

New Internal Financial Model
Revenue Decision Briefs
September 2012

Undergraduate Tuition

Informed by the deliberations of the Core Work Group and Revenues and Incentives Task Force preceding it, the modeling group focused its efforts on estimating the budgetary effects of four competing methods for attributing base undergraduate tuition revenue. The amount of tuition revenue available is the net amount available to the University after transfers to undergraduate financial aid; specific program differential tuition and fees will be addressed in the category called Other E&G Fees and Revenue. For the credit hours option, this amount is divided by the number of undergraduate credit hours across all schools to compute a net undergraduate tuition revenue per credit hour figure. For the home school option, the per capita figure is computed by dividing the tuition by fall undergraduate headcount for all schools. In the case of the “degrees conferred” attribution method, the numbers of degrees awarded is used. In all cases, the models neutralize financial aid and in-state/out-of-state variations across schools.

Scenario Modeling for Undergraduate Tuition Revenue

All Dollars in Millions, Using 2010-11 Actuals

NET UNDERGRADUATE TUITION¹				
	100% Credit Hours	100% Home School	Blend (uses 75%/25%)	Degrees Conferred
Arts & Sciences	\$146.2	\$146.2	\$146.2	\$142.0
Architecture	\$4.3	\$4.5	\$4.4	\$5.7
Batten	\$0.4	\$0.0	\$0.3	\$0.0
Curry	\$7.0	\$2.0	\$5.8	\$1.9
Darden	\$0.0	\$0.0	\$0.0	\$0.0
Engineering	\$30.2	\$33.9	\$31.1	\$28.6
Law	\$0.0	\$0.0	\$0.0	\$0.0
McIntire	\$13.8	\$9.9	\$12.8	\$19.2
Medicine	\$0.0	\$0.0	\$0.0	\$0.0
Nursing	\$3.8	\$5.1	\$4.1	\$6.2
SCPS	\$0.1	\$4.3	\$1.2	\$2.3
Total	\$205.9	\$205.9	\$205.9	\$205.9

Notes

¹ Amounts allocated are net of tuition-funded undergraduate financial aid and neutralize in-state/out-of-state mix by school

The greatest difference in the funding flows stems from the decision around whether to base attributions on student course flow or school-of-record. Within school-of-record options, the choice between current enrollment and degrees conferred results in significant variation for select schools, largely reflecting whether they have been gaining or shedding enrollment in recent years or offer two-year versus four-year programs. For example, the attribution for the McIntire School of Commerce using “degrees conferred” is \$19.2 million versus only \$9.9 million using “home school.” The school receives full credit for each student in the “degrees conferred” model versus only partial credit for students under the “home school” model since its students typically spend the first two years of study as College of Arts & Sciences students. For Engineering, the “degrees conferred” figure is less than the “home school” figure largely due to the fact that the recent enrollment growth for the school is lagged in the “degrees conferred” figure.

In reviewing the pros and cons of the competing methods, the modeling group reached a preference for either the “100% credit hours” or a “Blended” models. There was strong consensus that undergraduate tuition revenue should follow student course-taking patterns, thereby tightening the link between funding and level of activity. Either of these approaches (credit hours or blended) can be accomplished with readily available and easy-to-understand data, and struck the group as both highly rational and intuitive. Both models encourage the development and growth of interdisciplinary programs and the flow of students across schools. A primary disadvantage of these approaches could be the potential incentive for schools to offer duplicate courses in order to keep the credit hours from migrating to another school.

While the purity of the “100% credit hours” holds significant appeal, the modeling group recognized that there are real advising, registration, and other costs for being the school-of-record, regardless of where your students are taking classes. The modeling group believes that 15-25 percent is a reasonable range capturing these costs. However, the group encourages the Steering Committee to consider defining “home school” more broadly to split students who have declared undergraduate majors in multiple schools to acknowledge that both schools are incurring the types of costs intended to be covered by the 15-25 percent allowance.

The primary disadvantages of the “home school” and “degrees conferred” methods, in the view of the modeling group, are the disproportional tax on schools that import more student course registrations than they export, the potential for diminishing quality and investment in courses in which schools cluster external students, and the misalignment between student flows/demand and resource allocation.

Graduate Tuition

For graduate tuition, the modeling group also followed the lead of recommendations from preceding groups and focused on simply attributing the tuition dollars to the school-of-record. Unlike undergraduate tuition, the attribution is *gross* of financial aid and in-state/out-of-state mix.

Scenario Modeling for Graduate Tuition Revenue Sources

All Dollars in Millions, Using 2010-11 Actuals

GROSS GRADUATE TUITION ²			
	Home-School Regular	Home-School Self-Support	Home-School Total
Arts & Sciences ³	\$16.1	\$0.0	\$16.1
Architecture	\$3.3	\$0.0	\$3.3
Batten	\$0.3	\$0.0	\$0.3
Curry	\$6.6	\$0.0	\$6.6
Darden	\$0.6	\$35.5	\$36.1
Engineering	\$4.2	\$0.0	\$4.2
Law	\$6.2	\$40.6	\$46.8
McIntire	\$0.0	\$12.1	\$12.1
Medicine ³	\$23.1	\$0.0	\$23.1
Nursing	\$2.7	\$0.0	\$2.7
SCPS	\$0.0	\$0.0	\$0.0
Total	\$63.1	\$88.2	\$151.3

² Amounts allocated are gross, tuition-funded student aid the responsibility of each school

³ BIMS revenue located in GSAS not Medicine-- TBD

The group does not discount the reality that graduate students, like their undergraduate counterparts, also take courses spanning across schools. However, the group was persuaded by the argument that for graduate students these instances are much more isolated and often nested within joint-degree programs, which vary considerably by scale and substance. Also, for joint programs, faculty support of graduate students often takes the form of activity, such as advising, that stretches beyond course work in the registration system. Overall, the group believed that resource attribution for cross-enrolling graduate students would be better managed by a series of agreements between the schools and tailored to the specifics of the program than a generic formula treating all such enrollments the same. We encourage a careful inventorying of all such programs immediately so that schools can either revisit or construct agreements in advance of the upcoming fiscal year.

State Appropriations

The modeling group found the issue of attributing state appropriations to be the most complex and challenging among revenue sources. In all cases, the modeling involved only the undesignated portion of state appropriations, allowing designated line items, such as the State Arboretum, to flow in full to the relevant school. While the group modeled five alternatives, one was discarded, “in-state students,” as being at cross-purpose with the underlying assumption that we will allocate undergraduate tuition without regard to residency. Other options have several key negative considerations as discussed below. The four remaining alternatives are displayed below. In all alternatives presented below, Law and Darden are included like all other schools. However, each alternative can also be modeled by removing any state tax support allocation from the two currently self-supporting schools with the ability to charge market rate tuition and re-allocating those amounts to the remaining schools.

Scenario Modeling for State Tax Appropriation - Unrestricted

All Dollars in Millions, Using 2010-11 Actuals

State Tax Appropriation - Unrestricted				
	Same as Tuition Shares ¹	Enrolled Students	Program Weights from State ²	Degree Cost Proxy ³
Arts & Sciences	\$83.0	\$74.7	\$53.8	\$38.2
Architecture	\$3.9	\$3.4	\$2.8	\$2.5
Batten	\$0.3	\$0.3	\$0.4	\$1.9
Curry	\$6.3	\$8.9	\$6.5	\$4.1
Darden	\$0.3	\$5.6	\$6.6	\$16.6
Engineering	\$18.1	\$15.5	\$14.9	\$9.8
Law	\$3.2	\$6.2	\$4.7	\$15.7
McIntire	\$6.6	\$7.8	\$4.8	\$7.3
Medicine	\$11.8	\$6.0	\$37.0	\$34.1
Nursing	\$3.5	\$3.3	\$4.3	\$2.6
SCPS	\$0.5	\$5.8	\$1.7	\$4.7
Total	\$137.5	\$137.5	\$137.5	\$137.5

Notes

¹ Assumes 75/25 split for undergrads

² Assumes 1x for undergraduate and Law, 2x for other graduate, and 10x for Medicine

³ Cost of degree calculated as operating budget minus grants, financial aid, sales and services, and auxiliaries divided by number of degrees awarded

The “enrolled students” method was adopted after discarding the enrolled Virginians as providing a contradiction our expectation that undergraduate tuition will be distributed in a residency-neutral way;

this adopts the concept of the state tax appropriation being allotted to the core purpose of delivering instruction and to offset the differential tuition afforded to Virginian residents. One disadvantage is that the approach counts all students, graduate and undergraduate and across varying programs, the same. It also fails to account for the cross-enrollment trends prevalent in the consideration of undergraduate tuition attribution.

The “program weights” model relies on analysis conducted by the Commonwealth of Virginia (through SCHEV) on the relative costs of various degree programs. The Commonwealth’s Base Budget Adequacy analysis quantifies the base level of support that, according to the Commonwealth, an institution *should have* from state tax revenues and student paid tuition. It is an analysis of cost drivers – primarily based on student enrollment patterns and national norms for student:faculty ratios. Through the model, one can calculate an expected base level of support for undergraduate, graduate, law, and medical education and determine a relative weighting in terms of how the General Assembly might expect state taxes to support the various student types. In the November 2011 iteration of the model, tuition and General Fund support were calculated as Undergraduate \$12,571; \$12,752 for Law; \$130,931 for Medicine (MD); and \$26,372 for other graduate, including BMS and graduate business. Accordingly, the modeling group used weights of 1x for undergraduate and law, 2x for graduate programs other than law and medicine, and 10x for medical education in its analysis. The primary advantages of this approach are its use of external student:faculty benchmarking to recognize the variable costs associated with different disciplines and types of degrees and its acknowledgment of the Commonwealth’s inherent intent to subsidize the higher cost of medical education. A disadvantage of this model is the transparency of the SCHEV analysis, the difficulty in updating regularly, and the likelihood of debate over the appropriateness of the relative weightings.

The “degree cost proxy” model uses as its base the published expense data from each school, excluding grants, financial aid, sales and services, and auxiliary activities. That amount is divided by the number of degrees awarded by the school to compute the adjusted cost per degree. Using Arts & Sciences as the base of 1.0, each school is assigned a multiple based on the relation of their cost per degree to A&S. Those multiples are then used with the number of degrees awarded to attribute the state appropriation revenues. The primary advantages are largely the same as with the “program weights” model. The primary disadvantage is that this is an expenditure-driven model for allocating a core revenue source, in an environment in which expenditure levels have been affected by uneven tuition policy. Another significant disadvantage relates to data. Pursuing this structure would require additional analysis to arrive at a shared definition of “instruction-related costs” and a consistent means of extracting the financial data from the University system. If recognizing the differential cost of medical education is deemed important to capture in the model, then some variation of one of these approaches is warranted.

If one is less committed to recognizing the differential cost of medical education through the allocation of state appropriations, there is a strong argument for simply allocating state appropriations along the “same as tuition shares” method based on tuition (undergraduate and graduate combined) is attributed. This has the advantage, again, of linking resource allocation with level of instruction-related activity. It would be simple and highly transparent, and avoid the complications and vagaries of using proxies for costs. The two primary disadvantages would be that the method is influenced by tuition collections, incentivizing out-of-state enrollment and benefitting schools with higher market rate pricing and the anticipated need to address a subvention for medical education.

Restricted Gifts & Endowment Distribution

The modeling and planning group notes there is only one option with regard to restricted gifts and endowment distribution – that the revenue continue to be allocated in accordance with the donor’s stated wishes. In addition, this approach is consistent with President Sullivan’s guiding principles.

Unrestricted Gifts & Endowment Distribution

The modeling and planning group puts forward a single option with regard to unrestricted gifts and endowment distribution. Given that an unrestricted gift to the Rector and Visitors is generally intended to be allocated to the university's highest priorities, the revenue will be allocated at the direction of the president. This approach is consistent with President Sullivan's guiding principles.

Equipment Trust Fund

The modeling and planning group considered several options in regards to the allocation of funding from the Commonwealth for the purposes of "ongoing program for acquisition and replacement of instructional research equipment" or the Higher Education Equipment Trust Fund (ETF). While this funding source is an important resource to the schools, several restrictions on how and when the funding must be expended make this source less flexible. The group's recommendations recognize that while ETF has been previously utilized for strategic needs, a future strategic initiatives fund would be better funded from the most unrestricted funds possible. Accordingly, the first option and the method that the group preferred allocates HEETF funding to the non-auxiliary units with the highest equipment levels – the schools, the library, ITS, and the vivaria. This aligns the resource with the activity of equipment management. We also considered allocating the funds only to the schools, but this option ignores significant equipment inventory activity in academic support areas. A third alternative is the status quo, where a portion of the allocation is held by the center and the Vice President for Research for high priority initiatives. See below for a demonstration of the various models.

Scenario Modeling for Higher Education Equipment Trust Fund

All Dollars in Thousands, Using 2011-12 Actuals

Higher Education Equipment Trust Fund			
	100% to Units with Highest E&G Inventory Levels	100% to Schools	100% to Schools, ITS, Library, and Strategic Reserves
Arts & Sciences	\$2,190.0	\$2,508.9	\$882.4
Architecture	\$81.7	\$93.7	\$32.9
Batten	\$1.2	\$1.4	\$0.5
Curry	\$38.9	\$44.6	\$15.7
Darden	\$0.0	\$0.0	\$0.0
Engineering	\$2,143.0	\$2,455.1	\$863.5
Law	\$0.0	\$0.0	\$0.0
McIntire	\$24.3	\$28.0	\$9.8
Medicine	\$4,498.2	\$5,149.4	\$1,812.4
Nursing	\$43.4	\$49.8	\$17.5
SCPS	\$60.6	\$69.4	\$24.4
Alderman Library	\$244.1	\$0.0	\$98.4
Provost	\$58.6	\$0.0	\$23.6
Comparative Medicine	\$180.5	\$0.0	\$72.7
ITS	\$835.8	\$0.0	\$336.8
Other priorities	\$0.0	\$0.0	\$6,209.7
Total	\$10,400.3	\$10,400.3	\$10,400.3

Facilities and Administrative (F&A) Cost Recoveries

The modeling and planning group considered two options for the allocation of F&A cost recoveries. The first model squarely allocates all F&A to the source of the activity – the school/unit where the research grant is held. The second model is the current methodology and allocates F&A to various areas to cover administrative, operations and maintenance, and strategic needs. The first option – and the method that the group prefers – returns all F&A to the school/unit to emphasize transparency, to incentivize grant-holders to maximize the return, and to align the revenue with the activity. Underlying this preference is the understanding that there are current costs and strategic funds supported from this source which will need to be recovered from some source. The second method more closely aligns the revenue with the underlying administrative expenses – central sponsored research (OSP), accounting and human resources; research initiatives funds for strategic priorities, etc. The president’s guiding principles do outline that there will be future strategic initiative funds, but this may be funded in a different way.

Scenario Modeling for F&A Cost Recoveries

All Dollars in Millions, Using 2011-12 Actuals

F&A Cost Recoveries		
	100% to Grantholders	Status Quo
Deans/Departments/PIs	\$73.4	\$36.3
Central Administrative Costs ¹	\$0.0	\$16.6
Vice President for Research	\$0.0	\$8.0
FI Central Reserve	\$0.0	\$3.8
Governor's Overhead	\$0.0	\$3.7
CFO/OSP	\$0.0	\$2.7
ITS	\$0.0	\$1.7
Alderman Library	\$0.0	\$0.6
Total	\$73.4	\$73.4

Endowment Fee

The modeling and planning group considered two options for the allocation of the current 50 basis point endowment fee. The first model allocates the endowment fee to the source of the activity – the school/unit where the endowment is owned. The second model is the current methodology, which splits the endowment fee with ½ allocated to the school/unit where the endowment is owned and ½ allocated to cover the administrative cost of managing and raising the endowment. The first option – and the method that the group prefers – returns the entire fee (\$12.6 million) to the school/unit to emphasize transparency and to align the revenue with the activity. Underlying this preference is the understanding that there are current costs (primarily central development) supported from this source which will need to be recovered from some source. The second method more closely aligns the revenue with the underlying administrative expenses that occur both centrally and by the unit raising the endowment by allocating \$6.3 million to the former and \$6.3 million to the latter.

DECISION POINT - Undergraduate Tuition Revenue, Net of Tuition-Funded Financial Aid

Option 1. Attribute revenue to schools based on student credit hours

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$228.4 million</p> <p><i>Allocated</i></p> <p>A&S = \$146.2M ARCH = \$4.3 M BATT = \$0.4 M CURRY = \$7.0 M DARD = \$0.0 M ENG = \$30.2 M LAW = \$0.0 M MCINTIRE = \$13.8 M MED = \$0.0 M NURS = \$3.8 M SCPS = \$0.1 M</p> <p><i>Direct</i></p> <p>PROV = \$8.1 M SCPS = \$14.4 M</p>	<ul style="list-style-type: none"> Incentives to Innovate Transparency Accountability Simplicity Quality(?) Flexibility (?) 	<ul style="list-style-type: none"> Matches revenue producing activity (instruction) with revenue attribution. Programs that require a lot of course work receive more funding. Courses taken outside of school of enrollment are attributed to correct school. This would simplify the overall model. This would fund the establishment and growth of inter-disciplinary programs. Schools and programs will be able to monitor attribution metric in SIS. Will tend to be viewed as rational and intuitive. Funding would be generated to meet student demand. Schools/programs would be more willing to start and expand due to new or increased revenue stream. This method would incentivize increasing instruction and recruitment. 	<ul style="list-style-type: none"> Not all courses are within the tuition plateau. (Generally, students are charged for up to 12 credits per semester. A student who enrolls for 18 credits pays the same as a student who enrolls for 12 credits. The six credits are above the plateau.) This could create a perception that more revenue should be allocated than is actually received. This could have the effect of creating distrust of the attributed amounts. Does not reflect fixed cost of being home school, regardless of course patterns (e.g., advising, etc.) Could require additional academic policies related to duplicate courses. Does not reflect varying costs of instruction among schools. Schools with traditionally small class sizes are funded at a lower level per degree produced. Schools/programs with popular programs would be funded at a higher level, and could create a “have”/“have not” environment. Possible volatility as credit hours produced changes.

Notes

- Gross undergraduate tuition received by University is adjusted for tuition-funded support of undergraduate financial aid to arrive at net undergraduate tuition figure, which is then divided by number of undergraduate credit hours generated by University to derive a net tuition per SCH figure for attribution. This approach neutralizes the in-state/out-of-state mix by school.
- SCPS Non-Degree programs treated separately as direct allocation.
- Will want to consider the impact of 5 yr Bachelor/Masters programs and the enrollment patterns of students in these programs.
- In the future, may want to consider the impact of the flat tuition rate and patterns of students in enrolling in more than or fewer than 12 credit hours.
- Specific program differential tuition and fees will be addressed in the category called Other E&G Fees and Revenue

DECISION POINT - Undergraduate Tuition Revenue, Net of Tuition-Funded Financial Aid

Option 2. Attribute revenue to schools based on home school of undergraduate degree

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$228.4 million</p> <p><u>Allocated</u></p> <p>A&S = \$146.2 M</p> <p>ARCH = \$4.5 M</p> <p>BATT = \$0.0 M</p> <p>CURRY = \$2.0 M</p> <p>DARD = \$0.0 M</p> <p>ENG = \$33.9 M</p> <p>LAW = \$0.0 M</p> <p>MCINTIRE = \$9.9 M</p> <p>MED = \$0.0 M</p> <p>NURS = \$5.1 M</p> <p>SCPS = \$4.3 M</p> <p><u>Direct</u></p> <p>PROV = \$8.1 M</p> <p>SCPS = \$14.4 M</p>	<ul style="list-style-type: none"> • Transparency • Accountability • Simplicity • Incentive to Innovate (?) • Quality(?) • Flexibility (?) 	<ul style="list-style-type: none"> • Schools and programs will be able to monitor attribution metric in Student Information System (SIS). • Provides simplest model to initially attribute tuition; May be seen as rational and intuitive. • Provides predictable, stable funding levels. • Incentivizes increased admission recruitment and transfers. 	<ul style="list-style-type: none"> • Does not scale instructional costs to level of student demand. Limits pursuit of economy of scale advantages. • Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. • Disproportional “tax” on few schools, as Inflow/outflow balance of student registrations is not evenly distributed across schools. • Encourages schools to limit enrollment in courses to own students. Provides limited financial incentives to add or expand courses. • Does not reflect varying costs of instruction among schools. • In the absence of subventions, would tend to make interdisciplinary program funding more complicated or not possible. Separate transfers of funds may have to be made.

Notes

- Gross undergraduate tuition received by University is adjusted for tuition-funded support of undergraduate financial aid to arrive at net undergraduate tuition figure, which is then divided by fall headcount enrollment at the University to derive a net tuition per fall headcount FTE figure for attribution. This approach neutralizes the in-state/out-of-state mix by school.
- SCPS Non-Degree programs treated separately as direct allocation.
- Specific program differential tuition and fees will be addressed in the category called Other E&G Fees and Revenue

DECISION POINT - Undergraduate Tuition Revenue, Net of Tuition-Funded Financial Aid

Option 3. Attribute revenue to schools based on a blend of credit hours and home school of undergraduate degree (Example used is 75%/25%)

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
\$228.4 million	See Options 1 & 2	See Options 1 & 2	See Options 1 & 2
<p><u>Allocated</u></p> <p>A&S = \$146.2M ARCH = \$4.4 M BATT = \$0.3 M CURRY = \$5.8 M DARD = \$0.0 M ENG = \$31.1 M LAW = \$0.0 M MCINTIRE = \$12.8 M MED = \$0.0 M NURS = \$4.1 M SCPS = \$1.2 M SEAS = \$31.1 M</p> <p><u>Direct</u></p> <p>PROV = \$8.1 M SCPS = \$14.4 M</p>			

Notes

- See Options 1 & 2, can also implement any blend such as 50%/50% or 25%/75% or 85%/15%.
- SCPS Non-Degree programs treated separately as direct allocation.
- Specific program differential tuition and fees will be addressed in the category called Other E&G Fees and Revenue.

DECISION POINT - Undergraduate Tuition Revenue, Net of Tuition-Funded Financial Aid

Option 4. Attribute revenue to schools based on number of undergraduate degrees conferred

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$228.4 million</p> <p><i>Allocated</i></p> <p>A&S = \$142.0 M</p> <p>ARCH = \$5.7 M</p> <p>BATT = \$0.0 M</p> <p>CURRY = \$1.9 M</p> <p>DARD = \$0.0 M</p> <p>ENG = \$28.6 M</p> <p>LAW = \$0.0 M</p> <p>MCINTIRE = \$19.2 M</p> <p>MED = \$0.0 M</p> <p>NURS = \$6.2 M</p> <p>SCPS = \$2.3 M</p> <p><i>Direct</i></p> <p>PROV = \$8.1 M</p> <p>SCPS = \$14.4 M</p>	<ul style="list-style-type: none"> • Transparency • Accountability • Simplicity • Incentive to Innovate (?) • Quality (NO) • Flexibility (NO) 	<ul style="list-style-type: none"> • Incentivizes reducing time to degree and resulting cost per degree. • Outcome-based versus process-based. • Predictable, stable funding source. • Allows for small class sizes to be adjusted with transfers. • Simple model to initially attribute tuition. • Incentivizes increasing recruitment and transfers. 	<ul style="list-style-type: none"> • Funding lags by four years. • Does not scale instructional costs to level of student demand. Limits pursuit of economy of scale. • Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. • Disproportional “tax” on few schools, as Inflow/outflow balance of student registrations is not evenly distributed across schools. • Encourages schools to limit enrollment in courses to own students. Provides limited financial incentives to add or expand courses. • Could require additional academic policies related to duplicate courses. • Does not reflect varying costs of instruction among schools. • In the absence of subventions, would tend to make interdisciplinary program funding more complicated or not possible. Separate transfers of funds may have to be made. • Could encourage programs to reduce quality standards and requirements to reduce the time to degree.

Notes

- Gross undergraduate tuition received by University is adjusted for tuition-funded support of undergraduate financial aid to arrive at net undergraduate tuition figure, which is then divided by number of undergraduate degrees conferred by University to derive a net tuition per degree figure for attribution. This approach neutralizes the in-state/out-of-state mix by school.
- SCPS Non-Degree programs treated separately as direct allocation.
- Specific program differential tuition and fees will be addressed in the category called Other E&G Fees and Revenue.

DECISION POINT – Graduate Tuition Revenue, Gross of Tuition-Funded Financial Aid

Option 1. Attribute revenue to schools based on home school of graduate degree. Allow for MOU arrangements between/among schools for cross-enrolling programs.

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$151.3 million</p> <p><i>Allocated</i> A&S = \$16.1 M ARCH = \$3.3 M BATT = \$0.3 M CURRY = \$6.6 M DARD = \$41.1 M ENG = \$4.2 M LAW = \$46.8 M MCINTIRE = \$12.1 M MED = \$23.1 M NURS = \$2.7 M SCPS = \$0.0 M SEAS = \$4.2 M</p>	<ul style="list-style-type: none"> • Transparency • Accountability • Simplicity • Incentives to Innovate • Quality • Flexibility 	<ul style="list-style-type: none"> • Schools and programs will be able to monitor attribution metric in Student Information System (SIS). • Provides simplest model to initially attribute tuition; May be seen as rational and intuitive. • Provides more predictable, stable funding levels than a credit hour-based allocation model • Incentivizes increased admission recruitment and transfers and corresponding costs. 	<ul style="list-style-type: none"> • Does not scale instructional costs to level of student demand. Limits pursuit of economy of scale advantages. • Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. • Disproportional “tax” on few schools, as Inflow/outflow balance of student registrations is not evenly distributed across schools. Requires separate MOU for revenues to track student course-taking and other support provided. • Encourages schools to limit enrollment in courses to own students. Provides limited financial incentives to add or expand courses. • Could require additional academic policies related to duplicate courses. • In the absence of MOUs, could make interdisciplinary programs more complicated or not possible.

Notes

- Must isolate PhD enrollments in BIMS and SON PhD versus GSAS enrollments.

DECISION POINT – State General Fund Appropriations, Net of Restricted Line Items

Option 1. Attribute proportionally based on allocation of undergraduate and graduate tuition allocation, excluding self-supporting programs and differential tuition

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
\$137.5 million	See Tuition Section	See Tuition Section	See Tuition Section
<u>Allocated</u> A&S = \$83.0 M ARCH = \$3.9 M BATT = \$0.3 M CURRY = \$6.3 M DARD = \$0.3 M* ENG = \$18.1 M LAW = \$3.2 M* MCINTIRE = \$6.6 M MED = \$11.8 M NURS = \$3.5 M SCPS = \$0.6 M *see note below.	Allocation assumes 75/25 undergraduate tuition model		<ul style="list-style-type: none"> Influenced by pricing policy of graduate schools/programs. Incentivizes/rewards higher tuition rates and greater numbers of OOS students.

Notes

- Option 1a would exclude any general fund appropriation allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$3.5 million allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- The calculation is to take a school's undergraduate tuition attribution using the 75/25 blend plus the school's graduate attribution (excluding any self-supporting programs) divided by \$269 million. This figure is then applied to the \$137.5 million of available state appropriation to determine the school's share.

DECISION POINT – State General Fund Appropriations, Net of Restricted Line Items

Option 2. Attribute revenue based on annual full-time equivalent students enrolled

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$137.5 million</p> <p><i>Allocated</i></p> <p>A&S = \$74.7 M</p> <p>ARCH = \$3.4 M</p> <p>BATT = \$0.3 M</p> <p>CURRY = \$8.9 M</p> <p>DARD = \$5.6 M *</p> <p>ENG = \$15.5 M</p> <p>LAW = \$6.2 M *</p> <p>MCINTIRE = \$7.8 M</p> <p>MED = \$6.0 M</p> <p>NURS = \$3.3 M</p> <p>SCPS = \$5.8 M</p> <p><i>*See note below.</i></p>	<ul style="list-style-type: none"> Accountability Transparency Simplicity Incentive to Innovate(?) Quality(?) Flexibility (?) 	<ul style="list-style-type: none"> Provides simplest model to initially attribute SGF; May be seen as rational and intuitive. Provides more predictable, stable funding levels, although state contribution could be volatile. Incentivizes increased admission recruitment and transfers. 	<ul style="list-style-type: none"> Does not scale instructional costs to level of student demand. Limits pursuit of economy of scale advantages. Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. Disproportional “tax” on few schools, as Inflow/outflow balance of student registrations is not evenly distributed across schools. Encourages schools to limit enrollment in courses to own students. Provides limited financial incentives to add or expand courses. Could require additional academic policies related to duplicate courses. Does not reflect varying costs of instruction among schools. In the absence of subventions, would tend to make interdisciplinary program funding more complicated or not possible. Separate transfers of funds may have to be made.

Notes

- Option 2a would exclude any general fund appropriation allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$11.8 million allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- Since undergraduate tuition allocation recommendations are utilizing a weighted average approach for IS and OOS enrollment, it is more appropriate to utilize total enrollment for this measure rather than just in-state enrollment.

DECISION POINT – State General Fund Appropriations, Net of Restricted Line Items

Option 3. Attribute revenue based on weighting of various programs in state's funding model times enrolled students

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$137.5 million</p> <p><i>Allocated</i> A&S = \$54.0 M ARCH = \$2.8 M BATT = \$0.4 M CURRY = \$6.5 M DARD = \$6.6 M* EDUC = \$6.5 M LAW = \$4.7 M* MCINTIRE = \$4.8 M MED = \$37.0 M NURS = \$4.3 M SCPS = \$1.7 M</p>	<ul style="list-style-type: none"> Accountability Transparency Incentive to Innovate(?) Quality(?) Flexibility (?) Simplicity (NO) 	<ul style="list-style-type: none"> Follows state intent as to which programs are more heavily supported by GF. While not calculating a cost of degree, provides a rough proxy for higher cost programs (i.e., graduate and medical education). Provides more predictable, stable funding levels. Recognizes state's expectation to fund a greater subsidy to medical education. 	<ul style="list-style-type: none"> Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. Encourages schools to limit enrollment in courses to own students. Provides limited financial incentives to add or expand courses. In the absence of subventions, would tend to make interdisciplinary program funding more complicated or not possible. Separate transfers of funds may have to be made.

*see note below.

Notes/Explanation

- Option 3a would exclude any general fund appropriation allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$11.3 million allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- The Commonwealth's Base Budget Adequacy model is an attempt to quantify the base level of support that an institution should have from state tax revenues and student paid tuition. It is an analysis of cost drives – primarily based on student enrollment patterns and national norms for “base” student: faculty ratios. Through the model, one can calculate an expected base level of support for undergraduate, graduate, Law, and Medical education and determine a relative weighting in terms of how the General Assembly expects state tax to support the various student types. In the November 2011 iteration of the model, the following base levels of tuition and GF support were calculated:
 - Undergraduate: \$12,571; Graduate, including BMS and graduate business: \$26,372; Law: \$12,752; Medical education (M.D.): \$130,931
 - And using undergraduate as a 1x weighting, that equates to a 1x weighting for Law, a 2x weighting for Graduate, and a 10x weighting for medical education.

DECISION POINT – State General Fund Appropriations, Net of Restricted Line Items

Option 4. Attribute revenue based on a proxy of cost of instruction multiplied by number of degrees produced

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<p>\$137.5 million</p> <p><i>Allocated</i> A&S = \$38.1 M ARCH = \$2.5 M BATT = \$1.9 M CURRY = \$4.1 M COMM = \$7.3 M DARD = \$16.6 M* ENG = \$9.8 M LAW = \$15.7 M* MCINTIRE = \$7.3 M MED = \$34.1 M NURS = \$2.6 M SCPS = \$4.7 M</p> <p><i>*see note below</i></p>	<ul style="list-style-type: none"> Accountability Incentive to innovate (?) Quality(?) Flexibility (?) Transparency (No) Simplicity (No) 	<ul style="list-style-type: none"> Schools and programs will be able to monitor attribution metric Incentivizes increased admission recruitment and transfers. 	<ul style="list-style-type: none"> Does not scale instructional costs to level of student demand. Limits pursuit of economy of scale advantages. Schools uncompensated for instruction they provide to students in other schools – may lead to lower quality in “high-service” courses over time. Disproportional “tax” on few schools, as Inflow/outflow balance of student registrations is not evenly distributed across schools. Equity concern—schools with tuition flexibility/ability to increase budgets advantaged over others; rich get richer Encourages schools to limit enrollment in courses to own students. Limited financial incentives to add or expand courses. Could require additional academic policies related to duplicate courses. Does not reflect varying costs of instruction among schools. In the absence of subventions, would tend to make interdisciplinary program funding more complicated or not possible. Separate transfers of funds may be needed. Data refinement needed to calculate defensible “cost per degree”

Notes

- Option 4a would exclude any general fund appropriation allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$32.3 million allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.

DECISION POINT – Restricted Gifts & Endowment Distribution

Option 1. Distribute according to terms of donor restrictions

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
TBD	<ul style="list-style-type: none">• Accountability (to donor)• Incentives to Innovate (raise dollars for specific purposes)• Quality (raise dollars to augment base budget)• Flexibility (?)• Transparency, if budgeted• Simplicity – budgeting may not be simple.	<ul style="list-style-type: none">• Meets donor intent• Legal requirement• Consistent with current practice – little transition• Consistent with President Sullivan’s guiding principles.	

Notes:

- To enhance transparency, accountability, and management reporting, we may want to consider requiring all restricted gifts and endowment distributions to be installed, funded, and budgeted.

DECISION POINT – Unrestricted Gifts and Endowment Distribution

Option 1. Retain all unrestricted gifts and endowment distribution centrally

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
Includes: <ul style="list-style-type: none"> • LGF endowments – generate ~\$17M • R.C. Taylor - \$7M • Residential Improvement Fund - \$5M • Davenport Fund - \$1.4M • Class Affiliation Fund - \$550k • Bookstore endowment - \$450k 	<ul style="list-style-type: none"> • Accountability • Incentives to Innovate (funds strategic pool) • Quality (re-directs from current base budget investments to a strategic pool) • Flexibility • Transparency (depends on level of budgeting/ reporting) • Simplicity (?) 	<ul style="list-style-type: none"> • In accordance with donor intent by giving money in an unrestricted fashion, use of such funds should be allocated to the highest priority of the institution. This is best determined by the president. • Will help fund a strategic initiatives reserve with the most flexible of funds. • Will reduce the need to “tax” revenue centers in order to fund a strategic reserve. 	

Notes:

- Per 1988 BOV action, all unrestricted gifts are to be immediately deposited into the University’s unrestricted quasi endowment; therefore, there are technically no unrestricted gifts available for expending.
- To enhance transparency, accountability, and management reporting, we may want to consider requiring all unrestricted gifts and endowment distributions to be installed, funded, and budgeted.
- Will need to find an alternative funding source for the non-strategic, base budget, ongoing commitments (some to schools, some to administration) currently on these funds.

DECISION POINT – Equipment Trust Fund

Option 1. Allocate all ETF to schools, ITS, and library based on equipment levels.

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none"> • \$8.4M base funding for “ongoing program for acquisition and replacement of instructional and research equipment” • \$1.97M base funding for research • Total 11-12: \$10.4M <p><u>Allocated:</u> A&S = \$2,456 K ARCH = \$63 K BATT = \$0.4 K CURRY = \$34 K DARD = \$83 K * ENG = \$2,035 K LAW = \$39 K * MCINTIRE = \$19 K MED = \$4,091 K NURS = \$38 K SCPS = \$64 K CompMed = \$417 K ULIB = \$197 K ITS = \$864 K *see note below</p>	<ul style="list-style-type: none"> • Accountability • Simplicity • Incentives to Innovate (?) • Quality (?) • Flexibility (no – continues ETF funding levels for budget vulnerable areas) • Transparency (No, offsets some base costs rather than distributing full cost) 	<ul style="list-style-type: none"> • Recognizes instruction, research, and academic support goals of the program • Recognizes investment in equipment as the key underlying activity • Puts ETF in the hands of the units most likely to ultimately utilize funds (i.e., not a secondary allocation from the VPR, central) • Allows greatest flexibility in utilizing the fund despite the numerous restrictions around use, timing, and useful life by allocating full allotment to the heaviest equipment purchasers who should be able to better use the funds. Thus allows most unrestricted funds for strategic initiative pool, rather than a restricted source. 	<ul style="list-style-type: none"> • Eliminates one funding source currently utilized by senior administration to meet critical issues and cross-discipline initiatives (i.e., SIS implementation, Thrust Theatre costs, research initiatives, central start-up reserves). • Hides true cost of services such as ITS and Library. • Leaves potentially unpredictable funding source in areas without financial flexibility. • Potentially perpetuates current equipment levels, although there is no prohibition against purchasing equipment from other sources

Notes

- Option 1a would exclude any ETF allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$122k allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- May want to consider varying weighting of equipment to add incentive to use for critical priorities. Perhaps a higher/lower weighting to older equipment, a higher weighting to research equipment, or a higher weighting to equipment with a longer useful life (to avoid holding onto equipment after its useful life has expired).
- The state designates a portion of the ETF allocation to research; will need to determine if we manage this on a post-audit basis (although it seems unrealistic to think the equipment purchases will not be tied to research).

DECISION POINT – Equipment Trust Fund

Option 2. Allocate all ETF to the schools on the basis of equipment levels

Amounts (2011-12)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none"> • \$8.4M base funding for “ongoing program for acquisition and replacement of instructional and research equipment” • \$1.97M base funding for research • Total 11-12: \$10.4M <p><i>Allocated:</i> A&S = \$2,735 K ARCH = \$71 K CLAS - \$2,735k BATT = \$0.4 K CURRY = \$38 K DARD = \$92 K * ENG = \$2,266 K LAW = \$43 K * MCINTIRE = \$22 K MED = \$4,556 K NURS = \$42 K SCPS = \$72 K</p>	<ul style="list-style-type: none"> • Accountability • Incentives to Innovate (? - puts in hands of schools, out of strategic pool) • Flexibility (eliminates this for central) • Transparency (tied to instruction and research) • Simplicity 	<ul style="list-style-type: none"> • Recognizes instruction and research goals of the program • Puts ETF in the hands of the units most likely to ultimately utilize funds (i.e., not a secondary allocation from the VPR, central) • Allows greatest flexibility in utilizing the fund despite the numerous restrictions around use, timing, and useful life by allocating full allotment to the heaviest equipment purchasers who should be able to better use the funds. Thus allows most unrestricted funds for strategic initiative pool, rather than a restricted source. • Provides a true cost of services which previously received ETF allocations (ITS, Library, LNEC, vivaria) • Eliminates potential unpredictable funding sources to Library and ITS which rely on ETF for base funding now. 	<ul style="list-style-type: none"> • Eliminates one funding source currently utilized by senior administration to meet critical issues and cross-discipline initiatives (i.e., SIS implementation, Thrust Theatre costs, research initiatives, central start-up reserves). • Eliminates one funding source supporting research and academic technology and libraries, which will result in a higher cost to be allocated to revenue centers. • Potentially perpetuates current equipment levels, although there is no prohibition against purchasing equipment from other sources
*see note below			

Notes

- Option 2a would exclude any ETF allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$135k allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- May want to consider varying weighting of equipment to add incentive to use for critical priorities. Perhaps a higher/lower weighting to older equipment, a higher weighting to research equipment, or a higher weighting to equipment with a longer useful life (to avoid holding onto equipment after its useful life has expired).
- The state designates a portion of the ETF allocation to research; will need to determine if we manage this on a post-audit basis (although it seems unrealistic to think the equipment purchases will not be tied to research).

DECISION POINT – Equipment Trust Fund

Option 3. Apportion ETF between direct allocation to schools, library and ITS and strategic reserve pool to be managed centrally.

Amounts (2011-12)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none"> • \$8.4M base funding for “ongoing program for acquisition and replacement of instructional and research equipment” • \$1.97M base funding for research • Total 11-12: \$10.4M <p><u>Allocated:</u> A&S = \$1,275 K ARCH = \$33 K BATT = \$0.2 K CURRY = \$18 K DARD = \$43 K* ENG = \$1,057 K LAW = \$20 K* MCINTIRE = \$10 K MED = \$2,124 K NURS = \$18 K SCPS = \$33 K CompMed = \$216 K ULIB = \$102 K ITS = \$449 K Strategic = \$5 M *see note below</p>	<ul style="list-style-type: none"> • Accountability – not as clear • Incentives to Innovate (strategic fund) • Quality (no – work to trade off funds) • Flexibility (?) • Transparency (less than other options) • Simplicity (No) 	<ul style="list-style-type: none"> • Recognizes instruction, research, and academic support goals of the program • Allows an executive level strategic view of how funds intended to incentivize research are distributed. • Funds a strategic pool for critical issues (i.e., SIS implementation, Thrust Theatre costs, research initiatives, central start-up reserves). 	<ul style="list-style-type: none"> • Leaves potentially unpredictable funding source in areas without financial flexibility. Does not provide most flexible funds to a strategic initiatives pool. • Promotes a secondary allocation process as ETF is allocated to Provost/VPR, then re-allocated to schools. • Puts Provost/VPR in a position of having highly restricted funds to utilize for strategic purposes.

Notes

- Option 3a would exclude any ETF allocation to the current self-sufficient schools, Law and Darden. This would result in an additional \$63k allocated to the other schools. This would recognize the trade-off for tuition pricing flexibility afforded to Law and Darden.
- May want to consider varying weighting of equipment to add incentive to use for critical priorities. Perhaps a higher/lower weighting to older equipment, a higher weighting to research equipment, or a higher weighting to equipment with a longer useful life (to avoid holding onto equipment after its useful life has expired).
- The state designates a portion of the ETF allocation to research; will need to determine if we manage this on a post-audit basis (although it seems unrealistic to think the equipment purchases will not be tied to research).

DECISION POINT – Facilities & Administrative Cost Recoveries (F&A)

Option 1. Distribute 100% to School/Unit Where Grant Resides

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none"> Grantholders - \$73.4M 	<ul style="list-style-type: none"> Accountability Incentives to Innovate Quality Flexibility (more flexible funds allocated to schools) Simplicity Transparency (improved to schools; internal transparency across the board depends on level of budgeting/ reporting; less transparency in that funds are not going to cover costs which they are generated to cover) 	<ul style="list-style-type: none"> More transparent to the PI/School as to where generated F&A goes Will help provide a flexible pool of funds for schools to use to cover unallowable, research related costs. Provides a direct incentive for growing research base and maximizing F&A recoveries (i.e., increasing the effective rate) Provides a true cost of services which previously received F&A allocations (central administration, ITS, Library, VPR, CFO) 	<ul style="list-style-type: none"> Rate is billed to federal government to cover costs of administration, but is not recovered against those costs of administration. Eliminates central strategic pools managed by the VPR, the Provost (Governor's OH for capital reinvestment), and central (FI reserve for research related requests)

Notes

- Will need to "tax" revenue centers in order to fund a strategic research reserve and to cover base costs (such as OSP and research O&M).
- Will need to distribute existing ongoing obligations (especially debt service on MR-6, LiSA, CAS, Rice).
- Will need to consider state requirement to transfer \$16.6M into E&G.

DECISION POINT – Facilities & Administrative Cost Recoveries (F&A)

Option 2. Continue Current Practice of Distributing Recoveries to Schools, Central, and Strategic Reserves

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
Current Distribution: <ul style="list-style-type: none"> Deans/Depts/PIs \$36.3M E&G Support - \$16.6M VPR - \$8.0M FI Reserve – \$3.8M Gov’s OH - \$3.7M CFO/OSP - \$2.7M ITS - \$1.7M Library \$0.6M 	<ul style="list-style-type: none"> Accountability Incentives to Innovate Quality Flexibility (more flexible funds allocated to schools) Simplicity Transparency (improved to schools; internal transparency across the board depends on level of budgeting/ reporting; less transparency in that funds are not going to cover costs which they are generated to cover) 	<ul style="list-style-type: none"> Rate is billed to federal government to cover costs of administration and recovered against those costs (i.e., OSP, accounting, UHR, O&M for research buildings, etc.). Provides for central strategic pools managed by the VPR, the Provost (Governor’s OH for capital reinvestment), and central (FI reserve for research related requests) 	<ul style="list-style-type: none"> More opaque to the PI/School as to where generated F&A goes; does not provide a flexible pool of funds for schools to use to cover unallowable, research related costs. Provides disincentive for maximizing F&A recoveries (i.e., encourages waiving of recovery) Hides true cost of services which receiving F&A allocations (central administration, ITS, Library, VPR, CFO)

Notes

- Will reduce the need to “tax” revenue centers in order to fund a strategic research reserve.
- A third option would be to collect all centrally and allocated out exactly based on F&A rate proposal.
- Will need to consider state requirement to transfer \$16.6M into E&G.

DECISION POINT – Endowment Fee

Option 1. Allocate entire 50 basis point (bp) fee to the endowment holder

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none">Endowment Holders - \$12.6M	<ul style="list-style-type: none">AccountabilityIncentives to Innovate (provides unrestricted funds to schools)Quality (?)Flexibility (provides unrestricted funds to schools/endowment holders)TransparencySimplicity	<ul style="list-style-type: none">More transparent to the school/unit as to where fee assessed to their endowments goes.Will help provide a flexible pool of funds for schools to use.Provides a true cost of services which were previously partially funded by the 25 bps retained centrally (development/fundraising, endowment administration)	

Notes

- To enhance transparency, accountability, and management reporting, we may want to consider requiring all endowment fees to be installed, funded, and budgeted.
- Will need to “tax” revenue centers in order to cover costs currently covered from the 25 bps retained centrally.

DECISION POINT – Endowment Fee

Option 2. Maintain practice of splitting 50 basis point (bp) fee between central and the endowment holder

Amounts (2010-11)	Principles Supported	Positive Considerations	Negative Considerations
<ul style="list-style-type: none"> Endowment Holders - \$6.3M Local Gen'l Fund - \$6.3M 	<ul style="list-style-type: none"> Incentives to Innovate (provides unrestricted funds to schools) Quality (?) Flexibility (provides unrestricted funds to schools/endowment holders) Transparency Simplicity 	<ul style="list-style-type: none"> The endowment fee (seen as a recovery related to endowment related operational expenditures) will be applied to those endowment management and development costs. Will reduce the amount of central administrative costs to be recovered from the units. 	<ul style="list-style-type: none"> Not transparent to schools the entire cost of endowment management and development Central 25 bps (private unrestricted revenue) are used to cover administrative costs.

Notes

- To enhance transparency, accountability, and management reporting, we may want to consider requiring all endowment fees to be installed, funded, and budgeted.