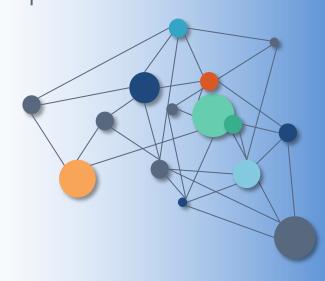
The Cone of Uncertainty: Planning a COVID-19 Response

WICHE LAC Meeting

September 23, 2020

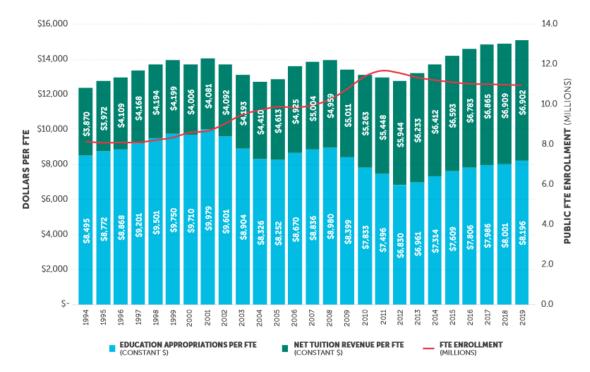


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Financial Crises Have Accelerated the Shift in the Burden of Funding Postsecondary Education

PUBLIC FTE ENROLLMENT, EDUCATION APPROPRIATIONS PER FTE, AND NET TUITION REVENUE PER FTE, U.S., FY 1994-2019 (CONSTANT DOLLARS)



NOTES:

1. Full-time equivalent enrollment converts student credit hours to full-time, academic year students, but excludes medical students.

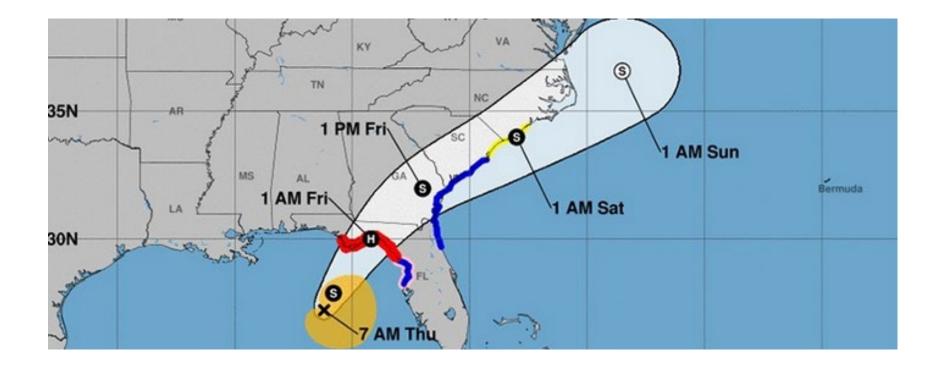
- Education appropriations are a measure of state and local support available for public higher education operating expenses, excluding appropriations for research, hospitals, and medical education.
- Net tuition revenue is calculated by taking the gross amount of tuition and fees, less state and institutional financial aid, tuition waivers or discounts, and medical student tuition and fees.
- 4. Constant 2019 dollars adjusted by the Higher Education Cost Adjustment (HECA).



SOURCE: State Higher Education Executive Officers Association

2

The Cone of Uncertainty in Hurricane Forecasting







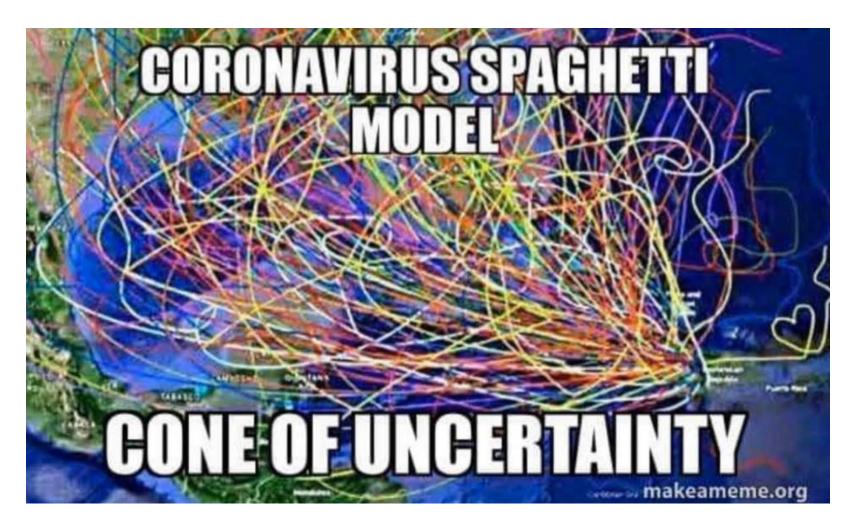
The COVID-19 Crisis is Different

- It has scrambled enrollment forecasting
- It resulted in major reductions in revenue (and additional costs) for auxiliary enterprises
 - Cannot make the assumption that they are self-supporting
 - General fund revenues have to be devoted to these functions—putting additional stress on funds for general operations
- It directly affected the educational delivery model as well as the business model





As Applied to Postsecondary Education Under COVID-19







COVID-19 Impact Model: Key Features

- Is heuristic. It allows investigating consequences within the realm of the cone of uncertainty
- Accounts for revenues from all sources
- State funds are the last dollar in—allows investigation of different state allocation strategies on:
 - Resulting adequacy of institutional funding—extent to which institutions in different sectors have sufficient funds to fulfill their varied missions
 - Affordability of education in different sectors for students of different income levels





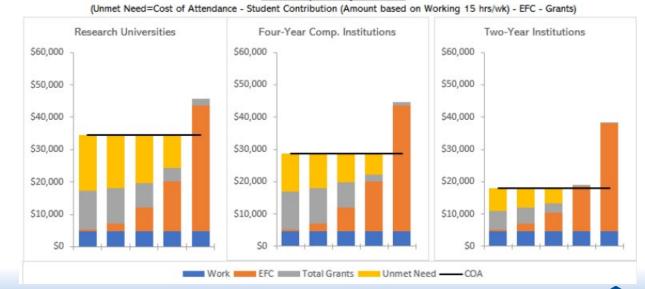
COVID-19 Impact Model Inputs & Results

Adjus	table Input Variables
Enrollm	ient
First	time, transfer-in, continuing
Dire	ct from high school, <25yo, 25+
Attei	ndance Status
Resid	dency
Incol	me Profile of Incoming Students
State A	ppropriations
Insti	tutional Appropriations
Stud	ent Financial Aid Appropriations
Federal	Stimulus
CARE	ES Act Institutional Allocation
CARE	ES Act Governor's Allocation
Poss	ible additional stimulus
Tuition	Prices
Resid	dent Undergraduate
Resid	dent Graduate
Noni	resident Undergraduate
Noni	resident Graduate
Auxilia	ry Revenue
Expend	itures
Instr	uction-Related Expenses
Stud	ent Services
Plant	t Operations & Maintenance
Auxi	liary

Est	imated Results
Enro	llment
	Undergraduate FTE
	Graduate FTE
Rev	enue (Total and per FTE)
	Federal Stimulus
	State Appropriations
	Local Appropriations
	Tuition Revenue
	Total Instruction-Related Revenue
	Auxiliary
Ехре	enditures (Total and per FTE)
	Instruction-Related Expenses
	Student Services
	Plant Operations & Maintenance
	Auxiliary
Awa	rds
	Bachelor's Degrees
	Associate Degrees
	Undergraduate Certificates
	Auxiliary
Affo	rdability
	Unmet Need by Income Level



					State	e A							
	Г	FY18/FY20			FY21			Difference			Percent Difference		
	E E E E E E E E E E E E E E E E E E E	Research	Four-Year Comp.	Two-Year	Research	Four-Year Comp.	Two-Year	Research	Four-Year Comp.	Two-Year	Research	Four-Year Comp.	Two-Yea
Frankland	Undergraduate FTE	226,253	30,989	315,824	212,731	28,958	297,651	-13.522	-2,031	-18,173	-6.0%	-6.6%	-5.8%
Enrollment	Total FTE	280,053	34,389	315,824	263,841	32,188	297,651	-16,212	-2,201	-18,173	-5.8%	-6.4%	-5.8%
	Federal Stimulus				\$149,135,868	\$13,246,630	\$150,734,608	\$149.135.868	\$13,246,630	\$150,734,608			
	State Appropriations	\$2,418,343,168	\$293,308,724	\$1,107,480,563	\$1,616,325,353	\$178,734,750	\$878,332,616	-\$802,017,816	-\$114.573.974	-\$229.147.947	-33.2%	-39.1%	-20.7%
	Local Appropriations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	N/A
Revenue	Revenue from T&F + Grants Used to Pay T&F	\$2,662,804,929	\$250,073,166	\$1,046,248,261	\$2,390,019,190	\$212,928,087	\$957,799,210	-\$272,785,739	-\$37,145.079	-\$88,449,051	-10.2%	-14.9%	-8.5%
	Total Instruction-Related Revenue	\$5.061.148.097	\$543,381,890	\$2,153,728,824	\$4,155,480,411	\$404,909,467	\$1,986,866,433	-\$925.667.686	-\$138,472,423	-\$166.862.391	-18.2%	-25.5%	-7.7%
	Auxiliaries	\$782,613,069	\$68,193,859	\$68.878.465	\$698,178,061	\$60,419,987	\$61,471,077	-\$84,435,008	-\$7,773,872	-\$7,407,368	-10.8%	-11.4%	-10.8%
	Total Instruction-Related Revenue + Auxiliaries	\$5,863,761,166	\$611,575,749	\$2,222,607,289	\$4,853,658,472	\$465,329,454	\$2,048,337,510	-\$1,010,102,694	-\$146,246,295	-\$174,269,779	-17.2%	-23.9%	-7.8%
	Federal Stimulus				\$565	\$412	\$506	\$565	\$412	\$506			
	State Appropriations	\$8.635	\$8.529	\$3.507	\$6,126	\$5,553	\$2,951	-\$2,509	-\$2,976	-\$556			
	Local Appropriations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-52,976	\$0			
Revenue per FTE	Revenue from T&F + Grants Used to Pay T&F	\$9.508	\$7,272	\$3.313	\$9.059	\$6,615	\$3,218	-\$450	-\$657	-\$95			
	Total Instruction-Related Revenue	\$18.144	\$15,801	\$6.819	\$15,750	\$12,579	\$6,675	-\$2,394	-\$3.222	-\$144			
	Auxiliaries	\$2,795	\$1,983	\$218	\$2,646	\$1,877	\$207	-\$148	-\$106	-\$12			
	Total Instruction-Related Revenue + Auxiliaries	\$20,938	\$17,784	\$7,037	\$18,396	\$14,457	\$6,882	\$0	\$0	\$0			
	•												
	Instruction-Related Expenses	\$3,424,868,140	\$333,043,085	\$2,012,383,991	\$2,772,742,804	\$253,402,391	\$1,854,597,361	-\$652,125,336	-\$79,640,694	-\$157,786,630	-19.0%	-23.9%	-7.8%
	Student Services	\$331,894,971	\$54,126,984	\$377,123,030	\$274,834,004	\$41,183,582	\$347,553,637	-\$57,060,967	-\$12,943,402	-\$29,569,392	-17.2%	-23.9%	-7.8%
xpenditures	Auxiliaries	\$779,825,388	\$70,394,537	\$84,748,219	\$673,855,021	\$53,561,070	\$78,103,296	-\$105,970,367	-\$16,833,467	-\$6,644,923	-13.6%	-23.9%	-7.8%
	Plant O&M Allocated to Instruction & Auxiliaries	\$195,488,793	\$15,749,817	\$163,306,849	\$195,488,793	\$11,983,559	\$150,502,316	\$0	-\$3,766,259	-\$12,804,533	0.0%	-23.9%	-7.8%
	Total Instruction-Related Expenses + Auxiliaries	\$4,732,077,292	\$473,314,424	\$2,637,562,089	\$3,916,920,622	\$360,130,602	\$2,430,756,611	-\$815,156,669	-\$113,183,822	-\$206,805,478	-17.2%	-23.9%	-7.8%
	Instruction-Related Expenses	\$12,229	\$9,685	\$6.372	\$10,509	\$7,873	\$6,231	-\$1,720	-\$1,812	-\$141			
	Student Services	\$1,185	\$1,574	\$1,194	\$1,042	\$1,279	\$1,168	-\$143	-\$295	-\$26			
xpenditures	Auxiliaries	\$2,785	\$2,047	\$268	\$2,554	\$1,664	\$262	-\$231	-\$383	-\$6			
per FTE	Plant O&M Allocated to Instruction & Auxiliaries	\$698	\$458	\$517	\$741	\$372	\$506	\$43	-\$86	-\$11			
	Total Instruction-Related Expenses + Auxiliaries	\$16,897	\$13,764	\$8,351	\$14,846	\$11,188	\$8,166	-\$2,051	-\$2,575	-\$185			
	Bachelor's Degrees	58.617	7,172	8.436	47,525	5.466	7,804	-11.092	-1,706	-632	-18.9%	-23.8%	-7.5%
	Associate's Degrees	1,736	1,441	70.831	1,404	1.091	65,298	-332	-350	-5.533	-19.1%	-24.3%	-7.8%
Awards	Undergraduate Certificates	287	0	25,792	233	0	23.820	-54	-330	-1.972	-18.9%	-24.376 NA	-7.6%
	Total Undergraduate Awards	60.640	8.613	105.059	49,161	6.557	96.921	-11.479	-2.056	-8,138	-18.9%	-23.9%	-7.7%



Shared Responsibility Framework

Output Examples



8

COVID-19 Impact Scenario Insights

- Federal stimulus won't be enough, and Governor's Emergency Education Relief Funds represent critical additional backstops
- Nonresident enrollment shifts can have big impacts
- Auxiliary revenue and unbudgeted expenditures put major pressure on funding institutional missions and student completions
- Public comprehensives are generally more vulnerable acrossthe-board, but research universities are vulnerable from nonresident impacts and auxiliaries
- State need-based grant aid can help limit further erosion of affordability





Principles for Resource Allocation

- State funds as last dollar, spent with awareness of other revenue streams
- Equal priority to institutional needs (in the form of "frugal" funding adequacy) and to student affordability
 - Will require prioritization among institution types
- Maintain focus on state goals
 - Make institutional productivity part of the solution
 - Review and revise—but don't scrap—performance funding, and ensure they prioritize populations in need
 - Incentivize collaboration, not just competition
- Don't ignore the capital budget by adopting a broader definition of "capital" to be durable capacity not just physical facilities





A Prospective Framework for Understanding Institutional Operating Needs

Category	Functions and Roles	Funding Responsibility		
Other	Advancement, auxiliaries, athletics, etc.	Self-support		
Research and Public Service	Grants management, community engagement, museums, arts, extension services	Self-support		
Innovation/Performance Enhancement	Investments in continuous improvement in all areas	Mix		
Scale	Course sections, academic support, student services (tutoring, student health, organizations and activities, etc.)	Mix		
Maintenance/Renewal	Strategy and planning, deferred maintenance, program/curriculum renewal and relevancy, personnel and professional development	State		
Foundational	Senior leadership, governance, compliance, debt obligations, foundational systems (LMS, public safety infrastructure, etc.)	State		

Institutional Budget



Final Thoughts

- Sensitivity to institutional context is critical and too easily overlooked in crisis
- COVID-19 has laid bare the need to attend to auxiliary budgets
- Look out: FY22 will present substantially greater challenges, and too few have begun to really address it



