## University of South Florida Preeminence Plan: A 5-Year Plan for National Excellence: June 2018

## Vision

The University of South Florida is a global research university dedicated to student success and positioned for membership in the Association of American Universities (AAU).

University of South Florida Tampa Strategic Plan, 2013-18

Background. In 2013, the Legislature and Governor Scott approved SB 1076<sup>1</sup>, creating the Preeminent State Research Universities Program, specifying 12 benchmarks and providing added resources and benefits to those eligible universities meeting 11 out of those 12 benchmarks. In 2016, the program was expanded through HB 7029<sup>2</sup> with a second designation for "Emerging Preeminent State Research Universities" for those institutions that met six of the 12 preeminence benchmarks. The University of South Florida Tampa (USF-T), a Carnegie-classified Doctoral Research University, Highest Research Activity<sup>3</sup>, qualified for the Emerging Preeminence designation in June 2016, meeting 9 of the 12 benchmarks and in June 2017 by meeting 10 of the 12 benchmarks. Investments granted through the Emerging Preeminence designation were targeted towards areas that most effectively and efficiently positioned USF-T to meet 11 of the 12 benchmarks as reported to the State University System of Florida's Board of Governors in its 2018 Accountability Plan (see Table 1). As USF-T plans for SACSCOC accreditation consolidation, with its campuses in St. Petersburg (USFSP) and Sarasota-Manatee (USFSM) by July 1, 2020, we will remain sharply focused on our shared vision for student success and continued development of a research profile consistent with eligibility for membership in the Association of American Universities (AAU)<sup>4</sup>.

As a preeminent university, we will: (1) raise our stature among the nation's top public research universities; (2) enhance our research productivity, (3) make greater contributions to the national and global prominence of the State of Florida and SUS;

## Table 1. Preeminence Metrics from the 2018 BOG Accountability Plan

2018 BOG Accountability Plan							
MEASURE	BENCHMARK	USF					
Average GPA and SAT Score for 2 A subtests for incoming freshman in Fall semester	4.0 GPA 1200 SAT	4.12 GPA 1280 SAT					
B National Public University Ranking	Top 50 in 2 or more publications	4					
C Freshman Retention Rate (Full-time, FTIC)	<u>&gt;</u> 90%	90%					
D (Full-time, FTIC)	<u>&gt;</u> 70%	71%					
E National Academy Memberships	6	13					
Total Annual Research F Expenditures (Science & Engineering only)	<u>≥</u> \$200 M	\$502					
G Total Annual Research Expenditures in Diversified Non- Medical Sciences (Science & Engineering only)	<u>≥</u> \$150 M	\$288					
National Ranking in Research Expenditures in at least 5 STEM disciplines as reported by NSF (includes public & private institutions)	5 in Top 100	7					
I Patents Awarded (over 3 year period)	<u>&gt;</u> 100	324					
J Doctoral Degrees Awarded Annually includes Research Doctoral Degrees and Medical/Health Professional Doctoral Degrees	<u>≥</u> 400	721					
K Number of Post-Doctoral Appointees	<u>&gt;</u> 200	300					
L Endowment Size (\$M)	>\$500 M	\$442					
NUMBER OF CRITERIA ABOVE THE BENCHMARK: 11							

and, (4) support innovation and economic development in the Tampa Bay region and the State of Florida.

**Quality Indicators.** The foundation of our strategy is accountability, guided by our strategic plan and the BOG's 2025 Strategic Plan. The USF Board of Trustees and university leadership consistently track progress towards meeting AAU membership eligibility, the SUS preeminence designation, and other contributions to the SUS strategic plan. Table 2 shows the 27 metrics most important to maintaining a preeminent designation, the AAU aspirations identified in USF-T's 2013-18 Strategic Plan, and our plan for reaching National Excellence. Our focus will not waver as we move forward towards development of accreditation consolidation. We will continue to focus on increasing access and success to students across the USF campuses, and meeting the needs of the greater Tampa Bay community.

<sup>&</sup>lt;sup>1</sup> <u>http://www.flsenate.gov/Session/Bill/2013/1076</u>

<sup>&</sup>lt;sup>2</sup> https://www.flsenate.gov/Session/Bill/2016/7029

<sup>&</sup>lt;sup>3</sup> http://carnegieclassifications.iu.edu/

<sup>44</sup> http://www.aau.edu/

Table 2. Metrics tracked for National Excellence, SUS BOG Preeminence, & AAU Eligibility.   2018 2019 2020 2021							y. 2021
	METRIC	SOURCE	BENCHMARK	PERFORMANCE	GOALS	GOALS	GOALS
A. Si	tudent Access						
				Fall 2017	Fall 2018	Fall 2019	Fall 2020
1	Average GPA and SAT Score for incoming freshman in Fall semester	Preeminence	4.0 / 1200	4.12 <i> </i> 1280	4.1 / 1282	4.1 / 1285	4.1 / 1290
				Fall 2017	Fall 2018	Fall 2019	Fall 2020
2	Freshman in Top 10% of Graduating High School Class for incoming freshman in Summer/Fall semester	AAU	31.5% (Fall 2014)	37%	38%	38%	39%
				Fall 2017	Fall 2018	Fall 2019	Fall 2020
3	Freshman Acceptance Rate for incoming freshman in Fall semester	SUS Research Institutions	51.7% (Fall 2014)	44%	44%	44%	44%
B. S	tudent Success						
				2016-17	2017-18	2018-19	2019-20
4	Freshman Retention Rate (Full-time, FTIC)	Preeminence	90%	90%	91%	92%	92%
				2013-17	2014-18	2015-19	2016-20
5	<b>4-year Graduation Rate</b> (Full-Time, FTIC)	SUS Research Institutions	40% (2011-15)	60%	60%	62%	64%
				2011-17	2012-18	2013-19	2014-20
6	<b>6-year Graduation Rate</b> (Full-time, FTIC)	Preeminence	70%	71%	73%	75%	77%
				2016-17	2017-18	2018-19	2019-20
7	Percent of Bachelor's Degrees Awarded in STEM and Health	SUS Research Institutions	34% (2014-15)	48%	48%	48%	48%
				2016-17	2017-18	2018-19	2019-20
8	Percent of Graduate Degrees Awarded in STEM and Health	SUS Research Institutions	45% (2014-15)	66%	66%	67%	67%
c. v	alue						
9	Public University National Ranking (in more than one national ranking)	Preeminence	2	4/2018 4	<u>4/2019</u> 5	4/2020 5	<u>4/2021</u> 5
D. Fa	aculty Excellence						
				2018 (2017-18)	2019 (2018-19)	2020 (2019-20)	2021 (2019-20)
10	National Academy Memberships	Preeminence	6	13	13	13	13
				2015	2016	2017	2018
11	Faculty Awards	AAU	12 (2013)	13	9	10	11
				Fall 2014	Fall 2015	Fall 2016	Fall 2017
12	Number of Post-Doctoral Appointees	Preeminence	200	300	277	267	260
				Fall 2014	Fall 2015	Fall 2016	Fall 2017
13	Number of PhDs on Non-Faculty Appointments	AAU	150 (Fall 2013)	119	100	122	120
				Fall 2017	Fall 2018	Fall 2019	Fall 2019
14	Student-to-Faculty Ratio	AAU	16 (Fall 2014)	22	21	20	19

## Table 2. Continued

				2018	2019	2020	2021
	METRIC	SOURCE	BENCHMARK	PERFORMANCE	GOALS	GOALS	GOALS
E. R	esearch: Productivity						3
				2016-17	2017-18	2018-19	2019-20
15	Total Research Expenditures (\$M)*	AAU	\$386 (2012-13)	\$558	\$559	\$560	\$561
				2016-17	2017-18	2018-19	2019-20
16	Federal Research Expenditures (\$M)	AAU	\$205 (2012-13)	\$250	\$251	\$252	\$253
				2016-17	2017-18	2018-19	2019-20
17	Total Annual Research Expenditures (\$M) (Science & Engineering only)	Preeminence	\$200	\$502	\$503	\$504	\$505
				2016-17	2017-18	2018-19	2019-20
18	Total Annual Research Expenditures in Diversified Non-Medical Sciences (\$M) (Science & Engineering only)	Preeminence	\$150	\$288	\$289	\$290	\$291
				2015-16	2016-17	2017-18	2018-19
19	National Ranking in S.T.E.M. Research Expenditures (includes public & private institutions)	Preeminence	Top 100 in 5 of 8 disciplines	7	8	8	8
				2015-16	2016-17	2017-18	2018-19
20	Total R&D Expenditures per Full- Time Tenured, Tenure-Earning Faculty Members	SUS Research Institutions	\$231,150 (2013-14)	\$505,965	\$557,889	\$566,363	\$567,376
				2016-17	2017-18	2018-19	2019-20
21	Doctoral Degrees Awarded Annually*	Preeminence	400	721	725	730	735
				2015-17	2016-18	2017-19	2018-20
22	Citation Impact	AAU	1.47 (2012-14)	1.66	1.67	1.69	1.71
F. Re	Research: Innovation and Commercialization						
				2015-17	2016-18	2017-19	2018-20
23	Patents Awarded (over 3 year period)	Preeminence	100	324	325	325	325
				2016-17	2017-18	2018-19	2019-20
24	Licenses/Options Executed*	AAU	47 (2012-13)	122	123	123	123
				2016-17	2017-18	2018-19	2019-20
25	Number of Start-up Companies*	AAU	4 (2012-13)	10	10	11	11
G. P	hilanthropic Support						
26	Endowment (in Millions)	Preeminence	\$500	2016-17 \$442	2017-18 \$450	2018-19 \$465	2019-20 \$485
				2016-17	2017 19	2018 10	2010 20
27	Gifts Received (\$1000s)	AAU	\$103,033 (2012-13)	\$84,566	2017-18 \$80,000	2018-19 \$80,000	2019-20 \$80,000

The metrics in Table 2 are grouped according to seven areas in which USF seeks to achieve national excellence: (1) student access; (2) student success; (3) value; (4) faculty excellence; (5) research productivity; (6) research innovation and commercialization; and, (7) philanthropic support. The preeminence metrics are highlighted in blue and the benchmark values are shown in the fourth column. While many preeminence benchmarks are important for AAU eligibility, as indicated with an asterisk, for those not benchmarked in preeminence, the value is based on the 25<sup>th</sup> percentile performance for the 34 U.S. public AAU institutions. The remaining metrics in Table 2 were selected as they contribute to the SUS BOG Strategic Plan goals and often are utilized in mathematical formulae for external ranking systems, including *US News & World Report (USNWR)*. While our *USNWR* ranking amongst public institutions has jumped rapidly from a ranking of 94 in the 2014 edition, to 68 in the most recent edition (2018), and we are not satisfied. Our aim is to be ranked among the top 50 public universities by *USNWR*, consistent with the designation of preeminence.

While USF will continue to balance its priorities to meet the performance goals for USF-T's 2013-18 Strategic Plan vision for AAU eligibility and all of the SUS BOG's 2025 Strategic Plan goals, the remainder of this discussion focuses on our plan to meet and sustain at least 11 of the 12 preeminence benchmarks through careful planning, strategic investments, disciplined execution and transparent accountability.

Critical to our current and planned performance for maintaining preeminence is recruiting and retaining high quality, research productive faculty talent. The role of faculty in support of the preeminence goals is exemplified by consideration of *student-to-faculty ratio*, a metric that is often utilized in national rankings. As shown for Metric 9, to meet the preeminence benchmark for national rankings a university must be in the top 50 of at least two. USF is proud that it exceeds the preeminence benchmark of two rankings in the top 50, and is currently ranked in the top 50 in four rankings: *Academic Ranking of World Universities (ARWU), Times Higher Education World University Rankings (THE), Kiplinger Best College Value,* and the *Center for Measuring University Performance (TARU).* As we move forward towards consolidation, USF will strive to be in the top 50 of at least one more ranking, including, but not limited to being in the top 50 of public research universities in the *USN&WR* rankings.

USF-T continues to invest heavily to improve its *student-to-faculty ratio*, improving from 24:1 when designated as an Emerging Preeminent university (June 2016) to 22:1, currently. However, this continues to fall short of the 25<sup>th</sup> percentile benchmark derived from AAU public institutions of 16:1. While USF will continue to serve a large undergraduate population, even small improvements in our *student-to-faculty ratio* will show a large return on investment, positively impacting several preeminence metrics including, but not limited to, *4-year graduation rate*, *freshman retention rate* and the *number of doctoral degrees awarded annually*. Indeed, the investments received through our emerging preeminence designation are already contributing, allowing USF-T to move from meeting 9 of the 12 preeminent benchmarks in 2016 to meeting 11 benchmarks this year.

The *freshman retention rate* metric will continue to be positively impacted with concomitant improvements in the *student-to-faculty ratio*. While we are proud that we have met the preeminence benchmark of 90%, we must continue to focus on student retention, not only to continue to meet the benchmark, but because continuing their undergraduate education is a key element in students realizing their future dreams. We expect to continue our improved performance in future years.

Linked to retention rates are the *4-year* and *6-year graduation rates*, the former of which will become the preeminence metric in 2019. USF-T has realized remarkable success in graduation rates under the stewardship of Dr. Judy Genshaft and her leadership team. For example, the 6-*year graduation rate* for the 2004 cohort (graduating in 2010) was 51%, and our current performance (2011 cohort, graduating in 2017) is 71%. Our *4-year rate* has similarly shown great improvements, with our current performance

(2013 cohort, graduating in 2017) a remarkable 60%. As recognized nationally, we are particularly proud of "closing the completion" gap for African-American students (#1 in Florida and #6 in the nation) and Hispanic students (#1 in Florida and #4 in the nation), with cohorts graduating at rates equal to or higher than that of our white students. Named as the "Institution of the Year" by Education Dive in 2017, USF-T was recognized for eliminating the graduation gap among students whether or not they are low-income PELL recipients. While we celebrate the increases in graduation rates, we are not satisfied. We will continue our current pattern of strategic investments, particularly those realized through performance-based funding<sup>5</sup>, to support our current and future student success initiatives.

Students are the focus of every decision we make, a fact supported by USF's proven ability to attract a talented and diverse pool of undergraduate and graduate students. Indeed, USF-T continues to meet the Average GPA and SAT score preeminence benchmark with a profile of 4.1 GPA and 1280 SAT for its current freshman class and continued gains are fully anticipated. While 37% of our talented summer/fall (50% of our fall only) freshmen graduated in the top 10% of their High School Class, placing us above the 25<sup>th</sup> percentile of public AAU institutions and consistent with the SUS BOG's Strategic Plan goal of 50% for the system, we must balance our recruitment of high-achieving students with our commitment to providing access to a diverse pool of talented young men and women, many of whom are first-generation in college. Not only are many USF-T undergraduates the first in their families to achieve the dream of attending university, a significant number (39.9% in Fall 2017) are low-income PELL recipients. In order to provide adequate support for a talented and economically diverse student population. USF must strive to achieve the preeminence Endowment Size benchmark of \$500 million. Although we do not anticipate meeting this benchmark in the immediate future, we firmly believe that we will continue to see progress in achieving our philanthropic goals, particularly with the success of the USF Unstoppable campaign which surpassed its \$1 billion goal<sup>6</sup>. We remain proud of the fact that only two other public institutions founded after 1950 (the University of California - San Diego and the University of California – Irvine) have reached an endowment value higher than that of USF's (based on FY 2016 nationally published data<sup>7</sup>).

While USF's dedication to student success is unwavering, we believe that it is our proven commitment to research and innovation that differentiates us from so many other colleges and universities across Florida and the nation. This dedication is responsible for USF leading the SUS in Total R&D Expenditures per Full-time Tenured and Tenure-Earning Faculty Members (\$505,965 in FY2016). Further, the commitment has resulted in USF's enviable recent trajectory in research related metrics, including meeting or exceeding performance benchmarks for the remaining preeminence metrics: National Academy Members; Science & Engineering Research Expenditures; Non-Medical Science & Engineering Research Expenditures; National Ranking in S.T.E.M. Research Expenditures, Patents Awarded, and the Number of Post-Doctoral Appointees. USF ranks 4th worldwide for organizations with the most Fellows of the American Association for the Advancement of Science (AAAS) named in 2017. USF ranks 11th among universities worldwide for U.S. patents granted in 2016, according to a report released by the National Academy of Inventors (NAI) and the Intellectual Property Owners Association (IPO), and has ranked in the Top 10 among public universities for U.S. patents granted (2010-2016). In 2015, USF was named an Innovation & Economic Prosperity University by the Association of Public and Land-grant Universities (APLU), in recognition of its strong commitment to economic engagement. These are no small achievements, yet we must continue to "raise our game", competing more successfully for external funding to support basic and translational work, together with exploring innovative pathways for taking important discoveries to the marketplace. In order for our research enterprise to flourish USF's leadership must build a sustainable plan to expand, equip and support state-

<sup>&</sup>lt;sup>5</sup> <u>http://www.flbog.edu/about/budget/performance\_funding.php</u>

<sup>&</sup>lt;sup>6</sup> https://foundation.usf.edu/what/campaign-history

<sup>7</sup> http://chronicle.com/article/Sortable-Table-College-and/235074

of-the-art research space, and most importantly link our aims to improve *faculty-to-student ratio*, with strategic and laser-focused faculty recruitment, through careful stewardship of the preeminence funding.

**Solution: Strategic Faculty Hires.** President Genshaft and her senior leadership team, including the Provost and the Senior Vice President for Health, will personally steward the Preeminence funding by earmarking the State's investment for Strategic Faculty Hiring in key areas of research focus. The President and her senior team serve as a selection committee to which Deans and Center Directors can petition for recruitment support for pre-identified nationally and globally prominent faculty. Areas that are believed to offer the greatest reputational and scientific return on investment include:

- **Brain and Spinal Cord**: neuroscience, aging, hearing loss, Alzheimer's Disease, brain, prosthesis, neuromorphic computing, cognitive sciences, spinal cord injury prevention and mitigation;
- **Data Science**: including data analytics, financial data analysis, and electronic health record generation and security;
- Heart: basic, translational and clinical research, and cardiovascular disease-related care including integrated cell and organ physiology, pharmacology, nanotechnology and drug discovery, cardiac regeneration and surgery, molecular biology, genomics and personalized medicine, bioinformatics, and medical engineering;
- Security: cybersecurity, global security, spread and control of infectious diseases, and social networks;
- Water: purification, ocean ecology, marine and coastal issues, and sustainability; and
- **Research Translation**: the translation of research into products, processes, and policies that improve the human condition.

**Future Steps.** USF's continued commitment to strategic investment in targeted faculty hires will result in significant gains in our current 29<sup>th</sup> place National Science Foundation (NSF) ranking among public research universities for total research expenditures (FY 2016), while furthering student success. In addition, our plan supports the BOG's 2025 Strategic Plan goals for strengthening quality and reputation in teaching, research, and public service. The strategic faculty hires will allow us to foster research connectivity, collaboration, and entrepreneurial, problem-solving approaches to focus on complex issues where society needs innovation and change. We are proud that we have moved our performance since being designated as Florida's first emerging preeminent state research university in 2016, so that we now meet 11 of the 12 preeminence metrics, the standard in Florida Law for reaching the preeminent state research university designation. This accomplishment enhances the State of Florida's competitive position in the global marketplace and brings greater prominence to USF and the SUS.

**Conclusion.** Through thoughtful, metric-driven planning, USF-T has been successful in its relentless pursuit of excellence and enhanced performance; and, as we move forward to consolidation of accreditation across the three USF System institutions, we will remain laser-focused on maintaining our high level of performance. Our current strategy has led to our qualification for preeminence status, and it will continue to drive our progress toward even higher gains in the years to come. The additional investments made available for this effort by our state leaders and supplemented with philanthropic support, will boost that progress exponentially, and we look forward to reporting back with more details of that inevitable success. The USF System is proud to work alongside the BOG, the Legislature and the Governor to provide the highest quality education to our tens of thousands of students, to enhance the national reputation of the State University System of Florida, and ultimately bolster the foundation of Florida's knowledge-based economy.