FIU iREAL Commission
White Paper

Introduction

American research universities, both public and private, are facing profound challenges. Disturbances "from unstable revenue streams, demographic shifts in the US population, changes in the organization and scale of research, and shifting relationships between research universities, government and industry" are affecting the way universities currently operate ("Research Universities and the Future of America," National Academies Press, 2012). Public research universities face an even more significant challenge as state funding, already eroding over the last two decades, was further reduced by the recent economic recession. As digital technology democratizes knowledge and the access to learning, institutions of higher education are finding themselves in a globally competitive market. In addition, demand from industry for well-rounded employees and demand from students for an education that prepares them for a rapidly shifting job market further challenge the status quo. These challenges provide an opportunity for re-envisioning FIU's future.

To address these major trends at Florida International University, President Mark B. Rosenberg charged the ten iREAL (integrating Research, Engagement, Assessment and Learning) Commissioners, led by Dean Kenneth G. Furton of the College of Arts & Sciences, with drafting a white paper to identify ways FIU can leverage its current success as a world class research university and a community engaged solutions center to be more world serving and stay competitive. The Commissioners are using this opportunity to create a vision that will position FIU as a leader in redefining the role of the American public research university in the 21st century. Working from the ten questions posed by President Rosenberg in May 2013 (Towards a New Strategic Plan, Appendix 1), the intent of this white paper is to inform FIU's next strategic plan.

The future of FIU is seen in the following context:
- Miami and South Florida are at the front line of global change; as the gateway to the Americas, they are at the vanguard of many social, demographic, scientific and environmental challenges that have national and global relevance and that will directly impact FIU's future. Yet Miami still ranks 43 out of 51 among metro areas for baccalaureate attainment. The growth of Miami and FIU are directly linked.
- Declining state appropriations are forcing universities to find external funding or risk closing programs.
- The State University System of Florida's shift towards performance based funding creates greater competition for state revenues.
- The educational landscape is increasingly complex with presence of lower cost degree options, including online only universities, community colleges expanding into four-year institutions, increase in the number of for-profit colleges, use of Massive Open Online Course (MOOCs), and other innovations.
- Competency-based assessment (CBA) practices challenge academic programs to focus on competencies of graduates rather than required curricular sequences.
- Employers expect university graduates to be critical thinkers who can communicate effectively, work in teams, and be resilient and responsive learners able to integrate knowledge across disciplines.
- The financial need of students is growing: 50% or more of FIU's students receive federal financial aid, and 50% of these are at the level of greatest need.

- Public universities have a responsibility to provide a high quality education and to foster civic, intercultural, and ethical learning that will guide a student's life and work.
- Institutional challenges include increasing competition for quality faculty and students, restrictions on tuition revenue, rising infrastructure costs, and declining state and national funding for research.

The Commissioners agree that, in order to meet the expectations of the State University System of Florida and the needs of our students, faculty, and our community, FIU must find creative responses to the profound transformations facing higher education. To this end, the Commissioners recommend the following nine **bold actions for FIU**:

Recommendation 1: Dramatically increase the percentage of students graduating in 4-6 years
Metric: Strive for a 70% graduation rate by 2020

Recommendation 2: Prepare graduates for seamless career integration and entrepreneurial success in the global marketplace
Metric: Require experiential learning and maintenance of electronic portfolio of student work that demonstrates accomplishment in key skill and knowledge areas (effective communication, knowledge in their field, etc.) by 2017

Recommendation 3: Grow: aggressively and strategically
Metric: Increase enrollment to 65,000 students by 2020 and increase quality of first time in college (FTIC) students each year (i.e., higher average GPA)

Recommendation 4: Expand financial base through organizational efficiencies, diversification of revenue streams, and incentive-based budgeting
Metric: Invest resources in preeminent programs utilizing an incentive-based budgeting system implemented in 2016

Recommendation 5: Launch a synchronized communications campaign to elevate the FIU brand focused on attracting donors
Metrics: Increase the number of national and international media hits annually and complete capital campaign raising more than $750M in private gifts by 2020

Recommendation 6: Intentionally pursue Carnegie "Very High Research" Designation
Metric: Increase STEM PhD production by 20%, and increase patent production by 500% by 2020

Recommendation 7: Innovate and integrate healthcare education, research, and delivery
Metric: Establish FIU's Innovative Health Initiative as a global leader in strategic areas with health-related grant funding growing by 100% by 2020

Recommendation 8: Strengthen reputation as critical academic partner/solutions center for the local marketplace and beyond
Metric: Increase public/non-profit/private partnerships and pioneering research that address community needs

Recommendation 9: Leverage global status of FIU and Miami
Metric: Increase international student enrollment, develop additional global business partners, and expand international programs

Planning for the Future
Below are the issues that are pertinent to each of the recommendations and that will need to be more fully addressed during the strategic planning process.

Recommendation 1: Dramatically increase the percentage of students graduating in 4-6 years
Metric: Strive for a 70% graduation rate by 2020

The primary driver for change in the delivery of education at FIU is the need to improve student learning, retention, and graduation rates. Not enough students are completing their degrees in a timely manner. Difficulties passing gateway courses, challenges getting into high-demand courses, and a sense of isolation in our largely commuter student population lead to decreased GPAs, lost scholarships, a loss of motivation, inability to justify the cost of education, and early departure.

Although FIU has recently improved the 6-year undergraduate FTIC graduation rate to 50%, which is excellent for an HSI, it still lags behind peer top research universities. FIU needs to adopt a multi-prong approach in order to significantly increase the graduation rate, which includes the following: improving access to and upgrading technology; creating more ways to incorporate prior learning assessment; improving student services; and integrating, incentivizing, and rewarding faculty who do research, teaching, and community engagement. FIU will distinguish itself as an educational institution through its in-class learning experience, which will use the best current practices in pedagogy and assessment to advance efficiency and rate of learning. Research has shown that students learn better from a hybrid or blended approach of both high tech and high touch. Course capture technology must be expanded to all classroom facilities. It is important to train and mentor faculty in these new technologies and pedagogical approaches.

Effective teaching is a core university responsibility. To enrich the teaching experience and to expose students to top quality research, it is important that researchers teach. A balance is necessary as overloading research faculty could divert them from their research and innovation activities and reduce teaching quality. FIU must integrate traditionally isolated activities (no longer teaching vs. research vs. community engagement); this integration must be promoted through incentives.

Degree programs that are focused around competency-based assessment (CBA) rather than credit hours and semester calendars allow working adults to study at their own pace to achieve the necessary outcomes. This minimally could be focused on General Education competencies, but ideally would expand to degree programs that can identify competencies of graduating students and development of effective assessment techniques to measure them. In this model, faculty time is initially spent in developing online learning activities designed to achieve competency and ultimately focuses on providing students feedback on their work.

In addition, FIU must attract South Florida's best students and not cede them to other institutions in the state or beyond. By targeting recruitment resources towards the best local high school students, and enhancing dual enrollment courses county-wide, the university and students will see the benefits of increased graduation rates, reduced costs, and a greater return on investment.

Examples of implementation strategies for discussion:

a. Focus on teaching excellence
   i. Develop incentives for faculty to adopt blended learning techniques and implement strategies to improve student learning
   ii. Identify outstanding instruction strategies and develop innovative mechanisms to share with all faculty and adjuncts
   iii. Create opportunities for the best adjuncts to convert to permanent instructors
   iv. Encourage more courses that involve both faculty and community expertise
   v. Build on FIU's unique community outreach and enrich FIU's teaching by developing new experiential field-based learning programs
   vi. Create a rubric to assess faculty teaching and establish incentives to promote continuous improvement of teaching

b. Become more student-centered
   i. Incorporate prior learning assessments such as CLEP, DANTES, Portfolio assessments
   ii. Identify competencies of General Education with concomitant competency-based assessment (CBA) strategies
   iii. Determine degree programs that are compatible with CBA and encourage creative approaches to implement CBA
   iv. Enhance dual enrollment to include working with all high schools
   v. Expand seamless Undergraduate to Master's Degree Programs/3+2 programs
   vi. Revamp first-year experience course (FIU Experience)
   vii. Improve percentage of bachelor's degrees without excess hours
   viii. Expand multi-disciplinary advising for well-rounded education
   ix. Personalize services for national award-winning students
   x. Extend mentorship programs
   xi. Focus on STEM advising
   xii. Create environment to optimize the conditions for learning on campus
   xiii. Strategize student recruitment
   xiv. Target recruitment at local high schools and beyond
   xv. Increase the quality of FTIC every year
   xvi. Leverage athletics and cultural activities on campus to draw the community to campus

c. Incorporate technology:
   i. Make all university core curriculum courses and labs hybrid
   ii. Build flipped classrooms
   iii. Ensure classroom capture is available for all classes
   iv. Adopt adaptive learning technology
   v. Explore the gamification of education
   vi. Expand the use of master course models
   vii. Use data to assess student learning and online coaches for real time assistance
   viii. Produce e-books and reduce reliance on traditional textbooks

Recommendation 2: Prepare graduates for seamless career integration and entrepreneurial success in the global marketplace
Metric: Require experiential learning and maintenance of electronic portfolio of student work that demonstrates accomplishment in key skill and knowledge areas (effective communication, knowledge in their field, etc.) by 2017

FIU has a responsibility to prepare students to be professionally and personally successful in a century that is likely to be defined by rapid and unpredictable change. Employers are looking to FIU to produce students who are not only technically qualified but also critical thinkers, adaptable and multi-disciplinary. Since approximately 80% of FIU students remain in South Florida, FIU alumni are an essential part of the region's work force and a key resource for the state's future. Employers and alumni can be game changers by adding value to our iREAL vision while incorporating new investments of resources, time, or engagement into the equation. We must go beyond traditional forms of engagement and gradually move corporations, the public sector, and alumni entrepreneurs to a more holistic relationship with FIU--both for enhanced experiences for our students and researchers and for new investments. Demographically, FIU is a mirror of its community: our residents and our students need to be truly global citizens. FIU also mirrors the entrepreneurial spirit of Miami. The combination of a diverse student body, entrepreneurial thinking, and a global city gives FIU a unique advantage in developing what it means to be a 21st century workforce-ready college graduate.

Examples of implementation strategies for discussion:

     a. Enhance private/public partnerships (seamless integration with industry)
     b. Develop dedicated career services addressing the unique needs of varies by the units/disciplines
     c. Utilize MOOCs to require a Tools for Life program for college seniors (preparation for life after university focused on financial competency and community engagement)
     d. Develop MOOCs to teach entrepreneurship to college juniors
     e. Work to minimize the impact of student loan debt
     f. Expand Student Employment Portfolio. Ensure all FIU students graduate with one or more of the following: internship, study abroad, research study, creative project, community engagement activity, job experience or learning assistantships
     g. Require participation at select cultural events
     h. Demonstrate that FIU students can find jobs by increasing the number of baccalaureate degree graduates employed full-time one year after graduation
     i. Partner with industry to leverage diverse student population to develop employment pipelines for graduates

Recommendation 3: Grow: aggressively and strategically
Metric: Increase enrollment to 65,000 by 2020 and increase quality of first time in college (FTIC) students each year (i.e., higher average GPA)

Strategic growth is critical for the long-term success of FIU. Increasing the student base to 65,000 would allow FIU to meet the community demand for an affordable, high quality college education. Growth must ensure that FIU continues to attain and improve performance metrics to both maximize funding from the state and continue to provide an outstanding student experience. To achieve this balance, FIU must boldly expand on its successes blending high tech with high touch, finding the

mechanisms to greatly expand its use of hybrid course models to increase enrollment, have more meaningful student interactions with faculty (even though total contact time may be less), and enhance student achievement. Such a model will allow more students to be enrolled per faculty, commute to FIU less often (reducing carbon footprint), yet maintain the on-campus interactions that are critical to a students' success and facilitate their strong life-long commitment to FIU. It also will allow FIU to use existing space more efficiently--a critical need with PECO (Public Equipment Capital Outlay) projects not on the horizon--and enhance 4-6 year graduation rates.

Examples of implementation strategies for discussion:

    a. Develop technology such as classroom capture, hybrid courses, competency-based assessment including prior learning assessment, MOOCS, and fully online courses and degrees to support the educational needs of a growing student population
    b. Leverage external funding by integrating interdisciplinary approaches
    c. Advance FIU's strategic growth by supporting an institutional culture that expects, rewards, and sustains activities involved in generating external funding
    d. Develop quality measures for FTIC and strive to increase quality every year

Recommendation 4: Expand financial base through organizational efficiencies, diversification of revenue streams, data-driven decisions, and an incentive-based budgeting system
Metric: Invest resources in preeminent programs utilizing an incentive-based budgeting system implemented in 2016

The future growth of FIU is dependent upon adequate funding. Traditional funding sources will need to be supplemented by a multifaceted financial base. Operational efficiency needs to be partnered with an entrepreneurial approach to generating income. FIU needs to realign its operations to take into account declining budgets for maintenance and to demonstrate the cost-effective custodianship of university resources. The stewardship of FIU resources and the development of university research and creative activities should be viewed as interrelated.

Investment must be made in areas where FIU can truly be excellent, especially in programs that are unique in the country/the world. This focus will attract quality faculty and students and enhance opportunities to garner research grants and philanthropic gifts. FIU should not be all things to all people and risk sacrificing quality. In addition to enhancing the online experience for students, we must remember the value of campus life; its energy and vibrancy is critical for both students and alumni. A way to enhance campus life would be through athletics, creative, and cultural offerings. Athletics is a point of pride for many institutions – for our students, community and alumni. Continuing to build a quality athletics program will generate excitement and pride in FIU. In the arts, FIU can leverage Miami's growing cultural identity and align itself with the community through private/public partnerships. It also allows the University to engage the community and bring back alumni to campus. Involving students in the arts and creative activities will help create more well-rounded and dynamic individuals.

Examples of implementation strategies for discussion:

    a. Work with an external auditor to review management and organizational structures and processes

    b. Allocate budget to units utilizing an incentive-based budget model that links funding to activity generating revenue and increases overall transparency of the university budget

    c. Identify and invest in academic programs and faculty that set FIU apart (where we are best in the world/U.S. or can become best in the world/U.S. by a target date and where we directly serve regional issues and needs). This can in part be achieved by developing centers and institutes that are both key to the SUS research portfolio and demonstrate relevance through sustained collaboration and funding

    d. Make environmental sustainability a guiding principle in the management of FIU facilities and resources

    e. Recognize the campus as a landscape for learning and creativity

    f. Continue and strengthen the FIU tradition of master planning with local communities to better utilize FIU's investments and to leverage local, state, and federal funding

    g. Incentivize entrepreneurial approaches by deans, chairs and center directors to generate revenue, reduce costs and propel online and cross-disciplinary education

Recommendation 5: Launch a synchronized communications campaign to elevate the FIU brand focused on attracting donors

Metrics: Increase the number of national and international media hits annually and complete capital campaign raising more than $750M in private gifts by 2020

FIU has matured into a top public research university with a strong portfolio of highly ranked programs. However, because it is still under 50 years old, the perception of the university is still largely not reflective of our true status. In fact, many alumni, community stakeholders and policymakers still do not realize how far FIU has come. The fact that many colleges and divisions within FIU have independent communications strategies fragments the message and adds to the brand confusion.

Effective communication about the research, community, and creative enterprises at FIU is one important way to change this perception. FIU needs to tell the story of the many ways it engages with the community and region, contributing to its health and vitality with the expertise and resources uniquely at its disposal. Stories about the faculty, student and research excellence within the academic units are a way to start building brand credibility and need to be well publicized. Communication should include FIU's commitment to use its resources to be a solutions center for the local community and beyond. FIU needs to leverage the fact that 80% of our graduates remain in Miami and are the future of Miami's workforce.

In order to attract private funding and ensure public support, FIU needs to create an aggressive, intentional, and unified messaging strategy aimed at raising the level of awareness both within the university and in the community. The message may be multi-faceted to give the different units flexibility to tailor it to specific audiences, but it demonstrates that the university does not duplicate efforts but is nimble, efficient, and collaborative. The advancement effort benefits from clear, coordinated messaging about FIU's brand as well as from a coordinated goal for each organization with whom FIU wants to do business. Single strategies per organization will yield larger philanthropic

investment over time and mitigate donor fatigue, which can occur when multiple, uncoordinated asks are going to the same organization.

A capital campaign is a university-wide effort. While University Advancement is responsible for coordinating the strategy to reach the fundraising goal, the division can only be successful if it can effectively unite efforts collectively. In launching the largest campaign in FIU's history, the university must adopt the collective responsibility to raise $750 million.

Examples of implementation strategies for discussion:

a. Complete capital campaign and raise more than $750M in private gifts by 2020
b. Work with academic leaders to implement donor relations best practices
c. Develop effective communication strategies with the donor in mind
d. Coordinate university-wide strategy on biggest prospects or high profile partners
e. Highlight impactful research, engagement, and creative activities with particular focus on how FIU research impacts the community (e.g., Center for Children and Families)
f. Develop an aggressive media strategy focused on garnering national and global media attention for FIU's preeminent programs
g. Create a web presence that reflects a more purposeful approach to advancement

Recommendation 6: Intentionally pursue Carnegie "Very High Research" Designation
Metric: Increase PhD production in STEM areas by 20% by 2020, and increase patent production by 500% by 2020

FIU conducts world-class research that builds knowledge, solves problems, and improves society. FIU is an important base of knowledge, expertise, and entrepreneurism for South Florida. The net economic impact of FIU's non-payroll operating expenditures and the personal expenditure of its employees at the county level is 7,650 jobs created or $539.8 million of output.

In addition, investment in preeminent programs is robust. Achieving the Carnegie "Very High Research" designation would mean that FIU is producing high quality, impactful research. This designation would allow the university to be a strong competitor for federal funding. Donors from individuals to corporations to family foundations are also stressing the need for impactful philanthropic funding. Returns on philanthropic investment need to be demonstrated in order to attract and secure transformational, long-term funding. FIU's current state of teaching, research, and technology transfer activities within the context of other SUS Carnegie Research institutions is reflected in Appendix 3.

Examples of implementation strategies for discussion:

a. Increase PhD production particularly in STEM fields by 5% per year
b. Increase grant expenditures by 5% per year
c. Establish a focused and coordinated approach to research centers and partnerships, promoting topic-centered facilities to deliver collaborative research
d. Develop incentives to create and increase patents, licensing, and startups
e. Identify key research areas that build on our strengths

f. Leverage ROIs with current C&Is. Examples include the Environment (SERC, Water, ICTB), International Affairs (LACC, CRI), Health (CCF, BSI, CNI) and STEM. The current list of C&Is ranked by total budget is listed in Appendix 3).
g. Use a standardized rubric to evaluate and prioritize current and new opportunity areas (see sample rubric in Appendix 2).
h. Recruit, mentor, and retain top faculty focusing on FIU' s strengths and strategic priorities
i. Ensure FIU faculty has the resources necessary to develop collaborative and competitive research initiatives
j. Fundraise to establish endowed scholarships for PhD students and post-doctoral researchers/fellows
k. Provide incentives for faculty to graduate PhD students more quickly
l. Develop program to encourage faculty to fund/recruit postdoctoral scholars
m. Improve research support services to reduce administrative burden of faculty and allow more time for writing grants

Recommendation 7: Innovate and integrate healthcare education, research, and delivery
Metric: Establish FIU's Innovative Health Initiative as a global leader in strategic areas with health-related grant funding growing by 100% by 2020

FIU will lead in shaping the future of health education, research and service delivery--the "Innovative Health Initiative" (IHI). Health is envisioned as an equation best solved through a holistic approach that integrates genomics, behavior, access, technology, environment, education, economics, and policy while balancing that solution with the cost to deliver it and the time to research and implement it.

Examples of implementation strategies for discussion:

a. Take advantage of FIU's strengths to become a global leader in shaping the future in five strategic areas: health disparities, childhood health, aging, climate change and disaster preparedness and computationally intensive data science
b. Make serving FIU's diverse local population a key point of focus. Research undertaken in Miami can be used to implement programs to serve as a model for diverse urban areas of the future, in the US and globally

The IHI will accelerate scientific discovery through the following:
a. NIH and NSF model of interdisciplinary research
b. Cross-pollination of ideas and deep collaboration across units
c. Promotion of integrative approaches that combine research from the basic and behavioral sciences with the applied sciences

Recommendation 8: Strengthen reputation as critical academic partner/solutions center for the local marketplace and beyond
Metric: Increase public/non-profit/private partnerships and pioneering research that address community needs

FIU serves the communities of South Florida through an ambitious set of community programs that apply university resources to key social, economic, and environmental needs. By establishing strong collaborations, FIU should position itself as the primary academic partner for communities and businesses in South Florida, recognized as a relevant and innovative solution center. These projects will disseminate research and innovation that strengthens the economy of South Florida. FIU has established strong linkages with South Florida non-profits and cultural organizations. For example, our work with the Beacon Council is contributing directly to Miami Dade's economic growth.

Examples of implementation strategies for discussion:

a. Dramatically increase FIU entrepreneurial activities and products (patents, spin-offs, innovation)
b. Build on FIU's traditions of private/public partnerships
    i. Campus based (RCCL, FPL)
    ii. Internships (local, national and global)
c. Establish FIU as gateway to the arts in Miami
    i. FIU students to perform at community venues
    ii. Bringing local community to campus for cultural activities
d. Increase sponsored research in areas of strategic priority (Water, Ecotoxicology, Wall of Wind)
e. Establish FIU as a valued solutions center to major issues facing community (e.g., sea-rise/extreme events)
f. Serve the educational needs of South Florida's retired community (silver tsunami, access to healthcare)

Recommendation 9: Leverage global status of FIU and Miami
Metric: Increase international student enrollment, develop additional global business partners, and expand international programs

FIU has a global future with an established and primary focus on Latin America and the Caribbean but also looking to Asia, Europe, Africa, and the Middle East. It is uniquely placed with a geographic location on the edge of the Caribbean and in close proximity to Central and South America and has a tradition of global engagement, which is reflected in a number of innovative international partnerships (over 40 countries). The global perspective is essential for creating a university experience that will generate citizen diplomats and concerned global citizens. While FIU remains intricately tied to the areas of Latin America and the Caribbean, the BRICs nations of Brazil, Russia, India, and China remain important areas of growth potential. There is demand for FIU's services and resources internationally, and such partnerships will form an important part of the university strategy for academic and financial growth. Our global engagement strengthens our "brand" and reinforces the "I" in FIU.

FIU should exploit the strategic advantages of "place," e.g., geography, diversity, demographics, climate, and culture. Miami is the fourth largest urban area in the US, a cosmopolitan city at the

gateway to Latin America, the Caribbean and the world. It is a unique arena in which to explore the future of the USA and the region. FIU needs to fully integrate with Miami's growth as a regional and global center for tourism, culture, biotechnology, agriculture, health care, and the need to prepare for future extreme events, etc.

While China and India remain large source countries for international students at FIU, efforts at recruiting students should span the globe. Given FIU's proximity to Latin America and the Caribbean this region should continue to be a strategic market for recruitment.

Examples of implementation strategies for discussion:

    a. Increase global learning professional development for faculty teaching in online, web assisted, and face-to-face courses
    b. Recognize global learning research and instruction in tenure, promotion, and hiring
    c. Increase visibility and impact of the Office of Study Abroad
    d. Fully utilize the resources of the international centers (e.g., LACC, CRI)
    e. Develop curricular offerings that allow every FIU academic program to pursue niche opportunities to attract students and prepare them for the global marketplace
    f. Establish offshore programming in SACSCOC-approved sites (examples include China, Guatemala, Jamaica, Panama, and Dominican Republic)
    g. Leverage and expand existing programs in China
    h. Support areas of strategic value to FIU through partnerships with overseas universities and international agencies
    i. Leverage US and federal government relationships as well as State of Florida's partnerships and relationships abroad
    j. Develop FIU as a global solutions center. Examples include water, tropical ecology, and sustainable architecture
    k. Focus on building revenue-building courses and activities with international partners
          i. Develop more MBA-like courses
         ii. Expand continuing education (workforce training, language immersion)
       iii. Increase Study Abroad/Student Exchange opportunities
       iv. Identify courses of interest to our international markets and offer online classes to address the demand

Appendix -1: iREAL Commission working groups - Commissioner areas based on President's initial ten questions and additional areas developed (http://commission.fiu.edu/about-fiu-ireal/commissioner-participants/)

1. What are the major drivers of change, now and in the foreseeable future, in the delivery of educational services, and how will they likely impact FIU and our predominantly minority and non-traditional (working) students who have been shown to have a greater need for high-touch educational experiences?

    1. **Commissioner Connie Boronat**
       staffed by Liz Greb
    2. Leslie Richardson
    3. Jeanette Cruz
    4. Alexandra Quadra
    5. Eric Brewe
    6. Shekhar Bhansali
    7. Leanne Wells
    8. Ive Barreiros
    9. Julian Edward
    10. Norma Goonen
    11. Elianis Nieves

2. What are the major drivers of change in the assessment of learning (i.e., prior learning and competency-based assessment) at the university level, and how will they impact FIU? For instance, the recently passed HB7029 requires the Board of Governors to develop rules to enable students to obtain university credit for online courses, including MOOCs, taken before they enroll in a SUS institution.

    1**. Commissioner Elizabeth Bejar**
       staffed by Jenn Gebelein
    2. Janie Valdes
    3. Susan Himburg
    4. Rosa Chang
    5. Bridgette Cram
    6. Ida Rodriguez
    7. Barbara Manzano
    8. Nancy Colon
    9. Susan Clemmons
    10. Matt Hagood

3. How will new modalities of education impact the six-year graduation rate of our first-time-in-college students, the primary performance funding indicator used by the Board of Governors?

    1. **Commissioner Kathleen Wilson**
       staffed by Valerie Johnsen
    2. Adam Drisin
    3. Jamie Sutton
    4. Alan Gumerson
    5. Christine Dundas
    6. Bruno Phanord
    7. Katherine Perez
    8. Danilo LeSante
    9. Adam Owenz
    10. Diana Ashley
    11. Enrique Villamor

4. The American public research university is built upon instructional revenues providing the salary support for faculty to pursue their research. How can the research university survive if the focus is on providing validation of individual learning in ways that are "less expensive than ever before"? Increasing research & PhD production

    1. **Commissioner Ken Furton**
       staffed by Meredith Newman
    2. Lidia Kos
    3. Maureen Pelham
    4. Ranu Jung
    5. Shahed Al-Tammar
    6. Dale Williams
    7. Peter Hernandez
    8. David Chatfield
    9. Nancy Borkowski
    10. Fu Zhou

5. What alternative scenarios of institutional change should we consider, and what are the pros and cons as well as the costs of the initiatives proposed? e.g. Smaller and more focused could improve our national rankings but reduce our local impact Being a leader in sustainability; Improving athletics
　　1. **Commissioner Jerry Cohen**
　　　staffed by Emily Gresham
　　2. Mike Heithaus
　　3. Christopher Bultnick
　　4. Stuart Kennedy
　　5. Mariel Acosta-Garcia
　　6. Aime Martinez
　　7. Karen Fuller
　　8. Medjy Pierre-Louis
　　9. Sara Lipman
　　10. Peter Campbell

6. How can faculty, staff, students, and the community be thoroughly engaged with changes that are proposed? e.g. continuous use of social media and open forums with live polls for suggestions and feedback. Becoming more community engaged; maintaining a life-long relationship with graduates
　　1. **Commissioner Pablo Haspel**
　　　staffed by Gisela Casines
　　2. Duane Wiles
　　3. Amy Woltman
　　4. Amanda Garcia
　　5. Teresa Ponte
　　6. Lori-Ann Cox
　　7. Michelle Mason
　　8. Luis Bolanos
　　9. Lauryl Collins

7. How will FIU respond to, and benefit from, the changes in the global educational market? Expanding overseas educational activities
　　1. **Commissioner Mihaela Plugarasu**
　　　staffed by John Stack
　　2. Mahfoud Oubadji
　　3. Christine Toguchi
　　4. Steve Luther
　　5. Hilary Landorf
　　6. Mercedes Ponce
　　7. Rocco Angelo
　　8. Eunju Suh
　　9. Sharon Spaltenstein
　　10. Bill Bullard

8. How do we balance the pressure to deliver inexpensive degrees with the need to maintain a high quality product that represents excellent value to our students and maintains FIU's trusted brand status? Expanding access to online and hybrid classes and programs; Improving graduation rates
　　1. **Commissioner Carlos Becerra**
　　　staffed by Jo Adkins
　　2. Joyce Elam
　　3. Diane Singh
　　4. Francisco Valines
　　5. Laura Padron
　　6. Valerie Patterson
　　7. JC Espinosa
　　8. Philip Koenig
　　9. John Stuart /Faquiry Diaz
　　10. Javier Rodriguez
　　11. Gabriel Albelo

9. How can we best harness the innate entrepreneurial spirit of our students, staff, faculty, and alumni? Business rep? Expanding and diversifying income streams.
　　1. **Commissioner Christina Jardim**
　　　staffed by Mike Maunder
　　2. Seema Pissaris
　　3. William Trueb
　　4. Dileep Rao
　　5. Rafael A. Paz
　　6. Elizabeth Rockowitz
　　7. Tina Vidal
　　8. Francisco Mora
　　9. Yanfei Zhang

10. How can we get maximum benefit from FIU's growing health related initiatives that include building on existing FIU expertise and demonstrating value to our university, South Florida, and global constituencies?
　　1. **Commissioner Yogi Hernandez**
　　　staffed by Suzanna Rose
　　2. Bill Pelham
　　3. Henry Henao
　　4. Monica Hough
　　5. Monica Chiarini-Tremblay
　　6. Eneida Roldan
　　7. Jessica Robb
　　8. Simone Morgan
　　9. Angela Laird
　　10. Pedro Greer
　　11. Yukching Tse Dinh

13

Appendix 2: iREAL ROI Rubric for Evaluating Existing and New Areas of Emphasis

Existing and New Areas of Emphasis
Evaluation Matrix

Project Name: _____
Date: _____

Categories	Score	1	2*	3	4***	5	Score
				Level of Adherence			
University Priorities							
Advance FIU's Strategic Themes		No relevance to FIU's strategic themes		Limited relevance to FIU's strategic themes		themes	
Support FIU's Mission		No relevance to FIU's mission		Limited relevance to FIU's mission		Direct and positive relation to FIU's mission	
Produce additional auxiliary revenue		Total Revenue: <$50,000		Total Revenue >$100,000		Total Revenue > $200,000	
Advancement							
Attract donor interest: Impact		helped, addressing pressing need)		people helped, addressing pressing need)		helped, addressing pressing need)	
Attract donor interest: Prestige		community, student interest		media, community, student interest		community, student interest	
Attract donor interest: Unique		Many of its kind in existence		Few of its kind in existence		One of a kind	
Expand funding opportunities		Total Fundraising <$100,000		Total Fundraising > $500,000		Total Fundraising > $1,000,000	
Increase number of prospects		<10		11 to 19		>20	
Research							
Improve PhD Production		graduate		graduate		graduate	
Recruit outstanding faculty		top faculty		recruit top faculty		to recruit top faculty	
Increase grant awards		Total Grants <$100,000		Total Grants> $500,000		Total Grants > $1,000,000	
Expand potential for patents/spin-off		No patents/spin-off potential		Limited patents/spin-off potential		High patents/spin-off potential	
External Relations/Engagement							
Benefit the South Florida community		No benefit to the community		Some benefit to the community		Significant benefit to the community	
Brand and/or promote FIU		Few opportunities to brand or promote FIU		Some opportunities to brand or promote FIU		Many opportunities to brand or promote FIU	
community, non-profit)		No opportunities for partnerships		Some opportunities for partnerships		Many opportunities for partnerships	
Retention/Graduation Rates							
Engage student		and events		seminars and events		seminars and events	
Supports student success		successfully achieve the learning outcomes		of students to successfully achieve the		of students to successfully achieve the	
Increase retention rates		No influence on student retention rates		Limited influence on student retention rates		rates	
Attract quality students		applicants		student applicants		of student applicants	
the student experience		Many of its kind in existence		Few of its kind in existence		One of a kind	
Enhance active learning		Few opportunities for active learning		Some opportunities for active learning		Many opportunities for active learning	
Inspire next generation (K-12)		No opportunities to engage K-12 students		Some opportunities to engage K-12 students		Many opportunities to engage K-12 students	
Diversify course format		No impact on the current course format		format		offered	
Increase enrollment opportunities		courses students need		students need to take (less than 10%)		courses students need. (10% or more)	
Potential challenges							
Restrict land use		Significant restriction of land use		Some restriction of land use		No restriction of land use	
Political liability		Politically unsupported		Politically neutral		Politically supported	
Perception liability		Lowers perception of FIU		Does not affect perception of FIU		Enhances perception of FIU	
Financial liability		Requires significant FIU investment		Requires some FIU investment		Does not require FIU investment	

TOTAL SCORE = 0

*Exhibits most characteristics of '1' and some of '3'
***Exhibits most characteristics of '3' and some of '5'

Appendix 3: Data Tables: Comparative SUS Data
(Areas of commonality between the FIU, UCF, and USF are highlighted below)

Centers and Institutes

Center/Institute	E&G	C&G	Fees for Service	Private and Other	Total	Return on Investment
Florida International University						
Centers and Institutes						
Total Expenditures						
2011-2012						
Southeast Environmental Research Center (SERC)	373,475	8,947,248	982,918	266,638	10,570,279	28.3
FIU Applied Research Center	915,888	5,181,773	0	53,977	6,151,638	6.7
International Hurricane Research Center	1,351,453	2,347,968	2,984	0	3,702,405	2.7
Center for Internet Augmented Research and Assessment	0	1,568,428	0	2,039,326	3,607,754	
Lehman Center for Transportation Research	0	2,577,991	0	0	2,577,991	
The Center for Research on U.S. Latino HIV/AIDS and Drug Abuse (CRUSADA)	0	2,037,692	0	0	2,037,692	
High Performance Data Research Center	0	1,938,805	66,710	9,744	2,015,259	
English Language Institute	0	0	1,942,834	0	1,942,834	
International Forensic Research Institute	289,923	1,556,563	74,203	8,180	1,928,869	6.7
Institute of NeuroImmune Pharmacology	364,659	1,279,841	0	14,821	1,659,321	4.6
The Center for Ethics and Professionalism	1,503,343	0	128,200	0	1,631,543	1.1
The Center for Leadership	723,491	0	491,802	54,311	1,269,604	1.8
Center for Diversity in Engineering and Computing	0	1,191,991	13,097	21,772	1,226,860	
Center for Advanced Technology and Education	0	800,000	0	100,000	900,000	
Women's Studies Center	487,249	328,681	30,976	6,710	853,616	1.8
Latin American and Caribbean Center	621,645	123,151	28,562	14,639	787,997	1.3
Center for the Administration of Justice	225,806	406,757	0	19,717	652,280	2.9
Metropolitan Center	349,282	140,034	102,586	14,004	605,906	1.7
Child and Family Psychosocial Research Center	0	604,140	0	0	604,140	
Center for the Study of Matter at Extreme Conditions	67,513	481,212	73	42,842	591,640	8.8
Infant Development Research Center	0	532,916	0	0	532,916	
Jack D. Gordon Institute for Public Policy and Citizenship Studies	220,932	156,478	9,952	89,737	477,099	2.2
Center for Labor Research and Studies	0	111,295	364,153	415	475,863	
Institute for Public Management and Community Services	0	71,860	368,132	0	439,992	
Institute for Hospitality and Tourism Education and Research	0	0	371,429	0	371,429	
Institute for Child Health and Development (I-CHAD)/CCF	0	154,060	0	135,857	289,917	
International Media Center	0	275,135	0	0	275,135	
Cuban Research Institute (CRI)	64,477	129,714	885	1,029	196,105	3.0
Telecommunications and Information Technology Institute	0	171,350	0	5,124	176,474	
Engineering Manufacturing Center	90,201	0	8,265	0	98,466	1.1
Center for Accounting, Auditing, and Tax Studies	0	0	55,413		55,413	
Ryder Center for Supply Chain Management	0	0	17,840	34,384	52,224	
Center for the Humanities in an Urban Environment	1,032	0	6,369	960	8,361	8.1
Jerome Bain Real Estate Institute	0	0	0	6,774	6,774	
Institute for Judaic and Near Eastern Studies	0	0	0	2,558	2,558	
	7,650,369	**33,115,083**	**5,067,383**	**2,943,519**	**48,776,354**	**6.4**

University of Central Florida					
Centers and Institutes					
Total Expenditures					
2011-2012					
Center/Institute	E&G	C&G	Fees for Service	Private and Other	Total	Return on Investment
Florida Solar Energy Center	3,244,521	17,562,358	1,832,522	7,536	22,646,937	7.0
Center for Research and Education in Optics and Lasers (CREOL)	5,633,428	8,403,379	0	2,381,003	16,417,810	2.9
Institute for Simulation and Training	2,167,012	13,827,687	0	0	15,994,699	7.4
Biomolecular Science Center	3,236,223	4,310,535	0	0	7,546,758	2.3
Advanced Materials Processing and Analysis Center (AMPAC)	1,106,843	1,999,608	414,193	1,102	3,521,746	3.2
Executive Development Center	0	0	2,600,689		2,600,689	
Florida Space Institute (FSI)	886,980	1,179,554	0	0	2,066,534	2.3
Small Business Development Center (Affiliate)	290,779	1,427,181	41,211	0	1,759,171	6.0
University of Central Florida Center for Forensic Science	803,039	412,320	0	0	1,215,359	1.5
Center for Planning, Research and Development	0	114,000	0	0	114,000	
Transportation Systems Institute	0	100,320	0	0	100,320	
Florida-Eastern Europe Linkage Institute	11,935	0	0	0	11,935	1.0
Florida-Canada Linkage Institute	11,933	0	0	0	11,933	1.0
Institute of Statistics and Data Mining	0	0	0	7,247	7,247	
Institute for Social and Behavioral Sciences	0	7,095	0	0	7,095	
Environmental Systems Engineering Institute	0	0	5,604	0	5,604	
	17,392,693	49,344,037	4,894,219	2,396,888	74,027,837	4.3

University of South Florida					
Centers and Institutes					
Total Expenditures					
2011-2012					

Center/Institute	E&G	C&G	Fees for Service	Private and Other	Total	Return on Investment
Pediatrics Epidemiology Center	132,090	38,762,793	0	390,962	39,285,845	297
The Center for Leadership in Public Health Practice	14,950	19,191,581	2,508	0	19,209,039	1,285
Center for Urban Transportation Research	1,194,124	8,633,811	0	24,142	9,852,077	8
Institute for School Reform, Integrated Services, and Child Mental Health and Educational Policy	0	5,527,549	0	0	5,527,549	
Institute for Research in Psychiatry and Neurosciences	1,321,653	1,570,617	0	1,642,660	4,534,930	3
USF Clinical and Translational Science Institute	2,607,516	977,844	74	513,900	4,099,334	2
Institute for Research in Art	1,746,132	28,097	1,416,003	289,216	3,479,448	2
USF Center for HIV Education and Research	1,505	3,089,661	16,949	0	3,108,115	2,065
David C. Anchin Center for the Advancement of Teaching	480,295	1,759,453	576,117	280,618	3,096,483	6
Nanomedicine Research Center	428,049	2,038,701	45,814	101,279	2,613,843	6
Center for Aging and Brain Repair	749,356	1,142,038	0	489,220	2,380,614	3
The Archie A. and Mary-Louise Silver Child Development Center	589,708	732,114	0	991,451	2,313,273	4
Clean Energy Research Center	299,414	1,434,899	0	367,656	2,101,969	7
National Center for Transit Research (NCTR)	4,155	1,919,712	0	0	1,923,867	463
Center for Assistive, Rehabilitation and Robotics Technologies	23,881	1,768,230	0	66,406	1,858,517	78
Lawton and Rhea Chiles Center for Healthy Mothers and Babies (Health Science Center)	82,380	1,394,972	0	296,620	1,773,972	22
USF Center for Biological Defense	32,802	1,656,610	5,603	0	1,695,015	52
Small Business Development Center - Affiliate	408,388	1,112,150	30,083	32,761	1,583,382	4
Global Center for Hearing and Speech Research	643,151	926,293	0	0	1,569,444	2
Florida Health Information Center (FHIC) (HSC)	96,456	1,175,878	0	0	1,272,334	13
Florida Center for Community Design and Research	324,306	899,088	0	18,596	1,241,990	4
Diabetes Center (HSC)	1,052,613	25,486	9,117	94,288	1,181,504	1
Florida Center for Instructional Technology	252,832	148,162	654,313	57,063	1,112,370	4
USF Center for Wireless and Microwave Technology	546,663	557,302	0	0	1,103,965	2
Nanotechnology Research and Education Center	875,614	28,000	137,120	256	1,040,990	1
Center for Autism and Related Disabilities	0	961,667	0	0	961,667	
National Bus Rapid Transit Institute (NBRTI)	0	900,693	0	0	900,693	
Eric Pfeiffer Suncoast Alzheimer's Center	102,977	194,737	0	545,119	842,833	8
Center for the Study of Migrant Education	0	747,843	0	1,040	748,883	
Educational Research Center for Child Development	0	0	719,851	0	719,851	
Joy McCann Culverhouse Center for Esophageal and Swallowing Disorders	0	0	0	613,112	613,112	
The John Scott Dailey Florida Institute of Government	32,064	395,910	122,917	58,029	608,920	19
Alcohol and Substance Use Research Institute	27,062	543,330	0	0	570,392	21
Florida Kinship Center	89,801	299,183	0	33,643	422,627	5
Center for Industrial and Interdisciplinary Mathematics	0	369,844	0	0	369,844	
Institute for the Study of Latin America and the Caribbean	360,413	3,837	0	3,104	367,354	1
Florida Policy Exchange Center on Aging	0	169,887	112,356	59,660	341,903	
The Jim Walter Partnership Center	14,399	71,417	16,481	207,114	309,411	21
Gus A. Stavros Center for Free Enterprise and Economic Education	84,192	0	13,431	202,353	299,976	4

Center/Institute	E&G	C&G	Fees for Service	Private and Other	Total	Return on Investment
	University of South Florida (con't)					
	Centers and Institutes					
	Total Expenditures					
	2011-2012					
Suncoast Area Teacher Training (SCATT)	249,176	0	13,967	4,041	267,184	1
Center for Research, Evaluation, Assessment and Measurement	6,889	211,337	14,983	0	233,209	34
Center for Communications and Signal Processing	0	200,271	0	0	200,271	
Center for Entrepreneurship	2,673	40,345	0	155,920	198,938	74
Kiran C. Patel Center for Global Solutions	158,618	0	0	18,140	176,758	1
Center for Modeling Hydrologic and Aquatic Systems	16,019	0	0	117,218	133,237	8
Center for Human Morpho-Informatics Research	132,377	0	0	0	132,377	1
USF Humanities Institute	112,653	0	0	7,972	120,625	1
Institute on Black Life	105,114	0	0	12,014	117,128	1
Center for Eating and Weight Disorders	0	0	0	111,996	111,996	
Institute for Public Policy & Leadership	104,364	0	348	4,785	109,497	1
USF Parkinson's Disease and Movement Disorders Center, NPF Center of Excellence	0	0	0	67,281	67,281	
James and Jennifer Harrell Center for the Study of Family Violence	10,757	18,672	0	28,784	58,213	5
Institute for Environmental Studies	0	51,382	0	1,914	53,296	
Center for Hospice, Palliative Care and End of Life Studies At the University of South Florida	39,744	0	0	0	39,744	1
STEM Education Center	11,824	5,085	8,733	10,766	36,408	3
Center for Applied Anthropology	0	0	24,165	0	24,165	
Center for Environmental/Occupational Risk Analysis & Managem	0	6,445	0	10,307	16,752	
USF-SMMARTT (Smart Metal Organic Materials Advanced Research and Technology Transfer)	14,017	0	0	0	14,017	1
Interdisciplinary Center for Hellenic Studies	0	0	0	12,901	12,901	
Institute for Systematic Botany	0	0	0	4,927	4,927	
Center for Music Education Research (CMER)	769	2,546	0	0	3,315	4
Ancient Studies Center, Department of History	0	0	0	2,200	2,200	
Institute for Information Systems Management	0	0	0	1,439	1,439	
Center for Jazz Composition	0	0	0	674	674	
Center for Neo-Platonic Studies	0	0	0	577	577	
Center for Social and Political Thought	0	0	0	300	300	
Interdisciplinary Center for Greek Studies	0	0	0	196	196	
Total	17,598,115	102,767,638	4,078,756	9,305,677	133,750,186	8

Comparative Faculty/Student Data

Assistantships

	2007	2008	2009	2010	2011	2012
FIU	1,036	985	990	1,038	1,071	1,177
FSU	3,022	2,812	2,946	2,997	3,033	2,982
UCF	1,764	1,698	1,335	1,509	1,541	1,568
UF	4,440	4,473	4,403	4,480	4,354	4,095
USF	1,725	1,774	1,866	2,071	2,059	2,026

Number of Assistantships
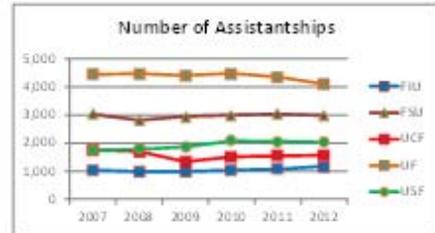
Tenured Full-time Faculty

	2007	2008	2009	2010	2011	2012
FIU	461	436	432	438	435	449
FSU	773	760	778	778	769	783
UCF	504	520	547	564	579	595
UF	1965	1899	1885	1847	1850	1838
USF	732	727	755	773	755	733

Tenured Full-Time Faculty
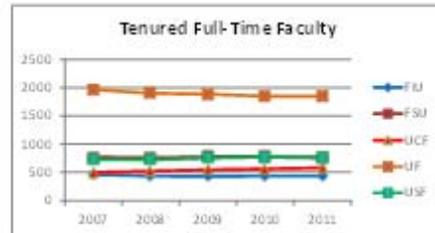
Tenure-track Full-time Faculty

	2007	2008	2009	2010	2011	2012
FIU	195	210	201	196	220	240
FSU	347	311	296	256	214	283
UCF	294	272	207	184	206	189
UF	815	759	677	713	669	592
USF	443	376	360	369	387	375

Tenure-track Faculty
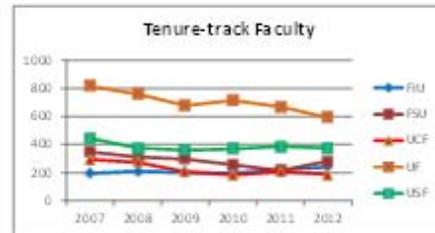
Non-tenure track full-time faculty

	2007	2008	2009	2010	2011	2012
FIU	172	171	191	210	310	429
FSU	680	664	647	606	667	695
UCF	454	455	528	564	621	808
UF	1647	1661	1645	1655	1766	1813
USF	582	476	503	523	501	521

Non-Tenure-tract Faculty
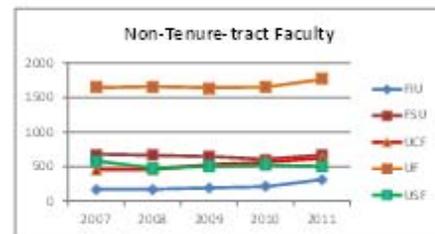
Total Full-time Faculty

	2007	2008	2009	2010	2011	2012
FIU	828	817	824	844	965	1,118
FSU	1,800	1,735	1,721	1,640	1,650	1,761
UCF	1,252	1,247	1,282	1,312	1,406	1,592
UF	4,427	4,319	4,207	4,215	4,285	4,243
USF	1,757	1,579	1,618	1,665	1,643	1,629

Total Full-time Faculty

Student-to-Faculty Ratio

	2008	2009	2010	2011	2012	Average
FIU	27	27	28	27	26	26.8
UCF	30	31	31	32	32	30.8
FSU	25	25	26	26.5	26.3	25.6
USF	27	27	24	26	24	25.8
UF	20.3	20.4	20.5	20.5	21.4	20.8

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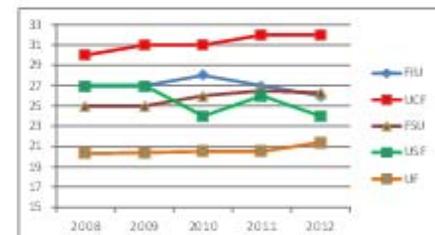
Technology Transfer Data

SUS Technology Transfer Comparison

	2007-08	2008-09	2009-10	2010-11	2011-12	5 Yr Avg
Invention Disclosures						
FIU	18	16	24	15	20	18
UCF	93	83	96	109	127	102
UF	299	304	295	322	345	315
FSU	45	41	37	60	65	49
USF	139	141	161	172	177	150
US Patents Issued						
FIU	0	1	1	3	1	1
UCF	57	41	91	76	67	60
UF	53	73	59	86	60	68
FSU	11	10	21	36	27	21
USF	31	36	66	91	98	59
Licensing Options Executed						
FIU	0	1	1	0	0	0
UCF	6	5	12	14	11	9
UF	75	115	92	131	129	103
FSU	12	10	6	10	13	10
USF	28	25	37	36	52	36
Licensing Income Received ($)						
FIU	9,423	39,819	24,942	12,000	62,034	25,731
UCF	327,176	640,008	411,393	500,966	560,135	611,073
UF	52,252,469	53,880,476	29,235,006	29,493,522	33,922,249	41,136,499
FSU	1,257,266	1,192,448	1,314,917	1,467,981	1,333,065	1,396,540
USF	1,831,000	1,300,000	17,411,625	1,390,871	1,243,425	4,212,772
Number of Start-up Companies						
FIU	0	0	0	0	0	0
UCF	2	3	7	1	5	4
UF	14	10	9	12	15	12
FSU	3	2	2	4	2	2
USF	5	3	5	8	10	6
Patents Per 1000 Tenured or tenure-earning faculty						
FIU	0	1.6	1.5	4.7	2	2
UCF	74	0	122	97	85	68
UF	20	29	25	34	24	27
FSU	10	9	20	34	27	20
USF	26	28	52	80	83	49
Total Research Expenditures per Full-time Tenured, Tenure-earning Faculty Member ($)						
FIU	163,148	160,066	174,204	173,511	180,241	171,569
UCF	184,326	187,883	157,734	145,975	155,170	167,628
UF	227,582	242,378	266,022	289,036	276,691	254,847
FSU	188,890	220,030	221,475	222,835	229,276	212,997
USF	291,630	313,641	327,318	350,857	381,131	323,872