# University of South Florida 2020-2021 Legislative Budget Request

# Advancing the Academic Excellence and National Stature of USF, the SUS and the State of Florida

# A RESPONSE TO QUESTIONS FROM THE FLORIDA BOARD OF GOVERNORS' STRATEGIC PLANNING COMMITTEE

1. Specifically, how will funds (\$2.0M) be used to enhance undergraduate student recruitment and support services?

Funds will be invested in the following categories, both directly dedicated to advancing student success (and advancing toward a Top 25 *US News and World Report* ranking):

- (a) \$1M to increase the value and number of both need-based and merit-based scholarships intended to recruit a diverse pool of higher ability students across all USF campuses. This will directly support student access, affordability and excellence of the student academic profile of incoming FTIC and transfer students,
- (b) \$0.5M to increase support for student mental health counseling, a high priority for the Florida Board of Governors and the USF Board of Trustees, and critical to enhancing student wellbeing and student success. This will build upon recent investments in USF's award-winning three-tiered plan, MWell4Success program, and
- (c) \$0.5M to support USF-wide student success platforms including predictive analytics (*Civitas Learning*) and career preparation (*Portfolium*).
- 2. Specifically, how will funds (\$3.5M) be used to enhance graduate student recruitment and support?

Funds will be invested in two categories, directed at enhancing the recruitment of worldclass talent, improving the graduate student experience, and significantly raising USF's research profile. These include:

(a) \$2.5M to attract high-caliber graduate students to USF and the State of Florida. Our institutional goal of achieving an overall graduate-level enrollment of 25% (consistent with top-tier research universities) will require enrolling approximately 1,000 more nationally-competitive, graduate students, with 300 at the Ph.D. level while managing/reducing undergraduate enrollment.

\$0.25M in focused investments will be made in areas of strategic emphasis (i.e. basic sciences, business, engineering, health, and marine sciences). We also seek to attract a first wave of 75 additional Ph.D. students at \$30,000 (stipend plus benefits) at a recurring cost of \$2.25M. New Ph.D. student recruitment will focus on USF's nationally-ranked programs and areas of strategic emphasis including Behavioral and Community Sciences, Biomedical Engineering, Cancer Biology (Chemical Biology, Immunology and Immunotherapy, and Integrated Mathematical Oncology), Cell and Molecular Biology, Chemical Engineering, Chemistry, Computer Science and

Engineering, Environmental Engineering, Industrial and Organizational Psychology, Marine Science, Medical Sciences, Nursing Sciences, Public Health, and Rehabilitation Sciences. Presently, available resources limit USF's competitive position in recruiting the best and brightest graduate students to the university's nationally-ranked programs. The recruitment of these students will entail more aggressive state and national recruiting efforts, including the development of pipeline programs, sending USF representatives to graduate student recruiting fairs across the country, as well as supporting targeted, highly-qualified students to USF for campus interviews.

- (b) \$1.0M to increase existing graduate student stipends and fellowships to a nationally competitive level. USF's current graduate stipends are not competitive with our national and aspirational peers. In order to attract, retain and graduate the most highly qualified doctoral students in carefully identified strategic areas of emphasis we plan to increase the compensation of 200 of our most meritorious students (of the existing cohort of 1,648 doctoral students) by \$5,000 per student.
- 3. In what specific disciplines will the 175 faculty and 25 technical personnel be hired into?

The proposed faculty hires across all ranks (during Phase I, with a total of 375 new faculty hires needed in our multiyear plan), from non-tenured Instructors, tenure-earning Assistant Professors, and tenured Associate and Full Professors (including National Academy members and World Class Scholars), are grouped as follows:

20 National Academy members and World Class Scholars: \$8.8M

25 full professors: \$5.8M

25 associate professors: \$4.0M

50 assistant professors \$6.8M

55 new instructors: \$5.8M

\$2.8M will be invested in essential research and instructional support for these professors through hiring 25 full-time technical personnel, including (a) research laboratory technicians, (b) statisticians and data analysts, and (c) research librarians.

Faculty investments will be made in areas of strategic research priority for the region, state and nation, will further strengthen USF's Top-25 position among public universities in research expenditures, and will accelerate USF's unmatched trajectory toward a Top 25 ranking in *US News and World Report*, particularly as Phase I is completed and future investments are realized.

Specifically, these include:

• Faculty hiring in the Board of Governors' focused areas of Academic and Research Excellence:

## Healthy Florida

Health and wellness for Floridians: Proactive and preventative steps to a healthier state:

- Reversing opiods and related addiction challenges
  - <u>USF hires</u>: Medicine (Cardiovascular Sciences, Neurosciences, Oncology, Pharmacological Sciences); Nursing; Behavioral Health; and Basic Sciences (Biology, Chemistry, Mathematics and Statistics, Physics, and Psychology).
- Assessing and treating disabilities and mental health disorders
  - <u>USF hires</u>: Medicine (Cardiovascular Sciences, Neurosciences);
     Nursing; Aging; Behavioral Health; and Basic Sciences (Biology, Chemistry, Mathematics and Statistics, Physics, and Psychology).
- Childhood development, health and education in Florida: Securing global competitiveness for the 2030 generation
  - USF <u>hires</u>: Medicine (Cardiovascular Sciences, Neurosciences);
     Nursing; Aging; Behavioral Health; and Basic Sciences (Biology, Chemistry, Mathematics and Statistics, Physics, and Psychology);
     STEM Education.

#### Secure Florida

- Preserving the Florida coast: Monitoring and assessing the marine and coastal environment
  - <u>USF hires</u>: Marine and Environmental; Sciences; Basic Sciences (Biology, Chemistry, Geosciences, Mathematics and Statistics, Physics, and Psychology); and Engineering (Computer Sciences and Engineering, Electrical Engineering, Mechanical Engineering, and Medical Engineering).
- Transforming Florida into the leading cyber/tech savvy society: Harnessing the data revolution
  - <u>USF hires</u>: Cybersecurity; Engineering (Computer Sciences and Engineering, Electrical Engineering, Mechanical Engineering, and Medical Engineering); Mathematics and Statistics; Information Systems and Decision Sciences; and Health Informatics.

### Prosperous Florida

- Advancing economic development through translational research:
   Innovation from laboratory to industry
  - <u>USF hires</u>: Basic Sciences (Biology, Chemistry, Geosciences, Mathematics and Statistics, Physics, and Psychology); Medicine (Cardiovascular Sciences, Neurosciences, Oncology); Accounting; Economics; Finance and Wealth Management; Information Systems and Decision Sciences; Risk Management and Insurance.
- The future of work at the human-technology frontier (AI, automated vehicles, etc.)
  - <u>USF hires</u>: Engineering (Chemical Engineering, Computer Sciences and Engineering, Electrical Engineering, Environmental Engineering,

Mechanical Engineering, and Medical Engineering); and Basic Sciences (Biology, Mathematics and Statistics, Physics, and Psychology).

- USF's planned investments in faculty are directed at improving the student-to-faculty ratio (SFR) to become more competitive with national peers and aspirational peers: USF's current SFR of 22.0 is non-competitive nationally. USF is currently tied overall at 44th in *US News and World Report* rankings with eight other institutions, yet lags the average SFR of 17.3, with the Top 43 ranked institutions at an average SFR of 16.9. In particular, the non-tenure track Instructor hires will help with this objective in targeted colleges with excessively large SFR and for specific introductory courses in the general education curriculum with large enrollments that are foundational courses and critical for student success. For example, SFRs in USF's Muma College of Business and the College of Engineering were 43.3 and 31.8 in Fall 2018.
- In addition, faculty hires in support of "signature, destination programs" on the St. Petersburg and Sarasota-Manatee campuses will support the growth of interdisciplinary centers of academic and research excellence, including marine and environmental sciences, journalism and media studies, the arts, financial services, and K-12 science education in St. Petersburg, along with aging studies, risk management and insurance, and K-12 arts-integrated education on the Sarasota-Manatee campus.

## 4. What research areas will the \$2.5M support?

An important aspect of further advancing our national rankings, and progress towards AAU membership eligibility, is increased institutional reputation based on faculty productivity, impact and national/international recognition. Increased grant funding, citations and impact (recognized by faculty awards) are all AAU Phase I indicators. This productivity is catalyzed by "building research connections" both nationally and internationally. We have piloted a USF Nexus Initiative over the past two years that has resulted in building 81 unique research partnerships for our faculty and graduate students across 12 U.S. states and in 32 countries. The proposed \$2.5M will support an additional 200 national/international, cross-disciplinary research collaborations in the areas outlined in the response to Question (3) above. In particular, it will provide global access to sophisticated, state-of-the-art research facilities and infrastructure for our faculty, far in excess of the requested investment. Other anticipated returns on investment include increased grant funding, publications, citations and the generation of scholarly works.

#### 5. How will the plan change if not fully funded?

If USF's plan for continued strategic progress and an accelerated upward trajectory is not fully funded, the University will continue to pursue its strategic direction and commitment to academic excellence. To reach our aspiration, though, we seek full funding of our plan.

6. The original LBR submitted to the Board office was for \$37.4M, but this latest request is for \$50M. Please explain the increase in the amount requested.

At the time of the initial (\$37.4M) request, USF was ranked 58th by US News and World Report. Since that submission, the 2020 US News and World Report rankings were announced in which USF advanced by 14 places to 44th among public institutions nationwide, ahead of 4 public AAU universities and tied with 2 others. This places USF in a much more competitive landscape requiring an accelerated financial stimulus to strengthen the current position and maintain the trajectory for a third Preeminent University in Florida (and the first metropolitan-based university currently engaged in consolidation) to attain a Top 25 ranking, and solidify Florida's position as a national leader in higher education. The nature of the challenge and the need for requested increased funding is demonstrated in the following figure:

2020 USNWR Public Ranking of National Universities			
	University of South Florida	Average of Universities Tied at 44th*	Average of Universities Ranked 1st to 43rd
Student to Faculty Ratio	22	17.3	16.9
Average Spending per Student	\$33,241.00	\$60,444.38	\$67,566.19
Faculty Resources Rank	255	400.4	4.00
(Includes Public and Private)^ Financial Resources Rank	256	190.1	143.3
(Includes Public and Private)~	211	120.5	89

<sup>\*</sup>Universities Ranked 44th: Auburn University, Temple University, University of California - Merced, University of Colorado - Boulder, University of Oregon, University of South Carolina, University of Tennessee, University of Utah

This demonstrates a disadvantage in terms of student-to-faculty ratio and average spending per student not only with respect to institutions ranked ahead of USF (1<sup>st</sup> to 43<sup>rd</sup>), but also a deficit of resources compared to those with whom we are now tied. Furthermore, the faculty resources and financial resources ranks among all universities (public and private) for the same cohorts confirms the deficit. Our overall performance (ranked 44<sup>th</sup>) is reflective of USF's remarkable gains in academic outcomes and far exceeds that expected given current financial support. Thus, the requested increase in funding will be instrumental for sustaining our current position, and essential to further gains in rankings.

**<sup>^</sup>Faculty Resources Rank:** Based on class size, faculty salary, proportion of full-time faculty with the highest degree in their fields, student-faculty ratio, and proportion of faculty who are full time

<sup>&</sup>quot;Financial Resources Rank: Based on average spending per student on instruction, research, student services, and related educational expenditures