

LOUISIANA BOARD OF REGENTS

LOUISIANA EDUCATION QUALITY SUPPORT FUND (LEQSF)

STRATEGIC PLAN, 1999-2006

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LOUISIANA EDUCATION QUALITY SUPPORT FUND

LONG-RANGE STRATEGIC PLAN FOR HIGHER EDUCATION

I. PREFACE

Since establishment of the Louisiana Education Quality Support Fund (LEQSF) in September 1986, the Board of Regents has approved two strategic plans to guide its operations for higher education, one in 1988, the other in 1993. The first plan evolved from a carefully researched "White Paper" prepared in 1987 by the Louisiana Stimulus for Excellence in Research (LaSER) Committee. The 1993 plan maintained the central themes and strategies of the 1987-92 period, while making modifications and adjustments based on seven years of experience. After thirteen years that encompassed significant changes in the government, economy and some areas of academia, the 1999 plan continues the approach of balancing continuity based on effectiveness, with revisions reflecting "lessons learned." In its strategic planning for the Support Fund, the Board of Regents has profited immensely from the insights of consultants who annually review proposals from campuses. In addition, the Board owes special thanks to advisory committees whose wise counsel has guided both strategic planning for the Support Fund and the implementation of various initiatives: the LEQSF Advisory and Planning Committees and the Experimental Program to Stimulate Competitive Research (EPSCoR) Committee. (See Appendix I.)

II. INTRODUCTION

The last thirteen years have demonstrated the wisdom of decisions made in September 1986 when Section 10.1. was added to Article VII of the Louisiana Constitution. The preponderance of proceeds from the State's share of the settlement of disputed offshore oil and gas revenues were consigned to a permanent trust fund for education titled the *Louisiana Education Quality Trust Fund (LEQTF)*. Seventy-five percent of the interest earnings from the LEQTF and related royalty income are placed into the Louisiana Education Quality Support Fund (LEQSF) to enhance education at all levels. Support Fund monies are equally divided annually between the Board of Regents (BoR) for higher education and the Board of Elementary and Secondary Education (BESE) for K-12.

With approval of the Legislature and Governor, the Board of Regents is authorized to distribute its share of LEQSF dollars to colleges and universities for “any and all of the following higher educational purposes to enhance economic development:”

- the carefully defined research efforts of public and private colleges and universities in Louisiana
- the endowment of chairs for eminent scholars,
- the enhancement of the quality of academic research or agricultural departments or units, and
- the recruitment of superior graduate students.

Guided by appropriate insights from within the State and nationally, the higher education LEQSF continues to enjoy remarkable success. Support Fund dollars have been effectively targeted in a manner which leverages federal and private monies. For each Support Fund dollar invested, approximately \$1.48 has been returned to the State. Twenty universities have been awarded 150 endowed eminent scholar chairs and 31 campuses have received 730 endowed professorships. To date LEQSF research has led to 41 patents issued, 66 patents pending, and 4,638 publications in refereed journals. Enhanced capacity and elevated collaboration among researchers has increased competitiveness for federal research and development dollars. Concomitantly, the LEQSF has afforded significant new opportunities for the BoR and BESE to collaborate effectively in the attainment of K-12 reforms. It has positively impacted the quality of teacher preparation programs and provided professional development opportunities for in-service teachers to enhance their skills, including the infusion of technology into the classroom. The LEQSF has also contributed to an increase in the number of students prepared to enter graduate school, particularly minority students in the sciences, mathematics and engineering.

III. MISSION

As envisioned by the Louisiana Constitution, the LEQSF mission is to promote economic development through improvement of the quality of education.

IV. GUIDING PRINCIPLES

To fulfill the constitutional mandate, the *LEQSF Long-Range Strategic Plan for Higher Education* is guided by the following principles:

- **Necessity of Sustained Financial Support** – A sound educational system that is well supported on a consistent basis at all levels and in all disciplines is crucial to enhancing academic programs and units and promoting economic development.
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- **Short and Long-Term Outcomes** – Expectations and outcomes must be related to the nature of investments in higher education; many investments only reap substantial rewards after the passage of years.
- **Need for Continual Infrastructure Investments** – In order to reap the benefits of a technology oriented, knowledge-based economy in which changes in infrastructure occur at a quickening pace, Louisiana must invest in infrastructure in a manner that permits the State to capitalize on new opportunities that arise.
- **Importance of Minority Participation** - Over one-third of Louisiana's population is minority, the second highest proportion of minority populations in the United States. If Louisiana is to progress economically, all students must be provided the opportunity for a first-rate education, especially in science, mathematics, engineering, and technology.
- **Pivotal Role of Peer Review Process** - To ensure the selection of proposals of the highest quality as well as the efficiency of LEQSF procedures, funds will be distributed through a merit-based peer review process using out-of-state experts and national standards of excellence.
- **Targeting Resources** - The competitive process must be managed in a manner that carefully targets resources to identified academic and economic goals.
- **Continuity and Change** – In order to remain faithful to its mission, LEQSF must adapt to new academic and economic challenges faced by higher education and the State.

V. DYNAMICS INFLUENCING PLANNING

Although the constitutional mission and guiding principles have remained lodestars of programs and objectives, the Support Fund has always embodied elements of continuity and change. Shifting balances in the apportionment of monies have occurred over the past thirteen years among and within the four constitutionally prescribed programs. In many cases, the discernment of unmet needs has led to new subprograms within the permissible categories; near-term strategies have been adapted to changing perceptions and circumstances.

The 1999 LEQSF Strategic Plan once again balances dynamics and constancy. Higher education is expected to assume a leadership role in Louisiana's recently launched economic development/diversification initiative. The late 1990s, as contrasted with the 1980s, have witnessed significant

changes in State funding patterns for higher education. The national tobacco settlement will provide resources for some targeted purposes which overlap LEQSF initiatives. An emerging community college system, embracing newly established campuses, broadens eligibility to the LEQSF for higher education. All of these considerations alter the context within which LEQSF dollars will be considered and apportioned.

A. VISION 2020

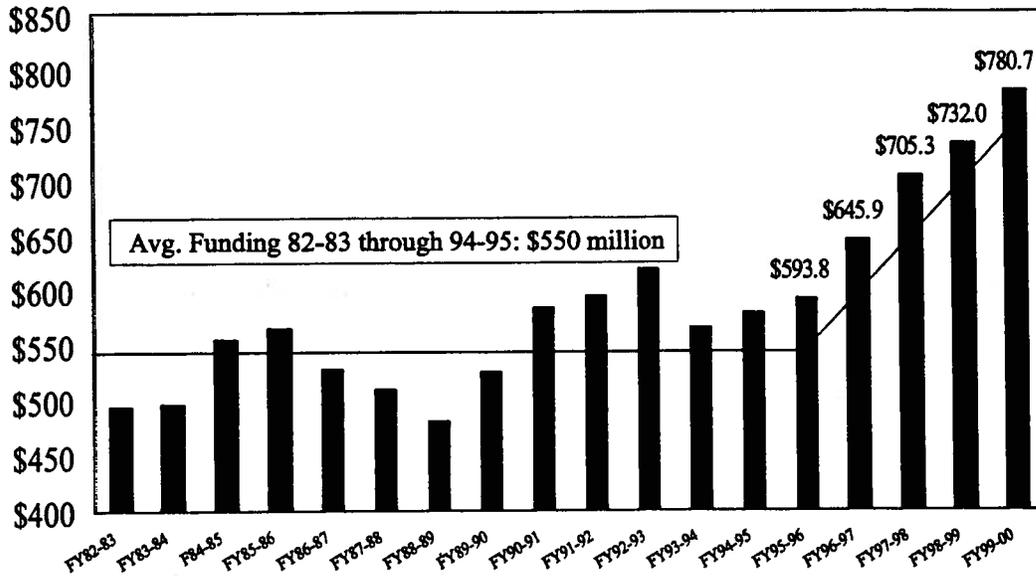
Louisiana's new master plan for economic development, *Vision 2020*, foresees that "Louisiana within twenty years will have a vibrant, balanced economy; a fully engaged, well-educated workforce, and a quality of life that places it among the top ten states to live, work, visit, and do business." To attain this transformational goal, *Vision 2020* identifies "education as the primary ingredient" to make Louisiana a "learning enterprise" and build a "culture of innovation" through technology. From its inception in 1988, LEQSF has fostered the basic economic development tenets affirmed in *Vision 2020*. This new mandate has caused the BoR to join with colleges and universities to re-examine the central role of higher education in economic development. In 1998 the Board of Regents formed the Industrial Targets Advisory Committee (ITAC) which has stimulated several new programs and initiatives. (See Section VII.B) Two new initiatives established during 1999, the Health Excellence Fund (HEF) and the Strategic Initiatives Excellence Program (SIEP), also promote *Vision 2020* goals and objectives. (See Section V.E)

B. STATE FUNDING FOR PUBLIC HIGHER EDUCATION

The Louisiana constitution stipulates that LEQSF monies should not supplant regular appropriations to higher education. This constraint has been sorely tested during some years of the 1980s and early 1990s, a period of largely standstill or declining budgets. During the last four years, including FY 99-00, total state monies appropriated to public higher education have spiraled dramatically upward:

Long-Term Trend in State Support

FY82-83 through FY99-00
(in millions of \$)



This trend makes more realistic implementation of the constitutional intent that LEQSF monies should be used--not for regular expenses--but rather to induce programs to "exceed their grasp."

C. ESTABLISHMENT OF COMMUNITY COLLEGE SYSTEM

Through a constitutional amendment adopted during the 1998 legislative session, Louisiana established its first comprehensive community college system. The authorization of three new community colleges accompanied the creation of the system; other campuses may be established in future years. Under BoR LEQSF policies for the Endowed Professorship program, each campus is entitled to two professorships, on the condition that a private match can be raised. Consequently, the FY 1999-2000 budget includes professorship monies for the two new community colleges in existence when the Regents adopted the budget in January 1999. More fundamentally, issues regarding community colleges will become an integral part of LEQSF discussions and planning. Two community college representatives will now become members of the LEQSF Planning Committee, and one representative will be appointed to the LEQSF Advisory Committee.

D. FUTURE ALLOCATIONS OF TOBACCO MONIES

The state of Louisiana expects to receive \$4.6 billion over the next 25 years as its share of a national legal settlement with tobacco companies. Under a constitutional amendment proposed by the 1999 legislature, annual installments would be divided between a "Millennium Trust" and a "Louisiana Fund." Forty-five percent of available monies would be placed in the Millennium Trust in 2000-01; 60 percent in 2001-02; and 75 percent in 2002-03 and thereafter. The remainder would be placed in the Louisiana Fund which lawmakers could spend each year on health care and education initiatives, especially for children.

The Millennium Trust includes three funds, one of which is the Health Excellence Fund, "a program of research grants and projects that encourage the pursuit of innovation in advanced health care sciences." The proposed constitutional amendment requires that the treasurer shall credit to the Health Excellence Fund one-third of the Settlement Agreement proceeds deposited each year into the Millennium Trust and one-third of all investment earnings of the Millennium Trust.

The 1999 enabling legislation provides that appropriations from the Health Excellence Fund shall:

...support clinical and laboratory research efforts based in Louisiana universities, as well as institutions represented in the membership of the Medical Education Commission [Louisiana State University Medical Center, Tulane University Medical Center and Alton Ochsner Medical Foundation] as provided in R.S. 17-1519.8 and shall encourage institutional commitment and leveraging of state monies to secure private and federal funds and shall be administered by the Board of Regents through an objective, competitive process subject to peer review. The Board of Regents shall annually submit to the legislature and the governor, not less than forty-five days prior to the beginning of each regular session of the legislature, a proposed program and budget for the expenditure of the funds appropriated to the Board of Regents for these purposes.

For FY 1999-2000, the Appropriations Bill provides \$15 million for the Health Excellence Fund, with the proviso that \$1,000,000 of that total be used for smoking cessation and prevention programs. Pursuant to the proposed constitutional amendment, the enabling legislation, and the 1999 appropriation, the BoR has disseminated an RFP for the Health Excellence Fund (HEF). The RFP emphasizes that monies allocated through the HEF will be articulated with dollars apportioned through the BoR Support Fund and the newly established Strategic Initiatives Excellence Program (SIEP).*

E. ARTICULATION AMONG BoR SUPPORT FUND, THE HEALTH EXCELLENCE FUND, AND THE STRATEGIC INITIATIVES EXCELLENCE PROGRAM

There are areas of natural overlap between the BoR Support Fund and the newly established Strategic Initiatives Excellence Program (SIEP) and the Health Excellence Fund (HEF).* For example, all three of the SIEP initiatives—Vision 2020 Super Endowed Chairs, Vision 2020 Campus Coordinators, and Vision 2020 Research and Commercialization Centers—could be used for enhancement in the health care sciences. In addition, both HEF and SIEP initiatives could be connected with those funded with the more broadly based Board of Regents Support Fund (BoRSF).

The BoR has adopted the following guidelines regarding relations among the two initiatives and the BoRSF:

- Consistent with maintaining the integrity of each initiative, funds may be integrated across the SIEP, HEF, and BoRSF programs; and
- As proposals are reviewed and funding decisions made, appropriate connections will be formulated between SIEP, HEF, and BoRSF programs.

In a manner uncommon to the BoR Support Fund, both the SIEP and HEF, in a focused manner, pool strengths across such initiatives as research, endowed chairs, enhancement of infrastructure, and training of graduate students. Each also engages established research faculty

*Board of Regents policies and RFPs may be downloaded from the following website:

SIEP and HEF RFPs can be downloaded from the BoR server at

<http://www.regents.state.la.us/sphome>.

in interdisciplinary team research. The BoR will examine carefully whether SIEP and HEF future outcomes should serve as models to achieve Support Fund goals and objectives through alternative strategies.

F. HIGHER EDUCATION'S ROLE REGARDING K-12 ACCOUNTABILITY

During the last seven years, the Board of Regents has recognized the need to target selective LEQSF monies to help catalyze reforms of teacher preparation programs. The Board thus allocated a \$3 million match for the \$5.7 million dollars that the National Science Foundation (NSF) awarded the Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT). The Center for Innovative Teaching and Learning (CITAL), through regular state appropriations, has extended teacher preparation reforms from mathematics and science to K-3 English/Language Arts and alternative certification. Policies for the LEQSF enhancement program have been revised to encourage faculty to revise and update curricula, both for teacher preparation and other undergraduate programs. More recently, the BoR joined with BESE and the Governor's Office to project sweeping changes in teacher preparation consistent with Louisiana's new standards-based Accountability Program. These will be accomplished through a Blue Ribbon Commission that will guide K-16 reform consortia in technology, English, mathematics, science, and social science.

VI. LEQSF'S LONG-RANGE STRATEGIC PLAN FOR HIGHER EDUCATION

Planning for LEQSF occurs continually in meetings of the Board of Regents, legislative sessions, and discussions of the Planning and Advisory committees. The five-year plans of 1988, 1993, and now 1999 are, nevertheless, pivotal events requiring the Regents and other stakeholders to reexamine goals and directions in light of evolving circumstances. There are, for example, high expectations of the role of higher education in implementing *Vision 2020*; state patterns of funding for public higher education have altered significantly in recent years; the emerging community college system enlarges discussions pertaining to the apportionment of LEQSF dollars for higher education; and the allocation of recently acquired tobacco monies provides supplementary opportunities. (See Section V.) All of these considerations make relevant and timely a new strategic plan that projects directions for LEQSF during 1999 -2006.

A. GOALS AND STRATEGIES

The following goals and strategies steer the programs and initiatives which translate guiding principles of the Strategic Plan into actual practice:

- Develop and maintain international excellence and a competitive position in basic and applied research;
- Increase numbers of research faculty who are competitive on a national basis;
- Increase the number of graduates at all levels who possess scientific and cultural literacy and relevant workforce skills;
- Target funding to disciplines in a manner which enhances research infrastructure while promoting economic development and diversification;
- Foster closer ties between university researchers and business and industry in order to selectively nurture the technology transfer of academic research;
- Promote and enhance close collaboration and resource sharing among the State's universities, especially between the majority white and historically black institutions;
- Revise teacher preparation programs in a manner consistent with the State Accountability System;
- Increase the number and quality of minority students in mathematics, science and technology;
- Provide matching funds for federal and private grants that meet the primary goals and objectives of LEQSF; and
- Systematically and comprehensively evaluate goals and strategies to determine effectiveness

B. PROGRAM COMPONENTS

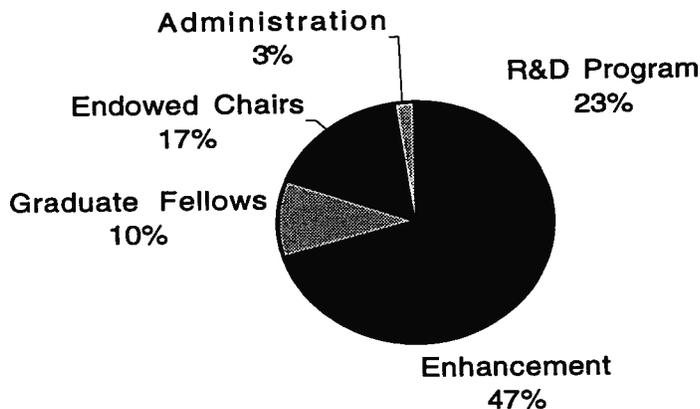
The four constitutionally prescribed program components are designed to complement each other. Under the rubric of "carefully defined research efforts" is housed the Research Competitiveness Subprogram (RCS), which targets Louisiana researchers who are at the brink of attaining competitiveness in the federal R&D marketplace, seeking to improve the basic research infrastructure in the State; and also the Industrial Ties Subprogram (ITRS), which seeks to promote economic development and diversification through the improvement of applied research.

The Endowment of Chairs for Eminent Scholars component is designed to facilitate the achievement of LEQSF goals through the recruitment and retention of “super star” scholars who attract young researchers and graduate students, while also interacting with business and community leaders. The Enhancement component allows on the one hand for substantial equipment purchases that elevate the quality of a department or unit’s instructional or research efforts and, on the other, for colloquia or curricular improvements which enhance departmental effectiveness.

Finally, the Recruitment of Superior Graduate Students component improves institutional quality and promotes both academic enrichment and economic development through the recruitment of graduate students of unquestioned ability. Elements of each of these program components are also contained in the Federal Matching Grants Program, which opens new areas of opportunity and increases the size of the LEQSF “pie” through the leveraging of funds.

Each fall as the LEQSF Plan and Budget is being prepared for submission to the Governor and the Legislature, the Board is faced with the difficult task of allocating scarce dollars across these worthy program components. The pie chart below illustrates the cumulative allocation of funds across program components from FY 1986-87 through FY 1997-98. The graph and table in Appendix II illustrate, through percentages and raw numbers, respectively, the year-by-year allocation across components, while Appendix III shows the cumulative allocation by program components across campuses.

Regents Support Fund 1986-98 Allocations



The allocation process continues to be dynamic, as the Board adapts initiatives to changing needs and circumstances. For example, as an improving economy and the cooperation of the Legislature manifested themselves, the Endowed Chairs component has attained additional funding through special state appropriations. For special reasons the Enhancement component has constantly been targeted for disproportionate amounts of Support Fund spending. This component not only provides essential ingredients necessary to the success of other LEQSF initiatives, but is also the one in which the most institutions statewide can effectively compete. To illustrate this point, the Board, realizing in the early 90's that many institutions could not raise the necessary private funds to endow chairs, instituted the Endowed Professorships component within the Enhancement Program. The Professorships component, requiring only one tenth of the private funds as a match, has enabled a far broader spectrum of campuses across the state to attract and maintain sterling educational leadership. In a similar vein, the Board in 1992 inaugurated the Undergraduate Enhancement component which limits participation to campuses with two or fewer doctoral programs. Initiatives of these types have enabled the Support Fund to benefit more institutions, while broadening the base of support for the Support Fund in general and its component parts in particular. A more detailed discussion and description of each program component follows.

1. Research & Development

a. Research Competitiveness Subprogram (RCS)

The Research Competitiveness Subprogram (RCS) is a stimulus program directed solely toward those researchers at Louisiana institutions who are at the threshold of becoming competitive in the Federal R&D marketplace. It is designed to assist these researchers in overcoming the barriers that have impeded successful competition at the national level for R&D funds. RCS is available only to researchers who clearly show strong potential for enhancing their competitive status within the time span of a Support Fund grant. In every year since the program's inception, far more Louisiana university researchers who fit this funding profile have submitted quality research proposals to RCS than the Board has been able to support and encourage with funding.

Through this Component, the Support Fund will continue to strengthen research leadership and infrastructure, while simultaneously impacting Vision

2020 goals. Basic research funds will continue to be reserved for scientific and engineering fields, including agriculture, health and medical sciences, and social sciences as defined by the National Science Foundation (NSF).

The merit-based peer review of LEQSF grant proposals by eminent out-of-state scientists, engineers, and scholars - who themselves typically receive significant levels of Federal funding - is the most effective way to assure continued high quality in the process. The following table indicates those disciplines in which RCS proposals were accepted and funded from FY 1996-1997 through FY 1999-2000, as well as those disciplines in which proposals may be submitted for funding consideration through FY 2005-2006.

Although it is problematic to predict which emerging technologies will be at the cutting edge of basic research, several disciplines are expected to remain important for the State's long-term economic development and educational advancement. The three disciplines assigned the highest priority for economic development (biological, earth/environmental sciences, and computer and information sciences) are targeted for annual funding. All others rotate on a two years on, two years off basis. As unexpected opportunities arise, the Board may increase the number of eligible disciplines in a given year.

RESEARCH COMPETITIVENESS SUBPROGRAM*

	Award Year									
	97	98	99	00	01	02	03	04	05	06
Natural Sciences—Physical										
Chemistry	x	x			X	x			x	x
Physics & Astronomy			x	x			x	x		
Natural Sciences—Computational										
Computer & Information	x	x	x	x	X	x	x	x	x	x
Mathematics			x	x			x	x		
Natural Sciences—Earth/ Environmental Sciences	x	x	x	x	X	x	x	x	x	x
Natural Sciences—Biological										
Agriculture			x	x			x	x		
Biological	x	x	x	x	X	x	x	x	x	x
Health & Medical	x	x			X	x			x	x
Engineering										
Engineering A			x	x			x	x		
Engineering B	x	x			X	x			x	x
Social Sciences			x	x			x	x		
Number of Disciplines	6	6	8	8	6	6	8	8	6	6

*See Appendix IV for a listing of those disciplines which are included in these larger groupings.

b. Industrial Ties Research Subprogram (ITRS)

The principal goal of the Industrial Ties Research Subprogram (ITRS) is to fund proposals that have significant near-term potential for contributing to the development and diversification of the Louisiana economy. Accordingly, all proposals and funded projects must demonstrate strong interest and continued involvement by the private sector and/or non-state public agencies. Because ITRS also functions as a stimulus program, funded projects should either (1) bring about significant near-term federal or private-sector funding of research with commercial applications, or (2) enhance or establish a Louisiana business or industry that will attract significant external revenues to the state.

By careful industrial targeting and the use of eminent out-of-state reviewers, the proposal evaluation and award processes insure that funds are

invested in projects that build on Louisiana's academic and economic strengths and opportunities. Prior to 1993, proposal submissions were limited to those areas deemed to be of highest priority by the Louisiana Department of Economic Development. To insure that no viable opportunity for economic development and diversification would be overlooked, submissions were invited in all research areas from FY 1992-1993 to FY 1999-2000.

To align the Support Fund more closely with the State's emerging economic initiatives while also targeting scarce resources for maximum effect, a modified approach will be followed through funding year FY 2005-2006. Beginning in FY 2000-2001, ITRS proposals will be accepted each year only from the following areas identified by the BoR Industrial Targets Advisory Committee:

- medical and biomedical;
- micromanufacturing;
- data and telecommunications;
- environmental technologies;
- food technologies;
- materials;
- existing principal industries, such as petrochemicals and agribusiness; and
- Louisiana culture and history.

2. Enhancement

Under the Enhancement component, grants are provided to Louisiana institutions of higher education to enhance instructional and research resources. Reflecting the Board's broad and continuing commitment to promote economic development by improving the quality of higher education, all disciplines are eligible to compete in the LEQSF Enhancement Program. Enhancement grants may be used to purchase instructional or research equipment and instrumentation, including computing equipment, or to support instructional improvement programs, curriculum revision projects, collaborative projects between departments, or other activities deemed likely to improve the quality of the

educational experience of Louisiana students. Proposals that promote significant interinstitutional cooperation which results in the sharing of scarce State resources are encouraged, particularly linkages between historically black colleges and universities (HBCUs) and non-HBCUs.

Proposals are reviewed by eminent out-of-state scientists, engineers, science and engineering administrators, scholars from other representative disciplines, and representatives from industry. All reviewers have national reputations and employ national standards of excellence in the review process.

The following table indicates disciplines eligible for funding consideration under the Enhancement component from FY 1996-97 through FY 1999-2000, as well as those eligible through FY 2005-06. It is the view of the Board, as well as diverse key segments of the higher education community, that the enhancement of all academic disciplines is essential to the improvement of educational quality and economic development/diversification. All compete in the Enhancement component with equal frequency.

DEPARTMENTAL ENHANCEMENT*

	Award Year									
	97	98	99	00	01	02	03	04	05	06
Natural Sciences—Physical										
Chemistry			x			x			x	
Physics & Astronomy			x			x			x	
Natural Sciences—Computational										
Computer & Information	x			x			x			x
Mathematics			x			x			x	
Natural Sciences—Earth/		X			x			x		
Natural Sciences—Biological										
Agriculture		X			x			x		
Biological	x			x			x			x
Health & Medical		X			x			x		
Engineering										
Engineering A		X			x			x		
Engineering B	x			x			x			x
Business			x			x			x	
Social Sciences	x			x			x			x
Education, including Literacy **		X	x			x			x	
Arts		X			x			x		
Humanities	x			x			x			x
Number of Disciplines	5	6	5	5	6	5	5	6	5	5

*See Appendix IV for a listing of those disciplines which are included in these larger groupings.

**Literacy is highlighted as a focal area within Education, because of Louisiana's unusually high illiteracy rate.

3. Recruitment of Superior Graduate Students

The recruitment of superior graduate students elevates performance levels of academic departments or units which have: (1) attained - or show clear promise of attaining - regional, national, or international standards of eminence commensurate with their degree offerings; and/or (2) promoted - or show clear promise of promoting - economic development in the State.

While graduate stipends or fellowships are available to recruit outstanding graduate students in all academic disciplines, those areas deemed most critical to overall academic enhancement leading to the development/diversification of Louisiana's economy (chemistry, physics and astronomy, environmental sciences, computer and information sciences, biological sciences, and engineering) are

eligible to compete each year for awards. Priority is given to proposals for doctoral study, but support is also provided for master's-level programs critical to economic development and diversification, as well as for one-year fellowships for current teachers of science and mathematics. Proposals are reviewed for merit by eminent scientists, engineers, and scholars in academia and/or industry from outside of Louisiana.

The following table indicates disciplines eligible for funding consideration under the Graduate Fellows component from FY 1996-97 through FY 1999-2000, as well as those eligible through FY 2005-06.

RECRUITMENT OF SUPERIOR GRADUATE STUDENTS*

Solicitation Year

	97	98	99	00	01	02	03	04	05	06
Natural Sciences—Physical										
Chemistry	x	x	x	x	x	X	X	x	x	x
Physics & Astronomy	x	x	x	x	x	X	X	x	x	x
Natural Sciences—Computational										
Computer & Information	x	x	x	x	x	X	X	x	x	x
Mathematics			x	x	x				x	x
Natural Sciences--Earth/ Environmental Sciences	x	x	x	x	x	X	X	x	x	x
Natural Sciences—Biological										
Agriculture			x	x	x				x	x
Biological	x	x	x	x	x	X	X	x	x	x
Health & Medical			x	x	x	x	x	x	x	x
Engineering										
Engineering A	x	x	x	x	x	X	X	x	x	x
Engineering B	x	x	x	x	x	X	X	x	x	x
Business			x	x	x				x	x
Social Sciences	x	x				X	X	x		
Education, including Undergraduate Reform, Teacher Preparation, and Literacy**			x	x	x				x	x
Arts	x	x				X	X	x		
Humanities	x	x				X	X	x		
Number of Disciplines	10	10	12	12	12	11	11	11	12	12

*See Appendix IV for a listing of those disciplines which are included in these larger groupings.

4. Endowed Chairs

The goal of the Endowed Chairs component is to assist colleges and universities in the recruitment or retention of eminent scholars who will make significant contributions to the twin constitutional goals of improving educational quality and promoting economic development and diversification. Matching funds are available for the recruitment of distinguished scholars from all academic disciplines. Highly leveraged by its requirement of a 3:2 private-sector match, the program has evolved over the years from a "first-come, first-served" operation in which all proposals evincing the required contribution were funded, into a highly competitive and flexible endeavor. Provisions have also been made for the establishment of chairs at the \$2 million level (four such chairs have currently been awarded), and in the summer of 1999, approval was given for the establishment of "Super" chairs at even higher funding levels in selected target areas.

Building upon the success of the constitutionally mandated Endowed Chairs program, the Super Endowed Chairs program will fund chairs in academic disciplines within the VISION 2020 target areas at a \$2 million or greater level to attract world-class talent to Louisiana universities. Such individuals are often the catalysts in creating R&D initiatives that can literally change the economy of a state or region. Their talents and reputations will draw additional private and federal grants, and attract additional superior scholars and students. This synergy becomes the key in creating new technologies and, literally, new segments for the Louisiana economy. LESQF funds will be matched three-to-one with private funds and money from the Strategic Initiatives Excellence Program (SIEP) or the Health Excellence Fund (HEF).

The Endowed Chairs Program is designed to interact with other LEQSF program components in a symbiotic way. Properly functioning, it will attract scholars of distinction who will in turn be magnets for the recruitment of professors and graduate students of high quality, as well as catalysts for interaction with business and community leaders. As evidenced by the most recent comprehensive evaluation of the program, conducted in the summer and fall of 1998, this component has the potential to serve as a national model.

5. Federal Matching

With the exception of Endowed Chairs, there are federal programs which parallel most of the LEQSF initiatives, particularly in the areas of research and education. Since its inception, the LEQSF has been used to match targeted federal dollars. This combination has dramatically increased the monies available for research and education in Louisiana and accomplished considerably more. Federal initiatives are often targeted toward frontier areas which provide foundation stones for future programmatic directions. The matching program, therefore, beyond the demonstrable outcome of expanding resources, serves to broaden horizons and enhance understandings of national trends among researchers and educators in Louisiana.

The primary goals and objectives of the Support Fund's Federal Matching Grants initiative are to: 1) expand opportunities available under one or more of the four constitutionally mandated Support Fund activities; 2) reinforce and enhance the building of infrastructure; 3) promote multi-institutional collaboration and cooperation as well as the sharing of scarce State resources among Louisiana universities; 4) enable universities to respond to competitive solicitations issued by Federal funding agencies which require a state match, are statewide in nature, and, therefore, hold the potential for systemic infrastructure improvements in research or education; and 5) continue and accelerate the leveraging of Federal money.

Special programs which qualify and receive BoRSF support under the Federal Matching Grants Program are of two types - those aimed at 1) increasing the research capacity and capabilities of Louisiana's scientists and engineers for competitively-awarded federal R&D, or EPSCoR matching funds, and 2) enhancing K-12 mathematics and science instruction and improving undergraduate teacher training. Whereas the emphasis of the former is on faculty science, mathematics, engineering and technology (SMET) competitiveness, the primary focus of the latter is on increasing the quality of K-12 students in SMET, along with the number and quality of undergraduates who pursue SMET careers. The latter includes the Louisiana Systemic Initiative Program (LaSIP), a \$30M plus, 10-year cooperative program of NSF, U.S. Department of Education, BoR, and BESE that concentrated first on the middle-school years and now on a range of

initiatives which address the State Accountability Program. Cited nationally as an example, it has resulted in significant increases in the standardized mathematics and science test scores of students taught by LaSIP-trained teachers.

The Delta RSI, a tri-state program (AR, LA, MS), intensifies the LaSIP effort in 21 Delta parishes. It, too, reflects a partnership with NSF, the U.S. Department of Education, and BESE. The complementary Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT) initiative is likewise making major strides toward improving undergraduate teacher training programs and curricular reform in mathematics and science. Like LaSIP, LaCEPT is a multi-million dollar, collaborative effort between NSF and LEQSF.

The State's EPSCoR programs account for two-thirds of the special initiatives for which BoR and federal agencies have created partnerships to increase R&D capabilities of higher education SMET researchers. In addition to NSF, Louisiana has EPSCoR awards from NASA, the Department of Energy, the Department of Defense, the Environmental Protection Agency, and an EPSCoT (Experimental Program to Stimulate Competitive Technology) grant from the Department of Commerce. NSF and BoR also co-sponsor the \$7.6 million Louisiana Alliances for Minority Participation (LAMP), which aims to increase the interest, matriculation, and graduation rates of minorities in NSF's recognized SMET areas.

VII. VISION 2020 AND RELATED INITIATIVES

Economic development/diversification, like federal matching, spans programs and disciplines, defying any efforts to easily fit these initiatives into pre-existing categories. Higher education, with LEQSF serving as a catalyst, can maximize its effectiveness in implementing goals of *Vision 2020* only through close collaboration with other affected governmental agencies and the private sector. Within this context, the primary role of LEQSF is to help catalyze selected *Vision 2020* initiatives which the Board of Regents has established as a priority for higher education.

A. INDUSTRIAL TARGETS ADVISORY COMMITTEE (ITAC)

The Board of Regents formed the broadly based Industrial Targets Advisory Committee (ITAC) in the fall of 1998 to engage the higher education community, industry and business in

addressing specific economic development issues outlined in *Vision 2020*. ITAC is in the process of implementing initiatives in three evolving areas: 1) identifying and removing impediments to university/industry partnering, 2) creating initiatives for *Vision 2020* technology clusters, and 3) developing incentives for university involvement. (See Appendix V for details on the principal initiatives of ITAC.)

B. EPSCoT

In January 1999, the BoR Sponsored Programs Division began administering a \$250,000 grant from the Experimental Program to Stimulate Competitive Technology (EPSCoT). This Department of Commerce program uses LEQSF funds matched one-to-one that are combined with private industry and in-kind funds to provide approximately \$1,000,000 to develop and implement a broad range of economic development programs that support the initiatives set forth in *Vision 2020*. The program's principal thrust is to promote and commercialize university-based technologies. (For details on the principal initiatives of the EPSCoT Program, see Appendix VI.)

C. Louisiana Economic Development Foundation

The Louisiana Economic Development Foundation is being established as a statewide, not-for-profit organization to promote university technology transfer and commercialization which will, in turn, translate into business expansion and creation, a key *Vision 2020* goal. While enabling each university campus to maintain control and profit from the intellectual property it generates, the Foundation will add value to the intellectual property and improve the prospects of commercialization.

The Foundation will serve on-campus intellectual property managers by sharing "best practices" methods, teaching aggressive marketing techniques, promoting faculty involvement, listing technologies available for commercialization, and assisting in the development of a campus-wide entrepreneurial spirit. Equity positions in the startup of new companies will be taken by the Foundation in exchange for securing capital and providing business planning assistance and other management services. In addition to taking equity positions, the Foundation will move to become self-sustaining by competing for federal and foundation grants. Results will be measured by the increase in university patent disclosures filed, the increased dollar value of technologies licensed, the increased number of startup companies with accompanying growth, and job creation.

The Louisiana Economic Development Foundation will require approximately \$300,000 per year for the first five years before becoming self-sustaining. These funds, to be forthcoming from the Louisiana Department of Economic Development (DED), will be used for salaries for a director and marketing specialist, and office support. LEQSF-funded projects at member universities will complement and support the Foundation's efforts to transfer and commercialize university-created technology.

D. Louisiana Genetics Research Consortium

The Louisiana Genetics Research Consortium is a non-profit, private corporation and is composed of a public/private alliance of statewide institutions that will expand and diversify Louisiana's economy through genetics research and related business development. Genetics research is a key element in *Vision 2020's* medical and biomedical target area. Specifically, the mission of the Consortium is to enable economic development based on human, agricultural, and veterinary genetics and gene therapy by strengthening basic research capacity, engaging citizens in lifelong learning activities, and expanding opportunities for stable, sustainable business growth. Members of the Consortium include the Tulane and LSU Medical Centers located in New Orleans, the LSU Medical Center in Shreveport, Tulane's Primate Center in Covington, USL's New Iberia Primate Research Center, and LSU A&M's Pennington Biomedical Research Center, and Agriculture and Veterinary Schools.

The Consortium proposes several far-reaching initiatives in its twenty-year plan. The core of the plan is to link the diverse genetics research capabilities dispersed across the state into a coherent and focused research organization. Member institutions will be linked by a telemedicine information technology network that will be integrated into planned statewide Internet networks. A coordinated capital outlay program will modernize and create new research facilities that are critical to an integrated research, development, and commercialization program.

From the beginning, LEQSF monies will be seamlessly integrated into the Consortium through the funding of existing enhancement, research, and endowed chairs programs at member institutions. It is anticipated that new projects will be funded by LEQSF that are tied directly to the efforts and success of the Consortium.

VIII. THE PEER REVIEW PROCESS

Two attributes are common throughout all LEQSF programs and initiatives: funds are targeted to attain specific programmatic objectives, and monies are inadequate to fund all proposals submitted. Peer reviews by out-of-state experts have been demonstrated as an efficacious process to identify the most meritorious proposals worthy of funding in each program component.

The peer review process operates in a manner specific to each program component. In each instance, the process begins with the issuance of a Request for Proposals (RFP) and the submission by the campuses of formal, written proposals. In the Endowed Chairs Component and the Superior Graduate Students Component, one final panel is assembled to judge proposals submitted in each program. In the Enhancement Component, a final panel is composed for each discipline eligible in a given year, and an Undergraduate Enhancement final panel is also assembled, with its members drawn from each of the eligible disciplines. Additionally, a multidisciplinary panel is formed to review proposals across disciplines. Thus, there are normally six to eight Enhancement final panels in operation each year.

Both components of the R&D program are reviewed in a multi-stage process. RCS proposals are first mail-reviewed by experts in the particular field or subfield of the submission. These mail-reviews, along with the proposals themselves, are forwarded for a second stage of review to experts in the various academic disciplines eligible that year (i.e. chemistry, physics, biological sciences, etc.). These discipline-specific panels study and establish priorities for all proposals in their respective subject areas. The convening of the RCS final panel to interlink and rank proposals from the different subject areas is the third and final stage of the process.

The ITRS component operates in two stages. In the first stage, proposals are grouped into subject areas and reviewed by panels consisting of individuals with expertise not only in the academic discipline involved, but also in the commercial possibilities of proposals from the particular discipline. The subject area reviews and the proposals themselves are then forwarded to a final panel which convenes to develop funding recommendations for the Board's consideration.

In all cases in all LEQSF programs the Board makes the final funding decisions, based upon the recommendations of consultants. To assure fairness, quality and efficiency, other initiatives funded through LEQSF which allocate monies competitively employ internally their own peer review processes: the Federal Matching Grants Program, LaSIP and LaCEPT.

IX. EVALUATION

The Board of Regents systematically aggregates data pertaining to the operation of each component of the Support Fund. In the future, this data collection will form the basis of comprehensive evaluations of each major LEQSF program, as well as the overall LEQSF. The 1998-99 evaluation of the Endowed Chairs program demonstrated the value of such in-depth perspectives. Accordingly, each LEQSF program, as well as the overall LEQSF program, will be evaluated according to the attached timetable. (See Appendix VII.)

X. ADMINISTRATION AND COORDINATION OF LEQSF PROGRAMS

The LEQSF is a novel program which is administered in novel ways. A broad array of stakeholders, along with out-of-state consultants, directly impact and shape administration. The Commissioner of Higher Education and the Board of Regents, with approval of the Legislature and Governor, set basic directions. The LEQSF Planning and Advisory Committees provide timely advice to Regents regarding strategic planning, implementation, and evaluation of programs. The role of consultants in administration, not always obvious, is nevertheless consequential. In preparing recommendations for the Regents, consultants interact at the crossroads where policies, requests for proposals (RFPs), proposals, and available funding intersect. They bring experiences with comparable programs along with national insights, providing advice which is irreplaceable. Finally, the Board of Regents' staff coordinates and administers the overall LEQSF program, including the proposal review process and the execution and supervision of contracts and grants once awards are made.

Some administrative priorities for the future include:

- An annual comprehensive review of the LEQSF Program components on a rotating basis;
 - Annual refinement and updating of Requests for Proposals (RPFs), reviewer guidelines, criteria and analysis forms;
 - The sustained quest for targeted grants from the Federal government, industry, and national foundations to supplement and leverage LEQSF money;
 - The continual promotion of interinstitutional cooperation and collaboration among Louisiana's colleges and universities, particularly between HBCUs and non-HBCUs, as well as with elementary and secondary schools and the new Louisiana Community and Technical College System;
 - The strengthening of relationships with other State agencies and the private sector to promote economic development/diversification.
-

A challenge for administration of the LEQSF in the years ahead is to balance legitimate concerns that monies allocated to administration should not be excessive, with the need for adequate administrative resources to maintain effectiveness of the peer review process.

XI. EPILOGUE

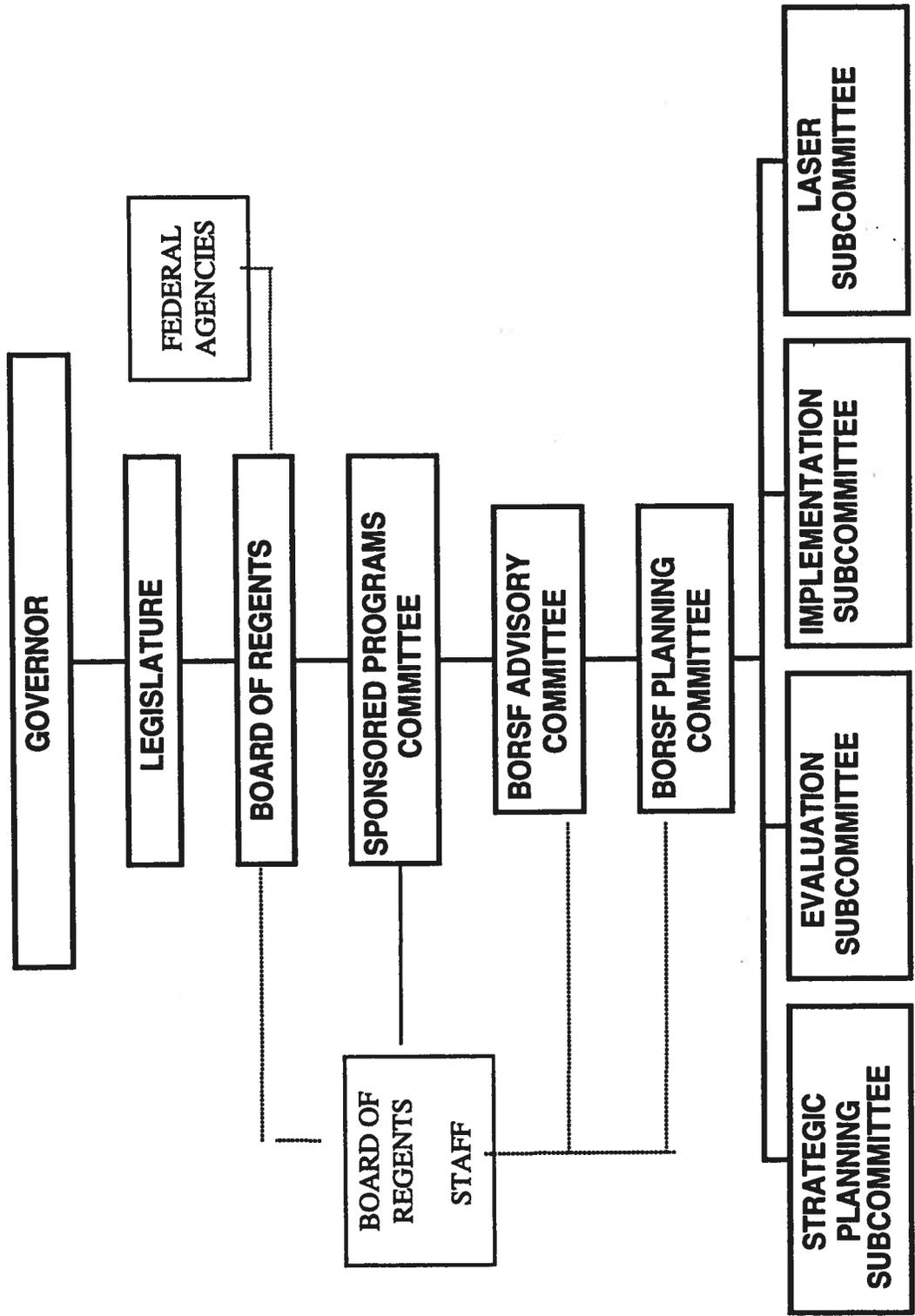
The Board of Regents anticipates that a much richer source of evaluation data will be available when the next LEQSF Strategic Plan is written during 2005-2006. Comprehensive evaluations will have been conducted, respectively, for Endowed Chairs, Endowed Professorships, Superior Graduate Students, Research and Development, and Enhancement. Based on comprehensive reviews of respective programs, an overall evaluation of the entire LEQSF program is scheduled for 2003-2004. As programs are enhanced the strategic planning process itself should be strengthened.

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APPENDIX I

Board of Regents Support Fund Decision-Making Process



BOARD OF REGENTS SUPPORT FUND ADVISORY COMMITTEE MEMBERSHIP

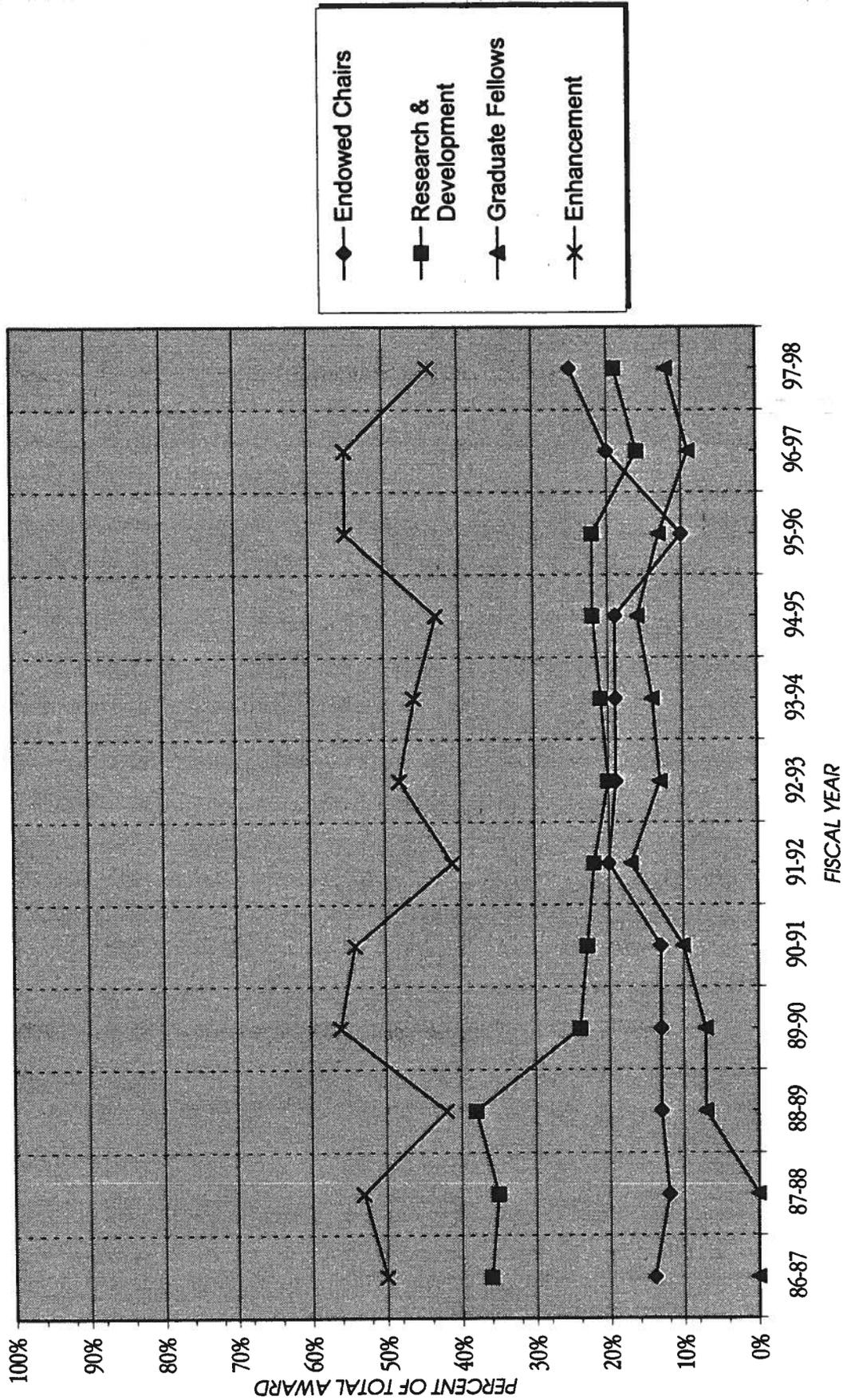
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APPENDIX II

**SUMMARY OF SUPPORT FUND PROJECTS
1986-87 THROUGH 1997-98**



**HISTORICAL ANNUAL ALLOCATIONS, BY MAJOR PROGRAM COMPONENTS,
BOARD OF REGENTS SUPPORT FUND PROGRAM**

Fiscal Year	Research & Development	Enhancement	Graduate Fellows	Endowed Chairs	Admini- stration	TOTALS
86-87	\$ 4,334,566	\$ 5,846,711	-0-	\$1,600,000	\$ 148,311	\$11,929,588
87-88	5,809,231	8,765,113	-0-	2,000,000	391,478	16,965,822
88-89	6,091,527	6,758,625	\$ 1,138,500	2,000,000	762,579	16,751,231
89-90	5,866,960	13,306,027	1,623,792	3,200,000	635,586	24,632,365
90-91	5,408,489	12,783,693	2,299,599	3,200,000	670,858	24,362,639
91-92	5,036,923	9,678,689	3,906,617	4,800,000	713,430	24,135,659
92-93	5,633,249	13,251,055	3,500,167	5,200,000	704,391	28,288,862
93-94	5,949,497	12,935,705	3,961,500	5,200,000	800,000	28,846,702
94-95	5,995,402	11,538,659	4,238,716	5,200,000	800,000	27,772,777
95-96	6,638,154	16,347,640	3,903,016	2,800,000	800,000	30,488,810
96-97	6,432,131	20,922,442	3,630,414	7,600,000	800,000	39,384,987
97-98	6,789,451	15,725,273	4,068,700	8,800,000	800,000	36,183,424
TOTALS	69,985,579	147,859,632	32,271,022	51,600,000	8,026,633	309,742,868

APPENDIX III

Distribution of Support Fund Research and Development Money Across Campuses

FY1986-87 through FY1997-98

Institution	
Centenary	0
Delgado	0
Dillard	0
Grambling	0
LA College	0
LSU-Ag.	5,839,269
LSU-A	0
LSU-BR	24,718,449
LSU-E	0
LSU-Law	0
LSUMC-NO	4,680,734
LSU-Pennington	0
LSUMC-S	3,068,985
LSU-S	292,000
LaTech	2,327,239
Loyola	298,437
LUMCON	1,200,354
McNeese	632,748
Nicholls	225,385
NLU	465,973
NSU	88,690
Nunez	0
OLHC	0
OLOL	0
SLU	907,151
SU-BR	1,472,302
SUNO	0
SUSBO	0
Tulane	7,168,152
TUMC	2,102,794
UNO	6,337,212
USL	6,909,358
Xavier	138,500
Total	\$68,873,732

Distribution of Support Fund Enhancement Money Across Campuses

FY1986-87 through FY1997-98
(excludes Endowed Professorships money)

Institution

Centenary	359,818
Delgado	1,199,702
Dillard	455,491
Grambling	1,201,706
LA College	0
LSU-Ag.	4,761,812
LSU-A	211,711
LSU-BR	39,171,870
LSU-E	430,463
LSU-Law	159,424
LSUMC-NO	2,007,890
LSU-Pennington	0
LSUMC-S	1,451,670
LSU-S	2,456,546
LaTech	4,039,400
Loyola	2,112,792
LUMCON	745,953
McNeese	1,268,000
Nicholls	1,522,521
NLU	2,806,693
NSU	2,128,679
Nunez	209,637
OLHC	0
LOL	0
SLU	1,591,906
SU-BR	5,065,591
SUNO	1,541,661
SUSBO	743,799
Tulane	4,955,143
TUMC	1,981,670
UNO	8,064,796
USL	9,705,806
Xavier	724,925
Total	\$103,077,074

Distribution of Support Fund Graduate Fellows Money Across Campuses

FY1986-87 through FY1997-98

Institution	
Centenary	0
Delgado	0
Dillard	0
Grambling	409,000
LA College	0
LSU-Ag.	0
LSU-A	0
LSU-BR	19,195,802
LSU-E	0
LSU-Law	0
LSUMC-NO	480,000
LSU-Pennington	0
LSUMC-S	0
LSU-S	0
LaTech	1,545,000
Loyola	0
LUMCON	0
McNeese	205,000
Nicholls	0
NLU	110,000
NSU	60,000
Nunez	0
OLHC	0
OLOL	0
SLU	0
SU-BR	273,000
SUNO	0
SUSBO	0
Tulane	6,799,000
TUMC	2,340,000
UNO	2,351,600
USL	3,719,500
Xavier	104,100
Total	\$37,592,002

**Distribution of Support Fund
Endowed Chairs and Endowed Professorships Money
Across Campuses**

FY1986-87 though FY1997-98

Institution	#	Chairs	#	Professorships
Centenary	9	3,600,000	15	600,000
Delgado		0	13	520,000
Dillard	2	800,000	16	640,000
GSU	1	400,000	3	120,000
LA College		0	4	160,000
LSU-Ag.	1	400,000	2	80,000
LSU-A		0	7	280,000
LSU-BR	29	11,600,000	132	5,280,000
LSU-E		0	3	120,000
LSU-Law		0	18	720,000
LSUMC-NO	15	6,000,000	31	1,240,000
LSU-Penn.	3	1,200,000	1	40,000
LSUMC-S		0		0
LSU-S	1	400,000	2	80,000
LaTech	7	2,800,000	56	2,240,000
Loyola	3	1,200,000	18	720,000
LUMCON		0		0
McNeese	2	800,000	25	1,000,000
Nicholls	3	1,200,000	5	200,000
NLU	5	2,000,000	31	1,240,000
NSU		0	13	520,000
E. Nunez		0	3	120,000
OLHC		0	11	440,000
LOL		0	4	160,000
SLU	1	400,000	12	480,000
SU-BR	1	400,000	8	320,000
SU-NO		0	1	40,000
SU-S		0		0
Tulane	11	4,400,000	45	1,800,000
TUMC	12	4,800,000	5	200,000
UNO	13	5,200,000	17	680,000
USL	7	2,800,000	83	3,320,000
Xavier	3	1,200,000	5	200,000
Total	129	\$51,600,000	589	\$23,560,000

Federal Matching Grants Program

Institution	NSF ESPCoR		NSF LAMP		NASA EPSCoR		NASA LAMPSPACE	
	Federal	Support Fund	Federal	Support Fund	Federal	Support Fund	Federal	Support Fund
Centenary	5,463							
Delgado								
Dillard			97,000	50,000				
Grambling	5,000		282,481	133,906			6,338	
LSU-BR	3,290,308	4,401,432	165,566	168,482	1,566,521		535,600	284,968
LSU-A								
LSU-E								
LSU-S	3,225						4,500	97,500
LSU Ag Ctr	34,000							
LSUMC-NO	104,325							
LSUMC-S	732,393							
LSU-Pennington								
LaTECH	1,059,881	1,165,685					54,367	89,898
Loyola	110,508						5,000	12,700
LUMCON	282,929	700,578	68,952	52,607				
McNeese	10,000		158,799	74,451				
Nicholls	57,015							
NLU	25,000						15,000	
NSU	25,000						135,637	32,393
Nunez			160,517	58,360				
SLOC								
SLU	25,000							
SUNO			210,377	74,982				
SUSBO			108,000	56,000				
SUBR	210,579		2,118,793	186,953			372,265	
Tulane	1,604,248	2,769,047	176,101	192,908			67,168	95,723
TUMC	161,679							
UNO	496,637		233,400	171,671				15,978
USL	911,208	2,137,613	99,001	48,959			29,995	63,482
Xavier	89,982							5,000
Totals	9,244,380	11,174,355	3,878,987	1,269,279	2,343,383	2,500,000	1,225,870	697,642
					5,148,266		4,843,383	
								1,929,512

Note: NSF ESPCoR does not include data from current Cooperative Agreement 9720652.

Note: For LaCEPT NSF dollars, awards were made in Dec 1998, using carryover funds from various budgets beginning in FY1993-94 through FY1997-98

Federal Matching Grants Program

Institution	DEP/CoR			POE/ESPCoR			NSF LaCEPT			NSF LaSIP		
	Federal	Support	Total	Federal	Support	Total	Federal	Support	Total	Federal	Support	Total
	Fund	Fund		Fund	Fund		Fund	Fund		Fund	Fund	
Centenary							19,974	24,700	44,674	118,478	173,738	292,217
Delgado				3,650		3,650	5,496		8,496			
Dillard				5,040		5,040	36,881		36,881	39,403	76,081	115,494
Grambling				935,103	1,556,784	2,491,887	321,790	236,100	557,890	433,967	388,636	822,603
LSU-BR	5,368,045	1,624,005	6,992,050				4,311		4,311	43,538	56,433	56,433
LSU-A							153,042	140,000	293,042	247,230	301,069	138,024
LSU-E												
LSU-S												
LSU Ag Ctr												
LSUMC-NO	478,571	180,921	659,492									
LSUMC-S												
LSU-Pennington												
LaTECH	313,350	189,798	503,148	392,106		392,106	305,882	320,192	626,074	118,900	79,031	197,931
Loyola							136,763	68,206	204,969	148,679	473,847	622,526
LUMCON							2,970		2,970	67,564	524,104	591,668
McNeese							50,391	36,925	87,216	296,054	434,832	730,886
Nicholls							174,364	205,517	379,881	312,574	713,780	1,026,354
NLU							326,062	306,328	632,390	307,943	757,255	1,065,198
NSU							126,359	130,086	256,445	195,907	171,772	367,679
Nunez												
SLOC							29,061		29,061			
SLU	274,996	137,498	412,494				256,790	136,000	392,790	191,853	1,173,360	1,365,213
SUNO							111,934	191,757	303,691			
SUSBO												
SUBR	762,825	292,926	1,055,751	892,807		892,807	114,626	238,715	353,341	140,944	455,545	596,489
Tulane				1,193,785	1,151,342	2,345,127				207,031	197,247	404,278
TUMC												
UNO	352,412		352,412	3,270		3,270	244,273	226,002	470,275	72,147	699,106	771,253
USL	487,376	148,927	636,303	828,140	1,707,003	2,535,143	235,061	275,076	510,137	145,142	834,131	979,273
Xavier				5,270		5,270	34,540	170,704	205,244	212,954	377,145	590,099
Totals	8,037,575	2,574,075	10,611,650	4,259,171	4,415,129	8,674,300	2,690,570	2,706,208	5,396,778	3,300,308	7,981,608	11,281,917

Note: NSF ESPCoR does not include data from current Cooperative Agreement 9720652.

Note: For LaCEPT NSF dollars, awards were made in Dec 1998, using carryover funds from various budgets beginning in FY1993-94 through FY1997-98.

Federal Matching Grants Program

Institution	NSF/RSI		Across All Programs		Total \$\$\$
	Federal	Support Fund	Total	Total	
Centenary				143,916	143,916
Delgado				3,650	3,650
Dillard				102,496	102,496
Grambling				375,143	375,143
LSU-BR	72,534	45,928	118,462	12,689,434	12,807,896
LSU-A				4,311	4,311
LSU-LE				43,538	43,538
LSU-S				403,497	403,497
LSU Ag Ctr				38,500	38,500
LSUMC-NO				582,896	582,896
LSUMCS				732,393	732,393
LSU-Pennington				118,900	118,900
LaTECH				2,274,265	2,274,265
Loyola				319,835	319,835
LUMCON				354,851	354,851
McNeese				515,244	515,244
Nicholls				543,953	543,953
NIU	25,835	154,875	180,710	699,840	880,550
NSU				482,903	482,903
Numez				160,517	160,517
SLOC				29,061	29,061
SLU				748,639	748,639
SUNO				322,311	322,311
SUSBO				108,000	108,000
SUBR				3,850,014	3,850,014
Tulane				4,011,158	4,011,158
TUMC				161,679	161,679
UNO				2,179,001	2,179,001
USL				2,735,923	2,735,923
Xavier				342,746	342,746
Totals	98,369	200,803	299,172	35,078,614	35,377,786

APPENDIX IV

TAXONOMY OF DISCIPLINES
USED IN THE
LOUISIANA EDUCATION QUALITY SUPPORT FUND PROGRAMS

NATURAL SCIENCES - BIOLOGICAL

Agriculture

- 0101 Agricultural Economics
- 0102 Agricultural Production
- 0103 Agricultural Sciences
- 0104 Agronomy
- 0105 Animal Sciences
- 0106 Fishery Sciences
- 0107 Food Sciences
- 0108 Forestry and Related Sciences
- 0109 Horticulture
- 0110 Resource Management
- 0111 Parks and Recreation Management
- 0112 Plant Sciences
(Except Agronomy, see 0104)
- 0113 Renewable Natural Resources
- 0114 Soil Sciences
- 0115 Wildlife Management
- 0199 Agriculture - Other

Biological Sciences

- 0201 Anatomy
- 0202 Biochemistry/Biophysics
- 0203 Biology
- 0204 Biometry
- 0205 Botany
- 0206 Cell and Molecular Biology
- 0207 Ecology
- 0208 Embryology
- 0209 Entomology and Parasitology
- 0210 Genetics
- 0211 Marine Biology
- 0212 Microbiology
- 0213 Neurosciences
- 0214 Nutrition
- 0215 Pathology
- 0216 Pharmacology
- 0217 Physiology
- 0218 Radiobiology
- 0219 Toxicology
- 0220 Zoology
- 0299 Biological Sciences - Other

NATURAL SCIENCES - BIOLOGICAL (CONTINUED)

Health and Medical Sciences

- 0601 Allied Health
- 0602 Audiology and Speech Pathology
- 0603 Chiropractic
- 0604 Dental Sciences
- 0605 Environmental Health
- 0606 Epidemiology
- 0607 Health Science Administration
- 0608 Immunology
- 0609 Medical Sciences
- 0610 Nursing
- 0611 Optometry
- 0612 Osteopathic Medicine
- 0613 Pharmaceutical Sciences
- 0614 Podiatry
- 0615 Pre-Medicine
- 0616 Public Health
- 0617 Veterinary Science
- 0699 Health and Medical Sciences - Other

NATURAL SCIENCES - PHYSICAL

Chemistry

- 0301 Chemistry, General
- 0302 Analytical Chemistry
- 0303 Inorganic Chemistry
- 0304 Organic Chemistry
- 0305 Pharmaceutical Chemistry
- 0306 Physical Chemistry
- 0399 Chemistry - Other

Physics and Astronomy

- 0801 Astronomy
- 0802 Astrophysics
- 0803 Atomic/Molecular Physics
- 0804 Nuclear Physics
- 0805 Optics
- 0806 Planetary Science
- 0807 Solid State Physics
- 0899 Physics and Astronomy - Other

NATURAL SCIENCES - COMPUTATIONAL

Computer and Information Sciences

- 0401 Computer Programming
- 0402 Computer Sciences
- 0403 Data Processing
- 0404 Information Sciences
- 0405 Microcomputer Applications
- 0406 Systems Analysis
- 0499 Computer Sciences - Other

Mathematical Sciences

- 0701 Actuarial Sciences
- 0702 Applied Mathematics
- 0703 Mathematics
- 0704 Probability and Statistics
- 0799 Mathematical Sciences - Other

NATURAL SCIENCES - EARTH/ENVIRONMENTAL

Earth, Atmospheric, and Marine Sciences

- 0501 Atmospheric Sciences
- 0502 Environmental Sciences
- 0503 Geochemistry
- 0504 Geology
- 0505 Geophysics and Seismology
- 0506 Paleontology
- 0507 Meteorology
- 0508 Oceanography
- 0599 Earth, Atmospheric, and
Marine Sciences - Other
- 4403 Environmental Design
- 4405 Landscape Architecture

ENGINEERING - A

Engineering - Chemical

- 1001 Chemical Engineering
- 1002 Pulp and Paper Production
- 1003 Wood Science
- 1099 Chemical Engineering - Other

Engineering - Civil

- 1101 Architectural Engineering
- 1102 Civil Engineering
- 1103 Environmental/Sanitary Engr.
- 1199 Civil Engineering - Other

ENGINEERING - A (CONTINUED)

Engineering - Electrical and Electronics

- 1201 Computer Engineering
- 1202 Communications Engineering
- 1203 Electrical Engineering
- 1204 Electronics Engineering
- 1299 Electrical and Electronics
Engineering - Other

ENGINEERING - B

Engineering - Industrial

- 1301 Industrial Engineering
- 1302 Operations Research
- 1399 Industrial Engineering - Other

Engineering - Materials

- 1401 Ceramic Engineering
- 1402 Materials Engineering
- 1403 Materials Science
- 1404 Metallurgical Engineering
- 1499 Materials Engineering - Other

Engineering - Mechanical

- 1501 Engineering Mechanics
- 1502 Mechanical Engineering
- 1599 Mechanical Engineering - Other

Engineering - Other

- 1601 Aerospace Engineering
- 1602 Agricultural Engineering
- 1603 Biomedical Engineering
- 1604 Engineering Physics
- 1605 Engineering Science
- 1606 Geological Engineering
- 1607 Mining Engineering
- 1608 Naval Architecture and
Marine Engineering
- 1609 Nuclear Engineering
- 1610 Ocean Engineering
- 1611 Petroleum Engineering
- 1612 Systems Engineering
- 1613 Textile Engineering
- 1699 Engineering - Other

SOCIAL SCIENCES

Anthropology and Archaeology

- 1701 Anthropology
- 1702 Archaeology

Economics

- 1801 Economics
- 1802 Econometrics

Law (5102)

Political Science

- 1901 International Relations
- 1902 Political Science and Government
- 1903 Public Policy Studies
- 1999 Political Science - Other

Psychology

- 2001 Clinical Psychology
- 2002 Cognitive Psychology
- 2003 Community Psychology
- 2004 Comparative Psychology
- 2005 Counseling Psychology
- 2006 Developmental Psychology
- 2007 Experimental Psychology
- 2008 Industrial and Organizational Psychology
- 2009 Personality Psychology
- 2010 Physiological Psychology
- 2011 Psycholinguistics
- 2012 Psychometrics
- 2013 Psychopharmacology
- 2014 Quantitative Psychology
- 2015 Social Psychology
- 2099 Psychology - Other

Sociology and Social Work

- 2101 Demography
- 2102 Sociology
- 5001 Social Work

Social Sciences - Other

- 2201 Area Studies
- 2202 Criminal Justice/Criminology
- 2203 Geography
- 2204 Public Affairs and 4801 Public Administration
- 2205 Urban Studies and 4406 Urban Design
- 2299 Social Sciences - Other
- 4401 Architecture
- 4402 City and Regional Planning
- 4404 Interior Design
- 5101 Interdisciplinary Programs

SOCIAL SCIENCES (CONTINUED)

Communications

- 4501 Advertising
- 4502 Communications Research
- 4503 Journalism and Mass Communication
- 4504 Public Relations
- 4505 Radio, TV and Film
- 4506 Speech Communication
- 4599 Communications - Other

Home Economics

- 4601 Consumer Economics
- 4602 Family Relations
- 4699 Home Economics - Other

Library and Archival Sciences

- 4701 Library Science
- 4702 Archival Science

ARTS

Arts - History, Theory, and Criticism

- 2301 Art History and Criticism
- 2302 Music History, Musicology, and Theory
- 2399 Arts - History, Theory, and Criticism - Other

Arts - Performance and Studio

- 2401 Art
- 2402 Dance
- 2403 Drama/Theatre Arts
- 2404 Music
- 2405 Design
- 2406 Fine Arts
- 2499 Arts - Performance and Studio - Other

Arts - Other

- 2999A Arts - Other
- 5101A Interdisciplinary Programs

HUMANITIES

English Language and Literature

- 2501 English Language and Literature
- 2502 American Language and Literature
- 2503 Creative Writing
- 2599 English Language and Literature - Other

HUMANITIES (CONTINUED)

Foreign Language and Literature

- 2601 Asiatic Languages
- 2602 Foreign Literature
- 2603 French
- 2604 Germanic Languages
- 2605 Italian
- 2606 Russian
- 2607 Semitic Languages
- 2608 Spanish
- 2699 Foreign Languages - Other

History

- 2701 American History
- 2702 European History
- 2703 History of Science
- 2799 History - Other

Philosophy

- 2801 All Philosophy Fields

Humanities - Other

- 2901 Classics
- 2902 Comparative Language and Literature
- 2903 Linguistics
- 2904 Religious Studies; 4901 Religion; and 4902 Theology
- 2999H Humanities - Other
- 5101H Interdisciplinary Programs

EDUCATION

Education - Administration

- 3001 Educational Administration
- 3002 Educational Supervision

Education - Curriculum and Instruction

- 3101 Curriculum and Instruction

Education - Early Childhood

- 3201 Early Childhood Education

Education - Elementary

- 3301 Elementary Education
- 3302 Elementary-level Teaching Fields

EDUCATION (CONTINUED)

Education - Evaluation and Research

- 3401 Educational Statistics and Research
- 3402 Educational Testing Evaluation and Measurement
- 3403 Educational Psychology
- 3404 Elementary and Secondary Research
- 3405 Higher Education Research

Education - Higher

- 3501 Educational Policy
- 3502 Higher Education

Education - Secondary

- 3601 Secondary Education
- 3602 Secondary Level Teaching Fields

Education - Special

- 3701 Education of the Gifted
- 3702 Education of the Handicapped
- 3703 Education of Special Learning Disabilities
- 3704 Remedial Education
- 3799 Other Special Education Fields

Education - Student Counseling and Personnel Services

- 3801 Personnel Services
- 3802 Student Counseling

Education - Other

- 3901 Adult and Continuing Education
- 3902 Bilingual/Crosscultural Education
- 3903 Educational Media
- 3904 Junior High/Middle School Education
- 3905 Pre-Elementary Education
- 3906 Social Foundations
- 3907 Teaching English as a Second Language/Foreign Language
- 3999 Other Education Fields

BUSINESS

Accounting

4001 Accounting

4002 Taxation

Banking and Finance

4101 Commercial Banking

4102 Finance

4103 Investments and Securities

Business, Administration and Management

4201 Business Administration and
Management

4202 Human Resource Development

4203 Institutional Management

4204 Labor/Industrial Relations

4205 Management Science

4206 Organizational Behavior

4207 Personnel Management

4299 Business Management - Other

Business - Other

4301 Business Economics

4302 International Business Management

4303 Management Information Systems

4304 Marketing and Distribution

4305 Marketing Management and Research

4399 Business Fields - Other

(1999)

APPENDIX V

ITAC INITIATIVES

The Board of Regents, working through the Industrial Targets Advisory Committee (ITAC), is addressing economic development and diversification issues in three broadly defined areas:

1. **Impediments.** The committee is working to identify and remove obstacles to the successful transfer and commercialization of technology from university to industry, particularly promoting changes in state and university regulations, policies and cultural issues.
2. **Initiatives.** ITAC is developing systemic reform programs to focus higher education's intellectual and fiscal resources in areas with the greatest probability of impacting Louisiana's economy. To this end, ITAC is identifying and organizing university resources that promote technology and economic development for the six technology clusters developed by the Louisiana Economic Development Council:

- Medical and Biomedical
- Micromanufacturing
- Data and Telecommunications
- Environmental Technologies
- Food Technologies
- Materials

In addition, ITAC created two other clusters that supplement the technology clusters. These provide a focus for existing university strengths and resources to grow Louisiana's economy:

- Existing Industries such as petrochemicals and agribusiness
- Louisiana Culture and History

Once individual strengths are identified, the state's colleges and universities will be able to form effective strategic alliances that pool their resources, creating vibrant research entities such as the proposed Louisiana Genetics Research Consortium.

3. **Incentives.** With information gathered through ITAC, the Board of Regents is developing several new *Vision 2020* initiatives designed to stimulate action in areas identified by the Impediments and Initiatives activities. These initiatives include the Super Endowed Chairs program, which was approved in the summer of 1999. Two additional programs are currently under development, the *Vision 2020* Campus Coordinators and the *Vision 2020* Research and Commercialization Centers programs tentatively funded through the Strategic initiatives Excellence Program..

The following information is provided for your information only. It is not intended to be used for any other purpose.

APPENDIX VI

EPSCoT INITIATIVES

The following initiatives of the Experimental Program to Stimulate Competitive Technology (EPSCoT) are designed to promote and commercialize university-based technologies.

- **The Louisiana Technology Harvest program** is reaching out to the university community by conducting seminars on the benefits and methods available to commercialization university-based technology. The program also is searching for and identify existing promising technologies which will be evaluated for their commercialization potential.
- **Regional Strategies program** will match LEQSF and private funds matched one-to-one to bring local businesses and universities together to study and develop technology-based economic development strategies specifically designed for local and regional partnerships.
- **The SBIR/STTR Phase Zero programs** managed by the Louisiana Technology Transfer Office promote an increase in the quality and quantity of research and development proposals from Louisiana businesses and universities. These proposals will provide additional federal grants for Louisiana, as well as promote university/industry partnerships.
- **Faculty Expertise and University Facilities databases** promote the partnering and sharing of resources by creating an easily accessible source of information to businesses attempting to utilize university resources.
- **University/Industry Forums** will be conducted at three locations across the state to to promote strong, effective university/industry linkages throughout the technology commercialization process.
- **The Industrial Target Advisory Committee (ITAC)** also is partially funded by EPSCoT funds (see Appendix V).

The initial EPSCoT contract will terminate in June 2000; additional federal funding with LEQSF matching is anticipated to continue the base objectives of this program.

APPENDIX VII
