Changes and Outstanding Issues

The accompanying workbook ("OSU Budget Model Comparisons FY16 to FY18) shows the model allocations under some different assumptions. These are noted at the appropriate places in the following discussion. The "Model Variable Comparisons" is the relevant tab for showing the changes as assumptions are changed. The "Fiscal Year Comparisons" tab shows the FY16, FY17, and FY18 model allocations (with the actual adjusted initial budget) with the same assumptions, to show the changes that are driven principally by changes in credit hour and degree numbers.

What has changed in these versions?

- The FY16, FY17, and FY18 (two versions one using FY17 projections and one FY17 actuals) have been updated to the same set of assumptions so the effect of changes in credit hour and degree production can be seen clearly.
- Ecampus and summer allocations have been adjusted to follow current practice of distributing 80% of net tuition with settle-ups during the year to actuals. These amounts are taken "off the top" of the productivity allocation since they are defined by specific amounts per credit hours.
- The proportions of the other five productivity pools were adjusted so they summed to 100% after Ecampus and summer were allocated and so they reflected the distribution in the original FY16 version.
- The discipline and level (baccalaureate, masters, doctoral) weights by CIP code were recalculated using a more extensive set of data and a better averaging method. These were used to calculate weighted averages for colleges based on numbers of majors in each CIP code. The change in weights made less than a 1% difference in the allocations for most units with other settings held constant.
- A number of computational corrections were made that impacted Agricultural Sciences and interdisciplinary graduate programs (because the allocations are from pools of funds, changes anywhere have at least small impacts on most productivity allocations).
- The strategic allocation was modified to include the new commitment to capital renewal (or depreciation) funds and to more clearly identify the necessary community support funds (the allocations at the end of the model to support strategically important programs that do not otherwise receive sufficient funding.
- The allocations to the two professional health programs in Pharmacy and Veterinary Medicine were set up with two options. There are disciplinary weights for the professional programs which are much higher than weights for other graduate programs (these disciplines are very expensive per student nationally). Those weights can be used, but then the allocations come entirely out of the graduate pool so other colleges with large graduate populations contribute disproportionately to funding those higher weights. After those allocations, an adjustment to floor funding is still usually needed for Veterinary Medicine. An alternative approach is to use weights for the two programs equivalent to those for health sciences graduate programs, then to make an adjustment allocating 95% of gross revenues generated by the two programs to the Colleges (the 5% is a small contribution to institutional overhead). There is then an adjustment to floor funding (small or none for Pharmacy, larger for Veterinary Medicine). This requires a larger community support fund and so distributes the additional funding for these programs across all programs, since the community support fund is taken at the beginning.
- A budget floor was established based on either FY15 or FY16 budgets. The respective budget allocation was taken, less any dedicated or strategic funds, to establish a floor budget, to which

any strategic or dedicated funds in the applicable budget year are added (we can talk through the concepts around the budget floor and how we set them).

- The community support fund was more clearly called out and distributed, so that there was a fully allocated version of the model. The community support fund needs to be about 2% to 3% of total revenues to provide a sufficient pool (with other strategic allocations) to support the defined budget floors for all units.
- There are some portions of the model that need data updated (interdisciplinary graduate numbers for FY17 and FY18, actual (as opposed to projected) degrees to international students and Pell recipients, and the history of some of the research funding data. None of these will change enough from current numbers to make a significant difference in allocations, but they will be updated by the end of October.

What are the outstanding issues?

- How should the strategic allocations for Pharmacy and Veterinary Medicine be structured? Choices include using disciplinary weights within the model, allocating most of the gross revenue to both programs, using a floor adjustment, or providing a fixed dollar allocation. Each has impacts on the allocations to other programs and budgets.
- How should the budget floor be defined? Which fiscal year should be used and how should the floor be applied?
- Is the 65%-35% productivity allocation a "hard" division? If so, for example, in the FY18 budget an additional $1.8M would have to be removed from the service and support units and reallocated to the academic pool. Or is this split viewed as one of the "levers" that can be adjusted within the model as levels of support are expected to be increased or decreased?
- Is the split for interdisciplinary graduate programs appropriate? Right now, each degree here is weighted at 1.2 times other degrees. 96% of that is allocated to the college of the student's major professor, 24% allocated to the Graduate School to support those programs
- Should the disciplinary weights for Ph.D. degrees all be the same, or should the current weights that vary by program be used?
- Should there be a settle-up to the initial budget in Fall of each year?   The initial budget is built on projections of the current year (for example FY18 uses projections of FY17). There are final numbers for credit hours and degrees awarded in summer of the next fiscal year, so the initial budget released in April could be updated in a final version by the end of August. This would require setting aside some additional funds as a settle-up pool.
- Should there be an annual limit on budget reductions or gains as the model is implemented, likely as a percentage of the budget allocation?
- There are currently small allocations for Honors College teaching and for courses taught at Cascades. Both are intended to provide an incentive and defray costs (particularly for Cascades) of participating in programs there. Are these appropriate and should they be retained or modified?
- What the appropriate metrics for service, support and management units (students plus faculty for the library, square feet for facilities, etc.?) and what are the current values for those metrics? This is a part of eventually moving those units to a metric based allocation discussion that will allow easier comparisons to peer institutions.
- Should there be a component of the allocation that creates an incentive for managing space? One approach to this is to charge a nominal amount per assigned square foot. In the first year, there would be an allocation out to units that was equal to the initial charge. In the next years,

if units reduced their space, the savings would be retained by the unit, but if units added space there would be an increased cost. The charge would not be the full cost of operating space (and would not vary by space) but should be large enough to create a meaningful incentive to manage space thoughtfully. This has not been included at this point, as the space data was not sufficiently good to take this approach. However, that data should be available shortly.

- There are some data updates that need to be completed, which will make small adjustments in the allocations but not significant ones. These include:
  - FY17 and FY18 numbers for interdisciplinary graduate degrees
  - Undergraduate minors and certificates awarded
  - FY18 actual values for degrees to the strategic population pools
  - Review of the allocation of Honors college credit hours
  - Completion of the data on research productivity to provide a clear record
- Finally, there are some additional tools that will be developed after some of the decisions noted above are completed, including:
  - A planning tool that will let colleges see how changes in numbers should impact projected budgets
  - An automatic per metric table that shows the allocations per unit credit hour or degree
  - Graphics and presentation materials showing the distribution of budget between various functions (instruction, research, etc.) or units (academic vs. support).

How big an impact do some of these have on the allocations?

As the model has developed, there were changes in each version in particular settings or calculations. The Budget Office has updated the FY16, FY17, and FY18 models to have similar structures. This allows a look at the consequences of particular changes and the changes over time caused by productivity growth. The FY16 and FY17 versions are based on actuals (FY14, FY15, and FY16 for the first; FY15, FY16, FY17 for the second). The FY18 version includes a versions based on FY15 and FY16 actuals, with FY17 projections (done in March) and a version based on FY15, FY16 and FY17 actuals.   The initial FY15 version of the model was largely conceptual and has not been updated.

The accompanying workbook shows some of the changes as variables are changed (the Model Variable Comparisons tab) and how allocations change across the three fiscal years with constant assumptions (the Fiscal Year Comparisons tab). Each fiscal year includes the adjusted actual initial budget (adjusted in this context means that central funds specific to a unit such as access funds were allocated out to the unit as part of the initial budget) for comparison.

Some of the notable variations:

- Column C shows the original FY16 model allocation (with corrections to calculations and data) using the original weights
- Column D is the same except using the revised disciplinary weights. For most units the change in is less than 1% (the dollar impact is the largest for Engineering). The revised weights are used in all other versions of the model. In this version, Veterinary Medicine and Pharmacy are allocated 95% of their gross revenues and then are settled up to the FY16 floor. The professional school weights are not used (weights for health sciences programs generally are used).
- Column E is the same as D, except that Pharmacy and Veterinary are allocated part of the graduate pool using the professional school disciplinary weights. You can see that this approach significantly reduces the Engineering allocation because there is such a large graduate

program there which contributes disproportionately to funding the larger model allocations to the professional schools.

- Column F is the same as D, except that the FY15 floor is used instead of the FY16 floor. This has the largest impact on Veterinary Medicine as the floor changed the most for that college between FY15 and FY16 (because of new central commitments).
- Column I shows the model allocation for FY17 using the revised weights, the 95% allocation model for Pharmacy and Veterinary Medicine and an adjustment to the FY16 floor. These are the same settings as in Column D in FY16 so the differences are driven by increased revenues overall and change in the unit credit hour and degree productivity.
- This is the same as Column I, but with Veterinary Medicine and Pharmacy allocated using the professional school disciplinary weights. Again, Engineering sees a significant reduction. Liberal Arts sees an increase, because there is more money in the general productivity pool (less is taken off the top to fund the community support fund), and Liberal Arts gets a large share of the foundation and undergraduate completion pools.
- Column K is the same as Column I, but with an adjustment to the FY15 floor instead of the FY16 floor. The final budgets are not necessarily the same when a college gets a floor adjustment, because the dedicated funds change independently of the budget floors.
- Column N shows the FY18 model budget, using the same settings as Column I for FY17 and Column D for FY16. The difference is that this FY18 budget uses projections of FY17 credit hours and degrees that were made in March. This is the budget approach that would be used to distribute initial budget in April.
- One major questions is how close the projections are to actuals and whether an adjustment is necessary. Column O shows the change from Column N when actual credit hours are substituted for the projected FY17 credit hours. For most units the difference is less than 0.2 percentage points. The credit hour projections are very close to actuals.
- Column P is the same as Column N, but substitutes both actual credit hours and actual degrees awarded for the FY17 projected values. The variation is up to 0.8% (Engineering). This is large enough that a late summer adjustment may be warranted and shows that the degree projections are less precise than the credit hour projections. Column P is analogous to Column D for FY16 and Column I for FY17.
- Finally, Column Q is the same as Column P but with the productivity split set at 64%-36% instead of 65%-35%. The reason for this is that the 65%-35% requires an additional $1.8M reduction to the service, support and management units. Keeping those units whole would require a 64%-36% split. This illustrates the impact that 1% point change has on the distribution to various units and the relative cost to colleges of making increased investments in service and support units.

The "Fiscal Year Comparisons" tab simply shows the initial budget and the same budget model version for each fiscal year, so units can see how budgets changed. For colleges, these changes reflect changes in credit hours and degrees.