

Alignment Between the *U.S. News & World Report* Rankings Metrics and USF's 2021-22 LBR Activities

Each item included in USF's 2021-22 Legislative Budget Request for \$50M is strategically and intentionally aligned with advancing USF into *U.S. News & World Report's* (*USN&WR*) Top 25 public university rankings, while simultaneously strengthening our stature in support of membership eligibility in the Association of American Universities (AAU). The underlying analysis includes three critical principles:

- (i) The various *USN&WR* metrics are not entirely independent. For example, institutional reputation (represented by peer assessment scores) drives the quality of faculty and student recruitment and retention which, in turn, affects outcomes such as graduation and retention rates for students. A quantitative analysis was conducted to assess the strength of the relationship between the 15 *USN&WR* metrics, based on a random selection of 82 public and private institutions spanning the range of ranked Tier 1 institutions. Observed inter-metric correlations with R-values greater than 0.5 were categorized as Correlated (C), with R values of 0.5-0.75, or Highly Correlated (HC), with R values of >0.75. This "ecosystem" analysis of the metrics has guided a confident prioritization of areas and scope of strategic investment.
- (ii) There are three institutions currently tied for 24th in the *USN&WR* rankings. A quantitative comparison of their average performance and range of values on each metric with USF's current position and recent trajectory in metrics was used to project initial target metric values for advancement to the Top 25.
- (iii) An analysis, with granularity at the metrics level using *USN&WR's* weights and methodology, was used to fine-tune and confirm the effect of the projections, and will be used to track progress to goals, following future strategic investments.

Guided by these analyses, USF's current position as 44th among public universities in *USN&WR* rankings, and future AAU aspirations, the \$50M strategic investment in the LBR is focused on the four pillars of *USF's Architecture of Academic Excellence*. As detailed in the LBR, specific requests include investments in faculty, research, and creative impact (\$8M for faculty retention, \$31.2M in faculty recruitment at all levels from National Academy members, world-class scholars, tenured/tenure-track Full, Associate and Assistant Professors, and Instructors, as well as \$2.8M in technical support personnel), quality of graduate students and their educational experience (\$3.5M to enhance graduate recruitment and support), quality of undergraduate students and their educational experience (\$2M to enhance undergraduate recruitment and support), and strategic partnerships for economic growth and societal engagement (\$2.5M to support new national and global partnerships, and R&D initiatives).

The following table summarizes the results of our analyses for each of the 15 *USN&WR* metrics, and provides the rationale and alignment with the LBR investments planned. Included in tabular form are all 15 *USN&WR* metrics used for the 2020 rankings, arranged in descending order of their relative weights, enumeration of the weights, the averages and range of metric values for the three public universities tied for 24th in the *USN&WR* 2020 rankings, USF's scores in the same rankings, projected metric scores for USF's rise into the Top 25, itemization of the inter-related metrics with the power of correlations, and summative notes, with relevant institutional trends and related LBR investments for each metric. Our analyses indicate that the projected metric scores will place USF in the Top 25 in *USN&WR's* ranking of public US universities, while significantly advancing the institution in all of the Phase I and Phase II indicators for AAU membership eligibility.

<i>USN&WR</i> Metrics	2020 Weights	Average Metric Score for the 24th Ranked Public Universities	Metric Range for the 24th Ranked Public Universities (lowest-highest)	2020 Metric Scores for USF	Projected Metric Scores for USF to Rise into the Top-25	Metric Correlations	Legislative Budget Request Investments
Peer Assessment Score	20.00%	3.5	3.3 - 3.7	2.8	3.3	Average Freshman Retention Rate, Actual Graduation Rate, Pell Graduation Rate, Faculty Salary, SAT scores, Freshmen in Top 10% of High School Class (HC); Pell Graduation Comparison Rate, Average Spending per student, Average Alumni Giving Rate (C)	The most highly weighted metric in the USN&WR rankings, this is also highly correlated with six other metrics, and correlated with three more, including the quality of incoming students, student retention and graduation, faculty salaries, and alumni giving, all essential elements of <i>USF's Architecture of Academic Excellence</i> . Each line item requested in the LBR promoting faculty recruitment and retention, graduate and undergraduate student support, and global and national partnerships is directly aimed at enhancing this score. In the past five years, this metric has remained fairly invariant at 2.7 to 2.8 for USF, with a student-to-faculty ratio static at 22:1. The proposed investments in the LBR are also significant in advancing both Phase I and Phase II AAU indicators, while directly affecting this <i>USN&WR</i> peer assessment score, which evaluates the reputation of the university among peers.
Actual Graduation Rate	17.60%	84%	80% - 86%	73%	84%	Average Freshman Retention Rate, Peer Assessment Score, Pell Graduation Rate, Faculty Salary, SAT scores, Freshmen in Top 10% of High School Class (HC); Pell Graduation Comparison Rate, Average Spending per student, Average Alumni Giving Rate (C)	The 6-year graduation rate metric is almost as highly weighted as the peer assessment score and shows the same high degree of correlation. USF has made remarkable strides, increasing in five years from 63% to 73%, from the 2015 to the 2020 <i>USN&WR</i> rankings. The proposed investment in 175 new faculty will improve all levels of the undergraduate curriculum from introductory to upper-level courses, including high-impact practices. Additionally, the LBR's planned \$2M targeted investment in student support services will improve the quality of undergraduate students and their educational experience. The plan is to raise the 6-year graduation rate to 84%, the average of institutions jointly ranked 24th in 2020.
Average Spending per Student	10.00%	\$60,355.00	\$41,367 - \$84,857	\$34,898	\$40,000	Average Freshmen Retention Rate, Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, Student/Faculty Ratio, Average Faculty Salary, SAT scores, Freshman in top 10% of High School Class, Average Alumni Giving Rate (C)	The average spending per student metric affects a large number of other correlated metrics, including those involving incoming student quality, student progression for both Pell and non-Pell students, faculty salaries, peer reputation, and alumni giving. Every dollar invested through the LBR will directly contribute to raising USF's performance on this metric. The LBR investment will raise the spending per student from \$34,898 to \$37,308 which, along with two more similar investments as part of the full implementation of the 5-year plan, will result in an average spending of \$39,975 per student, close to the projected value. This will still be at the lower end of the institutions currently ranked 24th.
Graduation Rate Performance (Over/Underperformance)	8.00%	6%	0% - 10%	12%	6%		This metric assesses the actual 6-year graduation rate, compared to that predicted by <i>USN&WR</i> , based on the incoming student profile. USF is currently performing 12% above the <i>USN&WR</i> prediction, with an actual graduation rate of 73% in the 2020 rankings, compared to a predicted value of 61%. As USF's incoming student profile is enhanced, we anticipate higher predicted graduation rates and a consequent relative reduction in this metric. Our projections include a conservative value of 6% which is at the average value of institutions currently tied for 24th.
% of Classes Under 20	8.00%	49%	45% - 52%	45%	55%	Student/Faculty Ratio (HC); SAT scores, Average Alumni Giving Rate (C)	The class size metric is highly correlated with an improved student to faculty ratio, allowing for more personalized attention. The correlation with both incoming SAT scores and alumni giving indicates a positive effect on high quality enrollment and lifelong engagement, post-graduation. USF has intentionally invested in reducing class sizes, resulting in an increase in class-sizes with <20 students from 28% to 45% in the past five years. The planned new faculty hires will directly impact this metric. For example, with a 4-course assignment per semester for 55 instructors, class sizes larger than 50 can be reduced to achieve 50% of classes less than 20, while reducing class sizes larger than 50 to 9%. For the full complement of contemplated faculty recruitments in the LBR with course assignments of 1, 2 and 4 per semester for Full Professors, Associate & Assistant Professors, and Instructors, we can achieve 55% of classes with less than 20 students, and only 6.6% of classes with more than 50 students. All this while enhancing our research productivity, consistent with AAU aspirations.
% of Classes of 50 or More		17%	16% - 18%	12%	7%		
SAT Scores (25th to 75th percentile range)	7.75%	1233-1430	1200-1290 (25th) & 1390-1480 (75th)	1170-1330	1230-1430	Average Freshmen Retention Rate, Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, Average Faculty Salary, Freshman in Top 10% of High School Class (HC); Pell Graduation Comparison Rate, Class Size, Student/Faculty Ratio, Average Spending per Student, Average Alumni Giving Rate (C)	The incoming SAT scores of our students are correlated with 11 of the 15 <i>USN&WR</i> metrics. It is not surprising that the highest correlations are with the academic profile of incoming students, and with subsequent student retention and graduation rates. The mid-point of the 25th to 75th percentile range of SAT scores at USF has progressed from 1170 to 1250 (and higher) in the past five years. The planned investments in faculty recruitment, technical personnel, and qualified graduate students will invigorate the research and scholarship at USF, resulting in attracting higher quality students. Also, the LBR investment to enhance student recruitment will be a key driver in improving performance on this metric to the projected percentile range of SAT scores of 1230-1430, matching the average for 24th ranked institutions and exceeding the public AAU average of 1188-1403.
Average Faculty Salary	7.00%	\$158,309	\$145,975 - \$166,317	\$120,073	\$150,000	Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, SAT scores, Freshman in Top 10% of High School Class (HC); Average Freshmen Retention Rate, Pell Graduation Comparison Rate, Student/Faculty Ratio, Average Spending per Student, Average Alumni Giving Rate (C)	This metric reflects the competitive importance of faculty compensation both in the recruitment and retention of outstanding faculty members, and is highly correlated to incoming student quality, graduation rates, and institutional reputation. Almost every item in the LBR is directly, or indirectly, supportive of this goal. The current gap for USF compared to the average public AAU institution exceeds \$42,000, in this metric. During the past five years, average faculty salary at USF has increased from \$101,002 to \$120,073. The LBR investments in salary for faculty retention and the recruitment of 175 new faculty members at all levels will increase average faculty salary to \$138,071. The projected goal is \$150,000, still \$8,309 less than the average 24th ranked <i>USN&WR</i> public university, and will require completion of the plan to recruit another additional 200 faculty members in the next phase, supported by a significant infusion of philanthropy.

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Average Alumni Giving Rate	5.00%	8%	7% - 9%	12%	12%	Average Freshman Retention Rate, Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, Class Size, Student/Faculty Ratio, Average Faculty Salary, SAT scores, Freshmen in Top 10% of High School Class, Average Spending per Student (C)	The alumni giving rate is correlated with the student experience in terms of personalized attention, retention and graduation rates, quality of faculty, and the spending per student. USF currently has an alumni giving rate of 12%, which is higher than the public AAU average of 11%, and the 7%-9% range of values for the three institutions tied for 24th place among public universities in <i>USN&WR</i> 2020 rankings. The LBR investments in faculty recruitment to support a more personalized and higher quality student experience will enhance student success, and maintain the current metric value.
Average Freshman Retention Rate	4.40%	93%	91% - 95%	90%	92%	Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, SAT scores, Freshmen in Top 10% of High School Class (HC); Pell Graduation Comparison Rate, Average Faculty Salary, Average Spending per Student, Average Alumni Giving Rate (C)	The freshman retention rate is correlated to the 6-year graduation rate and is highly correlated to the incoming student profile. Related factors that affect this metric include average faculty salary and average spending per student. The LBR is strategically investing directly in student support services, and in the recruitment of teaching and research professors to provide guidance and inspiration in the classroom and beyond. USF's retention rate has increased from 89% to 90% over the past five years. The projected impact of the LBR is anticipated to increase freshman retention to 92%, which is our aspirational average value for AAU public universities.
Proportion of Faculty with Highest Degree in their Field	3.00%	93%	92% - 94%	82%	90%		All newly recruited professors will have earned the highest degree in their field. With 175 additional faculty, the current value of 82% will be increased to 84.3%. Completion of the planned 375 total faculty recruitments, which includes those in the next phase, will elevate this metric to 86.1%. Closing the gap with the target of 90%, on the way to an aspirational goal of 92%, at the average value for public AAUs, will demand further philanthropic investments and the phasing out of faculty members without highest degrees, upon retirement.
Pell-Grant Graduation Rate	2.50%	78%	75% - 80%	72%	80%	Average Freshman Retention Rate, Actual Graduation Rate, Peer Assessment Score, Pell Graduation Comparison Rate, Average Faculty Salary, SAT scores, Freshmen in Top 10% of High School Class (HC); Average Spending per Student, Average Alumni Giving Rate (C)	USF is ranked #9 in America and #1 in Florida among public universities for Pell-recipient student success, and in <i>USN&WR</i> 's new "Top Performers on Social Mobility" rankings for 2020. At a Pell graduation rate of 72%, USF is close to the 75% value for average public AAUs. Planned strategic investments will also propel this metric beyond the aspirational goal to a projected value of 80%, at the top of the range for currently 24th ranked public universities. In particular, the planned investments for student support services will contribute to furthering the graduation rate for Pell students.
Pell to Non-Pell Graduation Comparison	2.50%	90%	89% - 90%	95%	95%	Pell Graduation Rate (HC); Average Freshman Retention Rate, Actual Graduation Rate, Peer Assessment Score, Average Faculty Salary, SAT scores, Freshmen in Top 10% of High School Class (C)	USF is currently among the national leaders in this metric, with a ratio of 95% for Pell graduation rate compared to their non-Pell counterparts. This exceeds both the public AAU average, which is 90%, and the range of 89%-90% for public universities ranked 24th by <i>USN&WR</i> in 2020. As the 6-year graduation rate increases to the target of 84% at USF, keeping this ratio at the high value of 95% will require intentional investments in student support services, as planned in the LBR.
Freshmen in Top 10% of High School Class	2.25%	52%	32% - 75%	34%	52%	Average Freshman Retention Rate, Actual Graduation Rate, Peer Assessment Score, Pell Graduation Rate, Average Faculty Salary, SAT scores (HC); Pell Graduation Comparison Rate, Average Spending per Student, Average Alumni Giving Rate (C)	This metric is highly correlated with institutional reputation, along with first-year retention and graduation. The current USF metric value of 34% has not changed significantly in the past five years. The LBR is strategically directed, both through investments in student recruitment and in the retention and recruitment of outstanding faculty members, in aiming to elevate this metric. In particular, the planned investment of \$8.8M to hire 20 additional National Academy members and other world-class scholars will help attract more of the best and brightest students to USF. Although the current value of 34% is above the minimum of the range of 32%-75% for 24th ranked public universities, the projected target is set at the average of this range, at 52%.
Student/Faculty Ratio	1.00%	17	16 - 18	22	19	Class Size (HC); Average Faculty Salary, SAT scores, Average Spending per Student, Average Alumni Giving Rate (C)	This metric is highly correlated to the ability to offer smaller class sizes and more personalized learning for students. The student-to-faculty ratio at USF has decreased from 24:1 to 22:1 in the past five years. It is still considerably higher than the 17:1 average for public AAUs, and the 16-18 range for 24th-ranked public universities in <i>USN&WR</i> 2020 rankings. The addition of 175 faculty members (while managing enrollment) will directly reduce this ratio to 20:1, with a projected 19:1 value after the total planned hiring of 375 additional faculty, as included in the next phase of investment, and supported, in part, through philanthropy.
Proportion of Full-Time Faculty	1.00%	91%	88% - 93%	84%	90%		As for faculty with the highest degree, every new professor recruited through the LBR request will be a full-time faculty member. The addition of 175 full-time faculty members will increase this metric value to 86%. Full implementation of a total of 375 more faculty will elevate to 87.3%. Reaching the target goal of 90% will require additional investment (including through philanthropy), and/or the phasing out of 170 part-time faculty over time. Reaching 90% of full-time faculty will place USF within the current range of 88%-93% for the 24th ranked <i>USN&WR</i> public universities.
Overall Score		59	59	51	60		The objective of the LBR is to propel USF toward a Top-25 <i>USN&WR</i> ranking. Our analyses indicate that achieving the metric goals will result in a total score of 60, which will place USF 22nd in <i>USN&WR</i> rankings among currently-ranked public universities. Should the current ranking landscape change in the future, the metric projections will need to be appropriately adjusted.
Rank		64	64	104	62		
Public Rank		24	24	44	22		