

**FY 2024-2025 PLAN AND BUDGET
FOR THE EXPENDITURE OF REVENUES AVAILABLE FROM THE
BOARD OF REGENTS SUPPORT FUND
WITH AN OVERVIEW OF RESULTS OBTAINED**

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

**ADOPTED
December 13, 2023
BY THE
LOUISIANA BOARD OF REGENTS**

TABLE OF CONTENTS

OVERVIEW OF RESULTS	i
PREFACE.....	1
1. INTRODUCTION.....	1
1.1 Board of Regents Support Fund Revenue Projection, FY 2024-25	1
1.2 Budget Rationale and Preamble.....	1
1.3 Adoption of FY 2024-25 Plan and Budget	2
2. LONG-RANGE PLANNING AND EVALUATION	3
2.1 Long-Range Planning	3
2.2 Long-Range Evaluation	4
3. AN OVERVIEW OF RESULTS OBTAINED	5
3.1 Statewide Results	6
3.2 Results from Selected Projects.....	6
4. LEVERAGING BoRSF MONEY, EXPANDING BoRSF OPPORTUNITIES, AND PROMOTING MULTI-INSTITUTIONAL COOPERATION & COLLABORATION	6
4.1 Funded Proposals: Joint BoRSF/Federal Programs with Statewide Impact	7
4.2 Pending Proposals.....	8
4.3 Multidisciplinary and Multi-Institutional Proposals in Support Fund Program Components	8
5. BOARD OF REGENTS SUPPORT FUND PROGRAM COMPONENTS	9
5.1 Endowed Chairs for Eminent Scholars	9
5.2 Recruitment of Superior Graduate Students	10
5.2.1 Traditional and BoR/SREB Graduate Fellowships.....	10
5.2.2 Endowed Superior Graduate Student Scholarships	11

5.3	Carefully Defined Research Efforts.....	11
5.3.1	Research Competitiveness Subprogram	12
5.3.2	Industrial Ties Research Subprogram.....	13
5.3.3	Awards to Louisiana Artists and Scholars Subprogram	14
5.3.4	Summary of FY 2024-25 Research and Development Allocations.....	15
5.4	Enhancement of the Quality of Departments or Units.....	15
5.4.1	Federal Matching	16
5.4.2	Endowed Professorships	16
5.4.3	BoRSF Endowed Two-Year Student Workforce Scholarships	18
5.4.4	Endowed Undergraduate Scholarships for First-Generation College Students ...	19
5.4.5	Departmental Enhancement.....	19
5.4.6	Summary of FY 2024-25 Enhancement Allocations	21
5.5	Administrative Expenses	21

TABLES AND SCHEDULES

Table I:	FY 2024-25 Budgetary Allocations by Program Component.....	3
Table II:	Federal Matching Grants Subprogram.....	8
Schedule I:	Eligibility of Disciplines in the Research Competitiveness Subprogram	12
Schedule II:	Eligibility of Disciplines in the Departmental Enhancement Subprogram.....	20

ATTACHMENTS

- I. Funded Proposals: Joint Federal/State Programs with Statewide Impact
- II. Board of Regents Support Fund Results of Selected Projects
- III. Taxonomy of Disciplines

OVERVIEW OF RESULTS

Investment of Board of Regents Support Fund Money in Higher Education 1987 – 2023

- ◆ **OVER THE PAST DECADE, \$390 MILLION REPORTED IN EXTERNAL FUNDING** for BoRSF-funded grant projects through Federal, private, and industry sources
- ◆ **\$465 MILLION GENERATED IN NON-STATE CONTRIBUTIONS FOR \$303 MILLION IN BoRSF MATCHES (\$1.53 FOR EACH BoRSF DOLLAR MATCHED)** for faculty and scholarship endowments
- ◆ **MORE THAN 1,000 EXTERNAL AWARDS** from Federal, private and other non-Support Fund sources since 2013
- ◆ **325 ENDOWED CHAIRS FOR EMINENT SCHOLARS** established at 25 campuses
 - Two hundred sixty-one (261) \$1 million chairs
 - Sixty (60) \$2 million chairs
 - Three (3) \$3 million chairs
 - One (1) \$4 million chair
 - Includes ninety-nine (99) chairs funded by special legislative appropriation
- ◆ **2,642 ENDOWED PROFESSORSHIPS** established at 40 campuses since FY 1990-91
- ◆ **573 UNDERGRADUATE, GRADUATE, AND WORKFORCE STUDENT SCHOLARSHIPS** endowed at 36 campuses since FY 2007-08
- ◆ **1,683 SUPERIOR GRADUATE FELLOWSHIPS** supported at 16 campuses
- ◆ **APPROXIMATELY 90 PATENTS FILED** during the grant period over the past decade
- ◆ **MORE THAN 2,500 PUBLICATIONS** in peer-reviewed journals, scholarly monographs, and conference proceedings since 2013
- ◆ **MULTI-CAMPUS COLLABORATION, PARTNERSHIPS, AND SHARED RESOURCES** increase competitiveness for federal R&D money

**PLAN AND BUDGET
FOR THE EXPENDITURE OF REVENUES AVAILABLE FROM
THE BOARD OF REGENTS SUPPORT FUND
FISCAL YEAR 2024-25**

PREFACE

A sound educational system at all levels and in all disciplines which is well supported on a consistent basis is crucial to achieving the two higher education goals established in the Constitutional amendment that created the Louisiana Education Quality Support Fund (hereinafter referred to as the Board of Regents Support Fund): enhancing academic programs and units and promoting economic development. The four programs of the Board of Regents Support Fund (BoRSF) pursue separate but related strategies to achieve these goals. Since its inception in 1986, the BoRSF has evinced a broad and long-range commitment to building and maintaining strength across all academic disciplines and, in so doing, to promoting economic development through the enhancement of higher education in general. As higher education becomes more focused on defined education and workforce missions, the BoRSF is adjusting to target funding to these priority areas and ensure that the most critical needs and priorities of the State, systems, and campuses are supported in ways that enhance higher education, support attainment goals, and contribute to Louisiana's economic growth.

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; (2) recruitment of superior graduate students; (3) carefully defined research efforts; and (4) enhancement of the quality of academic, research, or agricultural departments or units within a postsecondary institution.

1.1 BOARD OF REGENTS SUPPORT FUND REVENUE PROJECTION, FY 2024-25

The revenue amount used in the FY 2024-25 BoRSF Plan and Budget is \$17,850,000, based on projections from the Revenue Estimating Conference and the Treasury, as well as historic earnings levels and the growth in recent fiscal years of funds carried forward due to revenues earned over approved budget levels.

1.2 BUDGET RATIONALE AND PREAMBLE

In deliberations about the Board of Regents Support Fund Plan and Budget for FY 2024-25 and the Fund's structure in future years, the Board recognized several issues:

- The need to assure alignment of BoRSF programs and funding priorities with the Board of Regents' Master Plan for Higher Education, *Louisiana Prospers: Driving Our Talent Imperative*, and its priorities and strategies to drive attainment through 2030;
- Persistent high demand for drastically reduced Support Fund resources under all program components along with increases in proposal quality and outstanding results achieved;

- The State’s continued emphasis on economic development and diversification, particularly related to 21st-century innovation industries and student preparation for the workforce;
- Demand from campuses, foundations, and donors for endowment matching significantly beyond available Support Fund resources;
- The critical importance of data collection, analysis, and evaluation to inform decision making; and
- Attention to constitutionally defined Support Fund goals, objectives, and restrictions within the context of needs and impacts related to the State’s higher education priorities.

It is vital that cores of strength be maintained in and across the four interrelated Support Fund components. While the Board has over the past decade increased funding available for endowment matching, which now comprises approximately half of all available first-year funding, to encourage private philanthropy, it is also mindful that significant reductions already taken across Support Fund grant programs could jeopardize the programs’ viability; further reductions will impair the impact and quality of the Support Fund as a whole, and its ability to achieve mandated goals. In addition, for BoR Master Plan goals to be met and for endowments to be effective mechanisms for student and faculty support, the BoRSF must continue to provide direct funding for necessary infrastructure and equipment, strong educational and training opportunities, and supportive cutting-edge facilities and research across priority departments and units. It is therefore imperative to balance matching funds for endowments with monies for competitive grants across the Enhancement and R&D programs.

1.3 ADOPTION OF FY 2024-25 PLAN AND BUDGET

Table I presents the Plan and Budget for FY 2024-25 as adopted by the Board of Regents at its meeting of December 13, 2023, including budgetary allocations for new projects, previous commitments, and program administration. Detailed discussions of the programs and subprograms, including descriptions, history, and previous funding levels, are provided in Section 5.

TABLE I

FY 2024-25 BUDGETARY ALLOCATIONS BY PROGRAM COMPONENT			
	TOTAL SUPPORT FUND ALLOCATION	ALLOCATION FOR NEW PROJECTS	ALLOCATION FOR PRIOR COMMITMENTS
ENDOWED CHAIRS	\$ 2,020,000	\$ 2,020,000	\$ 0
GRADUATE FELLOWS	\$ 1,020,000	\$ 1,020,000	\$ 0
RESEARCH & DEVELOPMENT	\$ 5,656,476	\$ 2,280,000	\$ 3,376,476
ENHANCEMENT*	\$8,555,299	\$ 5,684,067	\$ 2,871,232
SUBTOTALS	\$17,251,775	\$11,004,067	\$ 6,247,708
ADMIN. COSTS	\$ 598,225		
GRAND TOTAL	\$17,850,000		

*Enhancement figures include funds used for Federal Matching Grants opportunities. The total for new projects in Enhancement further does not include \$175,000 for BoR/SREB Doctoral Support awards because the first year of new awards approved in FY 2024-25 will be funded out of the FY 2025-26 budget and included in that budget as prior commitments. All previously approved BoR/SREB Doctoral Support awards are budgeted as prior commitments in Departmental Enhancement.

The Board further adopted contingencies in the event that funds available are higher or lower than the base budget amount. If in FY 2024-25 the income received for the higher education portion of the Board of Regents Support Fund is greater than the \$17,850,000 projected, additional revenues shall be allocated to existing programs as approved by the Board. In the event that earnings are lower than projected, proportionate cuts shall be taken in first-year amounts allocated for proposals across all competitive programs and subprograms. Only after all funding for competitive programs has been eliminated will reductions in Endowed Professorships be considered, provided that allocated funds are in excess of those needed to provide matching slots as guaranteed in Board policy. If revenues are insufficient to provide guaranteed matching slots, campuses will be notified of the shortfall and plans to accommodate the guarantees in a future fiscal year. Except as noted above, only after all budgeted first-year program funds have been eliminated shall any needed reductions be taken in federal matching commitments (both prior-year and new) or prior contractual obligations.

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 sets forth short-term programmatic goals and fiscal objectives, long-range plans were

needed to accomplish the interrelated purposes and goals of the Support Fund. Short-term activities outlined in the annual plans and budgets could then be shaped by these long-term goals.

The first long-range plan evolved from a 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: *Board of Regents Support Fund Long-Range Strategic Plan for Higher Education*. It maintained the central themes and strategies of the earlier plan, adjusted to reflect changing conditions and lessons learned. In 1999 the Board adopted a second revised plan to guide the Support Fund through FY 2005-06. In the wake of Hurricanes Katrina and Rita, the Board extended that Strategic Plan through FY 2006-07 and at its meeting of June 22, 2006 adopted a new Strategic Plan to begin in FY 2007-08. This Plan continued the approach of balancing continuity based on effectiveness with revisions reflecting lessons learned.¹

In light of dramatic declines in Support Fund earnings, totaling more than 50% since 2008, as well as changing circumstances across higher education in Louisiana, the Board of Regents undertook a review and restructuring of the BoRSF in 2016. Campuses at all levels, public and independent higher education systems, and other stakeholders were provided with numerous opportunities to assist in shaping the Support Fund for the future through participation in meetings of the two Support Fund advisory committees constituted in Board of Regents policy, as well as extensive circulation of concepts and drafts. In November 2016 the Board adopted a revised structure, organized around current and prospective campus, system, and statewide strengths and needs, as well as individual campus roles, scopes, missions, and priorities. This revised structure formed the basis for the FY 2017-18 Plan and Budget and was implemented for that fiscal year's competitive cycle. It anticipated the Regents' 2019 Master Plan in its emphasis on campus role, scope, mission, and strategic priorities and alignment with long-term education and research goals. Reflecting Master Plan priorities, the adopted structure remains in place for FY 2024-25. As implementation continues, the Regents will monitor outcomes and make any changes needed to boost the impact of the Support Fund's limited dollars and align activities fully with Louisiana's Higher Education Master Plan.

2.2 LONG-RANGE EVALUATION

Starting with the first Strategic Plan in 1988, methods have been developed to assess the long-range impacts of the Board of Regents Support Fund, including levels of success attained by individual funded projects and the programs and subprograms through which funding is awarded. In the early years, program and project success was evaluated annually by the BoRSF Planning Committee using holistic assessments provided by external reviewers and annual and/or final reports submitted by project directors. In FY 1990-91, the Board undertook a systematic evaluation process, culminating in an evaluation by a distinguished panel of out-of-state experts in 1994. At that time, the panel concluded that the BoRSF was efficiently administered, was effectively addressing many of the State's economic development and higher education infrastructure needs, and had been a critical tool in attracting federal funds to the State.

¹ Copies of the 1988, 1993, 1999, and 2007 Strategic Plans are available in the Board's office and at <https://web.laregents.org/program-evaluations-2/strategic-planning/>.

As Support Fund operations continued in the 1990s, the need for comprehensive and regular assessment of programmatic benefits became evident and the Board accordingly adopted processes by which this could be accomplished. Over the past two decades, numerous programmatic evaluations have been conducted, which have yielded significant insights into Support Fund operations and revisions to maximize the benefits to higher education of programmatic expenditures:

- The 1998 Endowed Chairs review culminated in the March 1999 adoption of the Board of Regents Endowed Chairs Policy, which significantly strengthened a program with already impressive accomplishments.
- The FY 1999-2000 comprehensive review of the Endowed Professorships Subprogram led to the adoption, in December 2000, of the Board of Regents Endowed Professorships Policy, improving and focusing that Subprogram.
- The FY 2000-01 review of the Recruitment of Superior Graduate Students Program led to the January 2002 adoption of recommendations designed to elevate the program's accomplishments.
- The 2009 review of Endowed Chairs resulted in policy and program revisions implemented during the FY 2009-10 review process.
- The FY 2001-02 and 2010-11 reviews of Research and Development initiatives yielded powerful evidence of the program's success as well as recommendations for improvement.
- During 2016, comprehensive assessment by the Board of Regents and higher education stakeholders of Support Fund priorities and programs in the context of the changing landscape for higher education in Louisiana led to adoption and implementation of a revised structure for the BoRSF as a whole. The new structure is continuously monitored to determine how revisions are working, the degree to which the Support Fund articulates with statewide priorities, and whether desired outcomes are being achieved.
- As part of Master Planning activities in 2019, the Support Fund was again reviewed to determine the degree to which it aligns with statewide priorities and postsecondary education's long-range goals. The Master Plan acknowledges the Support Fund's value and urges strategic efforts to ensure it continues to reinforce and adapt as necessary to long-term goals and objectives for higher education, particularly related to university-based research and education/workforce development.

3. AN OVERVIEW OF RESULTS OBTAINED

Significant benefits are accruing to the State as a result of the Support Fund investment in higher education. The results reported are even more impressive when one understands that: (1) realization of the full benefit of investment in higher education is a long-term proposition, and results evolve over a period of many years; (2) reported results include **only benefits derived during the life of the grants awarded**, and do not attempt to capture the many benefits which accrue after the conclusion of relatively short-term BoRSF contracts; and (3) no specific benefits beyond the initial private match are claimed as a result of faculty endowment subprograms, and no specific research support or external grants have been attributed to the

Recruitment of Superior Graduate Students Program. Programmatic evaluations have led the Board to adopt reporting mechanisms that do, however, enable measurement of external funding related to BoRSF components.

3.1 STATEWIDE RESULTS

- * **Since 2012, over \$390 million in grant and contract funding has been generated** from federal, private, and industry sources from the BoRSF's investment in Enhancement and R&D awards, thereby significantly increasing the total monies available for higher education in Louisiana. The figure reflects only external funds generated during the life of the awards. Given the time scales of research and education outcomes, it is expected that substantial additional revenues are and continue to be generated after award completion.
- * **Approximately \$465 million in non-State contributions, matched by more than \$303 million from the Support Fund, have been provided** to Louisiana institutions to establish endowed chairs, professorships, and graduate, undergraduate, and two-year workforce scholarships. The market value of the approximately 3,500 BoRSF-matched individual endowments is more than \$1.1 billion.
- * **Since 2013, more than 1,000 grants and/or contracts have been awarded** to Louisiana postsecondary institutions from external funding agencies directly and indirectly as a result of BoRSF investments. Since the inception of the Support Fund in 1987, Louisiana's competitiveness for federal funding has increased, as reflected in a steady growth in research expenditures over the last decade.
- * **Approximately 90 patents related to BoRSF-supported research have been filed** over the past decade.
- * **Increased institutional collaboration has resulted from Support Fund investments, as evidenced by an unbroken stream of multi-million-dollar, multi-institutional federal grants awarded over the past three decades to the Board of Regents on behalf of statewide university consortia for research initiatives.** Their purpose is to increase research capacity and success, as well as the amount of federal research and development money awarded to Louisiana scientists and engineers. (See descriptions of statewide awards in Attachment I.)

3.2 RESULTS FROM SELECTED PROJECTS

Attachment II contains brief summaries of the achievements of selected recent projects funded across Support Fund components.

4. LEVERAGING BoRSF MONEY, EXPANDING BoRSF OPPORTUNITIES, AND PROMOTING MULTI-INSTITUTIONAL COOPERATION AND COLLABORATION

The Board began 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, now Established, Program to Stimulate Competitive Research (EPSCoR) during FY 1988-89. In FY 1991-92 the Board dedicated a portion of Board of Regents Support Fund monies as matching commitments for two statewide, multi-institutional initiatives to be submitted in national competitions for federal funds in

areas that coincided with constitutionally prescribed BoRSF activities: the NSF LaSER Advanced Development Proposal (ADP) and the Louisiana Systemic Initiatives Program (LaSIP) in Math and Science Education.² The reasons for, and goals of, these matching commitments were fourfold:

- To continue and accelerate the leveraging of federal money with BoRSF investments for statewide collaborative proposals;
- To expand opportunities available through BoRSF programs;
- To augment infrastructure development begun under BoRSF programs, which is necessary to enable Louisiana's postsecondary campuses to secure competitive federal funding; and
- To promote multi-institutional collaboration and cooperation among Louisiana's colleges, universities, and K-12 schools.

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

4.1 JOINT BoRSF/FEDERAL PROGRAMS WITH STATEWIDE IMPACT

The Board was successful in the early NSF EPSCoR competitions, and these efforts encouraged continued pursuit of competitive federal research and educational dollars from NSF and a variety of other agencies including the National Aeronautics and Space Administration (NASA), the Department of Defense (DOD), the Department of Energy (DOE), the Department of Commerce (DOC), the Environmental Protection Agency (EPA), and the National Institutes of Health (NIH). Support Fund obligations for these federal grants appear in Table I. Attachment I provides a detailed description of each grant, including federal funds received.

The Board's decision to leverage the Support Fund by targeting matches for federal grant opportunities has borne significant fruit. It has enabled the State to progress from receiving minimal support from NSF for research collaborations in the 1980s, to the current environment, in which Louisiana is among the elite of EPSCoR states in successful federally sponsored grants and research activities and one of very few to receive an unbroken stream of large NSF Track 1 awards since the mid-1980s. Table II provides a list of current and pending federal awards for which Support Fund match is budgeted in FY 2024-25.

Table II
Federal Matching Grants Subprogram
Current and Pending Joint State and Federal Projects with Systemic and/or Statewide Impact
By Types of Support Fund Activity, Monetary Commitment, and Duration

NSF EPSCoR RII Track 1 Proposal	ENH: 100%	\$800,000	\$4 Million	2020-21 through 2024-25	5
NASA EPSCoR Research Infrastructure	ENH: 100%	\$125,000	\$625,000	2022-23 through 2026-27	5
NASA EPSCoR - Research 18 (pending)	ENH: 100%	\$250,000	\$750,000	2024-25 through 2026-27	3
NASA LaSPACE Fifth-Yr Extension (pending)	ENH: 100%	\$250,000	\$250,000	2024-25	1

4.2 PENDING PROPOSALS

The NASA EPSCoR Program annually issues a Cooperative Agreement Notice (CAN) soliciting university-based research activities which will make significant contributions to the strategic research and development priorities of NASA and to the overall research infrastructure, science and technology capabilities, higher education quality, and economic development of the State. In addition, NASA is seeking a fifth-year extension of Space Grant programs in FY 2024-25; LaSPACE, led by LSU A&M, will request continuation of funding on behalf of the State. It is anticipated that \$500,000 will be required in FY 2024-25 to provide match to successful projects funded through these solicitations. The funds are included as a new award in the Federal Matching Grants component of the Enhancement Program (see Section 5.5.1).

4.3 MULTIDISCIPLINARY AND MULTI-INSTITUTIONAL PROPOSALS IN SUPPORT FUND PROGRAM COMPONENTS

The Board has long recognized the potential of multidisciplinary 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 funds and promote resource sharing. Accordingly, the Board has encouraged these kinds of proposals since the inception of the Board of Regents Support Fund, not only as part of the joint federal/State efforts described in Section 4.1 of this Plan and Budget, but also in proposals submitted under traditional BoRSF program components.

To further emphasize its belief in the potential of multidisciplinary, multi-institutional efforts to achieve BoRSF goals and promote the best interests of the State, the Board has specifically encouraged, through requests for proposals and long-range planning documents, the submission of collaborative proposals that promise statewide benefits. Reflecting this emphasis, beginning with its FY 2000-01 budget, the BoRSF set aside funds each year from the Traditional Enhancement Subprogram for the funding of these types of projects. Consistent with the growing emphasis placed on interdisciplinary research throughout the academic community and the large numbers of quality proposals submitted each year in the Multidisciplinary Enhancement category, the Board increased the funds available for awards in this category to \$950,000 in the

FY 2004-05 Plan and Budget. The funding level for Multidisciplinary Enhancement in subsequent years was calculated as a percentage of the Traditional Enhancement budget (20%), and this practice continued with the establishment of Departmental Enhancement in 2017. In retaining this percentage calculation in FY 2024-25, the Board reaffirms its encouragement of multidisciplinary and/or multi-institutional proposals across all Support Fund program components. Any unexpended Multidisciplinary funds will revert to discipline-based Departmental Enhancement (see Section 5.5.5).

5. BOARD OF REGENTS SUPPORT FUND PROGRAM COMPONENTS

5.1 ENDOWED CHAIRS FOR EMINENT SCHOLARS - \$2,020,000

The Endowed Chairs for Eminent Scholars Program, introduced in 1987, is designed to enhance the recruitment and retention of distinguished faculty at higher education institutions throughout Louisiana. Beginning in 1990, the program was budgeted at an annual level of at least \$3,200,000. Legislative supplemental appropriations, beginning in FY 1995-96 and continuing in several subsequent years, enabled the funding of 99 additional chairs. Through FY 2022-23, 325 chairs are matched at twenty-five institutions, and the program has generated a total endowment corpus (including non-State match) of \$385 million. Comprehensive reviews conducted in 1993, 1998 and 2009 led to significant strengthening of the program.

The program pairs a 60% private-sector contribution with a 40% Board of Regents match to endow a chair to be filled by an exemplary scholar. The Board endows chairs in any discipline in \$1,000,000 increments: \$1,000,000 total endowment (\$600,000 match/\$400,000 BoRSF); \$2,000,000 total endowment (\$1,200,000 match/\$800,000 BoRSF); and \$3,000,000 total endowment (\$1,800,000 match/\$1,200,000 BoRSF). Higher endowments are encouraged, generally established by combining existing matched Chairs or incremental requests for BoRSF match. Sixty (60) of the 325 chairs are matched at the \$2,000,000 level, three (3) at \$3,000,000, and one (1) at \$4,000,000.

A policy creating “Special Provisions for Public Four-Year Campuses with Fewer than Three Eminent Scholars Chairs,” adopted in 2001, allowed public four-year institutions with fewer than three chairs to invert the 60:40 ratio of private funds/BoRSF, but retained the principle of competition without favor. Through FY 2005-06, when the special provisions expired, nine chairs (three from Northwestern State University, two from Louisiana State University Shreveport, and one each from Grambling State University, Louisiana State University of Alexandria, Southern University and A&M College, and Southern University at New Orleans) were funded under its aegis. One additional inverse-ratio chair from Southern University at New Orleans was funded under special circumstances in FY 2006-07.

During the first years of the program’s operation, chairs were matched on a “first-come, first-served” basis. This approach was replaced in 1993 by a competitive process to ensure that the highest-quality chairs with the greatest potential for impact are funded. 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, recommending 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 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

should occur infrequently and only when a national search has documented the national and/or international eminence of the prospective chairholder.

As the national search guarantees past scholarly performance, periodic performance reviews of the chairholder are intended to assure continued accomplishment. As verified by these reviews, chairholders are required to maintain highly productive records of scholarly and/or creative endeavor, exceptional teaching, recruitment and mentoring of high-quality students, leadership activities, and economic development activity.

As part of the restructuring of the Support Fund, the Board adopted a policy that, for all future competitions, requires that endowed chairs for which match is requested be aligned with the submitting campus's role, scope, mission, and strategic priorities. This practice will ensure that these highly influential chairs are established in the areas of greatest strength and/or greatest need on the campus.

Traditionally \$3,220,000 has been budgeted annually for the Endowed Chairs category; severe funding constraints caused by sharp declines in Support Fund income required that the FY 2013-14 Endowed Chairs budget be reduced by 25%, to a level of \$2,420,000. In FY 2014-15, given the number of vacant existing chairs and the significant number of excess requests for State match in the Endowed Professorships Subprogram, the budget for Endowed Chairs was reduced to \$2,020,000. Though the traditional \$3,220,000 budget was restored in FY 2015-16, continuing declines in Support Fund income again required a reduction in the FY 2016-17 budget level, to \$2,020,000. To accommodate ongoing budget challenges and excess match requests in Professorships, the budget level was further reduced in FY 2017-18, to \$1,620,000. Persistent revenue shortfalls and high demand for Professorships matching resulted in an annual budget level of \$1,220,000 in FY 2018-19 and FY 2019-20. Improved revenue forecasts for FY 2020-21 and 2021-22 warranted an increase in the budget level to \$2,020,000. A total of \$2,420,000 was budgeted for FY 2022-23 and 2023-24. Funding in FY 2024-25 is reduced to \$2,020,000, to accommodate lower Support Fund revenue estimates, including \$2,000,000 for endowment matching and \$20,000 for competitive review.

5.2 RECRUITMENT OF SUPERIOR GRADUATE STUDENTS - \$1,020,000

The Recruitment of Superior Graduate Students component has provided direct student support and endowment matching to select departments to attract and retain top-quality students to help seed excellence in graduate programs. Through FY 2018-19, the Board of Regents funded 1,683 graduate fellowships to a spectrum of departments at sixteen institutions in Louisiana. More than 90% of all awards were made to science, technology, engineering, and mathematics programs and, in addition, about 8% of fellowships have been awarded to programs specifically targeting in-service K-12 teachers in mathematics and science disciplines pursuing master's degrees in education. Fellowships have clearly helped a large number of students to pursue graduate education, but each fellowship is expensive – over four years averaging \$100,000 in BoRSF funding plus tuition waivers provided by the campus – and its impact is limited to the single student recipient.

In FY 2015-16, the Board established a subprogram to match endowments for Superior Graduate Student Scholarships. Such endowments will provide a permanent source of support for graduate study in Louisiana, affecting generations of students.

5.2.1 Traditional and BoR/SREB Graduate Fellowships

The Traditional Graduate Fellows (GF) Subprogram was created at the inception of the Graduate

Fellows Program; the Board became a full participant in the Southern Regional Education Board (SREB)-State Doctoral Scholars Program in FY 2007-08 and, as a result, established the Board of Regents/SREB Graduate Fellowships to Promote Diversity Subprogram (BoR/SREB), adding it to the Graduate Fellows component. The Traditional Subprogram primarily supported excellent doctoral-level fellows, but also allowed stipends for students in master's-level programs of distinction. The BoR/SREB Subprogram, a continuation of the Perkins Doctoral Fellows Program established in response to the Louisiana Consent Decree, offered successful colleges and universities fellowships to build diversity in the professoriate by recruiting, retaining, and graduating excellent underrepresented minority PhD candidates. The Traditional GF and BoR/SREB Subprograms provided opportunities for departments and universities across the State to receive assistance in the recruitment, training and support of high-quality graduate students. Given their expense and limited impact, the Board determined that graduate student support would be better provided through a combination of endowments and R&D and Enhancement awards with broader purpose and through permanently endowed scholarship funds, so the standalone fellowship subprograms were suspended for new awards beginning in FY 2017-18. In consideration of the structure of the program and the unfunded one-year recruitment year provided, an additional competition for Traditional Graduate Fellows went forward in FY 2016-17, with individual awards approved in April 2017; the final commitments in this category were included in the 2021-22 Plan and Budget. No monies are included for these subprograms in the FY 2024-25 Plan and Budget.

5.2.2 Endowed Superior Graduate Student Scholarships

In September 2014, the Board of Regents approved establishment of the competitive BoRSF Endowed Superior Graduate Student Scholarships Subprogram, enabling campuses to enhance support for graduate and first professional degree students through permanent endowments which combine non-State contributions and Support Fund match. Endowed Superior Graduate Student Scholarships are established to assist departments, units, colleges, and/or campuses to recruit, retain, and graduate excellent graduate and first professional degree candidates as well as post-doctoral research fellows. Though all disciplines are eligible, priority is given to scholarships a) for students in high-demand professional master's, doctoral, and first professional degrees which target Louisiana's workforce needs and b) to support professional experiential opportunities substantially related to those workforce needs.

The funding of an endowed graduate scholarship requires the eligible college or university to raise at least \$60,000 from non-State sources, to be matched by \$40,000 from the Support Fund, thus establishing a graduate scholarship endowment of \$100,000 at minimum. Income from the permanent endowment must be used for direct benefit of the appointed student(s), to support scholarships and fellowships as well as professional development experiences including internships, externships, research and conference travel, and field work.

Based on the continuing high demand for matching, the Endowed Superior Graduate Student Scholarships Subprogram was budgeted for \$1,120,000 in FY 2022-23 and 2023-24. Funding in FY 2024-25 is reduced to \$1,020,000, to accommodate lower Support Fund revenue estimates, including \$1,000,000 for endowment matching and \$20,000 for competitive review.

5.3 CAREFULLY DEFINED RESEARCH EFFORTS - \$5,656,476

Board of Regents Support Fund Research and Development subprograms have consistently been highly successful in positioning faculty for non-State research funding, promoting economic development, and bringing

major scholarly and creative works to the marketplace. In addition to contributing to knowledge, understanding, and practical deployment of ideas, projects funded through these subprograms also bring a significant flow of federal and private-sector dollars to Louisiana in support of university-based research. A recent survey of completed projects indicated that the average return for one dollar of Support Fund research investment is approximately \$10.50. Given the success of these initiatives and their significant benefits to the State, it is important to retain them with minimal changes.

A total of \$3,376,476 is required during FY 2024-25 to honor prior commitments for multi-year projects in the BoRSF Research and Development (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.

5.3.1 Research Competitiveness Subprogram (RCS)

RCS is a stimulus initiative directed toward researchers who are at the threshold of becoming competitive in the federal R&D marketplace, designed to assist them to overcome the barriers that have prevented them from competing successfully at the national level for R&D funds. RCS is also focused only on those researchers who clearly show strong potential for enhancing their competitive status within the limited time span of a Board of Regents Support Fund grant. The one-year component of RCS emphasizes short-term seed funding to prepare research projects on the cusp of competitiveness for submission to and success in federal grant programs. 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 research funds in RCS are restricted to the sciences and engineering (as defined by the National Science Foundation), agriculture, life sciences, and health and medical sciences. Most disciplines are eligible on a staggered, two-years-on, two-years-off cycle; however, three disciplines accorded the highest priority for economic development in Louisiana (biological, computer & information, and earth & environmental sciences) are targeted for funding annually. The eligibility cycle for RCS, including rotating disciplines eligible in FY 2024-25, is specified in Schedule I.

SCHEDULE I: ELIGIBILITY OF DISCIPLINES* IN THE RESEARCH COMPETITIVENESS SUBPROGRAM (RCS)

GROUP I - ELIGIBLE EVERY YEAR

Biological Sciences
Computer & Information Sciences
Earth & Environmental Sciences

GROUP II - ELIGIBLE IN FYs 2022-23, 2023-24, 2026-27

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

GROUP III - ELIGIBLE IN FYs 2021-22, 2024-25, 2025-26

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

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

Given the success of RCS in preparing faculty for competitiveness in the federal R&D marketplace, the Board has made every effort to fund this Subprogram at the highest possible level. The amount devoted to RCS for first-year awards was set at \$1,500,000 in FY 1999-2000, a level maintained for several funding cycles. Beginning in FY 2006-07 and continuing through FY 2009-10, the amount budgeted for first-year awards was reduced to \$1,350,000 to facilitate funding of the Post-Katrina Support Fund Initiative. The funding level was restored in FY 2010-11 to \$1,500,000. Due to persistent declines in revenue in combination with lower projected income in the BoRSF, in FY 2011-12 and FY 2012-13 the funding level was again reduced to \$1,350,000. Additional significant declines in revenue projections required that first-year funding for RCS be further reduced in FY 2013-14, to a level of \$865,000. In FY 2014-15, lower levels of prior commitments and federal matching obligations allowed monies for first-year funding in RCS to be restored to \$1,350,000; this budget level was maintained between FY 2015-16 and FY 2017-18. For FY 2018-19, due to continued declines in Support Fund revenues, the RCS first-year budget was again reduced, to \$1,250,000. In FY 2019-20, based on decreased funds needed for prior commitments in Graduate Fellows programs, the first-year budget was increased to \$1,300,000. In FY 2020-21, the budget was restored to \$1,350,000, reflecting improved revenue forecasts. Revenue uncertainties and a budget reduction in FY 2021-22 led to lower first-year budget of \$1,250,000. The budget level of \$1,350,000 was restored in FY 2022-23 and maintained in 2023-24. Funding in FY 2024-25 is reduced to \$1,250,000, to accommodate lower Support Fund revenue estimates, providing opportunities for both single-year and multi-year (up to three years) projects.

5.3.2 Industrial Ties Research Subprogram (ITRS) and Proof-of-Concept/Prototyping Initiative (PoC/P)

The principal goal of ITRS is to fund research proposals which 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 of the private sector and/or non-State public agencies. Because ITRS also functions as a stimulus initiative, 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. The Proof-of-Concept/Prototyping (PoC/P) Initiative, consolidated with ITRS in FY 2016-17, provides support for faculty developing products and ideas for the marketplace, enabling faculty who have completed the research phases of their investigations to pursue proof-of-concept work and prototype development to prepare products for testing and production.

To ensure that investments align as much as possible with State and higher education priorities, projects are encouraged chiefly in five priority areas identified by the Louisiana Department of Economic Development and higher education research leaders and adopted by the Board of Regents in 2015: Advanced Manufacturing and Materials, Clean Technology and Energy, Coastal and Water Management, Digital Media and Enterprise

Software, and Life Sciences and Bioengineering. To ensure no opportunities with the potential to promote economic development and diversification are overlooked, the Board allows funding in other research areas, provided a persuasive, well-documented case is made in the proposal for a project's major contributions to the State, particularly related to economic development. Further, the Board continues 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. Through its Advisory Committee for the Advancement of Research in Louisiana (ACARL), the Board regularly reassesses research priority areas and needs related to economic development.

Though it has resulted in a number of projects with significant economic benefits (see Attachment II), ITRS has also presented some challenges. Louisiana's relatively undiversified industrial economy and dearth of large industrial-based corporations (only two Fortune 500 companies – Lumen Technologies (formerly CenturyLink) and Entergy – and relatively few industries with substantial in-state capacity for R&D spending) have made it difficult for university faculty to foster meaningful partnerships with State-based industries. The Board significantly reduced the funding level for ITRS to reflect this reality; the amount available for first-year funding of this component was set at \$650,000 for several years. To make funds available for the Post-Katrina Support Fund Initiative, the amount was reduced by 10%, to a first-year level of \$585,000, for FY 2006-07 through FY 2009-10. The funding level was restored to \$650,000 in FY 2010-11. In FY 2011-12, the funding level was again reduced by 10%, to \$585,000, to accommodate lower projected income in the BoRSF; this funding level was retained in FY 2012-13. Continued declines in revenue projections required that first-year funding for ITRS be further reduced in FY 2013-14, to a level of \$375,000. In FY 2014-15, due to decreases in prior commitments and federal matching obligations, monies for first-year funding in ITRS were restored to \$585,000; this budget level was maintained in FY 2015-16 for the traditional ITRS component.

The Opportunities for Partnerships in Technology with Industry (OPT-In) program, established in FY 2011-12 by Louisiana EPSCoR as part of its NSF Track 1 award, provided industrial partnership awards similar in focus to ITRS, but more limited in scope and duration, as well as funds for proof-of-concept work and prototype development. During its years of operation through EPSCoR, OPT-In funded 41 projects with an annual allocation of \$350,000 from the Support Fund match to the Track 1 award. Now the Proof-of-Concept/Prototyping (PoC/P) Initiative and directly funded through the BoRSF, this ITRS component exclusively targets products and ideas which are near to commercialization or transfer to the marketplace.

In FY 2016-17, the activities and objectives of ITRS and PoC/P were consolidated to ensure both innovation and partnership continue to be supported; in FY 2017-18, the consolidated budget was set at \$800,000 to reflect an anticipated increase in demand for research funding directly related to economic development. This consolidated approach was retained in FY 2018-19, though budget constraints and flat demand required a reduction of first-year funding to \$750,000; this budget level was retained in FY 2019-20. A year-one budget level of \$800,000 was recommended for FY 2020-21, reflecting the relative importance of supporting research with near-term economic benefits to Louisiana. Due to revenue uncertainties, a year-one budget of \$700,000 was adopted in FY 2021-22. An increased budget level of \$750,000 was provided in FY 2022-23 and 2023-24. Funding in FY 2024-25 is reduced to \$680,000, to accommodate lower Support Fund revenue estimates.

5.3.3 Awards to Louisiana Artists and Scholars (ATLAS) Subprogram

The ATLAS Subprogram provides support for major scholarly and artistic productions with potential to

have a broad impact on a regional and/or national level. ATLAS awards facilitate completion of manuscripts for publication and/or mounting of creative productions including recordings, performances, and gallery shows. The Subprogram allows the State to profit from its rich cultural traditions and makes Louisiana faculty members' expertise and creativity in these disciplines well known both nationally and internationally.

ATLAS, modeled after the internationally known John Simon Guggenheim Memorial Foundation Fellowships, was inaugurated at a funding level of \$500,000 in FY 2004-05. The funding level for this Subprogram remained at \$500,000 for FY 2005-06, but was reduced to \$450,000 in FY 2006-07 and subsequent years in order to make funds available for the Post-Katrina Support Fund Initiative. The funding level was restored to \$500,000 in FY 2010-11. In FY 2011-12, given lower projected income in the BoRSF, the funding level was again reduced by 10%, to \$450,000, a level retained in FY 2012-13. ATLAS funds were further reduced in FY 2013-14, to a level of \$285,000, to accommodate additional substantial declines in projected Support Fund income. In FY 2014-15, due to decreases in prior commitments and federal matching obligations, monies for first-year funding in ATLAS were restored to \$450,000 and maintained in FY 2015-16. Given ongoing Support Fund revenue declines, in FY 2016-17, the budget was reduced to \$350,000 and then to \$330,000 in FY 2017-18. Continuing fiscal stresses led to a further reduction, to \$300,000, in FY 2018-19. In FY 2019-20, based on extremely high demand and project quality, a budget of \$350,000 was adopted. Gains in projected revenues along with continued demand and project quality led to a budget of \$375,000 in first-year funds for FY 2020-21. For FY 2021-22, with revenue projections lowered, a budget of \$350,000 was adopted. An increased budget level of \$400,000 was provided in FY 2022-23 and 2023-24. Funding in FY 2024-25 is reduced to \$350,000, to accommodate lower Support Fund revenue estimates.

5.3.4 Summary of FY 2024-25 Research and Development Allocations

<u>Prior Commitments (RCS and ITRS only):</u>		\$3,376,476
<u>New Awards:</u>	RCS	\$1,250,000
	ITRS	\$ 680,000
	ATLAS	<u>\$ 350,000</u>
R&D PROGRAM TOTAL		\$5,656,476

5.4 ENHANCEMENT OF THE QUALITY OF DEPARTMENTS OR UNITS - \$8,555,299

NOTE: Matching commitments for all Federal Matching Grants Subprogram proposals are accommodated through the Enhancement Program. The Board has elected to operate in this manner due to (a) the uncertainty of a proposal's potential success in the national competition for federal funds; (b) the difficulty and uncertainty surrounding moving money from one BoRSF program budget to another, once budgeted in the prior year's appropriation process; and (c) 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 recognizes that enhancement of the instructional and research infrastructure of academic, research, and agricultural departments and units, the entities leading higher education's core mission, continues to be a fundamental need, essential to accomplishing goals of the other three BoRSF components and the BoRSF as a whole. For this

reason, the Board shall dedicate \$8,555,299 to the Enhancement Program in FY 2024-25. Thus, approximately 50% of the total program funds available in FY 2024-25 have been dedicated to this component. This reflects the Board's strong commitment to Enhancement, which provides opportunities to support high-priority academic activities for all Support Fund-eligible colleges and universities in the State.

Approximately \$3,371,232 of the \$8,555,299 budgeted for Enhancement awards in FY 2024-25 will be required to honor prior commitments for multi-year projects and new and prior-year matching for federal projects. Of this amount, \$1,946,232 has been budgeted for multi-year projects funded in prior competitive cycles under the Departmental Enhancement Subprogram (see Section 5.5.5), while a total of \$1,425,000 is required to meet the State's matching commitments in current and pending federal programs (see Section 5.5.1).

After deducting these projected commitments for multi-year Enhancement projects and the prior and projected obligations for federal matching opportunities, \$5,184,067 will be available for new Enhancement projects submitted for funding consideration in FY 2024-25. Maintenance of the highest possible budgetary allocations to the Enhancement subprograms is particularly important because: (a) Enhancement subprograms build infrastructure at higher education institutions, which is critical to the success of the other three Support Fund programs; and (b) all higher education institutions are eligible to compete and the majority of campuses most successfully compete in Enhancement subprograms. Enhancement is the only component of the Support Fund through which every eligible campus type has received funding. Reflecting need, demand, and breadth of access to funding, then, 52% of the total funds available for new awards will be dedicated to Enhancement subprograms. (See Table II, "An Overview of FY 2024-25 Budgetary Allocations by Program Component" in Section 6 of this Plan and Budget.)

5.4.1 Federal Matching

Federal matching leverages Support Fund monies to compete for funds from federal research programs, particularly through the Established (formerly Experimental) Program to Stimulate Competitive Research (EPSCoR), an initiative to address disparities in provision of federal research funding across states. The Board has also matched Enhancement monies to obtain federal grants that implement and sustain statewide education reform efforts. Between 1987 and 2022, federal programs awarded more than \$291 million to joint federal/State initiatives, for which the BoRSF provided match of approximately \$103.3 million. Budget levels for federal matching are determined by known demand – upcoming regular federal competitions and program policies and regulations defining what must and may be matched by the State.

A total of \$1,425,000 has been pledged as the State's matching commitment for federal awards in FY 2024-25, including: (a) \$800,000 for the fifth year of the NSF Research Infrastructure Improvement (RII) Track 1 project; (b) \$250,000 for the first year of the NASA EPSCoR Research 18 project; (c) \$250,000 for the fifth-year extension of NASA LaSPACE; and (d) \$125,000 for the third year of the NASA EPSCoR Research Infrastructure Development project.

5.4.2 Endowed Professorships

The Endowed Professorships Subprogram, established to provide supplementary support for superior faculty at any level, was established in 1990-91 and first funded in FY 1991-92. The funding of an endowed professorship requires the college or university to raise funds from non-State sources, to be matched by the BoRSF at a defined ratio, thus creating an endowed professorship valued at a minimum of \$100,000.

Following the Subprogram's initial implementation the Board became concerned that too many eligible campuses were not reaping its benefits. 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 also encouraged campuses to maximize efforts to attain matching funds for endowments from private philanthropic sources. Almost all Support Fund-eligible campuses now hold at least one matched Endowed Professorship.

Though campuses are informed of total available matching dollars and limited per-campus funding guarantees, the Board of Regents annually receives more requests for matching than can be provided with available funds. Measured against pressing financial needs throughout higher education, every component of the Support Fund is severely underfunded. Consequently, each dollar used to fund endowments means that fewer dollars are available for critical, immediate needs elsewhere. In FY 2010-11 and in several previous years, the Board funded the Endowed Professorships Subprogram at a level of \$2,680,000, sufficient to endow two \$40,000 professorships at each four-year and special purpose campus and one \$40,000 professorship at each two-year campus. In most years eligible campuses with excess submissions were able to receive more than two professorships when slots allocated to others were unclaimed. In addition, in FY 1995-96 and numerous subsequent years, the Legislature approved special appropriations to fund unmatched professorships.

Given changes in the markets over the past decade, which have led to limited returns on these smaller endowments, along with rising critical needs throughout the higher education community and steady declines in Support Fund income, the Board reduced funding for the Endowed Professorships Subprogram during FY 2011-12 to the level of \$1,560,000, an amount equivalent to one slot per eligible campus, though available monies were sufficient to continue meeting prior matching guarantees based on requests for match. The level of one \$40,000 match per four-year and two-year campus was retained in FY 2012-13, though the funding amount was increased to \$1,600,000 to accommodate the addition of Northshore Technical Community College as a Support Fund-eligible institution and the Board continued to maintain its matching of two guaranteed slots. Also in FY 2012-13, the Treasury realized an additional \$5,000,000 in revenue, which the Board dedicated entirely to matching a portion of the Endowed Professorships excess submissions, to fund an additional 125 \$40,000 slots. The funding level of \$1,600,000 was maintained in FY 2013-14, while the Board continued to identify mechanisms to fund the remaining excess submissions. To help address the challenge, the Subprogram was funded at a level of \$2,800,000 in FY 2014-15. With excess submissions cleared at all but one campus, the previous budget level of \$1,600,000 was restored in FY 2015-16. To accommodate additional campuses eligible for Professorships matching, the budget level was increased to \$2,000,000 in FY 2016-17.

As part of the restructuring of the Support Fund in 2016, Endowed Professorships' history and performance were assessed, as was the Subprogram's future viability as the Support Fund's expendable earnings continue to decline even while demand for matching dollars increases. The Board of Regents determined that the ratio of non-State contributions to public match should increase to 4:1 (\$80,000 non-State contribution matched with \$20,000 BoRSF) to enable matching of more slots, continuation of the non-competitive distribution of available monies, and retention of a funding guarantee of two slots per eligible campus per year.

In addition to the need for \$1,680,000 in matching dollars to fund at a rate of two \$20,000 slots per eligible campus, the FY 2017-18 Endowed Professorships budget of \$3,000,000 provided funds to continue matching excess \$40,000 slots, dating as far back as 2012. All remaining excess submissions were matched in

FY 2017-18, though some campuses continue to submit more requests than the Support Fund can match with available resources.

Also as a result of restructuring and severe revenue declines, in 2016 the Board of Regents approved suspension of the Endowed First-Generation Undergraduate Scholarships Subprogram, which had been operational since 2007 but had consistently attracted very limited donor support (see Section 5.4.4). Based on widespread need across higher education for support for this student population, as well as donor interest in assisting the State to serve these students, in 2019-20 this matching opportunity was restored as a component and within the budget of Endowed Professorships. If a campus wishes to solicit donations for first-generation scholarships, it may do so as part of its guarantee of two \$20,000 matches in Professorships.

A total of \$2,000,000 was budgeted in FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24 for both new and previously submitted requests; a similar amount is budgeted in FY 2024-25. Any unclaimed funds from new guaranteed slots shall be distributed equally among campuses with slots awaiting match. No funding will be specifically set aside for First-Generation Scholarships, but matching will be determined by campus assessments of their priorities and preferences, as reflected in their rank-order lists of all Endowed Professorship and First-Generation Scholarship match requests submitted by the campus during the funding cycle.

5.4.3 BoRSF Endowed Two-Year Student Workforce Scholarships

The Board's commitment to improvement of educational quality at all academic levels and in all disciplines drove the establishment, in FY 2002-03, of the Enhancement Subprogram for Two-Year Institutions. The Subprogram, open to all community and community technical colleges as well as the Louisiana Community and Technical College System, provided enhancements for academic and student access and success activities supporting the joint missions of two-year campuses to provide general academic preparation for postsecondary programs and workforce training to meet local and regional needs. During the Subprogram's operation, a competitive peer-review process was used to assess and prioritize proposals for funding.

In December 2014 the Board of Regents approved a new direction for Support Fund monies targeted to community and community technical campuses, to better align funding with a focus on Louisiana's low attainment rate and critical workforce shortages in four- and five-star job areas. The Board established the competitive Endowed Two-Year Student Workforce Scholarships Subprogram, enabling two-year campuses to provide academic and training support for students enrolled in degree and certificate programs related to these workforce needs. Since the program's inception, 162 scholarship funds have been matched at 13 eligible campuses.

Funding for the first year of the BoRSF Endowed Two-Year Student Workforce Scholarships Subprogram was \$1,100,000. In FY 2016-17, reflecting reductions across the Support Fund and limited demand in the Subprogram's first year, the budget level was reduced to \$800,000. Given persistent declines in revenues, along with increased demand for matching of excess submissions in Endowed Professorships, the budget level was further reduced in FY 2017-18, to \$650,000; demand below this level in the 2017-18 competition led to an annual budget level of \$600,000 for FY 2018-19 and 2019-20. In consideration of the importance of workforce training, the FY 2020-21 budget level was set at \$780,000; a total of \$1,000,000 was budgeted in FY 2021-22, FY 2022-23 and FY 2023-24. Funding in FY 2024-25 is reduced to \$850,000, to accommodate lower Support Fund revenue estimates.

5.4.4 Endowed Undergraduate Scholarships for First-Generation College Students

The State has faced a well-documented crisis in terms of educating its future workforce. Many Louisiana students have historically been effectively denied the opportunity for a postsecondary education due to many factors: severe limitations on need-based aid, insufficient assistance provided under the merit-based Taylor Opportunity Program for Students (TOPS) to help make college affordable, and inability of some students to satisfy all of the requirements necessary to qualify for TOPS. The Board's Master Plan has prioritized addressing these challenges, ensuring higher education is more accessible to all and that students are equipped for success, and seeding prosperity throughout the State.

In FY 2007-08, the Board implemented a merit- and need-based subprogram to help address this funding gap. To be eligible, students must be Louisiana residents who are "first-generation" college students (i.e., neither parent has earned a postsecondary credential), have been awarded the federal Pell Grant or otherwise document unmet financial need, and have been admitted to the institution awarding the scholarship. Each four-year institution was guaranteed one \$40,000 endowed scholarship match annually to a private/institutional contribution of \$60,000. Each two-year institution was guaranteed one \$20,000 endowed scholarship match annually to a private/institutional contribution of \$30,000. Proceeds established/enhanced a permanent endowed scholarship fund. Interest earnings from the fund(s) are awarded at the discretion of the institution to eligible students and may be divided among multiple recipients, provided that each student receives at least \$1,000 per year in scholarship funds through the endowment. In addition to scholarship proceeds, institutions must provide student recipients with structured support through active and engaged advising, as well as meaningful campus employment of at least ten hours per week over and above the scholarship.

As part of the restructuring of the Support Fund, the First-Generation Scholarships Subprogram was carefully assessed. It was determined that the Subprogram's ability to address defined goals is limited, due to the targeting of funds to individual students and the minimal amounts of earnings available for award to students. The Board suspended the Subprogram while retaining opportunities for campuses to target Support Funds to high-need students through the Departmental Enhancement Subprogram, and received a total of \$1,320,000 in match requests by the June 30, 2017 Subprogram suspension date. Accordingly, in FY 2017-18 a total of \$380,000 was budgeted to help clear excess applications; an additional \$320,000 was budgeted in FY 2018-19. All remaining slots awaiting match were cleared in FY 2019-20. Because different campuses have different missions and priorities, and first-generation student populations are extremely important to Louisiana's educational attainment and future, an opportunity to pursue new matches for first-generation scholarships was reintroduced as a component of the Endowed Professorships program in FY 2019-20, and it continues to be funded within that program's budget (see Section 5.4.2).

5.4.5 Departmental Enhancement

Since 1987, competitive grants programs in Enhancement, including Traditional, Undergraduate, and Two-Year Campus opportunities, have been instrumental in maintaining and developing the capacities and quality of academic, research, and agricultural departments and units, providing funding for acquisition of instructional and research equipment as well as a broad array of curriculum revision projects, academic success initiatives, service learning projects, and colloquia presented by outstanding out-of-state scholars.

Throughout the history of Enhancement grant competitions, proposals have been developed and submitted by individual investigators and groups of faculty, and generally have reflected the ideas of the proposal developers rather than a holistic assessment of the needs and direction(s) of a department, unit, center, or other larger academic group on the campus. While this approach has yielded good results and hundreds of highly successful projects, it does not enable and encourage strategic thinking on the part of the larger department or unit as to what investments will propel it forward in directions of value to the students, faculty, campus, State, private industry, and/or other stakeholders.

In addition, a founding principle of Enhancement has been support for all disciplines at all levels, which has yielded a very broad distribution of funds without consideration of the roles, scopes, missions, and priorities of submitting campuses. As Support Fund revenues continue to shrink, the broad but shallow approach of providing support across all areas limits the impact that funds can have in the areas of greatest need and emphasis for the campuses, systems, and State.

These considerations led the Board to modify Traditional Enhancement, to create a Departmental Enhancement Subprogram, with funding to be aligned with campus roles, scopes, missions, and priorities. In this new approach, a formally constituted academic, research, or agricultural organizational unit must develop proposals based on its strategic needs, potential for future enhancement or growth, alignment of activities with broader goals and priorities of the campus, and projected impact. Three types of proposals, defined by the proposed impact of the investment – primarily educational, primarily workforce, and primarily research – are solicited, with the expectation that many projects will seek to combine all three types in a single project to launch the department forward in a holistic way. Opportunities are available for both large-scale, multi-year projects (two to five years) and one-year awards to target one or more specific needs, as well as supplementary support for doctoral students participating in the SREB Doctoral Scholars Program (DSP).

After deducting all previous and projected commitments for other components of the Enhancement Program, \$2,334,067 remains for the first year of projects submitted in the FY 2024-25 competition of the Departmental Enhancement Subprogram, including the Multidisciplinary component (see Section 4.3). This amount may increase from the Plan and Budget as submitted if allocated money is not fully expended in one of the other Enhancement Program components.

Though applicants will be required to demonstrate the alignment of projects with campus role, scope, mission, and priorities, the wide variety of campuses and priorities across the State and demand in previous competitions indicate that opportunities must still be provided across all academic disciplines on a rotating basis. Schedule II indicates the current discipline eligibility cycle for Departmental Enhancement; this cycle may be revisited as higher education priorities, demand, and need are revised and refined.

SCHEDULE II: ELIGIBILITY OF DISCIPLINES* IN THE DEPARTMENTAL ENHANCEMENT SUBPROGRAM

CYCLE I – ELIGIBLE IN FYs 2021-22, 2023-24

Engineering B (Industrial, Materials Mechanical)
Biological Sciences
Health and Medical Sciences
Physics

Social Sciences
Humanities
Agricultural Sciences
Astronomy
Targeted Workforce (Programs leading directly to Louisiana jobs)

CYCLE II – ELIGIBLE IN FYs 2022-23, 2024-25

Engineering A (Chemical, Civil, Electrical)
Chemistry
Computer and Information Sciences
Business
Education
Earth and Environmental Sciences
Arts
Mathematics
Targeted Workforce (Programs leading directly to Louisiana jobs)

* Attachment III provides a listing of sub-disciplines included in these larger groupings.

5.4.6 Summary of FY 2024-25 Enhancement Allocations

<u>Prior Commitments:</u>	Departmental Enhancement	\$ 1,946,232
	Federal Matching Grants	\$ 925,000
<u>New Awards:</u>	Federal Matching Grants	\$ 500,000
	Endowed Professorships	\$ 2,000,000
	Endowed Two-Year Workforce Scholarships	\$ 850,000
	Departmental Enhancement	<u>\$ 2,334,067</u>
ENHANCEMENT PROGRAM TOTAL		\$ 8,555,299

5.5 ADMINISTRATIVE EXPENSES - \$598,225

Act 675 of 1989 established the following restrictions with respect to the amount of Support Fund money that may be used to administer BoRSF programs:

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

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

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

program for which the review, evaluation, and assessment applies.

Act 703 of 2006 further allows the Board of Regents Support Fund administrative budget to be determined by formula:

No more than three percent of the average annual amount of actual expenditures...for the most recent three previous fiscal years for which actual expenditures are available shall be appropriated for such [administrative] purposes.

This formula yields an actual amount of \$598,225 to be expended in this category during FY 2024-25.

Each program component whose expenditures are itemized in sections 5.2 through 5.5 of this Plan and Budget will incur expenditures for professional services of out-of-state consultants, estimated as follows:

Endowed Chairs for Eminent Scholars	\$ 20,000
Research and Development	\$135,000
Enhancement	\$ 85,000
Recruitment of Superior Graduate Students	\$ 20,000

The amounts estimated above will be deducted from the total amounts available for expenditure in respective program components. Estimated consultant costs for the Endowed Chairs for Eminent Scholars Program and Endowed Superior Graduate Student Scholarships (Recruitment of Superior Graduate Students component) are added to the regular allocation to preserve the matching units necessary for the endowments.

ATTACHMENT I

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NSF/LaSER: The Louisiana EPSCoR Program	FY1989-90 – FY1992-93	STI-8820219	NSF	3 years	\$1,945,312	\$3,374,355
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.						
NSF LaSER Advanced Development Proposal (ADP)	FY1991-92 – FY1994-95	EHR-9108765	NSF	3 years	\$3,700,000	\$4,800,000
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 and Science Education	FY1991-92 – FY1995-96	TPE-9150043	NSF	5 years	\$10,000,000	\$10,000,000 ((\$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.						
NASA Training Grant (LaSPACE)	FY1991-92 – FY1995-96	NGT-40039	NASA	4 years	\$600,000	\$500,000 (NASA and BOR portions awarded directly to LSU)
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.						
Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT) Program	FY1992-93 – FY1996-97	DUE-9255761	NSF	5 years	\$4,000,000	\$2,500,000
Participating Institutions: Centenary, Grambling, LSU A&M, LSU-S, LA Tech, Loyola, McNeese, Nicholls, ULM, NSU, SLU, SUBR, SUNO, ULL, UNO, Xavier Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of mathematics and science educators.						
U.S. Department of Energy/EPSCoR Program	FY1993-94 – FY1994-95	DE-FC02-91ER75669	DOE	2 years	\$1,039,590	\$1,039,590
Participating Institutions: Grambling LA Tech, LSU A&M, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier Description/Purpose: To develop the infrastructure for energy and energy-related research in Louisiana, while improving the quality of energy research and education in the State and encouraging human resource development in this area. This proposal was the result of a one-year \$99,454 planning grant awarded to the Board by DOE.						

Page 2 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
Defense Experimental Program to Stimulate Competitive Research (DEPSCoR) Planning Program	FY1993-94	DAAH04-93-G-0466	DOD	1 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.						
1993 DEPSCoR Implementation Program	FY1994-95 – FY1996-97	Grant Numbers vary	DOD	3 years	\$2,400,000	\$500,000
Participating Institutions: Dillard, Grambling, LSU A&M, LSUHSC-NO, SUBR, SUNO, Tulane, ULM, UNO, Xavier Description/Purpose: To conduct research and educate scientists and engineers in Louisiana in areas important to national defense.						
NASA EPSCoR Program	FY1994-95 – FY1996-97	NCCW-0059	NASA	3 years	\$1,500,000	\$1,500,000
Participating Institutions: Dillard, LA Tech, LSU A&M, 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 federally-funded aerospace research; and 2) to support three multi-institutional research cluster projects.						
NSF Teaching Scholars Program	FY1994-95 – FY1998-99	DUE-9255761 (Supplement)	NSF	5 years	\$500,000	\$250,000
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).						
NSF/EPSCoR LaSER Systemic Improvement Program (SI)	FY1995-96 – FY1997-98	OSR-9550481	NSF	3 years	\$4,400,000	\$3,000,000
Participating Institutions: Grambling LA Tech, LSUHSC-S, LSU A&M, Loyola, SUBR, SUNO, Tulane, ULL, UNO, Xavier Description/Purpose: 1) To stimulate systemic and sustainable improvements in the science and technology enterprise by creating centers of research excellence in the State, improving the infrastructure for scientific and engineering research and education in Louisiana, and enhancing human resources development in the sciences and engineering, thereby increasing the State's capability to perform federally-funded research of economic importance to Louisiana; and 2) to create real and meaningful research linkages between the State's Historically Black and Majority White Campuses and Universities through Joint Faculty Appointments. This proposal continued the efforts begun under the EPSCoR ADP award described above.						

Page 3 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
Building Research Partnerships with Audio/Video Conferencing Facilities	FY1996-97 – FY1998-99	EPS-9632665	NSF	2 years	\$494,198	\$0
<p>Participating Institutions: LA Tech, LSU A&M, LSU Ag, LSUHSC-NO, NSU, SLU, SUBR, Tulane, ULL, ULM, UNO</p> <p>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.</p>						
LaSERnet II Backbone for Institutions of Higher Education in Louisiana	FY1997-98 – FY1999-00	EPS-9720147	NSF	2 years	\$552,893	\$0
<p>Participating Institutions: LA Tech, LSU A&M, LSUHSC-S, LSUHSC-NO, SLU, SUBR, Tulane, ULL, ULM, UNO</p> <p>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.</p>						
U.S. Department of Energy/EPSCoR Program Renewal	FY1995-96 – FY1998-99	DE-FC02-91ER75669	DOE	4 years	\$3,473,402	\$3,200,000
<p>Participating Institutions: Grambling LA Tech, LSU A&M, Loyola, McNeese, SUBR, Tulane, ULL, ULM, UNO, Xavier</p> <p>Description/Purpose: 1) To increase research competitiveness and capabilities of Louisiana scientists and engineers in areas of importance to the State and the U.S. Department of Energy; 2) to educate and recruit individuals, especially minorities and women, to work in these areas in Louisiana; 3) to provide new technologies that lead to economic development in the State; and 4) to support three multi-institutional research cluster projects.</p>						
Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) Program	FY1995-96 – FY1999-00	HRD-9550765	NSF	5 years	\$5,944,914	\$2,249,280
<p>Participating Institutions: Dillard, Grambling, LUMCON, LSU A&M, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO</p> <p>Description/Purpose: To increase the number of underrepresented minorities receiving B.S. degrees in science, engineering, and mathematics in Louisiana from the baseline rate of 610 annually to an annual rate of 1,110.</p>						
NASA LaSPACE Renewal Program	FY1996-97 – FY1999-00	NGT-40039	NASA	4 years	\$600,000	\$400,000
<p>Participating Institutions: A consortium of sixteen campuses; grant funds awarded on a competitive basis</p> <p>Description/Purpose: To continue the development of the infrastructure for aerospace research to competitive levels, while improving the quality of aerospace research and education.</p>						

Page 4 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
Louisiana Systemic Initiatives Program (LaSIP) Renewal in Math and Science Education Participating Institutions: A significant number statewide; grant funds awarded on a competitive basis. Description/Purpose: To continue the education reform efforts begun under the original LaSIP program.	FY1996-97 – FY2000-01	ESR-9634088	NSF	5 years	\$7,000,000	\$10,000,000 (\$5 million each from Regents and BESE)
1995 DEPSCoR Implementation Program Participating Institutions: LSU A&M, 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.	FY1996-97 – FY1998-99	Grant Numbers vary	DOD	3 years	\$2,350,303	\$1,500,000
NASA EPSCoR Program Renewal (2 years) Participating Institutions: Dillard, LA Tech, LSU A&M, 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.	FY1997-98 – FY1998-99	NCC5-167	NASA	2 years	\$1,000,000	\$1,000,000
Delta Rural Systemic Initiative in Science, Mathematics, and Technology Participating Institutions: A significant number; all campuses are eligible to compete. Description/Purpose: To complement and supplement current statewide math and science education reform initiatives such as LaSIP and LaCEPT. A tri-state effort involving Louisiana, Mississippi, and Arkansas, it concentrates on professional development programs for teachers, pre-service enhancement programs for educators, leadership institutes for administrators, and acquisition of supportive hardware and software in an effort to impact 64 counties and/or parishes (22 school districts in 21 parishes within Louisiana) that are rural and have major economic problems.	FY1997-98 – FY2001-02	ESR-9700041	NSF	5 years	\$10,000,000 (\$2.46 million is Louisiana's share)	\$2,000,000 (divided equally between BOR and BESE)
Louisiana Collaborative for Excellence in the Preparation of Teachers (LaCEPT) Program Supplemental Award Participating Institutions: Grambling, LSU A&M, LSU-S, LA Tech, Loyola, Nicholls, NSU, SLCC, SLU, SUBR, SUNO, ULL ULM, UNO, Xavier Description/Purpose: To improve the quality of undergraduate teacher preparation programs in mathematics and science and to increase substantially the number of mathematics and science educators; to evaluate the effectiveness of the initial five-year award (FYs 1993-98).	FY1998-99 – FY2000-01	DUE-9816194	NSF	3 years	\$600,000	\$300,000

Page 5 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
1997 DEPSCoR Implementation Program	FY1997-98 – FY1999-00	Grant numbers vary	DOD	3 years	\$1,770,504	\$750,000
Participating Institutions: LSU A&M, 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	FY1998-99 – FY2000-01	EPS-9720652	NSF	3 years	\$3,000,000	\$3,000,000
Participating Institutions: A significant number statewide; grant funds awarded on a competitive basis. Description/Purpose: 1) To enhance the competitiveness of science and engineering (S&E) faculty of the State's higher education institutions by making them more competitive in gaining national research and development support, engaging them in science and technology transfer activities with business and industry, and helping them educate effectively large numbers of S&E students at both graduate and undergraduate levels; 2) to create real and meaningful linkages between the State's HBCUs and MWCUs through the Joint Faculty Appointments Program; and 3) to foster economic development in the state by facilitating, through various initiatives, interaction between business & industry, universities, and state government. This proposal continued the efforts begun under the EPSCoR ADP and SI awards previously described.						
1999 DEPSCoR Implementation Program	FY1999-00 – FY2001-02	Grant numbers vary	DOD	3 years	\$1,459,473	\$189,798
3 years						
Participating Institutions: LSU A&M, 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.						
Experimental Program to Stimulate Competitive Technology (EPSCoT)	FY1999-00 – FY2000-01	60NANB9D0005	Dept. of Commerce	2 years	\$250,000	\$300,000
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.						
NASA EPSCoR Program Continuation Funding	FY1999-00	NCC5-167	NASA	1 year	\$400,000	\$250,000
Participating Institutions: Dillard, LA Tech, LSU A&M, 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. This award is the sixth-year continuation of the NASA EPSCoR Program and NASA EPSCoR Program Renewal previously described.						

Page 6 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NASA EPSCoR Preparation Grant Program	FY1999-00	NCC5-393	NASA	1 year	\$225,000	\$100,000
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.						
NASA LaSPACE Continuation	FY2000-01 – FY2004-05	NGT5-40115	NASA	5 years	\$1,281,250	\$1,000,000
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.						
EPA EPSCoR 2000 Program –Coastal Monitoring	FY1999-00 – FY2000-01	R-82778501-0	EPA	2 years	\$483,939	\$500,000
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 Participation (LS-LAMP) Phase II	FY2000-01 – FY2005-06	HRD-000272	NSF	5 years	\$5,000,000	\$2,500,000
Participating Institutions: Dillard, Grambling, LUMCON, LSU A&M, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO Description/Purpose: To continue to increase the number of underrepresented minorities in Louisiana receiving B.S. degrees in science, engineering, and mathematics.						
NASA EPSCoR Preparation Grant Program Renewal	FY2000-01	NCC5-393	NASA	1 year	\$225,000	\$0
Participating Institutions: A significant number statewide. Funds are competitively awarded. Description/Purpose: To continue the efforts described above for the NASA EPSCoR Preparation Grant.						
NASA EPSCoR Program Continuation Funding (year seven) 1 year	FY2000-01	NCC5-167	NASA	1 year	\$400,000	\$0
Participating Institutions: Dillard, LA Tech, LSU A&M, LSU Ag, LUMCON, McNeese, SUBR, Tulane, UNO, Xavier Description/Purpose: This award is the seventh-year continuation of the NASA EPSCoR Program previously described.						

Page 7 of 13

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.

Page 8 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NASA EPSCoR 2000 Renewal	FY2004-05 – FY2005-06	NCC5-573	NASA	2 years	\$986,236	\$986,560
Participating Institutions: LSU A&M, LUMCON, Tulane, Dillard, ULL, UNO, Xavier. A portion of the grant funds will be awarded on a continuing, competitive basis. 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 significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support multi-institutional research projects.						
DOE EPSCoR Implementation 2004	FY2004-05 – FY2006-07	DE-FG02-04ER46136	DOE	3 years	\$1,200,000	\$1,200,000
Participating Institutions: ULL, LSU A&M, 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."						
LAMP Phase III	FY2005-06 – FY2009-10	HRD-0503362	NSF	5 years	\$2,500,000	\$2,500,000
Participating Institutions: Dillard, Grambling, LUMCON, LSU A&M, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO Description/Purpose: To continue to increase the number of underrepresented minorities in Louisiana receiving B.S. degrees in science, engineering, and mathematics, and to transition at least 30% of these graduates to graduate school by 2010.						
NASA LaSPACE Continuation II	FY2005-06 – FY2009-10	NNG05GH22H	NASA	5 years	At least \$1,280,000	\$1,000,000
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.						
NASA EPSCoR Phase 3	FY2006-07 – FY2011-12	NNX07AL03A, NNX07AT62A, NNX07AT67A	NASA	6 years	\$2,175,000	\$2,250,000
Participating Institutions: LSU A&M, SUBR. A portion of the grant funds will be awarded to these and other institutions on a continuing, competitive basis. Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support two research projects of particular interest to NASA, one studying adhesively bonded joints in composite structures and one focusing on high-energy astrophysics.						

Page 9 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
Louisiana EPSCoR Research Infrastructure Improvement (CyberRII)	FY2006-07 – FY2008-09	EPS-0701491	NSF	3 years	\$9,000,000	\$3,000,000
<p>Participating Institutions: A significant number statewide, including LSU A&M, LSUHSC-NO, LA Tech, SUBR, Tulane, Tulane Health Sciences Center, Xavier, ULL, UNO. A portion of the grant funds will be awarded to these and other institutions on a continuing, competitive basis</p> <p>Description/Purpose: The focus of this project is the development of multi-functional cyberinfrastructure (<i>CyberTools</i>) that will broadly enable significant advances in modern science and engineering. In addition, a variety of initiatives to enhance the competitiveness of science and engineering (S&E) faculty of the State's higher education institutions are also supported. This project continues the efforts begun under the EPSCoR ADP, SI, NCA, RII, and LSII awards previously described.</p>						
DOE EPSCoR Implementation Renewal	FY2007-08 – FY2009-10	DE-FG02-04ER46136	DOE	3 years	\$900,000	\$1,200,000
<p>Participating Institutions: ULL, LSU A&M, SUBR</p> <p>Description/Purpose: This is a three-year renewal of the DOE EPSCoR program, which seeks 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."</p>						
NASA EPSCoR 2009 Research 3	FY2009-10 – FY2011-12	NNX09AP72A	NASA	3 years	\$750,000	\$750,000
<p>Participating Institutions: LSU A&M, SUBR.</p> <p>Description/Purpose: Support for a research project to develop thermal barrier coatings with high reflectance in both the visible and infrared bandwidth to reduce the thermal radiation transport. Such nano-structured TBCs would make significant contributions to NASA's efforts to develop advanced thermal barrier systems for jet engine propulsion.</p>						
NASA EPSCoR 2009 Research 4	FY2009-10 – FY2011-12	NNX10AP07A	NASA	3 years	\$750,000	\$750,000
<p>Participating Institutions: LSU A&M, LA Tech, SUBR.</p> <p>Description/Purpose: This research program will investigate existing and novel microorganisms with tolerances to cold, desiccation, and radiation as models for astrobiology. The expected outcomes include the development of fundamental astrobological concepts and operational capabilities that would promote the success of future NASA-driven life detection missions, inform policies on planetary protection, and lay the foundation for a new space research enterprise in Louisiana.</p>						
Louisiana EPSCoR Research Infrastructure Improvement (LA-SiGMA)	FY2009-10 – FY2013-14	EPS-1003897	NSF	5 years	\$20,000,000	\$10,000,000
<p>Participating Institutions: A significant number statewide, including LSU A&M, Grambling, LA Tech, SUBR, Tulane, Xavier, and UNO. A portion of the grant funds will be awarded to these and other institutions on a continuing, competitive basis</p> <p>Description/Purpose: The research component of the NSF EPSCoR project will create the <i>Louisiana Alliance for Simulation-Guided Materials Applications (LA-SiGMA)</i>. Program objectives include: building the next generation of experimentally validated formalisms, algorithms, and codes for multiscale materials simulations; implementing them on present and next generation super-computers; and educating the next generation of a highly skilled workforce of materials scientists and engineers.</p>						

FUNDED PROPOSALS: JOINT FEDERAL/STATE PROGRAMS WITH STATEWIDE IMPACT

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NASA LaSPACE Renewal	FY2010-11 – FY2014-15	NNX10AI40H	NASA	5 years	At least \$3,145,000	\$1,250,000

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.

LAMP Phase IV (Senior-Level Alliance)	FY2010-11 – FY2014-15	HRD-1002541	NSF	5 years	\$2,500,000	\$2,500,000
--	--------------------------	-------------	-----	---------	-------------	-------------

Participating Institutions: Dillard, Grambling, LUMCON, LSU A&M, McNeese, Nunez, SUBR, SUNO, SUSBO, Tulane, ULL, UNO, Xavier

Description/Purpose: The purpose of the LAMP program is to increase the number of underrepresented minorities in Louisiana receiving degrees in science, engineering, and mathematics. Phase IV will continue a comprehensive set of institutional transformation and systemic mentoring activities, with special emphasis on the progression of minority STEM students to and through graduate school and their transition to research-based careers that include the professoriate.

NASA EPSCoR 2009 Research 5	FY2011-12 – FY2013-14	NNX11AM17A	NASA	3 years	\$750,000	\$750,000
-----------------------------	--------------------------	------------	------	---------	-----------	-----------

Participating Institutions: LSU A&M, SUBR.

Description/Purpose: This research program will provide NASA with more durable, reliable, lighter, safer, and smarter composite sandwich structures, create knowledge and develop enabling technology in self-healing composite materials/structures, and enhance related research infrastructure and workforce training at LSU and SU.

NASA EPSCoR 2009 Research 6	FY2012-13 – FY2014-15	NNX13AD29A	NASA	3 years	\$750,000	\$750,000
-----------------------------	--------------------------	------------	------	---------	-----------	-----------

Participating Institutions: UNO, LSU A&M, SUBR.

Description/Purpose: This research program will provide NASA with joint decision and estimation framework to enable heavier yet safer air traffic in the Next Generation Air Transportation System. This project will also enhance related research infrastructure and workforce training at UNO, LSU and SU.

NASA EPSCoR Research Infrastructure	FY2012-13 – FY2014-15	NNX13AB14A	NASA	3 years	\$375,000	\$375,000
-------------------------------------	--------------------------	------------	------	---------	-----------	-----------

Participating Institutions: LSU A&M. A significant portion of the grant funds will be awarded to other LA institutions on a continuing, competitive basis.

Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support research projects of particular interest to NASA.

NASA EPSCoR 2009 Research 7	FY2013-14 – FY2015-16	NNX13AN05A	NASA	3 years	\$750,000	\$750,000
-----------------------------	--------------------------	------------	------	---------	-----------	-----------

Participating Institutions: LA Tech, Grambling, ULL.

Description/Purpose: This research program will provide NASA with a means of assessing the impact of high-energy radiation on genetic material, which can be used to improve radiation risk analysis on space missions. This project will also enhance related research infrastructure and workforce training at LA Tech, Grambling, and ULL.

Page 11 of 13

<p>Participating Institutions: LSU A&M, LA Tech, Tulane, UNO.</p> <p>Description/Purpose: This research program seeks to establish unique capabilities among Louisiana faculty by using the advanced neutron scattering facilities at Oak Ridge National Laboratory to characterize complex materials. This project will also enhance related research infrastructure and workforce training in materials science at the participating universities.</p>						
NASA LaSPACE Continuation	FY2015-16 – FY2019-20	NNX15AH82H	NASA	5 years	\$3,659,644	\$1,250,000
<p>Participating Institutions: A consortium composed of sixteen campuses; grant funds are awarded on a competitive basis.</p> <p>Description/Purpose: This award continues the efforts begun under the original LaSPACE program and the LaSPACE renewals described previously. *This award was originally for a three-year period, and there were two one-year continuations awarded subsequently.</p>						
NASA EPSCoR Research 9	FY2015-16 – FY2018-19	NNX15AM61A	NASA	3 years	\$750,000	\$750,000
<p>Participating Institutions: LSU A&M, SUBR, Xavier, University of Puerto Rico.</p> <p>Description/Purpose: This research program will help us better understand a component of lightning-producing storms called terrestrial gamma flashes, or TGFs. The project will also build research infrastructure at three minority institutions in two EPSCoR jurisdictions and train underserved minority students.</p>						
NASA EPSCoR Research Infrastructure	FY2015-16 – FY2018-19	NNX15AK33A	NASA	4 years	\$500,000	\$500,000
<p>Participating Institutions: LSU A&M. A significant portion of the grant funds will be awarded to other LA institutions on a continuing, competitive basis.</p> <p>Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support research projects of particular interest to NASA. *This award was originally for a three-year period, and there was a one-year continuation awarded subsequently.</p>						
Louisiana EPSCoR Research Infrastructure Improvement (CIMM)	FY2015-16 – FY2019-20	OIA-154079	NSF	5 years	\$20,000,000	\$4,000,000
<p>Participating Institutions: A significant number statewide, including LSU A&M, Grambling, LA Tech, SUBR, and UNO. A portion of the grant funds will be awarded to these and other institutions on a continuing, competitive basis.</p> <p>Description/Purpose: The research component of the NSF EPSCoR project will create the <i>Consortium for Innovation in Manufacturing and Materials (CIMM)</i>. The two main goals of the project are to 1) address challenges in high-throughput manufacturing of components with functional features ranging from microns to millimeters and beyond with high fidelity and repeatability and 2) focus on adaptive manufacturing of application-specific structures with a high degree of geometric and microstructural complexity and variability. In addition, the Consortium's workforce development program will provide advanced hands-on training in manufacturing-relevant skills for students in two- and four-year institutions.</p>						

Page 12 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NASA EPSCoR Research 10	FY2016-17 – FY2018-19	NNX16AQ93A	NASA	3 years	\$750,000	\$750,000
Participating Institutions: LSU A&M, SUBR. Description/Purpose: This project will develop new polymer composite panels for in-service damage self-healing through (1) design, synthesis, characterization, and manufacturing of two-way shape memory polymers (2W-SMPs); (2) multiscale modeling of the smart composite structures; and (3) additive manufacturing using 3D printing and experimental evaluation of the smart composite panels for impact mitigation and in-service crack healing. This project was also designed to attract and retain a greater number of high caliber students, including underrepresented minority students, in STEM disciplines, and train a larger number of high caliber STEM students for NASA related industry.						
NASA EPSCoR Research 11	FY2017-18 – FY2019-20	80NSSC18M0028	NASA	3 years	\$750,000	\$750,000
Participating Institutions: LSU A&M, SUBR. Description/Purpose: This research addresses the transport of carbon through the land-sea interface, and supports NASA's major strategic goal to advance understanding of Earth. The team proposes to investigate two contrasting coastal sites across the Mississippi River Delta: the Bataria Bay Region and the Wax Lake Delta region. Understanding these two contrasting environments which are under same climate conditions is critical to assess the role of delta systems in carbon export to the coastal oceans on a global scale.						
DOE EPSCoR Implementation Renewal	FY2017-18	DE-SC0012432	DOE	3 years	\$4,938,955	\$500,000
Participating Institutions: LSU A&M, Tulane, UNO. Description/Purpose: : This is a three-year renewal of the DOE EPSCoR LaCNS project which seeks to build on its prior success to attain a sustainable neutron scattering infrastructure capable of treating both soft and hard materials. This project will also enhance related research infrastructure and workforce training in materials science at the participating universities.						
NASA EPSCoR Research 12	FY2018-19 – FY2020-21	80NSSC18M0062	NASA	3 years	\$750,000	\$750,000
Participating Institutions: ULL. Description/Purpose: The overarching goal of this project is to develop a waste management system, BIOSYS, that is energy- and oxygen-use neutral (produces as much or more of these resources than it consumes) and is capable of meeting treatment goals while producing additional life support resources. This project will also (a) position the project team as leading experts on in-space waste management strategies and (b) build a foundation of interest among current and future students in space-related STEM areas.						
NASA EPSCoR Research Infrastructure 2019-22	FY2019-20 – FY2021-22	80NSSC19M0055	NASA	3 years	\$375,000	\$375,000
Participating Institutions: LSU A&M. A significant portion of the grant funds will be awarded to other LA institutions on a continuing, competitive basis. Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support research projects of particular interest to NASA.						

Page 13 of 13

Title	Fiscal Years	Federal Award Number	Federal Agency	Duration	Federal Award Amt.	Support Fund Match
NASA EPSCoR Research 13	FY2019-20 – FY2021-22	80NSSC19M0149	NASA	3 years	\$749,393.87	\$750,000
Participating Institutions: ULL, LSU A&M, LA Tech Description/Purpose: This collaborative research effort is designed to study additive manufacturing processes using lightweight metal alloys for in-space manufacturing applications. The primary objective of ISM-LMA is to produce robust and high strength FDM aluminum parts with minimum porosities.						
Louisiana EPSCoR Research Infrastructure Improvement (LAMDA)	FY2020-21 – FY2024-25	OIA-1946231	NSF	5 years	\$20,000,000	\$4,000,000
Participating Institutions: A significant number statewide, including LSU A&M, LA Tech, SUBR, ULL, and Tulane. A portion of the grant funds will be awarded to these and other institutions on a continuing, competitive basis. Description/Purpose: Louisiana proposes to transform research and education in advanced manufacturing and materials throughout the State by establishing the Louisiana Materials Design Alliance (LAMDA). The research objective of LAMDA is to generate fundamental insights into the complex relationships among composition, processing, microstructure, performance, and structural integrity within the context of additive manufacturing (AM).						
NASA EPSCoR Research 14	FY2020-21 – FY2022-23	80NSSC20M0216	NASA	3 years	\$750,000	\$750,000
Participating Institutions: LSU A&M, LSUHSC-NO, SUBR, LA Tech Description/Purpose: The purpose of this project is to develop and demonstrate innovative technologies to automatically transfer, sustainably use, and interactively visualize NASA satellite remote sensing products for intelligently forecasting oyster harvesting safety risks, protecting public health, and promoting economic (particularly oyster industry) development in Louisiana and beyond.						
NASA LaSPACE Renewal	FY2020-21 – FY2023-24	80NSSC20M0110	NASA	4 years	\$2,815,000	\$1,000,000
Participating Institutions: A consortium composed of 31 affiliates; 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.						
NASA EPSCoR Research 15	FY2021-22 – FY2023-24	80NSSC21M0333	NASA	3 years	\$750,000	\$750,000
Participating Institutions: ULL, LSU A&M, LA Tech Description/Purpose: The goal of this collaborative proposal is to address the overarching challenges in developing safe and high-performance solid-state batteries with a lithium-metal electrode for NASA missions.						
NASA EPSCoR Research Infrastructure 2022-27	FY2022-23 – FY2026-27	80NSSC22M0030	NASA	5 years	\$1,000,000	\$625,000
Participating Institutions: LSU A&M. A significant portion of the grant funds will be awarded to other LA institutions on a continuing, competitive basis. Description/Purpose: 1) To develop and strengthen long-term academic research enterprises that will make significant contributions to the strategic research and technology priorities of NASA and, in turn, to contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State; and 2) to support research projects of particular interest to NASA.						

ATTACHMENT II

Board of Regents Support Fund Results of Selected Projects

Following are brief synopses of several successful projects recently funded through Board of Regents Support Fund competitive grants programs. These represent just a small sample of the supplementary and enhancing activities made possible across higher education in Louisiana by distribution of these dollars.

DEPARTMENTAL ENHANCEMENT

Southern University at New Orleans used Targeted Departmental Enhancement funding to bring IC3 digital literacy certification boot camps to high school and college students. Digital literacy is a critical tool to navigate any part of our information-saturated world, but particularly the world of work. Students gained digital skills and knowledge, with more than 90 receiving IC3 certifications during academic year 2020-21, even despite pandemic disruptions. The concepts included in the certification classes were also incorporated into the curricula of SUNO faculty, expanding the impact of these tools. As a result of this success, SUNO's Computer and Information Sciences Department has implemented a policy to allow students to substitute a collection of earned certifications for a related course in the program, to demonstrate competency. As a result, students are incentivized to pursue more certifications, and to stack them strategically. This has allowed students to parlay their knowledge into new employment and graduate studies opportunities, improving their earning potential and bringing them into the Louisiana workforce. *{LEQSF(2021-22)-ENH-DE-24; Igwe Udeh, PI}*

A Departmental Enhancement project at the **University of Louisiana at Lafayette** has provided upgrades to the state-of-the-art Louisiana Accelerator Center (LAC), adding an automated control system to the particle accelerator. While some components have been delayed by supply chain issues, those received have allowed training for graduate students, international presentations, and, impressively, a unique opportunity to study a set of Egyptian artifacts on loan to the New Orleans Museum of Art from Museo Egizio, the oldest museum in the world. The technology available at the LAC made it possible to gain insights into the materials used in and fabrication of the objects without maintaining their full integrity. *{LEQSF(2021-24)-ENH-DE-28; William Hollerman, PI}*

With support from a Targeted Departmental Enhancement grant, **Fletcher Technical Community College** purchased cutting-edge equipment to enhance and expand training capacity in its Marine Diesel program. Trained on the newest technology available, students will be highly competitive for high-demand, high-wage jobs in this field, while faculty are able to update and revise curricula to align with the needs of employers across the sector. During the project year, 45 students were enrolled in the program, along with 16 high school students participating via dual enrollment; the

equipment purchases expand capacity, meaning more students each semester can receive program training over the coming years. *{LEQSF(2019-20)-ENH-DE-04; Ronnie Hayes, PI}*

A faculty team at **Baton Rouge Community College**, with support from a Departmental Enhancement award, has created Louisiana's first and currently only research lab at a community college. The lab, in collaboration with the Louisiana Universities Marine Consortium and the University of New Orleans, conducts research on freshwater sponges, and is one of the country's leading research projects in this field. The project brings incredible opportunities for hands-on, high-level research to students at the community college level, while conducting continuous research on and monitoring of the freshwater sponge population in Louisiana. The research provides important insights into the health of our substantial water systems, bringing students into the field and engaging them in all aspects of the project. This kind of training is essential to building our STEM workforce and providing opportunities at every level for Louisianians to contribute to the health and welfare of the state and its ecosystems. *{LEQSF(2023-24)-ENH-DE-01; Mary Miller, PI}*

The **University of Louisiana at Monroe** used a Targeted Departmental Enhancement award to maintain the competitiveness and quality of its unique pharmacy programs through the purchase of a mass spectrometry system. Though only recently acquired, this equipment has already been extensively utilized by research faculty, and its new analytical capabilities are generating significant findings that will lead to greater research productivity, improved competitiveness for external funding, and more significant impacts in the future. Faculty have incorporated experimental analysis made possible by the new equipment into current grant submissions and enhanced their scientific profiles through the elevated analytical capabilities now available. *{LEQSF(2021-22)-ENH-DE-33; Georgios Matthaiolampakis, PI}*

A faculty team at **Louisiana State University and A&M College** used Departmental Enhancement funding to purchase an Elemental Analyzer Isotope Ratio Mass Spectrometer as part of its Wetland Biogeochemistry Analytical Services lab. The equipment has already been integrated into a graduate-level course and now that it is fully operational will be extensively used by undergraduate students. The opportunity for hands-on experience and training on a cutting-edge piece of equipment such as this is a major recruitment incentive for both undergraduate and graduate students. In addition, the tool has helped to develop new streams of grant funding, interdisciplinary collaborations, and high-impact research, with at least one major award already conditionally offered. It is also attracting government and industry clients, who can access the equipment on a fee-for-service basis. *{LEQSF(2019-20)-ENH-DE-06; Michael Polito, PI}*

A Departmental Enhancement project at **Northwestern State University** has enabled the campus to purchase and train faculty and students in the use of a nuclear magnetic resonance (NMR) instrument, to increase the capacity and competitiveness of its Chemistry program. The equipment will be essential to building faculty members' research activities, and it is anticipated that more

than 100 students per year will be affected by the purchase. The NMR puts Northwestern on track to reach its goal of becoming certified by the American Chemical Society, which requires student access to such equipment. {LEQSF(2019-20)-ENH-DE-16; Jennifer Hill, PI}

A Comprehensive Departmental Enhancement project at **Tulane University** has helped to establish core research facilities for neuroscientists to enable cutting-edge research and training through the new Brain Institute. The equipment acquired through the grant has dramatically increased capacity and made state-of-the-art tools available to faculty and students. The development of this facility has increased Tulane's international recognition as a hub for neuroscience research and promises to enable recruitment of senior and junior faculty, as well as graduate students, at the highest levels. Already the Institute's research team has secured more than \$14 million in competitive external funding as a result of this significant infrastructure investment. But the real impact of the core facilities is extended well beyond this research core as the equipment is made available to researchers across campus and across the region. {LEQSF(2018-23)-ENH-DE-15; Jill Daniel, PI}

A faculty team at the **University of New Orleans** showed perfect timing in securing Departmental Enhancement funding to strengthen digital teaching and learning in the Department of English and Foreign Languages. The work the project team was able to complete before the onset of the COVID-19 pandemic made the faculty able to pivot to online instruction and remote student support much more quickly than their peers, and without loss of the quality of instruction. The pandemic also served as an experimental setting, allowing faculty to assess and refine their approaches to meet the ongoing demand for online education and training. We knew before COVID-19 that digital learning was going to be the wave of the future, but we did not know how rapidly that future would arrive. The fortuitous timing of this support enabled UNO faculty in a critical early-college discipline to get ahead of the curve and position itself at the vanguard. {LEQSF(2018-23)-ENH-DE-19; Elaine Brooks, PI}

RESEARCH AND DEVELOPMENT

Research Competitiveness Subprogram (RCS)

The BoRSF Research Competitiveness Subprogram (RCS) provides funding to scientists on the verge of competitiveness for federal research funding, to help them overcome barriers and achieve success. In recent years, four RCS principal investigators – two at **Tulane University** and two at **Louisiana State University and A&M College** – have won CAREER awards, the most prestigious young investigator grant offered by the National Science Foundation. In total, these four five-year CAREER awards bring more than \$2.2 million in federal research funding to Louisiana institutions. This represents a return on the RCS investment of more than \$4 of every \$1 spent from the BoRSF. {LEQSF(2018-21)-RD-A-05; Genevieve Palardy, PI; LEQSF(2015-

18)-RD-A-23; Jiang Wei, PI; LEQSF(2016-19)-RD-A-07; Daniel Kuroda, PI; and LEQSF(2016-19)-RD-A-19; Eliot Kapit, PI}

With the help of RCS funding, a research group at the **University of Louisiana at Lafayette** is making significant strides toward understanding how continents are formed and new land is created. Studying deformation, thermal exchange, and fluid flow, the team is seeking to understand mechanisms of exchange between fluids and minerals in deforming rock as the Earth's upper and lower crusts interact. The research has pushed the boundary of oxygen isotope analysis of minerals to the micron scale, resulting in a major award, totaling \$319,973, for the study of fluid flow in the Earth's mid-crust. *{LEQSF(2015-18)-RD-A-28; Raphael Gottardi, PI}*

Thanks in part to an RCS award, a principal investigator at **Tulane University** has established a highly competitive research program focused on the study of family and community violence's impact on young children and their development. The research provides vital missing information about and understanding of risks of exposure to violence, and how children might develop resilience in the face of violence. The researchers have secured substantial funding to continue the work seeded by RCS, including grants from the multiple sectors of the National Institutes of Health, as well as the Brain and Behavior Foundation. The principal investigator's work has received national prizes and early career awards, while both graduate and undergraduate students working in her lab have received awards for excellence for both research poster submissions and theses based on their participation in the research work. *{LEQSF(2016-19)-RD-A-17; Sarah Gray, PI}*

A team of researchers at **LSU Health Sciences Center – New Orleans** is studying how bacteria invade their hosts' defenses through studies of an important cause of respiratory infections, the pathogen *Legionella*. Understanding how this infection works gives vital insight into both the particular ways to mitigate and control its effects, as well as aiding in the design of more effective antimicrobial therapies. The success of the RCS-funded research, generating significant preliminary data and yielding two published manuscripts with more in progress, helped the team secure a five-year, \$1.812 million R01 award from the National Institutes of Health to continue and advance this important work. *{LEQSF(2016-19)-RD-A-15; Stanimir Ivanov, PI}*

A researcher at **Louisiana State University and A&M College**, along with a team of seven graduate students, has used RCS funding to study the effects of fungus-based biocomposites in building construction and design. These composites could serve as a "green" building material, replacing brick or cement in the construction process, and have potential uses in the transportation field as well. The research has focused, in part, on learning from a great Louisiana material: the dirt dauber nest. The soils used by dirt daubers have been investigated from a geotechnical engineering perspective, to understand their physical and mechanical properties and any applicability to human construction techniques. Initial studies have been promising, and have

already generated significant external support, including two regional awards and a major \$247,800 grant from the National Science Foundation. {LEQSF(2019-22)-RD-A-10; Hai Lin, PI}

Industrial Ties Research Subprogram (ITRS) & Proof-of-Concept/Prototyping Initiative (PoC/P)

A researcher at **Louisiana Tech University** has used PoC/P funding to coat natural fibers, such as cotton, wool, and animal fur, with halloysite nanoclays, which allows high flame retardancy and coagulating properties. The potential benefits of this technology are manifold, from richer, longer-lasting hair and paint colors, to powerful wound dressings. The technology has proven to be fully biocompatible, with minimal ingredient loss and high safety. Two U.S. companies have already shown interest in the technology, with one contract in place and another in negotiations, demonstrating its strong commercial potential. {LEQSF(2020-21)-RD-D-03; Yuri Lvov, PI}

A researcher at **Louisiana State University and A&M College** is providing tools to enhance drilling productivity through riser gas applications, a critical issue for Louisiana industry, through a study of transport processes of hydrocarbon influxes in non-aqueous muds. Based on the initial funding from ITRS and a private-sector partner, the PI and collaborating researchers have leveraged major funding from regional industries like ExxonMobil, which provided more than \$450,000 for two phases of research, as well as a partnership on a large U.S. Department of Energy grant for which LSU will receive \$580,000. As the project's ITRS support concludes, the investigators are already well-positioned to seek support from both federal agencies and industry, with expressions of interest already in hand. {LEQSF(2019-22)-RD-B-02; Yuanhang Chen, PI}

A team of researchers at the **University of Louisiana at Lafayette** are studying the creation of complex fractures in unconventional reservoirs, a topic of great importance in the development of the shale resources that are abundant in Louisiana. Not only is the research significant for industries developing the Haynesville and Tuscaloosa shales, it is helping to develop a highly skilled workforce for the industry by engaging students with industry partners, and expanding Louisiana's research contributions to a growing field. Locally, the study led to more than ten conference and journal papers and placement of a graduate-level student with an industry partner. More broadly, the impacts are substantial: the ITRS award helped set the stage for the team to secure almost \$3.6 million from the U.S. Department of Energy and private industry to study Tuscaloosa Marine Shale, with a focus on enabling more cost-efficient and environmentally sound recovery from this unconventional liquid-rich shale play. {LEQSF(2017-20)-RD-B-05; Mehdi Mokhtari, PI}

Awards to Louisiana Artists and Scholars (ATLAS) Subprogram

An award-winning novelist at **Louisiana State University and A&M College** has used ATLAS funding to complete a new book, *The American Daughters*. The novel, to be published in 2024, adds to the rich literature around New Orleans and Louisiana, and is already receiving advance

reviews praising the work as a fresh and splendid contribution from one of the state's most admired writers. {LEQSF(2021-22)-RD-ATL-02; Maurice Ruffin, PI}

A filmmaker at **Louisiana State University and A&M College** premiered an ATLAS-supported feature documentary at the New Orleans Film Festival in November 2021. The film, titled *The Laughing Man*, is about Thomas Alan Williamson, a part-time actor in his 50s from Shreveport, who defies all expectations. Facing trauma, mental illness, homelessness, and isolation, Thomas's joy, optimism, and most of all laughter paint the portrait of a man in love with life despite the odds being stacked against him. The film charts its maker's own complicated relationship with Thomas as the lines between director, collaborator, friend, and caregiver are blurred. The documentary weaves verité footage, first-person accounts, and Thomas's own writing in this intimate look into his struggles, his strained relationship with his father, his perseverance, and his appreciation of life's beauty. {LEQSF(2018-19)-RD-ATL-02; Zack Godshall, PI}

A historian at **Tulane University** has used ATLAS funding to complete a major monograph on Noel Carrière, the commander of the New Orleans Free Black Militia during the Revolutionary War. The book, to be published soon, adds both Carrière and Louisiana back into the nation's founding story and provides a rare account of the life and experiences of a Black colonial in Spanish Louisiana. This work promises to expand and complicate our understanding of New Orleans life and culture at the time of the United States' founding. {LEQSF(2018-19)-RD-ATL-06; Emily Clark, PI}

LOUISIANA EPSCoR

In 2020 a consortium of researchers significantly enhanced Louisiana's leadership in advanced manufacturing and materials research and education through the award of a highly competitive \$20 million Track 1 grant from the National Science Foundation's Established Program to Stimulate Competitive Research (EPSCoR). The grant established the Louisiana Materials Design Alliance (**LAMDA**), a research collaboration among five of Louisiana's public universities: Louisiana State University and A&M College, Louisiana Tech University, Southern University and A&M College, Tulane University and the University of Louisiana at Lafayette. Importantly, LAMDA's impact stretches far beyond the five lead campuses, engaging higher education institutions across Louisiana in building their research capacity and success.

The five-year award is having a significant impact on the State, launching the next level of research and development into advanced manufacturing and materials. Researchers will be designing complex alloys and polymers specifically for 3D printing, also known as additive manufacturing. There is a huge demand in the additive manufacturing industry for new 3D printing materials to produce metal and plastic products with fewer defects and a longer useful life. Louisiana researchers will use advanced machine learning to study the characteristics of novel materials and test how they react under pressure and heat during the manufacturing process. The major outcomes of this project will include a materials design framework guided by machine learning, a framework to assess structural integrity, and a diverse and highly skilled STEM workforce for Louisiana. This new award will leverage the remarkable progress made through the Consortium for Innovation in Manufacturing and Materials (CIMM), funded through a previous NSF Track 1 award, which established Louisiana as a national leader in 21st-century materials and manufacturing.

Louisiana EPSCoR also holds several additional awards through federal programs. The NSF EPSCoR Track 3 award, led by **Louisiana Tech University** with participation of high schools and middle schools across the State, is developing and implementing Science, Technology, Engineering and Mathematics (STEM) discovery camps for students and teachers that can be replicated across the State. By focusing on teachers over a period of several years, the program will ultimately have a broad impact on significant numbers of students and improve education, training, and opportunities for industry in Louisiana.

An additional award, approximately \$5 million from the Department of Energy's EPSCoR program paired with \$500,000 in BoRSF matching, continued the highly successful project entitled "Building Neutron Scattering Infrastructure in Louisiana for Advanced Materials." The project has enabled us to build a regional base of users of the Spallation Neutron Source (SNS) and the High Flux Isotope Reactor (HFIR) at the Oak Ridge National Laboratory. A collaborative effort led by **Louisiana State University and A&M College in partnership with Louisiana Tech, Tulane, and UNO**, the project continues to enable the training of highly talented students and post-doctoral fellows, the next generation of neutron users, in synthesis and neutron scattering techniques.

ATTACHMENT III

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

NATURAL SCIENCES - BIOLOGICAL

Agriculture

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

Biological Sciences

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

NATURAL SCIENCES -BIOLOGICAL (CONTINUED)

Health and Medical Sciences

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

NATURAL SCIENCES - PHYSICAL

Chemistry

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

Physics and Astronomy

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

NATURAL SCIENCES - COMPUTATIONAL

Computer and Information Sciences

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

Mathematical Sciences

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

NATURAL SCIENCES - EARTH/ENVIRONMENTAL

Earth, Atmospheric, and Marine Sciences

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

ENGINEERING - A

Engineering - Chemical

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

Engineering - Civil

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

ENGINEERING - A (CONTINUED)

Engineering - Electrical and Electronics

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

ENGINEERING - B

Engineering - Industrial

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

Engineering - Materials

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

Engineering - Mechanical

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

Engineering - Other

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

SOCIAL SCIENCES

Anthropology and Archaeology

- 1701 Anthropology
- 1702 Archaeology

Economics

- 1801 Economics
- 1802 Econometrics

Law (5102)

Political Science

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

Psychology

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

Sociology and Social Work

- 2101 Demography
- 2102 Sociology
- 5001 Social Work

Social Sciences - Other

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

SOCIAL SCIENCES (CONTINUED)

Communications

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

Home Economics

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

Library and Archival Sciences

- 4701 Library Science
- 4702 Archival Science

ARTS

Arts - History, Theory, and Criticism

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

Arts - Performance and Studio

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

Arts - Other

- 2999A Arts - Other
- 5101A Interdisciplinary Programs

HUMANITIES

English Language and Literature

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

HUMANITIES (CONTINUED)

Foreign Language and Literature

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

History

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

Philosophy

- 2801 All Philosophy Fields

Humanities - Other

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

EDUCATION

Education - Administration

- 3001 Educational Administration
- 3002 Educational Supervision

Education - Curriculum and Instruction

- 3101 Curriculum and Instruction

Education - Early Childhood

- 3201 Early Childhood Education

Education - Elementary

- 3301 Elementary Education
- 3302 Elementary-level Teaching Fields

EDUCATION (CONTINUED)

Education - Evaluation and Research

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

Education - Higher

- 3501 Educational Policy
- 3502 Higher Education

Education - Secondary

- 3601 Secondary Education
- 3602 Secondary Level Teaching Fields

Education - Special

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

Education - Student Counseling and Personnel Services

- 3801 Personnel Services
- 3802 Student Counseling

Education - Other

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

BUSINESS

Accounting

- 4001 Accounting
- 4002 Taxation

Banking and Finance

- 4101 Commercial Banking
- 4102 Finance
- 4103 Investments and Securities

Business, Administration and Management

- 4201 Business Administration and Management
- 4202 Human Resource Development
- 4203 Institutional Management
- 4204 Labor/Industrial Relations
- 4205 Management Science
- 4206 Organizational Behavior
- 4207 Personnel Management
- 4299 Business Management - Other

Business - Other

- 4301 Business Economics
- 4302 International Business Management
- 4303 Management Information Systems
- 4304 Marketing and Distribution
- 4305 Marketing Management and Research
- 4399 Business Fields - Other