



STRATEGIC PLAN

Presented to:
National Science Foundation
EPSCoR Program
Martha James, Program Director

Henry H. Smith
Program Director
VI-EPSCoR
April 28, 2005



TABLE OF CONTENTS

OVERVIEW OF VI-EPSCOR	3
GOALS, OBJECTIVES, AND TASKS	4
GOAL 1. THE VIRGIN ISLANDS EPSCoR (VI-EPSCoR) PROGRAM WILL CATALYZE INCORPORATION OF SCIENCE- AND TECHNOLOGY-BASED RESEARCH INTO THE CULTURE OF THE TERRITORY.....	4
GOAL 2. VI-EPSCoR WILL ESTABLISH AND SUSTAIN NATIONALLY COMPETITIVE RESEARCH IN THE BIOCOMPLEXITY OF CARIBBEAN CORAL REEFS.	7
GOAL 3. VI-EPSCoR WILL PROVIDE SUPPORT FOR THE CREATION OF NEW NATIONALLY COMPETITIVE RESEARCH AREAS IN THE TERRITORY.	9
GOAL 4. VI-EPSCoR WILL ENHANCE THE ABILITY OF THE VIRGIN ISLANDS TO ACQUIRE AND MANAGE THE RESOURCES AND CULTURE OF COMPETITIVE RESEARCH GRANTS.	11
<i>Research Management</i>	11
Administration and Leadership of VI-EPSCoR	11
Office of Sponsored Programs.....	13
<i>Research Infrastructure</i>	14
Information Technology	14
Library	15
Geographic Information Systems.....	17
Physical Research Infrastructure Improvement	18
GOAL 5. VI-EPSCoR WILL HELP CREATE A FOUNDATION OF SCIENCE AND TECHNOLOGY-BASED RESEARCH CAPABILITY TO STIMULATE AND SUSTAIN ECONOMIC DEVELOPMENT IN THE VIRGIN ISLANDS.	19



Overview of VI-EPSCoR

EPSCoR is the Experimental Program to Stimulate Competitive Research, a program administered by the National Science Foundation (NSF) to build the economy of states and territories through research, technology and development. EPSCoR programs are intended to be of direct benefit to the scientific and technological development of an entire community.

GOALS OF THE VIRGIN ISLANDS EPSCoR PROGRAM

- The Virgin Islands EPSCoR (VI-EPSCoR) program will catalyze incorporation of science- and technology-based research into the culture of the Territory.
- VI-EPSCoR will establish and sustain nationally competitive research in the Biocomplexity of Caribbean Coral Reefs.
- VI-EPSCoR will provide support for the creation of new nationally competitive research areas in the Territory.
- VI-EPSCoR will enhance the ability of the Virgin Islands to acquire and manage the resources and culture of competitive research grants.
- VI-EPSCoR will create a foundation of science and technology-based research capability to stimulate and sustain economic development in the Territory.

The VI-EPSCoR program plan has been developed to take advantage of the unique circumstances and opportunities found in the Virgin Islands. The University of the Virgin Islands (UVI) aims to become a role model of an institution where undergraduate research provides a mechanism to develop highly qualified human resources capable of serving the science and technology needs of the Virgin Islands, as well as a source of underrepresented students for graduate programs in science and technology.

UVI has unique opportunities to embed research into its undergraduate teaching mission. It has an active and relevant research component through its land grant status, although this research component has been primarily based in a Research and Public Service (RPS) division that is distinct from the teaching mission and faculty organizationally and culturally. The Division of Science and Mathematics (DSM), however, has a vision of using research to enhance the learning process in the classroom. Thus, the VI-EPSCoR program presents a unique opportunity to bridge these two segments of the University (i.e., RPS and DSM) to further the goals of VI-EPSCoR.

The VI-EPSCoR strategic plan will provide a vision for the program, articulating what the program can do to catalyze territorial policy, particularly where it concerns economic development and the role that science and technology should play in this development.

Goals, Objectives, and Tasks

Goal 1. The Virgin Islands EPSCoR (VI-EPSCoR) program will catalyze incorporation of science- and technology-based research into the culture of the Territory.

Vision: To partner with government, business, educational, and community leaders in activities to strengthen local mathematics and science education at K-12, undergraduate, and graduate levels and to create a territorial culture of active learning and research in mathematics and science.

Objective 1.1: VI-EPSCoR will reach out to government, business, educational, and community leaders interested in strengthening mathematics and science education as a foundation for science and technology-based economic development in the Virgin Islands.

Tasks:

- Invite suitable government, business, educational, and community leaders to serve on the VI-EPSCoR Governing Committee (see more details under Objective 5.1).
- Involve the Governing Committee in the planning and implementation of VI-EPSCoR mathematics and science education activities.
- Seek other avenues for involvement of the local community in the planning and implementation of VI-EPSCoR mathematics and science education activities.

Objective 1.2: VI-EPSCoR will support efforts to strengthen K-12 teaching in mathematics and science areas by strengthening workforce and in-service teacher preparation through the establishment of relevant professional development programs at UVI.

Tasks:

- Establish a graduate program leading to a Master of Arts degree in mathematics for secondary school teachers.
 - Support recruitment of a faculty position in mathematics with part-time responsibility for directing the new Masters-level program in mathematics for secondary school teachers.
- Evaluate the feasibility of establishing a joint or in-house Masters-level program in environmental studies for teachers. (See also related Objectives 1.3 and 2.2.)
 - Recruit a consultant with expertise in science and graduate education to conduct a feasibility study.
 - Prepare a white paper on the possibilities, resource requirements, and advisability of a joint or in-house Masters-level program, to be discussed



by VI-EPSCoR, the Division of Science and Math, BCCR, and UVI Administration.

- Identify needs for additional graduate programs in Science and Mathematics
- Work with the Division of Education and the Division of Science and Mathematics to strengthen pre-service training of science and mathematics teachers.
- Develop non-degree professional development modules for K-12 teachers in mathematics and across the science disciplines. These modules will strengthen teacher preparation in basic concepts, help teachers practice the creative pedagogy of hands-on laboratory learning experiences, lead teachers through explorations of cutting-edge concepts in the disciplines, and build linkages between UVI teaching and research faculty, K-12 teachers, and the K-12 curriculum.
- Support efforts to initiate a program of research on learning to better understand the ways that children in the Virgin Islands learn, understand, and use mathematical concepts most effectively.
 - Work with DSM researchers to develop plans and seek funding for an international conference of researchers that will be held in the Virgin Islands, with local educators in attendance, including K-6 teachers and administrators who will function as a catalyst for this research program.
 - Work with DSM researchers to develop plans and seek funding for research on the relationship between language and mathematics and the efficacy of grounding mathematical concepts in locally relevant environment and culture, and for development of curriculum and pedagogical methods based on the findings relating to learning.

Objective 1.3: VI-EPSCoR will support efforts to strengthen natural resource management in governmental and non-governmental agencies through workforce training. (See also related Objectives 1.2 and 2.2.)

Tasks:

- Evaluate the feasibility of establishing a joint or in-house Masters-level program in environmental studies for workforce training.
 - Recruit a consultant with expertise in science and graduate education to conduct a feasibility study.
 - Explore linkages with potential university partners for a joint Masters-level program in environmental studies, by inviting relevant researchers from mainland universities to lecture in the EPSCoR Seminar Series.
 - Prepare a white paper on the possibilities, resource requirements, and advisability of a joint or in-house Masters-level program, to be discussed by VI-EPSCoR, the Division of Science and Math, BCCR, and UVI Administration.



Objective 1.4: VI-EPSCoR will support efforts at UVI to increase the quantity and quality of undergraduate mathematics and science research experiences and increase student involvement in UVI research, in order to strengthen the quality of undergraduate mathematics and science education.

Tasks:

- Support efforts of VI-EPSCoR researchers to promote undergraduate research opportunities among students.
- Support efforts of VI-EPSCoR researchers to incorporate undergraduate research opportunities into their research plans.
- Partner with other EPSCoR programs and other relevant programs such as NSF Historically Black Colleges and Universities Undergraduate Program, NIH Minority Access to Research Careers Program, and NIH Minority Biomedical Research Support program, in order to provide off-island research opportunities for UVI students.
- Link with off-island programs to host visiting scientists and ensure that their plans include research opportunities for UVI students.

Objective 1.5: VI-EPSCoR will support efforts to increase linkages between K-12 students and teachers and UVI faculty through educational outreach in mathematics and science areas in order to strengthen K-12 mathematics and science education.

Tasks:

- Help develop plans and seek funding for projects.
- Work with Division of Science and Mathematics in support of Summer Science Academy and Saturday Academy programs for mathematics and science student enrichment.
- Bring K-12 students on campus for interactive programs.
- Enable mathematics and science Master Teacher programs, detailed under Objective 1.2, to strengthen the professional development of teachers and to increase the connectivity between scientific research and the K-12 curriculum.

Goal 2. VI-EPSCoR will establish and sustain nationally competitive research in the Biocomplexity of Caribbean Coral Reefs.

Vision: To develop an international center of excellence in the study of coral reef ecosystems through directed research and educational activities that support local and regional communities in developing a keen awareness of the importance of environmental stewardship.

Objective 2.1. Conduct nationally competitive research in oceanography, biodiversity, and ecology of Caribbean coral reef ecosystems.

Tasks:

- Conduct biological sampling, research experiments, and modeling studies that connect research at different spatial and temporal scales within a framework that recognizes that organisms, land, ocean and atmosphere are interacting parts of a dynamic earth system.
- Create a BCCR Advisory Committee to assist in strategic planning and to provide guidance for BCCR research.
- Facilitate collaboration with local, regional, and national researchers.
- Strengthen the research competitiveness of BCCR faculty.
 - Address barriers that prevent faculty from conducting research.
 - Work with university administration to ensure adequate infrastructure support for research, including information technology, GIS, and library facilities.
 - Offer competitive pilot project grants to encourage new areas of research.
 - Develop a long-term plan for growing and sustaining BCCR activities and resources.
 - Develop a plan for ensuring sustainability of VI-EPSCoR-funded faculty positions.
 - Identify and compete for research funding within other NSF programs and other nationally-competitive research funding sources.

Objective 2.2 Support educational efforts to build a foundation of scientific thinking and research skills in the local community.

Tasks:

- Explore the feasibility of developing graduate programs in key areas of interest. (See also related Objectives 1.2 and 1.3.)
- Strengthen undergraduate education in science and mathematics at UVI by creating undergraduate research opportunities.
- Strengthen K-12 education in science and mathematics through hands-on research experiences.
- Support efforts to develop informal research experiences for the local community.



Objective 2.3: Develop local and regional awareness of the importance of environmental stewardship.

Tasks:

- Promote information exchange and dialogue with local and regional stakeholders.
- Build linkages and partnerships with local, regional, and national governmental and non-governmental organizations and research initiatives relevant to BCCR.

Goal 3. VI-EPSCoR will provide support for the creation of new nationally competitive research areas in the Territory.

Vision: To strengthen the capability of researchers in the Virgin Islands to conduct nationally competitive research, in order to increase the volume and quality of research conducted in the Territory.

Objective 3.1: Identify and nurture potential Territorial researchers who are not currently active in research and develop them into active researchers, as a steppingstone to becoming nationally competitive researchers.

Tasks:

- Develop a research incubator program for potential researchers.
 - Award incubator grants on an annual, competitive basis.
 - Mentor grant recipients who are applying for nationally-competitive grants for further research.
- Offer small travel grants to emerging science and mathematics faculty that will enable them to collaborate with other researchers in their field and to present their research to others around the world.
- Develop a regular EPSCoR Seminar Series on research topics of interest to faculty and students in mathematics and science areas as well as members of the Virgin Islands community, to foster collegial interaction.
- Work with the Office of Sponsored Programs to provide technical assistance to the VI community on acquiring and managing competitive research grants
 - Assist potential researchers in developing research ideas, in identifying potential collaborators and funding sources, and in proposal development.
 - Coordinate development of informational materials for the Office of Sponsored Programs and VI-EPSCoR websites.
 - Promote grant proposal opportunities through email, newsletter, and webpage announcements.
 - Offer training workshops as needed.

Objective 3.2: Foster opportunities for UVI faculty to conduct research and for faculty and students to interact meaningfully by sharing their research experiences.

Tasks:

- Reduce obstacles for research and teaching faculty who are conducting research and publishing their research results.
- Address ways that will bring research faculty into contact with students, including opportunities for research faculty to be involved in the classroom and opportunities for students to participate in research projects.
- Work with the Division of Science and Mathematics to encourage the recruitment of faculty with proven capacities or high potential to become active and competitive researchers.



- Encourage faculty to include opportunities for undergraduates in their research programs.
- Devise a plan for allocating start-up funds to new faculty that will help them develop their research programs quickly.

Goal 4. VI-EPSCoR will enhance the ability of the Virgin Islands to acquire and manage the resources and culture of competitive research grants.

Vision: To strengthen the research environment in the Virgin Islands by building UVI's research management capacity and by improving the research infrastructure in key areas, in order to make the Virgin Islands more competitive in attracting research funds.

Research Management

Administration and Leadership of VI-EPSCoR

Vision: To support and enable effective research management in VI-EPSCoR and at UVI, through the use of 'best practices' in research management with the help of the VI-EPSCoR leadership team. The leadership team will be comprised of the Program Director, the Program Coordinator, the BCCR Principal Investigator, and the Outreach Coordinator.

Objective 4.1: Employ 'best practices' in the management of VI-EPSCoR.

Tasks:

- Develop job descriptions for the Program Director, Program Coordinator, BCCR Principal Investigator, and Outreach Coordinator.
- Assimilate, adapt, and implement 'best practices' from other EPSCoR programs.
 - Build linkages with other EPSCoR programs and with NSF mentors through an exchange of visits.
- Ensure sufficient managerial support to lead and implement the VI-EPSCoR strategic plan.
- The Program Coordinator will be responsible for designing and implementing a monitoring and evaluation strategy.
 - Work with the VI-EPSCoR team and outside consultants to develop performance metrics for the goals, objectives, and tasks set out in the strategic plan.
 - Be responsible for the collection, compilation, and analysis of monitoring data and for the submission of annual evaluation reports to the Program Director.
- Facilitate improved coordination of research management within the University.
 - Coordinate VI-EPSCoR strategic planning with the UVI strategic planning process.

Objective 4.2: Engage in succession, growth, and sustainability planning.

Tasks:

- The Program Director will be responsible for ongoing succession planning.

- The VI-EPSCoR team will work actively to build on the foundation of NSF EPSCoR funding, in order to create a broader funding portfolio for VI research.
 - Explore opportunities for funding from other EPSCoR programs, other NSF programs, and other national, regional, and international research grant programs and research initiatives
- VI-EPSCoR will engage in planning for sustainability.
 - The Program Director and the Program Coordinator will ensure that each of the subsections of the strategic plan addresses the issue of sustainability.

Objective 4.3: Establish effective and efficient channels of communications.

Tasks:

- The VI-EPSCoR team will hold regular meetings to exchange information.
 - The leadership team (Program Director, Program Coordinator, BCCR Principal Investigator, and Outreach Coordinator) will meet bi-monthly.
 - The management team (Program Coordinator, Outreach Coordinator, and support staff) will meet weekly.
 - The full VI-EPSCoR program team (Program Director, Program Coordinator, BCCR Principal Investigator, Outreach Coordinator, and all VI-EPSCoR participants) will meet monthly.
 - The Program Coordinator and Outreach Coordinator will meet monthly with the Director of Sponsored Programs.
 - The Program Coordinator will meet monthly with the VI-EPSCoR accounts specialist.
- VI-EPSCoR will develop a website to support the exchange of information among the program team as well as with other constituencies including the local community, EPSCoR colleagues, and colleagues at other universities, research grant programs, and research initiatives.
 - Provide information about VI-EPSCoR's research, education, and outreach activities.
 - Provide technical assistance on grant management to the local research community.
 - Provide the latest information on upcoming events.
- VI-EPSCoR will develop electronic mailing lists, as needed, to facilitate the exchange of information on specialized topics.
- VI-EPSCoR will develop a regular quarterly newsletter, available both in hard-copy and on the website, to publicize research, teaching, and outreach activities.
- Other means of publicity will be used, including University press releases, local media, and other outlets.
- VI-EPSCoR will develop strategies to disseminate and discuss research findings effectively within the local community and the larger research community.

Office of Sponsored Programs

Vision: To support and facilitate VI-EPSCoR's efforts to stimulate obtaining external support for USVI research programs through grants and contracts.

Objective 4.4: Keep faculty and staff regularly informed about relevant funding opportunities.

Tasks:

- Send out broad notices to faculty and staff at least monthly.
- Send out focused notices of special interest as they arise.
- Cooperate with VI-EPSCoR staff to make researchers aware of opportunities.

Objective 4.5: Coordinate ongoing training and education on grant administration.

Tasks:

- Organize UVI grants management training sessions at least annually.
- Cooperate with VI-EPSCoR staff to provide grants management training and assistance as needed.

Objective 4.6: Assist faculty and staff with proposal development.

Tasks:

- Provide advice and assistance to proposal writers.
- Organize proposal-writing training sessions at least annually.
- Cooperate with VI-EPSCoR staff to assist researchers with proposal development. Meet monthly with VI-EPSCoR staff to coordinate efforts.

Objective 4.7: Coordinate internal review and approval of UVI grant and contract applications.

Tasks:

- Assure that proposals approved by the Office of Sponsored Programs for submission have been reviewed and approved by the appropriate University officials.
- Provide an activity report to the Provost at least quarterly.
- Identify possibilities for making the review process more efficient and more effective.

Objective 4.8: Serve as a resource on grant and contract regulations, and interpret requirements for faculty and management.

Tasks:

- Maintain current information on grant and contract regulations.
- Provide advice and assistance as needed.

Objective 4.9: Facilitate the electronic grants submission process.

Tasks:

- Serve as the University point of contact with agencies that encourage or require electronic submission of proposals.
- Maintain current information on correct procedures.

Objective 4.10: Provide leadership that will help improve internal procedures and policies related to grant and contract administration.

Tasks:

- Review existing University policies and procedures to identify areas that need strengthening.
- Coordinate with other University offices that may be affected.
- Report to the Provost at least twice annually.
- Make current policies and procedures available online to faculty and staff.
- Add changes as they arise in order to maintain a reliable source of information.

Objective 4.11: Maintain and report information regarding proposal and award activity.

Tasks:

- Maintain accurate and timely records of proposals submitted and awards received.
- Provide activity reports to the Provost at least quarterly.

Objective 4.12: Work collaboratively to implement the University's Strategic Plan and other related assignments.

Tasks:

- Use the Strategic Plan to set priorities for grant-seeking efforts.
- Participate actively in the development of the new Strategic Plan.
- Provide support and information to University efforts to monitor and assess outcomes related to strategic goals.

Research Infrastructure

Information Technology

Vision: To invest in information technology infrastructure in support of VI-EPSCoR research, teaching, and outreach activities.

Objective 4.13: VI-EPSCoR will participate in UVI's strategic planning of improvements to provide greater bandwidth throughout the university community, which will help support faculty research activities.

Tasks:

- Assist in setting goals for network bandwidth, availability, and support.
- Assist in developing implementation and resourcing plans.

Objective 4.14: VI-EPSCoR will support development of the necessary infrastructure at UVI to provide VI-EPSCoR researchers with high bandwidth internet access and access to high-performance computing capacity at partner institutions and facilities.

Tasks:

- VI-EPSCoR will support planning efforts, development of resourcing plans, and identification of funding sources.
- VI-EPSCoR will support the recruitment of key information technology specialists to provide technical support.

Objective 4.15: VI-EPSCoR will support development of ‘smart classroom’ and video conferencing capability to support VI-EPSCoR research, teaching, and outreach activities.

Tasks:

- VI-EPSCoR will partner with BCCR and DSM faculty and the VI Department of Education in jointly developing research, teaching, and outreach activities that link UVI faculty and undergraduates with local K-12 teachers and students with the help of ‘smart classroom’ and video conferencing resources (linked to Objectives 1.2, 2.2, and others).
- VI-EPSCoR will work with BCCR, DSM, and the VI Dept. of Education, to jointly plan the development of ‘smart classroom’ and video conferencing capacity at the university and in schools across the Territory, to develop resourcing plans, and to incorporate technology requirements into relevant project proposals.
- VI-EPSCoR will support the recruitment of key information technology specialists to provide technical support.

Library

Vision: To support VI-EPSCoR research, teaching, and outreach activities through the acquisition of appropriate information resources, development of need-based library services, and delivery of training in the use of resources and information literacy.

Objective 4.16: Build linkages and partnerships with stakeholders in VI-EPSCoR, UVI, and the local community.

Tasks:

- Work with VI-EPSCoR Program Coordinator, BCCR Principal Investigator, and Division of Science and Mathematics Chair to develop a VI-EPSCoR Library Working Group which meets regularly to support and advise the science librarian.
- Develop linkages with eminent research libraries relevant to VI-EPSCoR research.
- Facilitate information exchange and dialogue with BCCR and science and mathematics faculty at UVI.

- Build linkages and partnerships for information exchange with stakeholders in the local community, including governmental and non-governmental organizations, schools.

Objective 4.17: Provide appropriate research materials to support the BCCR initiative.

Tasks:

- Work with the Library Working Group on an on-going basis to identify priority needs.
- Manage development of collections within budgetary constraints.
- On an as-needed basis, explore opportunities for supplemental funding to strengthen collections.
- Document and organize database of local research activities to facilitate access to faculty publications, presentations, etc.

Objective 4.18: Enhance the mathematics and science holdings to support a general research focus.

Tasks:

- Work with the Library Working Group on an on-going basis to identify priority needs.
- Manage development of collections within budgetary constraints.
- On an as-needed basis, explore opportunities for supplemental funding to strengthen collections.

Objective 4.19: Identify locally produced, science-related content for digitization to facilitate access for UVI and community researchers.

Tasks:

- Develop a list of local marine and ecological research collections.
- Identify science-related resources for inclusion in the Libraries' Virgin Islands Digital Collection.

Objective 4.20: Produce faculty and students trained and conversant with search and use of research literature and sources and with the application of educational technology.

Tasks:

- Conduct training sessions for faculty on each campus.
- Conduct training sessions for teaching and research assistants on each campus.
- Assess student information literacy skills through routine library assessment activities.

Objective 4.21: Identify funds to sustain mathematics and science activities post-EPSCoR.

Tasks:

- Develop a budget plan for sustaining mathematics and science library activities.
- Identify funding from the IT and Libraries organizational restructuring and program rationalization to support the budget plan.

- Develop a proposal for a major library and educational technology support initiative for the Title III funding cycle 2007.
- Work with VI-EPSCoR leadership team and university administration to develop a plan for rationally allocating indirect cost funds to support library resources.

Geographic Information Systems

Vision: To support VI-EPSCoR research activities through the delivery of researcher training in GIS and GPS and the development of GIS services on an as-needed basis.

Objective 4.22: Provide GIS services to VI-EPSCoR research activities on an as-needed basis.

Tasks:

- The GIS specialist will interact with researchers and the VI-EPSCoR leadership team on a regular basis by attending VI-EPSCoR meetings and providing advice on GIS-related research issues.
- The GIS specialist will work collaboratively with VI-EPSCoR researchers on an as-needed basis to integrate GIS into research planning and to provide GIS support for research activities.

Objective 4.23: Provide GIS support for BCCR efforts to integrate existing multi-year data sets containing spatial information for coastal areas of the Virgin Islands on benthic and fisheries resources, oceanographic conditions, near-shore current patterns, and human inputs such as nutrients, sedimentation, and pollution, in a GIS framework, that will be an information nucleus for potential research on coastal reef systems and a decision-making tool for resource managers in organizations such as the VI DPNR, VI CZM, and the National Parks System.

Tasks:

- The GIS specialist will work with BCCR researchers to identify and integrate datasets in a GIS framework.
- The GIS specialist will ensure region-wide access to the database and will provide technical assistance to users.

Objective 4.24: Strengthen the GIS and GPS training of VI researchers on an as-needed basis.

Tasks:

- The GIS specialist will work with the VI-EPSCoR leadership team to develop a training plan for VI faculty, researchers, and students that will incorporate formal for-credit coursework as well as focused workshops and seminars.
- The GIS specialist will develop ongoing proactive support for researchers to enable their use of GIS and provide basic training in GPS.
- The GIS specialist will support GIS inclusion in grant proposal requests.

Objective 4.25: Build linkages to regional, national, and international GIS programs relevant to VI-EPSCoR.

Tasks:

- VI-EPSCoR researchers will participate in regional, national, and international GIS programs relevant to VI-EPSCoR, including federal grant programs such as NSF-NEON, and research community GIS initiatives, such as that of Leonard Krishtalka and Jim Beach at the University of Kansas.

Objective 4.26: Support the development of territory-wide unified access to VI spatial databases.

Tasks:

- The GIS specialist will participate in a VI task force which will identify the developers, archivers, and providers of relevant spatial databases for the VI, sponsor a Territory-wide meeting of GIS programs to discuss interest and opportunities for collaboration, and develop policies and protocols for data-sharing.

Physical Research Infrastructure Improvement

Vision: To work with the Division of Science and Mathematics, Research and Public Service, and University administration to build and sustain the necessary physical research infrastructure for nationally competitive research.

Objective 4.27: VI-EPSCoR will ensure adequate research facilities for VI-EPSCoR research activities.

Tasks:

- Provide support for key physical research infrastructure improvements including renovations of UVI's MacLean Marine Science Center on St. Thomas and the Virgin Islands Environmental Resources Station on St. John.
- Advise and assist the university with its current implementation of physical research infrastructure improvements.
- Encourage VI-EPSCoR researchers to incorporate support for research infrastructure improvement into research grant applications, where appropriate.

Objective 4.28: VI-EPSCoR will support efforts to strengthen long-term planning for physical research infrastructure maintenance and improvement at UVI, in order to acquire and manage competitive research funding and conduct competitive research more effectively.

Tasks:

- Coordinate VI-EPSCoR planning for laboratory space and research infrastructure improvements with the UVI strategic planning process.

Goal 5. VI-EPSCoR will help create a foundation of science and technology-based research capability to stimulate and sustain economic development in the Virgin Islands.

Vision: To build a broad partnership with Territorial government, business, educational, and community leaders, other EPSCoR programs, eminent research and teaching programs at other universities, and national, regional, and international research grant programs and research initiatives in order to foster science- and technology-based economic development in the Territory.

Objective 5.1: Partner closely with local government, business, education, and community leaders in the development and implementation of VI-EPSCoR so that the program helps to build an appropriate foundation for science- and technology-based economic development in the Territory.

Tasks:

- Create the VI-EPSCoR Governing Committee to assist in strategic planning and to provide guidance for VI-EPSCoR.
 - Identify and recruit Territorial government, business, educational, and community leaders interested in strengthening science and technology, as well as leaders of other EPSCoR programs, as members of the Governing Committee.
 - Conduct regular meetings of the VI-EPSCoR Governing Committee.
 - Involve the VI-EPSCoR Governing Committee in the planning and implementation of VI-EPSCoR activities.
- Work with local business-related organizations and individuals -- such as the UVI Research and Technology Park, the UVI Small Business Development Center, the Economic Development Commission, local businesses engaged in research, and local research entrepreneurs -- to facilitate a supportive environment for the development of economic activities based on scientific research and development in the Territory, including supporting development of new R&D industries in areas of comparative advantage.
- Seek other avenues for involvement of the local community in the planning and implementation of VI-EPSCoR activities.

Objective 5.2: Establish a network of EPSCoR colleagues to share 'best practices' in research management.

Tasks:

- The VI-EPSCoR leadership team, Governing Committee members, and researchers will visit other EPSCoR programs to develop contacts and share 'best practices'.
- The VI-EPSCoR leadership will use the annual meeting for networking and partnership opportunities.

Objective 5.3: Build linkages and partnerships with eminent research and teaching programs at other universities relevant to VI-EPSCoR.

Tasks:

- Identify eminent research and teaching programs at other universities relevant to VI-EPSCoR, particularly in the area of the Biocomplexity of Caribbean Coral Reefs.
- Explore opportunities for research partnerships or mentoring.
- Explore opportunities for joint supervision of M.S. students, wherein graduate students from other universities will conduct their research at UVI.
- Strengthen opportunities for UVI undergraduates in science and mathematics to do internships at mainland universities and for UVI graduates in science and mathematics to go on to graduate programs at mainland universities.
- Explore opportunities for UVI, as an HBCU institution, to partner in research with other universities, to mutual benefit.

Objective 5.4: Build linkages to regional, national, and international research grant programs and research initiatives relevant to VI-EPSCoR.

Tasks:

- Participate in regional, national, and international research grant programs and research initiatives relevant to VI-EPSCoR, in order to acquire and manage competitive research funding and conduct competitive research more effectively.