

Report of the George Washington University Faculty Senate Fiscal Planning and Budgeting Committee, Nov. 8, 2019

The following summarizes the activities of the Faculty Senate Fiscal Planning and Budgeting Committee in relation to the Strategic Plan.

1. At the faculty senate meeting on Sept. 13, the committee presented an initial estimate of the revenue impact of the plan. The following are the broad conclusions.
 - If the strategic plan were implemented without any adjustments other than adopting variable tuition, the revenue shortfall (tuition + housing) would be approximately \$66 million once the planned reduction in undergraduates was fully phased in. This estimate assumes that there would be no reduction in the discount rate (financial aid).
 - The Committee notes that the planned shift to variable tuition increases revenue because freshman tuition will be raised 3% under both plans, and then raised again by 3% per year under the variable tuition plan. This amounts to a 7.5% rise in the 4-year cost of attending GWU under the variable tuition plan compared to a 3% rise under fixed tuition. The effects of such a large tuition increase on enrollment cannot be estimated precisely because there is no recent experience of such a large tuition increase at GWU compared to its competitors.
 - This estimate does not include any added revenue costs from increasing the share of stem students to 30% which depends on how the increased STEM share is implemented
2. These estimates are consistent with President LeBlanc's reported estimate of \$64 million.
3. The Committee's next scheduled meet took place on Oct. 25 but before receiving guidance from the Senate Executive Committee. Two items were on the agenda at the meeting.
 - a. First, the committee discussed what advice to give the Executive Committee and agreed on the following items
 - i. All information made available to each of the four strategic planning committees be simultaneously made available to the relevant faculty senate committees;
 - ii. Requests for information about the strategic plan from the University Administration from any of the faculty senate committees mentioned in the faculty petition be granted promptly

- iii. Liz Carlson should set up a “Box” site/folder on the Faculty Senate website with subfolders for each of the relevant faculty senate committees so that these committees can post material that can be viewed by the broader faculty
- b. In addition, the Committee heard a presentation from Provost Maltzman on some different enrollment scenarios for the planned reduction in undergraduates. This handout is attached to our report. Provost Maltzman’s analysis was also presented to the Senate Education Policy Committee and by agreement with the Education Policy committee chair, that committee will comment on the analysis more extensively in their report.

A few comments about Provost Maltzman’s analysis are in order.

- The analysis also includes annual estimates of the revenue cost of each scenario. The scenario that corresponds directly to both our analysis and that of President LeBlanc is the first row “random reduction” (e.g. reducing enrollments without imposing any desired constraints). The revenue impact of that scenario is (not surprisingly) comparable to that of the Committee’s estimates and those of President LeBlanc’s (multiply the annual number by 4).
 - Other scenarios produce different and in most cases larger revenue shortfalls. The best way in which to use these estimates is as indicators how different enrollment strategies might affect revenue shortfalls relative to the \$64-\$66 million “benchmark: estimates from the FPB committee and from President LeBlanc.
 - In addition, Provost Maltzman’s analysis does not include the potential effects of the undergraduate tuition increase resulting from moving to variable tuition. More important, given differences in 4-year graduation rates, revenue implications of admitting more students coded as 6’s and 7’s are substantial because of low 4-year retention rates.
4. Lastly, the Fiscal Planning and Budgeting Committee chair had his monthly meeting with Executive VP Mark Diaz. Executive VP Diaz shared some preliminary budget estimates for implementation of the strategic plan. However, the estimates are very preliminary and not yet ready “for prime time.” The committee will invite Executive VP Diaz to present estimates at its December meeting and hopes to share these results at the Dec. 13 Senate meeting.

FALL 2019 AND SIMULATING FUTURE ENROLLMENT

Forrest Maltzman
Provost and Professor of Political Science

October 24, 2019

ENROLLMENT AND STUDENT DATA

2019 ENROLLMENT SUMMARY - UNDERGRADUATE

- ▶ Interest in GW continues to be strong among domestic and international markets. First-time applications increased 2.1% from 2018.
- ▶ As of 9/7/19, GW enrolled 2,748 new undergraduate students (enrollment target was 2,765). Overall, undergraduate enrollment will exceed net revenue target.
- ▶ Undergraduate enrollment continued to meet academic metrics and included increases in international, male, and STEM student enrollment.
- ▶ While international applications were down, international yield was up ~4%. International first-year students make up 14.5% of students entering in 2019 vs. 10.8% in 2018.
- ▶ The number and percentage of Hispanic/Latino students in the first-year class continue to increase; the number and percentage and number of black/ African American students declined slightly from 2018.

NEW UNDERGRADUATE STUDENTS

CCAS, GWSB, MISPH, SEAS, ESIA

STATISTICS	2017*	2018!	2019#
First-Year, First-Time	2,609	2,853	2,627
Transfers	308	158	116
Total New Undergraduates	2,917	3,011	2,743

*As of Fall 2017 Census;

! As of Fall 2018 Census;

Preliminary as of 9/7/19; Official data will be based upon Fall 2019 Census. At census, we ended up with 2621 first-year students and 117 transfer students. The budgeted goal was 2,765 new students. This was a reduction of 100 from our 2018 goal. The 27 student new student short-fall was off-set by continuing students exceeding budget by 70 students.

Source: Institutional Research

UNDERGRADUATE FIRST-YEAR ADMISSIONS METRICS

- Applications for the class of 2023 were the highest in GW's history, indicating continued interest in the university among prospective students.
- Yield for first-year students decreased by ~2% from 2018 to 2019. 2018 saw a higher yield rate than anticipated. International yield was stronger than anticipated.
- Enrolled First-year (as of 9/7/19) was 3% greater than anticipated and 7% fewer than 2018. [Note: transfer class was reduced by ~100 to accommodate extra first-time students.]

STATISTICS	2017	2018	2019
Number of Applications*	27,109	26,642	27,119
Number of Admits*	11,177	11,223	11,130
Admit Rate	41.2%	42.1%	41.0%
Number of Enrolled Students **	2,609	2,853	2,627
Yield Rate	23.3%	25.4%	23.6%

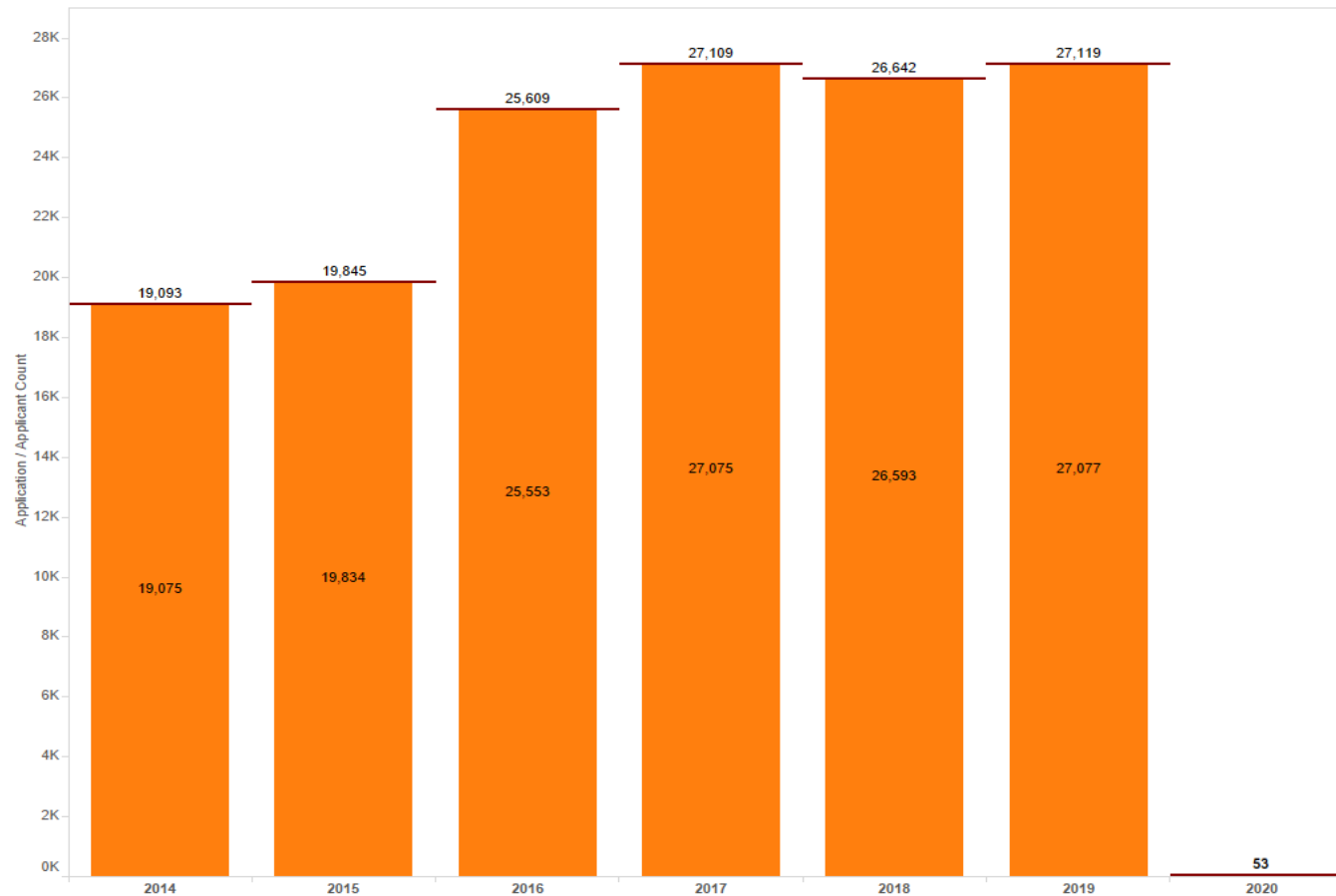
*Source for Application and Admit Data: BI Dashboard

** Source for 2017 and 2018 Enrolled Student Data: 2017, 2018 Census Data; Source for 2019 Enrolled Student Data: Institutional Research, as of 9/7/19

FIRST-YEAR APPLICATION TREND

Enrollment Management Application Dashboard Applications Count by Academic Year

Data refreshed on
9/18/2019 12:16:41 AM



As of September 18, 2019

Source: BI Dashboard

INTERNATIONAL ENROLLMENT

Enrollment Management Application Dashboard

Applications Count vs. Previous Year By Decision Status

Apply Term: 2019 Summer & Fall , As of Date: Sep. 18

Data refreshed on
9/18/2019 12:16:41 AM

Decision Status	Selected Term (blue) vs. Previous Year (red)	Count This Year	Count of Previous Year	Difference from Last Year	% Difference from Last Year
Applied		4,238	4,991	-753	▼ 15.1%
Admitted		1,700	1,641	59	▲ 3.6%
Coming		385	313	72	▲ 23.0%
Denied		2,377	2,879	-502	▼ 17.4%
Not Coming		1,301	1,316	-15	▼ 1.1%
Waitlist Offer Pending		6	125	-119	▼ 95.2%
Withdraw		148	173	-25	▼ 14.5%

As of September 18, 2019
Source: BI Dashboard

ACADEMIC RANK (ACRK) OF FIRST YEAR STUDENTS

- ACRK is an accurate predictor of GW performance.
- The first year cohort continues to be academically strong. The number and percentage of ACRK 1 and 2 students have seen steady growth.
- The number and percentage of ACRK 6 and 7 has remained steady over the past year. These are still strong students who we believe will be successful at GW.

ACRK	2017*		2018!		2019#	
	#	% of class	#	% of class	#	% of class
1	179	6.9%	196	6.9%	254	9.7%
2	282	10.8%	408	14.3%	394	15%
3	327	12.5%	339	11.9%	291	11.1%
4	401	15.4%	347	12.2%	293	11.2%
5	380	14.6%	392	13.8%	371	14.1%
6	442	16.9%	501	17.6%	395	15%
7	598	22.9%	662	23.3%	629	23.9%

*As of Fall 2017 Census

! As of Fall 2018 Census

Preliminary as of August 26, 2019; Official data will be based upon Fall 2019 Census

Source: Office of Enrollment and Student Success

HIGH SCHOOL ACADEMIC INDICATORS

STATISTICS	2017 [!]	2017 ^{&}	2018 [#]
MEDIAN GPA	3.72	3.73	3.73
MEDIAN SAT COMPOSITE*	1360	1370	1370
MIDDLE 50% SAT*	1290-1420	1300-1440	1310-1440
MEDIAN ACT COMPOSITE*	30*	31*	31
MIDDLE 50% ACT	29-32*	29-32*	30-33

*Test scores represent all students for whom we have a test score, including students who applied test-optional and submitted scores post-enrollment.

[!] Census 2017

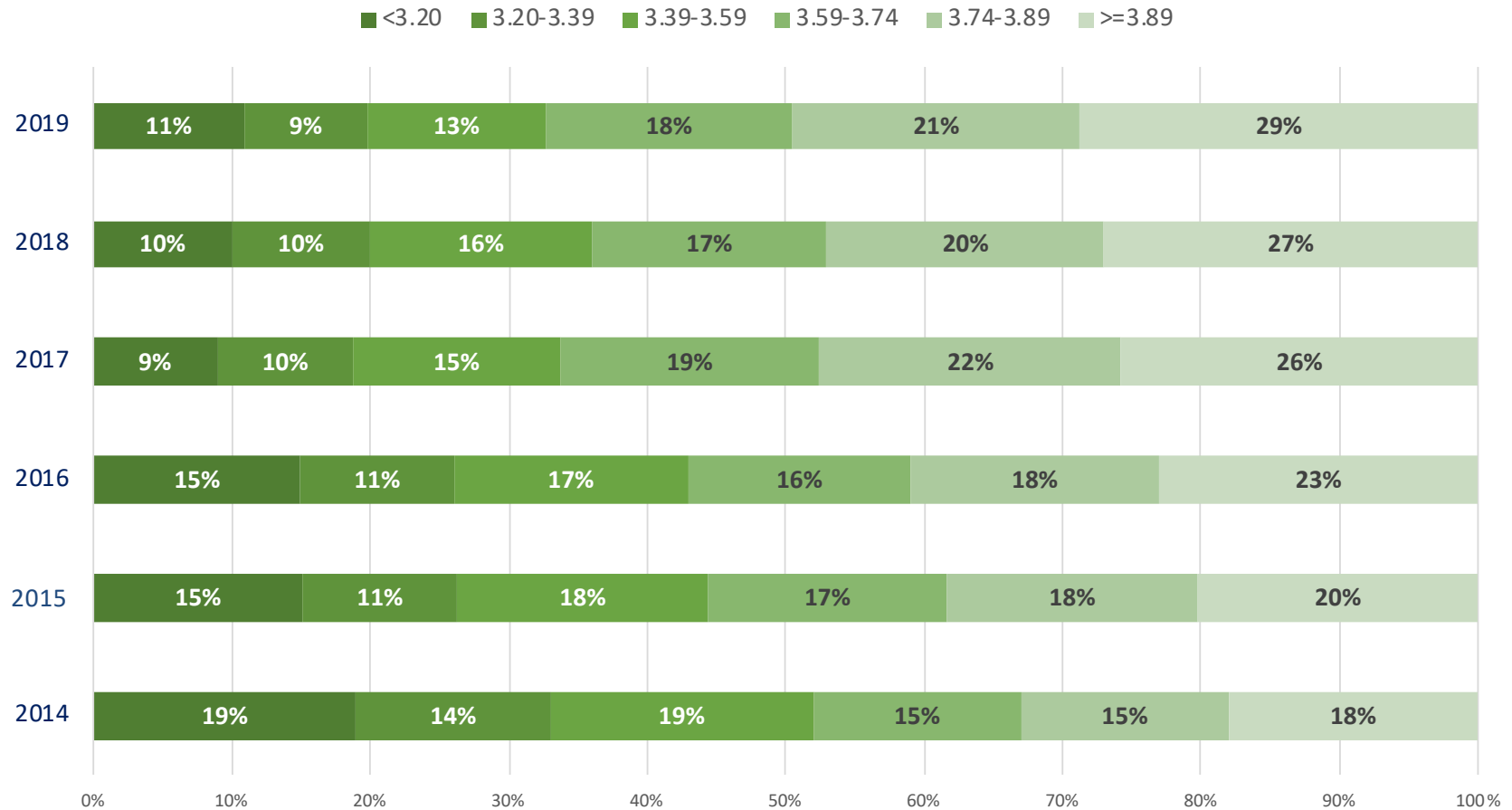
[&] Census 2018

[#] Preliminary as of August 26, 2019; Official data will be based upon Fall 2019 Census

Source: Enrollment and Student Success

HS GPA – ENROLLED FY STUDENTS

HS GPA – ENROLLED FY STUDENTS
PERCENTAGE OF STUDENTS WITH UNWEIGHTED ACADEMIC-ONLY GPA 3.74 OR HIGHER UP FROM 33% IN 2014 TO 50% IN 2019; WITH GPA LOWER THAN 3.39 DOWN FROM 33% IN 2014 TO 20% IN 2019



Source: GW Enrollment and the Student Experience

STEM PERCENTAGE

PERCENTAGE OF STUDENTS DECLARING STEM MAJORS DURING APPLICATION PROCESS

STATISTICS	2016 [@]		2017 [!]		2018 ^{&}		2019 [#]	
	#	% of class	#	% of class	#	% of class	#	% of class
STEM	551	21.8%	601	23.0%	648	22.8%	641	24.4%
Non-STEM	1972	78.8%	2008	77.0%	2197	77.2%	1987	75.6%

Note: STEM Fields based on the Classification of Instructional Programs (CIP), determined by the U.S. Department of Education's National Center for Education Statistics (NCES)

@ Census 2016

! Census 2017

& Census 2018

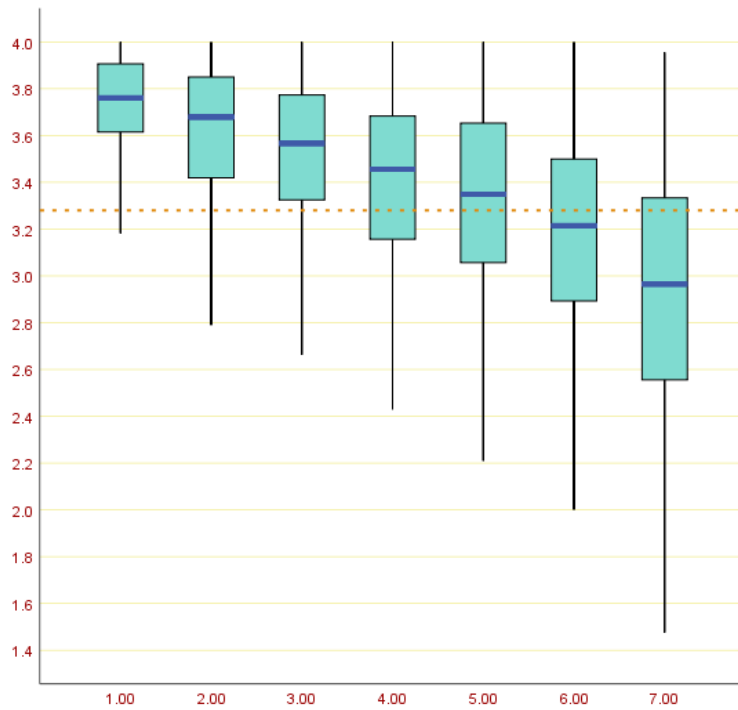
Preliminary as of August 26, 2019; Official data will be based upon Fall 2019 Census

Source: Enrollment and Student Success

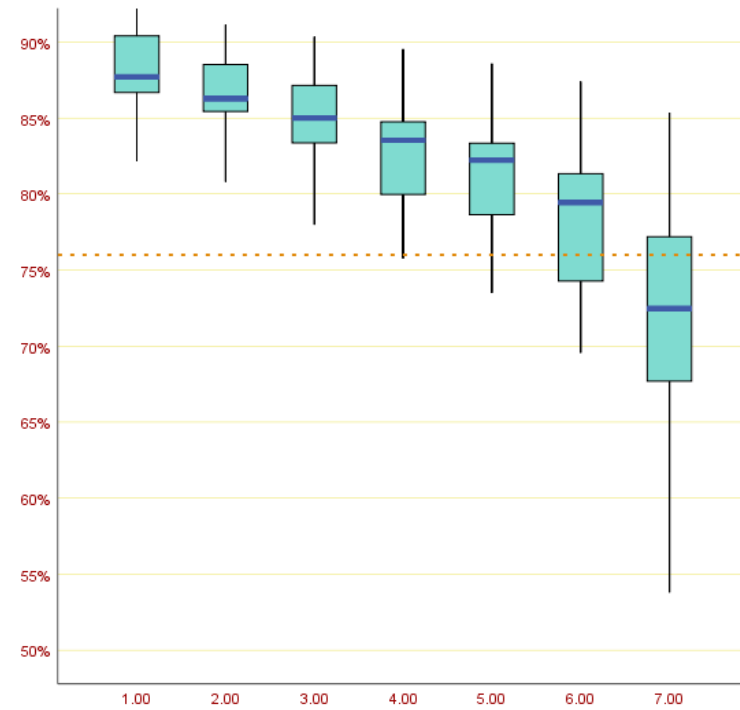
APPENDIX 2

ACRK PREDICTION CONSISTENT W/ PERFORMANCE

Cumulative First-Year GPA by ACRK: 2017 Cohort



Graduation Rate by ACRK: 2013 Cohort



ACADEMIC RANKING BANDS

THE GEORGE
WASHINGTON
UNIVERSITY

WASHINGTON, DC

	Best Composite	High School GPA	High School Rank	High School Quality
ACRK 1	1500	3.96	96.1%	92.1%
ACRK 2	1444	3.88	94.1%	88.5%
ACRK 3	1420	3.78	92.6%	88.8%
ACRK 4	1404	3.68	90.8%	87.4%
ACRK 5	1384	3.58	88.6%	86.5%
ACRK 6	1357	3.45	85.7%	83.4%
ACRK 7	1317	3.28	80.8%	80.2%
ACRK 8	1235	3.05	74.8%	64.6%

Source: Human Capital Research Corporation

ENROLLMENT MODELING

STRATEGY IMPACT ON COMPOSITION, REVENUE & PROFILE

Simulating 2019 First-year Enrollment Strategy

- ▶ We contrast six simulated enrollment strategies for enrolling the class of 2019 with the actual results (adjusted with a 3% reduction in class size and aggregate net tuition to achieve 2018 first-time/first-year target of 2,550). [See Appendix 1]. This target was a reduction of 100 from previous year target.
- ▶ We compare composition and net revenue for six simulations with a class size target of 2,100 (in contrast to 2,550)..
 - ▶ Three simulations tinker exclusively with selection based upon STEM, Academic Profile, and family wealth:
 - ▶ Three simulations assume that the university will readmit student athletes and those students with the greatest affinity (as demonstrated by an early decision application)
- ▶ Simulations did not create any filters for schools (albeit STEM filter favors SEAS); special programs beyond athletics (e.g. Women's Leadership; Corcoran; etc....); demographic characteristics (beyond wealth), or for geography.
- ▶ All simulations assume applicant pool, admissible applicants, and financial aid awards are identical to what we employed in 2019 and each admissible student has an identical probability of yield as in 2019.*
- ▶ 2020 actual will depend upon applicant pool.
- ▶ Developed in conjunction with Human Capital Research Corporation.

* Analysis only looks at main campus enrollment and excludes UG enrollment in Health Sciences, College of Professional Studies, and the School of Nursing.

APPENDIX 1

ESTABLISHING THE BASELINE

	ACTUAL*	BASELINE/GOAL*
ENROLLMENT FACTS		
Admit	11066	10746
Matric	2626	2550
Yield	23.7%	23.7%
STUDENT CHARACTERISTICS		
ACRK (Academic Quality)	4.46	4.46
NDRK (Financial Need)	2.69	2.69
STEM_Major	24%	24%
SOC_NoAsian	23%	23%
male	37%	37%
International	15%	15%
Pell_Eligible**	15%	15%
SCHOOL BASED ENROLLMENTS		
CCAS	49%	49%
ESIA	20%	20%
GWSB	14%	14%
SEAS	10%	10%
GWSPH	6%	6%
SELECTED FINANCIAL METRICS		
Tuition Discount	42.3%	42.3%
Average Net Tuition	\$34,841	\$34,841
Aggregate Net Tuition	\$91,491,517	\$88,843,629
Aggregate Inst Grant	\$58,938,893	\$57,233,121

*Data is based upon week of 9/10. **Pell eligible is based upon earned income.

ACHIEVING 2100 STUDENTS

MAXIMIZING STEM; TRADE-OFF BETWEEN QUALITY AND \$\$

	BASELINE/GOAL*	(1A) 2100: MAX STEM then PROFILE	(1B) 2100: MAX STEM then NTR	(1C) 2100: STEM if ACRK>7 then NTR
ENROLLMENT FACTS				
	#####	#####	Delta	#####
			Delta	#####
Admit	10746	10607	(139)	9227
Matric	2550	2100	(450)	2100
Yield	23.7%	19.8%	-3.9%	22.8%
				-1.0%
				18.3%
				724
				(450)
				-5.4%
STUDENT CHARACTERISTICS				
ACRK (Academic Quality)	4.46	3.6	(0.8)	5.2
NDRK (Financial Need)	2.69	3.4	0.7	2.4
STEM_Major	24%	45%	22.0%	45%
SOC_NoAsian	23%	20%	-2.5%	19.9%
male	37%	31%	-6.0%	39.7%
International	15%	6%	-8.6%	17.8%
Pell_Eligible**	15%	22%	6.6%	14.4%
				-1.1%
				10.4%
				(0.5)
				(0.2)
				11%
				-7.5%
				-4.3%
				-4.2%
				-5.1%
SCHOOL BASED ENROLLMENTS				
CCAS	49%	53.6%	4.2%	54.2%
ESIA	20%	16.3%	-3.9%	12.3%
GWSB	14%	8.5%	-6.0%	12.1%
SEAS	10%	15.0%	5.4%	15.0%
GWSPH	6%	2.0%	-4.2%	6.4%
				5.2%
				-8.0%
				-2.4%
				5.4%
				0.4%
				54.0%
				-2.9%
				-3.1%
				11.3%
				1.8%
				-0.1%
SELECTED FINANCIAL METRICS				
Tuition Discount	42.3%	57.6%	-15.4%	33.7%
Average Net Tuition	\$34,841	\$26,341	-\$8,499	\$39,765
Aggregate Net Tuition	\$88,843,629	\$55,312,234	-\$33,531,395	\$83,503,360
Aggregate Inst Grant	\$57,233,121	\$64,975,575	\$7,742,454	\$36,790,915
				-8.6%
				39.2%
				3.1%
				\$36,147
				-\$1,307
				\$75,925,069
				-\$12,918,560
				\$44,397,956
				-\$12,835,165
Good News (Summary)		STEM # (not quality); Pell Up; Academic Profile+	STEM # (not quality); Males +; \$\$ loss minimized	Academic Profile+; STEM (# and quality)
BAD News (Summary)		\$\$ Very Hard; Males-	Academic Profile Falls Significantly	Males-; \$\$ mid loss; Diversity-

*Data is based upon week of 9/10. **Pell eligible is based upon earned income.

2100 WHILE PRIORITIZING ATHLETES & ED (AFFINITY)

APPLICATION TYPE AND THEN QUALITY AND \$\$\$

	BASELINE/GOAL*	(2A) ATHLETES & ED READMITTED STEM IF ACRK>7 then PROFILE	(2B) ATHLETES & ED READMITTED STEM IF ACRK>7 then NTR	(2C) ATHLETES & ED READMITTED STEM if ACRK>7 then PELL then NTR			
ENROLLMENT FACTS							
	#####	#####	Delta	#####	Delta	#####	Delta
Admit	10746	10713	(33)	11252	506	9539	(1207)
Matric	2550	2100	(450)	2100	(450)	2100	(450)
Yield	23.7%	19.6%	-4.1%	18.7%	-5.1%	22.0%	-1.7%
STUDENT CHARACTERISTICS							
ACRK (Academic Quality)	4.46	3.46	-1.00	4.06	-0.40	4.44	-0.01
NDRK (Financial Need)	2.69	3.14	0.44	2.45	-0.24	3.19	0.50
STEM_Major	24%	35%	12%	35%	12%	35%	12%
SOC_NoAsian	23%	16%	-6%	15%	-7%	21%	-2%
male	37%	30%	-7%	34%	-3%	33%	-4%
International	15%	8%	-7%	11%	-4%	11%	-4%
Pell_Eligible**	15%	18%	3%	11%	-5%	31%	16%
SCHOOL BASED ENROLLMENTS							
CCAS	49%	53.1%	4.1%	53.6%	4.5%	54.0%	5.0%
ESIA	20%	18.5%	-1.8%	17.1%	-3.2%	17.1%	-3.2%
GWSB	14%	10.8%	-3.6%	12.0%	-2.5%	11.7%	-2.8%
SEAS	10%	11.4%	1.8%	11.4%	1.8%	11.4%	1.8%
GWSPH	6%	6.2%	0.2%	5.9%	-0.1%	5.8%	-0.2%
SELECTED FINANCIAL METRICS							
Tuition Discount	42.3%	53.6%	-11.3%	39.6%	2.6%	52.7%	-10.4%
Average Net Tuition	\$34,841	\$28,356	-\$6,484	\$35,900	\$1,060	\$29,662	-\$5,178
Aggregate Net Tuition	\$88,843,629	\$59,553,009	-\$29,290,620	\$75,404,592	-\$13,439,037	\$62,300,421	-\$26,543,208
Aggregate Inst Grant	\$57,233,121	\$60,755,700	\$3,522,579	\$44,916,621	-\$12,316,500	\$58,016,167	\$783,046
Good News (Summary)		STEM # +; Academic Profile+; PELL+		STEM +; Academic Profile +;		STEM (# and quality)	
BAD News (Summary)		\$\$ Very Hard; Males % Drops a Great Deal; SOC-		Males % Drops; \$\$Loss Sig.; SOC-; Pell-		Males-; \$\$ very hard; Diversity-	

*Data is based upon week of 9/10. **Pell eligible is based upon earned income.

SUMMARY OF EFFECTS OF DIFFERENT STRATEGIES

- A class of 2,100 students can be achieved.
- Smaller class would boost academic quality in every model except 1B. To avoid sacrificing academic quality will cost around \$16M in net revenue per cohort.
- STEM can be boosted with current applicant pool, but if you want to exclude weak STEM will see significant reduction in proportion of male students.

Model	Acad. Quality	Males	STEM Major	Pell	Net Revenue (compared to 2550)
Same as 2019 (but 2100)	4.5	37%	23%	15%	-16.2M
1A Max STEM then Profile	3.6	31%	45%	22%	-36.2M
1B Max STEM then NTR	5.2	40%	45%	10%	-8.0M
1C STEM if ACRK>7 then NTR	4.0	33%	35%	14%	-15.6M
2A Athletes and ED; STEM if ACRK>7 then profile	3.5	30%	35%	18%	-31.9M
2B Athletes and ED; STEM if ACRK>7 then NTR	4.0	34%	35%	11%	-16.1M
2C Athletes and ED; STEM if ACRK>7 then Pell then NTR	4.4	33%	35%	31%	-29.2M

CONCLUSION

- ▶ With a target enrollment of 2,100 first-years, we can enhance academic quality.
- ▶ Strategies that minimize weakest STEM students (ACRK=7) will enhance quality, but further distorts university's gender balance and preclude SEAS from growing if the applicant pool remains the same.
- ▶ The 2019 data suggests that reducing enrollment by 450 additional students and maintaining our academic profile will result in a loss of tuition revenue of approximately \$16M. Housing revenue is supplemental loss.
- ▶ There is no model that meets all enrollment objectives.
 - ▶ Need to decide what is the right compromise to make between enhancing academic profile, net tuition goals, diversity goals (including Pell and gender), and school balance.
- ▶ Four critical points about the 2020 and beyond cycles:
 - ▶ The 2019 enrollment patterns reflect who applied, an enrollment strategy designed to balance various objectives, econometric models based upon prior year patterns, the market, the economy and luck.
 - ▶ The 2020 pool will be different than the 2019 applicant pool.
 - ▶ If the economy becomes weaker (recession), all bets are off!
 - ▶ Changes being made (including investing in building applicant pool with additional name buys) will increase uncertainty in 2020.

KEY QUESTIONS

- ▶ Are we willing to spend additional resources to enhance academic quality and/or diversity? Are we willing to further sacrifice either diversity or quality to minimize next revenue loss associated with enrollment trend?
- ▶ How does one measure systematically academic quality.
 - ▶ Threshold for AP exams, test scores, HS calculus, or class rank?
- ▶ What is cost of enrollment cut with and without housing?
- ▶ **What percentage of need should university meet?**
- ▶ **How should the university meet changes in cost of attendance for continuing students?**
 - ▶ **FROZEN MODEL:** Freeze all aid packages based upon first year of enrollment (except for change in family circumstances)? Freeze only merit aid packages?
 - ▶ **PARTNERSHIP MODEL:** Meet the same (or close to the same) percentage of need for continuing students?
 - ▶ **FULLY MEET MODEL:** Fully cover the change in cost of attendance.
- ▶ What discount rate will university utilize?