transformation/rebuilding of our older cities, though not exclusive to them. The increasing cost and diminishing supply of land and petro-products will need to be addressed, and not only in times of crisis. The rapid growth of many southern cities with stagnant tax bases will offer many interesting problems to university researchers. Affordable housing, local services, health care, etc. all need to be provided and coordinated in a realistic manner.

Many special opportunities in this complex area exist for USF. The Center for Urban Transportation Research, recently created, is concerned with transportation planning and research. Tampa is a laboratory for such study because it is a typical

auto-dominated city developed with little forward-looking planning. The research results derived in Tampa and its surroundings will be relevant to many other communities.

Visualization and Simulation Technologies -- Computer Applications for the Arts, Sciences, and the Professions

Media provides an all-encompassing environment for the mind, just as physical surroundings provide an all-encompassing environment for the body. Our minds depend on a rich environment of media and symbols. We live in a global information society, where media events increasingly shape human perception, social and cultural bias, and in time reshape human consciousness.

The university of the next century must consider current trends in each of the disciplines where the application of "visualization and simulation technologies" have developed as a particular way of knowing about and communicating ideas. Traditional differences between disciplines will continue to blur, as shared information and insight become more accessible to the learner/researcher through more visual ways of communicating.

Significant research and training programs already exist in the Colleges of Fine Arts and Engineering. Future emphasis should be placed on developing interdisciplinary relationships with new and existing programs networked to regional microelectronic companies, and on the emerging multi-national arts and entertainment industries. The areas of emphasis would include:

1. the application of computer visualization/simulation technologies to all of the professions;
2. the application of computer science for interdisciplinary teaching and research related to all human computer interfaces including artificial intelligence, expert systems, robotics, and virtual reality;
3. the application of computer mediated audio and visualization technologies for research and teaching in the Arts (Visual Arts, Music, Theater, Dance, and the Arts in Education).

Appendix C: Faculty Integrative Research Initiatives

To support the Commission's strategy on **Encouraging Multidisciplinary Initiatives** the following competitive research program is proposed.

I. Elements of the Faculty Integrative Research Initiatives

There are three critical elements that must be implemented to ensure success:

A. Institutional Commitment

To be successful the collective efforts of faculty in pursuing new initiatives must receive constant and visible support from the institution. Multi-disciplinary and integrative efforts by groups of faculty must be encouraged, facilitated, and rewarded by all levels of the university administrative structure.

B. Development of a Plan

USF should adopt and implement a plan for the identification, selection, and support of innovative integrative initiatives. To accomplish this, a Policy Committee, consisting of faculty who have broad knowledge of academic areas and who are committed to integrative approaches, will be appointed by the Provost to develop a plan for involving colleagues in genuine multi-disciplinary, integrative scholarship. The framework for such a plan is described in Section II.

C. Evaluation

In order to ensure that the whole process of encouraging and nurturing a multi-disciplinary environment at USF is meeting its objective, a periodic assessment must be conducted. The program should assess how well these initiatives achieve the goal of establishing USF as a leader in anticipating the academic frontiers and needs of the 21st Century.

II. Framework for Development of Plan

The following represents a beginning framework to be used to develop a plan to implement the Integrative Research Initiatives program. The Policy Committee will

consider this framework and then recommend a plan.

A. Objectives

The Faculty Integrative Research Initiatives will provide the necessary institutional environment to accomplish the following objectives:

1. Facilitate formation of faculty groups to pursue integrative studies and research of long term value to USF.
2. Establish cadres of related intellectual expertise that will serve as the nucleus for formation of future Centers and Institutes.

B. Structure

The Faculty Integrative Research Initiatives program is intended to result in a series of significant, innovative research programs proposed and administered by faculty.

The structural and organizational elements of these Initiatives are as follows:

1. Size and Number
These initiatives are intended to have a major impact on the establishment of significant integrative programs and therefore must involve sufficient faculty to ensure a critical mass for an intellectually self-sustaining collegial group. Faculty from multiple departments across colleges will be required to participate in each initiative. Funds permitting, at least four of these major initiatives will be in operation at any one time with staggered starting dates.

2. Level of Funding

Each initiative will be funded at an appropriate level for a period of up to 5 years. Funding decisions will be based on competitive proposals evaluated by internal and external peers. Continued funding for the full 5 years will be contingent upon successful

achievement of proposed milestones and objectives as determined by an annual assessment process conducted by both internal and external groups. No funding from this source will be provided beyond 5 years. It is expected that at the conclusion of this period the initiative will either derive continuing support from other funding sources or be completed and brought to closure.

3. Faculty Management

The faculty group proposing a program can suggest any internal administrative structure that will ensure that the fiscal requirements and proposed academic/research objectives are met. The "Principal Investigator" model may apply in many cases, but other faculty management structures are possible and are encouraged. Alternate management structures must identify how the functions of accountability and responsibility will be carried out.

C. Method of Selection

The Faculty Integrative Research Initiatives will be selected based on peer review of proposals submitted by faculty groups. Proposals will be submitted in November of each year and reviewed by an expert panel (see below). Notification of awards will take place in March with funding to begin in the fall of that year. The evaluation and selection process will involve the following:

1. Criteria for Evaluation

The criteria for evaluating the proposals submitted to the Faculty Integrative Research Initiatives will be established by the faculty Policy Committee. Among the elements that the Committee may want to consider are: level of interdisciplinary character of proposal; relevance to USF mission; visible indication of prior collaborative activity; clarity of objectives; reasonableness of proposal

assessment measures; opportunities for national leadership in proposed initiative, etc.

2. Solicitation of Proposals

In April of each year the Office of Academic Affairs will send a "request for proposals" to all faculty informing them of the purpose of the program, the criteria that will be used to evaluate the proposals, the required format and the deadline (November) for submission.

3. Review Committee

The Provost will appoint a committee each year to review the proposals. The committee shall consist of at least 4 outside reviewers of national reputation and 7 reviewers from USF and shall make use of criteria as described above. The external reviewers shall have extensive experience in reviewing integrative proposals at agencies such as the National Science Foundation, National Endowment for Humanities, or similar organizations.

The Committee will provide the Provost with an evaluation of each proposal and recommended funding priorities.

Committee Structure

I. Policy Committee

A. Membership:

University faculty who have broad knowledge of academic areas and who are committed to integrative approaches.

B. Functions:

- 1) Develop a plan for the identification, selection and support of innovative integrative initiatives.
- 2) Establish criteria for evaluation.

II. Review Committee

A. Membership:

Four outside reviewers of national reputation with extensive peer review experience at national level. Seven USF faculty reviewers.

B. Functions:

- 1) Review and evaluate annually all proposals received in response to the RFP.
- 2) Recommend funding priorities.

Appendix D: Institutional Life and Culture

The University's ability to foster a sense of community and common purpose is significantly affected by the quality of the environment within which it operates. Physical, social, cultural, and aesthetic surroundings directly impact the educational process for students and the working environment of faculty and staff. The importance of these factors was articulated by the Task Force on Institutional Life and Culture in its final report.

Based on this work, the Commission subsequently issued a comprehensive set of recommendations that addressed areas of vital interest to substantial numbers of University constituents. These recommendations focus largely on the Tampa campus because of the greater complexity of enhancing the quality of the environment on the University's largest and most comprehensive campus. The Commission expects that similar studies will be carried out by each regional campus which will recommend enhancements specifically tailored to its needs.

Recognizing that the physical environment strongly affects the moods and feelings of community members and thus the general atmosphere and indeed even the functioning of the institution, the Commission recommends the following enhancements for the Tampa campus:

- The construction of a textbook and general purpose bookstore, a food court, and a conference hall and theater, all located on an integrated site near the University Center to promote an atmosphere of collegiality and relaxed informality;
- The renovation of lecture halls, classrooms, lounges, and corridors to present a pleasant prospect for teaching and learning;
- The enhancement of interior and exterior spaces by artwork, sculpture,

and landscaping to improve campus aesthetic ambience;

- The use of large shade trees, covered walkways, and benches to provide informal meeting places and to unite buildings now separated by open spaces punished by an unrelenting sun;
- The addition of more lounges and food service areas to facilitate convenient and casual meeting places in and around academic buildings, current and future;
- The creation of a physical structure to establish a unique identity for the university and to serve as a symbol of university values, e.g., a bell tower, the Picasso sculpture, an elaborate fountain or set of fountains;
- The provision of an effective campus signage program including readable directions and numerous functional signs for buildings, offices, and rooms to increase student and visitor accessibility;
- The use of multi-level parking structures and shuttle service to provide closer access to campus facilities for students, staff, faculty, and visitors and to promote pedestrian traffic safety;
- The establishment of a Campus Physical Enhancement Committee comprised of faculty and staff to oversee the continuing and comprehensive planning for the physical and aesthetic environment of the entire campus. The committee should report to the Vice President for Administration and should include equal numbers of faculty and administrators, including campus directors whose responsibilities involve planning and operations of facilities and grounds.

Recognizing the primacy of the University's educational mission, the Commission recommends the following actions which have the potential to influence significantly the quality of campus life for students and to

increase their satisfaction with the university experience:

- The expansion of available housing on campus and in the immediate environs to accommodate larger numbers and more diverse types of living arrangements;
- The accommodation of special housing needs of foreign students, married students, and students over the traditional age;
- The expansion of the University's reward system to insure tangible rewards—salary increases, workload assignments, bonuses, or other suitable recognition—for those faculty and staff who spend considerable time working with students **beyond the requirements of their assigned responsibilities**;
- The development of flexible staff scheduling in essential offices so that the availability of student services is matched with student needs. Coordination of services among academic and administrative offices will be required, including college advising services.

Recognizing the University's responsibility to offer opportunities for prevention-oriented health care for faculty, staff, and students, the Commission recommends:

- The completion of facilities for a full-service Wellness Center that will promote ease of access and functional coordination of programs whose missions focus on physical and mental health and career counseling.

Recognizing that faculty, staff, and students have expressed strong concerns about their needs for child care services, the Commission supports the current University activity to analyze the needs of constituent groups and identify opportunities for solutions. The Commission especially encourages the pursuit of public/private partnerships and solutions that do not require

underwriting from University resources.

Recognizing that the quality of worklife affects the morale and productivity of the University's support staff and that the quality of service they provide directly affects the successful accomplishment of the University's missions, the Commission recommends:

- The aggressive expansion of the University's human resources development programs in order to increase employee effectiveness, job satisfaction, and institutional pride throughout the campus. Expanded efforts should include:

- On-going and comprehensive training and development programs for all supervisors and managers and the incorporation in all training and development programs of management practices that are consistent with the University's broad institutional values;

- Opportunities for professional growth and development within the organization for non-supervisory employees;

- The availability of programs and services outside the normal job experience to address personal and professional needs that may affect on-the-job performance and satisfaction, e.g., Employee Assistance Program;

- The development of a comprehensive University plan to expand the use of technology as rapidly as possible throughout the support functions to increase the efficiency of office operations and the skill levels of support staff.

Recognizing the essential need for all students and faculty to have access to adequate computer support, the Commission recommends the expansion of academic computing services including:

- The establishment of a computing environment in which all students and

faculty have access to computers and computer networks seven days a week;

- The availability of convenient personal computers for student use (word processing, spreadsheets, etc.) distributed across campus in adequate numbers;

- The availability and accessibility of computer networks by students and faculty seven days a week to provide communication to data bases, scientific software, information retrieval systems, electronic mail, and other advanced information systems;

- The availability of adequate support personnel to provide training and consultation to all users.

Recognizing the continuing interest and discussions of the role of inter-collegiate athletics in enhancing the University's image and reputation, the Commission recommends:

- The establishment of a Presidential Task Force to review the University's intercollegiate athletics and determine if the current programs best serve the needs of the total university community, addressing specifically the following issue:

In what ways might Intercollegiate Athletics best enhance the University experience and the institution's reputation?

- A review of the appropriateness of the Brahma Bull as the USF mascot, considering whether a symbol of wider appeal and one more characteristic of the Tampa Bay area may generate a more favorable image for the University.

Recognizing the desirability of broader participation by faculty, staff, and students in the many stimulating and interesting speakers and events brought to campus, the Commission recommends the following actions to promote increased involvement:

- The promotion of scheduled artistic and cultural events and thought-provoking speakers through more effective publicity and timely communications at the college and department levels;

- The availability to all segments of the university community of an easy-access, annual calendar of major events to facilitate planning, coordinate activities, and avoid scheduling conflicts;

- A better distribution of events programming during daytime and evening hours so that more people can attend the functions.

Recognizing that the quality of the living-learning-working environment at the University is dependent on the values, campus culture, commitment, and abilities of all persons involved within its domain; that economic, social, and political forces must be understood and sensitively handled to provide congenial surroundings for all campus constituents; and that creative responses to the realities of a changing world and therefore to a changing campus environment must be fostered and encouraged, the Commission recommends:

- The University sponsor and promote opportunities for the entire University community to interact on and off campus with those of different ethnic and cultural backgrounds and to gain international experiences through various overseas programs. In particular, the University should:

- Promote a wide range of overseas travel, study, and research opportunities coordinated by one central office;

- Sponsor ethnic festivals, programs, research, and community projects;

- Provide and effectively publicize speakers who address a wide range of historical and contemporary topics dealing with cultural diversity, international affairs, and ethnicity.

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*Complete reports of the three task forces are available for review in the
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