FY 2006-2007 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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OVERVIEW OF RESULTS

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

- ♦ \$674.7 MILLION GENERATED IN NEW EXTERNAL FUNDING (through 6/30/2005) From federal, private, and other non-Support Fund sources
- ★ AN ADDITIONAL \$256.8 MILLION GENERATED IN EXTERNAL CONTRIBUTIONS For Endowed Chairs and Professorships
- ♦ 2,555 EXTERNAL AWARDS From federal, private, and other non-Support Fund sources
- ♦ 228 \$1 MILLION CHAIRS AND 22 \$2 MILLION CHAIRS for eminent scholars endowed at 24 universities
- ♦ 1,560 \$100,000 PROFESSORSHIPS endowed at 34 campuses
- ♦ 1:1.72 RATE OF RETURN for all projects funded since 1987
 For every Support Fund dollar invested, \$1.72 has been returned to the State
- **♦ 122 PATENTS ISSUED; 77 PATENT APPLICATIONS PENDING**
- ♦ 8,596 PUBLICATIONS in refereed journals
- ♦ 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 2006-2007

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 generally been restricted to those disciplines where the promotion of basic and applied research is essential for near-term economic development. Since in FY 2004-05, one of the R & D subprograms has focused on research efforts in the arts, social sciences, and humanities. (See section 5.4 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) endowment of chairs for eminent scholars (hereinafter referred to as the Endowed Chairs Program); (2) recruitment of superior graduate students (the Graduate Fellows Program, including Traditional Graduate Fellows and Graduate Fellowships for Teachers); (3) carefully defined research efforts (the R & D Program, including the Research Competitiveness Subprogram, the Industrial Ties Research Subprogram, and the Awards to Louisiana Artists and Scholars [ATLAS] subprogram); and (4) 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, the Enhancement Program for Two-Year Institutions, the Louisiana Systemic Initiatives Program [LaSIP], the Undergraduate Scholarships Program, and the Post-Katrina Support Fund Initiative). A more extensive discussion of the Board's use of the Support Fund to ameliorate the effects of Hurricane Katrina and Rita appears in Section 5.5.7 of this Plan and Budget.

1.1 BOARD OF REGENTS SUPPORT FUND PROJECTION, FY 2006-2007

The Revenue Estimating Conference projects that the amount of money to be available for higher education from the Louisiana Education Quality Trust Fund in FY 2006-2007 will be \$35,650,000.

1.2 BUDGET RATIONALE AND PREAMBLE

In deliberations about the Board of Regents Support Fund Plan and Budget for FY 2006-2007, the Board again noted the persistence of three related Support Fund issues requiring long-range strategic planning:

- 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 \$1.72 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.

Additionally, the Board feels the need to direct some money from Support Fund programs to assist higher education institutions in the recovery and rebuilding efforts necessitated by the hurricanes. 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 significant cuts in budgets for Enhancement, R & D 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.

1.3 TOTAL AVAILABLE BUDGET, FY 2006-2007: \$35,650,000

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. The Treasurer's estimate has generally been conservative, and 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.

While the use of this policy has resulted in a more realistic figure, it retains the conservative Treasurer's estimate as a beginning point, and the Board's experience with it indicates that desperately needed funds remain unexpended. Accordingly, the Board, at its December 8, 2005 meeting, decided to use the Revenue Estimating Conference's projected figure in preparation of the FY 2006-07 plan and budget.

1.4 ADOPTION OF FY 2006-2007 PLAN AND BUDGET

Based on the fiscal estimate provided by the Revenue Estimating Conference and consistent with the <u>Strategic Plan</u> for the Board of Regents Support Fund, the following plan and budget for FY 2006-2007

were adopted by the Board of Regents at its meeting of January 26, 2006. (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. In the wake of Hurricanes Katrina and Rita, the Board extended the current Strategic Plan through FY 2006-07. 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."**

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 in January, 2002 of recommendations designed to elevate the program's accomplishments. The

^{*}Copies of the 1988, 1993, and 1999 Strategic Plans are available in the Board's office.

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

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. All Support Fund Programs are thus continually evaluated to assure their efficiency.

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 <u>full</u> benefit of investment in higher education is a long-term proposition, and final results only become obvious after a period of many years; (2) reported results include <u>only</u> 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; and (3) no specific benefits beyond the initial private match are claimed as a result of the Endowed Chairs for Eminent Scholars Program, and no specific external grants are attributed to the Recruitment for Superior Graduate Students program.

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

- * \$931.5 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 \$1.72 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 \$15 million over a six-year period.
- * 2,555 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.)
- * 122 patents have been issued, and another 77 applications are pending.

3.2 RESULTS FROM SELECTED PROJECTS

See Attachment II for brief summaries of the achievements of several selected projects.

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 \$931.5 million in new revenues generated from Board of Regents Support Fund projects is estimated as follows:*

- > approximately \$1.905 billion in new revenues to Louisiana firms and organizations;
- > approximately \$769.89 million in new income for Louisiana citizens; and
- > approximately 33,270 new jobs for Louisianians.
- 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:

^{*}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.

- 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 Attachment II 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.

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.

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
NSF/SI Delta Rural SI	TR ENH: 100%	\$200,000	\$1 Million	1997-98 through 2001-02	5

CHART I (CONTINUED)

FEDERAL GRANT	TYPE OF SUPPORT FUND ACTIVITY	AMOUNT OF ANNUAL MATCHING COMMITMENT	TOTAL MATCHING COMMITMENT	FYS IN WHICH COMMITMENT IS APPLICABLE	TOTALLENGTHE OF COMMITMENT IN YEARS
LaCEPT Supplemental	TR ENH: 100%	\$100,000	\$300,000	1998-99 through 00-01	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 04-05	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	\$2.1 Million	2001-02 through 03-04	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	TR ENH: 100%	\$1 Million	\$3 Million	2003-04 through 2005-06	3
DOE/EPSCoR Implementation 2004	TR ENH: 100%	\$400,000	\$1.2 Million	2004-05 through 2006-07	3
NASA/EPSCoR 2000 Renewal	TR ENH: 100%	\$493,280	\$986,560	2004-05 through 2005-06	2
LAMP Phase III	TR ENH: 100%	\$500,000	\$2.5 Million	2005-06 through 09-10	5
NASA LaSPACE Continuation II	TR ENH: 100%	\$200,000	\$1 Million	2005-06 through 2009-10	5
NASA/EPSCoR 2006 (pending)	TR ENH: 100%	\$400,000	\$1.2 Million	2006-07 through 2008-2009	3
NSF EPSCoR Proposal (pending)	TR ENH: 100%	\$1 Million	\$3 Million	2006-07 through 2008-2009	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.)

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. (Chartlpb.07 C:JW and 06-07P/B)

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

4.2.1 National Aeronautics and Space Administration (NASA) Experimental Program to Stimulate Competitive Research (EPSCoR)

The goal of the National Aeronautics and Space Administration (NASA) Experimental Program to Stimulate Competitive Research (EPSCoR) is to improve the infrastructure and capacity for aerospace-related research and education in Louisiana.

Current and Prior Awards:

Louisiana has participated in NASA EPSCoR since 1994, when the Board of Regents received the first award under this program. Total federal obligations under NASA EPSCoR total \$6,836,236, matched by cost sharing of \$5,936,560 from the Board of Regents Support Fund.

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

Duration:

5 years

Participants:

Dillard, LSU-BR, LUMCON, Tulane, ULL, UNO, and Xavier

NASA Award:

\$ 3,086,236

Support Fund Match:

\$ 3,086,560

Institutional Cost Share:

\$ 2,312,059

Total Project:

\$ 8,484,855

Pending Proposal:

NASA has not yet issued a solicitation for NASA EPSCoR 2006, but has indicated that it will do so at some point during the calendar year.

4.2.2 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 an NSF EPSCoR Planning Grant. In 1989, Louisiana was successful in competing for the first of a series of six NSF EPSCoR implementation awards, with a total federal obligation of nearly \$32.6 million, matched by cost sharing amounting to \$20.1 million from the Board of Regents Support Fund.

The current EPSCoR Research Infrastructure Improvement project was awarded funding in May, 2004.

Duration:

3 years

Participants:

LSU-BR, LSUHSC-NO, Tulane, ULL, ULM, UNO, Xavier

 NSF Award:
 \$ 9,000,000

 Support Fund Match:
 \$ 3,000,000

 Institutional Cost Share:
 \$ 1,500,000

 Total Project:
 \$13,500,000

This project supports a major research effort entitled "Center for BioModular Multi-scale Systems" which is a joint effort of teams of researchers at the institutions listed above. In addition to the center, 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:

NSF has not yet issued a solicitation for this year's Research Infrastructure Improvement project, but is expected to do so in the spring of 2006. The proposal developed in response to the solicitation will be submitted in the summer of 2007.

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 2005-06, 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 2005-2006. 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 increased the funds available for awards in this category to \$950,000 in the plan and budget for FY 2004-05. The \$950,000 level will be maintained for FY 2006-07. 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

If Board of Regents Support Fund money for higher education is greater than the \$35,650,000 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. In the event that reductions are necessary, they are to be made on a pro-rata basis among the Enhancement and Research and Development program components.

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

Overview/Rationale

The Endowed Chairs for Eminent Scholars Program, introduced in 1987, is designed to enhance the recruitment and retention of distinguished university faculty at institutions throughout Louisiana. Through the 2004-2005 fiscal year, 250 chairs have been funded at twenty-four institutions, and the program has generated a total endowment (counting private match) of \$428 million.

The program pairs a 60% private-sector match with a 40% Board of Regents award to endow a chair to be filled by a scholar of high renown and great ability. The Board endows chairs in any discipline at two levels: \$1 million total endowment (\$600,000 match/\$400,000 BoRSF) and \$2 million total endowment (\$1.2 million match/\$800,000 BoRSF).

The competition established to determine endowment awards is rigorous and highly selective. A panel of out-of-state experts reviews proposals on an annual basis, and recommends for funding those most representative of and able to achieve the goals of the program. Stringent rules governing the selection of the faculty recipient are designed to ensure his or her excellence. An endowed chair must be filled through a national search and the committee conducting the search must include at least one individual recognized as an expert in the field of the chair, but who is not affiliated with the institution, the private donor, or the Board of Regents. While a chair recipient may be selected from within the affected campus, this may only be done when a national search has documented the national and/or international eminence of the prospective chairholder.

As the national search guarantees the past reputation of the chairholder, periodic peer reviews of the chairholder are intended to assure continued accomplishment. Chairholders are held to standards of performance which require that they maintain a continuing record of scholarly and creative endeavors, leadership activities, exceptional teaching, attraction of high-quality students and enhancement of the State's economy.

Important Historical Milestones

- > Funds first awarded in 1987
- ➤ Has been budgeted at ≥\$3.2 M since 1990
- ➤ "First-come, first-served" replaced by Competitive Process in 1993

- Legislative supplemental appropriations, beginning in FY 1995-96 and continuing in most years since then, have enabled the funding of 80 chairs
- Comprehensive Reviews conducted in 1993 and 1998; Recommendations adopted for significant strengthening, especially in 1999
- "Special Provisions for Public Four-Year Campuses with Less than Three Eminent Scholars Chairs" adopted in 2001 allows public, four-year institutions with fewer than three chairs to invert the 60:40 private funds/public funds ratio, but retains the principle of competition without favor to date, six chairs, two each from Northwestern State University and Louisiana State University Shreveport, and one each from Louisiana State University Alexandria and Southern University New Orleans, have been funded under its aegis. Two additional proposals (one each from Grambling State University and Northwestern State University) are currently under consideration.

5.3 RECRUITMENT OF SUPERIOR GRADUATE STUDENTS - \$3,800,000

The Recruitment of Superior Graduate Students (RSGS) Program provides resources to select departments to bring top-quality students to their graduate programs. Through the 2004-2005 fiscal year, the Board of Regents has provided over one thousand graduate fellowships to a spectrum of departments at fourteen institutions in Louisiana. About 10% of these fellowships have been awarded to programs specifically targeting in-service teachers in mathematics and science disciplines pursuing master's degrees in Education. While the economic and cultural impact of these fellowships is difficult to quantify, it is clear that the program has contributed highly educated employees to Louisiana industry, expert teachers at levels from kindergarten to college, and a community of enthusiastic, energetic, and dedicated students to further the educational and research agendas at colleges and universities across the State.

Since 1993 two subprograms have comprised RSGS: Traditional Graduate Fellows and Graduate Fellowships for Teachers (GFT). The Traditional subprogram primarily supports excellent doctoral-level programs, but also allows stipends for students at master's-level programs of distinction. The GFT subprogram offers support to preand in-service teachers seeking master's degrees in science and/or mathematics. To apply for GFT awards, an applicant institution must offer a program that can be completed in one academic year plus an additional summer, to allow teachers to finish within a single year's sabbatical from the classroom. Fellowship recipients, further, must pledge to teach in a Louisiana school system for at least one year after completing the master's degree, to insure that Louisiana students reap some of the benefits of the State's support of these teachers. Together the GF and GFT subprograms provide a comprehensive opportunity for departments across the State to receive assistance in the training and support of graduate students.

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 submit successful proposals during the current fiscal year (FY 2005-06) will have a full year (FY 2006-07) during which to recruit students who, in turn, will enroll in Louisiana universities' graduate programs for the first time in the fall of 2007 (FY 2007-08).

The \$3,800,000 budgeted for this category for FY 2006-2007, therefore, is entirely for previous obligations, including: (a) \$1,000,000 for fourth-year funding of graduate fellows who began their course of study in AY 2003-2004; (b) \$800,000 for third-year funding of graduate fellows who began their course of study in AY 2004-2005;

(3) \$1,000,000 for funding of second-year graduate fellows who began their course of study in AY 2005-2006; and (d) \$1,000,000 for funding of graduate fellows who will begin their course of study in AY 2006-2007. This information is included in the current year's plan to notify the Governor and the Legislature that an amount of approximately \$3.8 million will have been committed from the FY 2007-2008 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 2006-2007, see Chart II.

CHART II

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, 2006-07

Agriculture
Business
Education, including Literacy
Mathematics

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

Arts Humanities Social Sciences

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

^{**}The frequency of eligibility for "Computer and Information Sciences" was increased in the 1993 <u>Strategic Plan</u> 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 Health Sciences 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 <u>Strategic Plan</u>.

5.4 CAREFULLY DEFINED RESEARCH EFFORTS - \$ 5,735,000

A total of approximately \$3,350,000 will be required during FY 2006-07 to honor prior commitments for multi-year projects in the Board of Regents Support Fund R&D Program. Since most research projects are multi-year endeavors, the Board has historically been conservative in recommending an increase in funds dedicated for new research projects in the R & D Program. 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.

The Research Competitiveness Subprogram has been consistently successful since its inception in FY 1986-87. Accordingly, the Board has made every effort to fund this subprogram at the highest possible level. The amount devoted to this subprogram for first-year awards was increased to \$1.5 million in FY 1999-2000 and has been maintained since except in those years when ominously low economic forecasts mandated mid-year budget cuts.

The Industrial Ties Research Subprogram has not enjoyed such a pattern of unbroken success. Louisiana's relatively undiversified industrial economy and its dearth of large industrial-based corporations (only one Fortune 500 company and relatively few industries with substantial capacity for R & D spending) have made it difficult for university faculty to foster meaningful partnerships with industries based in the State. The Board has significantly reduced the funding level for this subprogram to reflect this reality, with the amount available for first-year funding of this component stabilized at \$650,000 during the past several years. To free up funds for the Post-Katrina Support Fund Initiative, the amount is further reduced (by 10% to a first-year level of \$585,000) for FY 2006-07.

While the Board has to date focused the R & D Program almost exclusively on the sciences, mathematics, and engineering, the Regents remain cognizant of their responsibility, elucidated in each Strategic Plan since 1988, to improve the quality of education "at all levels in all disciplines." The comprehensive review of the R & D Program during FY 2001-02 documented the need for a subprogram with emphasis on the arts, social sciences, and humanities. This subprogram, modeled after the internationally famous Guggenheim Foundation Program, was inaugurated at a funding level of \$500,000 FY 2004-05. The funding level for this subprogram, now named the Awards to Louisiana Artists and Scholars (ATLAS) subprogram, remains at \$500,000 for FY 2005-06, but will be reduced in FY 2006-07 to \$450,000 in order to free up funds for the Post-Katrina Support Fund Initiative.

A more detailed discussion of the R & D subprograms for which relevant historical data exists appears below.

5.4.1 Research Competitiveness Subprogram (RCS)

The RCS is a stimulus program directed <u>only</u> toward those researchers who are at the threshold of becoming competitive in the Federal R & D marketplace. It is designed to assist these researchers to overcome the barriers that have prevented them from competing successfully at the national level for R & D funds. RCS is also directed only to those researchers who clearly show strong potential for enhancing their competitive status within the time span of a Board of Regents Support Fund grant. In every year since the subprogram's inception, far more Louisiana university researchers who fit this funding profile have submitted quality research proposals to RCS than the Board has been able to support and encourage with funding.

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 2006-07 see Chart III.

CHART III

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, 2006-07

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 listing of those sub-disciplines which are included in these larger groupings is in Attachment III.

5.4.2 Industrial Ties Research Subprogram (ITRS)

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

To ensure that no opportunities with the potential to promote economic development and diversification would be overlooked, the Board has, since 1993, opened competition in the ITRS to proposals from any and all

research areas. Further, the Board has attempted to encourage university/industry initiatives through cooperation with the Governor's Economic Development Cabinet and with related entities such as the Louisiana Department of Economic Development.

5.4.3 Awards to Louisiana Artists and Scholars (ATLAS) Subprogram

The Awards to Louisiana Artists and Scholars (ATLAS) Subprogram provides support for major scholarly and artistic productions with potential to have a broad impact on a regional and/or national level. The Support Fund awards are accompanied by paid sabbaticals from the faculty members' institutions which facilitate the completion of manuscripts for publications and/or provide recognition for the efforts of artists, playwrights, choreographers, composers, etc. The subprogram allows the State to profit from its rich cultural traditions and makes Louisiana's expertise and creativity in these disciplines known to the rest of the nation.

The inaugural competitive cycle resulted in the submission of fifty (50) proposals statewide. While funding was available to provide support for only fourteen (14), a total of thirty-six (36) of the 50 submitted were deemed worthy by the distinguished peer review panel.

5.4.4 Summary of FY 2006-07 Research and Development Expenditures

Prior Commitme	ents (RCS and ITRS only)	\$3,350,000
New Awards -	RCS	\$1,350,000
	ITRS	\$ 585,000
	ATLAS	<u>\$ 450,000</u>
R & D PROGR	AM TOTAL	\$5,735,000

5.5 ENHANCEMENT OF THE QUALITY OF DEPARTMENTS OR UNITS - \$22,095,000

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 \$22,095,000 to the Enhancement Program in FY 2006-07. Thus, approximately 63% of the total funds available for awards in FY 2006-07 (\$34,850,000) 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 \$1,400,000 of the total \$22,095,000 budgeted for Enhancement awards in FY 2006-2007 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 2005-06 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 2006. The remaining \$1.1M has been promised as the State's matching commitments under three current jointly-funded Board of Regents Support Fund/Federal Matching Grants, including: (a) \$400,000 for the third year of the DOE/EPSCoR project; (b) \$200,000 for the second year of the NASA LaSPACE project; and (c) \$500,000 for the second year of the LAMP Phase III project. An additional \$1,400,000 has been earmarked for two prospective jointly-funded Board of Regents Support Fund/Federal Matching Grants to begin in FY 2006-07, including (a) \$400,000 for the NASA EPSCoR project (pending) and (b) \$1,000,000 for the NSF EPSCoR renewal project (pending).*

After deducting these projected commitments for two-year enhancement projects and the commitments and projected commitments for Federal matching opportunities, \$19,295,000 will be available for new enhancement projects submitted for funding consideration in FY 2006-07. Maintenance of the highest possible budgetary allocations to the Enhancement Programs is 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 <u>all</u> universities are eligible to compete, they are also the ones under which the majority of campuses most successfully compete. Significantly, 73% of the total funds available for <u>new awards</u> will be dedicated to the Enhancement Program. (See Chart V, "Overview of FY 2006-07 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 <u>all</u> academic levels, the Board shall dedicate \$1,620,000 million of the \$14,295,000 budgeted for new awards in the Enhancement Program to be used to improve education at the primarily undergraduate institutions. (This amount is reduced by 10% of the FY 2005-06 allocation in order to provide funds for the Post-Katrina Support Fund Initiative.)

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 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.

^{*}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.

5.5.2 Endowed Professorships Program

This program was created by the Board and incorporated into the Enhancement Program in FY 1990-91, and 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*
- 2. Bossier Parish Community College
- 3. Grambling State University *
- 4. LSU-Eunice*

- 5. River Parishes Community College
- 6. South Louisiana Community College
- 7. Southern University-New Orleans
- 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 X \$20,000 (the difference in 60:40 versus 40:60) = \$580,000. Additional money was set aside for this purpose to accommodate Louisiana Delta Community College and Southern University - Baton Rouge Law Center in FY 2003-04, and, effective in FY 2005-06, L. E. Fletcher Technical Community College and Sowela Technical Community College. This special provision will be reevaluated during 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 continue to fund the Endowed Professorships Program during FY 2006-07 at the level of

^{*}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. Louisiana Delta Community College and Southern University Law Center each received three professorships under the inverse ratio in FY 2003-04.

\$2,680,000. These funds will enable each four-year campus to endow two professorships, and each two-year campus 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, L. E. Fletcher Technical Community College, Louisiana Delta Community College, LSU-Eunice, Nunez Community College, River Parishes Community College, South Louisiana Community College, Southern University-Shreveport, and Sowela Technical Community College. 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 subprogram. To wit, the Board has modified its policy for the disbursal of funds for endowed professorships (described in Section 5.5.2 above) so that at least \$440,000 per year will be available to sustain this program. Additional funds will continue to be taken from the Traditional Enhancement Program. One million dollars (\$1,000,000) was allotted to this program in FY 2003-04, and the FY 2004-05 allocation for the Enhancement Program for Two-Year Institutions was raised to \$1,200,000. The \$1,200,000 level was maintained for FY 2005-06. The FY 2006-07 level of \$1,080,000 reflects a reduction of 10% to provide funds for the Post-Katrina Support Fund Initiative. Any unexpended funds will revert to the Traditional Enhancement Program.

5.5.4 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 only two statewide initiatives (Connecticut) 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 should not die. Accordingly, the Board committed \$500,000 per year for five years, beginning in FY 2001-02, to continue LaSIP activities. The money came from the Reserve Fund, and was contingent upon the provision of a like sum annually from BESE and supplemental funding from the Legislature. Both the Regents and BESE approved five-year renewals at \$500,000 per year for the Program at their meetings in January, 2006.

5.5.5 Needs-Based Undergraduate Scholarships Program for Deserving Students

The State faces a well-documented impending crisis in terms of educating its future workforce. According to statistics provided by the National Center for Higher Education Management Systems (NCHEMS), for every 100 students entering the ninth grade this fall only about 56 will graduate from high school four years hence. Only 33 will attend college, and only 22 will receive a baccalaureate degree within six years of college entry. Research indicates that this massive "pipeline leakage" is due primarily to socioeconomic factors. Many worthy Louisiana students are now effectively denied this opportunity either because the assistance provided under the TOPS program is not sufficient to make a college education affordable for them or because they approach but fall short of satisfying all of the requirements necessary to qualify for the TOPS program.

The Board is developing a pilot merit- and needs-based program that would provide assistance to worthy students for the purpose of acquiring a college education. The scholarship initiative would solicit private donations on a matching funds basis, and may be established as an endowment program. Intensive study will be undertaken during the following months regarding the interface among TOPS, Pell Grants, and the projected pilot program. It is anticipated that final approval for the program guidelines will be forthcoming in the spring of 2006.

5.5.6 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 as 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 \$2,500,000 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 \$1.62 million committed for new projects in the Undergraduate Enhancement Program, the \$2.68 million committed for Endowed Professorships, the \$1.08 million committed for the Enhancement for Two-Year Institutions, the \$500,000 for LaSIP, and the \$1 million for Undergraduate Scholarships, \$7,415,000 remains for new projects submitted in the Traditional Enhancement Program in FY 2006-07. 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 <u>Strategic Plan</u>. To determine the eligibility of specific disciplines for FY 2006-07, see Chart IV.

CHART IV

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, 2006-07

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

Education **

Mathematics

Physics/Astronomy

^{*}See the attached listing of those sub-disciplines which are included in these larger groupings in Attachment III.

**At the request of the Blue Ribbon Commission on Teacher Quality, Education was made annually eligible between 2001 and 2005. Beginning in FY 2005-06, the focus of emphasis will change to fund higher education institutions who will assist K-12 schools meet or exceed standards of the Louisiana Department of Education. The Board is funding this endeavor through its Reserve Fund.

5.5.7 <u>Post-Katrina Support Fund Initiative</u>

The storms of August and September, 2005 decimated Louisiana and other sections of the Gulf Coast. In addition to the diaspora of its population, the State's economy, infrastructure, tax-base, and research, both basic and applied, have suffered. The affected region encompasses coastal areas unparalleled for the productivity of its natural resources, its diverse recreation, its unique culture(s), and the quality of its creative and performing arts. While the catastrophic dimensions of the storms would be difficult to overstate, the resulting situation does present an unprecedented opportunity for faculty and students to participate in the recovery and rebuilding of both urban and rural areas.

To facilitate this endeavor, the Board has established, at its December 8, 2005 meeting, a five-year program to be funded through an annual allocation of approximately \$5 million from the Board of Regents Support Fund. Although it involves the redirecting of substantial funds from established BoRSF programs, it is essential to addressing priorities that have emerged since the storms. Utilizing monies unspent in the FY 2005-06 competitions, in addition to budget adjustments in established programs and revised budget projections, the Initiative has significant potential for leveraging of BoRSF funds to attain federal and private monies. Thus, the total money available to the Initiative should be significantly more than the \$5 million per year provided through the BoRSF.

The program will operate on a competitive basis, and be subject to peer review by out-of-state consultants, as is standard for BoRSF programs, but will otherwise be much broader in scope and impact. The Initiative will adopt a cross-program approach, encompassing all the constitutional mandates of the BoRSF, making funds available at all levels and for a myriad of activities, providing support to both annual and multi-year projects. All campuses and all disciplines will be eligible to compete. Each year's competition will be organized around central themes and areas, and these will serve as the parameters for proposal submission. The overarching them of the program will be Louisiana's recovery and rebuilding from the devastation of Hurricanes Katrina and Rita. The narrower themes that will guide proposal submission will be determined in part through 2006 and 2007 forums to be hosted in New Orleans by the Board of Regents. A committee of campus representatives has been formed to discuss the design of a request for proposals, topics for proposal submission, discipline eligibility, and the program's interfaces with the BoRSF's constitutionally-mandated objectives. The Board of Regents will review and approve details of the Post-Katrina Initiative during the spring or summer of 2006.

5.5.8 SUMMARY OF FY 2006-07 ENHANCEMENT EXPENDITURES

Prior Commitmen	ts - Traditional and Undergraduate	\$ 300,000
21	Federal Matching Grants	\$ 1,100,000
New Awards -	Federal Matching Grants	\$ 1,400,000
	Undergraduate	\$ 1,620,000
	Endowed Professorships	\$ 2,680,000
	Two-Year Institutions	\$ 1,080,000
	LaSIP Renewal	\$ 500,000
	Undergraduate Scholarships	\$ 1,000,000
	Traditional	\$ 7,415,000
	Post-Katrina Initiative	\$ 5,000,000
ENHANCEMEN	T PROGRAM TOTAL	\$22,095,000

5.6 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 <u>eight hundred thousand dollars</u>, 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 peerreview 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	\$150,000
Enhancement	\$ 95,000

These amounts estimated above will be <u>deducted from</u> the total amounts available for expenditure in the respective program components. As discussed in Section 5.2 (pp. 11-12) above, estimated consultant costs for the Endowed Chairs for Eminent Scholars Program are <u>added to</u> the regular allocation in order to preserve the \$400,000 units necessary for the endowments. An accurate estimate of consultant costs for the Post-Katrina Support Fund Initiative cannot be rendered at this time.

6. OVERVIEW OF FY 2006-2007 BUDGETARY ALLOCATIONS BY PROGRAM COMPONENT

The following chart provides an overview of FY 2006-2007 Board of Regents Support Fund budgetary allocations for new projects and previous commitments.

CHART V

	TOTAL SUPPORT FUND ALLOCATION	ALLOCATION FOR NEW PROJECTS	ALLOCATION FOR PREVIOUS COMMITMENTS
ENDOWED CHAIRS	\$ 3,220,000	\$ 3,220,000	\$ 0
GRADUATE FELLOWS	\$ 3,800,000	\$ 1,000,000*	\$ 3,800,000
RESEARCH	\$ 5,735,000	\$ 2,385,000	\$ 3,350,000
ENHANCEMENT**	\$ 22,095,000	\$20,695,000	\$ 1,400,000
SUBTOTALS	\$34,850,000		
ADMIN. COSTS	\$ 800,000		
GRAND TOTAL	\$35,650,000		

^{*}Because allocations for the Graduate Fellows Program must be determined two years in advance of when students first arrive on campus, the FY 2006-2007 allocation for new graduate fellowships was determined in FY 2004-05 and set forth for the first time in the FY 2005-06 Plan and Budget. Thus, this allocation for new projects must come from the FY 2007-08 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.

^{**}Enhancement figures include funds used for Federal Matching Grants opportunities and for the Post-Katrina Support Fund Initiative.

ATTACHMENT I FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPA					
FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPA		ATTAC	HMENT I		

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

		Federal	Federal		Federal	Support Fund Match
Title	Fiscal Years	Award Number Agency Duration	Agency	Duration	Award Amt.	
NSF/LaSER: The Louisiana EPSCoR Program	FY1989-90-	STI-8820219	NSF	3 years	\$1,945,312	\$3,374,355
	FY1992-93					

Participating Institutions: 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.

\$3,700,000 \$4,800,000	
3 years \$	
NSF	16
EHR-9108765	
DP) FY1991-92-	FY1994-95
NSF LaSER Advanced Development Proposal (ADP)	

Participating Institutions: A significant number statewide, organized into research clusters; 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

Louisiana Systemic Initiatives Program (LaSIP) in Math	FY1991-92-	TPE-9150043	NSF	5 years	\$10,000,000	\$10,000,000
and Science Education	FY1995-96					(\$5 million each from Regents and BESE)

Participating Institutions: A significant number statewide; grant funds awarded on a competitive basis.

Description/Purpose: To reform statewide - from kindergarten through college - methods of instruction and learning in mathematics, science, and engineering education.

\$500,000	(NASA and BOR portions	awarded directly to LSU)
\$600,000		
4 years	,	
NASA		
NGT-40039		
FY1991-92-	FY1995-96	
NASA Training Grant (LaSPACE)	0	

Participating Institutions: A consortium of sixteen campuses; grant funds awarded on a competitive basis.

Description/Purpose: To develop the infrastructure for aerospace research to competitive levels, while improving the quality of aerospace research and education.

DUE-9255761 NSF 3 years \$4,000,000 \$2,500,000		
1	7	
Coulsiana Collaborative for Excellence in the Preparation FY1992-93	of Teachers (LaCEPT) Program	

Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of Participating Institutions: Centenary, Grambling, LSU-BR, LSU-S, LA Tech, Loyola, McNeese, Nicholls, ULM, NSU, SLU, SUBR, SUNO, ULL, UNO, Xavier mathematics and science educators.

\$1,039,390	
\$1,039,590	
2 years	
DOE	
DE-FC02-	91ER75669
FY1993-94 -	FY1994-95
U.S. Department of Energy/EPSCoR Program	

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. Participating Institutions: Grambling LA Tech, LSU-BR, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 2 of 9

		Federal	Federal		Federal	Support Fund Match
Title	Fiscal Years	Award Number Agency	Agency	Duration	Award Amt.	
Defense Experimental Program to Stimulate Competitive Research (DEPSCoR) Planning Program	FY1993-94	DAAH04-93-G- 0466	. DOD	l year	\$50,000	\$25,000

Participating Institutions: A significant number statewide

Description/Purpose: To prepare a statewide plan for increasing the State's capacity to perform defense-related research and technology transfer.

			ı			000000
1993 DEPSCoR Implementation Program	FY1994-95 -	Grant Numbers	DOD	3 years	\$2,400,000	\$200,000
	FY1996-97	vary				

Description/Purpose: To conduct research and educate scientists and engineers in Louisiana in areas important to national defense. Participating Institutions: Dillard, Grambling, LSU-BR, LSUHSC-NO, SUBR, SUNO, Tulane, ULM, UNO, Xavier

NASA EPSCoR Program	FY1994-95 -	NCCW-0059	NASA	3 years	\$1,500,000	\$1,500,000
	FY1996-97					

Participating Institutions: Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier

Description/Purpose: 1) To improve the infrastructure for aerospace-related research and education in Louisiana, and increase the State's capability to perform federallyfunded aerospace research; and 2) to support three multi-institutional research cluster projects.

NSF Teaching Scholars Program	FY1994-95 -	DUE-9255761	NSF	5 years	\$200,000	\$250,000
	FY1998-99	(Supplement)				

Participating Institutions: Centenary, LA Tech, Loyola, Nicholls, SLU, SUBR, SUNO, ULL, ULM, UNO, Xavier

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).

\$3,000,000	
\$4,400,000	
3 years	
NSF	
OSR-9550481	
FY1995-96 -	FY1997-98
NSF/EPSCoR LaSER Systemic Improvement Program	(SI)

research linkages between the State's Historically Black and Majority White Campuses and Universities through Joint Faculty Appointments. This proposal continued the 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 Participating Institutions: Grambling LA Tech, LSUHSC-S, LSU-BR, Loyola, SUBR, SUNO, Tulane, ULL, UNO, Xavier efforts begun under the EPSCoR ADP award described above.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 3 of 9

		Federal	Federal		Federal	Support Fund Match
Title	Fiscal Years	Award Number Agency Duration	Agency	Duration	Award Amt.	
Building Research Partnerships with Audio/Video Conferencing Facilities	FY1996-97 – FY1998-99	EPS-9632665	NSF	2 years	\$494,198	80

Participating Institutions: LA Tech, LSU-BR, LSU Ag, LSUHSC-NO, NSU, SLU, SUBR, Tulane, ULL, ULM, UNO

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.

THE STATE OF THE S	EV1007 00	EDG 0730147	NCF	7 years	ICE 2 vears \$552 893	0\$
Laseknet II backbone for Institutions of Higner	L I 199/-90 -	1107/6-014	TON	e years		<u>}</u>
Education in Louisiana	FY1999-00					

Participating Institutions: LA Tech, LSU-BR, LSUHSC-S, LSUHSC-NO, SLU, SUBR, Tulane, ULL, ULM, UNO

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.

\$3,200,000	
\$3,473,402	
4 years	
DOE	
DE-FC02-	91ER75669
ewal FY1995-96-	FY1998-99
U.S. Department of Energy/EPSCoR Program Renewal	

Participating Institutions: Grambling LA Tech, LSU-BR, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier

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 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. to economic development in the State; and 4) to support three multi-institutional research cluster projects.

Participation (LS-LAMP) Program FY1999-00	Louis Stokes Louisiana Alliance for Minority	FY1995-96-	HRD-9550765	NSF	5 years	\$5,944,914	\$2,249,280
	Participation (LS-LAMP) Program	FY1999-00					

Description/Purpose: To increase the number of underrepresented minorities receiving B.S. degrees in science, engineering, and mathematics in Louisiana from the Participating Institutions: Dillard, Grambling, LUMCON, LSU-BR, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO baseline rate of 610 annually to an annual rate of 1,110.

	(NASA and BOR portions	awarded directly to LSU)
\$600,000		
4 years		
NASA		
NGT-40039		
FY1996-97 –	FY1999-00	
NASA LaSPACE Renewal Program		

Participating Institutions: A consortium of sixteen campuses; grant funds awarded on a competitive basis

Description/Purpose: To continue the development of the infrastructure for aerospace research to competitive levels, while improving the quality of aerospace research and education

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 4 of 9

Title	Fiscal Voors	Federal	Federal		Federal	Support Fund Match
	Fiscal Leals	Awalu Mulibel	Agency	DUFATION	Award Amt.	
s Program (LaSIP) Renewal	-	ESR-9634088 NSF 5 years	NSF	5 years	\$7,000,000	\$10,000,000
in Math and Science Education	FY2000-01					(\$5 million each from
	,					Regents and BESE)

Description/Purpose: To continue the education reform efforts begun under the original LaSIP program. Participating Institutions: A significant number statewide; grant funds awarded on a competitive basis.

FY1998-99 vary	PSCOR Implementation Program FY1996-97 - Grant Numbers DOD 3 years \$2,350,303 \$1,500,000
----------------	--

Participating Institutions: LSU-BR, LSUHSC-NO, SLU, Tulane

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.

\$1,000,000	41,000,000
Veare \$1.0	0,19
NASA 2	1
NCC5-167	
FY1997-98 -	FY1998-99
CoR Program Renewal	Time.
NASA EPSC	2 years

Participating Institutions: Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier

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.

	\$2,000,000	(divided equally between	BOR and BESE)	
	\$10,000,000	(\$2.46	million is	Louisiana's
	5 years			
	NSF			
	ESR-9700041			
	FY1997-98 -	FY2001-02		
D.M. D	Delta Rural Systemic Initiative in Science, Mathematics,	and recunology		

share)

Participating Institutions: A significant number; all campuses are eligible to compete.

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 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, parishes within Louisiana) that are rural and have major economic problems.

Louisiana Collaborative for Excellence in the Prenaration	n FV1998-99	DITE-0816104	NCE	2 170050	\$500,000	0000000
	***************************************	L/1010/-00	TON	J years	9000,000	000,000
of I eachers (LaCEPT) Program Supplemental Award	FV2000_01					
THURST THAT THE TANK	10-000711					

Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of Participating Institutions: Grambling, LSU-BR, LSU-S, LA Tech, Loyola, Nicholls, NSU, SLCC, SLU, SUBR, SUNO, ULL ULM, UNO, Xavier mathematics and science educators; to evaluate the effectiveness of the initial five-year award (FYs 1993-98).

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 5 of 9

		Federal	Federal		Federal	Support Fund Match
Title	Fiscal Years	Award Number Agency Duration	Agency	Duration	Award Amt.	
1997 DEPSCoR Implementation Program	FY1997-98 FY1999-00	Grant numbers vary	ДОД	3 years	\$1,770,504	\$750,000

Participating Institutions: LSU-BR, Tulane, ULL

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

NSF/EPSCoR New Cooperative Agreement (NCA)s	(NCA)s FY1998-99 - EPS	EPS-9720652	NSF	3 years	\$3,000,000	\$3,000,000
	FY2000-01					

Participating Institutions: A significant number statewide; grant funds awarded on a competitive basis.

competitive in gaining national research and development support, engaging them in science and technology transfer activities with business and industry, and helping them 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. 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 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

					(t) (t)	CC CC + E	
1999 DEPSCoR Implementation Program	FY1999-00-	Grant numbers	DOD	3 years	\$1,459,473	\$189,/98	
3 years	FY2001-02	vary					

Participating Institutions: 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.

\$300,000
\$250,000
2 years
Dept. of Commerce
60NANB9D0005 Dept. of 2 years Commerce
FY1999-00 – FY2000-01
Experimental Program to Stimulate Competitive Technology (EPSCoT)

Participating Institutions: A significant number statewide

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.

000000	\$250,000
	ling FY1999-00 NCC5-167 NASA 1 year \$400,000 \$2550,000
	1 year
	NASA
	NCC5-167
	FY1999-00
	NASA EPSCoR Program Continuation Funding

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 Participating Institutions: Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier

continuation of the NASA EPSCoR Program and NASA EPSCoR Program Renewal previously described.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 6 of 9

Federal Support Fund Match	Award Amt.	
	Duration	NASA 1 year
Federal	Agency	NASA
Federal	Award Number Agency	NCC5-393
	Fiscal Years	FY1999-00
	Title	NASA EPSCoR Preparation Grant Program

Participating Institutions: A significant number statewide. Funds are competitively awarded.

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.

					010111	CCC - CCC
NASA LaSPACE Continuation	FY2000-01 - NGT5-40115 NASA	NGT5-40115	NASA	5 years	\$1,281,250	\$1,000,000
	FY2004-05					

Participating Institutions: A consortium composed of sixteen campuses; grant funds are awarded on a competitive basis.

Description/Purpose: This award continues the efforts begun under the original LaSPACE program and the LaSPACE renewal described previously.

					000	000
FPA EPSCoR 2000 Program -Coastal Monitoring	FY1999-00-	R-82778501-0	EPA	2 years	\$483,939	\$200,000
	FY2000-01					

Participating Institutions: 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.

Louis Stokes Louisiana Alliance for Minority	1	HRD-000272	NSF	5 years	\$5,000,000	\$2,500,000	
Participation (LS-LAMP)	FY2005-06						
Phase II							

Description/Purpose: To continue to increase the number of underrepresented minorities in Louisiana receiving B.S. degrees in science, engineering, and mathematics. Participating Institutions: Dillard, Grambling, LUMCON, LSU-BR, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO

0
\$225,000
l year
NASA
NCC5-393
n Renewal FY2000-01
NASA EPSCoR Preparation Grant Program Renewal

Description/Purpose: To continue the efforts described above for the NASA EPSCoR Preparation Grant. Participating Institutions: A significant number statewide. Funds are competitively awarded.

NASA EPSCoR Program Continuation Funding (year	FY2000-01	NCC5-167	NASA	l year	4
seven)				8	

20

1 year

Description/Purpose: This award is the seventh-year continuation of the NASA EPSCoR Program previously described. Participating Institutions: Dillard, LA Tech, LSU-BR, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 7 of 9

		Federal	Federal		Federal	Support Fund Match
Title	Fiscal Years	Award Number Agency	Agency	Duration	Award Amt.	
Video to the Desktop: A Louisiana Model	FY2000-01 – FY2001-02	EPS-0083089	NSF	2 years	\$494,450	0\$

Description/Purpose: To promote research partnerships by establishing an inter-institutional H.323 research communications (videoconferencing) network, which will Participating Institutions: LA Tech, LSU-BR, LSU Ag, LSUHSC-NO, LSUHSC-S, NSU, SLU, SUBR, Tulane, ULL, ULM, UNO operate over existing Internet lines instead of over telephone lines, and allow desktop-to-desktop multimedia communications.

Louisiana EPSCoR Research Infrastructure	FY2001-02 -	EPS-0092001 NSF	NSF	3 years	\$9,000,000	\$3,000,000
Improvement (RII)	FY2003-04					

Participating Institutions: 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

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. Description/Purpose: This award funds the "Micro/Nano Technologies for Advanced Physical, Chemical, and Biological Sensors" research consortium in addition to a

NASA EPSCoR 2000	FY2001-02 -	NCC5-573	NASA 3 years	3 years	\$2,100,000	\$2,100,000	4
	FY2003-04						

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

D-87647001-0 FPA 2 ves

Participating Institutions: LUMCON, UL-Lafayette, LSUBR

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.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 8 of 9

Il Support Fund Maten		\$3,000,000
Federal	Award Amt.	\$9,000,0
	Duration	3 years
Federal	Agency	NSF
Federal	Award Number	EPS-0346411 NSF
	Fiscal Years	FY2003-04- FY2005-06
	~[+;L	Louisiana's Strategic Infrastructure Improvement (LSII)

Participating Institutions: A significant number statewide, including LSU-BR, LSUHSC-NO, SUBR, Tulane, ULL, ULM, UNO, Xavier. A portion of the grant funds will be awarded on a continuing, competitive basis.

Description/Purpose: This award funds the "Center for Bio-Modular Multi-Scale Systems" 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, NCA, and RII awards previously described.

\$986,560	
\$986,236	
2 years	
NASA	
NCC5-573	
FY2004-05 - NCC5-573	FY2005-06
NASA EPSCoR 2000 Renewal	3.3

significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology Description/Purpose: A two-year renewal of the NASA EPSCoR 2000 Program to 1) To develop and strengthen long-term academic research enterprises that will make Participating Institutions: LSU-BR, LUMCON, Tulane, Dillard, ULL, UNO, Xavier. A portion of the grant funds will be awarded on a continuing, competitive basis. capabilities, higher education, and economic development of the State; and 2) to support multi-institutional research projects.

					000 000	000 000
DOK RPSCoR Implementation 2004	FY2004-05-	DE-FG02-	DOE	3 years	5 DE-FG02- DOE 3 years \$1,200,000	\$1,200,000
	FY2006-07	04ER46136				

Participating Institutions: ULL, LSU-BR, SUBR.

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 award funds the multi-institutional, multidisciplinary research project entitled "Ubiquitous Computing and Monitoring System (UCoMS) for Discovery and Management of Energy Resources."

\$2,500,000	
5 years \$2,500,000	
5 years	
NSF	
- HRD-0503362	
FY2005-06-	FY2009-10
LAMP Phase III	

Description/Purpose: To continue to increase the number of underrepresented minorities in Louisiana receiving B.S. degrees in science, engineering, and mathematics, and Participating Institutions: Dillard, Grambling, LUMCON, LSU-BR, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO to transition at least 30% of these graduates to graduate school by 2010.

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT Page 9 of 9

		Federal	Federal		Federal	Support Fund Match
		Award Number	Agency	Duration	Award Amt.	
NASA LaSPACE Continuation II	FY2005-06 -	NNG05GH22H NASA 5 years At least	NASA	5 years	At least \$1.280.000	\$1,000,000
	01-KN07 L					

Participating Institutions: A consortium composed of sixteen campuses; grant funds are awarded on a competitive basis.

Description/Purpose: This award continues the efforts begun under the original LaSPACE program and the LaSPACE renewals described previously.

ATTACHMENT II

RESULTS FROM SELECTED PROJECTS

RESULTS FROM SELECTED PROJECTS

As a result of scientific data generated by an LSU Agricultural Center researcher, a new, quality herbal dietary supplement – Eucommia bark extract - is forthcoming that will allow people with high blood pressure to maintain a healthy blood pressure range. Ancient herbs, despite of long history of use, are not guaranteed preventative or therapeutic agents until their chemical compositions are characterized. This project, funded by an LEQSF research and development grant and one of the few of its kind in the country, overcame the quality flaws often seen in herbal dietary supplements by developing a standardization protocol that uses an effective chemical marker and fingerprint as future manufacturing template. This guarantees a reliable quality extract and, in turn, a repeatable biomedical effect that brings ancient herbs a closer step to entry in the mainstream healthcare system. When the project researchers administered the standardized Eucommia bark to hypertensive rats it caused their blood pressure to drop significantly without any side effect. This hypertensive effect was confirmed in a human clinical trial in which no adverse effect has been observed. {LEQSF (2000-02)-RD-B-01; PI, Zhijun Liu}

A team of Northwestern State University researchers funded by an LEQSF research and development grant are working to improve the productivity of a start-up plant in Natchitoches. As would be expected, the start-up plant is experiencing growing pains, in this case, scrap rates higher and productivity rates lower than desired. Researchers have developed a computerized control program using visual entry system software that addresses these issues. The projected gain if manufacturing employees if the plant reaches full employment will positively impact both Natchitoches Parish and the State. The program may also be used as a model for other plants in the company and worldwide. {LEQSF (2002-05)-RD-08; PI, Pamela Miller}

LSU Health Sciences Center researchers in New Orleans are developing new therapies for AIDS and other infectious diseases by targeting host process hijacked by the virus rather than attacking the virus directly. Using a synthetic peptide drug developed by one of the researchers, they have also demonstrated that its use is highly active against the AIDS virus in laboratory

experiments. Funded by an LEQSF research and development grant, these studies are being performed in collaboration with the University of New Orleans, Children's Hospital and a small biotechnology company. This project promotes the development of a biotechnology industry based in New Orleans, using its strong university and medical communities as a basis for development. {LEQSF (2002-05)-RD-B-06; PI, Seth Pincus}

Thanks to an LEQSF enhancement grant, **Xavier University** chemistry students now have access to the advanced techniques of Nuclear Magnetic Resonance (NMR) spectroscopy and Chromatography/Mass Spectrometry (GC/MS). Both have been integrated into the undergraduate experience, including the advanced lab classes, undergraduate research projects and lower-division lab courses. Exposure to the techniques used by these two major state-of-theart instruments is required in order for Xavier students to receive a nationally accredited degree. It also enables the students to be professionally competitive with students from other schools and enables in-house research to provide high quality training and educational experiences. {LEQSF (2002-03-ENH-TR-96; PI, R. Bryan Klassen}

While e-business continues to explode for firms with real operational presence, current e-solutions are too expensive and complex for many of Louisiana's small-to-medium sized businesses to implement. Based on the results of a survey that they conducted to measure the current capabilities of Louisiana businesses, researchers at the University of Louisiana at Lafayette's Center for Business and Information Technologies designed the Extended Enterprise/Supply Chain Management Framework and a suite of Collaborative E-Business Management (CEM) software. The technologies have applicability to all Louisiana business, both large and small, that engage in transactions for products and services. The investigators have held seminars and workshops to acquaint Louisiana businesses with the low-cost, Internet-based supply chain management technologies and solutions that will help them expand their global visibility. Additionally, the results of a feasibility study for the Defense Logistics Agency of the Department of Defense, which awarded the researchers two grants totaling \$345,000, indicated an anticipated net benefit of over \$17.3 million dollars, a return on investment of over 8 percent, and a 53% reduction in stock-outs. The Center's Industrial Advisory Board includes representatives from the following out-of-state companies: Sara Lee, Daimler Chrysler, John &

John Co., Proctor and Gamble, Software Consultants and The Boeing Company. Within two years of the \$100,000 LEQSF research and development grant, the return was already a healthy \$935,640 in federal/external funds. {LEQSF (2002-04)-RD-B-12); PI, Ramesh Kolluru}

An LEQSF research and development grant was awarded to Nicholls State University researchers investigating a deadly parasite that is the primary cause of mass mortalities in the eastern oyster *Crassostrea virginica* along the Gulf of Mexico and Atlantic coasts. The investigators have developed fluorescent microplate assay that will greatly facilitate the determination of the nature and specificity of host-parasite recognition. The fluorescent plate reader assay will also be used to study parasite infectivity for host other host tissues. The work was presented at an international conference and a manuscript accepted for publication by the Journal of Parasitology. {LEQSF (2001-04-RD-A-24; PI, Julie Gauthier}

Program to Stimulate Competitive Research (EPSCoR) its second \$9 million grant within three years. LEQSF matched the awards with \$3 million. The first award went to a consortium of nine Louisiana universities collaborating on micro- and nano-scale science and technology research. The centerpiece of the second grant is the establishment of a nationally prominent Center for Biological Modular Microsystems, an interdisciplinary, multi-institutional research team with expertise in microsystems engineering, materials, chemistry and biological systems. This team is focusing on scientific challenges in the design and development of BioMicroElectroMechanical Systems. Participants include researchers from Louisiana State University and A&M College, Louisiana State University Health Sciences Center, Tulane University Health Sciences Center, the J. Bennett Johnston Center for Advanced Microstructures and Devices (CAMD), and Xavier University of Louisiana.

A Tulane University Health Sciences Center research team has identified factors that may prove helpful in designing better therapies for individuals suffering from cryptococcal meningitis. The investigators, recipients of an LEQSF research and development grant, have also demonstrated that protective immune responses can be induced in a mouse model that extends the survival of mice with cryptococcal meningitis. Researchers anticipate that their work

may lead to the development of immunotherapeutic therapies to more effectively treat crypococcosis patients, especially those with AIDS, such that expensive antimycotic treatments will no longer be required for the lifetime of afflicted individuals. Data obtained from this study is being presented at national and international journals as well as published in relevant scientific journals. It has also has opened additional avenues of research on other fungal pathogens as well as potential collaborations with scientists in Louisiana and other states and federal funding possibilities. {LEQSF (2000-03)-RDA-37; PI, Kent Buchanan}

Thanks to an LEQSF enhancement grant **Louisiana Tech University** has a new computer-enhanced English classroom and tutoring lab. It is providing students with access to word processing systems for composing, revising and editing in-class writing assignments, and facilitating learning through the use of multiple modes of visual and audio instruction and the development of technological skills. It has also improved the instructional capabilities for faculty. While research and writing are the primary skills developed in the lab, it also assists students in understanding research procedures, developing critical thinking skills, and organizing those thoughts into high quality written essays. In the first quarter in which it was open, 573 students – almost five percent of the university's total enrolment, had already improved their technological skills in the areas of research, writing and communications. {LEQSF (2003-04)-ENH-TR-46}

An LEQSF Enhancement grant for **Tulane** University's A.B. Freeman School of Business to 1) design, install and test a trading room and train faculty and staff in its use; 2) use the trading room to enhance the energy finance curriculum and courses; and 3) develop and implement a new energy management courses also contributed to the establishment of the Entergy-Tulane Energy Institute. Entergy has committed \$2.5 million to the institute over five years an anonymous donor gave \$167,957 for the project. The enhancements made possible by the trading room and revised curriculum will build up the school's strengths in an established area and provide a teaching and research laboratory comparable to other top business schools. {LEQSF (2002-04)-ENH-TR-70}

ATTACHMENT III

TAXONOMY OF DISCIPLINES

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

NATURAL SCIENCES - BIOLOGICAL

NATURAL SCIENCES -BIOLOGICAL (CONTINUED)

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

Biologi	ical	Sci	ences

Agriculture

0201 Anatomy 0202 Biochemistry/Biophysics

0199 Agriculture - Other

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

Health	and Medical Sciences
0601	Allied Health
~ < ^ ^	A 11 1

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/Theater 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

3901 Adult and Continuing Education

3902 Bilingual/Crosscultural Education

3904 Junior High/Middle School

3905 Pre-Elementary Education

3906 Social Foundations

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

3903 Educational Media

Education

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

(2006)