DEPARTMENT OF HIGHER EDUCATION

STATE SHARE OF INSTRUCTION HANDBOOK:

*PROVIDING THE METHODOLOGY FOR ALLOCATING
STATE SHARE OF INSTRUCTION FUNDS
FOR FISCAL YEARS 2016 and 2017*

FOR USE BY:

UNIVERSITY REGIONAL & MAIN CAMPUSES

REVISED: May, 2016

FY 2016 and FY 2017 SSI Funding Formula Summary

1. The SSI formula is based the HEFC recommendations available at:
   a. (https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/financial/ssi/Ohio%20Higher%20Education%20Funding%20Commission%20-%20Report.pdf).
2. The Fiscal Year (FY) 2016 and FY 2017 SSI spreadsheets are available online using the following links: https://www.ohiohighered.org/financial under "State Share of Instruction (SSI) Spreadsheets" . Select the respective Operating Budget link for detailed formula calculations for each year of the biennium – either FY 2016 or FY 2017.

Summary of relevant SSI changes

1. The FY 2016 appropriation increased 4.68% from 2015 to 2016 while the FY 2017 appropriation increased by an additional 4% (as announced in the state budget).
2. The FY 2016 and 2017 appropriation increases help offset the undergraduate tuition freeze that was part of the state budget.
   a. Institutions with tuition guarantee programs that allow for tuition increases for new cohorts have their SSI reduced to account for the increase.
3. Degree Credit Calculations
   a. When two degrees at the same level (Bachelor's, Associate…) are earned in the same academic year, the most costly (as determined based on degree costs, discussed below) is treated as the primary degree. Credits attributed to other degrees will count at 25%. Previously, only one degree per level per FY counted in the formula.
   b. When a Bachelor's degree is earned and an Associate's degree has been earned previously, the degree credits for the Bachelor's degree are based on the difference in cost between the Bachelor's degree and the Associate's degree
      i. In the rare instance where the Associate's degree is more costly, the Bachelor's degree credits are based on the credits earned since the Associate's degree was earned.
   c. The degree –granting 'bonus' is capped at 12.5% for degree earners who transferred more than 12 credit hours into that institution. Previously there was no cap on this 'bonus'.
4. Statewide At-Risk Weight Calculation and Application for Degree Completions

   a. Effective FY 2017, the at-risk weights for degree completions will be recalculated based on the following:
      i. The student cohort used to measure the at-risk weights will include first-time students that began at either a regional or main campus.
      ii. Students with transfer credits will be included in the student cohort used for calculating the at-risk weights.

   iii. Associate degree completion will be measured as a positive outcome. Prior to FY 2017, the weights were developed using bachelor's degree completion as the only measure of success.

  b. At-risk weights will be applied to all eligible undergraduate degree completions, including transfer students.

5. The distribution of the Doctoral set-aside will be as follows:

  a. 47.5% in FY 2016 and 40% in FY 2017 to FTE/historic FTE

  b. 35% in FY 2016 and 40% in FY 2017 to cost of degrees awarded

  c. 17.5% in FY 2016 and 20% in FY 2017 to research dollars received

  d. These percentages may change for FY 2017 pending recommendations from the Chancellor's Council on Graduate Studies (CCGS)

STATE SHARE OF INSTRUCTION HANDBOOK

Introduction

The purpose of this document is to provide users detailed information regarding the allocation of the State Share of Instruction (SSI). Fiscal Years 2016 and 2017 continue the process of using different formulas for (a) University Main & Regional Campuses, and (b) Community and Technical Colleges.

As a result, there are two separate handbooks detailing the methodology for allocating State Share of Instruction funds each sector. ***This version is designed to provide the allocation methodology for University Main & Regional Campuses. Please be careful to ensure that you are using the appropriate document.***

I. UNIVERSITY FUNDING METHODOLOGY OVERVIEW

The University funding model consists of two primary funding components:

1. Course Completions (aka Completed FTE) which comprises about 30% of the distribution
2. Degree Completion which allocates 50% of the distribution
3. Earmarks, if applicable

    a. Access Challenge Allocations

        i. In FY 2016 each eligible institution shall be allocated an amount equivalent to 2/3 of its FY 2015 allocation.

        ii.   In FY 2017 each eligible institution shall be allocated an amount equivalent to 1/3 of its FY 2015 allocation.

    b. POM allocations

        i. In FY 2016 each eligible institution shall be allocated an amount equivalent to 2/3 of its FY 2015 allocation.

        ii.   In FY 2017 each eligible institution shall be allocated an amount equivalent to 1/3 of its FY 2015 allocation.

        iii. Funding for the POM allocation is prorated among all institutions based on their earnings in the formula.

4. Set-Asides, if applicable

    a. Medical model set-aside

    b. Research Doctoral Set-Aside allocation

The following methodology is used to determine the share of the total allocation to be distributed through each funding component of the university SSI formula

Start with the University appropriation for the fiscal year in the parameters tab, which includes funding for both main and regional campuses. The amount available for the course completions component is determined after the following calculations are complete:

a. Reserving 50% of the University SSI funding for a weighted degree completion component. The degree completion funding component is calculated based on data from both university main and regional campuses.

b. Subtracting the following from the remainder:

- Doctoral Set-Aside Allocation = 11.78% of the total annual State Share of Instruction appropriation for Universities.

- Medical 1 Set-Aside Allocation = 1.48% of the total annual State Share of Instruction appropriation for Universities.

- Medical 2 Set-Aside Allocation = 6.41% of the total annual State Share of Instruction appropriation for Universities.

- FY 2009 Access Challenge Allocations for Access Institutions (University of Akron, University of Cincinnati, Cleveland State University, Central State University, Shawnee State University, Youngstown State University).

- The POM distribution is not subtracted here because it is covered later as described above.

c. The remaining university SSI funding shall be allocated through the course completion component of the SSI formula.

II.   DETERMINING THE COST OF COURSES AND DEGREES

Because both the Course completions and the degree attainment components of the formula have a cost basis, the determination of these costs is explained first.

Below are the steps used to calculate the model costs for courses and degrees.

Step One: Collect Resource Analysis Cost for Each Subsidy Model

Collect Resource Analysis Data to Develop the Statewide Average Model Cost for Each Subsidy Model

The Department of Higher Education collects cost and enrollment data from each of the campuses (all sectors).   These data include a course level and subject code for each course which are used in combination to categorize courses into subsidy models based on cost and content. The cost and enrollment data are used to determine the average cost per FTE for each Subsidy Model for the most

recent 3 years available prior to running the SSI formula for the first year of the target biennium. In determining the average cost for the Fiscal Year 2016 and FY 2017 biennium, the calculation is based on data for Fiscal Years 2011, 2012, and 2013. The cost allocation is done in the Resource Analysis process described on the web at http://regents.ohio.gov/hei/RA/RAspecifications.html , and collected in the spreadsheet at "L:\Budget-SSI\FY2016-17 DEV\RA for model costs for FY 2016-17 SSI.xlsx", in the tab called *3 and 6 year model cost*.

Normalize each year's cost by inflating the costs.

Above, an average cost for instruction for each model was calculated using three years (Fiscal Years 2011, 2012, and 2013) of costs from Resource Analysis. In order to make these costs comparable, it is necessary to inflate each of the prior years of Resource Analysis cost data to reflect Fiscal Year 2013 costs (the last year of actual data) using the Higher Education Cost Index (HECA).

This is also done in the spreadsheet at "L:\Budget-SSI\FY2016-17 DEV\RA for model costs for FY 2016-17 SSI.xlsx". The statewide average costs for each model for the biennium are located in the ***SSI spreadsheet*** in the tab called *Model Cost (courses).*

Add Higher Education Funding Commission Priority Weightings for Science, Technology, Engineering, Mathematics, Medicine, and Graduate Courses by model

The Higher Education Funding Commission endorsed a priority weighting for STEM² and graduate models.

The STEM² weighting was calculated in a manner that held STEM² and Medical models harmless relative to the amount of state support the same instruction earned in the previous SSI formula, using FY 2007 as the base year. In cases where this addition is negative, it is set to zero (i.e. it never reduces the SSI of a model).

The graduate weights (used by University Main and Regional campuses) were implemented to ensure that the relative amount of state support for graduate and undergraduate activity under the new funding model remains comparable to the earnings that utilized the enrollment model, using FY 2009 as the base year.

The STEM² and graduate model priority weightings are multiplied by the respective model cost for each of the 26 models. *The resulting calculation is called the **Model Reimbursement Cost** and can be viewed in the **SSI spreadsheet*** in the tab called *Model Cost (courses).*

 Note: The original plan was to gradually phase out the priority weightings for the STEM² models, with the exception of the Medical 2 model, as the Resource Analysis average cost calculations for the models begin to reflect this additional SSI funding. No adjustments have been made.

Determine the Statewide Average Degree Costs

The cost of each degree is calculated using the statewide average cost of the SSI model for each course taken, adjusted, weighted, and inflated to the appropriate year as above.   The costs of all courses taken

at any USO campus, through the year and term the degree is awarded, by students who met the following criteria are included in these calculations.

For FY 2016-FY 2017 degree costs, a query of HEI data is used to select degrees earned in FY 2011, FY 2012 or FY 2013 for which there is evidence that all instruction for the degree was earned on a University System of Ohio (USO) campus. (Note: A student's coursework needs to be completed within the time frame of the HEI system's existence (i.e. FY 1999 and later), to be included in the calculation.) In other words, we compare the credit hours earned of each degree recipient to the minimum credits required for the degree at each institution (as reported in the Academic Program file in HEI) to determine whether that degree should be included in the calculation of degree costs.   Barring a few special exceptions, undergraduate enrollments do not count for graduate degrees and vice versa.   Also, for graduate degrees, the course must be taken at the degree granting institution.

Once the cost of all degrees earned in a given subject and level is calculated then the degrees are aggregated as shown below. A statewide average degree cost is then calculated for each level of the aggregation.

The statewide average degree cost is calculated by level. Different levels have different aggregation categories. Associate degrees are grouped into the various technical areas, plus Liberal Arts as follows:

Technology Areas for Associate Degrees

Technology Areas	Discipline Areas	Subject Fields
Business Technologies	Business	
Engineering Technologies	Engineering	
Health Technologies	Health	
Public Service Technologies		Public Administration and Services
		Protective Services
Agriculture Technologies		Agriculture
Natural Science Technologies	Natural Science and Math	Exclude Agriculture
Liberal Arts	Arts & Humanities	
	Education	
	Social and Behavioral Sciences	Exclude Public Administration and Services
Other	Unclassified	Exclude Protective Services

Bachelor's, master's and professional degrees are grouped by Subject Field (based on the CIP code as reported in the DC file).

Doctoral degrees are grouped by Discipline Area (which is broader than Subject Field), because there are too few degrees in some Subject Fields.

6

The category into which a degree falls is determined by the level and the subject code (or CIP code) under which it is reported by the institution in the Degrees and Certificates Awarded (DC) file.

The costs (sum of costs of courses taken) of all degrees earned in the given technology area, subject field, or discipline (as appropriate given the degree level) are averaged to determine the statewide average cost for all degrees fall into that category. These degree costs can be viewed in the *SSI spreadsheet* in the tab called *completions model costs.*

III. COURSE COMPLETION COMPONENT OF THE FORMULA

Below are the steps used to calculate the course completion component of the funding methodology:

Collect Subsidy Eligible Completed FTEs and at-risk completed FTEs and calculate the 3-year averages

To add stability and predictability to the SSI allocations, all allocations are based on FTE's that are lagged one-year. Therefore, the Department of Higher Education will provide a summary of the subsidy course completions (completed FTE) by Subject and Level for the 3-years ending in the year preceding the year for which SSI is being calculated. The source for the FTE data comes from the HEI system and can be viewed in the *SSI spreadsheet* in the tab called *'subject level'.*

A subsidy FTE is defined as 30 semester credit hours or 45 quarter credit hours. Medical, Veterinary Medicine, and Dental Health FTE are based on student enrollments and are not included in the general FTE, but in the Med set-asides. Please note that high school students and credits earned at the college while students are in high school are included in the formula unless the course or the student is marked ineligible for one of the reasons shown here: https://www.ohiohighered.org/node/1872

Three-year averages of subsidy eligible completed FTE and at-risk subsidy eligible completed FTE counts are generated for each eligible combination of institution, subject field, and level of instruction. For Fiscal Year 2016 SSI, the FTE data from fiscal years 2015, 2014, and 2013 are used in the calculation. For Fiscal Year 2017 SSI, the FTE data from fiscal years 2016, 2015, and 2014 are used in the calculation.

The completed FTEs, at-risk FTEs, and resulting average calculations can be viewed in *the SSI spreadsheet* in the tab called *'Subject-Level'.* The first two years are actual FTEs and the latest year's FTEs are projected until actual data are available. The model using projected data is used for the first 6 months' payments and the model with all actual data is used for the second six months' payment. The model with all actual data (or settle-up) should be available in the fall of the fiscal year (so for example, actual data and the second half allocations for the FY 2016 distributions should be available in Fall 2015).

Define and Weight the access completed FTE:

Students are at-risk for course completions if they have either or both of the following characteristics:

- **Financial:** EFC < $2190, based on FAFSA application data
- **Academic:** ACT score of less than 17 in either Math or English or completion of developmental course work at any public college or university for students with no ACT scores

Any course completed (FTE) by an at-risk student is considered at-risk and that FTE is included in the at-risk add-on as described below.

At-Risk Students are given additional weighted FTEs based upon the difference in completion rates for at-risk students compared to the course completion rates for students who are not determined to be at-risk. The at-risk FTEs are multiplied by two factors, a model specific weight and an institution specific index to determine the weighted at-risk FTE. For the calculation of the statewide weight, students are considered at-risk if they have one or both of the above characteristics. Students are placed into one of 4 categories: Not at risk, financial risk only, academic risk only, or academically and financially at risk.

The at-risk course completion weight is calculated as the difference between course completion rates for non at-risk undergraduate students versus the course completion rates for at-risk students. This weight is statewide (not institution specific) but is calculated by model, so for example, the weight for engineering courses might be different than that for English courses. The at-risk course completion institution index is institution specific and it captures the magnitude of the "at-risk" student population at each institution in all of the combinations of the various risk categories. This takes into account the number of students in each risk category as well as how at-risk the students in that category are.

The at-risk weights and indexes are calculated in the **enroll at risk tab** and explained in slightly more detail in appendix 1 .

<u>**At-Risk Course Completions add-on FTE =**</u>

(3-year average At-Risk Completed FTEs (from Step One))
                                      *
(Statewide Average Course Completion At-Risk Weights by model)
                                      *
 (At-Risk Course Completion Index (by institution)

This is calculated in the *subject level tab* **in the SSI spreadsheet**.

Calculate Course Completions SSI by Institution, Subject Field, and Level of Instruction

The amount of the SSI appropriation that is allocated to course completions (as determined in section I above) is prorated to each combination of institution, subject, and level.   First the 3-year average completed FTE for each combination is multiplied by the appropriate model cost (calculated as described above) to determine the reimbursement cost for each combination. Then these

reimbursement costs are summed to calculate a total reimbursement cost for the sector. Next, this is done for the at-risk add-on FTE. The ratio of the reimbursement cost calculated for each institution, subject, and level to the total reimbursement cost for the sector is multiplied by the course completion allocation to determine the SSI distributed for that institution, subject, level combination. These steps are repeated for the at-risk add-on FTE. The sector total used for the ratio is the sum of the reimbursement costs for completed FTE and for the at-risk add-on FTE.

This calculation can be seen in the *SSI spreadsheet in the 'subject level' tab.* The appropriation being prorated and the total reimbursement costs for the sector are seen at the bottom of the columns.

Starting in FY 2015, the weighted course completion funding component is allocated by institution - across both university sectors (university main and regional campuses) with a single appropriation, reimbursement costs, and SSI allocations.

The *'Summary' tab in the SSI spreadsheet* sums the course completions SSI distributions by institution to show the total amount each institution earned from course completions and at-risk course completions.

IV. Degree Completion Component of the Formula

This section provides the methodology for allocating the degree completion component of the SSI formula, as shown in Section I (50% of the appropriation in FYs 2016 and 2017).

Per the Higher Education Funding Commission's recommendation the following degrees shall contribute to the degree counts in the degree attainment model:

- Associate degree completion at any university regional or main campus shall be eligible for degree completion funding;
- Baccalaureate degrees; and
- Masters and Professional degrees, excluding Medical 1 and Medical 2 degrees.

Starting in FY 2014 and continuing in this biennium, subsidy eligible degrees shall be adjusted as follows:

- The degrees conferred to students identified as residents of the state of Ohio in any term of their studies, as reported through the Higher Education Information (HEI) system student enrollment file, shall be weighted by a factor of 1.

- The undergraduate degrees conferred to students identified as out-of-state residents during all terms of their studies, as reported through the Higher Education Information (HEI) system student enrollment file, who remain in the state of Ohio one year after graduation shall be weighted by a factor of 50 per cent. In order to avoid unnecessary delay in awarding SSI for degrees earned, it was agreed that an institutional 'stay in state' rate would be determined and used as a proxy for knowing which graduates remained. This can be seen in the *SSI spreadsheet in the 'Institutional Out-of-State Rate ' tab*

Determine the number of degree credits earned by each University

First, data on all degrees earned at each institution in each level and subject (or discipline for doctoral degrees as explained in section II above) is collected. This includes Associate's, Bachelor's, Master's, and Professional degrees (excepting Medical degrees) awarded at all university main and regional campuses. If a student earns more than one degree at the same level, in the same year, the most costly of those degrees is included wholly and all others at that level, earned in that year are weighted at .25. For FY 2016, degree attainment is measured by the three-year average of the degree credits associated with degrees awarded in FY 2013, FY 2014, and FY 2015. For FY 2017, degree attainment is measured by the three-year average of the degree credits associated with degrees awarded in FY 2014, FY 2015, and FY 2016. Until the actual degree data for the latest year is input into HEI, degree credit projections which are based on degree projections from the institutions are used .

Because there are no data in HEI that explicitly relate courses to degrees, the formula converts all credit hours to semester hours and calculates and sums the cost of all college level course credits earned in a USO university (main or regional campus) earned by each graduate as long as they meet these criteria:
1) The credit hours were earned since the last degree at that same level was earned
2) The credit hours were earned in the same term as the degree or earlier
3) The credit hours are reported as completed in the course enrollments (CN) file
4) In general, undergraduate credit hours do not count toward graduate degrees, although there will be some exceptions to this rule. For example, University of Cincinnati Pharmacy students receive a graduate degree but there is no terminal Bachelor's degree as part of the program and so most are never reported as graduate students. Undergraduate credit hours (those taken as an undergraduate) apply to these degrees.

The fraction of the degree or degree credit used for each contribution institution is:

Cost of credit hours earned at the individual institution /
(max(Cost of total credit hours earned at all IUC institutions, statewide average degree cost))

If the cost of a given degree is less than the statewide average cost, the remainder of the cost between the cost of total credit hours earned at all USO university campuses and the Statewide Average Cost of the Degree, if any, is converted to degree credits and is awarded to the degree granting institution as a bonus. For example if the cost of a degree including all credits in the IUC is $90,000 and the statewide average cost is $100,000 then .9 degree credits would be awarded based on the cost of credits earned in the system and the degree granting institution would get a 'bonus' of .1 degree credits for that degree to. Starting in FY 2016, the bonus is capped at 12.5% for degrees earned by students who transferred in more than twelve credit hours.

If the cost of the degree was greater than the statewide average cost for that degree there is no bonus. Also, no bonus is applied if a previous degree at the same level had been earned.

Starting with the FY 2016 SSI, there are also adjustments made for multiple degrees earned. If an associate's degree is earned and then a bachelor's degree is earned, the hours that counted toward the associate's degree do not count toward the bachelor's degree. If the bachelor's degree is more costly than the associate's degree, then the difference in costs is credited to the bachelor's degree. If the associate's degree is higher cost (this would be rare) then the bachelor's degree credits include only the courses taken between the associate's degree and the bachelor's degree. Also, previously, if two degrees at the same level were earned in the same FY, the more costly was included and the other(s) were dropped. Now, in that situation, the most costly is weighted at 1 and any other(s) at .25.

The resulting degree credits are in the SSI spreadsheet in the **tab called SL degrees**.
When degree projections are included, the tab called '***Degree percents***' calculates projected degree credits, projected resident & non-resident degree credits, and projected at-risk degree credits based on historic trends.

Determine which Degree Credits are Eligible for At-Risk Funding for each at-risk category.
At-risk degree credits are defined as those from above that were earned by students with any of the following characteristics:

- **Age:** The student was over 22 when they began college. This calculation uses the difference between the year first enrolled in any USO institution and year of birth as full birth dates are not available for all students.

- **Financial:** The student had an EFC of less than $2,190 in any of the years prior to degree attainment

- **Academic:**   The student scored less than 17 on the ACT Exam in either Math or English OR, if no ACT data available, if the student completed any Developmental course on any USO campus at any time before the degree was awarded.

- **Race:** If the student was reported as African American, American Indian, or Hispanic from the Student Entrance table with the same admission area as the corresponding DC record.

At-risk degree credits are identified in the selection of degrees for SSI process. Degree credits earned through the 'bonus' rather than through courses earned at that institution are not included in the at-risk add on for degree credits. The resulting degree credits are in the SSI spreadsheet in the **tab called SL degrees**.

Calculate the Statewide At-risk weights for undergraduate degrees earned.

Each student (and therefore degree credit) is placed into one of 16 categories based on which of these risk factors they have, ranging from students with none of these risk factors to students with all four risk factors.

For FY 2016, the at-risk weights for undergraduate degrees are designed to reflect the decreased likelihood of students graduating based on whether or not they are at-risk. They were calculated using cohorts of full-time degree seeking students who started college on a USO main campus in summer or fall 2001, 2002, 2003 and 2004 and measuring their progress for the next 8 years. The 8-year bachelor's degree attainment rate of students who were in that at-risk category was compared to that of students who were not at-risk to determine the weight for each category.

For FY 2017, the cohort used for determining the at-risk weights for undergraduate degree completions will include students who begin at regional campuses as well as transfer students. In addition, students completing an associate's degrees will be included as achieving a positive outcome, along with bachelor's degree achievement. Specifically, the at-risk weights were calculated using cohorts of full-time degree seeking students who started college on a USO main campus in summer or fall 2002, 2003, 2004 and 2005 and measuring their progress for the next 8 years. The 8-year associate's or bachelor's degree attainment rate of students who were in that at-risk category was compared to that of students who were not at-risk to determine the weight for each category.

The calculation of the at-risk degree weights, as well as institution level data, is available in the **tab called 'degree index**.'

Step Four: Calculate the degree credit costs and weighted degree credit costs for each university by degree categories and prorate the SSI based on this weighted degree credit cost.

Degree credit counts are separated into 2 categories: in-state and out-of-state. Within each of these there are overall degree credits and at-risk degree credits (the at-risk degree credits are really a subset of the overall credits and are used as add-ons in the formula).

The appropriation for degree completions is prorated to each combination of institution, subject, and level by the ratio of cost of the degree credits in this category to the total cost of all degree credits. The cost of out-of-state undergraduate degree credits is only included if they stay in Ohio one year after graduation (i.e. are enrolled in a state college or university or are found to be employed in the state). Degrees earned by out-of-state students who do remain in Ohio are funded at 50% of the degree cost. In order to avoid a delay in funding out of state degrees, an institution specific 'rate of stay' is used to determine what percentage of out of state degree credits should be included.   The rate is based on the percentage of their out of state undergraduate graduates who remained in the state and were employed (according to ODJFS records) &/or pursuing more education at a USO institution. This rate uses the most recent 3 years' worth of graduates for whom ODJFS data are available. For the FY 2016-17 biennium, this includes graduates from FY's 2010, 2011, and 2012.This can be found in the *Institutional Out-of-State Rate* tab.

The appropriation for degrees is prorated to each combination of institution, subject area, and degree level by the ratio of cost of the degree credits in that combination to the total sector degree costs. The sector total used for the ratio is the sum of the costs for degrees overall and the costs of at-risk degrees.

The results of the calculation of SSI for degree credits can be seen in the **SSI** *spreadsheet in the 'SL degrees' tab.*

V. The Doctoral Set Aside and Medical Set-Asides

  a. For FY 2015, 55% of the total doctoral set-aside for enrollments for each eligible institution is calculated as detailed in Step One below. For FY 2016, it is 47.5%.

  b. Allocate 2/3 of the remaining doctoral set aside funds (approximately 30% of the total doctoral set aside) based on weighted cost of doctoral degrees.

  c. Allocate 1/3 of the remaining doctoral set aside funds (approximately 15% of the total doctoral set aside) based upon their respective shares of the most current NSF expenditure data available (with the NIH expenditures weighted by 50%).

  d. The entire Medical I set-aside is allocated to OSU

  e. The Medical 2 set-aside is allocated amongst the institutions that have medical schools based on their FTE shares.

Calculate the FTE component of the Doctoral Set Aside for each institution with doctoral instruction.

Calculate the doctoral set aside for each institution with doctoral instruction. The FTE portion of each institution's doctoral set aside is based on a fixed percentage (or Doctoral Share) of the doctoral appropriation. The doctoral shares for each institution were established by the Graduate Funding Commission based on their FY 1994-1998 FTE. If the institution's subsidy eligible 3-year average Doctoral 1 equivalent eligible FTE (based on FY1999 FTE) is less than 85% of the Base Doctoral 1 equivalent FTE for the institution, the doctoral set aside is reduced by the % less than 85% and the unused SSI is included in the remaining doctoral set aside. Doctoral 1 equivalent FTE is equal to Doctoral 1 FTE + 1.5 * Doctoral 2 FTE.
Note that the doctoral set aside earnings described here may not allocate all of the earnings since some institutions can fall below the 85% rule.

*The doctoral FTE share calculation can be seen in the **Doc Set Aside tab**.*

Step Two **: Calculate the Degree and Research components of the Doctoral Set Aside for each institution with doctoral instruction.**

Calculate the remaining doctoral set aside allocation by subtracting amount used in Step One from the total set-aside allocation. Allocate 2/3 of the remaining doctoral set aside funds based on weighted cost

of doctoral degrees. This is based on degrees awarded at the institution, not degree credits (i.e. proportional degrees are not used here). The costs of the degrees are determined as described above in Section II.

 Allocate 1/3 of the remaining doctoral set aside funds based upon each institution's respective shares of the most current NSF expenditure data available (with the NIH expenditures weighted by 50%). The research expenditures can be seen in the tab called FY 2013 Research in the SSI spreadsheet.

The doctoral degrees and research shares calculation can be seen in the **Doc Set Aside tab***.*

Step Three: Allocate Medical I and Medical II Model Funding

The Ohio State University is the only University to have Medical I programs; therefore, the entire Medical I funding model shall be allocated to The Ohio State University.   Med 1 programs include doctoral/professional level dentistry and veterinary.

The Medical II model funding is allocated based on a 3-year average eligible FTE. The FTE is determined by counting enrollments of professional level medical students since medical course enrollments are not reported through HEI. Each professional level medical student enrolled in a given term is assumed to be full time that term so that a student enrolled 2 semesters would count as one annual FTE. Because of semester conversion, the medical FTE is calculated for FY 2013 so that all terms (including summer 2012) are treated as semesters. This can be seen in the *"Med 2 calculations" tab of the spreadsheet*. The medical II share calculation can be seen in the ***med 2 tab.*** This special calculation for FY 2013 will not be necessary starting with the FY 2017 SSI.

V: Earmarks: POM and Access Challenge

These earmarks are remnants of the old model and are being phased out. Access Challenge was a program to help the more open access institutions with lower tuition rates be able to keep their tuition low in order to serve often underserved students. Much of this previously went to regional campuses, but at the behest of the Higher Education Funding Commission, this was removed from the regional campus formula in FY 2014. In FY 2015, these amounts are based on what the institution received in 2009. In FY 2016, they receive 2/3 of that amount, and in FY 2017 1/3 of the FY 2009 amount.   A university is eligible for Access Challenge in FY 2016-FY2017 biennium only if its main campus received Access Challenge in the FY 2009 formula.

Similarly, a number of university main campuses had significant protection in the old model related to the amount of NASF that they had compared to their activity based POM.   This amount is also based on what was received at the main campus in FY 2009. It will also be phased out such that in FY 2016, they will receive 2/3 of that amount, and in FY 2017 1/3 of that amount. A university is eligible for NASF protection in FY 2016-FY2017 biennium only if its main campus received NASF protection in the FY 2009 formula.   The NASF protection is not a separate pot of money, nor is money set aside from the overall

appropriation for POM. The amount that some institutions receive through the POM earmark is offset by contributions from all universities (including those on the protection) based on their total formula earnings.

This can be seen in the *SSI spreadsheet in the "earmarks" tab and in the "summary" tab.*

VII: SUMMARIES

Other tabs in the SSI spreadsheet gather and summarize the values calculated as described above. The *Summary tab* shows the amount of SSI each institution will receive from each component (completed FTE, degrees, Doc and Med set-asides, and earmarks) based on those calculations.   This tab also compares the overall total current year values to the totals from the previous SSI year. The *output tab* provides a simple summary of the totals by institution and compares the current year totals to the previous year totals. It also shows the percentage of SSI each institution got by component (completed FTE, degrees, and total) or each institution's share of the funding for FTE, degrees, and overall. Note: In some cases these numbers may not seem to make sense (for example if the share of FTE and share of degrees are both less than the share of total) but this is because the set asides and earmarks are not included in the shares. If any adjustments to the formula are needed (due to bridge funding or other legislative mandates, there may be another summary tab that will account for that. In FY 2016, there is an *output adjusted tab* that adjust the institutional totals based on the legislation related to the tuition freeze and tuition guarantee programs. The first tab in the spreadsheet, called parameters, shows the total SSI appropriation and the amounts for the Doc and Med set asides. This information is used extensively throughout the SSI calculations.

VIII.   APPLY THE CAPITAL DEDUCTION FOR EACH INSTITUTION PRIOR TO DISTRIBUTING THE STATE SHARE OF INSTRUCTION ALLOCATION

This step of the calculation reduces the State Share of Instruction allocation for institutions that have negative adjustments that are the result of the implementation of the Regents' incentive-based capital funding policy. As part of this policy, institutions with debt service costs (for qualifying capital projects) that exceed their formula-determined capital allocation have that difference deducted from their State Share of Instruction allocation. Pursuant to the recommendations of the SSI Consultation and the Higher Education Funding Commission, funds from this capital deduction are to be transferred to the Capital Component line item. This transfer allows the Capital Component to be fully funded. This is not shown in the SSI spreadsheet, but does affect the actual distributions.

Appendix #1 – Summary of the Course Completion Index

In order to develop an institution specific course completion index, staff analyzed student enrollment and completion data from a cohort of enrolled students from FY 2008 and FY 2009. Two risk factors were identified as relevant: financial risk and academic risk. Specifically, the students were categorized in one of the four possible categories based on combinations of these risk factors:

1. Students having no risk factors
2. Students identified as being financially "at-risk," only. In this case, the definition is tied to those students with an EFC less than $2190, anytime in the latest three years.
3. Students identified as being academically "at-risk," only. This includes those students with an ACT score of less than 17 in either English or Math; OR, students who completed any developmental course in any year (at any USO school) if an ACT score was not available. The ACT score was scaled to 17 so that it would classify approximately as many students as being at risk as the developmental course test.
4. Students identified as being both financially and academically at risk.

The student level cohort data led to the development of an institution index for course completions that provides additional weighting to those at-risk categories defined above. The weightings for each at-risk category is calculated as the statewide difference in the course completion rate of the students with no risk factors as compared to the completion rate of the respective at-risk categories. The institution index is then calculated as follows:

[Weighted Student FTE Cohort] / Total (Un-Weighted) FTE Cohort

While a summary of the student cohorts and indices appears in the *enroll at risk tab* in the SSI spreadsheet, and example of the calculation of a single course completion index appears below. Note: the weights below are rounded, while in the actual calculations they are not, so if you want to calculate an index, please keep that in mind.

Example Calculation of an institutional at-risk index for course completions:

Total Cohort	= 27,839 Eligible FTE
No Risk Factors	= 10,351 Eligible FTE (Un-weighted with a factor of 1.000)
Financial Risk only	= 6,777 Eligible FTE (Weighted by a factor of 1.107)
Academic Risk only	= 3,759 Eligible FTE (Weighted by a factor of 1.065)
Both "At-Risk" Factors	= 6,502 Eligible FTE (Weighted by a factor of 1.181)

At-Risk Index = [(10,351) + (6,777*1.107) + (3,759*1.065) + (6,502*1.181)] / 27,839

At-Risk Index = [10,351+7,502+4,003+7,679] / 27,839

At-Risk Index = 29,535 / 27,839

At-Risk Index = 1.078

The statewide at-risk weight (by model) is calculated by comparing the graduation rates of not at risk students to those of at-risk students (for this calculation, students with either or both risk factors are considered at-risk without any further distinction) as follows :

(Graduation rate for not at-risk students/Graduation rate for at-risk students) -1

These weights are:

AH 1	*18.44%*		*BES 4*	*6.07%*
AH 2	*9.46%*		*STEM 1*	*24.06%*
AH 3	*6.55%*		*STEM 2*	*11.68%*
AH 4	*6.48%*		*STEM 3*	*11.40%*
BES 1	*15.48%*		*STEM 4*	*5.68%*
BES 2	*14.06%*		*STEM 5*	*3.72%*
BES 3	*7.97%*			

The index and weight are then applied to the At-Risk Completed FTEs as follows:

At-Risk Course Completions add-on FTE =

(3-year average At-Risk Completed FTEs (from Step One))

        *

(Statewide Average Course Completion At-Risk Weights by model)

        *

(At-Risk Course Completion Index (by institution)