

Oregon State University Corvallis Shared Responsibility Budget Model

OSU's process for the allocation of the Corvallis-campus Education and General budget moved to a new "Shared Responsibility Budget Model" (SRBM) for the FY19 fiscal year (the model was partially implemented for academic units in FY18). This change began with discussions in 2014-15 and addressed a number of concerns that included:

- Deans, department chairs, central leadership, and the heads of major support units felt the existing budget process was unclear, hard to understand, and didn't serve the interests of their units;
- Incentives for different kinds of activities (e.g. campus vs. Ecampus teaching) were not clear and not aligned;
- Deans were not clear on what program choices will change their budget picture;
- Central leadership lacked sufficient reserves to support strategic decisions, contribute to unit-level initiatives, and buffer units from unexpected downturns in enrollment or state funding;
- Small, incremental budget decisions were "clogging" the management and strategy-setting process for the Provost and VP for Finance and Administration;
- The mechanisms to balance the level of service desired by Colleges with the costs of those services (vs. other investments like new faculty or graduate remissions) were not clear.

The new budget process intended to:

- Link budget clearly to the programs and results delivered by academic units;
- Be transparent and consultative;
- Recognize academic success also requires strong service, support, and facilities services;
- Encourage financial decision making at the local level to align decisions with OSU's strategic goals
- Be equitable and predictable, to allow unit leadership to plan for the future
- Keep the university and all of its components financially healthy

Why "Shared Responsibility"?

The University Budget Committee and the Provost's Council did not feel that a pure Responsibility Centered Management¹ (RCM) budget model would fit OSU's culture and needs. They endorsed a hybrid approach that used elements of RCM budgeting but that encouraged collaborative decisions about revenue generation, investments in services and academic programs, and the development of cross-unit collaboration. The model attempts to clearly show the relation of budget allocations to the work of academic delivery units and activities of service, support, and management units.

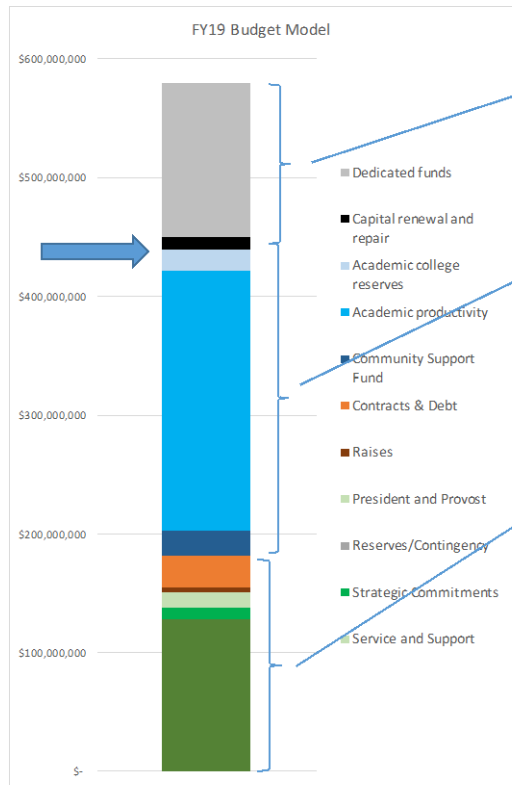
Overview:

The model allocates budget for three major functional areas:

- **Academic program delivery:** This includes academic colleges, centers and institutes, and some teaching delivered by other units. These funds support delivery of instruction, research, and engagement. These activities generate most of the revenue that supports OSU.
- **Academic support, institutional operations:** These functions include academic support (the library, information services, graduate school, research administration, etc.); student and faculty support (student affairs, undergraduate studies, etc.); plant and facilities operations; and institutional operations (finance and administration, business centers, etc.). These services are essential to allow the colleges to deliver programs and for students and faculty to access support for their work.
- **Financial stability and university commitments:** This includes commitments for debt service, contracts with the Foundation and INTO-OSU, reserves for mid-year salary increases, reserves for settle-up of tuition and returned overhead, charges paid to the city and other entities, and similar costs. It also includes contingency funds for revenue shortfalls or unexpected costs. These costs are necessary to maintain OSU's financial stability and obligations to partners. Most of these costs benefit multiple units across campus and are therefore budgeted centrally.

¹ A brief summary of university budget models: <https://www.hanoverresearch.com/insights-blog/6-alternative-budget-models-for-colleges-and-universities/>

Figure 1: Schematic of the distribution of Education and General (E&G) revenues through the budget model. The allocation builds from the top of the left hand bar downwards (i.e. the first step is the distribution of dedicated funds).

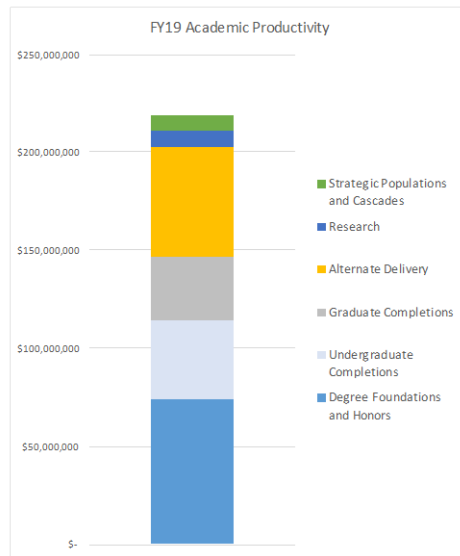


Dedicated funds (22% of total): Sales and service, earmarks, F&A recovery, fees, differential tuition over base tuition, endowment match AND capital renewal and repair funds

Academic funds (45% of total): 59% of balance (this is a decision point in model—how much to academic vs support) with three parts:

- Academic college reserves (distributed during the year)
- Academic productivity
- Community Support Fund (fixed amounts outside productivity)

Support and management (31% of total): 41% of balance; debt and contracts, raise pools, contingency and reserves, strategic commitments (non-recurring ideally), athletics, service and support units, executive functions



**FY19 OSU-Corvallis
E&G Budget Model
Revision**

Strategic populations: by degrees awarded to Pell recipients, URM students, international students, 3 years total

Research: by F&A recovery, 3 years total

Alternate delivery: Ecampus and Summer, 80% of net tuition by credit hour, current year actuals

Graduate completions: 40% credit hours, 60% degrees, 3 year totals, weighted by level and discipline

Undergraduate completions: 40% credit hours, 60% degrees, 3 year totals, weighted by level and discipline

Foundations: service teaching by credit hours, 3 year totals, weighted by level not discipline

Corvallis Shared Responsibility Budget Model Frequently asked questions

Why a new budget model?

OSU used historical (or incremental) budgeting for much of the E&G budget, though budgeting based on specific activities (like Ecampus and summer teaching) have become a larger and larger portion of the budget in the last ten years.¹ This changing mix has raised a number of concerns over the last few years including:

- Deans, department chairs, central leadership, and the heads of major support units feel the present budget process is unclear, hard to understand, and not serving the interests of their units;
- Incentives for different kinds of activities (face-to-face teaching, Ecampus teaching, etc.) are not clear and not aligned;
- Deans are not clear on what program choices will change their budget picture.

There was a consensus in 2015 that more of the E&G budget should be linked to productivity measures--the comment was often something in the vein of "budgets for face-to-face work should be more like Ecampus".

Why do we need a budget model at all?

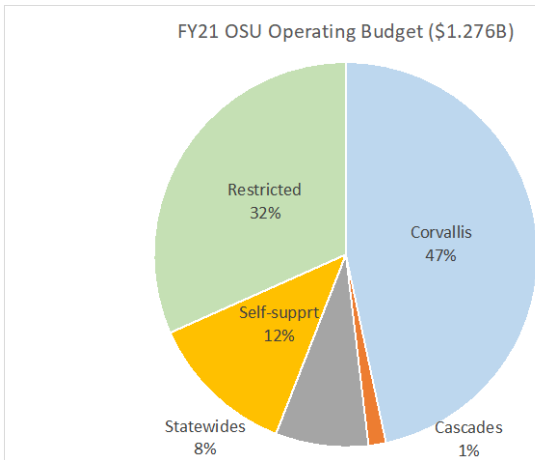
While the new budget process is called a "model", there has always been a budgeting model in the sense that there was a process for allocating the annual E&G budget. Prior to the current model, Ecampus was allocated on a per credit hour basis, earmarked or targeted funds were largely distributed to units (things like fees, differential tuition, state earmarks), and general tuition and state funding were distributed by incremental decisions based on requests to the Provost and Vice President for Finance and Administration from deans and other senior leaders. The new model replaces some of that incremental decision making with the productivity allocations in the budget model.

Why "Shared Responsibility"?

The University Budget Committee and the Provost's Council did not feel that a pure Responsibility Centered Management² (RCM) budget model would fit OSU's culture and needs. They endorsed a hybrid approach that used elements of RCM budgeting but that encouraged collaborative decisions about revenue generation, investments in services and academic programs, and the development of cross-unit collaboration. The model attempts to clearly show the relation of budget allocations to the work of academic delivery units; activities of service, support, and management units; and strategic, executive, and financial stability requirements.

¹ Appendix A provides a short summary of OSU's E&G budget approaches.

² A brief summary of university budget models: <http://www.hanoverresearch.com/insights/6-alternative-budget-models-for-colleges-and-universities/?i=higher-education>



Why does the model have such an emphasis on undergraduate outcomes?

The E&G budget for Corvallis is about 47% of the total OSU operating budget but provides most of the budget support for the facilities, library, business services, insurance, etc. that supports the work of the Statewide Public Services and the over \$400M of grant awards that are part of the restricted fund budget. The E&G budget also supports much of the faculty time that is committed to research, scholarship, and graduate education. A healthy E&G budget is essential to the success

of all parts of OSU’s mission.

About 65% of the E&G budget comes from net tuition and fees and about 78% of that is from undergraduate tuition. Overall, 67% of the E&G budget comes from undergraduate tuition or state funding based on undergraduate enrollment and graduation. This means the single most important part of the E&G budget depends on undergraduate enrollment and success. As demographics change nationally and the number of high school graduates declines maintaining and building undergraduate enrollment requires comprehensive and college-up planning.

The prominence of undergraduate education in the productivity part of the model reflects these budget realities and is intended to encourage colleges to focus on how to contribute to undergraduate enrollment and success, as appropriate to their individual missions.

Why isn’t research more prominently featured in the model?

The model has several allocations in support of research. These include about \$42M in Finance and Administrative (F&A) costs to support services and units that support research, \$8.4M of community support funding for Centers and Institutes, \$4.6M to the Research Office (in addition to the F&A allocation to the office) and \$7M as part of the productivity allocation based on unit F&A recovery over three years (about 3.3% of the productivity allocation of \$214M). The total of these allocations is about 11% of the total E&G budget (not including allocations for capital renewal and repair of facilities).

The productivity allocation for research is 3.3% of the total productivity allocation, so does indeed have less prominence than the undergraduate allocations. This is related to the previous question. Undergraduate-based funding is 67% of the total E&G budget and is the most critical part of keeping that budget healthy and that provides support services and faculty time that enable the work supported by over \$400M in external grant funding.

What’s going to be different for my unit?

The budget model is intended to provide clear links between budget allocations and academic program outcomes. Budget allocations to academic units are linked to measures such as student credit hours,

research activity, or degrees, recognizing differences in the costs of program by level (baccalaureate, masters, doctoral) and by discipline. This means that budget allocations will change with time as enrollments and degrees increase or decrease. This is different than in the past where there was a less clear link between the growth or decline of programs and the budgets that were allocated to them.

This approach should also provide colleges tools for planning the revenue results of academic program and enrollment changes. There is a group working on developing better reporting and forecasting tools to help colleges with that.

How will this change the resources my dean has?

The model was phased in over a period of time and for most allocations uses three year averages of outcomes, so it takes some time for the consequences of changes in on-campus enrollments and degrees to take effect. This was by design, to buffer the consequences of rapid growth or rapid shrinking. If a college adds a new course delivery or increases graduation rates the changes will have an impact in the next fiscal year. As enrollments and degrees awarded change, the budget allocations to colleges do change.

Does this mean now every college has to make money?

No. At the university level, the model specifically allocates a community support reserve and establishes floor funding to recognize the college-level cross-unit subsidies necessary to maintain a strong, comprehensive research university. The specific mechanisms of distributing these cross-subsidies are one component of the model that is still being adjusted.

The same applies within colleges—the model is not intended to pass straight down to the unit level. Some programs have large enrollments and low delivery costs, some have low enrollments but high delivery costs. Both types of programs are important parts of a college's academic mission. Deciding where there are cross-unit allocations or support is an important part of budgeting at the college level.

How does this align with a higher education landscape that clearly indicates the next ten years will be different than the last ten years?

Enrollment in Corvallis is going to slow as OSU approaches 28,000 students living in the community, the projections for Oregon high school graduates remain fairly flat then declines, the number of high school graduates nationally declines, and competition for non-resident and international students increases nationally. Creating the revenues needed to meet our strategic aspirations will require new approaches. OSU's work in building a respected and successful online-delivery vehicle in Ecampus provides an important opportunity for thinking about recruitment, enrollment, and program delivery.

Why does the budget go down in some years even if my college's credit hours or degrees increased?

There are two situations where this could happen. The first (as was the case this year) is that the overall E&G budget decreases so there is simply less funding to allocate. This can be from enrollment declines, decreased state funding or drops in other revenue sources. There can be cases where a large increase in an outside cost (insurance or large commitments for capital renewal are examples) can take money

away the overall pool so that the whole budget grows some but the amount available to distribute to units declines.

The second issue is that the productivity distributions for classes and degrees in Corvallis are not fixed amounts per credit but are a percentage share of pools of funding. If one college taught 60% of the service credit hours and the other taught 40%, the first college would be allocated 60% of the pool for service teaching. With multiple colleges, it is possible for one college to grow fast enough that another college growing slowly might not see an increase in their budget. This would assume the overall budget remains constant. This would be an unusual circumstance, as such rapid growth in a college should yield overall budget growth for the university.

The first issue has been the large concern in the first years of using the model---commitments for either external costs or allocations for capital renewal have kept the productivity pool from growing proportionately to the whole budget.

FY19 budget allocation per credit hour (or equivalent)

	Lower division	Upper division	Graduate
Service teaching, all units	131.33	189.45	381.69
Ecampus courses (base tuition)	172.00	172.00	382.40
Campus students*			
Agricultural Sciences	131.33	254.80	307.31
Business	131.33	123.17	306.03
Education	131.33	605.63	691.43
Forestry	131.33	228.32	378.92
Pharmacy	131.33		204.58
Science	131.33	142.83	215.65
Graduate School	131.33		220.89
Liberal Arts	131.33	157.63	267.41
Veterinary Medicine	131.33		196.79
Engineering	131.33	174.61	303.64
PHHS	131.33	150.83	308.24
CEOAS	131.33	317.61	352.31
Campus average	131.33	168.00	272.24

(total undergraduate or graduate completions budget divided by average three-year credit hours)

Why is there less allocated per credit hour for fact-to-face teaching to majors than for an Ecampus credit hour? (table here needs review and updating)

Ecampus revenue is allocated on a per credit hour basis and does not differentiate between lower-division and upper-division teaching or between disciplines. Service teaching allocations in Corvallis are based only on credit-hours, but undergraduate and graduate allocations are based 60% on degrees and 40% on credit hours. This means to compare these directly the total allocation for undergraduate or graduate students in Corvallis needs to sum the

two parts of the allocation and then divide by the total number of credit hours in that category. The service teaching allocation is the same for all units because there is no weighting for disciplines. The table shows that the allocations per credit hour equivalent are somewhat less for campus than for Ecampus. There are three reasons for this: 1) Ecampus is not supporting most of the backend costs of the campus in Corvallis so a higher proportion is available for academic allocation; 2) there are some other allocations to units from the Corvallis budget including graduate assistant health insurance, mid-year salary increases, and a couple others. These reduce the pool available for distribution; and 3) there was an intent to make Ecampus slightly higher to maintain the incentive to build enrollment and programs there.

This is an important area for review in the budget model review discussion. This is one of the areas where it is important that the incentives are appropriately aligned.

Why isn't there an allocation in the model to recognize experiential learning?

The productivity part of the model tried to use data that were readily and consistently measured. Experiential learning includes a variety of experiences and both formal and informal academic work. Identifying a consistent and fair way to measure that work has not been possible. There is an indirect incentive for colleges to create such experience. Experiential learning has been shown to have a positive impact on student retention and graduation and colleges receive a significant part of their budget allocations

Doesn't the model just encourage units to compete for credit hours?

One of the perils of productivity based budget models is that it can encourage units to try to "poach" credit hours from other units. The model tried to decrease that temptation by not weighting service credit hours by discipline and by using degrees awarded as an important measure (as degrees are more difficult to move from one unit to another).

One relevant observations is that this was a concern well before the existing budget model was implemented. There have been regular issues with one unit trying to teach in an area another unit felt was their purview (statistics courses are a common case). The Bacc Core review in 2010, long before the budget model, noted there were concerns about changes that would decrease credit hours to one or another college. Deans have always used their share of credit hours or growth in credit hours as an argument to get a larger budget allocations in the old incremental budget scheme. So, "ownership" of credit hours has always mattered, it is just much more specific and visible now.

Competition for credit hours, if enrollment stagnates, will ultimately not lead to program gains as the overall budget pool will not grow. If College A makes a new course to take some service teaching from College B, College B is then likely to do a revision to take those credits back and the budgets just oscillate back and forth, never growing stably in the long term.

Real growth in enrollment, retention, and completion rates will build the overall revenues that can be distributed to units and will create the best strategy for long-term budget growth. Collaborative programs that create enrollment growth in any unit benefit the overall budgets of every unit.

Won't the emphasis on degrees encourage units to "cut corners" on degrees and credentials?

Some concerns has been expressed that the model will encourage reducing the rigor of degrees or credentials so that more of them can be given to create more budget. Some of the same observations about credit hours apply here. Counts of graduates have always mattered to budgets (in fact degree counts specifically determine a large part of the state's allocation to OSU).

The more important point here is that the budget model is not (or certainly should not be) the only factor that units use to make decisions about programs, degrees, and mission. While in the short-term, if reducing requirements increases the number of degrees and has some positive budget impact, in the long-term if the quality and reputation of a degree, program or credential is damaged because it lacks rigor or is viewed in the outside world as inferior, in the long term enrollment in that program will certainly suffer.

There are places where rethinking degree and credential requirements makes programmatic or pedagogic sense. If a Ph.D. program requires the equivalent of M.S. level work on the way to the doctorate, but the program never formalized the award of a degree as part of the graduate program, perhaps it would be good for the student and the program to formalize that. But it should rest on what is good for the student and the long-term development of the program.

Doesn't the model discourage interdisciplinary work?

The design of the model actually tried to remove the barriers to participation in the university's formal interdisciplinary graduate programs. Units get credit for a student who graduates in an interdisciplinary program, based on the home of the student's advisor. The count is the same as if the student had been in the advisor's home unit's degree program. There is an extra allocation for an interdisciplinary student that goes to the Graduate School to support the costs of those programs.

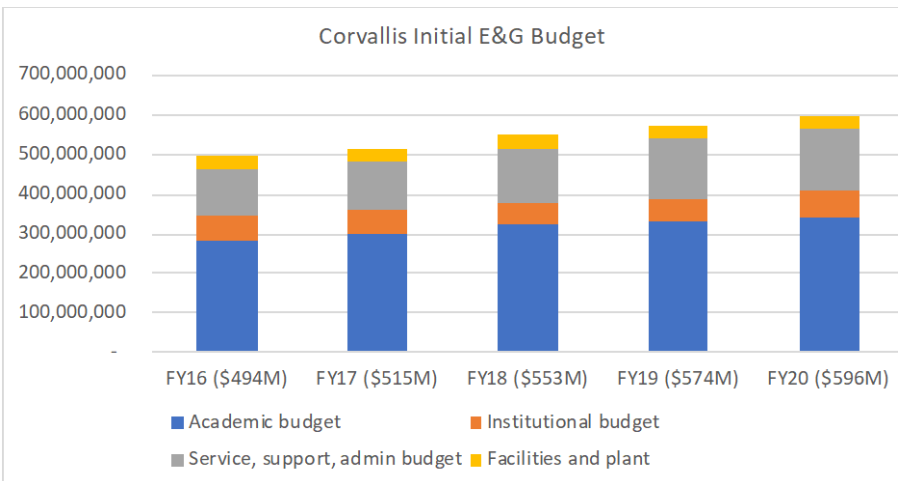
Informal interdisciplinary programs aren't called out in the model---team teaching of course across colleges, joint advising of students, etc. Those are smaller (but important) efforts but are hard for the Budget Office to capture. They presumably have value to the program by increasing the number of students exposed to a program (who might become majors) or by increasing opportunities for faculty to pursue joint grants, and so on. To date, colleges and departments have been asked to sort out a fair sharing of costs and benefits for those things internally. The largest example, perhaps, is the joint support of the Department of Biological and Ecological Engineering between the Colleges of Engineering and Agricultural Sciences. This may also be a place in the model that needs discussion and review.

The new budget model for Corvallis Education and General funds (the Shared Responsibility Budget model) was fully implemented for academic units mid-year in FY18 and was implemented for all E&G budgeting in FY19. It is a hybrid version of an RCM (for Responsibility Centered Management, an outcomes-based budgeting approach), with significant activity-based budgeting (dollars per credit hour allocations in Ecampus), and incremental budgeting (for administrative and support units as well as community support funding for some academic units).

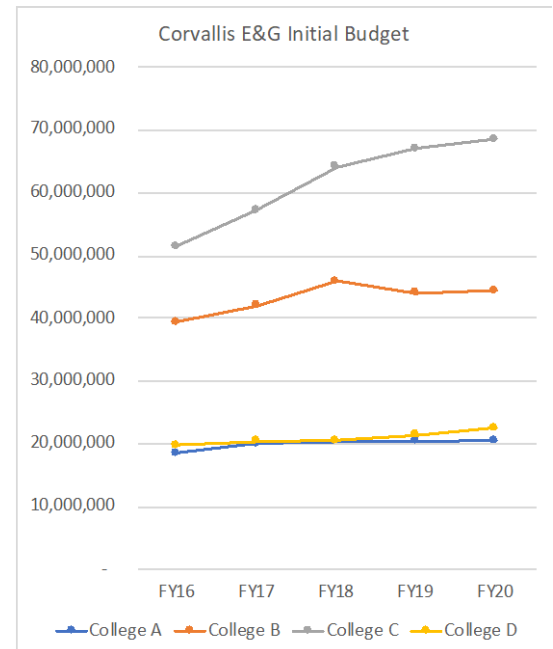
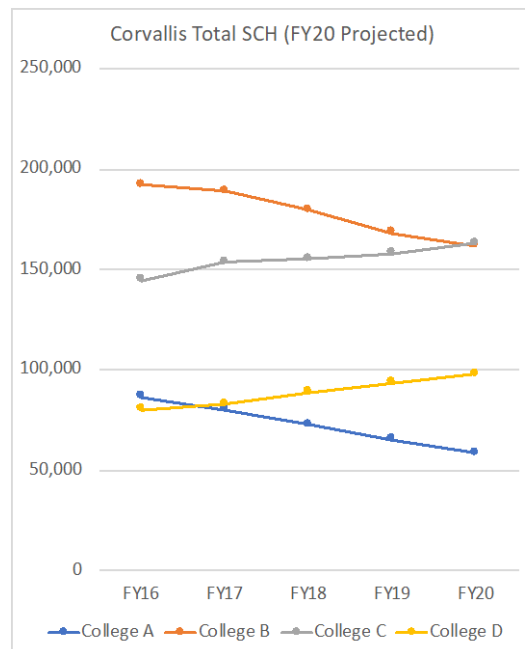
How has the model been working?

The model was intended to link budgets more directly to activities and outcomes for all modes of teaching (not just for Ecampus) and for other aspects of the university’s mission. Because this approach replaces the idea of “base” budget, it is designed to respond somewhat more slowly than Ecampus allocations (three-year averages of outcomes and a “share of the pie” approach rather than a per credit hour allocation).

The budget overall has grown significantly since FY16, though the proportions distributed to different functions are similar. FY16 and FY17 were prior to the model, FY18 had a mid-year adjustment to allocate some additional revenue to colleges that were growing, FY19 includes the mid-year rescission amounts, and FY20 is the current initial budget estimates.



That budget growth does not move uniformly through units, as the model did change how the budget allocations adjust for changing enrollments and graduations. The figure at the right shows changes in Corvallis total SCH taught (on the left, as an example of one measure) for four colleges and the total Corvallis E&G budget for those same colleges. FY19 shows a discontinuity with a reduction for a college that had been declining



and increments to colleges that were growing. From FY19 to FY20, colleges with declining enrollments had only small budget increases, while those with growth showed larger allocations. This is the kind of change the model was intended to create. These changes are also broadly consistent with what the model forecast for those units.

What is "Bridge Funding"?

The change to the model did change the budget trajectory for a number of colleges and it was recognized that some transitional support was necessary. Bridge funding is an allocation of budget outside the model for a limited number of years (typically three) based on a plan developed by the Dean and the College and agreed to by the Provost. The goal of this funding is to allow the colleges to make adjustments in their programs and financial commitments in response to the current and projected budget changes. Science and Education have bridge funding agreements in place and Liberal Arts and Public Health and Human Sciences are in the final stages of finishing agreements. Depending on the final version of those agreements there will be from \$2.3M to \$3.1M in bridge funding allocations this year.

What changes have been made so far?

The change to this approach was a very large shift for OSU and while the model was developed and run in parallel to the traditional budgeting practices for three years, it was not expected that everything would work as intended without adjustments and changes. The goal of the model is to balance budget incentives that align with the goals of SP 4.0 with the realities of limited overall resources. It was expected that there would be some adjustments and modifications to the model as it evolved. For FY20, some of the principal changes included:

- Business and Engineering dropped the pro-school models they had been using, which required a change in how credit hours were attributed (majors vs. non-majors). This was a significant adjustment in the "how" part of the model but had the goal of keeping the college budget allocation the same so that a change made for curricular reasons did not have negative budget consequences.
- Corrected how Honors College credit hours were distributed so that colleges got full credit for all of the Honors courses they delivered; this required making a community support allocation to the Honors College.
- Refined the weighting tables to remove outlier values.
- Corrected the allocation to Veterinary Medicine to reflect the funding agreement for the growth of the non-resident enrolment.
- The counts of minors are now for minors awarded not minors declared.
- Some corrections were made so all certificate and minors were correctly assigned to colleges.
- The proportions for interdisciplinary graduate programs were adjusted so units were credited exactly the same amount for one of these students as for a student in their own programs.

What are some of the issues in the model and what's next?

The model continues to evolve as there is more experience with it. Some of the issues that may be addressed in the next iteration include:

- Currently the model allocates virtually all revenues out, leaving no central reserve. This is why, in part, there was a mid-year rescission in FY19 and a "take-back" as a last step in the FY20 allocation. The model proportions should be adjusted so there is a reasonable central reserve after funding academic, support and administrative units.
- Dedicated funds are currently charged a modest overhead. While the principle of the charge makes sense (spending and managing those funds creates "back-end" costs) instituting the charge has proved complicated and has created some unintended consequences. This approach may need to be revised.
- Consider if service and support units should get any productivity allocations. This has, again, created some unintended incentives that can distract from the core mission of a unit.
- Review the way Pharmacy and Veterinary Medicine are treated inside the model and consider whether a block funding approach would be more appropriate than the partial productivity approach.