Budget 1010: Introduction to University Budgeting

Budget Study Group

Session 1

July 16,2020

1

This presentation is intended to provide a high-level overview of the Athens budget for members of the Budget Study Group and other stakeholders with an interest in learning more about the budget.

Budget Book

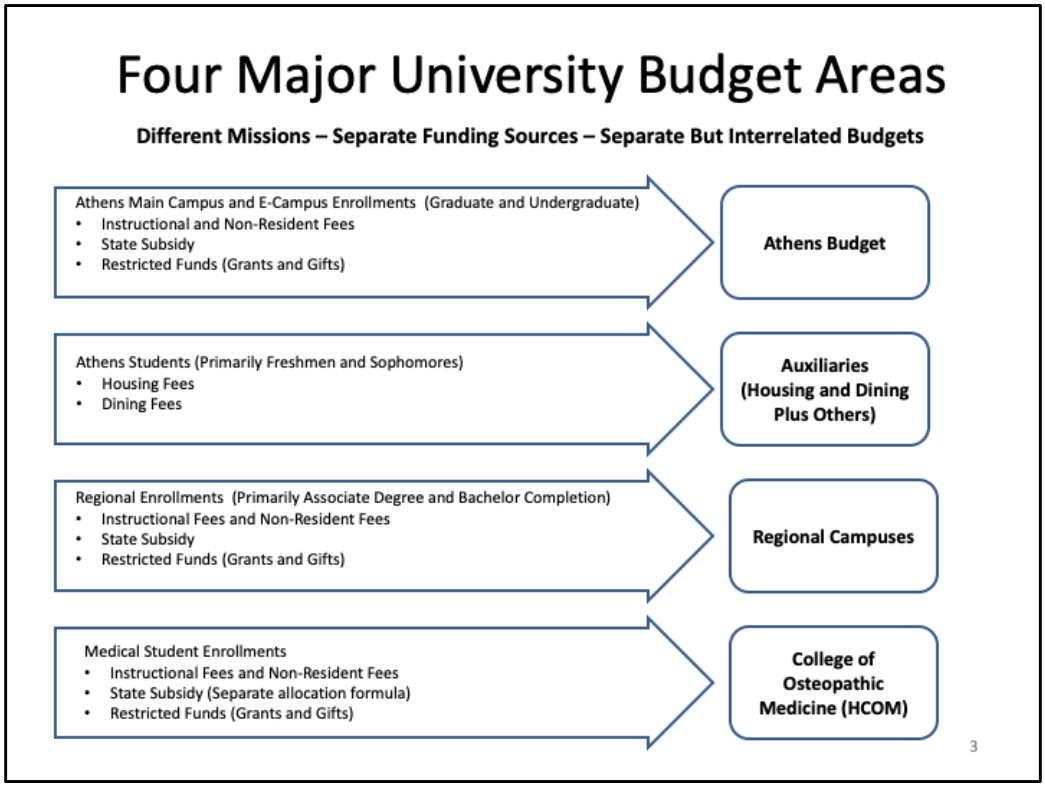
2019-2020

OHIO UNIVERSITY

https://www.ohio.edu/finance/budget/budget-book

2

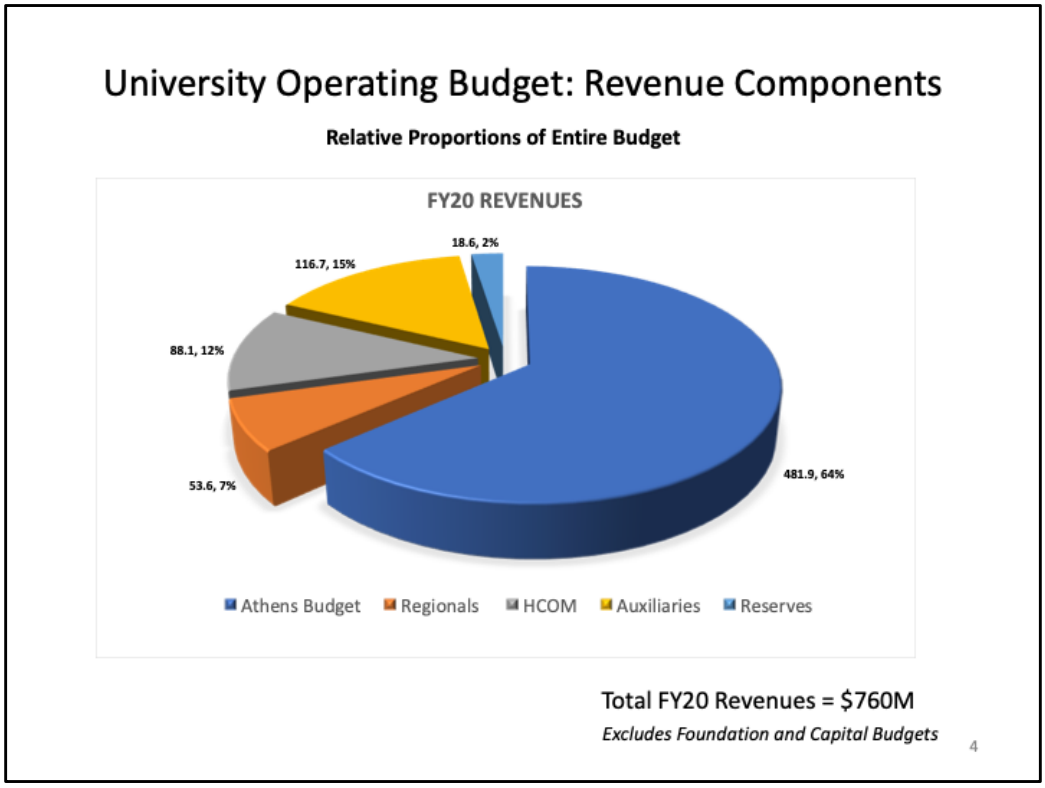
The data supporting this presentation matches the information in the FY20 Budget book which can be found here: https://www.ohio.edu/finance/budget/budget-book



The budget for the entire university is broken down into four major areas. Each area has a different mission and operates on different revenue streams so they have separate budgets. These four areas are:

1) The Athens Budget– this budget is the main budget that supports activity on the Athens campus and is supported by the tuition, fees and state subsidy associated with the courses that are taught on the Athens Main Campus and E-campus activity originating in the Athens colleges along with the restricted revenues associated with funded research and gifts.
2) Auxiliaries – this budget area is associated with auxiliary operations that are designed to operate on their own separate funding sources. The largest auxiliaries are housing and dining but include others like parking and printing. Athletics is included in this group but it has a mixed budget with part funded with its own revenue but it also gets funding from the Athens budget – the term "supported auxiliary" is some times used to describe this structure.
3) Regional Campuses – this is the budget for the five regional campuses. These units have separate tuition rates and their activity generates state subsidy.
4) Heritage College of Osteopathic Medicine (HCOM) – like regional campuses, the medical school has its own tuition rate. It receives a separate subsidy allocation from the state.

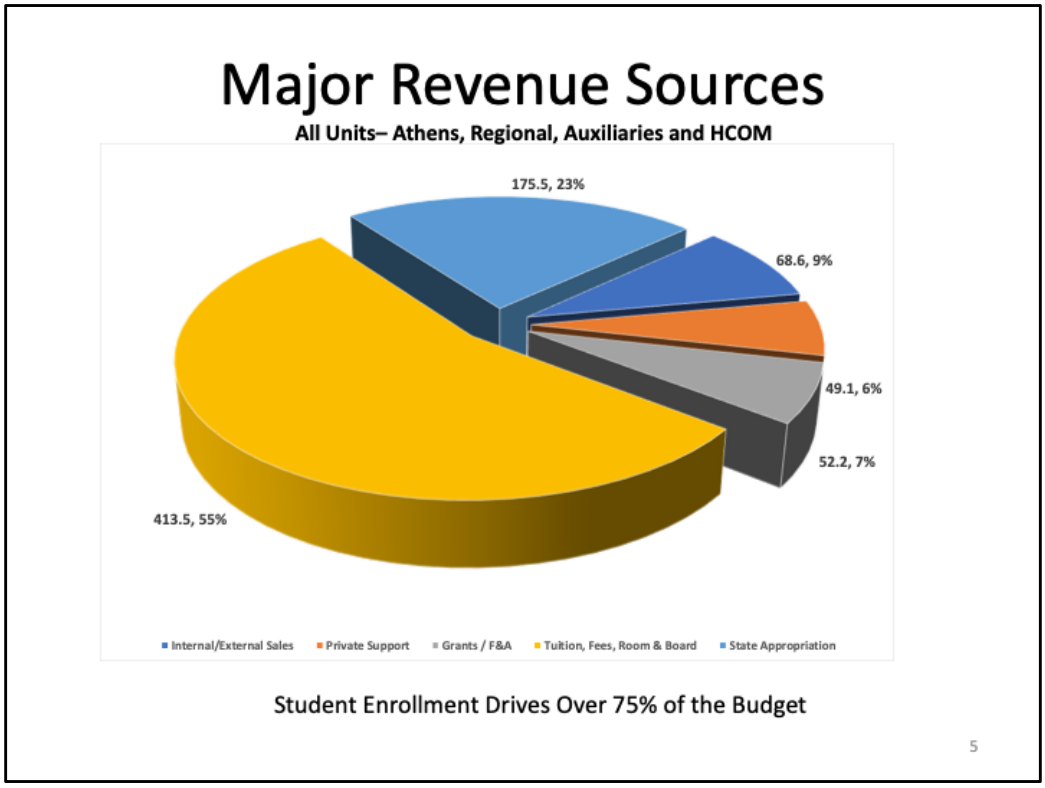
While these budgets are separate, there are interactions that take place between the Athens Budget and the other three areas since those areas are served by the administrative structure in Athens and some of their services (human resources, payroll, accounting, budget, etc) are provided by Athens units. Overhead payments are made into the Athens budget to reflect this.



The relative sizes of the four major budget areas can be seen here. The largest area is the Athens budget which is over $480M and 62% of the overall $760M budget.

This view does not include the OU Foundation or Capital budgets. The Foundation is a separate organization with its own governing board, so its budget is not part of the annual budget process. The Capital budget is a separate allocation from the state which is restricted to large building projects. Those funds, therefore, cannot be spent on other things like salaries or travel.

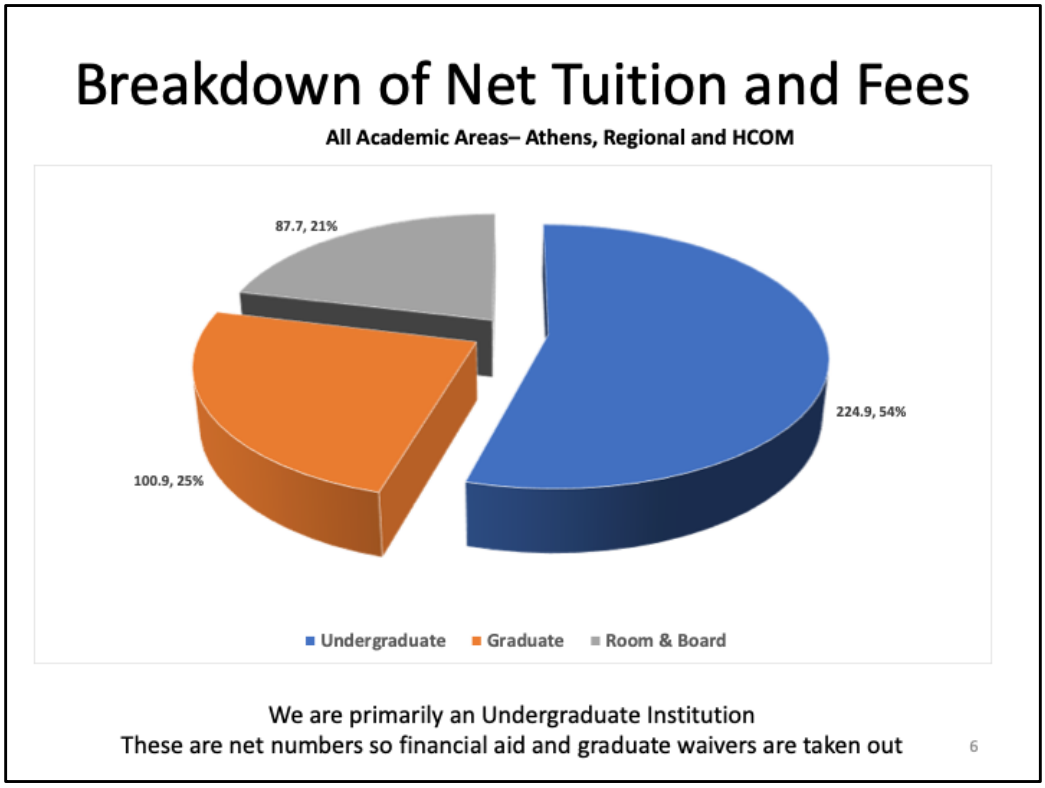
There are still interactions between these other two budgets and the main university budget. For example, interest from the endowment of the Foundation supports activities (scholarships, professorships, etc.) in the university budget. In addition, there are impacts to the university budget from capital projects. While the funds to construct a building are in the capital budget, the cost to operate the building will end up in the university budget. In addition, not all building activity occurs in the capital budget. For example, the Ping Center and Baker University Center were funded by bonds that are paid off by additional student fees. Projects like this as well deferred maintenance projects often do impact the main university budget and the university has recently created a strategy to use debt for building projects and deferred maintenance since the funds from the state are not sufficient to cover all of our renovation needs. Look for information about the Century Bond to learn more about this deferred maintenance strategy.



A budget is basically a plan for matching incoming funding or "revenue" to ongoing expenses and balancing those two sides of the equation.

This chart shows the major categories of revenue bringing funding in to support our operations. These categories include Tuition, Fees and Room and board from our undergraduate, regional, graduate and medical students. Academic activity associated with those students also brings in state support.

The remaining 25% of our revenue comes in from sales -9% (e.g. clinic revenue, royalties, special contracts, etc.), private support in the form of endowment proceeds and gifts (6%) and grant activity (7%). This reinforces the idea that we are an academic institution that is supported by student enrollment which means that changes in enrollment have a major impact on the budget.

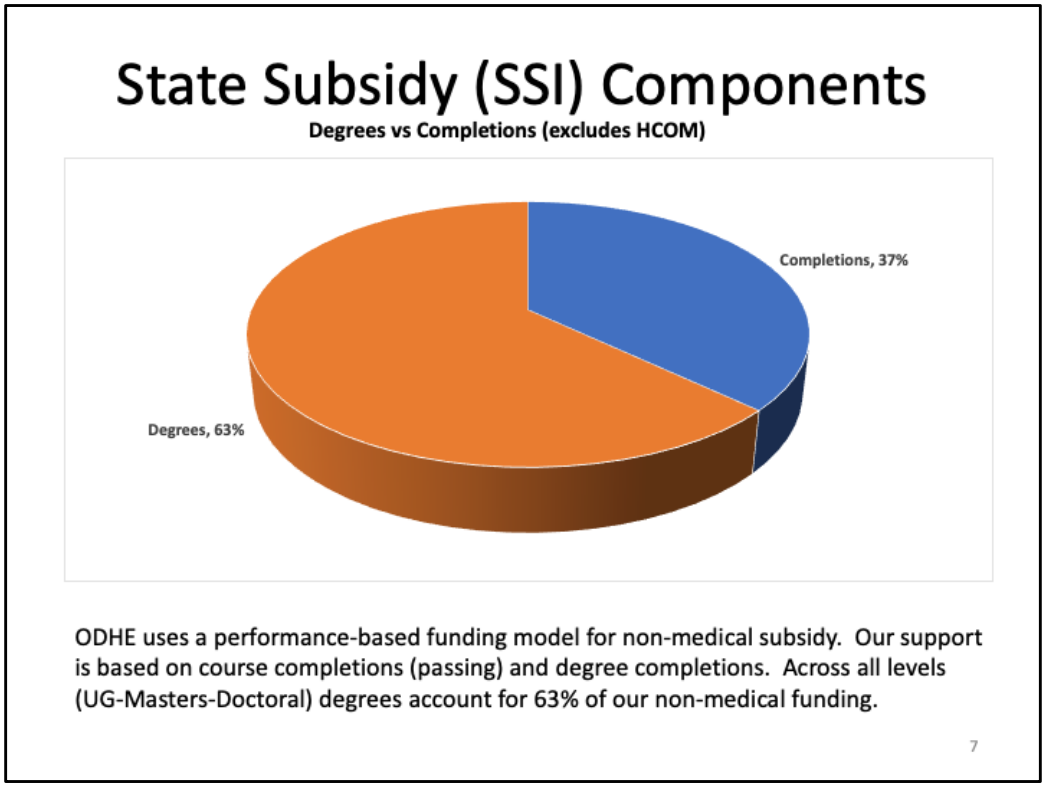


To further break down the revenues from tuition, and fees, this chart separates the amount for Room & Board Fee that go to Auxiliaries from tuition revenue.

Tuition revenue is broken down by revenues from undergraduate students (Athens and Regional Campuses) and graduate students (Athens and HCOM).

Further note that the data in this chart shows “net” tuition which means that undergraduate financial aid is subtracted from the undergraduate tuition total and graduate waivers are subtracted from the graduate revenue.

From this presentation it is easy to see that most of our revenue comes from our undergraduate activity. This makes sense given that we have much larger numbers of undergraduate students compared to graduate.

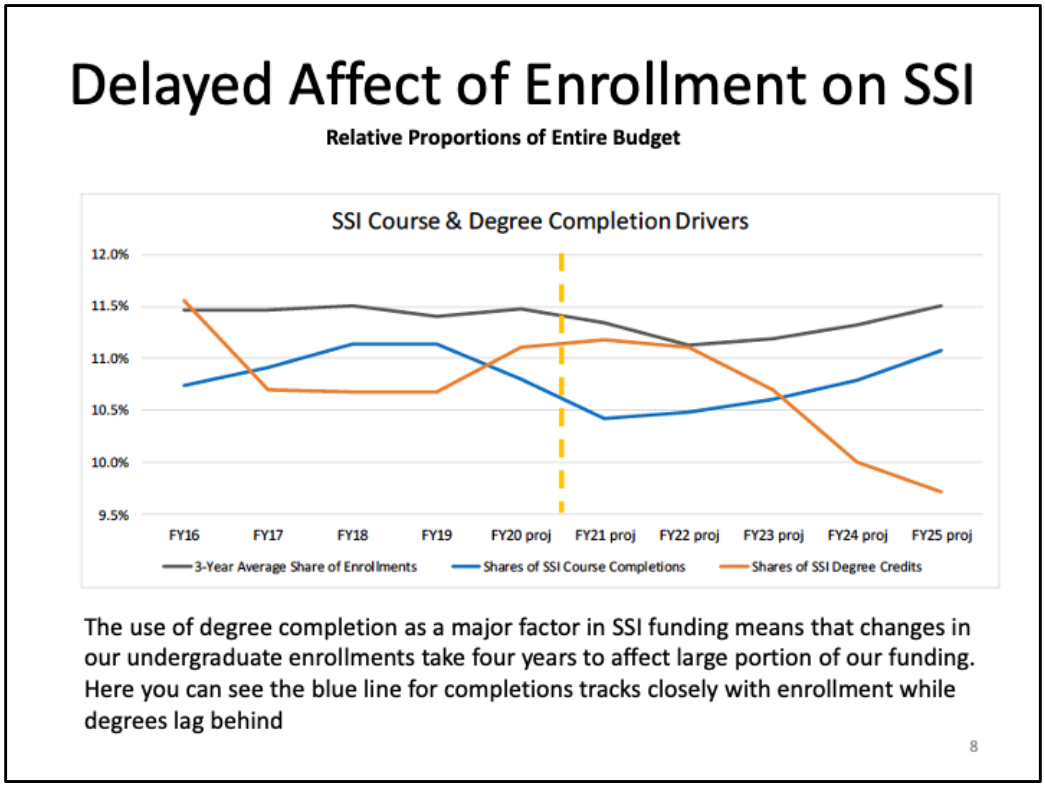


The second largest source of revenue is state subsidy. The state utilizes what is known as a performance-based funding where universities receive funding based on course completions and degree completions. This means that a student much successfully pass a course for those credits to generate subsidy. In addition, we do not receive the degree portion until the student successfully completes the degree. Notice that the amount we get is higher for the degrees as opposed to completions. This is a signal from the state that they want to incent universities to focus on helping student reach the finish line of successfully getting their degree.

State subsidy is earned for the completions and degrees from students that are Ohio residents at the undergraduate level. Out-of-state and international undergraduate students do not generate subsidy. This is why the university charges a non-resident fee to these students – basically to substitute for the lack of state support.

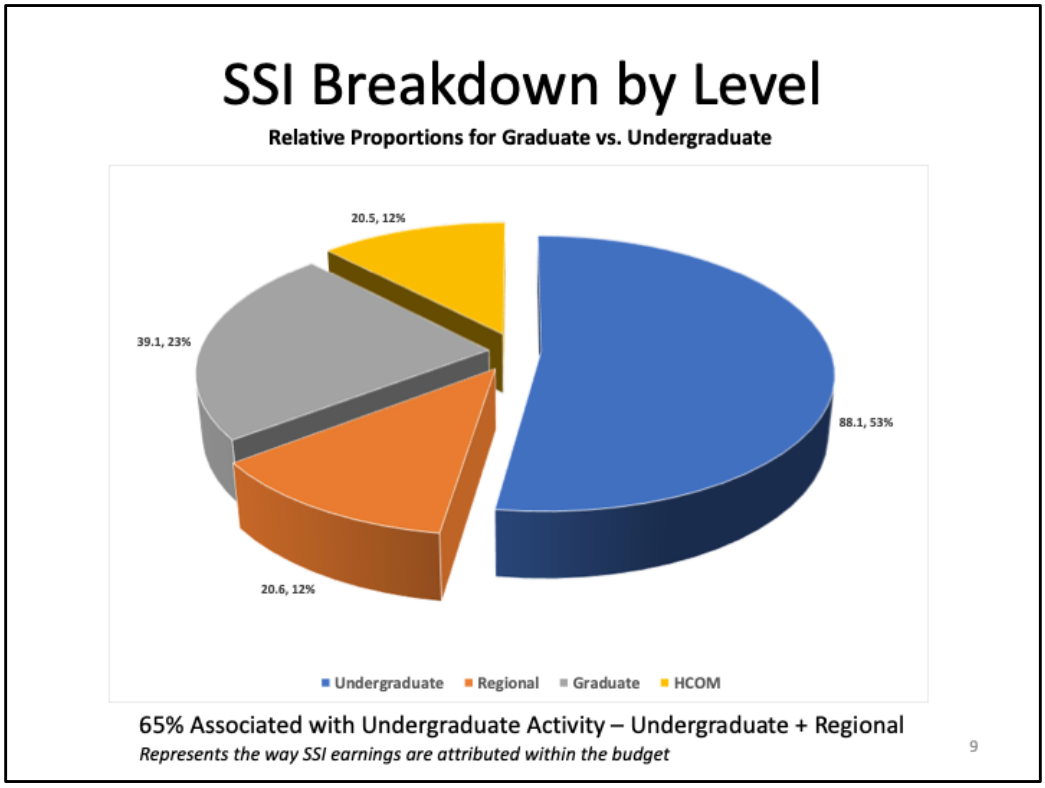
At the masters and doctoral level, subsidy is earned on the vast majority of graduate students. This is why the non-resident fee is typically waived for graduate students on waivers and why the nonresident fee is low for off-campus graduate programs.

There are many other intricacies associated with how subsidy is allocated for multiple degrees, completion programs, transfer students and other circumstances that are beyond the level of this presentation.



Since a large part of our subsidy is earned when a student gets a degree, there is a delay between when we have students in our courses and when we get the revenue associated with that activity. This chart illustrates that concept. The top line shows a projection for how much of the state-wide enrollment is associated with OHIO. Our share of course completion revenue tracks close to enrollment illustrating that completion subsidy comes in fairly close to time where the students are taking courses. With degree subsidy, we don't get funding until the student finishes the degree. This means that the degree subsidy lags behind the associated enrollment. As illustrated in the chart a downturn in enrollment takes several years to show up in degree subsidy. Similarly, when enrollment increases, it takes several years for the increased funding to be available.

There are other complexities in terms of the timing of subsidy such are the one-year lag between activity and when it is reported, and activity being averaged over three years – complete understanding requires a more detailed coverage of this topic which is beyond the scope of this presentation.



This chart breaks our internal SSI revenue down by graduate and undergraduate with the graduate revenue for HCOM separated from the Athens graduate activity and the undergraduate revenue further broken down by Athens and Regional undergraduate activity. If you consider the combination activity associated with regional and undergraduate activity, we again see that, as with tuition revenue, the majority of our subsidy revenue is associated with our undergraduate activity as is expected given the much larger numbers of undergraduate students.

Subsidy Rates for Completions

SSI Model	OHUN SSI	OHUN FTEs	SSI per FTE
AH 1	1,107,857	985	1,125
AH 2	3,006,342	1903	1,580
AH 3	2,653,827	1364	1,945
AH 4	1,200,472	404	2,971
AH 5	917,676	178	5,153
AH 6	1,125,091	219	5,128
BES 1	500,725	462	1,085
BES 2	1,469,873	1241	1,184
BES 3	1,995,480	1331	1,499
BES 4	8,055,386	4654	1,731
BES 5	2,434,289	856	2,845
BES 6	1,020,794	342	2,987
BES 7	1,309,280	288	4,548
STEM 1	1,336,187	1249	1,069
STEM 2	2,754,659	1997	1,380
STEM 3	2,629,191	1023	2,571
STEM 4	12,920,825	4122	3,134
STEM 5	2,295,326	686	3,346
STEM 6	445,755	98	4,563
STEM 7	2,821,423	673	4,195
STEM 8	1,267,697	171	7,417
STEM 9	340,950	45	7,650

Rates derived from OHIO SSI earning budgeted for FY20

- Subsidy is earned by producing credit hours measured in FTE (a student taking 30 hour's per year)
- 22 cost models – represents statewide average cost of producing an FTE in different discipline groups and levels
  - AH = Arts & Humanities
  - BES = Business, Education & Social Science
  - STEM = Science, Technology, Engineering & Math
- This weighting determines the reimbursement rate for course completions
- Entry level courses carry similar rates across all disciplines
- Upper levels are major courses and have higher rates because of greater cost (course size, faculty type, etc)
- Our largest areas in both FTE and resulting SSI are in BES 4 and STEM 4
- Shaded = Masters level
- We have only a few FTE in some masters models
- Degrees also depend on this cost weighting and are actually treated as collections of courses leading to a degree = degree credits

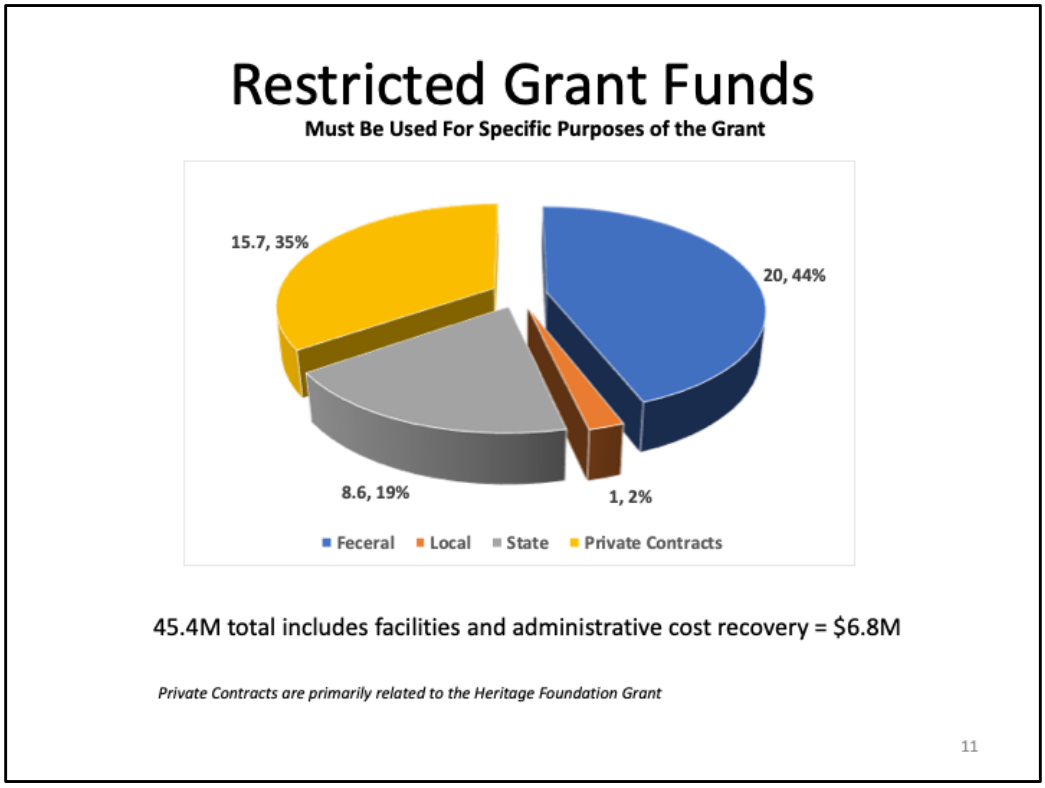
10

The computation of subsidy earnings is extremely complex but here is a brief overview.

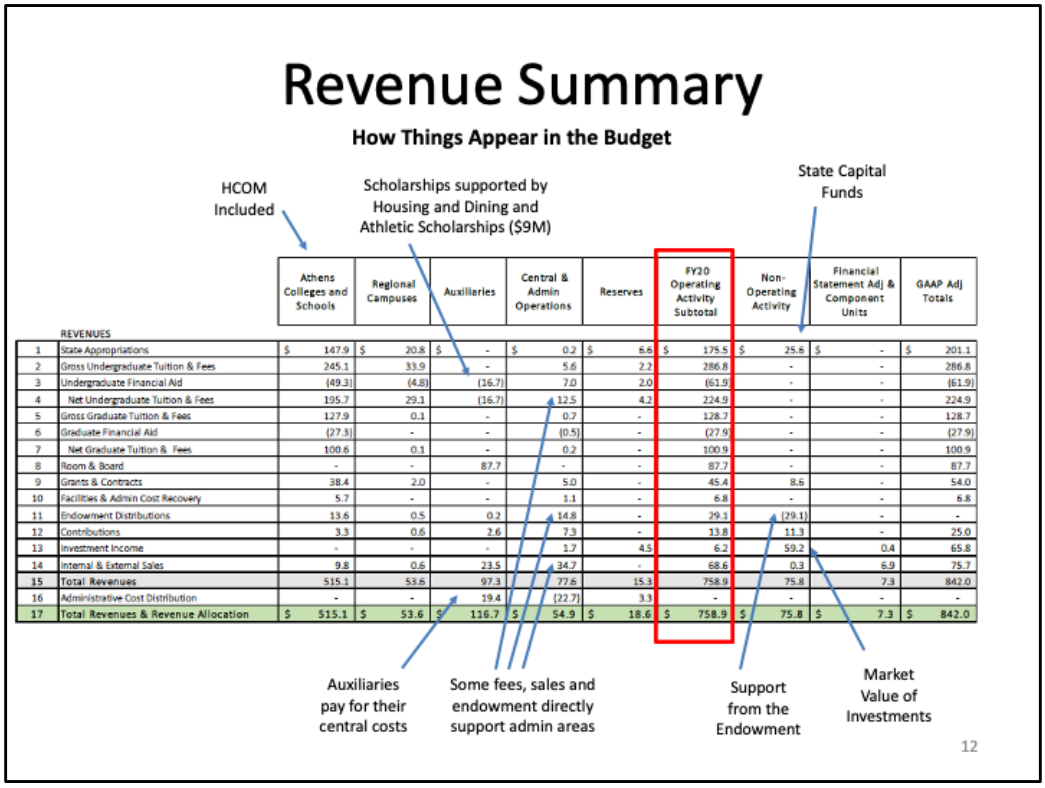
Subsidy calculations are based on Full-Time Equivalent (FTE) students which is the completion of 30 credit hours. The state recognizes that there are different costs for producing different FTEs depending on discipline and level (general education, undergraduate and masters). To reflect these differences, 22 cost models (referred to as the New Taxonomy) each containing a different mix of disciplines and courses are created. These models are grouped by discipline area: Arts and Humanities (AH); Business, Education and Social Science (BES) and Science, Technology, Engineering and Mathematics (STEM) and numbered with 1 indicating introductory, general education courses in those disciplines and the highest level (shaded) indicating masters-level courses. These cost models are shown at the left with our earned revenue and associated FTE production in each model. The fourth column shows the amount of revenue we received per FTE. This is a derived number based on our projected earnings this past year – the actual amount earned will vary but this gives you a rough estimate of the amount and an illustration of the magnitude of the differences.

These weights for courses at different levels also influence degree completions since the subsidy for a degree is actually based on degree credits which are collections of courses taken to complete a degree. Degrees include general education as well as major courses so the total cost of a degree is the cost of the various courses that go into that degree. Degree subsidy is done this way to handle situations like transfers or programs like degree completion where a student completes a bachelor's on top of an associate degree.

A separate allocation is given for doctoral FTE production (as well as a separate calculation for doctoral degrees) but this component is capped meaning that if we increase our FTE, we will get no additional funding. This allocation is associated with an FTE target established in the late 1990s and we must maintain our production up to at least 85% of that target.



The remaining major areas of funding (external sales, endowment/gift and grants) are more straightforward with each contributing 6%-9% of our funding. One term typically used for grants and some gift/endowment is "restricted." A restricted funding source can only be used for a specific purpose. The funds for a grant are restricted to the purpose of that grant and can only be spent for that. The funds cannot be repurposed to pay for something else within the university. Some grants (typically certain federal grants) allow the university to charge an overhead fee called Facilities & Administrative (F&A) cost recovery. This recognizes that the university has costs to support the infrastructure to support research – lab facilities, accounting, etc. This overhead is earned as the dollars are spent on grant activity. Our earnings are around $6.8M per year. These funds can be spent as the university wishes but we have a formula that splits these funds between the researchers (in research incentive – RI funds), the department/center, the college and the VP Research and we tend to invest these funds back into research activity.



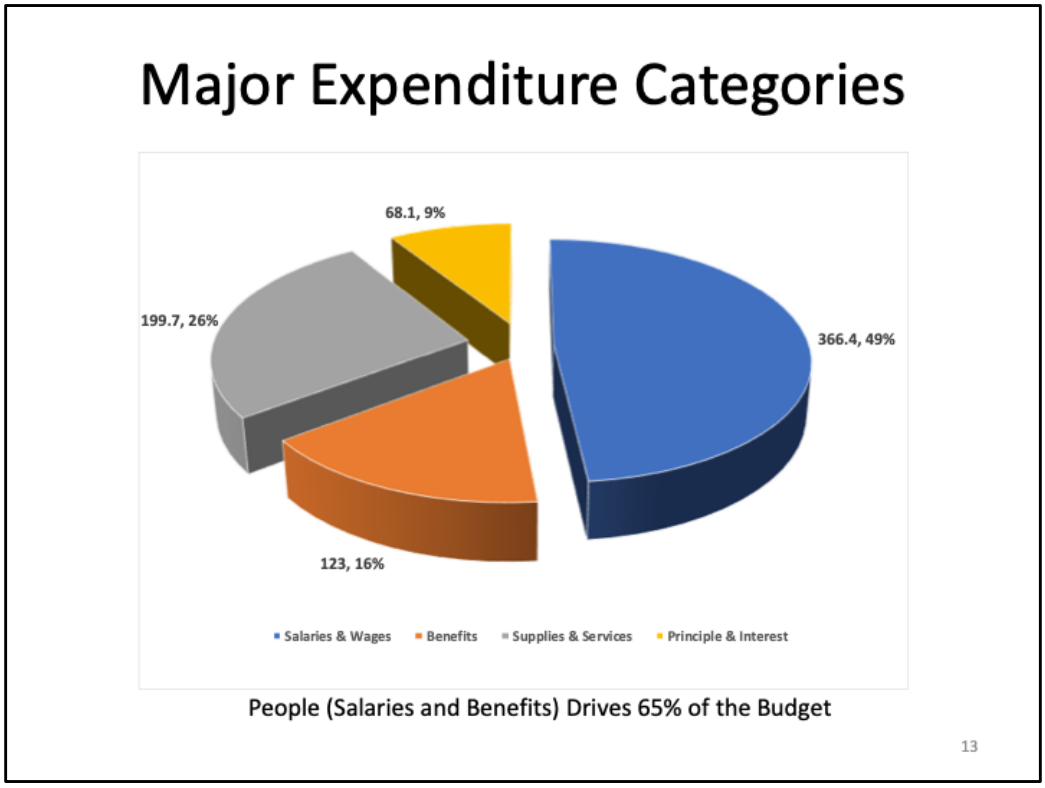
This is the way all the revenue sources just discussed appear on the budget presented on page 14 of the budget book. You can see the various sources discussed previously down the left.

Here are some things to note

The red box shows the totals for the operating budget. There are columns to the right of this but these are not part of the operating budget. Several numbers are called out on this slide to illustrate what falls into this category. For example the 25.6M at the top under State Appropriations is the state capital funding from the state. As stated in the beginning, these funds are one-time funds to be used only for construction and cannot be used for other purposed. Thus, they are not part of the normal operating budget. Similarly, near the bottom is 29.1M listed under Endowment Distributions. This is a negative number indicating that these funds are coming into the budget from the OU Foundation – this is the interest earned off the endowment and it funds the 29.1M inside the red box which is the total support within the budget from the endowment. A final example is the 59.2M listed under Investment Income. This is the market value of the investment of our reserves in the market. This represents the current value of this investment (sort of like the value of your 401K retirement fund) but the only way to realize this funding would be to take the investment out of the market.

Some of the other things discussed earlier are also called out on this slide.

Note that HCOM is rolled up into the first column with the rest of the Athens activity for this high level consolidation
Under auxiliaries two items are highlighted – the scholarship entry of 16.7M represents 9M in Athletic scholarships and contributions from housing and dining to support central scholarships
The Administrative Cost Distribution line shows funding being paid from auxiliaries (19.4M) to pay for their central costs like custodial service and administrative services. These funds, along with some funds from reserves, bring 22.7M into central administration. This an illustration of how the four areas of the budget have interactions between them as is the scholarship support from auxiliaries.

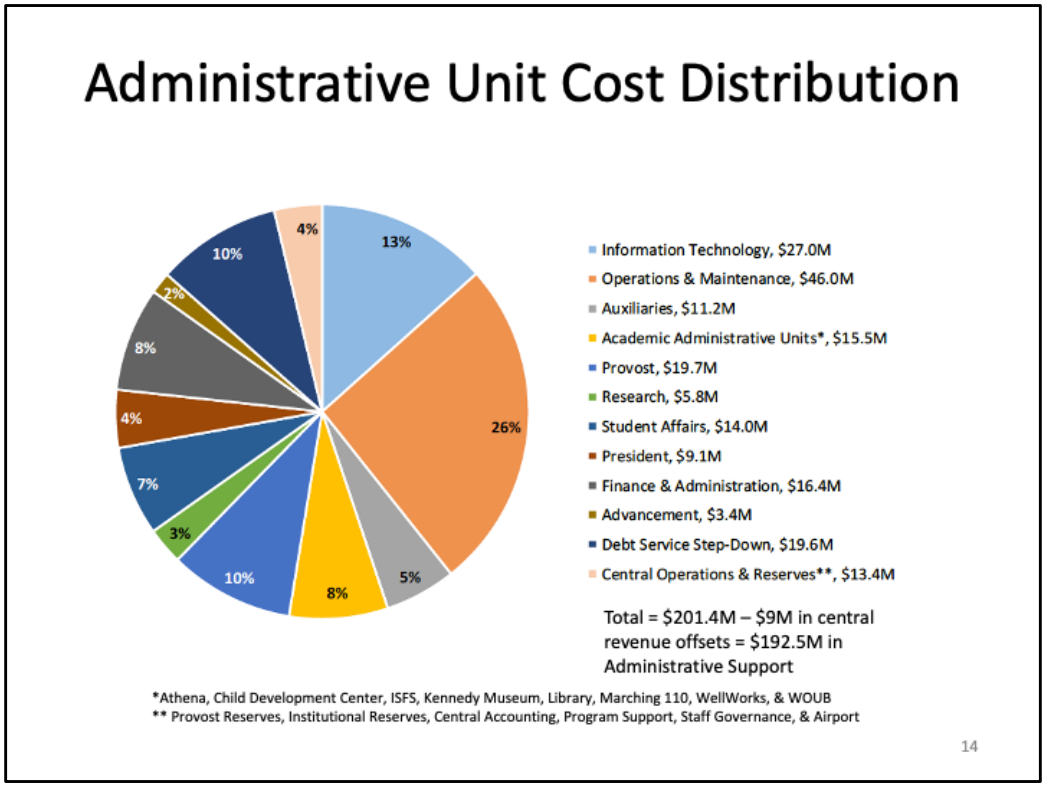


In addition to revenues, the other major part of a budget is expenditures – basically the things on which we spend the incoming funding. This chart give you a high level view of the major expenditure categories.

The principle & interest category is the amount we have to spend each year to pay for our debt. While the university has occasionally taken out debt for major projects (the convocation center, baker center, the IT network, etc.) we have implemented a major effort to invest in our deferred maintenance issues through the creation of the Century Bond. While beyond the scope of this presentation, the Century bond basically involves adding $13M to the operating budget to service debt that is being used to pay for ongoing projects to address deferred maintenance issues like replacement of windows, roofs, HVAC, plumbing, etc. since the state capital funding is not sufficient to handle all these costs and without investment we were in danger of falling further behind in maintaining our facilities to the point were we were experiencing building failures like what happened with Lindley a few years ago. This is a constant pressure on our budget driven by the fact that we are a residential campus which means a significant amount of our cost will always be related to facilities. With increases in this area of the budget, there are fewer dollars to go to other parts of the budget such as people.

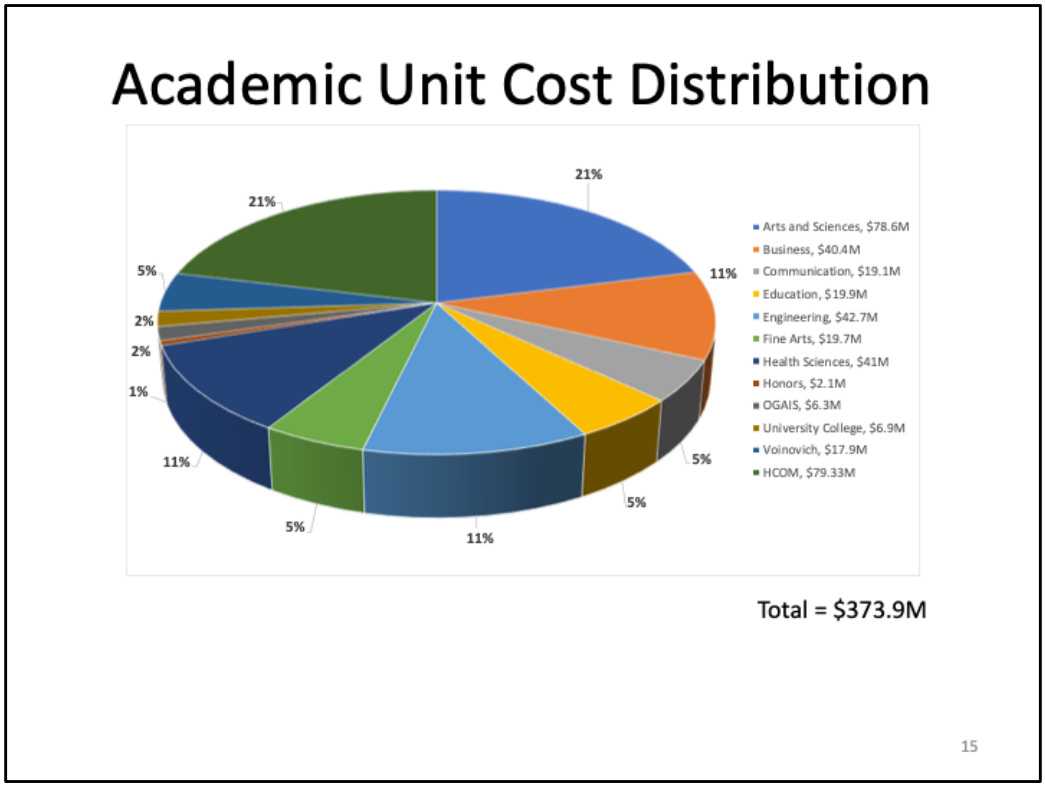
This chart also shows that with salary and benefit costs, the majority (65%) of our budget is related to people. Being a residential campus also means that we have a large need for people to run this type of operation.

The final category for Supplies & Services which includes travel and general non-personnel costs and is about 25% of the budget



Another way to divide up expenditures is by the units that are funded. This chart shows the major administrative units and the relative sizes of their budgets. These budgets are about $201.4M but there are $9M in revenues brought in by these units to pay for their costs. The remaining $192.5M comes from tuition and subsidy funds.

The largest unit is Operations &Maintenance at 26% and another 10% is related to debt service which combined again illustrate that a large part (36%) of our administrative costs derives from the residential nature of our campus



A similar breakdown can be done for the academic units. Collectively the academic units are close to 375M compared to192M in terms of funding so the ratio of academic units to administrative units is about 60-40. Note that there are other parts of the budget outside these totals like Regional campuses and auxiliaries to get to the full $760M budget so the proportions depending what is included in a comparison.

Expenses

How Things Appear in the Budget

		Athens Colleges and Schools	Regional Campuses	Auxiliaries	Central & Admin Operations	Reserves	FY20 Operating Activity Subtotal	Non-Operating Activity	Financial Statement Adj & Component Units	GAAP Adj Totals
	EXPENSES									
19	Total Salaries, Wages, & Other Payroll	207.5	28.4	29.8	100.7	-	366.4	-	1.8	368.3
20	Total Benefits	62.0	9.6	9.7	41.7	-	123.0	-	-	123.0
21	Supplies, Services, & Capital Costs	70.9	5.9	35.1	87.8	-	199.7	193.8	(193.4)	200.1
22	External Debt Service - Principal	-	-	-	-	-	-	13.8	(13.8)	-
23	External Debt Service - Interest	-	-	-	-	-	-	29.6	(1.5)	28.1
24	Internal Principal & Interest	20.5	0.3	13.4	34.0	-	68.1	(68.1)	-	-
25	Depreciation	-	-	-	-	-	-	-	58.8	58.8
26	Total Direct Expenses	361.0	44.2	88.0	264.1	-	757.3	169.0	(148.0)	778.3
27	Capital Cost Allocation	13.0	-	1.5	(14.6)	-	-	-	-	-
28	Contribution Margin	168.9	7.6	16.0	(192.5)	-	-	-	-	-
29	Total Expenses & Expense Allocations	$ 543.0	$ 51.8	$ 105.5	$ 57.1	$ -	$ 757.3	$ 169.0	$ (148.0)	$ 778.3

The Revenue associated with the various units more than covers the costs of those units – the rest goes to administrative costs as a "contribution margin"

Capital Cost Allocation is the methodology utilized to allocate the central debt service charges to colleges and administrative planning units.

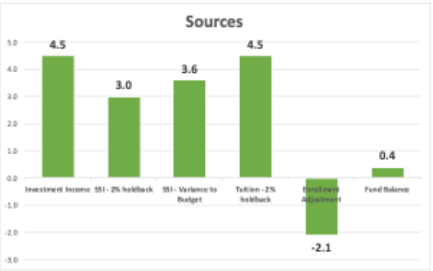
16

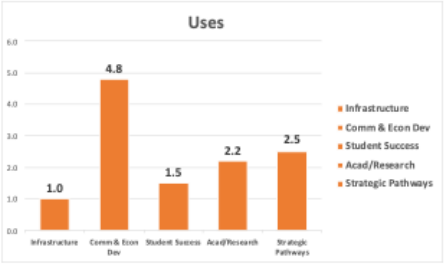
This shows that high level summary of expenditures from page 14 of the budget book. The major expenditure categories are shown in the left column. Two new concepts illustrated here are highlighted. First the Contribution Margin row shows how funding for tuition, fees and subsidy listed under the colleges, regional campuses and auxiliaries flows to the Central Admin & Operations columns to show that those expenses are funded from those revenues.

The other highlighted area is the Capital Cost Allocation. This shows that the External Debt on lines 22 and 23 get represented in the operating budget as a flow of charges to the colleges and auxiliaries that "pay for" the debt costs under central administration and operations.

Strategic Opportunity Reserve (SOR)

Beginning Balance	21.9
Sources	13.9
Uses	-12
Ending Balance	23.8





Infrastructure – deferred maintenance, OIT systems, financial systems
Community & Economic Development – tech growth, arts & culture, healthcare, arts/culture
Student Success – endowed scholarship and signature financial aid programs
Academic & Research Investments – online learning, startup costs, bridging enrollment shifts
Presidential Priorities and Strategic Pathways - various pathways including One OHIO

The expected SSI variance to budget was erased by SSI changes caused by the pandemic

17

The other major portion of the budget in addition to revenue and expenditures that is often involved in balancing the budget is the use of reserves. The university keeps pools of funds for various purposes. For example, the university is required to maintain reverses for things like extraordinary benefits claims and worker's compensation. There are other reverses within the auxiliaries where funds are accumulated over several years to pay for major dorm renovations.

There is also a central reserve called the Strategic Opportunity Reserve (SOR) that used to make investments in strategic priorities and to help buffer unexpected swings in enrollment. This reserve is built by using various sources such as investment income and by taking the projection for tuition and subsidy revenue and holding back 2% to create a buffer in case enrollments fall short in a given year. These sources are how in the graph at the left. Note that in FY20 there is a negative number associated with enrollment which results from the FY20 freshman class coming in 100 student less than predicted when the budget was built the previous spring. This illustrates the buffering potential for this reserve – when the revenue fell short of what was budgeted, this reserve absorbed that loss temporarily so that units did not have to cut their budgets. This imbalance, however, still needs to be solved in future years.

The graph at the right shows some of the major areas of investment of these funds. The table at the top shows that there was about 22M available in SOR as we started FY20 and the plan was to add about 14M to this and spend 12M. As we ended the year, however, there was cut to subsidy resulting from the pandemic and the anticipated addition of 3.6M resulting from the state adding to subsidy after the budget was built was wiped out by this cut. This again illustrates the important of maintaining some sort of central buffer to help smooth out some of these unexpected events so that we don't ha\ve to go back and change unit budgets mid-year.

Transfers and Net Results

		Athens Colleges and Schools	Regional Campuses	Auxiliaries	Central & Admin Operations	Reserves	FY20 Operating Activity Subtotal	Non-Operating Activity	Financial Statement Adj & Component Units	GAAP Adj Totals
17	Total Revenues & Revenue Allocation	$ 515.1	$ 53.6	$ 116.7	$ 54.9	$ 18.6	$ 758.9	$ 75.8	$ 7.3	$ 842.0
18	Funding Transfers	$ (6.2)	$ 0.5	$ 2.3	$ (13.9)	$ 17.4	$ -	$ -	$ -	$ -
29	Total Expenses & Expense Allocations	$ 543.0	$ 51.8	$ 105.5	$ 57.1	$ -	$ 757.3	$ 169.0	$ (148.0)	$ 778.3
30	Results of Operations	$ (21.6)	$ 1.4	$ 8.9	$ 11.7	$ 1.3	$ 1.6	$ (93.2)	$ 155.3	$ 63.7
	INVESTMENT TRANSFERS									
31	Transfer To (From) Plant Fund	9.1	0.9	12.5	4.7	0.3	27.5	(27.5)	-	-
32	Transfer To (From) Quasi Endowments	(0.9)	-	-	0.2	1.0	0.3	(0.3)	-	-
33	Repair & Replacement Transfers	-	-	-	-	-	-	-	-	-
34	Internal Bank Transfers	-	-	-	-	-	-	-	-	-
35	Total Investment Transfers	$ 8.2	$ 0.9	$ 12.5	$ 4.9	$ 1.3	$ 27.8	$ (27.8)	$ -	$ -
						-	-			
36	Total Transfer To (From) Reserve	(29.8)	0.5	(3.6)	6.8	-	(26.2)	26.2	-	-
37	Adjusted Net Results	$ -	$ -	$ -	$ -	$ -	$ -	$ (91.6)	$ 155.3	$ 63.7

18 Funding Transfers – movement of funds between areas. Nets to zero. Basically funds come from reserves and auxiliaries and going into college and admin units
30 Results of Operations – What is left after you take Revenues and Transfers (reverse the sign) minus Expenses. A negative number means the area is in deficit, positive is a surplus
31 Transfer To (From) Plant Funds – using funds in the budget to pay for capital improvements – moved to Non-Operating Activity
32 Transfer To (From) Quasi Endowments – setting aside funds into an endowment to generate interest that then will be spent
36 Total Transfer To (From) Reserve – using accumulated reserves to balance the budget – 26.2M in FY20
37 Adjusted Net Results – balance between revenue and expense after transfers

18

The three major components of the budget – revenues, expenditures and reserves come together to create a balanced budget. Typically revenues are not exactly equal to expenditures in a given year. Transfers are used to move funds to and from various reserves to achieve balance. This table pulls the relevant rows from the budget shown on page 14 of the budget book.

Total revenues show up on row 17 and expenditures on row 29. Row 18 shows funding transfers across units. Here you can see 17.4M coming out of reserves to fund various things in colleges and central administration. The total of all these transfers is zero so there is no net effect on the overall budget but there are effects within the individual areas.

When you subtract expenditures from revenues and take the effect of transfers into account, you get the Results of Operations in row 30. Colleges end up with a negative result and the other units are positive this year. This is mostly because colleges are in the middle of phasing in reductions to expenditures though the use of reserves to stretch out the impact. Line 36 shows this.

Other transfers occur between units and Plant Funds. This is where a unit takes part of its budget for a year and puts it into an account for a future renovation. The biggest example of this is under auxiliaries where they set aside part of their revenues for dorm renovation since that must fund those improvements themselves. All units do this to differing levels.

Transfers to Quasi Endowments are instances where a unit puts funds into an endowment in order to use the interest over time. This is slightly different that the university endowment where the funds remain in the endowment forever. With a quasi endowment is is possible to reverse this and move the funds back out if necessary some day. An example of this is the royalty funds we received from the Somovert drug commercialization. Those one-time funds were set aside into quasi endowments in the units getting a portion of those funds rather than simply spending the funds.

Once the various Investment Transfers are accounted for, the Adjusted Net Results in line 37 shows that the budget has been balanced.

Glossary

- **Fiscal Year** - The University's fiscal year begins on July 1 and ends on June 30 of the following calendar year.
- **Fund** - An income source established for the purpose of carrying on specific activities or objectives, in accordance with special regulations, restrictions or limitations.
- **Restricted Funds** - Funds whose use has been restricted by an external agency or individual. These funds are limited to support specific purposes and/or units. Examples include certain research awards and gifts.
- **Unrestricted Funds** - Refers to funds that have no external limitations on their use. Examples of unrestricted funds include *Tuition, State Subsidy, Fees and External Sales*.
- **Budget** - The annual plan for the expenditure of estimated resources to support the University's priorities and operations.
- **Operating Budget** - Detailed projection of all estimated income and expenses based on forecasted revenue during a given period (usually one year) to support the operations of the university, including instruction, scholarships and financial aid, and administrative activities.
- **Capital Budget** - Budget/plan for capital assets and infrastructure such as facilities, renovation, information technology, and certain equipment. Appropriations from the state of Ohio are the primary source.
- **Revenue** - Inflow of funds from sales, services, fees, gifts, or other external sources, including the state of Ohio and tuition.
- **Expenditure** – The use of funds to pay for activities related to the operation of the university
- **Base Budget** – Represents resources that are consistent and reasonably anticipated to continue from year to year. For example, salaries for permanent positions are expected to be base funded.
- **One-time Funds** - Resources that cannot be anticipated on a long-term or consistent basis and therefore should not be allocated to support ongoing expenses. Reserves are an example of one-time funds
- **Reserves** - Funds that are not expended during the course of a fiscal year are "carried forward" typically in the form of segregated accounts within each unit's budget and some central areas like healthcare and worker's compensation.
- **Transfers** - Represents financial activity between units within the university for services rendered or in to or out of the operating budget from other areas like plant funds or reserves.
- **The State Share of Instruction (SSI)** - Unrestricted funding that supports a portion of instructional and administrative costs incurred by campuses. Uses an outcome-based funding model based on course and degree completion.
- **GAAP –** Generally Accepted Accounting Principles

19

This Glossary includes commonly used terms that we will encounter often during the year.

Glossary

- **Facilities and Administrative Cost Recovery** - An overhead charge the university can include with a grant (mostly federal grants) to pay for costs of facilities and other infrastructure needed to support research activity.
- **Endowment –** money set aside to be invested with the intent that interest earned from the investment will be brought into the operating budget to fund various activities. The university endowment is managed by a separate entity called the OU Foundation that has its own governing board.
- **Quasi Endowment** – operating funds that are set aside by a unit into an endowment that is invested along with the university endowment. The term "quasi" indicates that the funds do not belong to a separate entity and it is possible to bring those funds back and spend them in the future in case of an emergency.

20

This Glossary includes commonly used terms that we will encounter often during the year.