

Tuition and Fee Revenue Allocation Work Group

VCU New Budget Model Task Force

Status Report - October, 2016

Work Group Members:

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Original Charge: The Tuition and Fee Revenue Allocation Work Group was charged with developing recommendations for an equitable and transparent revenue sharing model that allocates tuition and fee revenue to the revenue-generating administrative and academic units.

Based on best practices and VCU's core values for transparency and accountability, the group was also charged with putting forth a model that would easily be communicated and understood and the data would readily be accessible and replicable.

Data Selection & Methodology: The tuition and fee revenue allocation group originally selected Academic Year 2014-2015, as the most recent year that was completed. After completing its recommended methodology discussed below, the work group decided to expand the data selection beyond 2014-15 academic year and added 2012-2013, 2013-2014 and 2015-2016 academic years to provide four year overview for the next phase of modeling efforts.

Two (2) tuition and fee allocation methodologies were considered by the work group: by Instructor of record and by College / School of Instruction. The instructor of record methodology distributed shared revenue to the home unit of the instructor. However, it doubled the number of non-academic units from 9 to 21 compared to College / School of Instruction, and in general had more data reliability issues. In addition, some courses are taught by instructors whose home organization has no relation to the course being taught: e.g. UNIV 101 that is taught by an employee of the Admissions Office. These findings were then shared with the University New Budget Model (NBM) consultant, Larry Goldstein of Campus Strategies, LLC, for feedback and it was determined that the methodology to distribute revenue by College / School of Instruction was simpler and provided more consistent results.

The work group explored various tuition revenue split scenarios such as 75/25, 80/20, 85/15 and reviewed best practices at other institutions (Kent State, University of Arizona, University of Washington, UKMC, etc.) that successfully implemented Responsibility Centered Management (RCM) budget model. After careful consideration and in the light of the feedback received from the University NBM consultant Larry Goldstein, concerning most commonly practiced revenue allocation splits in the

industry, the work group decided to adopt 80/20 revenue split to develop its tuition revenue allocation methodology.

VCU's current tuition plan (meaning how tuition is charged to students) posed a significant challenge for allocation as the per credit revenue varies dependent on the total number of credits taken by the student in that semester. For example, a freshman in the College of Humanities and Sciences would be charged \$374 per credit for all credits between 1-14 and be charged for \$187 for credits 15+. Therefore, a student taking 12 credits would result in a revenue of \$374 per credit while a student taking 15 credits would result in \$361.53 $(\$374 \times 14 + 187) / 15$ credits).

The solution to this data problem was to base all tuition and fee amounts on actual assessments (charges) posted to individual student accounts and divide that amount by the total number credits taken by that student in that semester resulting in accurate total revenue for allocation.

The following allocation methodology was used:

- Tuition was divided into a *Base* tuition amount and a *Differential* tuition amount.
 - *Undergraduate Students:* Currently, undergraduate tuition differentials for School of the Arts majors and School of Engineering majors are recorded as separate line items on student accounts. The Differential Tuition amount is calculated by adding those unique differential line items. All other tuition amounts are considered Base Tuition.
 - *Graduate Students:* A base tuition rate was established using standard approved Master's or Doctoral rates based on student residency for the appropriate semesters, and a calculated base tuition amount was calculated for each student based on hours enrolled. The actual base tuition amount for each student was the lesser of the calculated base tuition amount or the actual tuition amount assessed to the student. The Tuition Differential was calculated as the difference between actual tuition assessment and the calculated base amount, for assessments greater than the base tuition amount.
 - *Professional Students:* Current, there is no defined standard rate for professional students. In order to calculate a base and tuition differential, the standard master's rate, based on residency, was used as a base rate for professional students. The Based Tuition and Tuition Differential were calculated using an identical methodology to graduate students.
- Base Tuition revenue was distributed between a student's school / college of enrollment (major school) and the school(s) teaching the courses (school / college of instruction) in which the student was enrolled using an 80/20 revenue split.
 - The based tuition amount for each course is defined as a portion of each student's total tuition revenue proportional to ratio of the course hours to the total billed hours using the formula
 - $$\frac{\text{Course Revenue}}{\text{Total Billed Hours}} = \frac{\text{Course Hours}}{\text{Total Billed Hours}} \times \left(\frac{\text{Total Tuition Revenue}}{\text{Total Billed Hours}} \right)$$
 - Eighty percent (80%) of the course revenue is allocated to the school teaching the course. The remaining twenty percent (20%) is allocated to the school of the student's primary major (major school). If the student's school / college of enrollment (major

school) is teaching the course, then the major school retains one-hundred percent (100%) of the course revenue.

- The Differential Tuition amount is allocated to the student's school / college of enrollment (major school).
- Program and Course fees are allocated based on the Major Business Unit including academic and administrative units for the revenue organization associated with the charge transaction in Student Accounting. Program fees are identified as any fee with a Student-level rule in the fee assessment process. Any fees that can be both a program fee and a course fee are identified as a program fee.
- All tuition revenue is included in the calculations except one-time only tuition amounts (e.g. Bike Race Courses), the Qatar Exchange Program, and contract revenue.
- Courses without associated tuition are excluded in the credit hour calculations. Courses include Cooperative Education (COOP), English Language Program (ENLP), Study Abroad (STUA) and NEXUS (NEXS).

Allocation Model Definitions: The following are the definitions used in constructing the Revenue Allocation Model. *(For more information please refer to the work group's presentation and the document contains tuition and fee allocation scenarios.)*

- **Internal (100%):** Internal amounts are the revenues retained by the student's school of enrollment for courses taught by the same school.
- **Residual (20%):** Residual amounts are the revenues retained by the student's school of enrollment for courses taught by another school.
- **Import (80%):** Import amounts are the revenues retained by the school of instruction for students with majors in another school (non-majors).
- **Export (80%):** Export amounts are the revenues from the students of school of enrollment that are allocated to schools of instruction.
- **Differential:** Differential amounts are the revenues above the base tuition amount retained by the student's major (home) school.
- **Major Total:** Major revenue is the total revenue retained by the major school for its own students. The total amount is the sum of the Home School plus Residual amounts.
- **Total Base Tuition:** Total base tuition is the sum of the Major Total revenue and Non-Major Import Revenue.
- **Major Gross:** Major gross tuition is the total revenue assessed for students school of enrollment. The major gross is the sum of the Major Total (Internal + Residual) and Export tuition amounts.

Recommendations

The principle recommendation of the tuition and fee revenue allocation work group is to assess a tuition sharing methodology based on the following:

- Distribute a base tuition amount per student per course, with 80% distributed to the school teaching the course, and 20% distributed to the student's major school
- Any tuition amounts above the base rate should be considered differential tuition, and would be retained completely by the student's major school
- A base tuition amount, to be determined, should be defined for the professional students, using a fixed number of credit hours for all students. The base tuition should be distributed using the above methodology and any amounts above the base retained by the major school as a differential
- Evaluate the tuition assessment model to calculate all differentials consistently: there should be a standard base rate for all populations, based on degree-level and residency, and any differentials would be posted as a unique line item. This methodology should be consistent with the current differential assessments in the School of the Arts and the School of Engineering
- Evaluate the tuition assessment methodology for a possible conversion to a per-credit model for all populations. This would simplify both the assessment and revenue allocation models. (See open issues).

Open Issues:

- **Tuition Assessment Methodology:** The current tuition assessment methodology is complex and not consistent across all programs. Most graduate and professional programs are assessed at a per-credit hour rate for part-time students, and a standard block tuition rate for enrollment between nine (9) and fifteen (15) hours. The course revenue formula in this model therefore produces different per-course prices for the same course between different students, depending on the number of total hours enrolled for the specific student. Since this model is implemented on actual assessments and course hours, the differences in course price is handled automatically. However, these differences create difficulty when trying to reconcile enrollment to actual revenue, and when trying to project future revenue distributions. The current block tuition methodology for undergraduate students is being replaced by a per-credit model. The new per-credit model has a two hourly rates for students enrolled in fifteen (15) or more credit hours. Therefore, the course price difference exists for undergraduate students as well.
- **Professional Student Distribution:** Due to differences in the recording of professional student enrollment in Banner, large discrepancies in the per credit cost are realized in this model's calculations. The Banner system does not record actual enrollment for Professional Medical students, and a place-holder course is used for administrative purposes. This place-holder course gives an average credit hour load less than one-half of the enrolled hours for Professional Dental students. This results in increased revenue sharing for Medical students compared to Dental students. One possible solution is to define a standard number of full-time hours for all professional students, which would allow for comparable distribution of split revenue across all programs.

- **Entrepreneurial Program Tuition (EPT) agreements:** The handling of EPT agreements going forward will need to be evaluated to determine if the agreements will continue, be modified, or if the new revenue model will replace existing agreements. There is no information on the global impact of EPT arrangements on revenue distribution and cost. Before any decisions about EPTs can be made, this information needs to be surfaced to assess the full impact.
- **Non-Academic Unit Allocation:** The current academic hierarchy can associate academic programs and courses with non-academic units, e.g. the Office Academic Affairs. These associations are often implemented for operational purposes. The outstanding issue is to determine whether these units should be considered as revenue centers, or if the revenue should be redistributed back to the academic units. If the revenue is redistributed, an association methodology would need to be defined in order to calculate a distribution to the academic units.
- **Withdrawals:** The current methodology treats all credit hours equally, including withdrawn courses. Withdrawals during the first two to four weeks of the Fall or Spring term may result in a reduction of tuition, based on the University's refund policy. Therefore withdrawn courses may generate less revenue than other courses. (Note: During the first week of classes, courses are normally dropped instead of withdrawn, and dropped hours are not included in the current methodology.) The University's tuition assessment methodology (see above) creates a withdrawal calculation that significantly increases the complexity of the model and makes it more difficult to understand and forecast. The complexity of the withdrawal calculation methodology is most pronounced for block tuition students (see appendix I). However, the withdrawn hour methodology is only relevant for students with shared revenue; the revenue for a student taking all courses within the home school is not impacted by the withdrawal calculation. Since graduate and professional students are more self-contained within their home school and have fewer withdrawals, one possible solution is to calculate withdrawals for undergraduates only.

General Questions/Concerns:

The handling of tuition waivers remains to be determined. There are several options that appear to be viable alternatives:

- Net actual waivers to revenue assessed per school within the revenue distribution model
- Distribute waivers evenly across all schools based on total assessment
- Include waivers as a central cost
- Include waivers in Financial Aid

Appendix I

Withdrawal Calculation

The following example demonstrates the complexity of a withdrawal calculation for a student withdrawing from full-time to part-time under the block tuition model.

Course	Hours	Refund Percentage
MATH 501	3.00	
MATH 504	3.00	40%
MATH 591	1.00	
MATH 505	3.00	60%
MATH 507	3.00	

Since the student is full-time under the block model (9 to 15 hours), with no overloads, the original tuition charge is \$5,446.50.

After the first withdrawal (MATH 591), the 3 hours above the full-time threshold (9 hours) are ignored. After the second withdrawal, the student is still enrolled in 7 non-withdrawn hours. The total hours eligible for refund is the difference between the full-time threshold and the non-withdrawn hours: 2 hours.

Therefore, the student is responsible for 7 hours at 100% and 2 hours at 60%. The new hour calculation is:

$$7 \times 100\% + 2 \times 60\% = 8.2$$

The new tuition amount is

$$8.2 \times \$605.00 = \$4,961.00$$