

FY 2004-2005 PLAN AND BUDGET
FOR THE EXPENDITURE OF REVENUES AVAILABLE FROM THE
BOARD OF REGENTS SUPPORT FUND
WITH AN OVERVIEW OF PRELIMINARY RESULTS OBTAINED

SUBMITTED TO THE
GOVERNOR AND LEGISLATURE
IN ACCORDANCE WITH THE CONSTITUTIONAL PROVISIONS OF
ARTICLE VII, SECTION 10.1

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BOARD OF REGENTS

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OVERVIEW OF RESULTS

from the Investment of Board of Regents Support Fund Money in Higher Education

- ◆ **\$551.8 MILLION GENERATED IN NEW EXTERNAL FUNDING** (through 6/30/2003)
From federal, private, and other non-Support Fund sources
- ◆ **AN ADDITIONAL \$214.2 MILLION GENERATED IN EXTERNAL CONTRIBUTIONS**
For Endowed Chairs and Professorships
- ◆ **2,248 EXTERNAL AWARDS**
From federal, private, and other non-Support Fund sources
- ◆ **196 \$1 MILLION CHAIRS AND 18 \$2 MILLION CHAIRS** for eminent scholars
endowed at 21 universities
- ◆ **1,267 \$100,000 PROFESSORSHIPS** endowed at 34 campuses
- ◆ **1:1.57 RATE OF RETURN** for all projects funded since 1987
For every Support Fund dollar invested, \$1.57 has been returned to the State
- ◆ **115 PATENTS ISSUED; 65 PATENT APPLICATIONS PENDING**
- ◆ **7,701 PUBLICATIONS** in refereed journals (published, in press, or accepted)
- ◆ **LaSIP** (Regents/BESE/NSF/Louisiana Legislature) produces rising student scores on statewide tests
- ◆ **EXPANDED UNIVERSITY COLLABORATION** to increase research competitiveness for
federal R&D money

**PLAN AND BUDGET
FOR THE EXPENDITURE OF REVENUES AVAILABLE FROM
THE BOARD OF REGENTS SUPPORT FUND
FISCAL YEAR 2004-2005**

PREFACE

The Governor, Legislature, and public should recognize that a sound educational system at all levels and in all disciplines--which is well-supported on a consistent basis--is crucial to enhancing academic programs and units and promoting economic development, the two goals of the Constitutional amendment which created the Louisiana Education Quality Support Fund (hereinafter referred to as Board of Regents Support Fund). The four programs of the Board of Regents Support Fund pursue different but related strategies in the quest to achieve these goals. All disciplines are eligible to compete in the Graduate Fellows, Enhancement, and Endowed Chairs Programs, thus reflecting the Board's broad and long-range commitment to strengthen all disciplines and, in so doing, to promote long-term economic development through the enhancement of higher education in general. Competition in the Research and Development (R&D) Program has been restricted to those disciplines where the promotion of basic and applied research is essential for near-term economic development. Beginning in FY 2004-05, one of the R&D subprograms will focus on research efforts in the arts, social sciences, and humanities. (See section 5.4.3 below.)

I. INTRODUCTION

According to Article VII, Section 10.1, of the Louisiana Constitution, at least sixty days prior to each regular session of the Legislature the Board of Regents must submit to the Governor and the Legislature a proposed plan and budget for the expenditure, during the coming fiscal year, of money available to higher education from the Board of Regents Support Fund. Higher education's portion of these funds may be spent for "any or all" of the following purposes: (1) the endowment of chairs for eminent scholars (hereinafter referred to as the Endowed Chairs Program); (2) the recruitment of superior graduate students (the Graduate Fellows Program, including Traditional Graduate Fellows and Graduate Fellowships for Teachers); (3) the carefully defined research efforts of public and private universities (the R & D Program, including the Research Competitiveness Subprogram, the Industrial Ties Research Subprogram, and the newly-established Research Subprogram for the Humanities, Arts, and Social Sciences); and (4) the enhancement of the quality of academic, research, or agricultural departments or units within a university (the Enhancement Program, including the Traditional Enhancement Program, the Undergraduate Enhancement Program, the Endowed Professorships Program, and the Enhancement Program for Two-Year Institutions).

1.1 BOARD OF REGENTS SUPPORT FUND PROJECTION, FY 2004-2005

The Division of Administration and the State Treasurer's office project that the amount of money to be available for higher education from the Louisiana Education Quality Trust Fund in FY 2004-2005 will be \$24 million.

1.2 BUDGET RATIONALE AND PREAMBLE

In deliberations about the Board of Regents Support Fund Plan and Budget for FY 2004-2005, the Board again noted the persistence of four related Support Fund issues requiring long-range strategic planning:

- An overall decline in monies available from the Trust Fund during the past few years, from \$30.8 million in FY 1993-94 to the \$24 million projected for higher education in FY 2004-2005;

- Steadily increasing demands for Support Fund resources under all four Program components with concomitant increases in proposal quality and outstanding results achieved, including the leveraging during the grant period of \$1.57 in non-State money for every Support Fund dollar awarded;
- The State's expanding emphasis on economic development and diversification through Vision 2020; and,
- Unusually great and increasing demands for resources to create endowments--for both eminent scholars and professorships.

For example, the \$3,220,000 budgeted in the current year (FY 2003-2004) for endowed chairs will permit the Board to provide matching money for only a small percentage of the anticipated requests. Similarly, the \$2.6 million budgeted for endowed professorships in the current year's budget is woefully insufficient to fund the anticipated requests. It would take at least \$10 million--in addition to the \$5,820,000 budgeted this fiscal year from the Support Fund--to fill all anticipated chair and professorship requests.

Over the past several years the overall decline in funds available and the high demand for endowment money, as evidenced from the previous example, have persuaded the Board to make across-the-board reductions in the budgets for new Research and Development, Enhancement, and Recruitment of Superior Graduate Students awards while maintaining budgets for endowment programs. This choice has been a conscious one, because the Board is aware of the ever-increasing importance of private philanthropy to the overall fiscal health of higher education. Moreover, the Board knows that the Support Fund is a powerful tool for attracting private donors to become involved with and support higher education.

Nevertheless, it is vital that robustness be maintained in all four interrelated Support Fund components. While the Board lauds the growth in private philanthropy reflected in the increased applications for endowed chairs and professorships, the Regents are also mindful that further cuts in budgets for R & D, Enhancement, and Recruitment of Superior Graduate Students would jeopardize the viability of these components and hence impair the overall quality of the Support Fund programs. Endowed chairholders and professors must have basic infrastructural equipment, supportive cutting-edge research in affected departments and units, and top quality graduate students in order to achieve the results expected of them.

For these compelling reasons, the Board of Regents strongly recommends to the Governor and the Legislature that approximately \$10 million in State General Fund money be appropriated to the Board to fund the anticipated excess FY 2003-04 requests for endowed chairs and professorships. If, in future years, requests for chairs and professorships greatly exceed the long-range allocations to be established by the Board for these programs, consideration again should be given to the provision of another special appropriation to fund the endowment requests.

Because the budget problems described herein will persist as the Board makes future decisions about the allocation of Support Fund money, the Board decided to undertake (beginning in the summer of 1998) a fundamental reexamination of the manner in which non-committed Support Fund money is allocated across programs for new awards. This analysis will be based on a comparative evaluation of the demonstrated outcomes of each of the four major Support Fund program components. To date, the Endowed Chairs, Endowed Professorships, Recruitment for Superior Graduate Students, and Research and Development programs have been comprehensively evaluated, with the Enhancement Program currently under review. A comprehensive review of the entire program is scheduled to begin at the conclusion of the Enhancement Program review.

Because such a comparative evaluation is extremely time consuming and requires completion of the massive Board of Regents Support Fund database currently under development at the Board of Regents, in the interim the Board shall establish long-range allocations for new awards for all four Program components using the outcome data that are currently available as the basis for those recommendations.

1.3 TOTAL AVAILABLE BUDGET, FY 2004-2005: \$31,504,181

Since the inception of the BoRSF Program, the Board and its staff have traditionally used the figure projected by the State Treasurer's Office for funds available for BoRSF expenditures as the basis for the plan and budget. While the Treasurer's estimate has generally been conservative, in many years the discrepancy between the estimate and the amount ultimately available for expenditure has been sizeable. Accordingly, at its meeting of January 24, 2003, the Board approved a policy relative to the annual projection of plan and budget funds available designed to stabilize budgetary planning and make it more rational.

POLICY RELATIVE TO THE ANNUAL PROJECTION OF PLAN AND BUDGET FUNDS AVAILABLE

Beginning with FY 2004-05, the total funds budgeted in each BoRSF plan and budget shall be computed as follows: the income actually received from the Support Fund for distribution during the most recently completed fiscal year shall be compared with the Treasurer's estimate for that fiscal year. The difference between the income actually received and the amount estimated shall, as applicable, be added to or subtracted from the amount projected by the Treasurer's Office to be available for the year in which the new BoRSF plan and budget is being prepared.

Application of this policy results in the following increment to be used for the FY 2004-05 Plan and Budget:

Actual Income Realized for FY 2002-03:	\$27,220,560
State Treasurer's Estimate for FY 2002-03:	<u>\$20,800,000</u>
Difference equals	\$ 6,420,560

This Plan and Budget recommends expenditure of the \$24 million projected to be available for higher education in FY 2004-2005 from Trust Fund interest earnings and royalty income, the \$6,420,560 derived from application of the above referenced policy, and \$1,083,621 from the State General Fund or the Reserve Fund,* for a total FY 2004-2005 budget of \$31,504,181.

*In light of declining interest rates, as well as the uncertainties surrounding the impact of the 1994 Constitutional amendment enabling the State Treasurer to place up to 35% of the Trust Fund money in higher-yielding investments, the Board believes that maintaining a minimal "cumulative balance" as a safeguard against low interest rates and decreases in royalty income is important. The Board has decided that at least \$2 million shall be maintained annually as a cumulative balance. Funds that accrue in excess of this amount may be recommended for expenditure. The Board's plan for expenditure of these funds is discussed elsewhere in this plan and budget.

1.4 ADOPTION OF FY 2004-2005 PLAN AND BUDGET

Based on the fiscal estimates provided by the Division of Administration and the Office of the State Treasurer, as well as the anticipated \$1,083,621 from the State General Fund or the Reserve Fund and consistent with the Strategic Plan for the Board of Regents Support Fund, the following plan and budget for FY 2004-2005 were adopted by the Board of Regents at its meeting of January 22, 2004. (See Section 2 for a discussion of the Strategic Plan.)

2. LONG-RANGE PLANNING AND EVALUATION

2.1 LONG-RANGE PLANNING

In FY 1987-88 the Board of Regents determined that, in addition to the Constitutionally-required annual plan and budget which set forth short-term programmatic goals and fiscal objectives, a comprehensive overview of tactics and strategies was required to accomplish fully the interrelated purposes and goals of the Support Fund. The short-term activities outlined in the annual plans and budgets could then be shaped by these long-term goals.

The first such plan evolved from a carefully researched "White Paper" prepared by the Louisiana Stimulus for Excellence in Research (LaSER) Committee. Titled Strategic Plan for Higher Education's Portion of the Louisiana Education Quality Support Fund, it was adopted in 1988. Cognizant of changes in economic conditions which affected academic issues, the Board in 1993 adopted a revised plan, titled Board of Regents Support Fund Long-Range Strategic Plan for Higher Education. It maintained the central themes and strategies of the earlier plan, and adjusted to changing conditions and lessons learned from seven years of experience. In 1999 the Board adopted a third revised plan to guide the Support Fund through FY 2005-06. After fourteen years encompassing significant changes in government, economy, and some areas of academia, the 1999 Plan continues the approach of balancing continuity based on effectiveness, with revisions reflecting "lessons learned."**

2.2 LONG-RANGE EVALUATION

To ensure that the Board of Regents Support Fund achieves its goals, the Board, beginning in FY 1990-91, implemented a systematic comprehensive evaluation process. This process involved four stages: (1) collection of background information; (2) submission to the Board by project directors of annual and/or final project reports; (3) submission of additional information one year after project termination; and (4) an evaluation by out-of-state experts of individual projects as well as the overall program. In the spring of 1994 such an evaluation was conducted by a distinguished panel of out-of-state experts. The Panel concluded that the Board of Regents Support Fund Program "is effectively and efficiently administered, that it is addressing some of the State's economic development and higher education infrastructure needs, and that it has been successful in attracting federal funds to the State."***

*Copies of the 1988, 1993, and 1999 Strategic Plans are available in the Board's office. Work on the next Strategic Plan will begin during FY 2004-05.

**This Panel's report is available in the Board's office.

With the opportunity to see the various Support Fund programs in operation over a period of years, new insights have been gained. Accordingly, the Board has instructed the staff, through the Evaluation Subcommittee of the Board of Regents Support Fund Planning Committee, to engage in a thorough revision of the long-range evaluation system. That process began with the comprehensive review of the Endowed Chairs Program during the summer and fall of 1998. The Endowed Chairs review culminated in the March, 1999 adoption of the Board of Regents Endowed Chairs Policy, which further strengthens a program with already impressive accomplishments. Similarly, the FY 1999-2000 comprehensive review of the Endowed Professorships Program led to the adoption, in December, 2000 of the Board of Regents Endowed Professorships Policy, providing for the improvement of that program. The FY 2000-01 review of the Recruitment of Superior Graduate Students Program led to the adoption in January, 2002 of recommendations designed to elevate the program's accomplishments. The FY 2001-02 review of the Research and Development Program led to recommendations intended to improve and strengthen this already highly successful program. In each instance, insights from the review led to the adoption of measures that will further strengthen these programs and thus maximize their positive impact on Louisiana higher education.

3. AN OVERVIEW OF PRELIMINARY RESULTS OBTAINED

Significant benefits have begun to accrue to the State as a result of the investment of this money in higher education. The results reported herein are even more impressive when one understands that: (1) realization of the full benefit of investment in higher education is a long-term proposition, and final results only become obvious after a period of many years; and (2) reported results include only benefits derived during the life of the grants awarded, and do not attempt to measure the many benefits which accrue to affected institutions after the conclusion of the relatively brief time of Support Fund contracts.

Annual and/or final reports have been used since the inception of the Board of Regents Support Fund Program to monitor the progress of all projects. A few of the most significant achievements are described in the following sections.

3.1 STATEWIDE RESULTS

- * **\$766 million in external funds has been generated** from Federal, private, and industrial sources as a result of the Board of Regents Support Fund investment in higher education, thereby significantly increasing the total monies available for higher education. This represents a **return of \$1.57 for every Board of Regents Support Fund dollar invested** in higher education since the inception of the programs. The figure reflects only dollars generated during the life of the awards--additional revenues were/will be generated after the expiration of the awards.
- * **Increased collaboration and coordination of efforts between Regents and BESE**, as evidenced by the renewal of the \$37 million joint LaSIP effort to reform K-12 and undergraduate instruction in math and science, the subsequent funding of the Delta Rural Systemic Initiative, and the joint efforts of the two boards to improve education through the Blue Ribbon Commission on Teacher Quality. (See Attachment I for descriptions of these projects.) Those collaborative efforts also contributed to the funding of Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) by the U.S. Department of Education for \$12.5 million over a five-year period.

- * **2,248 grants and/or contracts have been awarded to Louisiana universities from external funding agencies directly as a result of Board of Regents Support Fund investments.**
- * **An analysis performed by the Louisiana Department of Economic Development in 1996 concluded that, for all completed Industrial Ties Research Subprogram projects, 48% had either been successfully commercialized or were in the process of commercialization. Forty-five percent (45%) of those projects that were successfully commercialized are protected by a patent and/or license. Additionally, almost 60% of all completed projects reported significant to moderate industrial interaction.**
- * **Increased institutional collaboration has resulted, as evidenced by the multi-million dollar, multi-institutional grants awarded to the Board of Regents on behalf of statewide university consortia for research reform initiatives. Their purpose is to increase the amount of federal research and development money awarded to Louisiana scientists and engineers statewide. (See descriptions of awards in Attachment I.)**
- * **115 patents have been issued, and another 65 applications are pending.**

3.2 RESULTS FROM SELECTED PROJECTS

- * **A University of New Orleans professor has been awarded a patent for new technology that can be used to improve remediation of contaminated environmental sites. Funded by a Board of Regents Research Competitiveness Subprogram grant, he studied how the interactions between pollutants and natural organic compounds found in rivers, lakes, streams, bayous, soil and groundwater affect the degradation of the pollutants. The fundamental findings of this project are applicable to solving such environmental problems as the remediation of contaminated sites and treatment of industrial waste streams. The data may also be applicable to biomedical studies involving free radical oxidations of cellular material that are important in many diseases, including cancer.**
- * **Five Chinese scholars visited LSU in the spring 2002 semester to work with faculty and teach students skills in ceramic sculpture and glazing as well as a special course on the connoisseurship of Chinese ceramics. Several special museum exhibits were held in conjunction with this project, including two at the LSU Museum of Art and one at the Foster Gallery. It was the first time that the wares of Shekwan and Yixing, both Chinese provincial kilns, had ever been shown together. A catalogue for the three exhibitions was produced and a collaborative publication between the principal investigator and a Chinese scholar on Shekwan ceramics is in its final stages.**
- * **Researchers with a collaborative Industrial Ties Research project funded by the Board of Regents Support Fund have made a breakthrough that - to their knowledge - is a first in the world: they have successfully demonstrated high temperature micromolding of aluminum at high temperatures. This is a major technological breakthrough in micromanufacturing technology, and they are currently pursuing intellectual property protection. They have also made discoveries important to the design of ceramic nanocomposite coatings and have demonstrated technology that is the first step towards high temperature micromolding of technologically important metals. During the project period, the researchers were awarded multiple federal funding. This collaborative project includes researchers from the LSU Mechanical Engineering Department, the LSU Center for Advanced Microstructures and Devices (CAMD) and Timken Company, a leading U.S. manufacturer of bearings and steel.**

- * The **Northwestern State University** Computer Information Systems Department used funding from a Board of Regents Support Fund Enhancement grant to build an e-commerce technology computer lab...upgrade networking hardware...and train faculty. As a result, the Computer Information Systems Department has begun a sustained phase of curriculum and instruction development that includes new courses in advanced e-commerce topics. This project contributes directly to the State's economic development. The need for qualified professionals in the area of information systems and technology and particularly with e-commerce expertise has become a major obstacle to the entry of Louisiana companies into the information age and is an increasingly important issue for American industry as a whole. The capability to provide high quality information systems graduates and a state-of-the-art learning environment in the heart of the central Louisiana region provides an infrastructure that is attractive to industry. It is also highly probable that NSU students – who have won awards at National Collegiate Competition – will perform and compete at an even higher level.
- * The effects of endocrine disruption–the alteration of normal hormone function by man-made chemicals in the environment–on a wild fish population was the object of a **Southeastern Louisiana University** research project funded by a Board of Regents Support Fund Research Competitiveness Subprogram grant. The study tracked the migration of adult sunfish along a stretch of the Pearl River near Bogalusa that has industrial waste with potential endocrine-disrupting effects. The grant allowed the researcher to establish an environmental endocrinology lab and successfully integrate field and lab analyses of endocrine disruption. As a result, she was invited to participate in a multi-university consortium funded by a \$600,000 Environmental Protection Agency grant created to examine indicators of Gulf estuarine ecosystem health. All four students working with her plan to pursue careers in science.
- * A Board of Regents Enhancement grant enabled **Tulane University** to add to the active-learning components within each of four courses developed to foster the transition from the study of traditional engineering to Biomedical Engineering. When Tulane University received this project in 2000, Tulane's undergraduate biomedical engineering program was unranked by U.S. News & World Report. By 2003, the program was rated 16th nationally. The National Science Foundation has awarded the researcher another \$199,000 to expand the teaching facilities. Over 15 Tulane graduates with M.S. or Ph.D. degrees have remained in Louisiana over the past few years, in large part as a result of this grant and its after-effects.
- * The Louisiana Commerce Exchange System (LACES), an Internet-based business directory promoting business opportunities and economic development in Louisiana, is a direct descendent of a database system developed under a Board of Regents Support Fund Enhancement grant. Louisiana is presently the only state offering a free, searchable, online directory of businesses. The **University of Louisiana at Lafayette Apparel CIM Center** developed LACES in collaboration with the Louisiana Department of Economic Development. Over 85,000 companies included in the nine industry clusters identified by Vision 2020 are eligible to participate. LACES was the result of an 18 month development effort driven by technology conceived and refined in the Louisiana Textile-Apparel-Retail Consortium for Quick Response Enhancement grant awarded through the Support Fund from 1999 to 2001.

- * Louisiana's competitiveness in producing high performance composite piping systems has been enhanced by a team of researchers who developed high pressure/temperature composite piping systems using hybrid fiber reinforcement. Their ultimate goal is to develop a new generation of composite piping system that can be used in pressures as high as 500 pounds per square inch and temperatures as high as 300 degrees Fahrenheit by using hybrid fiber reinforcement. The use of advanced piping systems will greatly reduce costs for Louisiana chemical and petrochemical industries, which rely heavily on the development of advanced composite piping systems and their associated components. Funded through the Industrial Ties Research Subprogram, the research team includes scientists from the **LSU and Southern University departments of mechanical engineering, as well as an industrial partner**. They have applied for a patent and are in the process of licensing and developing markets.
- * A new faculty member striving to increase the research competitiveness of **Nicholls State University** used the data acquired under a Board of Regents Support Fund Research Competitiveness Subprogram grant – his first funded research grant – to successfully compete for larger federally funded grants from the National Institutes of Health, National Oceanic and Atmospheric Administration, and Long-Term Estuary Assessment Group. The biology professor developed a tool that provides a specific test result that can be easily used by monitoring agencies or by industrial firms to test whether their plants are releasing compounds with estrogenic effects on wildlife. It may also be useful in assessing how suitable water diverted from the Mississippi River is to downstream estuaries. Additionally, the tools validated within this project have the potential to expedite tests that can be used to predict where problem areas may lie and hopefully prevent real damage before it occurs. The researcher has initiated collaborative relationships with the Tulane/Xavier Center for Bioenvironmental Research and Southern University and has been invited to participate in a federally funded mentorship proposal submitted by the LSU Health Sciences Center in New Orleans.
- * A team of **LSU Agricultural Center** researchers has demonstrated that crop reflectance determined by digital aerial photography can be used to determine the timing of insecticide applications on soybean crops. If confirmed by further research, using digital aerial photography would drop the cost for screening the total soybean acreage from \$5 million to \$800,000. As one of the major problems facing Louisiana's \$100 million annual soybean industry is losses from defoliating insects, the end result of a more effective control of defoliating pests would be a more profitable soybean industry. The Ag Center researchers are in their second year of a three-year Board of Regents Support Fund Industrial Ties Research Subprogram grant.
- * **A consortium of nine Louisiana universities** (Grambling State University, Louisiana State University and A&M College, Louisiana State University Health Sciences Center - New Orleans, Louisiana Tech University, Southern University and A&M College, Tulane University, University of Louisiana-Monroe, University of New Orleans, and Xavier University), the centerpiece of a \$9 million grant from the National Science Foundation EPSCoR (Experimental Program to Stimulate Competitive Research) program that was matched by \$3 million from the Board of Regents Support Fund, has made significant accomplishments. Within two years of receiving the grant the Consortium was awarded 41 grants totaling over \$17.8 million in external funding and eight Small Business Innovation Research and Small Business Technology Transfer grants. It has attained six patents (with another 15 pending), and has submitted five patent disclosures and seven reports of invention. It has recruited 25 new researchers - 11 of

them women and/or minorities - and supported nine postdoctoral candidates, 31 graduate students, 15 undergraduate students and one high school student. Eighteen student researchers have graduated with Ph.D or M.S. degrees and two with B.S. degrees and 41 students and six high school teachers (31 of them women and/or minorities) have attended the Consortium's summer research program. "The Micro/Nano Technologies Consortium for Advanced Physical, Chemical and Biological Sensors" has also attracted substantial private sector interest in establishing collaborative and/or marketing arrangements for many of the research projects with strong commercial potential.

- * A Board of Regents Enhancement grant helped enable the **University of Louisiana at Monroe College of Pharmacy** to initiate an internationally competitive marine natural products research program through an upgrade of the school's nuclear magnetic resonance (NMR) spectrometer. A significant share of drug discovery efforts continue to focus on natural products from novel sources, including the traditional medicines of various cultures worldwide. One ULM professor is extracting compounds from the more than 70 specimens of marine sponges that he collected from a relatively untapped region of the western Red Sea. The upgraded NMR will greatly facilitate - and in many cases enable where otherwise impossible - the definitive identification of the isolated substances. Some will undoubtedly be compounds never before isolated that will be tested in screen for antimicrobial and anticancer activity. The upgraded NMR can also analyze much smaller amounts of material, thus preserving supplies of novel compounds that will in most cases be extremely limited. The upgraded NMR spectrometer is now listed as state-of-the-art instrumentation in external funding applications and will similarly aid in recruitment efforts for excellent graduate students and faculty.

3.3 MULTIPLIER EFFECTS

Using the input/output table constructed by the Bureau of Economic Analysis in the U. S. Department of Commerce and housed in the Department of Economics at LSU, one can estimate the "multiplier" effects that such an infusion of new dollars creates on the Louisiana economy in terms of new revenues, income, and jobs for Louisianians.

The effect of the \$766 million in new revenues generated from Board of Regents Support Fund projects is estimated as follows:*

- * **approximately \$1.567 billion in new revenues to Louisiana firms and organizations;**
- * **approximately \$633.1 million in new income for Louisiana citizens; and**
- * **approximately 27,400 new jobs for Louisianians.**

*These estimates were determined through application of a formula developed by Dr. Loren Scott of LSU-BR, who authored "The Impact on the Louisiana Economy of \$66.5 Million in Outside Research Funding at LSU," January 1990.

4. LEVERAGING BOARD OF REGENTS SUPPORT FUND MONEY, EXPANDING BOARD OF REGENTS SUPPORT FUND OPPORTUNITIES, AND PROMOTING MULTI-INSTITUTIONAL COOPERATION AND COLLABORATION

As early as FY 1988-89, the Board was co-sponsoring research projects with the National Science Foundation (NSF) and supporting the development of scientific research and educational infrastructure in Louisiana under NSF's Experimental Program to Stimulate Competitive Research (EPSCoR). In FY 1991-92, the Board decided to dedicate a portion of the Board of Regents Support Fund monies as matching commitments for two new statewide, multi-institutional initiatives to be submitted in national competitions for Federal funds in areas which coincide with Constitutionally prescribed Board of Regents Support Fund activities. The reasons for, and goals of, this decision were fourfold:

- * To continue and accelerate the leveraging of Federal money with Board of Regents Support Fund investments--as is being accomplished by principal investigators of individually-funded Board of Regents Support Fund projects described in Section 3 of this Plan and Budget;
- * To expand opportunities available under the Board of Regents Support Fund Programs;
- * To reinforce the building of infrastructure that had begun under the traditional Board of Regents Support Fund Programs, which is necessary to enable Louisiana's universities to compete more successfully for Federal research money; and,
- * To promote multi-institutional collaboration and cooperation among Louisiana's colleges and universities.

The FY 1991-92 Board of Regents Support Fund Plan and Budget described the dedication of Board of Regents Support Fund money as State matching commitments for these multi-year Federal grant proposals then in preparation (FY 1990-91) under the auspices of the Board of Regents. Each proposal required significant State matching money as a condition of funding.

4.1 FUNDED PROPOSALS: JOINT BOARD OF REGENTS SUPPORT FUND/FEDERAL PROGRAMS WITH STATEWIDE IMPACT

The Board was successful in the competitions described above. These efforts served to solidify a partnership between the Support Fund and the National Science Foundation. This partnership has grown over the years to include relationships with the National Aeronautics and Space Administration, the Department of Defense, the Department of Energy, the Department of Commerce, the Environmental Protection Agency, and the National Institutes of Health. Support Fund obligations for these federal grants appear below in chart form. (See Chart I.) A more detailed description of each grant, including the federal funds received from each, can be found in Attachment I.

CHART I
FEDERAL MATCHING GRANTS PROGRAM
FOR JOINT STATE AND FEDERAL PROJECTS WITH SYSTEMIC AND/OR STATEWIDE IMPACT
BY TYPES OF SUPPORT FUND ACTIVITY, MONETARY COMMITMENT, AND DURATION

FEDERAL GRANT	TYPE OF SUPPORT FUND ACTIVITY	AMOUNT OF ANNUAL MATCHING COMMITMENT	AMOUNT OF TOTAL MATCHING COMMITMENT	FYs IN WHICH COMMITMENT IS APPLICABLE	TOTAL LENGTH OF COMMITMENT IN YEARS
NSF/EPSCoR* LaSER Implementation	TR ENH: 30% R&D: 70%	Yr. 1 \$685,043 Yr. 2 440,202 Yr. 3 191,791	\$1,317,036	1988-89 through 1990-91	3*
NSF/SI LaSIP	TR ENH, UG ENH, PLEx: Prorata	\$1 Million	\$5 Million	1991-92 through 1995-96	5
NSF/EPSCoR LaSER Advanced Development Program	TR ENH: 1/3 GR FEL: 1/3** ITRS: 1/3	\$1.2 Million	\$4.8 Million	1991-92 through 1994-95	4
NASA/ LaSPACE	RCS: 60% GR FEL: 40%**	\$100,000	\$500,000	1991-92 through 1995-96	5
NSF/SI LaCEPT	TR ENH: 100%	\$500,000	\$2.5 Million	1992-93 through 1996-97	5
DOE/EPSCoR Implementation	TR ENH: 60% RCS: 40%	\$519,795	\$1,039,590	1993-94 through 1994-95	2
DOD/EPSCoR Planning	TR ENH: 100%	\$ 25,000	\$ 25,000	1993-94	1
NASA/EPSCoR Implementation	TR ENH: 50% RCS: 25% GR FEL: 25%**	\$500,000	\$1.5 Million	1994-95 through 1996-97	3
1993 DEPSCoR Implementation	TR ENH: 50% RCS: 25% GR FEL: 25%**	Yr. 1 \$166,666 Yr. 2 166,666 Yr. 3 166,667	\$500,000	1994-95 through 1996-97	3
NSF/SI Teaching Scholars	TR ENH: 100%	\$ 50,000	\$250,000	1994-95 through 1998-99	5
NSF/EPSCoR LaSER Systemic Initiatives	TR ENH: 60% UG ENH: 10% R&D: 20% GR FEL: 10%**	\$1 Million	\$3 Million	1995-96 through 1997-98	3
DOE/EPSCoR Implementation Renewal	TR ENH: 10% R&D: 70% GR FEL: 20%**	\$800,000	\$3.2 Million	1995-96 through 1998-99	4
NSF/SI LAMP	TR ENH: 100%	Yr. 1 \$200,000 Yrs.2-5 \$500,000	\$2.2 Million	1995-96 through 1999-2000	5
NASA LaSPACE Renewal	RCS: 50% GR FEL: 50%**	\$100,000	\$400,000	1996-97 through 1999-2000	4
1995 DEPSCoR Implementation	TR ENH: 50% R&D: 25% GR FEL: 25%**	Yr. 1 \$551,439 Yr. 2 311,740 Yr. 3 311,972	\$1,175,151	1996-97 through 1998-99	3
NSF/SI LaSIP Renewal	TR ENH: 100%	\$1 Million	\$5 Million	1996-97 through 2000-01	5
NASA/EPSCoR Implementation Renewal	TR ENH: 50% RCS: 25% GR FEL: 25%**	\$500,000	\$1 Million	1997-98 through 1998-99	2

CHART I (CONTINUED)

FEDERAL GRANT	TYPE OF SUPPORT FUND ACTIVITY	AMOUNT OF ANNUAL MATCHING COMMITMENT	TOTAL MATCHING COMMITMENT	FYs IN WHICH COMMITMENT IS APPLICABLE	TOTAL LENGTH OF COMMITMENT IN YEARS
NSF/SI Delta Rural SI	TR ENH: 100%	\$200,000	\$1 Million	1997-98 through 2001-02	5
LaCEPT Supplemental Award	TR ENH: 100%	\$100,000	\$300,000	1998-99 through 2000-01	3
1997 DEPSCoR Implementation	TR ENH: 50% R&D: 25% GR FEL: 25%**	\$250,000	\$750,000	1997-98 through 1999-2000	3
NSF/EPSCoR New Cooperative Agreement	TR ENH: 75% R&D: 25%	\$1 Million	\$3 Million	1998-99 through 2000-01	3
1999 DEPSCoR Implementation	TR ENH: 100%	Yr. 1 \$65,998 Yr. 2 61,900 Yr. 3 61,900	\$189,798	1999-2000 through 2001-02	3
EPSCoT	TR ENH: 100%	\$300,000	\$300,000	1999-2000	1.5
NASA/EPSCoR Continuation Funding	TR ENH: 100%	\$250,000	\$250,000	1999-2000	1
NASA/EPSCoR Preparation Grant	TR ENH: 100%	\$100,000	\$100,000	1999-2000	1
NASA LaSPACE Continuation	TR ENH: 100%	\$200,000	\$1,000,000	2000-01 through 2004-05	5
EPA/EPSCoR 2000	TR ENH: 100%	Yr. 1 \$255,261 Yr. 2 244,739	\$500,000	1999-2000 through 2000-01	2
LAMP Phase II	TR ENH: 100%	\$500,000	\$2.5 Million	2000-01 through 2004-05	5
NSF/EPSCoR Research Infrastructure Improvement	TR ENH: 100%	\$1 Million	\$3 Million	2001-02 through 2003-04	3
NASA/EPSCoR 2000	TR ENH: 100%	\$700,000	\$2,100,000	2001-02 through 2003-04	3
EPA/EPSCoR 2001	TR ENH: 100%	Yr. 1 \$250,000 Yr. 2 244,542	\$494,542	2002-03 through 2003-04	2
NSF/EPSCoR Research Infrastructure Improvement II (pending)	TR ENH: 100%	\$1 Million	\$3 Million	2003-04 through 2005-06	3
DOE/EPSCoR Implementation 2004 (pending)	TR ENH: 100%	\$400,000	\$1,200,000	2004-05 through 2006-07	3
NASA/EPSCoR 2004 (pending)	TR ENH: 100%	\$700,000	\$2,100,000	2004-05 through 2006-07	3

*The 13 research projects that were a part of the first NSF/EPSCoR award received Board of Regents Support Fund money for two years prior to receiving NSF support in January of 1989 (FY 1988-89), for a total of five years and \$3,374,355 in Board of Regents Support Fund money. This chart reflects only years three through five of Board of Regents Support Fund money (or \$1,317,036), since only that period of State support that coincides with Federal Support can be counted as part of the State's matching commitment. (See Section 4.1.1.)

** Because of the nature of the Graduate Fellows Program, money for this component must be committed in the fiscal year prior to expenditure. For this reason, the first year's Graduate Fellows portion of matching funds committed to a particular project was usually actually charged to Enhancement or R&D, or prorated between the two program components. (Chartpb.02 C:JW and 04-05P/B)

The Board's decision to augment the Support Fund by using a part of it to pursue federal matching grants opportunities has borne significant fruit. It has enabled the State to progress from a point in 1985-86 at which it could not receive even minimal support from NSF for research collaborations to the current situation, which finds Louisiana among the elite of EPSCoR states in terms of successful research-related activities. The current pending effort aimed at continuing this successful trend is described below.

4.2 PENDING PROPOSALS: JOINT BOARD OF REGENTS SUPPORT FUND/ FEDERAL PROGRAMS WITH STATEWIDE IMPACT

National Science Foundation (NSF) EPSCoR

Initiated by the National Science Foundation (NSF), EPSCoR is designed to assist researchers and institutions in states that have historically received lesser amounts of Federal R&D funding to become more competitive for federal research funds.

Current and Prior Awards:

Louisiana has participated in the EPSCoR program since 1985, when the Board of Regents received a NSF/EPSCoR Planning Grant. In 1989, Louisiana was successful in competing for the first of a series of five NSF/EPSCoR implementation awards, with a total federal obligation of over \$23.6 million, matched by cost sharing amounting to \$15.1 million from the Board of Regents Support Fund.

The current EPSCoR Research Infrastructure Improvement project was awarded funding in June, 2001.

Duration:	3 years
Participants:	LSUHSC-NO, Louisiana Tech, UNO, Grambling, LSU-BR, SU-BR, Tulane, UL-Monroe, Xavier
NSF Award:	\$ 9,000,000
Support Fund Match:	\$ 3,000,000
Institutional Cost Share:	\$ <u>3,989,452</u>
Total Project:	\$15,989,452

This project supports a major research effort entitled "Micro/Nano Technologies for Advanced Physical, Chemical, and Biological Sensors" which is a joint effort of teams of researchers at the institutions listed above. In addition to the consortium, the NSF/EPSCoR award supports several smaller-scale infrastructure-building programs and also provides funding for staffing the EPSCoR office at the Board of Regents, which administers and coordinates the State's EPSCoR efforts.

Pending Proposal:

A statewide EPSCoR Research Infrastructure Improvement (RII) proposal was submitted on July 17, 2003. The research centerpiece of the proposal is entitled "Center for Biological Modular Microsystems," a consortium headed by Louisiana State University - Baton Rouge, with participation of faculty at LSU Health Sciences Center - New Orleans, Tulane University Health Sciences Center, and Xavier University. As in the current NSF/EPSCoR award, this award will support not only the research consortium, but also several smaller-scale infrastructure-building programs and provide funding for staffing the EPSCoR office at the Board of Regents.

Duration:	3 years
Major Participants:	LSU-BR, LSUHSC-NO, TUHSC, Xavier
NSF Award:	\$9,000,000
Support Fund Match:	\$3,000,000
Institutional Cost Share:	\$1,500,000

U.S. Department of Energy (DOE) EPSCoR

DOE/EPSCoR supports basic research in EPSCoR states spanning the entire range of research that pertains to the scope and mission of DOE, including materials science, chemical science, biological and environmental science, high energy and nuclear physics, fusion energy science, advanced computer science, fossil energy science, and energy efficiency and renewable energy science. This support is provided through statewide implementation grants.

Prior Award:

Louisiana was awarded a DOE/EPSCoR Implementation grant in 1993, which continued until 2000. Three research cluster projects, a teacher education project, and a human resources development project were supported, involving 11 institutions in the State. The total federal obligation amounted to \$4,612,933, matched by cost sharing of \$4,239,590 from the Board of Regents Support Fund.

Pending Proposal:

Louisiana was allowed to submit two proposals, only one of which can receive funding:

Proposal #1 Title:	Ubiquitous Computing and Monitoring System (UcoMS) for Discovery and Management of Energy Resources
Duration:	3 years
Major Participants:	UL-Lafayette, LSU-BR, Southern University-BR
DOE Funding:	\$2,250,000
Support Fund Match:	\$1,200,000
Institutional Cost Share:	\$1,552,500

Proposal #2 Title:	Chemical Characterization and Ecotoxicological Influence of Particle-Associated, Metal-Organic Mixtures: An Interdisciplinary Study
Duration:	3 years
Major Participants:	LSU-BR, Center for Advanced Microstructures and Devices (CAMD)
DOE Funding:	\$2,250,000
Support Fund Match:	\$1,200,000
Institutional Cost Share:	\$1,735,795

The proposals were submitted to DOE on September 23, 2003. The results of this competition will not be known until sometime in 2004.

National Aeronautics and Space Administration (NASA) EPSCoR

NASA/EPSCoR seeks to improve the infrastructure for aerospace-related research and education in states of modest research infrastructure. The NASA/EPSCoR research projects are closely related to one of NASA's five strategic enterprises: Aeronautics, Space Flight, Earth Science, Space Science, and Education. EPSCoR investigators collaborate frequently with NASA's field installations and program offices.

Current and Prior Awards:

Louisiana has participated in the NASA/EPSCoR program since 1994, when the Board of Regents received the first in a series of three awards, with a total federal obligation of \$5,960,000, matched by cost sharing of \$4,950,000 from the Board of Regents Support Fund.

The current NASA/EPSCoR 2000 project was awarded funding in August 2001.

Duration:	3 years
Major Participants:	LSU-BR, LUMCON, Tulane, UNO, Dillard, Xavier
NASA Award:	\$2,099,514
Support Fund Match:	\$2,100,000
Institutional Cost Share:	\$1,516,562
Total Project:	\$5,716,076

This project supports three research clusters investigating a wide range of topics, including laser deposition of hard materials onto substrates, aircraft control systems, and an investigation into the optical properties of coastal waters in the Gulf of Mexico. In addition to the consortium, the NASA/EPSCoR award supports several smaller-scale infrastructure-building programs to assist faculty in becoming more competitive for federal research funding.

Pending Proposal:

At the time this plan and budget was prepared, NASA had not yet issued a request for proposals (RFP) for the next implementation award cycle. If Congress continues funding of the NASA/EPSCoR program at historical levels, it is expected that the RFP issued in early 2004 will be similar to prior solicitations. The following figures are based on that assumption:

Duration:	3 years
Major Participants:	To be determined
NASA Award:	\$2,100,000 (Estimated)
Support Fund Match:	\$2,100,000
Institutional Cost Share:	To be determined

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The institution(s) that will participate in the research component will be determined by a statewide competitive process.

It is important to note that all Federal/State cooperative endeavors expand the opportunities and increase the amount of funding available under the traditional Board of Regents Support Fund Program components. Depending upon the number of such endeavors funded in a given fiscal year, the additional amount has ranged from about \$2.6 million to about \$8 million per year.

4.3 SPECIAL EFFORTS TO PROMOTE THE SUBMISSION OF MULTI-DISCIPLINARY, MULTI-INSTITUTIONAL PROPOSALS

The Board has long recognized the potential of multi-disciplinary and/or multi-institutional projects to enhance academic quality and promote economic development, as well as to make the most prudent use of scarce State resources. Accordingly, the Board has encouraged these kinds of proposals since the inception of the Board of Regents Support Fund, not only in the joint Federal/State efforts described in Sections 4.1 and 4.2 of this Plan and Budget, but also in the proposals submitted under the traditional Board of Regents Support Fund Program

components. The best known manifestation of the Board's support of proposals of this type was an \$800,000 award to fund the Louisiana Academic Library Network (LaLINC) proposal, which has computerized databases and linked academic libraries throughout the State.

To further emphasize its belief in the potential of multi-disciplinary, multi-campus efforts to achieve Board of Regents Support Fund goals and promote the best interests of the State, in its most recent solicitation for proposals, as well as in the 1993 and 1999 revisions of the Strategic Plan, the Board specifically encouraged the submission of collaborative efforts which would provide statewide benefits. Beginning with its FY 2000-01 budget, and continuing in FY 2004-05, the Board has set aside funds from the Traditional Enhancement program each year for the funding of these types of projects. The Board reaffirms the eligibility and encourages the submission of multi-disciplinary, multi-institutional proposals in all Board of Regents Support Fund Program components for FY 2004-2005. Consistent with the increased emphasis being placed on interdisciplinary research throughout the academic community and the increase of quality proposals submitted in this category, the Board has increased the funds available for awards in this category to \$950,000 in the plan and budget for FY 2004-05. Any unexpended multi-disciplinary money will revert to discipline-based Traditional Enhancement. (See section 5 below.)

5. BOARD OF REGENTS SUPPORT FUND PROGRAM COMPONENTS

5.1 BUDGETARY CONTINGENCIES

As indicated in Section 1.1, the Treasurer's Office has projected that \$24 million will be available in FY 2004-2005 for higher education from the Support Fund. The \$1,083,621 from the State General Fund or the Reserve Fund and the \$6, 420,560 obtained by application of the Board's Policy Relative to the Annual Projection of Plan and Budget Funds Available, added to the projected \$24 million from the Trust Fund, create a total FY 2004-2005 Support Fund budget for higher education of \$31,504,181. The following budgetary allocations for each of the four major Board of Regents Support Fund Program components are calculated using this figure.

If Board of Regents Support Fund money for higher education is greater than the \$31,504,181 projected, overages shall be returned to the Traditional Enhancement Program until its allocation reaches \$10 million. Any amount thereafter shall be returned to the Traditional and Undergraduate components on a pro-rata basis. Reductions in the budgets for the four major Board of Regents Support Fund Program components, as set forth in Sections 5.2 through 5.5 of this document, could be required if: (a) higher education's portion of Trust Fund interest earnings and/or royalty income for FY 2004-2005 is less than the amount projected to be available by the Treasurer's Office; and/or (b) less than \$1,083,621 is available for expenditure from the State General Fund or the Reserve Fund. In the event that reductions are necessary, they are to be made on a pro-rata basis among the Traditional Enhancement, Undergraduate Enhancement, and Research and Development program components.

5.2 ENDOWED CHAIRS FOR EMINENT SCHOLARS - \$3,220,000

The funding of an endowed chair requires that the institution secure at least \$600,000 in private funds, to be matched by \$400,000 from the Support Fund, thus establishing an endowment valued at a minimum of \$1 million. In each of the first three years of operation, \$2 million was dedicated to the Endowed Chairs Program.

In FY 1989-90 (the fourth year of operation), primarily due to the increased number of requests, but also because a one-year windfall of approximately \$5 million was available, the Board increased the amount of funds available for endowed chairs to \$3.2 million. As of December, 1989, however, the Board had already endowed eight

chairs, thereby depleting the \$3.2 million budgeted for this Program for FY 1989-90. At the same time, at least four additional requests for matching funds to establish endowed chairs were pending.

Notwithstanding the increased demand for matching funds to endow chairs, in its FY 1989-90 Board of Regents Support Fund budgetary deliberations for the FY 1990-91 Plan and Budget the Board was unable to increase the FY 1990-91 budget for the Endowed Chairs Program, primarily because of the need to identify Board of Regents Support Fund money to fund the (then) newly-created Endowed Professorships Program. As a result, by October of 1990 half of the \$3.2 million budget dedicated for Endowed Chairs in FY 1990-91 had been awarded to complete the endowments for the four chairs applied for, but unfunded, in FY 1989-90.

Recognizing the critical importance of the Endowed Chairs Program in attracting and retaining eminent faculty and in the immediate leveraging of Support Fund dollars, and responding to the increased demand from universities for matching funds to endow chairs and the growing backlog of requests, in its FY 1990-91 deliberations the Board decided to allocate a minimum of \$3.2 million in FY 1991-92 to endow eight chairs and to request a special State appropriation for matching funds to endow at least ten additional chairs. The Board's contingency plan, if the request were denied, was to provide in its FY 1991-92 Plan and Budget an additional \$1.6 million (for a total of \$4.8M) to endow at least four more chairs above and beyond the eight chairs for which funds had already been provided. This increase was to be accommodated by taking 75% of the amount required from the Enhancement Program and the remaining 25% from the R & D Program. Because the special appropriation was not forthcoming, the Board ultimately enacted its contingency plan, thus endowing twelve chairs in FY 1991-92.

In FY 1990-91 the Board adopted investment policies to serve as guidelines for the manner in which campuses could invest Board of Regents Support Fund money awarded for chairs and professorships. These guidelines were subsequently revised in 1992, 1998, and 2001. Also in FY 1990-91, the Board acted to ensure that the Endowed Chairs Program would comply with the Constitutional mandate that all Board of Regents Support Fund programs promote economic development in the State by changing its "first-come, first-served" policy to a competitive one. This competitive policy--called "General Guidelines* to Competitively Award Board of Regents Support Fund Matching Funds to Endow Chairs"--utilizes both the economic development and academic enhancement potential of a proposed chair as criteria for determining those chairs for which Board of Regents Support Fund matching funds will be provided.

*The "General Guidelines" have been revised several times since their initial adoption in FY 1990-91 and are available in the Board's office. The first set of revisions was adopted 7/23/92 to provide for restricted bequests, as well as to require that private matching funds be in hand when proposals are submitted. The second set of revisions was adopted 1/7/93 to refine the language relative to bequests and to eliminate one of the three required affidavits. The third set of revisions was adopted at two separate Board meetings (12/7/95 and 6/22/96). Significant changes include: (a) the assignment of evaluation points for proposals submitted under the Competitive Endowed Chairs Program, to ensure that a plan has been presented to recruit minority and women scholars in those areas historically under-represented at the proposing university; (b) adding the requirement that a national search be conducted for the holder of the chair and including on the search committee a scholar in the field of the chair with a non-Regents- and non-private-donor affiliation; and, finally, (c) permitting proposing universities to endow chairs at the \$2 million level, provided that the 60/40 ratio between the private/Board of Regents Support Fund money is maintained, that only multiples of \$400,000 in Board of Regents Support Fund money are requested, and that any requests for \$2 million be counted toward the upper limit of 3 chairs that any public university, or all private universities, may be awarded in one year under the competitive program. These revisions were incorporated into Request for Proposals #97-09, "Competitive and Restricted Bequests Endowed Chairs Programs," issued in June of 1997. The Board reviewed the Endowed Chairs Program on a comprehensive basis in the summer and fall of 1998, resulting in the adoption of the Board of Regents Endowed Chairs Policy in March, 1999. The Policy is available in the Board's office.

Simultaneous with the adoption of the "General Guidelines," the Board adopted the "Special FY 1990-91 Guidelines to Competitively Award Board of Regents Support Fund Matching Funds to Endow Chairs"* to eliminate, on a competitive basis, the backlog of eighteen requests for which private matching funds had already been secured. The Board also decided that the "General Guidelines" would not become effective until the backlog of requests had been accommodated under the "Special Guidelines." For this reason, the Board made the following decisions: (1) to award the remaining \$1.6 million in the FY 1990-91 Endowed Chairs Program budget to the four top-ranked proposals among the backlog of 18 requests for matching funds to endow chairs; (2) to award the \$4.8 million in the FY 1991-92 Plan and Budget to proposals ranked fifth through sixteenth; and (3) to set aside sufficient funds (\$800,000) from the FY 1992-93 Board of Regents Support Fund Plan and Budget to fund the remaining two proposals.

Having removed most of the backlog of applications through increased expenditures in FY 1991-92 and established guidelines that emphasize a proposed chair's contribution to economic development, the Board decided again in FY 1992-93 to allocate up to \$4.8 million for this component. This amount accommodated the funding of the final two chairs approved under the "Special Guidelines" competition, as well as ten of the top-ranked proposals that were submitted in the FY 1992-93 competition.

Because the backlog of requests for matching funds to endow chairs grew again during FY 1992-93, in its deliberations about the FY 1993-94 Plan and Budget the Board decided: (a) to amend the FY 1992-93 budget, contingent on Legislative approval, to provide for 13 chairs, instead of the 12 originally allocated; and (b) to increase the allocation from \$4.8 million to \$6 million for FY 1993-94, an amount sufficient to complete the endowments for 15 chairs.

The Board also determined that an immediate assessment of the academic and economic impact of the Endowed Chairs Program on academic departments and programs should be conducted, in light of the ever increasing demand for funds in this Program, as well as the rate of increase in funds dedicated to this Program compared to the three other major Board of Regents Support Fund Programs. A distinguished panel of out-of-state consultants rendered this assessment in June of 1993. (A copy of the panel's report is on file in the Board's office.)

The allocation for new Endowed Chairs grew at a faster rate than that for new projects submitted under other Board of Regents Support Fund program components. This fact--in addition to declining interest rates which diminished the short-term impact of money spent to endow chairs at a time when institutions throughout the State were facing needs both immediate and acute while the allocations for all other Board of Regents Support Fund Program components were necessarily decreasing, as well as an anticipated decline in the number of requests--led the Board to decide that it must return to the FY 1992-93 budgetary allocation level of \$4.8 million for this Program in FYs 1994-95 and 1995-96.

These factors also influenced the Board's decision to reduce the amount available for endowing new chairs in FY 1996-97 to \$2.4 million, although the greatest determinant was the small number of requests (seven) for FY 1995-96 matching funds for chairs that had been received as of the November 15, 1995, deadline. The number of requests for matching funds to endow chairs submitted by the November 15, 1996, deadline for FY 1996-97 funds, however, increased from 7 to 17, requesting \$6.8 million, or \$4.4 million more than the \$2.4 million budgeted for this component.

*Copies of the "Special Guidelines" are available in the Board's office.

For this reason, the Board was reluctant to maintain for FY 1997-98 the \$2.4 million steady-state budget from the previous year, despite the fact that the Endowed Chairs budget--along with the Endowed Professorships budget--were the only two Board of Regents Support Fund Program components not initially targeted for a 25% reduction. Only because of the anticipated special appropriation from surplus FY 1996-97 State General Funds--a portion of which, coupled with the \$2.4 million budgeted for FY 1996-97 provided the necessary matching funds to complete the endowments for all requested chairs--did the Board feel comfortable in ultimately deciding on the \$3.2 million budget level for Endowed Chairs in FY 1997-98. Anticipating a similar State General Fund appropriation in FY 1997-98, the Board maintained the same budget level for Endowed Chairs in FY 1998-99. The \$5 million special appropriation from the State General Fund, coupled with the Support Fund allocation, enabled the funding of 22 new chairs in FY 1997-98. Similar special appropriations, combined with the Support Fund allocation, allowed the funding of 22 \$1 million and 3 \$2 million chairs during FY 1998-99. Despite the lack of a special allocation, the Board supplemented its \$3.2 million Support Fund allocation with \$2.4 million from the Reserve Fund to award eight \$1 million and 3 \$2 million chairs in FY 1999-2000. A special appropriation from the State General Fund was used in combination with the \$3.2 million from the Support Fund to fund 34 new chairs (six of which were at the \$2 million level) in FY 2000-01. Thus, entering FY 2001-02, the backlog of applications for the Program had been completely eliminated. In FY 2001-02, seven endowed chairs (three of which were at the \$2 million level) were funded with the Support Fund allocation of \$3.2 million and \$800,000 unexpended from the 2001 special legislative appropriation. In FY 2002-03, ten endowed chairs (one of which was at the \$2 million level) were funded with the Support Fund allocation of \$3.6 million (\$400,000 of which came from the Reserve Fund to fund two chairs at the inverse ratio--see below) and \$1.2 million from the 2003 special legislative appropriation. This base funding level of \$3.2 million was maintained in the FY 2003-04 plan and budget, and remains the same for FY 2004-05. Consistent with Act 698 of 2001, the total requested allocation of \$3,220,000 includes \$20,000 for consultant costs.

The Board continues to seek broader participation in the Endowed Chairs for Eminent Scholars program. Over the past few years, several mechanisms have been explored to further this goal. **In FY 2001-02 the Board decided to use money from the Reserve Fund to enable Louisiana public four-year campuses to attain a minimum of three Endowed Chairs for Eminent Scholars.** The plan will allow affected campuses to utilize an inverse ratio (\$600K Support Fund:\$400K private funds) until each has attained three chairs. Institutions are required to participate in activities designed to increase their fund-raising capacity as a condition of eligibility. A mandatory workshop in developing fund-raising capacity for all participants was conducted in April, 2001. The consultants used, both of whom have extensive and distinguished records in fund-raising, continued to work with the institutions until June, 2001, at which time each institution was required to submit an individualized fund-raising plan.

Participating campuses must raise the required private funds and submit a proposal which competes successfully **without preferential treatment** in the regular Endowed Chairs for Eminent Scholars competition. All monies unclaimed after five years will revert to the regular Endowed Chairs for Eminent Scholars program. Through August, 2003 Louisiana State University - Shreveport and Northwestern State University have each received one chair under the auspices of this special incentive program. Chart II below indicates the campuses eligible for participation in this effort, as well as the number of chairs each had received at the time of its adoption and the amount of money which will be required from the Reserve Fund in the event that full subscription is attained.

CHART II

SPECIAL PROVISIONS FOR CAMPUSES WITH FEWER THAN THREE EMINENT SCHOLAR CHAIRS		
INSTITUTION	NUMBER OF CHAIRS AWARDED	REQUIRED SUPPLEMENT FROM UNSPENT MONIES
Grambling State University	1	\$400,000
Louisiana State University - Alexandria	0	\$600,000
Louisiana State University-Shreveport	1	\$400,000
McNeese State University	2	\$200,000
Northwestern State University	0	\$600,000
Southeastern Louisiana University	2	\$200,000
Southern University-Baton Rouge	1	\$400,000
Southern University-New Orleans	0	\$600,000
		\$3,400,000
Inverse Funding Ratio	\$400K (private funds) \$600K (BoRSF)	
Sources of Support per Chair	Regular Budget: \$400K Unspent Monies: \$200K	
Unspent Slots to Fill	17 (x \$200K)	
Cost of Program	\$3,400,000	
Longevity of Program	5 years	
Criteria for Awards	Regular Competitive Process	

5.3 RECRUITMENT OF SUPERIOR GRADUATE STUDENTS - \$3,377,000

Timely implementation of the Graduate Fellows Program requires the following schedule: year one, awarding the grant; year two, recruiting by awardees of superior graduate students; and year three, disbursing funds committed under the grant. For example, colleges and universities that submitted successful proposals during FY 1986-87 (the first year in which the Board of Regents Support Fund programs were operative) had a full year (AY 1987-88) during which to recruit students who, in turn, enrolled in Louisiana universities' graduate programs for the first time in the fall of 1988 (FY 1988-89).

The \$3,337,000 budgeted for this category for FY 2004-2005, therefore, is for previous obligations, including: (a) \$714,000 for fourth-year funding of graduate fellows who began their course of study in AY 2001-2002; (b) \$863,000 for third-year funding of graduate fellows who began their course of study in AY 2002-2003; (c) \$1,000,000 for funding of second-year graduate fellows who began their course of study in AY 2003-2004; and (d) \$800,000 for funding of graduate fellows who will begin their course of study in AY 2004-2005. First-year funding for new proposals solicited in the current fiscal year (FY 2003-2004) will not be required until FY 2005-06.

To minimize the amount of money committed from future Board of Regents Support Fund budgets for graduate fellowships, in FY 1988-89 the Board placed a cap of \$600,000 per year on new graduate fellowship awards that would be made in FY 1989-90. The Board also provided a mechanism whereby the Graduate Fellows Program could grow as the Support Fund expanded. Accordingly, the amount of Support Fund money for new projects was increased to approximately \$900,000 in FY 1990-91 and to \$1.1 million in FY 1991-92. Because the State was successful in the NASA/LaSPACE and NSF/LaSER grant competitions, each of which contained provisions for graduate fellowships, Support Fund money allocated for new Board of Regents Support Fund graduate fellowships reverted to the \$600,000 level for FY 1992-93.

As stipulated in the Strategic Plan, priority is given to proposals for doctoral study, although master's programs in areas critical to the State's economic development also are encouraged. In its deliberations about the FY 1992-93 Plan and Budget, the Board of Regents reaffirmed its concern about the low proposal submission rate in the Board of Regents Support Fund Graduate Fellows program from masters-level programs of critical importance to the State's economic development. For this reason, the Board decided to renew its commitment to encouraging the submission of proposals that fit this category of eligibility. To continue to provide funding for the many high quality, Ph.D.-level proposals that had traditionally been received, as well as to ensure that funds would be available for the anticipated influx of high quality masters-level proposals in areas critical to the State's economic development, in FY 1991-92, during the deliberations for the FY 1992-93 budget, the Board decided to increase the allocation for new graduate fellowships in FY 1993-94 from \$600,000 to \$1 million.

Notwithstanding the Board's attempts to encourage the submission of high-quality master's-level proposals in areas critical to the State's economic development, a paucity of high-quality proposals was submitted in the FY 1991-92 proposal solicitation. In its FY 1992-93 deliberations about the FY 1993-94 Plan and Budget, the Board took further action to encourage submission of high-quality master's-level proposals--particularly proposals for master's-level teacher stipends in areas important to Louisiana's economic development--by: (1) maintaining for FY 1994-95 the increased funding level (\$1 million) adopted in the previous funding cycle; and (2) setting aside 20% of the annual allocation for the Board of Regents Support Fund Graduate Fellows Program specifically for masters-level proposals for current teachers. Both masters-level and doctoral-level programs are eligible to compete for the remaining 80% of the annual allocation for these funds.

The set-aside program, known as the "Board of Regents Support Fund Graduate Fellowships for Teachers (GFT) Program," underwent its first competitive cycle during FY 1992-93. As a result of that competition, five proposals, providing stipends for 23 teachers, were funded at a level of \$192,600 for FY 1994-95. Similarly, the FY 1993-94 competitive cycle resulted in the funding of two proposals, with stipends for 10 teachers, at a level of \$115,500 for FY 1995-96, while the FY 1994-95 cycle yielded two proposals with 7 stipends, at a level of \$68,000 for FY 1996-97. All three of the proposals submitted in the FY 1995-96 cycle for funding consideration in FY 1997-98, with four stipends, were approved by the Board in the amount of

\$54,000. Three proposals submitted in the FY 1996-97 cycle for funding consideration in FY 1998-99 were approved by the Board in the amount of \$76,000, as was the case in the FY 1997-98 cycle. Two proposals in the amount of \$80,000 were approved in the FY 1998-99 cycle. Four proposals submitted in the FY 1999-2000 cycle for funding consideration in FY 2001-02 were approved by the Board in the amount of \$137,000. Three proposals submitted in the FY 2000-01 cycle for funding consideration in FY 2002-03 were approved by the Board in the amount of \$118,000. One proposal submitted in the FY 2001-02 cycle for funding consideration in FY 2003-04 was approved by the Board in the amount of \$90,000. Two proposals submitted in the FY 2002-2003 cycle for funding consideration in FY 2004-05 were approved by the Board in the amount of \$94,000. Decisions have not yet been made about the proposals submitted in the 2003-04 cycle for funding consideration in FY 2005-06. Since the FY 1994-95 competitive cycle the GFT has been restricted to current teachers pursuing master's-level degrees in the fields of science or mathematics. The continuing need for teachers with advanced training in these fields has led the Board to maintain the emphasis on math and science in the GFT Program. Individuals to whom institutions award graduate fellowships under this Program are required to sign an affidavit committing themselves to teach at least one semester in Louisiana for every semester they receive the fellowship.

In FY 1992-93 the Board reaffirmed its commitment to doctoral programs, as well as masters-level programs of economic importance to the State, by maintaining in the FY 1993-94 Board of Regents Support Fund Plan and Budget the \$1 million budgetary level for FY 1994-95. The Board has continued the \$1 million commitment level for new Graduate Fellows proposals during its deliberations in each year since FY 1993-94 with the exception of the FY 2002-03 competition (for awards to begin in FY 2004-05) when budgetary constraints forced the Board at mid-year to reduce the amount available for first-year awards to \$800,000. For the FY 2003-04 competition for awards to begin in FY 2005-06 the Board has reinstated the \$1 million commitment level for new Graduate Fellows proposals.

This fiscal year the Board of Regents will continue to follow the same procedure for implementation of the Graduate Fellows Program: (1) proposals were solicited during FY 2003-2004; (2) campuses with successful applications will recruit students during AY 2004-2005 and (3) funds will be provided for students during AY 2005-2006. This information is included in the current year's plan to notify the Governor and the Legislature that an amount of approximately \$3.337 million will have been committed from the FY 2005-2006 Support Fund prior to the time that the annual plan and budget are submitted for that year.

In keeping with the conceptual framework to use Support Fund money to enhance all areas of higher education, all disciplines are eligible to compete in the Graduate Fellows Program. Those disciplines accorded a higher priority for Louisiana's economic development are eligible to compete every year. To determine the eligibility of specific disciplines in the Graduate Fellows Program for FY 2004-2005, see Chart III.

CHART III

ELIGIBILITY OF DISCIPLINES* IN THE GRADUATE FELLOWS PROGRAM

GROUP I - ELIGIBLE EVERY YEAR

Biological Sciences
Chemistry
Computer and Information Sciences**
Earth/Environmental Sciences
Engineering A and B
Health/Medical Sciences***
Physics/Astronomy

GROUP II - ELIGIBLE IN FY 1999-2000, 2000-01, 2004-05, 2005-06

Agriculture
Business
Education, including Literacy
Mathematics

Group III - ELIGIBLE IN FY 2001-02, 2002-03, 2003-04

Arts
Humanities
Social Sciences

*The attached listing of those sub-disciplines which are included in these larger groupings is in Attachment II.

**The frequency of eligibility for "Computer and Information Sciences" was increased in the 1993 Strategic Plan to reflect the growing importance of this discipline for the State's economic development and diversification.

***Effective with the Board action of June 22, 1995, the LSU Health Sciences Centers in New Orleans and Shreveport and the Tulane University Medical Center are permitted to submit a maximum of three proposals each when "Health and Medical Sciences" is an eligible category. "Health and Medical Sciences" was made eligible each year in the 1999 revision of the Strategic Plan.

5.4 CAREFULLY DEFINED RESEARCH EFFORTS - \$ 6,707, 181

A total of approximately \$2,825,000 will be required during FY 2004-05 to maintain prior research commitments for multi-year projects in the Board of Regents Support Fund R&D Program.

Considering the multi-year nature of most research projects, the Board has been conservative in recommending an increase in funds dedicated for new research projects in the R & D Program, since an increase in funds to begin new research projects necessitates comparable increases in future years to continue those commitments. Allocations for new awards in the R & D program peaked at approximately \$2.8 million in FY 1990-91. The budget for new R & D projects was reduced in FY 1991-92, in part because of a slight drop in total Support Funds available, but primarily as a result of the matching commitments required for federal grants.

Mainly because R & D projects had been so successful in leveraging other monies and, thereby, in stimulating near-term economic development and diversification, but also because of the exceedingly large number of high quality proposals submitted under the R & D Program, in its deliberations about the FY 1992-93 Plan and Budget the Board decided to increase the budgetary allocation for new research projects to \$2.5 million for FY 1992-93. The Board also decided to increase funding for new R & D projects because of the need to build the research infrastructure in the State, which, in turn, should increase Louisiana's share of federal R & D monies, enhance its national research reputation, and promote long-term economic development. The increased allocation thus restored to the R & D Program most of the cuts necessitated in FY 1991-92. The recommended level for FY 1992-93 was less for the Industrial Ties Research Subprogram (\$1.1 million) than for the Research Competitiveness Subprogram (\$1.4 million) because proposal pressure was less in the former and because research proposals which promote goals similar to those of the ITRS were funded under the partnership grant with NSF. Both subprograms retained the same funding level for FY 1993-94.

Declining interest rates and the resultant lower level of funds projected to be available in FY 1994-95--coupled with the growing number of endowed chair requests and jointly-funded Board of Regents Support Fund/Federal projects containing large research components and requiring significant fiscal commitments--necessitated a reduction in the amount of money that could be devoted to first-year expenditures in the R & D programs. In the RCS, where both the quality and quantity of proposals remained unusually high, the Board dedicated \$1,325,000 for new projects in each year from FY 1994-95 through FY 1998-99. In the ITRS, where the quality of proposals remained high but submission rates were lower, the Board reduced the annual allocation for new projects to \$800,000 in each year from FY 1994-95 to FY 2000-01. The continuing decline in number of proposal submissions likely to result in **near-term** economic development and diversification moved the Board to further reduce the ITRS allocation to \$650,000 in first-year support for FY 2001-02 and FY 2002-03. Drastically reduced estimates of the overall availability of funds from the State Treasurer's Office led the Board to lower the allocation for ITRS to \$600,000 at mid-year during FY 2002-03. The \$650,000 allotment was restored at mid-year of FY2003-04 and remains in force for FY 2004-05.

Because of the quality of proposal submissions in the Research Competitiveness Subprogram and the impact that funding of these has on economic diversification and development efforts, the Board decided to increase the amount dedicated to new projects in the Research Competitiveness Subprogram for FY 1999-2000 through FY 2002-2003 to \$1,500,000 in first-year support. **Overall budgetary constraints forced a reduction in first-year funds available for RCS to \$1.2 million at mid-year of FY 2002-03, a level that also appeared in the Plan and Budget for FY 2003-04. More favorable economic forecasts allowed the Board to restore the FY 2003-04 allocation to \$1.5 million at mid-year. This level is maintained for FY 2004-05.** Thus, including the \$2,825,000 required to maintain previous commitments for multi-year research projects, a total of \$4,975,000 will be dedicated to the RCS and ITRS subprograms in FY 2004-2005.

Since its inception, the Strategic Plan has restricted the number and types of disciplines which are eligible to compete in the R & D Program to those which have the greatest chance of yielding an economic return relatively quickly. Consistent with this conceptual framework, the Board has decided that eligibility to compete in the subprograms of the R & D Program will be limited in the following ways:

5.4.1 Research Competitiveness Subprogram (RCS)

NOTE: The RCS funds basic research to promote long-term economic growth and development.

Disciplines eligible to compete for basic research funds in the RCS are restricted to the sciences and engineering, as defined by the National Science Foundation, agriculture, and health and medical sciences. Most disciplines are eligible on a staggered, two years on-two years off basis; however, three disciplines which are accorded the highest priority for economic development (biological, computer/information, and earth/environmental sciences) are targeted for funding annually. To determine the eligibility of specific disciplines in the RCS for FY 2004-04 see Chart IV.

CHART IV

ELIGIBILITY OF DISCIPLINES* IN THE RESEARCH COMPETITIVENESS SUBPROGRAM

GROUP I - ELIGIBLE EVERY YEAR

Biological Sciences
Computer and Information Sciences
Earth/Environmental Sciences

GROUP II - ELIGIBLE IN FY 1999-2000, 2002-03, 2003-04

Agricultural Sciences
Engineering A (Chemical, Civil, Electrical, etc.)
Mathematics
Physics/Astronomy
Social Sciences

Group III - ELIGIBLE IN FY 2000-01, 2001-02, 2004-05, 2005-06

Chemistry
Health and Medical Sciences
Engineering B (Industrial, Materials, Mechanical, etc.)

*The attached listing of those sub-disciplines which are included in these larger groupings is in Attachment II.

5.4.2 Industrial Ties Research Subprogram (ITRS)

NOTE: The ITRS funds applied research to promote near-term economic growth and diversification.

Eleven target areas considered important for Louisiana's economic development and diversification were identified and summarized in the 1988 Strategic Plan. In FY 1990-91, "Transportation Systems" was added to the other eligible areas for the ITRS. All twelve target areas focused on: (1) spheres of traditional economic strength in Louisiana that should be bolstered; (2) emerging technologies that have potential in Louisiana; and (3) the pervasive issues of human and environmental resources. These target areas continue to be important to the State, and the Louisiana Department of Economic Development will continue to provide, on an annual basis, suggested target areas which it deems of high priority. To ensure that no opportunities with the potential to promote economic development and diversification will be overlooked, however, the 1993 Strategic Plan opened competition in the ITRS to proposals from all research areas. Accordingly, the "Target Areas Eligibility" timetable for the ITRS was discontinued. The 1999 Strategic Plan reaffirmed that posture.

In FY 1989-90, the Board decided that industrial representatives should assist in developing future plans for the Industrial Ties Research Subprogram, as well as in determining ways to promote better linkages between the private sector and Louisiana's institutions of higher education. The Board has attempted to coordinate joint university and private-sector initiatives with recommendations of the Governor's Economic Development Cabinet, representatives from the Louisiana Department of Economic Development, and/or other appropriate entities, particularly the Industrial Targets Advisory Committee. Systematic efforts to coordinate are continuing with the Louisiana Department of Economic Development. These efforts will be further discussed in section 5.4.4 below.

5.4.3 Research Subprogram for the Arts, Social Sciences, and Humanities

In keeping with the Constitutional mandate to both promote economic development and improve the quality of higher education in Louisiana, the Board has to date focused the R & D program almost exclusively on the sciences, mathematics, and engineering. That said, the Board remains cognizant of its responsibility, elucidated in each Strategic Plan since 1988, to improve the quality of education "at all levels in all disciplines." Accordingly, the Board has long recognized the need for greater opportunities for the arts, social sciences, and humanities in Support Fund programs. The need for an R & D subprogram with emphasis on the arts, social sciences, and humanities was documented during the comprehensive review of the R & D program in 2002, and the idea has received the enthusiastic support of the Support Fund Planning and Advisory Committees. At its meeting of January 22, 2004, the Board approved \$500,000 during FY 2004-05 for the establishment of a pilot subprogram to be modeled after the internationally famous Guggenheim Foundation Program. The \$500,000 will enable the Board to fund 12 to 15 projects statewide, to be accompanied in each case by the provision of a paid sabbatical for the faculty awardees from affected institutions. This subprogram will facilitate, for example, the completion of important manuscripts for publication, and/or will provide funding and recognition for the efforts of artists, playwrights (but not actors), choreographers (but not dancers), composers (but not musicians), etc. Using a competitive, peer-review process, awards will be made to faculty members with established records of high quality scholarly/artistic production who are poised to complete substantial new projects within a short span of time. The subprogram will allow the State to profit from its rich cultural traditions and to make the rest of the nation aware (and envious) of Louisiana expertise and creativity in these disciplines.

5.4.4 Other Research and Development Approaches

An amount of \$1,232,181 shall be devoted during FY 2004-05 to either or both of the following options: (a) revision/enlargement of the current Industrial Ties Research Subprogram (ITRS); (b) establishment of a matching funds program to provide postdoctoral fellows for the furtherance of research and development activities at institutions across the State. The Board will make the ultimate determination relative to the expenditure of funds associated with these options. A brief discussion of each option follows.

Allocations for the extant ITRS have steadily dropped over recent years, from a high of \$1.1 million in first-year funds during FY 1992-93 to the current first-year level of \$650,000. Because the pattern of proposal submissions over the years was characterized by diminishing numbers of high quality proposals—proposals which contained both meritorious scientific rigor and significant potential for near-term development/diversification of the Louisiana economy—the Board courageously acted to reduce the allocation for this component. Mindful of the need and the duty to promote economic development through the improvement of higher education, and particularly of the need to bring together segments of the higher education community with Louisiana industrial partners to drive the State's economic engine, the Board has pursued over the past several years discussions with the Louisiana Department of Economic Development. From these discussions a suggestion has emerged to allocate significant new funds to ITRS in order to encourage large-scale academic/industrial partnerships. During the spring of 2004, in time for the issuance of requests for proposals by late summer, a final decision will be reached as to whether and to what extent the current ITRS will be merged/revised/subsumed into this ongoing effort.

There are currently just over 300 postdoctoral fellows employed statewide in Louisiana. The great majority of these are located at Louisiana State University-Baton Rouge, Tulane University, and their respective health science centers. Many authorities believe that the higher education community's contribution to economic development can be furthered by an increase in postdoctoral fellows. The Board and its staff have concluded that it would be feasible to provide partial support for up to 30 fellows statewide per year on a matching funds basis, with a cost to the Support Fund in the initial year of \$600,000.

Thus, the total R & D allocation of \$6,707,181 consists of \$2,825,000 for prior commitments; \$2,150,000 for first-year spending levels for the extant R & D subprograms; \$500,000 for the research subprogram for the arts, social sciences, and humanities; and \$1,232,181 for either or both of the revised ITRS or postdoctoral options.

5.5 ENHANCEMENT OF THE QUALITY OF DEPARTMENTS OR UNITS - \$17,400,000

NOTE: Matching commitments for all Federal Matching Grants Program proposals for which Federal approval has not been received as the date of submission of the affected Plan and Budget will be accommodated from the Enhancement Program. The Board has elected to operate in this manner because of (a) the uncertainty of a proposal's potential success in the national competition for Federal funds, (b) the Board's policy that any unexpended money in the Chairs, Graduate Fellows, and/or R&D program components annually revert to Traditional Enhancement for new awards in that component, (c) the difficulty and uncertainty surrounding moving Board of Regents Support Fund money from one Board of Regents Support Fund Program component budget to another, once budgeted in the prior year's appropriation process, and (d) the fact that all projects of this nature contain elements, in varying degrees, that enhance academic departments and units at colleges and universities.

After weighing interrelations among the four components of the Support Fund, the Board has concluded that enhancement of the instructional and research infrastructure of departments and units remains a fundamental need, essential to accomplishing the goals of the other three Program components. For this reason, the Board shall dedicate \$17,400,000 to the Enhancement Program in FY 2004-05. Thus, approximately 57% of the total funds available for awards in FY 2004-05 (\$30,704,181) have been dedicated to this component, reflecting the Board's strong commitment to the program under which the majority of the State's colleges and universities are most competitive and successful.

Approximately \$2,000,000 of the total \$17,400,000 budgeted for Enhancement awards in FY 2004-2005 will be required to honor prior commitments for multi-year projects. Of this amount, \$300,000 has been budgeted for potential second-year commitments for two-year proposals to be approved in FY 2003-04 under the Traditional and/or Undergraduate Enhancement programs. Traditional and Undergraduate Enhancement proposals are currently undergoing competitive external review and the Board will make funding decisions about them in April or May of 2004. The remaining \$1,700,000 has been promised as the State's matching commitments under three current jointly-funded Board of Regents Support Fund/Federal Matching Grants, including: (a) \$500,000 for the fifth-year of the five-year Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) Phase II project; (b) \$200,000 for the fifth year of the NASA/EPSCoR LaSPACE continuation project; and (c) \$1,000,000 for the second year of the NSF/EPSCoR New Research Infrastructure Improvement project.

An additional \$1,100,000 has been earmarked for two prospective jointly-funded Board of Regents Support Fund/Federal Matching Grants to begin in FY 2004-05, including (a) \$400,000 for the DOE/EPSCoR project (pending) and (b) \$700,000 for the NASA project (pending).*

After deducting these projected commitments for two-year enhancement projects and the commitments and projected commitments for Federal matching opportunities, approximately \$14,300,000 will be available for new enhancement projects submitted for funding consideration in FY 2004-05. Increased budgetary allocations to the Enhancement Programs are particularly important, because: (a) the Enhancement Programs build the infrastructure at universities which is critical to the success of the other three Support Fund programs; and (b) not only are the Enhancement Programs the ones in which ALL universities are eligible to compete, they are also the ones under which the majority of campuses most successfully compete. Significantly, 68% of the total funds available for new awards will be dedicated to the Enhancement Program. (See Chart VI, "Overview of FY 2004-05 Board of Regents Support Fund Budgetary Allocations by Program Component" in Section 6 of this Plan and Budget.)

5.5.1 Undergraduate Enhancement Program

Some colleges and universities without sizeable graduate programs have not been aggressive in submitting enhancement proposals. To continue to affirm the principle that improvement of infrastructure is essential at all academic levels, the Board shall dedicate \$1.8 million of the \$14,300,000 budgeted for new awards in the Enhancement Program to be used primarily to improve undergraduate education.

Prerequisites for participation in the Undergraduate Enhancement Program are as follows: (1) the campus may not offer more than two doctoral programs; and (2) the department applying may not offer a doctoral degree. It should be noted that the maximum number of doctoral programs a campus may offer and still be eligible to

*A summary of the funded proposals referenced above may be found in Attachment I. Full discussions of the pending proposals may be found section 4.2.

participate in the Undergraduate Enhancement Program was lowered from ten in FY 1991-92 to two for FY 1992-1993 and beyond. The Board took this action to promote maximum participation by primarily undergraduate campuses in this Program.

Participation in the Undergraduate Enhancement Program does not preclude campuses from competing for other Enhancement money, and quality considerations continue to form the basis for all funding decisions. The same rotation of disciplines (Chart V) and types of projects eligible under the Traditional Enhancement Program are also eligible in the Undergraduate Enhancement Program, and the same regulations apply to proposals. Surplus amounts not awarded in the Undergraduate Program will be transferred to the Traditional Enhancement Program.

5.5.2 Endowed Professorships Program

This program was created by the Board and incorporated into the Enhancement Program in FY 1990-91. Funds were first allocated to endow professorships in FY 1991-92. The funding of an endowed professorship requires the college or university to raise at least \$60,000 from external sources, to be matched by \$40,000 from the Support Fund, thus establishing an endowed professorship valued at a minimum of \$100,000.

Since its inception the Board has been concerned that too many eligible campuses were not reaping the benefits possible through the Endowed Professorships Program. One manifestation of this concern appeared in the FY 1995-96 Plan and Budget, when the Board first allowed campuses to use Federal funds as the matching source for one endowed professorship per year. The Board has also encouraged campuses to maximize efforts to attain matching funds for endowments from private philanthropic sources. In the Endowed Professorships Policy which emanated from the FY 1999-2000 comprehensive review of the program, the Board adopted the following strategy to broaden inclusiveness:

Beginning in FY 2001-02, the campuses listed below, which have received fewer than five professorships since inception of the program, will receive \$60K from the Support Fund, to be matched with \$40K in private funds. Once a campus has attained five professorships, it will no longer be eligible for funding under this ratio, and will revert to the \$60K private:\$40K Support Fund ratio.

- | | |
|-------------------------------------|--------------------------------------|
| 1. Baton Rouge Community College* | 5. River Parishes Community College |
| 2. Bossier Parish Community College | 6. South Louisiana Community College |
| 3. Grambling State University * | 7. Southern University-New Orleans |
| 4. LSU-Eunice* | 8. Southern University-Shreveport |

The Board initially set aside \$580,000 from the Reserve Fund to accommodate this special funding. The eight campuses listed above will require a total of 29 professorships to enable each to have five funded professorships. $29 \times \$20,000$ (the difference in 60:40 versus 40:60) = \$580,000. An additional \$40,000 was set aside for this purpose to accommodate the new Louisiana Delta Community College in FY 2003-04. For FY 2004-05, another

*Grambling State University and Baton Rouge Community College used the inverse ratio during FY 2001-02. Louisiana State University - Eunice used the inverse ratio during FY 2002-03. Grambling has now received a total of seven professorships and LSU-E has now received a total of five professorships; both are thus now ineligible for the inverse ratio.

\$40,000 will be required to accommodate the Southern University-Baton Rouge Law Center, which will henceforth be considered as a distinct administrative unit. Thus, a total of \$660,000 will have been reserved for this special provision. This special provision will be reevaluated during the next comprehensive review of the Endowed Professorships Program, scheduled for FY 2005-06.

This year, as in previous years, the Board searched diligently to identify money in the Support Fund to continue this Program. Measured against the pressing financial needs of higher education, every component of the Support Fund is severely underfunded. Consequently, each dollar used to fund new programs means that fewer dollars are available for critical needs elsewhere. Nevertheless, due to the overriding imperative to strengthen faculty at colleges and universities statewide, the fact that this Program enhances and promotes recruitment and retention of outstanding faculty, and the ever-increasing success of campuses statewide in raising private matching funds, the Board of Regents shall fund the Endowed Professorships Program during FY 2004-05 at the level of \$2,600,000. These funds will enable each of the 28 four-year campuses to endow two professorships, and each of the two-year campuses to endow one professorship, assuming that private matching monies can be secured and all regulations can be met. The money "saved" by reserving only one professorship per two-year institution will be used in future years in the manner described in the Section 5.5.3.

5.5.3 Enhancement Program for Two-Year Institutions

The Board's belief that improvement of educational quality is essential at all academic levels and in all disciplines drove the establishment, beginning in FY 2002-03, of the Enhancement Program for Two-Year Institutions. The absence of federal calls in FY 2002-03 for grants requiring a state match enabled the Board to use the \$1 million normally made available for federal matching opportunities to "jump-start" the two-year institutions, particularly those which have recently joined the Louisiana higher education system.

Campuses eligible for participation in this program are Baton Rouge Community College, Bossier Parish Community College, Delgado Community College, Louisiana Delta Community College, LSU-Eunice, Nunez Community College, River Parishes Community College, South Louisiana Community College, and Southern University-Shreveport. These campuses participated during the spring of 2002 in the development of rigorous criteria which parallel, to the degree feasible, the criteria used in other BoRSF Enhancement components. A competitive peer-review process is used to prioritize successful proposals.

It is the Board's belief that proceeding in this manner will provide not only an opportunity for the two-year institutions to participate meaningfully in the BoRSF, but also an invaluable training experience in the grant writing and capacity-building that all institutions of higher education must undertake. Cognizant that all or most of the funds devoted to this purpose in FY 2002-03 were likely to revert to the Federal Matching Grants Program in future years, the Board has attempted to provide a financial foundation for the continuance of the Set-Aside for Two-Year Institutions. To wit, the Board has modified its policy for the disbursement of funds for endowed professorships (described in Section 5.5.2 above) so that at least \$360,000 per year will be available to sustain this program beyond FY 2002-03. Additional funds will be taken from the Traditional Enhancement Program. One million dollars (\$1,000,000) is allotted to this program in FY 2003-04, and the FY 2004-05 allocation for the Enhancement Program for Two-Year Institutions will be \$1,200,000. Any unexpended funds will revert to the Traditional Enhancement Program.

5.5.4 Traditional Enhancement Program

Based on its continuing review of academic programs, coupled with evaluation of Board of Regents Support Fund projects, the Board anticipates that the acquisition of research and instructional equipment will remain indefinitely the area of greatest need in the Enhancement Program. Indeed, during the first three years in which the Board of Regents Support Fund operated, instrumentation was the only type of request allowed in the Enhancement Program. Beginning in FY 1989-90, the Board invited the submission of other types of enhancement requests, due primarily to the eligibility of selected non-scientific and non-engineering disciplines for the first time. Some types of enhancement requests other than instrumentation include, for example, curriculum revision projects and colloquia to be presented by outstanding out-of-state scholars.

In an attempt to limit the commitment of future Board of Regents Support Fund money, in FY 1989-90 the Board further decided that equipment can only be purchased in the initial year of a project and that, for projects which envision multi-year funding, the following stipulations apply: (1) no project may be of more than two years in duration; (2) no project may request more than \$50,000 in the second year; and (3) a limit of \$1 million will be placed on the total of all second-year commitments in the Enhancement Program. This year, the Board decided to continue to allow the submission of Enhancement requests other than for instrumentation, with the same stipulations as adopted previously.

Thus, excluding the \$300,000 set aside to accommodate previous commitments for multi-year Traditional and/or Undergraduate Enhancement projects and the \$2,800,000 in prior or anticipated commitments for the State's required match in enhancement-type projects that are funded through the Federal grants referenced previously, and after deducting the \$1.8 million committed for new projects in the Undergraduate Enhancement Program, the \$2.6 million committed for Endowed Professorships, and the \$1.2 million committed for the Enhancement for Two-Year Institutions, \$8,700,000 remains for new projects submitted in the Traditional Enhancement Program in FY 2004-05. This amount would increase only if allocated money is not expended in one of the other Support Fund programs, or if one or more of the Federal Matching Grants opportunities described in section 4.2 is not funded.

In keeping with the conceptual framework to use Support Fund money to enhance all areas of higher education, all disciplines are eligible to compete in the Traditional Enhancement Program on a rotating basis as set forth in the Strategic Plan. At the request of the Blue Ribbon Commission on Teacher Quality, beginning in FY 2001-02 and continuing until at least FY 2005-06, "Teacher Education" will be eligible each year in the Enhancement competition. To determine the eligibility of specific disciplines for FY 2004-05, see Chart V.

CHART V

ELIGIBILITY OF DISCIPLINES* IN THE TRADITIONAL AND UNDERGRADUATE ENHANCEMENT PROGRAMS

GROUP I - ELIGIBLE IN FY 1999-2000, 2002-03, 2005-06

Biological Sciences
Computer and Information Sciences**
Engineering B (Industrial, Materials, Mechanical, etc.)
Humanities
Social Sciences

GROUP II - ELIGIBLE IN FY 2000-01, 2003-04

Agricultural Sciences
Arts
Earth/Environmental Sciences
Engineering A (Chemical, Civil, Electrical, etc.)
Health and Medical Sciences

GROUP III - ELIGIBLE IN FY 2001-02, 2004-05

Business
Chemistry
Mathematics
Physics/Astronomy

GROUP IV - ELIGIBLE EVERY YEAR

Education (Emphasis on redesign of teacher preparation programs)

*See the attached listing of those sub-disciplines which are included in these larger groupings in Attachment II.

5.6 CONTINUATION OF THE LOUISIANA SYSTEMIC INITIATIVES PROGRAM (LaSIP)

The Louisiana Systemic Initiatives Program (LaSIP) first competed successfully for National Science Foundation (NSF) funding in 1991. At that time it received \$10 million from NSF, matched by \$5 million each from the Board of Regents and the Board of Elementary and Secondary Education (BESE). The project involves K-12 reforms which require leadership from colleges and universities, as well as revisions in teacher education programs. LaSIP was one of a select few statewide initiatives which received a five-year renewal in 1996. Federal support ended in FY 2000-01. From the beginning, NSF emphasized that Federal money would only be used to seed the project, with the major continuing financial commitment to emanate from state and/or private sources.

During its ten-year existence LaSIP was repeatedly cited by NSF as a model program. The project's exemplary nature was a major contributing factor in the 1996 renewal. Further, LaSIP has achieved significant results statewide in the improvement of student scores on both criterion-referenced and norm-referenced tests. It has the potential to be a major resource for school districts throughout the State in achieving accountability goals.

Mindful that the federal funding stage for this project was drawing to a close, the Board determined that the educational reform impulse at once spearheaded and buttressed by LaSIP shall not die. Accordingly, the Board committed \$500,000 per year for five years, beginning in FY 2001-02, to continue LaSIP activities. The money is to come from the Reserve Fund, and is contingent upon the provision of a like sum annually from BESE and supplemental funding from the Legislature.

5.7 ADMINISTRATIVE EXPENSES - \$800,000

Act 675 of 1989 established the following restrictions with respect to the amount of Support Funds money that may be used to administer the Board of Regents Support Fund Programs:

No more than 3% of the annual total amount appropriated to each board or eight hundred thousand dollars, whichever is smaller, shall be appropriated for such purposes to each board, subject to a thorough review with the goal of limiting such costs to those necessary and proper. . . .

This legislation was modified by Act 698 of 2001, which specifies that:

Costs attributable to the Board of Regents for use of external peer-review consultants for purposes of review, evaluation, and assessment of program proposals are recognized as costs appropriately borne by the respective Support Fund programs and shall be paid from the category of expenditure related to the program for which the review, evaluation, and assessment applies.

Accordingly, each program component whose expenditures are itemized in sections 5.3 through 5.5 of this Plan and Budget will incur expenditures for the professional services of out-of-state consultants estimated as follows:

Recruitment of Superior Graduate Students	\$ 20,000
Research and Development (RCS and ITRS)	\$117,000
Enhancement	\$ 80,000

These amounts estimated above will be deducted from the total amounts available for expenditure in the respective program components. As discussed in Section 5.2 (p.19) above, estimated consultant costs for the Endowed Chairs for Eminent Scholars Program are added to the regular allocation in order to preserve the \$400,000 units necessary for the endowments.

6. OVERVIEW OF FY 2004-2005 BUDGETARY ALLOCATIONS BY PROGRAM COMPONENT

The following chart provides an overview of FY 2004-2005 Board of Regents Support Fund budgetary allocations for new projects and previous commitments.

CHART VI

AN OVERVIEW OF BOARD OF REGENTS SUPPORT FUND BUDGETARY ALLOCATIONS BY PROGRAM COMPONENT, FY 2004-05			
	TOTAL SUPPORT FUND ALLOCATION	ALLOCATION FOR NEW PROJECTS	ALLOCATION FOR PREVIOUS COMMITMENTS
ENDOWED CHAIRS	\$ 3,220,000	\$ 3,220,000	\$ 0
GRADUATE FELLOWS	\$ 3,377,000	\$ 1,000,000*	\$ 3,377,000
RESEARCH	\$ 6,707,181	\$ 3,882,181	\$ 2,825,000
ENHANCEMENT	\$ 17,400,000	\$15,400,000	\$ 2,000,000
SUBTOTALS	\$30,704,181		
ADMIN. COSTS	\$ 800,000		
GRAND TOTAL	\$31,504,181		

*Because allocations for the Graduate Fellows Program must be determined two years in advance of when students first arrive on campus, the FY 2004-2005 allocation for new graduate fellowships was determined in FY 2002-03 and set forth for the first time in the FY 2003-04 Plan and Budget. Thus, this allocation for new projects must come from the FY 2005-06 budget and has not been included in the subtotal and grand total figures in this chart. See Section 5.3 for a detailed explanation of the timing of the allocation process for this Board of Regents Support Fund Program component.

ATTACHMENT I

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
3 years	FY 1989-90 – FY 1992-93	STI-8820219	NSF	NSF/LaSER: The Louisiana EPSCoR Program	\$1,945,312	\$3,374,355	A significant number statewide; grant funds awarded on a competitive basis.

Description/Purpose: 1) To increase the competitiveness of Louisiana scientists and engineers in the Federal R & D marketplace, 2) to effect permanent improvements in the quality of science and engineering in Louisiana, 3) to develop human resources in Louisiana in the sciences and in engineering, and 4) to ensure that improvements achieved continue with State and/or private support beyond the end of the grant period.

3 years	FY 1991-92 – FY 1994-95	EHR-9108765	NSF	NSF LaSER Advanced Development Proposal (ADP)	\$3,700,000	\$4,800,000	A significant number statewide; organized into research clusters; grant funds awarded on a competitive basis.
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Description/Purpose: 1) To increase the competitiveness of Louisiana scientists and engineers in the Federal R & D marketplace, 2) to effect permanent improvements in the quality of science and engineering in Louisiana, 3) to develop human resources in Louisiana in the sciences and in engineering, and 4) to ensure that improvements achieved continue with State and/or private support beyond the end of the grant period.

5 years	FY 1991-92 – FY 1995-96	TPE-9150043	NSF	Louisiana Systemic Initiatives Program (LaSIP) in Math and Science Education	\$10,000,000	\$10,000,000 (\$5 million each from Regents and BESE)	A significant number statewide; grant funds awarded on a competitive basis.
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Description/Purpose: To reform statewide – from kindergarten through college – methods of instruction and learning in mathematics, science, and engineering education.

4 years	FY 1991-92 – FY 1995-96	NGT-40039	NASA	NASA Training Grant (LaSPACE)	\$600,000	\$500,000 (NASA and BOR portions awarded directly to LSU)	A consortium of sixteen campuses; grant funds awarded on a competitive basis.
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Description/Purpose: To develop the infrastructure for aerospace research to competitive levels, while improving the quality of aerospace research and education.

5 years	FY 1992-93 – FY 1996-97	DUE-9255761	NSF	Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT) Program	\$4,000,000	\$2,500,000	Centenary, Grambling, LSU-BR, LSU-S, LA Tech, Loyola, McNeese, Nicholls, ULM, NSU, SLU, SUBR, SUNO, ULL, UNO, Xavier
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Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of mathematics and science educators.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT
Page 2 of 8

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
2 years	FY1993-94 - FY1994-95	DE-FC02- 91ER75669	DOE	U.S. Department of Energy/EPSCoR Program	\$1,039,590	\$1,039,590	Grambling LA Tech, LSU-BR, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier

Description/Purpose: To develop the infrastructure for energy and energy-related research in Louisiana, while improving the quality of energy research and education in the State and encouraging human resource development in this area. This proposal was the result of a one-year \$99,454 planning grant awarded to the Board by DOE.

1 year	FY1993-94	DAAH04-93-G- 0466	DOD	Defense Experimental Program to Stimulate Competitive Research (DEPSCoR) Planning Program	\$50,000	\$25,000	A significant number statewide
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Description/Purpose: To prepare a statewide plan for increasing the State's capacity to perform defense-related research and technology transfer.

3 years	FY1994-95 - FY1996-97	Grant Numbers vary	DOD	1993 DEPSCoR Implementation Program	\$2,400,000	\$500,000	Dillard, Grambling, LSU-BR, LSUHSC-NO, SUBR, SUNO, Tulane, ULM, UNO, Xavier
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Description/Purpose: To conduct research and educate scientists and engineers in Louisiana in areas important to national defense.

3 years	FY1994-95 - FY1996-97	NCCW-0059	NASA	NASA EPSCoR Program	\$1,500,000	\$1,500,000	Dillard, LA Tech, LSU- BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier
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Description/Purpose: 1) To improve the infrastructure for aerospace-related research and education in Louisiana, and increase the State's capability to perform federally-funded aerospace research; and 2) to support three multi-institutional research cluster projects.

5 years	FY1994-95 - FY1998-99	DUE-9255761 (Supplement)	NSF	NSF Teaching Scholars Program	\$500,000	\$250,000	Centenary, LA Tech, Loyola, Nicholls, SLU, SUBR, SUNO, ULL, ULM, UNO, Xavier
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Description/Purpose: To increase the number of minority teachers by providing a financial supplement to the Teaching Scholars program for Historically Black Colleges and Universities (HBCUs).

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT
Page 3 of 8

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
3 years	FY1995-96 - FY1997-98	OSR-9550481	NSF	NSF/EPSCoR LaSER Systemic Improvement Program (SI)	\$4,400,000	\$3,000,000	Grambling LA Tech, LSUHSC-S, LSU-BR, Loyola, SUBR, SUNO, Tulane, ULL, UNO, Xavier

Description/Purpose: 1) To stimulate systemic and sustainable improvements in the science and technology enterprise by creating centers of research excellence in the State, improving the infrastructure for scientific and engineering research and education in Louisiana, and enhancing human resources development in the sciences and engineering, thereby increasing the State's capability to perform federally-funded research of economic importance to Louisiana; and 2) to create real and meaningful research linkages between the State's Historically Black and Majority White Campuses and Universities through Joint Faculty Appointments. This proposal continued the efforts begun under the EPSCoR ADP award described above.

2 years	FY1996-97 - FY1998-99	EPS-9632665	NSF	Building Research Partnerships with Audio/Video Conferencing Facilities	\$494,198	\$0	LA Tech, LSU-BR, LSU Ag, LSUHSC-NO, NSU, SLU, SUBR, Tulane, ULL, ULM, UNO
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Description/Purpose: To promote research partnerships by establishing an inter-institutional audio/video (A/V) research communications network across Louisiana. The A/V network will enhance collaborative exchanges within and among the State's EPSCoR and EPSCoR associated schools and to promote new research partnerships by eliminating geographical (distance/separation) barriers.

2 years	FY1997-98 - FY1999-00	EPS-9720147	NSF	LaSERnet II Backbone for Institutions of Higher Education in Louisiana	\$552,893	\$0	LA Tech, LSU-BR, LSUHSC-S, LSUHSC- NO, SLU, SUBR, Tulane, ULL, ULM, UNO
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Description/Purpose: To provide researchers in the State with a high-speed intra-state backbone for sharing resources and access to broad-band (Internet II) service and direct vBNS (very Broadband Network Service) connectivity.

4 years	FY1995-96 - FY1998-99	DE-FC02- 91ER75669	DOE	U.S. Department of Energy/EPSCoR Program Renewal	\$3,473,402	\$3,200,000	Grambling LA Tech, LSU-BR, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier
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Description/Purpose: 1) To increase research competitiveness and capabilities of Louisiana scientists and engineers in areas of importance to the State and the U.S. Department of Energy; 2) to educate and recruit individuals, especially minorities and women, to work in these areas in Louisiana; 3) to provide new technologies that lead to economic development in the State; and 4) to support three multi-institutional research cluster projects.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

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Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
5 years	FY1995-96 – FY1999-00	HRD-9550765	NSF	Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) Program	\$5,944,914	\$2,249,280	Dillard, Grambling, LUMCON, LSU-BR, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO

Description/Purpose: To increase the number of underrepresented minorities receiving B.S. degrees in science, engineering, and mathematics in Louisiana from the baseline rate of 610 annually to an annual rate of 1,110.

4 years	FY1996-97 – FY1999-00	NGT-40039	NASA	NASA LaSPACE Renewal Program	\$600,000	\$400,000 (NASA and BOR portions awarded directly to LSU)	A consortium of sixteen campuses; grant funds awarded on a competitive basis.
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Description/Purpose: To continue the development of the infrastructure for aerospace research to competitive levels, while improving the quality of aerospace research and education.

5 years	FY1996-97 – FY2000-01	ESR-9634088	NSF	Louisiana Systemic Initiatives Program (LaSIP) Renewal in Math and Science Education	\$7,000,000	\$10,000,000 (\$5 million each from Regents and BESE)	A significant number statewide; grant funds awarded on a competitive basis.
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Description/Purpose: To continue the education reform efforts begun under the original LaSIP program.

3 years	FY1996-97 – FY1998-99	Grant Numbers vary	DOD	1995 DEFSCoR Implementation Program	\$2,350,303	\$1,500,000	LSU-BR, LSUHSC-NO, SLU, Tulane
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Description/Purpose: To continue previous efforts to conduct research and educate scientists and engineers in Louisiana in areas important to national defense, thus improving the State's research infrastructure.

2 years	FY1997-98 – FY1998-99	NCC5-167	NASA	NASA EPSCoR Program Renewal	\$1,000,000	\$1,000,000	Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier
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Description/Purpose: A renewal program to 1) continue to improve the infrastructure for aerospace-related research and education in Louisiana, and increase the State's capability to perform federally-funded aerospace research; and 2) to continue the support of three multi-institutional research cluster projects.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Page 5 of 8

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
5 years	FY1997-98 – FY2001-02	ESR-9700041	NSF	Delta Rural Systemic Initiative in Science, Mathematics, and Technology	\$10,000,000 (\$2.46 million is Louisiana's share)	\$2,000,000 (divided equally between BOR and BESE)	A significant number; all campuses are eligible to compete.

Description/Purpose: To complement and supplement current statewide math and science education reform initiatives such as LaSIP and LaCEPT. A tri-state effort involving Louisiana, Mississippi, and Arkansas, it concentrates on professional development programs for teachers, pre-service enhancement programs for educators, leadership institutes for administrators, and acquisition of supportive hardware and software in an effort to impact 64 counties and/or parishes (22 school districts in 21 parishes within Louisiana) that are rural and have major economic problems.

3 years	FY1998-99 – FY2000-01	DUE-9816194	NSF	Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT) Program Supplemental Award	\$600,000	\$300,000	Grambling, LSU-BR, LSU-S, LA Tech, Loyola, Nicholls, NSU, SLCC, SLU, SUBR, SUNO, ULL ULM, UNO, Xavier
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Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of mathematics and science educators; to evaluate the effectiveness of the initial five-year award (FYs 1993-98).

3 years	FY1997-98 – FY1999-00	Grant numbers vary	DOD	1997 DEPSCoR Implementation Program	\$1,770,504	\$750,000	LSU-BR, Tulane, ULL
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Description/Purpose: To continue previous efforts to conduct research and educate scientists and engineers in Louisiana in areas important to national defense, thus improving the State's research infrastructure.

3 years	FY1998-99 – FY2000-01	EPS-9720652	NSF	NSF/EPSCoR New Cooperative Agreement (NCA)	\$3,000,000	\$3,000,000	A significant number statewide; grant funds awarded on a competitive basis.
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Description/Purpose: 1) To enhance the competitiveness of science and engineering (S&E) faculty of the State's higher education institutions by making them more competitive in gaining national research and development support, engaging them in science and technology transfer activities with business and industry, and helping them educate effectively large numbers of S&E students at both graduate and undergraduate levels; 2) to create real and meaningful linkages between the State's HBCUs and MWCUs through the Joint Faculty Appointments Program; and 3) to foster economic development in the state by facilitating, through various initiatives, interaction between business & industry, universities, and state government. This proposal continued the efforts begun under the EPSCoR ADP and SI awards previously described.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

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Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
3 years	FY1999-00 – FY2001-02	Grant numbers vary	DOD	1999 DEPSCoR Implementation Program	\$1,459,473	\$189,798	LSU-BR, LA Tech, UNO

Description/Purpose: As in past DEPSCoR awards, the individual research projects funded through this award enhance the statewide research infrastructure improvement efforts.

2 years	FY1999-00 – FY2000-01	60NANB9D0005	Dept of Commerce	Experimental Program to Stimulate Competitive Technology (EPSCoT)	\$250,000	\$300,000	A significant number statewide
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Description/Purpose: To develop and implement regional and statewide strategies to accelerate commercialization of university-based technologies, thus contributing to the economic development of the State.

1 year	FY1999-00	NCC5-167	NASA	NASA EPSCoR Program Continuation Funding	\$400,000	\$250,000	Dillard, LA Tech, LSU- BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier
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Description/Purpose: A renewal program to 1) continue to improve the infrastructure for aerospace-related research and education in Louisiana, and increase the State's capability to perform federally-funded aerospace research; and 2) to continue the support of three multi-institutional research cluster projects. This award is the sixth-year continuation of the NASA EPSCoR Program and NASA EPSCoR Program Renewal previously described.

1 year	FY1999-00	NCC5-393	NASA	NASA EPSCoR Preparation Grant Program	\$225,000	\$100,000	A significant number statewide. Funds are competitively awarded.
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Description/Purpose: To allow Louisiana researchers to initiate contacts and promote collaborative research programs with NASA Centers and Enterprises, and begin research activities in areas of strategic importance to NASA in preparation for submission of a statewide proposal to NASA EPSCoR in 2001.

5 years	FY2000-01 – FY2004-05	NGT5-40115	NASA	NASA LaSPACE Continuation	\$1,281,250	\$1,000,000	A consortium composed of sixteen campuses; grant funds are awarded on a competitive basis.
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Description/Purpose: This award continues the efforts begun under the original LaSPACE program and the LaSPACE renewal described previously.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Page 7 of 8

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
2 years	FY1999-00 - FY2000-01	R-82778501-0	EPA	EPA EPSCoR 2000 Program -Coastal Monitoring	\$483,939	\$500,000	LUMCON, Tulane (all data obtained will be made available to scientists and students throughout the state.)

Description/Purpose: To establish and maintain a series of instrument platforms by which university scientists can monitor environmental variables in coastal Louisiana for research and educational needs, thus increasing the State's capability to compete for and perform federally-funded environmental research.

5 years	FY2000-01 - FY2005-06	HRD-000272	NSF	Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) Phase II	\$5,000,000	\$2,500,000	Dillard, Grambling, LUMCON, LSU-BR, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO
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Description/Purpose: To continue to increase the number of underrepresented minorities in Louisiana receiving B.S. degrees in science, engineering, and mathematics.

1 year	FY2000-01	NCC5-393	NASA	NASA EPSCoR Preparation Grant Program Renewal	\$225,000	\$0	A significant number statewide. Funds are competitively awarded.
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Description/Purpose: To continue the efforts described above for the NASA EPSCoR Preparation Grant.

1 year	FY2000-01	NCC5-167	NASA	NASA EPSCoR Program Continuation Funding (year seven)	\$400,000	\$0	Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier
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Description/Purpose: This award is the seventh-year continuation of the NASA EPSCoR Program previously described.

2 years	FY2000-01 - FY2001-02	EPS-0083089	NSF	Video to the Desktop: A Louisiana Model	\$494,450	\$0	LA Tech, LSU-BR, LSU Ag, LSUHSC-NO, LSUHSC-S, NSU, SLU, SUBR, Tulane, ULL, ULM, UNO
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Description/Purpose: To promote research partnerships by establishing an inter-institutional H.323 research communications (videoconferencing) network, which will operate over existing Internet lines instead of over telephone lines, and allow desktop-to-desktop multimedia communications.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Page 8 of 8

Duration	Fiscal Years	Federal Award Number	Federal Agency	Title	Federal Award Amt.	Support Fund Match	Participating Institution(s)
3 years	FY2001-02 – FY2003-04	EPS-0092001	NSF	Louisiana EPSCoR Research Infrastructure Improvement (RII)	\$9,000,000	\$3,000,000	A significant number statewide, including LA Tech, LSUHSC-NO, UNO, Grambling, LSU-BR, SUBR, Tulane, Xavier, NSU, ULM. A portion of the grant funds will be awarded on a continuing, competitive basis.

Description/Purpose: This award funds the "Micro/Nano Technologies for Advanced Physical, Chemical, and Biological Sensors" research consortium in addition to a variety of initiatives to enhance the competitiveness of science and engineering (S&E) faculty of the State's higher education institutions. This proposal continues the efforts begun under the EPSCoR ADP, SI, and NCA awards previously described.

3 years	FY2001-02 – FY2003-04	NCC5-573	NASA	NASA EPSCoR 2000	\$2,100,000	\$2,100,000	LSU-BR, LUMCON, Tulane, Dillard, ULL, UNO, Xavier. A portion of the grant funds will be awarded on a continuing, competitive basis.
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Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support three multi-institutional research projects.

2 years	FY2002-03 – FY2003-04	R-82642001-0	EPA	EPA EPSCoR 2001 Program – Climate Change	\$494,195	\$494,542	LUMCON, UL-Lafayette, LSUBR
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Description/Purpose: To enhance Louisiana's capability for understanding and predicting the effects of climate change on the state's coastal ecosystems, thus increasing the State's capability to compete for and perform federally-funded environmental research.

ATTACHMENT II
TAXONOMY OF DISCIPLINES

TAXONOMY OF DISCIPLINES
USED IN THE
BOARD OF REGENTS SUPPORT FUND PROGRAMS

NATURAL SCIENCES - BIOLOGICAL
(CONTINUED)

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

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