Meeting #15

Welcome to the August 3, 2023 meeting of the Technical Modeling Workgroup. The meeting will begin at 9:00 a.m. This meeting will be recorded.

Members of the general public will remain muted throughout the meeting and will have the opportunity to comment during the public comment period. To make a comment, please leave your name and the organization you represent in the Q&A section by 10:45 a.m. We will call on you during the public comment period and ask that you keep your remarks to under three minutes.

Welcome & Agenda Overview

9:00 am Welcome & Agenda Overview

9:05 am Action: Approval of Minutes from July 20, 2023 Workgroup Meeting

9:10 am Mock Model Pressure Testing

9:45 am ESS: Affordability Levers

10:25 am Topic Team Report Out: Auxiliaries

- 10:50 am Topic Team Report Out: Other Resources
- 11:15 am Public Comment
- 11:25 am Plan for Subsequent Meetings
- 11:30 am Next Steps & Adjournment

Action: Approval of minutes from July 20, 2023 Workgroup Meeting

Mock Model Pressure Testing

Pressure Testing the Model

- We modeled out what one additional student would do to schools' adequacy targets and resource profiles using the following examples:
 - Pell undergraduate (0% ESS)
 - In-state adult enrolled in a high-cost program (25% ESS)
 - In-state medical school student (75% ESS)
 - Out-of-state graduate student (100% ESS)
- For the most part, the formula works as intended.
- But the pressure test did identify some pieces of ESS that warrant further examination and a possible alternative.

Possible Alternative to Model

- Switch to calculating ESS using a dollar value of the adequacy target, rather than a percentage of adequacy.
- Start with the student subsidies we've discussed, and calculate the tuition revenue those subsidies create.
- Each student enrolled at a university would have a specific ESS amount based on their characteristics, and the school's ESS would be the sum of them.

ESS: Affordability Levers

Equitable Student Share – Options for Affordability

To influence affordability, the formula could consider the following options:

- 1. ESS vs actual external tuition revenue
- 2. Affordability Measure (e.g. net price, percent of T&F paid)
- 3. Both

Equitable Student Share – Options for Affordability

1. ESS vs actual external tuition revenue

What it is: Comparison of an institution's ESS with "external tuition revenue," all revenue from tuition and fees paid for from sources other than the institution itself.

External tuition revenue = Gross T&F charged to all students – Gross institutional aid

How it would work: Universities would be expected to bring their actual external tuition revenue to the ESS level, over time and as the state fulfills its obligation. The formula adjusts a university's ESS or allocation based on progress towards that goal.

Pros:

- Reflects actual resources available to the university.

Cons:

- Topline number inhibits an assessment of equity; universities could reduce costs for outof-state or higher-income students.

- Requires a change in data reporting.
- May be too precise for the way the adequacy target works.

Pressure Testing Lessons - Interaction with Option 1

- The adequacy cost is not a perfect measure of the total cost to educate individual students.
- For example, we've excluded some costs (e.g., athletics, medicare, CMS health insurance).
- And we've used averages to avoid overcomplicating the formula we are not intending to account for all every cost differences across all programs.
- It works well at a schoolwide and system level to generate relative costs that will inform an allocation formula.

Pressure Testing Lessons - Interaction with Option 1

- It gets more complicated when accounting for how individual students affect finances.
- If a program costs \$20,000 to deliver but the adequacy target is only \$16,000, schools will need to generate that extra \$4,000. They could crosssubsidize from other students, but there may be times they need to charge more in tuition.

	Actual Program Cost	Adequacy Target		ESS (50%)	Adequacy Gap
University A	\$20,000		\$16,000	\$8,000	\$8,000

Pressure Testing Lessons - Interaction with Affordability

- Under Option 1, if the school raised an extra \$4,000 in tuition to cover actual costs, it would exceed its ESS and be penalized in the next year's formula.
- Is Option 1 too precise to allow the necessary flexibility?
- IBHE could still track actual tuition revenue, assess how much it exceeds ESS at schools, and revisit whether to link the two in future revisions of the formula.

	Actual Program Cost	Adequacy Target			ESS (50%)	Adequacy Gap
University A	\$20,000		\$16,000		\$8,000	\$8,000

Equitable Student Share – Options for Affordability

2. Affordability Measure

What it is: A benchmark of affordability, using metrics such as the net price or the percent of tuition and fees paid. The benchmark could be for all-students and/or low-income students.

How it would work: Example: Universities that keep their net price below **\$X** or reduce it by **Y**% a year would have their ESS decreased by **Z**%.

Pros:

- Ability to look at affordability for specific populations (residents, low-income).

Cons:

- Some drawbacks to both net price and percent of T&F paid as metrics.
- Does not address the scenario of a university bringing in more tuition revenue than its ESS.

Equitable Student Share – Incentive for Affordability

Option 2: Affordability Measure - Reduce a university's ESS if they meet or make progress towards affordability benchmarks.

Institution	Residents Paying	Residents Paying	Pell Eligible Paying	Pell Eligible Paying
Institution	<25%	<50%	0%	<25%
University A	63.5%	70.3%	77.3%	90.4%
University B	54.5%	64.0%	72.8%	87.6%
University C	44.5%	59.9%	34.7%	74.9%
University D	36.7%	47.7%	59.5%	80.6%
Statewide average	44.7%	54.7%	61.1%	82.7%
University Median	49.7%	60.0%	67.2%	89.0%
Strawman Threshold	55.0%	65.0%	70.0%	95.0%
Currently meeting the threshold	4	4	6	2

Equitable Student Share – Options for Affordability

Discussion

- Is it necessary for the formula to incentivize affordability? Or is there an out-of-formula lever that could work?
- Is there a way to address concerns about over-complicating the formula while still incentivizing affordability?

Topic Teams Report Out: Auxiliaries

Auxiliaries: Background Information

Description

Auxiliary Enterprises: Auxiliary enterprises can both be non-academic supports for students and also generate revenue. They can be revenue positive, neutral, or require supplementing

- Residence halls
- Food services
- Student unions
- College stores
- Bowling alleys
- Vending machines

<u>Issues</u>

Auxiliaries can be essential for some students to be able to enroll/persist, or they can be ancillary additions to the college experience.

- 35% of student <u>respondents</u> experienced food insecurity
- Fees, revenues, expenditures are hard to parse
- Current spending may reflect ability of students to pay, not adequacy
- Equitable access to adequate services that are designed to address student needs related to enrollment, retention, and graduation



Summary, Questions, and Recommendations

- 1. Auxiliary operations at each university vary greatly
- 2. Auxiliary operations are designed to be self-sustaining, but may not be in reality
- 3. The need to identify which auxiliary services are essential to support students' educational experience
- 4. How to incorporate students' ability to pay for auxiliary services as part of the formula ("cost of attendance")
- 5. Balancing the dynamic of *encouraging* use of campus auxiliaries towards ERG goals and additional investments into these services

Recommendation Option 1: Cost of Attendance

Calculate the number of students that fall into demographics (following ESS subsidy calculation) that may need additional financial assistance for other educational expenses such as food, housing, books, etc. Then assign tiers to each university based on the relative percentage of students in need. Then include a subsidy for each tier based on what it costs to provide additional educational support to students.

Pros

- 1. Possibly more accurate estimate of student need
- 2. Equity-based calculation

Cons

- . May be duplicative with elements of ESS
- 2. Adds complexity to formula

	Percent Eac	age of S h Stude	tudents nt Share	at a Scl Catego	nool in ory		
Institution	100%	75%	50%	25%	0%	ESS Index	Tier
University A	19%	12%	12%	40%	17%	44%	1
University B	11%	4%	22%	30%	34%	32%	2
University C	8%	7%	13%	17%	55%	24%	3

Operationalizing Option 1: Cost of Attendance

The average room and board for 4-year university students in Illinois is about \$11,700

• There's an additional \$1,200 spent on books, totalling \$12,900 in non-tuition expenses

A simple calculation for a subsidy would be to take this number and multiply it by the number of Pell-eligible students

- Covering all costs of attendance for Pell-eligible students may be too expensive
 - The **simplest** solution is to set a lower subsidy
 - A more **equitable** way of lowering this price is to have tiers/multiplier based on the % Pell students
 - This also takes into account how student populations can subsidize one another
- This would be added to the Equity Adjustment of each university

Average undergraduate tu												
	a	nd level of i	nstitution a	nd state or j	jurisdicti	on: 2019-20) and 2020-21			Sample Calculatio	n	
			[In curre	nt dollars]	689				A. Number	B. Percentage of Pell Students	C. Per Student Subsidy for	E. Formula Distribution
State or jurisdiction	Total	fees ¹	P Total	ublic 4-ye fees ¹	Room	Board			students		Room and Board	(A * B * C)
1	2	3	4	5	6	6 7	8	University A	2,000	65%	\$11,700	\$15.2 million
United States	\$21 ,035	\$9,349	\$21,337	\$9,375	\$6,774	\$5,189	\$27,091					
Illinois	25,806	14,455	26,252	14,579	6,270	5,403	28,660	University B	3,000	35%	\$11,700	\$12.3 million

Recommendation Option 2: Accountability and Net Price/Cost of Attendance

Revisit the Affordability Adjustment and the accompanying accountability metrics such that the formula funds and incentivizes universities to lower their net prices for students that fall into demographics (following ESS subsidy calculation) that may need additional financial assistance for other educational expenses such as food, housing, books, etc.

Pros

- 1. Flexibility in spending
- 2. Accountability with desired outcome
- 3. Simplicity

Cons

- 1. Formula changes needed to make proactive discounts possible
- 2. May not result in desired spending on specific programs
- 3. Data is imperfect

Operationalizing Option 2: Accountability and Net Price/Cost of Attendance



Net Price at Universities by Income

Approach 1: Add to the Equity Adjustment such that universities can lower their net price

- Effectively achieves a room and board subsidy without micromanaging finances
- Ex. If net price is \$8,000 for a university's 1,000 students who have 25% ESS
 - Subsidy: \$8,000*1,000*.75 = \$6 million
 - New net price per 25% ESS student: \$2,000

Approach 2: instead of aiming for a full subsidy, fund and hold institutions accountable for bringing down *relative* net prices

- Set the subsidy to bring each institution to the bottom X% of universities' net price nationwide
- Set subsidy to the lowest of IL universities

Operationalizing Price and Accountability

Distribution considerations:

- Universities may currently have inequitable distribution of institutional aid, resulting in higher net prices for lower-income students and lower prices for higher-income students
 - To recognize equity in aid distribution, we could calculate an equitable aid index to determine the subsidy amount
 - Based on the distribution of institutional aid, the populations of students, and net price

Timing and accountability considerations

- Universities need these funds proactively to lower net prices
- Option 1: limit the spending of these funds to aid to students' tuition, fees, housing, food and books for the student groups they're allocated to
- Option 2: Require institutions to maintain **enrollment numbers** for subsidized students
 - To avoid universities lowering net prices by subsidizing fewer students

	University A	Uni	iversity B	
Number of Students: 0% ESS	30%		10%	
Number of Students: 50% ESS	30%		20%	
Number of Students: 100% ESS	40%	70%		
% of Institutional Aid: 0% ESS	50%		5%	
% of Institutional Aid: 50% ESS	30%	15%		
% of Institutional Aid: 100% ESS	20%	80%		
Net Price: 0% ESS	\$ 13,000	\$	13,000	
Net Price: 50% ESS	\$ 20,000	\$	14,000	
Net Price: 100% ESS	\$ 25,000	\$	15,000	
Aid Index	2.17		0.88	

Because University A already allocates their funding to equitably keep prices low, they receive a far greater subsidy per student

Recommendation Option 3: No Inclusion of Auxiliaries and Other Costs of Attendance

Auxiliaries are hard to factor into a model, since they are generally supposed to be self-sustaining; when they realize that goal, they don't need to be accounted for, and when they don't, the effect is often that they spend less (and it's hard to measure that *lack* of data).

If there the previous two options are untenable, it may be better to omit them from the formula entirely, and focus on shoring up the existing affordability and student service elements.

Pros

- 1. Simplicity
- 2. Avoids confusing current auxiliary processes, revenues, and expenditures

Cons

- 1. Doesn't directly address key part of college-going and retention
- 2. May disincentivize equitable spending on Room & Board

Topic Teams Report Out: Other Resources

Other Resources

Revenue sources include:

- Government Grants
- Sales & Services (Hospitals, Auxiliaries, "Education Departments")
- State line item appropriations
- Private Gifts & Grants

Institutions provided examples of this revenue:

"...a course fee, youth camp revenues, student fee for health services, tech fee to purchase students' computers, etc."

"...majority of this category is Athletic Sales and Service. Other things that hit this category are thing such as Art sales, Music Camps, English Studies Summer Camp, Technology Sales, Lab fees, Municipal Clerks of Illinois, Theatre Arts, Dramatic Performances, Geology-Geography charges, Reg Office of Education payments, Autism Center/Conference, and a few course fees."

"...the vast majority of this would be our clinical revenue."

Possible approach:

- Identify and include items that are relevant to adequacy.
- If new items are added in later years, the formula review process could revisit whether to include them in.

Other Resources: Gifts

- Agreement remains that some portion of gifts should be recognized.
 - Can an algorithm be used to predict a universities level of revenues to be generated by gifts?
 - To what extent can/should historical revenues be used in addition? Instead?
- Funding formula needs to incent continued philanthropic activities
 - Incentivize both institutions that already have high revenues from gifts but allow for other institutions to expand their philanthropic activities.

The Other Resource group is still exploring how to account for gifts in the Resource Profile.

Public Comment

Instructions for Members of the Public:

Please wait for your name to be called. Public comments will be limited to three (3) minutes per person.

Workplan

August 17	 Aim for Draft Institutional Level Model (Revisit ESS subsidies; evaluate total cost and the prioritization of equity; revisit calculation of Instruction and Student Services per student base) Allocation Formula Formula Upkeep
August 30	 Accountability & Transparency Future Adequacy
September 14	- Refine/finalize recommendations
September 21	- Commission Meeting

Next Steps

- Auxiliaries and Other Resources finalize proposals.
- Develop and circulate institutional level model
- Implementation Topic teams develop proposals to be discussed at the next two meetings.

Adjournment

Next Workgroup Meeting: August 17, 2023

Appendix

Equitable Student Share – Affordability

- ESS incentivizes universities to enroll lowincome, URM, and other priority populations. It helps them to lower tuition if they choose by shifting more responsibility to the state, but does not directly incentivize that.
- The model does not account for excess revenue from tuition in any way.



Equitable Student Share – Incentive for Affordability

Option 1: Compare ESS to Actuals - Adjust the following year's ESS by any tuition revenue collected the prior year in excess of the ESS level (+5% margin of error).

Institution	2023 Equitable		Equitable		2023 Actual External			2 Evenes Povonuo	2024 Equitable			2024 Final ESS	
institution		Student Share			T&F Revenue		202	2023 LACESS REVENUE		Student Share		2024 Filiai E33	
University A	\$	29,990,106	\$	31,489,611	\$	30,000,000	\$	-	\$	29,990,106	\$	29,990,106	
University B	\$	119,070,311	\$	125,023,827	\$	118,000,000	\$	-	\$	119,070,311	\$	119,070,311	
University C	\$	32,809,677	\$	34,450,161	\$	35,000,000	\$	549 <i>,</i> 839	\$	32,809,677	\$	33,359,516	
University D	\$	95,984,209	\$	100,783,420	\$	105,000,000	\$	4,216,580	\$	95,984,209	\$	100,200,790	
University E	\$	53,112,901	\$	55,768,547	\$	50,000,000	\$	-	\$	53,112,901	\$	53,112,901	

Equitable Student Share – Options for Affordability

	Students Paying Less Than X% of T&F	Net Price
Pros	- Able to focus on in- state students	- Captures full cost of attendance
Cons	 Measure is largely driven by financial aid; does not incentivize lowering or freezing tuition levels. Focuses only on T&F costs 	 Unable to focus on instate students Limited to recipients of federal grants/loans Based on cost of attendance, which can be gamed