New Internal Financial Model
Expenditure Decision Briefs
December 2012

Introduction

This work has been informed by the deliberations of the Core Work Group in summer 2011, the July 2012 report of the Cost and Service Level Architecture Task Force, guiding principles articulated by President Sullivan in September 2012, and presentations from the leaders of several core service units to the Steering Committee and the Planning and Modeling work.

Currently, the Medical Center, the University Physicians Group, and self-supporting auxiliaries are charged certain general and administrative costs based on an existing formula. At this point for simplicity and timing purposes only, we are continuing this treatment rather than allocating to these units based on the formulas for the schools. It is important that we consider how those chargeback rates compare to the rates at which the same central and shared services and facilities are charged to other units within the University under the new budget model. Ultimately, the same rate structure should apply to all units; otherwise one group of units could be subsidizing another. We will complete this work going forward. Major examples of auxiliaries include Athletics and Intramurals, Housing, Dining, Parking & Transportation, Printing & Copying, Newcomb Hall, Student Health, WTJU, Safe Ride, and Leased Operations.

The expenditure allocation model employs a step-down approach for allocating costs, which means that we develop a sequence for allocating costs. This means that once costs are fully allocated in the sequence, the cost center will not be distributed service costs from other allocating cost centers. The order we are utilizing at this point is Facilities Services…IT Services…Human Resource Services. As the model is developed, we may want to revise this approach.

In addition, at this time, we have proposed that expenses for development services, excluding public affairs functions, continue to be charged as they are today, which is to central resources (including 50% of the endowment fee) under the discretion of the President. Accordingly, this recommendation may also affect the revenue recommendation related to the endowment fee. We propose that this arrangement continue until a larger discussion of the future scale and relationship of central development with school- and unit-based fundraising operations can take place.

<u>Major Principles Identified by the Task Force on Cost and Service Level Architecture</u>

The Task Force on Cost and Service Level Architecture recommended the following principles, designed to create incentives for stewardship of University resources and incentives for the provision of effective, efficient, and high-quality services from the University:

1. The model should create incentives for schools and service units to control costs.
2. The model should find the incentive/simplicity tradeoff that works best for UVa.
3. The model should rely on direct charges wherever feasible.

4. The model should permit schools to obtain services from third parties whenever feasible and when it is not should seek to benchmark charges against those of third party providers.

A copy of the Task Force report is provided in Attachment A.

Major Principles Identified by President Sullivan Related to Costs

In September, President Sullivan articulated several major principles. Following is an excerpt from those principals which have relevance in the discussion of cost allocations.

Core Central Services: There are central services that are so important or fundamental to the University that no constituent unit may opt out from them. Examples include, but are not limited to the library, compliance, audit, finance, insurance and risk management, financial aid, payroll, employee benefits, and the Board of Visitors.

Discretionary Funds for Central Officers: Central officers of administration need discretionary funds to carry out their duties and responsibilities on behalf of the institution. The New Internal Financial Model (NIFM) will ensure that central officers of administration have the necessary resources.

Tax Rate and Structure Principles: It is reasonable to expect that the new "tax rate" will begin at a high level, on the assumption that in the future it can be reduced. Tax rates are much harder to raise. In addition, the costing and allocation of some services initially included in the base tax rate may take time to implement effectively. It is reasonable that the "tax" be levied on expenditures, not revenues, to incentivize revenue growth and expense management. It would be reasonable to set lower "tax rates" on expenditures from some sources (e.g. gift funds and endowment, research funds that carry full indirect costs). These lower rates encourage expenditures of these funds while incentivizing conservation of general funds.

Current Policies: Current operational and financial policies should be assumed to persist. Examples include, but are not limited to, debt issuance, banking services, cash management, investments, procurement, disbursements, purchase of real estate, and lease transactions. Proposed changes to University policies will go through the normal policy review process.

Major Policy Issues for Consideration

As the Steering Committee considers the various options for allocation of costs, the following major policy issues emerging so far include:

1. To what extent should the model credit schools/units for providing central/shared services in house, such as information technology, human resources, student services, libraries? How do we determine when these services supplant baseline services vs. adding on an additional level of service?

2. To what extent do schools/units have flexibility to opt out of central/shared services or to designate variable service levels?

3. How should centers, institutes, and other units (that are not schools, auxiliaries, or central/shared service centers) be funded to the extent that they are not self-supporting?

4. How should the NIFM capture revenues to be applied to renewal and replacement of facilities?

Facilities Services

This category includes corrective, preventive, and major maintenance; utilities; custodial; grounds-keeping; risk management; and leasing and real estate operations related to central and shared services that are identified as educational and general facilities (excludes all Medical Center and auxiliary facilities, as these are not identified as educational and general facilities). In the current model, the Law School and the Darden School are charged for the direct costs of their facilities. For the sake of modeling consistency, we have reversed these direct charges and have distributed costs to the Law School and Darden School in the same manner as all units.

To reflect space usage and to incentivize efficient use of scarce resources, facilities costs should be distributed across all revenue centers (primarily the schools) and cost centers (primarily administrative units). The Provost's Office is assigned responsibility for centrally managed classrooms and auditoria. The facilities costs are managed in the following pools:

Facilities Services	
All Dollars in Millions, Using 2010-11 Actuals	
Utilities	$30.6
Preventative and corrective maintenance, custodial, landscaping	$26.5
Major and deferred maintenance	$10.9
Risk management, insurance	$1.6
Leasing and real estate	$0.6
Allocated costs (none, since first allocated in step down process)	$0.0
Total	**$70.2**

We recommend that Utilities be directly charged to units based on actual consumption when metering is available. At this time, we propose a temporary solution of allocating utilities on the basis of assignable square footage, as maintained by Space and Real Estate Management. An alternative may be a hybrid model, in which metered facilities are billed directly and remaining facilities are allocated based on assignable square footage.

Preventative and corrective maintenance, custodial, grounds keeping, risk management, leasing and other facilities services costs are proposed to be allocated on the basis of assignable square footage.

Major and deferred maintenance is expected to continue to be managed on a pan-University basis, as facilities will age and need major maintenance over different time periods. Currently major and deferred maintenance is funded from operations (nearly $11 million in FY11) and a capital appropriation from state general funds ($5 million in FY11). The state capital appropriation is maintained outside this model, while we propose that the operational contribution of $10.9 million per year in operations be allocated on the basis of replacement value.

Three categories of facilities costs are currently excluded from modeling efforts:

1. Facilities Management directly charges operations and maintenance costs to the Medical Center and auxiliaries based on actual usage; these costs and the offsetting recovery from the units are excluded for simplicity reasons at this point.
2. Activity associated with the Facilities Planning and Construction (FP&C) unit are currently assessed to the benefiting capital projects. This model assumes continuation of this and excludes this activity from current modeling efforts.
3. The University does not currently fully reserve for major renovation, replacement, and adaptive use, but rather manages these on a case by case basis through the capital program. This may be an opportunity for systematically addressing this activity.

Scenario Modeling for Facilities Services

All Dollars in Millions, Using 2010-11 Actuals

	Operations & Maintenance, Property Insurance, Leasing and Real Estate							
	Assignable Square Foot	% of Total	Utilities *	Maintenance, Custodial, Groundskeeping	Replacement Value	% of Total	Major Maintenance	Allocation
Arts & Sciences	853,149	20.7%	$6.3	$5.9	$429.0	24.3%	$2.6	$14.8
Architecture	47,432	1.2%	$0.4	$0.3	$24.7	1.4%	$0.2	$0.9
Batten	12,623	0.3%	$0.1	$0.1	$6.4	0.4%	$0.0	$0.2
Curry	96,108	2.3%	$0.7	$0.7	$55.1	3.2%	$0.3	$1.7
Darden	218,471	5.3%	$1.6	$1.5	$73.1	4.2%	$0.5	$3.6
Engineering	344,825	8.4%	$2.6	$2.4	$188.7	10.8%	$1.2	$6.2
Law	200,598	4.9%	$1.5	$1.4	$76.0	4.3%	$0.5	$3.4
McIntire	50,272	1.2%	$0.4	$0.3	$39.5	2.3%	$0.3	$1.0
Medicine	1,127,569	27.3%	$8.3	$7.9	$369.1	21.1%	$2.3	$18.5
Nursing	42,159	1.0%	$0.3	$0.3	$9.7	0.6%	$0.1	$0.7
SCPS	68,420	1.7%	$0.5	$0.5	$12.4	0.7%	$0.1	$1.1
Library	399,707	9.7%	$3.0	$2.8	$151.3	8.7%	$0.9	$6.7
Development/PA	40,128	1.0%	$0.3	$0.3	$1.9	0.1%	$0.0	$0.6
CIO/ITS	56,324	1.4%	$0.4	$0.4	$25.7	1.5%	$0.2	$1.0
UHR	18,931	0.5%	$0.2	$0.1	$4.6	0.3%	$0.0	$0.3
VPR	33,314	0.8%	$0.2	$0.2	$90.6	5.2%	$0.6	$1.0
Student Affairs	40,600	1.0%	$0.3	$0.3	$4.7	0.3%	$0.0	$0.6
VP/Diversity	1,320	0.0%	$0.0	$0.0	$0.3	0.0%	$0.0	$0.0
EVP/COO	14,359	0.3%	$0.1	$0.1	$4.1	0.2%	$0.0	$0.2
VP/CFO	27,134	0.7%	$0.2	$0.2	$6.6	0.4%	$0.0	$0.4
VPMB	35,980	0.9%	$0.3	$0.3	$2.6	0.1%	$0.0	$0.6
President's Office	54,490	1.3%	$0.4	$0.4	$36.4	2.1%	$0.2	$1.0
Provost	335,412	8.1%	$2.5	$2.3	$136.3	7.8%	$0.9	$5.7
Total	**4,119,325**	**100.0%**	**$30.6**	**$28.7**	**$1,748.8**	**100.0%**	**$10.9**	**$70.2**

Notes

* It is recommended that utilities be alloated on the basis of actual usage as soon as metering is widely available.

IT Services

Currently, Information Technology Services is a hybrid funding unit which (1) directly assesses users (including departments, auxiliaries, the Medical Center, and students) for communication services and Microsoft licensing (approximately $27 million); (2) receives a central allocation of $27.2 million for other services such as network infrastructure, classroom and instructional technology, Oracle and PeopleSoft systems, collaborative technologies, and base user support; and (3) manages a central strategic fund of $1.3 million currently directed toward high performance and specialized research computing.

As a result of a comprehensive review of services, it is expected that ITS will continue to maintain a hybrid model, however, the mix of direct assessment and general allocation may change to align better with intended incentives from the New Internal Financial Model. At this time, we are modeling the allocation of the centrally funded $28.5 million (the combination of #2 and #3 above) plus a $1.0 million share of facilities services.

Some costs are currently recovered from auxiliaries and the Medical Center. For reasons of simplicity at this time, these have been netted from the Business/Executive Management costs, but we should break out these recoveries into the IT Services category going forward.

For all expenditures other than classroom technology, the modeling group has proposed an allocation basis weighted as 75% related to employee FTE and 25% related to student FTE. We recommend that in the final model we consider allocating classroom technology (approximately $2.2 million in FY11) on another basis, potentially assignable square footage for classrooms.

Scenario Modeling for IT Services

All Dollars in Millions, Using 2010-11 Actuals

	Annual FTE Students	Annual FTE Employees	75% Emp/25% Student	Allocation
Arts & Sciences	13,199	1,009	37.7%	$11.2
Architecture	600	62	1.8%	$0.5
Batten	52	21	0.3%	$0.1
Curry	1,577	220	5.2%	$1.5
Darden	983	227	3.9%	$1.2
Engineering	2,731	372	8.9%	$2.6
Law	1,096	186	3.8%	$1.1
McIntire	1,385	119	4.0%	$1.2
Medicine	1,059	2,469	19.7%	$5.8
Nursing	589	78	1.9%	$0.6
SCPS	1,017	103	3.1%	$0.9
Library	-	216	1.5%	$0.4
Development/PA	-	205	1.4%	$0.4
CIO/ITS				
UHR	-	86	0.6%	$0.2
VPR	-	141	1.0%	$0.3
Student Affairs	-	67	0.5%	$0.1
VP/Diversity	-	6	0.0%	$0.0
EVP/COO	-	157	1.1%	$0.3
VP/CFO	-	100	0.7%	$0.2
VPMB	-	59	0.4%	$0.1
President's Office	-	87	0.6%	$0.2
Provost	-	270	1.9%	$0.6
Total	**24,288**	**6,260**	**100.0%**	**$29.5**

Employee Services

This category includes the University Human Resources organization (payroll and benefits, recruiting and hiring, employee relations, training) and Equal Opportunity Programs, which are currently funded from a central target allocation. In addition, there are activities totaling $1.3 million which are offered on a cost recovery basis, with rates approved through Financial Administration, to units receiving agreed-upon services – e.g., temporary employee pool, international management, background checks for new employees, and an executive management search group. It is assumed that for modeling purposes that these services continue to be charged on a per usage basis.

Employee Services	
All Dollars in Millions, Using 2010-11 Actuals	
Human Resources	$7.8
EOP	$0.7
Allocated Facilities and IT Services	$0.5
Total	**$9.0**

Some costs are currently recovered from auxiliaries and the Medical Center. For reasons of simplicity at this time, these have been netted from the Business/Executive Management costs, but we should break out these recoveries into the Empoyee Services category going forward. The modeling group has proposed an allocation basis entirely related to employee FTE. According to UHR, the most reasonable cost driver is the number of processed payments. For staff this is 26 payments per year, while for faculty it is 12. However, it does not seem a reasonable incentive to the modeling group to weight staff by 2x faculty, so we propose a purely FTE employee basis.

Scenario Modeling for Employee Services			
All Dollars in Millions, Using 2010-11 Actuals			
	Annual FTE Employees	% of Total	Allocation
Arts & Sciences	1,009	16.3%	$1.5
Architecture	62	1.0%	$0.1
Batten	21	0.3%	$0.0
Curry	220	3.6%	$0.3
Darden	227	3.7%	$0.3
Engineering	372	6.0%	$0.5
Law	186	3.0%	$0.3
McIntire	119	1.9%	$0.2
Medicine	2,469	40.0%	$3.8
Nursing	78	1.3%	$0.1
SCPS	103	1.7%	$0.1
Library	216	3.5%	$0.3
Development/PA	205	3.3%	$0.3
CIO/ITS			
UHR			
VPR	141	2.3%	$0.2
Student Affairs	67	1.1%	$0.1
VP/Diversity	6	0.1%	$0.0
EVP/COO	157	2.5%	$0.2
VP/CFO	100	1.6%	$0.1
VPMB	59	1.0%	$0.1
President's Office	87	1.4%	$0.1
Provost	270	4.4%	$0.4
Total	**6,174**	**100.0%**	**$9.0**

Library Services

This category includes the University Libraries; it excludes libraries operated by the Darden School, the Law School, and the School of Medicine. The direct expenses for those libraries are included in the respective school's direct expenses. In addition, the University Library charges the three school libraries for some direct costs, including the cataloging of the collections of the school libraries. It is assumed that for modeling purposes that these services continue to be charged on a usage basis, since these are exclusive services to these school-run facilities.

At this time, we are modeling the allocation of the centrally funded $22.9 million (excluding expenses supported from restricted endowments and grants owned by the library) plus a $7.4 million share of facilities, IT services, and employee services. All students, faculty, and staff (in fact, any Commonwealth of Virginia citizen) have access to the collections, the catalog, the research services, and the spaces provided by the University Library. Based on feedback from the library that the number of faculty, students, and PhD degrees are predictors of the size of a research institution's library, the modeling group proposes an allocation to the schools on a basis that treats each of the three factors above with an equal weighting.

Scenario Modeling for Library Services

All Dollars in Millions, Using 2010-11 Actuals

	FTE Faculty	FTE Student	PhD Degrees	Allocation Share	Allocation
Arts & Sciences	616	13,199	183	51.5%	$15.8
Architecture	41	600	1	2.4%	$0.7
Batten	11	52	-	0.2%	$0.1
Curry	96	1,577	52	6.4%	$1.9
Darden	67	983	-	3.9%	$1.2
Engineering	167	2,731	84	11.0%	$3.4
Law	88	1,096	3	4.4%	$1.3
McIntire	63	1,385	-	5.3%	$1.6
Medicine	983	1,385	-	8.7%	$2.4
Nursing	44	589	23	2.4%	$0.7
SCPS	9	1,017	-	3.8%	$1.2
Total	**2,185**	**24,614**	**346**	**100.0%**	**$30.3**

Research Support Services

This category includes the operations of the Office of Sponsored Programs, the Vice President for Research (research enhancement; graduate studies and postdoctoral programs; innovation, strategic partnerships, and technology commercialization) and the finance group which manages the Facilities & Administrative Cost Recovery process. In addition, the VPR directly charges for animal husbandry, veterinary care services, and research compliance, recovering over $9 million annually. It is assumed that for modeling purposes, these services continue to be charged on a usage basis.

Research Services	
All Dollars in Millions, Using 2010-11 Actuals	
VP For Research Services and Initiatives, net of recoveries	$9.5
Office of Sponsored Research and F&A Support	$4.3
Allocated Facilities, IT, and Employee Services	$1.5
Total	**$15.3**

Some environmental health and safety costs are currently recovered from the Medical Center. For reasons of simplicity at this time, these have been netted from the Business/Executive Management costs, but we should break out these recoveries into the Research Support category going forward. Because research support is influenced by both the number of the awards and the dollar value of the awards, the modeling group adopted an allocation to the schools on a basis that treats each as an equal weighting.

Scenario Modeling for Research Support					
All Dollars in Millions, Using 2010-11 Actuals					
		$ Res. Awards	# Res. Awards	Allocation Share	Allocation
Arts & Sciences	$	47.6	313	16.2%	$2.4
Architecture	$	0.2	10	0.5%	$0.0
Batten	$	-	3	0.1%	$0.0
Curry	$	18.2	74	4.1%	$0.7
Darden	$	0.3	1	0.1%	$0.0
Engineering	$	61.4	328	17.5%	$2.8
Law	$	1.0	7	0.4%	$0.0
McIntire	$	-	-	0.0%	$0.0
Medicine	$	193.8	1,131	59.4%	$9.2
Nursing	$	3.1	28	1.4%	$0.2
SCPS	$	1.1	5	0.3%	$0.0
Total	**$**	**326.7**	**1,900**	**100.0%**	**$15.3**

Student Support

This category includes the following activities: Office of the VP and Chief Student Affairs Officer, the Dean of Students, Career Services, Office of African-American Affairs, Learning Needs Evaluation Center (disability accommodations), Registrar, Student Financial Services (billing, collections, and financial aid support, but not actual financial aid), Admissions, and ID Card Services. It excludes Student Health, Student Council/Activities, and Newcomb Hall, all of which operate as auxiliaries and are supported primarily through student fees. As auxiliaries, these units are required to fully cover their direct and indirect costs of operation.

Student Services	
All Dollars in Millions, Using 2010-11 Actuals	
VP for Student Affairs, Dean of Students, Career Services, etc.	$5.8
Student Financial Services	$3.0
Admissions and Registrar	$5.1
E&G Sports and I/M Rec subsidy (in transition to full auxiliary)	$1.1
ID Card Services	$0.3
Allocated Facilities, IT, and Employee Services	$0.8
Total	**$16.1**

At this time, the group proposes to allocate costs based on a straight student FTE count, preliminarily based on the idea that the level of time spent on graduates vs. undergraduates was not significant enough to warrant any different weighting between the two groups. However, we have asked for further feedback from student affairs, which may result in a different suggested approach.

Scenario Modeling for Student Support			
All Dollars in Millions, Using 2010-11 Actuals			
	FTE Student	% of Total	Allocation
Arts & Sciences	13,199	53.7%	$8.8
Architecture	600	2.4%	$0.4
Batten	52	0.2%	$0.0
Curry	1,577	6.4%	$1.1
Darden	983	4.0%	$0.7
Engineering	2,731	11.1%	$1.8
Law	1,096	4.5%	$0.7
McIntire	1,385	5.6%	$0.9
Medicine	1,385	5.6%	$0.7
Nursing	589	2.4%	$0.4
SCPS	1,017	4.1%	$0.7
Total	**24,614**	**100.0%**	**$16.2**

Academic Support

This activity includes all the operations in the Provost Office, including direct academic support and administration, Summer Session and J-Term, international activities, ROTC, and also a number of centers and institutes, such as the Virginia Foundation for Humanities, the Cooper Center for Public Service, the Teaching Resource Center, Jefferson Public Citizens, and the Women's Center. Many of these organizations have supporting restricted revenues, but most are not fully self-supporting. To the extent these units have available related revenues (tuition, gifts, grants, and endowment), we have attributed associated direct costs to those restricted revenues, with the remaining costs allocated to the schools.

At this time, we are modeling the allocation of the centrally funded $17.6 million (excluding expenses supported from endowments and grants owned) plus a $6.4 million share of facilities (including centrally managed classroom and auditoria), IT services, and employee services. The modeling group preliminarily recommends an allocation basis of equally weighted student and faculty FTEs.

Scenario Modeling for Academic Support

All Dollars in Millions, Using 2010-11 Actuals

	FTE Faculty	FTE Student	Allocation Share	Allocation
Arts & Sciences	616	13,199	51.7%	$12.8
Architecture	41	600	2.4%	$0.6
Batten	11	52	0.2%	$0.0
Curry	96	1,577	6.2%	$1.5
Darden	67	983	3.9%	$1.0
Engineering	167	2,731	10.8%	$2.6
Law	88	1,096	4.4%	$1.1
McIntire	63	1,385	5.4%	$1.3
Medicine	983	1,385	8.8%	$1.9
Nursing	44	589	2.4%	$0.6
SCPS	9	1,017	3.8%	$0.9
Total	**2,185**	**24,614**	**100.0%**	**$24.3**

Business/Executive Management
All other central costs are bundled in this category, including VP/Diversity Office, EVP/COO Office, Emergency Preparedness, Police, Audit, University Architect, VP/CFO Office, Policy Management, Comptroller/Accounting Services, VP/MB Office, Procurement, Budget, State Governmental Relations, Process Simplification, President’s Office/Carr’s Hill, Board of Visitor’s Office, General Counsel, Major Events, and other general institutional costs. In addition, the Miller Center for Public Affairs, which generates sufficient funds to support all direct costs, is included in this category although no direct costs associated with the Miller Center are distributed.

As explained earlier, the University recovers funds from the auxiliaries, the Medical Center, and the University Physicians Group for central administrative services. Included in the Business/Executive Management category is an approximately $15 million in recoveries from these activities.

Business and Executive Management	
All Dollars in Millions, Using 2010-11 Actuals	
Public Affairs	$3.5
VP/Diversity	$1.5
COO, Police, Emergency Preparedness, Univeristy Architect, Audit	$11.7
CFO, Comptroller, Financial Reporting, Policy Support	$10.0
VPMB, Budget, Procurement, State Governmental Relations	$4.7
President, BOV, General Counsel, Other	$11.9
Allocated Facilities, IT, and Employee Services	$4.8
Recovered from Auxiliaries and Medical Center	($15.0)
Total	**$33.1**

The modeling group preliminarily recommends, based on the President's suggested principle, an allocation basis of the expenditure base. There is some concern that such an approach disadvantages the School of Medicine, given that a large share of that school's expenditure base is related to sponsored research. We will continue to consider refinements that should be made in order to more appropriately allocate these funds.

Scenario Modeling for Business Services and Executive Management			
All Dollars in Millions, Using 2010-11 Actuals			
	Direct Exp	% of Total	Allocation
Arts & Sciences	$ 185.9	22.8%	$7.5
Architecture	$ 10.3	1.3%	$0.4
Batten	$ 14.0	1.7%	$0.6
Curry	$ 34.1	4.2%	$1.4
Darden	$ 53.3	6.5%	$2.2
Engineering	$ 83.6	10.2%	$3.4
Law	$ 56.7	6.9%	$2.3
McIntire	$ 22.2	2.7%	$0.9
Medicine	$ 326.0	40.0%	$13.2
Nursing	$ 12.1	1.5%	$0.5
SCPS	$ 17.9	2.2%	$0.7
Total	**$ 816.1**	**100.0%**	**$33.1**

Other items for consideration as the model is developed:

As we attempt to draw closure to an initial cost allocation structure for modeling and implementation purposes we recognize that, in addition to the major policy considerations listed in the beginning of this document, there are also other aspects of cost allocation that need further work and consideration. At this point the working group has identified the following items. Resolution of these items and potentially others that might be identified over time may result in revisions to the currently proposed treatments of costs as outlined in this document.

- Are there other metrics that should be used in each expenditure category?
    a. For research, allocating costs over the dollar value of research awards; allocating costs based on the number of research awards; or allocating costs based on a blend of research award dollar value and actual number of research awards.

- As facilities are constructed or renovated, the sponsoring unit will be responsible for covering incremental costs, which may include utilities, routine and preventative maintenance, landscaping, custodial, security, property insurance, and a reserve for future major maintenance.

- Is it appropriate to include centrally managed classrooms and auditoria in the Provost's area, to be allocated based on the metrics for Academic Support? How are classrooms and auditoria managed – when are classrooms added to this category?

- One approach to assessing the costs of the University Library is to assume that all schools – regardless of whether they operate their own library – will pay a proportional share (as modeled above). Another approach would be to discount the share paid by those schools (Darden, Law, and Medicine) already operating their own library. If all University faculty and students also have access to the Darden, Law, and Health Sciences Library, the University could consolidate all library expenses and spread them across all schools. (Currently, University faculty and students have access to the school-based libraries for in-person visits; however, they typically do not have access to the full range of library services, such as access to restricted databases.)

- We recommend that strategic initiative funds/reserves be separated from core costs in allocation. What is the targeted threshold amount for these reserves? How should the University develop appropriate reserves, including strategic initiative reserves provided through the President, Provost, COO, VPR?

- How should tuition-generating activities such as Summer Session, J-Term, University Seminars, and ROTC be treated?

Attachment A

Report of the Cost and Service Level Architecture Task Force
To the NIFM Steering Committee

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Report of the Cost and
Service Level Architecture Task Force
to the NIFM Steering Committee

The Task Force's objective was to develop mechanisms for charging the costs of centrally provided goods and services to academic and non-academic units. We were instructed to do so in a way that will create incentives for stewardship of University resources on the "customer" side and incentives for effective, efficient, and high-quality service on the "provider" side, and in general to align service in support of the University's teaching, research, service, and health care missions.

The Task Force met on April 11, May 21, and July 10. Our discussions focused first on principles that should guide the allocation of cost, then on methodologies for cost recovery that would be consistent with those principles.

Principles

The Task Force recommends a set of four design principles that any cost allocation and service level mechanism should meet. They are described below with brief explanations of the thinking behind them.

Principle 1: The model should create incentives for schools and service units to control costs.

The budget model will not directly create any new revenue or eliminate any expenses. Incentive alignment and accountability are the principal mechanisms by which the budget model can indirectly result in new revenues or lower costs. On the service cost and architecture side of the model, the key incentives are twofold: first, schools should have an incentive to *economize on services*. This does not necessarily mean minimizing the use of services because that could be counterproductive (for example, not maintaining buildings). Ideally, schools will use services up to the point where the cost of an additional unit of service matches the benefit of an additional unit of service. The second key incentive is for service units to provide services at a competitive cost. Unless the model's structure creates incentives to do these things, it will not be worth the time we are spending and will continue to spend on it.

Principle 2: The model should find the incentive/simplicity tradeoff that works best for UVA.

There is a tradeoff between incentives and simplicity. A very simple model (e.g., each school pays x% of revenues, where *x* is designed to cover all service center costs) does not create sufficient incentives for the schools to economize on the use of resources nor for the service units to control costs. A model that maximizes these incentives would likely have dozens of different service levels and rates (as does Penn's system). But at some point that level of complexity becomes counterproductive and leads to "gaming" the system. We may not be able immediately to implement the optimal rule structure where our systems do not yet generate needed information, but we should attempt to remedy that shortcoming over time.

Principle 3: The model should rely on direct charges whenever feasible.

The system will necessarily have a mix of "direct" charges (paid on a per-use basis) and "indirect" charges (paid based on some measure of unit activity but not on the basis of use). Indirect charges are necessary when use is hard to measure or where there are substantial spillovers (that is, one unit's use benefits another unit). Direct charges, however, create incentives to economize on services that indirect charges cannot. The additional transparency will enable academic units to plan and manage their use of centrally-provided services.

Principle 4: The model should permit schools to obtain services from third parties whenever feasible and when it is not should seek to benchmark charges against those of third party providers.

There are three basic mechanisms by which the model can create incentives for the service centers to control costs. First, once the costs are transparent to the schools, schools will more carefully monitor and seek to influence the behavior of the service centers. This is a low-power incentive to the extent the schools are captive customers. Second, the model could require the service centers to benchmark their charges against those of independent third parties. This is a medium-power incentive. On the one hand, it provides an objective basis for charges. On the other, there will be ample room for disagreement about the appropriate benchmarks (for example, whether quality levels are similar). Third, the model could permit "opt-out", or the purchase of services from third-party providers. This is a high-power incentive because unless the service centers can offer a competitive cost/quality mix, they will lose business.
We all recognize that costs are driven in significant part by staffing levels and that it is difficult (and in some cases impossible) to reduce staffing levels in the short run. Thus, opt-out could simply result in some units bearing a larger share of a fixed expense, which would be unfair to those units. In the long run, however, the most effective means of cost control is to permit opt-out.

Cost allocation methodologies

The Task Force used organization chart information available from the University's web site, as well as the modeling tool provided by the Office of the Vice President for Management and Budget, to identify cost centers. We then assigned each to one of four broad cost-recovery categories:

Indirect

This category consists of cost centers that meet two criteria: (1) the activity broadly benefits all units and (2) it is not practical to measure and assign usage or benefit to a particular unit. The canonical example is the President's Office. The costs of these centers will be charged to academic units based on a measure of unit size or activity (e.g., based on the number of students). Within this category, we identified five different subcategories, each to be allocated on the basis of a different measure of unit size/activity:

Institutional Service (allocated on the basis of unit direct expenditure)
Academic (allocated on the basis of FTE faculty)
Student service (allocated on the basis of FTE students)
Undergraduate student service (allocated on the basis of FTE undergraduate students)
Personnel (allocated on the basis of FTE employees)

Direct

This category consists of centers providing services for which it is feasible, at least approximately, to bill academic units on the basis of use. Utilities are the canonical example of such a service. As noted in the design principles above, this assignment must be coupled with some mechanism for assuring that the billed costs bear some relation to the value of services of a similar quantity and quality. Depending on the service, the mechanism may be third-party benchmarking or permitting opt-out.

Hybrid

This category consists of services that will be charged to academic units based on the level of service, as determined by agreement between the service and customer unit with the oversight and approval of the central administration. Some of the organizations in this category provide several different types of services, some for which direct allocation may be feasible and others for which it may not. Others provide services for which the level of use may vary from one unit to another, but it may be more practical to specify *what* is to be provided rather than *how much* is to be provided. A canonical example here is University Development. Some units use DPA for all development-related activities, including fundraising and gift processing. Others perform some of those functions in-house.

The central administration will have to play a role in these service level agreements so that academic units do not try to avoid costs fairly attributable to them, leaving other units to pick up the tab. But it is equally true that units that currently provide significant services in-house should not be required to pay twice for the same service. Using service level agreements will allow for flexibility in the provision of services centrally versus at unit level while allowing the central administration to prevent excessive "opt out" of centrally provided services.

We do not have a detailed recommendation on the governance procedures that should apply to an academic unit's decisions to opt out of (or amend the service level agreement for) a service that is currently centrally provided to that unit. We do, however, believe there should be a requirement for advance notice and procedures that will prevent simple cost-shifting to other units. This issue is clearly tied to the larger question of how much flexibility the University's Human Resources system should afford in changing staffing levels in response to changes in unit activity.

Self-funded

This category consists of units that are supported by auxiliary revenues and/or designated funding sources. These will not be charged to the academic units. Athletics is the canonical example.

The Task Force did not have sufficiently fine-grained data to know whether every unit we have assigned to this category has a revenue stream sufficient to cover all its costs. In a few cases (e.g., the Virginia Quarterly Review), we suspect that this will be true only if we consider a subsidy from central funds to be part of the revenue stream. In principle, however, we are concerned that having these activities funded automatically by a small charge to each academic unit will lead to insufficient oversight of their expenditures. It seems to us that a better solution would be to permit these organizations to request a subsidy from institutional funds under the Provost's control, creating a single point of oversight and accountability.

Not allocated

These are units whose costs or revenues will be allocated through some other mechanism. For example, as we understand it, the bulk of expenditures assigned to the Comptroller's Office are for undergraduate financial aid, which will be a deduction from tuition revenues that will be allocated on the revenue side of the model. These costs should, however, be subject to the same level of transparency as allocated costs.

The assignment of cost centers to categories and subcategories is attached as Appendix A. We recognize that most if not all of these cost centers do not fit purely into any one category. Some of their activities may be better assigned to a different category. However, we were also mindful of the principle of simplicity. We believe the category assignments are reasonable even if they do not fit a particular cost center's activities 100 percent.

We recommend that academic units receive an itemized bill for their share of direct and indirect costs according to the allocation formula, use, or service agreement, as appropriate. This transparency will facilitate analysis, planning, and accountability. Of course, smaller service units, particularly within the Indirect category, could be "bundled" for billing purposes where it would be efficient. We have not addressed the extent to which charges should be "cascaded" so that, for example, a particular service center would be billed by Facilities Management, Information Technology Services, etc. and those charges built into the service center's own cost structure. Of course, the revenue-generating parts of the University will ultimately bear all of the costs of the non-revenue-generating centers, but from an accounting and accountability point of view it might make sense to cascade charges for some centrally-provided services.

Overlap with other task forces

A number of the issues raised or implied by our work falls partly within the scope of other task forces. A non-exhaustive list includes

- Revenues: How will central strategic funds be generated—through a prior claim on state general fund appropriations, a tax, or other?
- Governance: What will be the relative roles of the academic units and the central administration in negotiating service level agreements, pricing, and opt-outs?
- Financial Reporting: How will the availability of information affect the feasibility of different allocation strategies?
- Communications: What terminology will best describe the different revenue/cost categories and methodologies and the affected units?

APPENDIX A

Cost Allocation Methodologies

Indirect

Institutional Support
- Board of Visitors Office
- President's Office
- Executive VP--COO office
- General Counsel
- Federal Relations
- Office of the Vice President-Chief Financial Officer
- Office of the Vice President-Management and Budget
- Audit Department
- State Governmental Relations
- Emergency Preparedness

Academic
- Executive VP—Provost office
- Diversity Office

Student Services
- Office of the Vice President-Student Affairs
- Dean of Students office

Undergraduate Student Services
- Undergraduate Admissions
- African-American Affairs

Personnel
- EOP

Direct
- Facilities Management
- Procurement
- Department of Space and Real Estate Management
- Sponsored Programs

Hybrid
- University Police
- University Architect
- Development and Public Affairs
- Regional Business Development
- Major Events
- Risk Management
- Environmental Health and Safety
- Vice Provost—International
- Academic Support

Vice President for Research
Information Technology Services
University Library
Career Services
Human Resources

Self-funded

Athletics
Business Operations
Miller Center
Virginia Health Policy Center
Virginia Quarterly Review
Centers (Advanced Studies; Liberal Arts, Public Service, Undergraduate Excellence, Politics, Miller Center)
Virginia Foundation for the Humanities
Institute for Advanced Technology in the Humanities
Residential Colleges
Student Health

Unallocated:

Comptroller
Treasury Management