2017-18 Fiscal Year Tuition and Education and General Budget Scenarios

SUMMARY

Discussions on budget planning and tuition recommendations for the 2017-18 fiscal year have been underway since October. These have included discussions by the University Budget Committee, university leadership, Provost's Council, Faculty Senate Budget and Fiscal Planning Committee, and the Student Budget Advisory Council. The groups have reviewed projections of expenses, revenues (informed by the Governor's Recommended Budget released on December 1, 2016), and new strategic budget allocations needed to advance university priorities. Following the January 18 Finance & Administration Committee, additional outreach will be conducted with students, the University Budget Committee, Provost's Council, the Faculty Senate Budget and Fiscal Planning Committee, the Student Budget Advisory Council and others to order to develop final proposals to present to the Board at its March meeting.

Some of the key observations that have come from discussions to date are that an effective budget plan:

- Maintains the quality of OSU's programs, promotes access to those programs, advances the strategic goals of the university, and supports the long-term financial stability of the university;
- Addresses access and affordability for all students but particularly for students at risk and evaluates which group of students are most affected by different budget scenarios;
- Recognizes that modest tuition increases may be appropriate but that they should not be the first or the only approach used to build a balanced budget;
- Examines all revenues and expenses;
- Considers long-term consequences, as well as short-term needs;
- Reviews and adjusts management and administrative overhead costs and practices to ensure that necessary support is provided at as small a cost as possible;
- Recognizes and supports the university's mission and all of its communities; and.
- Makes necessary adjustments to allow for strategic allocations to high priority needs while balancing the overall budget.

The Governor's Recommended Budget (GRB) includes "flat" funding for public universities for the 2017-19 biennium despite significantly increased costs to OSU that include required participation in the state retirement and health insurance systems. The biennial cost increase for continuing service levels is estimated at 7.9%. With reasonable assumptions about enrollment, other revenues, and expense growth, it would take a resident tuition increase of over 14% for the next year to balance the operating budget with no other adjustments. *None of the planning groups recommend this strategy.*

The 2017-18 fiscal year budget will likely require cost reductions, some enrollment growth, and tuition increases to support critical strategic investments and cost increases to maintain quality in existing programs and services and to retain faculty and staff. The specific mix of these elements is not yet clear, as it will depend in part on decisions by the State Legislature in the coming session.

The preferred approach on tuition from the discussions to date is planning for a 3-5% increase in resident undergraduate tuition for 2017-18 with perhaps an additional 1% increase to be dedicated entirely to need-based aid. Increases for non-resident undergraduates would be somewhat less because non-resident enrollment is more cost-sensitive (as it is about three times resident tuition) and larger increases decrease enrollment.

At GRB funding levels, in FY18 (that is, for the 2017-18 academic year) there would be a reduction in state funding of about $3.5M to OSU-Corvallis, $2.4M to the Statewide Public Services, and $0.2M to OSU-Cascades. These cuts, in combination with cost increases and the tuition scenario outlined above, would leave an approximately $14-23M annual budget gap for FY18 at OSU-Corvallis to fill through other measures and a gap of about $4.7M to the Statewide Public Services and would significantly slow growth of faculty and programs at OSU-Cascades.

The university is working with students, faculty, other stakeholders, and Oregon's other six public universities to increase the state allocation to public universities and to student financial aid. University leadership is also reviewing strategies to close the projected budget gap in any tuition scenario brought to the Board for discussion and approval at the March meeting. A higher tuition increase scenario might be required if it becomes apparent that actions to close budget gaps that large would damage the long-term success of the university.

STATE FUNDING OUTLOOK

The state anticipates a $1.7B shortfall in the revenues required to fund all state agencies for the next biennium at the "continuing service level" or CSL. This is the level of state support needed to provide the same services as in the previous biennium, including cost increases in personnel, services and other areas. The expected shortfall derives largely from very large increases in costs for statewide healthcare programs and for funding the Public Employee Retirement System (PERS). The PERS increases result from a court decision overturning previous pension reforms and lower than projected investment returns for the program.

To create biennial budgets, the state calculates the CSL budget and then makes adjustments based on discrete policy decisions and overall revenues available. The public universities are disadvantaged in this calculation because the CSL is calculated at a flat 4.2% per biennium for the universities rather than at actual cost increases (many mandated by the state) as is done for state agencies. The universities estimated that actual CSL cost increases will be about 7.9% for the 2017-19 biennium. This approach by the state means that Oregon's public universities take a disproportionate share of reductions in their funding to support other state functions. This either shifts costs onto students or requires a reduction in the scope and quality of programs the universities can offer.

Flat state funding impacts all of OSU, but different operations are affected to different degrees (Figure 1). State funding is about 21% of the OSU-Corvallis E&G budget; OSU-Cascades' E&G budget is about 44% supported by state funding; and the Statewide Public Services receive almost 70% of their budget from the state. The Governor's budget proposes flat funding for each of those budgets, which means a reduction of 3.1% from FY17 to FY18 funding and an

increase of 4.0% from FY18 to FY19[1]. The expected rates of continuing service level cost increases are similar for all three of the E&G Fund operations (see Figure 1).

In addition to state operating funding, OSU is also seeking state-paid debt to support capital projects in Corvallis and at OSU-Cascades. These include $65M in capital improvement and renewal funds for the seven public universities, improvements to Cordley Hall, Fairbanks Hall, and Gilbert Hall, the construction of the Oregon Quality Foods and Beverage Center, and expansion at OSU-Cascades, including site reclamation, infrastructure development, construction of two new buildings, and renovation of the OSU-Cascades Graduate and Research Center. The capital requests create additional budget pressure on state resources. The Governor's Recommended Budget includes $45M for capital repair and renewal funds for the seven universities, the requests for Gilkey Hall, Cordley Hall, the Quality Food and Beverage building, and the infrastructure and reclamation work at OSU-Cascades.

OSU's priorities during the legislative session are to revise the CSL calculation for the public universities, increase the state appropriation to higher education, maintain the progress made in funding for the Statewide Public Services in the 2015-17 biennium, and fully fund the build-out of the Cascades campus.

UNIVERSITY COSTS AND STRATEGIC NEEDS ASSESSMENT

The budget projections OSU staff used in assessing various tuition scenarios at different state funding levels include a number of assumptions. Enrollment growth is assumed to be at the benchmark levels projected in the ten-year forecast (modified for undergraduate enrollment response to tuition increases). Tuition for resident graduate students is projected at a 1.5% increase and for non-resident graduate students, a 4.5% increase, both reflecting a multi-year adjustment to bring those rates into better alignment with peer institutions. Veterinary Medicine's Doctor of Veterinary Medicine and Pharmacy's Doctor of Pharmacy programs are projected with 3% tuition increases. Other revenues are projected based on recent historical trends.

Cost projections (for the present) are based on historical trends, known changes in rates for retirement and health benefits, contractual obligations for represented employees, and increases in staff and other costs proportional to projected enrollment increases. The projections include budget for an average 3% raise for unclassified employees (the proportions of merit and cost-of-living are not yet determined).

The cost projections also add about $14.4M at OSU-Corvallis in new commitments. These include additional budget for student success initiatives, growth of the professional school in Engineering, stabilization of the Athletics budget, continued work on the Marine Studies Initiative, expansion of public safety and student conduct staffing, commitments to new deans in colleges of Public Health and Human Sciences and Earth, Ocean and Atmospheric Sciences, expanded support for the OSU Foundation, and adjustments to several other essential service and support functions, including the eProcurement system and staff in Procurement and Contract Services. Some of these investments will create long-term savings (for example, the eProcurement program is projected to save $2M annually when fully implemented) and some

[1] The state allocates 49% of the biennial allocation to the universities in the first year, and 51% in the second year. If the 2017-19 funding is the same as 2015-17 funding, OSU gets the same amount in FY18 as we did in FY16, and the same amount in FY19 as we did in FY17. The consequence is this odd fluctuation in year-to-year state funding.

can reduce costs and meet strategic goals (for example, investments in student success that see more students earn their degrees in shorter periods of time). At OSU-Cascades there are significant investments planned in new faculty and staff to expand the number of programs available to students. More than 12 new faculty hires are required for academic year 2017-18 to support the development or delivery of seven additional academic degrees at OSU's campus in Central Oregon.

UNDERGRADUATE TUITION SCENARIOS

The Student Budget Advisory Council and the University Budget Committee have had several discussions about tuition and the impact of tuition increases on the affordability of higher education for many of our students. The discussions have touched on the value of higher education and the idea of higher education as a public good not just a benefit to the individual.

There is substantial research documenting the economic and social returns to both individuals and society of public investments in higher education. Many students on the Student Budget Advisory Council feel strongly that a return to truly affordable higher education requires reductions in tuition and would yield benefits to the State and society as well as to individual students. The group does recognize, however, that getting there requires substantially larger investments by the State of Oregon, as simply cutting tuition without an offsetting commitment from the state would likely require reductions in the scope and quality of programs and opportunities important to students. The tuition scenarios illustrated in Table 1 include one that shows no increase in undergraduate tuition to illustrate the relative cost required to move in that direction. The scenarios also show a maximum resident undergraduate tuition rate increase of 9%, as it is assumed that increases over that would make OSU unaffordable for too many students and would create enrollment losses that would largely offset the overall increase in revenue and be counter to our mission.

Levels of state funding for academic operations and for facilities and maintenance most directly affect resident undergraduate tuition rates. The state provides some support for academic operations and for facilities and maintenance in the E&G budget. The level of those commitments has a direct impact on the share of costs resident undergraduate students and families must pick up. Non-resident students[2] are assessed tuition at a rate that is closer to the full cost of education including operations, financial aid, and facilities costs (operations, debt service, depreciation, maintenance, etc.). Non-resident tuition should be impacted principally by the annual escalation in program costs, not by swings in Oregon's funding of higher education for its residents. In addition, non-resident students are making enrollment decisions based on program quality and cost and are looking within the context of a national market. This means it is important for the university to consider where our non-resident tuition sits, relative to national peers with similar offerings. The scenarios in this document assume that non-resident rate increases would be about one-third the size of resident rate increases and that a 2-4% increase per year is likely a maximum increase before enrollment losses outweigh the gains from the rate increase.

It is important in projecting tuition revenues to assess the effect of tuition increases on enrollment. Tuition increases at some point have a diminishing return as non-resident students

[2] This discussion is focused on non-resident students on campus. Many non-resident students in Bend or Corvallis use Ecampus courses, which charge a rate much closer to resident tuition. This is because of national pricing for online programs. Resident/non-resident differentials are the exception in pricing for most universities' online offerings.

chose to go elsewhere and resident student chose not to attend at all. There is a point at which the revenue return is not sufficient to justify the loss of students the increase causes, given OSU's commitment to access and affordability. The budget gaps calculated in these scenarios attempt to estimate the impact of various tuition increases on enrollment (Appendix A). The existing studies on this impact are mostly pre-recession and are not all directly applicable to OSU, so the errors on these estimates may be substantial. What is available, however, suggests that non-resident enrollment shows a much greater sensitivity to tuition increases than resident enrollment, with increases of 4% or more significantly reducing non-resident enrollment growth rates and net revenue. Resident enrollment overall is not strongly correlated with tuition increases but shows some negative correlation, particularly for enrollment of first-time freshmen. Increases over 6-7%, on the other hand, seem to create negative changes in growth rates of freshmen enrollment, which eventually impact overall resident enrollment. Nevertheless, the loss of resident enrollment with tuition increases is small enough that net revenues actually grow with tuition increases up to about 10%. However, there is a major impact on students that runs counter to OSU's mission and values regarding access and affordability. At a 4% increase in resident undergraduate tuition, the model predicts a loss of over 200 students; at a 9% tuition increase, a loss of over 450 students. Additionally, the students priced out of the university at these increases are more likely to be from historically disadvantaged communities in the state.

Table 1 illustrates some of the major consequences of various tuition scenarios for OSU-Corvallis E&G funds. These scenarios assume two levels of state funding and similar assumptions about graduate and professional tuition, enrollment increases, and cost growth. The first state funding level is the Governor's Recommended Budget, which is flat funding relative to the 2015-17 biennium. However, that budget assumes $897M in new revenues, which may not be realized, as nearly all require approval of new state taxes or fees and the votes for those are not certain. The second scenario assumes funding at 5% below the GRB, which is roughly a "no new revenues" level. Table 1 notes the budget gap (before any adjustments to historical expenditure levels), the change in tuition waivers (the principal source of institutional financial aid, which is set as a percentage of gross tuition revenues), and the annual dollar cost increase for full-time resident and non-resident undergraduate students.

During their meetings, the Student Budget Advisory Council and the University Budget Committee discussed scenarios that included a 2% reduction in tuition and no increase in tuition (Scenario A in Table 1 shows the case for no increase in tuition) to see what the impacts would be. The discussions concluded that the university would have to close a significant part of the budget gap in any scenario through cost reductions, but the consensus of the University Budget Committee was that the cuts required in these scenarios would adversely impact too many academic programs. While either scenario might be possible in the short-term, in the absence of increases in state appropriations, both would require long-term reductions that would adversely impact the university's strategic goals.

Scenario D illustrates a 9% and 4% increase in resident and non-resident rates, respectively. This scenario closes the budget gap, though it still requires $11M to $14M (at the GRB level of funding) of other changes or reductions to expenditures. The gap is also not much greater than that in Scenario C, in large part because at the tuition increase levels of Scenario D, significant reductions in enrollment (on the order of 4-5%) are assumed. A tuition increase that large shifts a very large part of the budget gap onto students and has the potential to decrease enrollment, particularly for first-generation students and students from economically disadvantaged backgrounds. Even in this challenging budget environment, the University Budget Committee

felt that a resident tuition increase over 7% was not a viable strategy for the institution, given OSU's dedication to access and affordability.

Scenario B in Table 1 assumes a 3% increase in resident tuition rates and a 1% increase in non-resident rates (the latter is a lower percentage increase because non-resident tuition is already so much higher than resident tuition), and Scenario C assumes a 6% increase in resident tuition rates and a 2.5% increase in non-resident rates. These approaches have smaller dollar increases for both resident and non-resident students compared to Scenario D and provide significant increases in institutional financial aid but leave a $14 to $26M budget gap (depending on the final level of state funding) that would need to be closed by cost reductions or other revenues.

The budget discussions have included the idea that increases over some threshold (for example, 3% for residents and 2% for non-residents) would be allocated entirely to increase need-based institutional financial aid. These increases would not close the budget gap but would address some of the unmet need that currently exists before there is any tuition increase. OSU's institutional financial aid is about 10% of gross tuition revenues and is low compared to most of the public institutions we view as peers. The average freshmen discount rate at public universities in fall 2014 was 14.0%. With additional institutional financial aid, OSU's priority would be to return to fuller funding of the Bridge to Success program. Bridge to Success is a financial aid program that provides aid to Oregon students with the most significant need. The awards are based on financial need and the student's ability to show satisfactory progress toward completion of degrees. Students do not need to apply; any financial aid applicant who meets Pell Grant and Oregon Opportunity Grant eligibility and can show necessary progress toward degree is automatically considered.

At Oregon State's average institutional remission of $2,900, each additional $1M in aid would allow OSU to add 345 students to the Bridge program (currently there are about 1,800 students in the program). We could also consider reinstating some of what the awards used to cover. When Bridge was implemented in 2008, the Oregon Opportunity Grants awards were larger, and the average OSU institutional remissions were lower than the current amount. At that time, we served around 3,200 Oregon Pell-eligible students so that tuition and fees were covered by gift aid, and approximately 49% of these students also had their gift aid cover books and supplies. At current levels of funding, we are no longer able to cover books and supplies.

BUDGET SCENARIO IMPACTS

OSU-Corvallis

The Governor's Recommended Budget would cut about $3.5M from the OSU-Corvallis E&G budget in FY18 relative to FY17. As noted earlier in footnote #1, the state's biennial appropriation is allocated 49% in the first year, and 51% in the second year, so even flat funding creates a reduction in the first year. Each of the budget scenarios outlined in Table 1 requires reductions in expenses, given that there are currently few other reliable avenues for revenue increases. The most likely budget gap to be closed is between $17M and $23M for the 2017-18 fiscal year. The budget discussions have included consideration of strategies to close that gap. These include:

- Review and reduce management and overhead costs wherever possible (see Appendix B)
- Reduce growth rate in spending for services and supplies

- Use some fund balance for the first year of the biennium to allow for time to plan appropriate recurring budget adjustments
- Hold vacant positions open for defined or open-ended periods of time except for critical instructional, advising, or health and safety positions
- Identify areas for efficiencies on the academic (minimum class sizes, for example) and service side (standards for productivity per position)
- Defer E&G funded capital repairs or construction
- Reduce or delay future salary increases for unclassified staff
- Invest in systems or process improvements that reduce recurring operational costs (e.g., eProcurement for purchasing, energy improvements, etc.)
- Invest in areas that can create productivity increases in core functions (e.g., staff support that frees faculty from administrative work to spend more time in instruction and research)
- Use Foundation or other one-time funds as a bridge to the next biennium
- Identify opportunities for renegotiating agreements on utilities, insurance, or debt that might reduce operational costs
- Consider a voluntary separation or early retirement program with specific goals for recurring savings in personnel costs
- For the longer term, continue exploring opportunities to leave the state's retirement and health insurance systems

OSU-Cascades

The Governor's Recommended Budget would reduce funding for OSU-Cascades by about $0.2M in FY18 relative to FY17. The largest annual revenue change for OSU-Cascades is from the rapid growth in enrollment as the four-year campus builds out. However, reductions in state funding have a significant impact on hiring new faculty to build the programs students want, and slower hiring will slow the growth in enrollment. Flat-funding is particularly challenging for the Bend campus because enrollments are growing rapidly and the response of the Higher Education Coordinating Commission (HECC) allocation model to enrollment growth takes two to three years (since the largest part of the allocation depends on degrees awarded and is averaged over three years). Leadership at OSU-Cascades is reviewing options to maintain essential hiring if funding remains at the GRB level.

Tuition rates for resident undergraduate students at OSU-Cascades are a few dollars less per-credit hour than at OSU-Corvallis. This was done originally to encourage enrollment in the 2+2 programs that existed with Central Oregon Community College. However, now that the campus has transitioned to offering complete four-year degree programs, the University Budget Committee recommended that those rates be adjusted to be the same as rates at OSU-Corvallis. The final tuition proposals may include an additional adjustment for resident rates at OSU-Cascades to move closer to matching rates at OSU-Corvallis. However, OSU-Cascades has a very high rate of Pell-eligible students in the population, and tuition increases of any sort are even more challenging for students there. If base tuition rates have a large increase, this may not be the right time to try to close the pricing gap between the two campuses. Leadership at OSU-Cascades is discussing tuition strategies with their students.

OSU-Cascades faces two other significant challenges in state funding. The state provides additional allocations of "regional funding" to the four smaller universities (Western Oregon,

Eastern Oregon, and Southern Oregon universities and Oregon Institute of Technology) and the OSU-Cascades campus in recognition of the higher overhead costs of maintaining small regional campuses. However, that regional funding for OSU-Cascades was originally capped at about 40% of what the other smaller campuses receive. This cap was somewhat arbitrary but was based on the assumption that overhead costs were lower since OSU-Cascades was a branch campus, was originally only a two-year program, and was so much smaller than the other campuses that the formula did not work well. This is no longer true, and while the total overhead is somewhat lower because OSU-Corvallis provides significant management and governance support, the current regional allocation is intended to support the higher per-capita costs of delivering academic programs on a small campus and does not reflect the actual costs of operation of a four-year campus[3]. This allocation was to be revisited as part of the HECC's review of the discipline weighting and mission differentiation allocations in the Student Success and Completion Model (SSCM), which is Oregon's performance-based funding formula. Those discussions were postponed, and the issue for OSU-Cascades has not been resolved. The current approach provides $3M to $3.5M per year less to OSU-Cascades compared to what the formula used for the other regional campuses would provide. OSU continues to work with the HECC on resolving this problem, though it is more challenging in a year in which we anticipate reductions in funding.

The second important issue is funding the development of the physical campus in Bend. The legislature mandated the creation of a four-year campus in Bend, which will entail significant costs for acquisition and development of appropriate space and facilities. This construction cannot reasonably be done within the historic capital allocations for the seven existing campuses and will require additional commitments from the legislature. This is the university's first priority in legislative advocacy for the Bend campus. The most pressing issue is that OSU's request to the HECC included funding to construct the next academic building. Another academic building is needed to accommodate the enrollment growth anticipated in the next four years at OSU-Cascades. At its current capacity, the 10-acre campus can serve no more than 1,890 students. At its current enrollment of 1,122 and its expected growth rate, the campus will reach capacity in three years (2020). Without that construction and renovations to the Graduate and Research Center, OSU-Cascades will have to limit enrollment and look for additional space to rent for the next biennium but lacks fund balance to cover those costs without passing them on to students.

Statewide Public Services

The Statewide Public Services (SWPS) receive nearly 70% of their funding from the state and support faculty in Agricultural Sciences, Forestry, Public Health and Human Sciences, Veterinary Medicine, and at experiment stations and extension offices around the state. A significant state funding increase in the 2015-17 biennium supported the addition of about 40 faculty members to work on critical problems for the state's economy.

The Governor's Recommended Budget would fund the SWPS at the same level as in 2015-17, which would result in a reduction in funding of about $2.4M in FY18, relative to FY17, from the operations of the Statewide Public Services. With continuing service level costs considered, the

[3] The regional campuses at Eastern Oregon, Western Oregon, Southern Oregon, and Oregon Institute of Technology received an additional budget allocation for shared services costs when the Oregon University System dissolved. This was intended to support added governance costs. The existing regional funding is for the higher per capita cost of program delivery, which is similar for OSU-Cascades as for the other regional universities.

SWPS need an additional $9.4M for the biennium to maintain the progress made in serving the state the last two years. While fund balance can defray some of those reductions in the first year, the principal strategy will need to be management of vacant positions and staff reductions, as most of the costs are in personnel. The SWPS are not supported by significant tuition and fee revenues and do not benefit from changes in those rates. However, many of the faculty supported by SWPS funds are in tenured or tenure-track positions split with E&G funding and contribute to the education of graduate and undergraduate students. Any changes in those positions have consequences for the overall mission of the university and have to be carefully planned.

This level of funding also risks the progress made with the funding increases from the 2015 legislative session. Increases in funding supported more than 40 new faculty in the Agriculture Experiment Station, the Forest Research Lab, and the Oregon Extension Service. Programs across the state were expanded and serve stakeholders in every county in Oregon. OSU is working with stakeholders across the state to preserve the impact the SWPS have had across Oregon.

NEXT STEPS

Trustee discussion and comments at the January 18 Finance & Administration Committee meeting will be shared with the University Budget Committee, Provost's Council, the Faculty Senate Budget and Fiscal Planning Committee, and the Student Budget Advisory Council. The University Budget Committee, with advice from the other groups, will recommend tuition proposals to the Provost in the first week of February. These may include alternate scenarios, depending on the final level of state funding. These proposals will be communicated to the university community for comment, and the final proposals will be brought to the Board at its March meeting.

Figure 1: State funding as a proportion of funding for OSU's Education and General operations

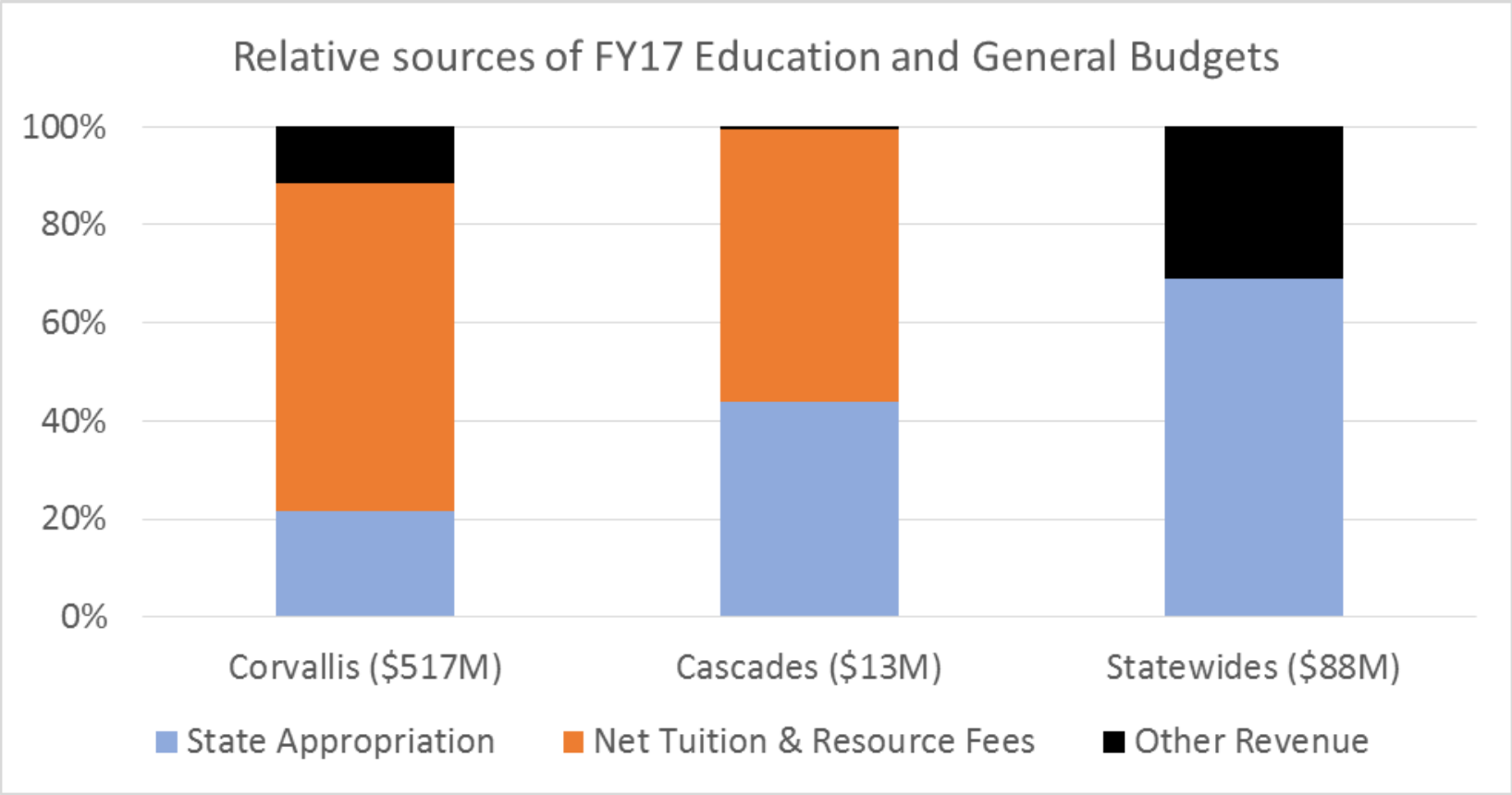


Table 1: Budget Scenario Summaries—OSU-Corvallis Education and General Fund

Columns show different undergraduate tuition rate scenarios for resident and non-resident students. Tuition increase shown in each scenario is the total per academic year assuming 15 credits. Rows show state funding at Governor's Recommended Budget level (top row) and at the GRB minus 5% (bottom row), which is a projection consistent with a "no new revenues" budget. The **"gap"** is the annual operating deficit that would have to be covered by fund balance, cuts, or other changes. Other revenue and expense assumptions are held constant and are noted on the next page. A university commitment to fund $20M through expense reductions or fund balance commitments would make the two tan shaded boxes possible outcomes.

State Change	**A. Resident / Non-resident Tuition: 0% / 0%**	**B. Resident / Non-resident Tuition: 3.0% / 1.0%**	**C. Resident / Non-resident Tuition: 6.0% / 2.5%**	**D. Resident / Non-resident Tuition: 9.0% / 4.0%**
Governor's Recommended Budget **+0% for biennium** (–3.1% for FY18 over FY17) **$667.3M PUSF***	**Annual Gap:** **–$21.7M to –$23.7M** Tuition waivers increase: $1.6M Resident tuition increase: $0 Non-resident tuition increase: $0	**Annual Gap:** **–$17.0M to –$19.1M** Tuition waivers increase: $2.3M Resident tuition increase: $261 Non-resident tuition increase: $272	**Annual Gap:** **–$13.9M to –$15.9M** Tuition waivers increase: $2.7M Resident tuition increase: $523 Non-resident tuition increase: $680	**Annual Gap:** **–$11.5M to –$13.5M** Tuition waivers increase: $3.0M Resident tuition increase: $784 Non-resident tuition increase: $1,088
Governor's Recommended Budget with no new revenue **–5% for biennium** (–9.3% for FY18 over FY17) **$633.9M PUSF**	**Annual Gap:** **–$28.5M to –$30.5M** Tuition waivers increase: $1.6M Resident tuition increase: $0 Non-resident tuition increase: $0	**Annual Gap:** **–$23.8M to –$25.8M** Tuition waivers increase: $2.3M Resident tuition increase: $261 Non-resident tuition increase: $272	**Annual Gap:** **–$20.6M to –$22.7M** Tuition waivers increase: $2.7M Resident tuition increase: $523 Non-resident tuition increase: $680	**Annual Gap:** **–$18.3M to –$20.3M** Tuition waivers increase: $3.0M Resident tuition increase: $784 Non-resident tuition increase: $1,088

**PUSF is the Public University Support Fund, the principal part of state support to the universities*

- Expense base is $552M in all cases, so a $10M gap = 1.8% of the base, $12M gap = 2.2%, $20M gap = 3.6%, $30M gap = 5.4%
- The median salary across all positions is $58K ($87K with benefits); each $10M in cuts is equal to 115 employee positions.

- At median salary of $85K ($127.5K with benefits), each $10M in cuts is equal to 78 employee positions.
- At the GRB level of funding, with a 3% cap on non-resident tuition, it would take a resident tuition increase of 14% to balance the budget with no cuts.
- A 1% tuition rate change (up or down) is a change of $1.0M in net resident tuition revenue (after institutional financial aid) and a change of $1.0M in non-resident tuition.

Table 1 Notes:

Revenue Assumptions

- Growth as outlined in the ten-year forecast benchmark: flat for residents; up 4.2% for non-residents (ambitious, but possible)
- 1.5% annual tuition increase for resident graduates
- 4.5% annual tuition increase for non-resident graduates
- 3% annual tuition increase for professional programs
- Ecampus and summer tuition increases are equal to resident undergraduate tuition increases; Ecampus annual enrollment growth rate is 12%; summer enrollment growth is assumed to be flat.
- Modest increases in F&A and other revenues sources based on historical trends

Expense Assumptions

- 3% unclassified salary increases
- PERS as currently projected with increased rates
- Increases in staff proportional to enrollment growth
- Supplies & Services (S&S) and other increases as in recent years
- $14.4M in new spending for student success, known new commitments to colleges and support services, OSU Foundation and Athletics and the loss of Oregon Lottery support for student-athlete scholarships

APPENDIX A: ENROLLMENT SENSITIVITY TO TUITION INCREASES AT OSU

There have been a number of studies on the sensitivity of enrollment to tuition increases, but there are few in recent years that address the sensitivity of non-resident enrollments across state boundaries or the changes in costs and student demographics since the recession. The Office of Budget and Fiscal Planning looked at two approaches to trying to estimate the price sensitivity of enrollment for undergraduate students. The conclusions here are qualitative as the existing data do not allow for well-constrained models.

The conclusions from this study are that resident undergraduate enrollment is not particularly sensitive to price and that, even with losses in enrollment, there are revenue increases with increases in tuition up to about 10%. However, the losses in enrollment could be significant (over 200 students at a 4% increase) and run counter to OSU's mission and commitment to serve all Oregon students regardless of circumstances. Resident freshmen enrollments are more sensitive to tuition increases. Increases over $500-600 in annual tuition charges (4.9% to 5.9% at current tuition and fees) correlate with significant negative impacts on enrollment growth.

Non-resident undergraduate enrollment shows significant sensitivity to price, based on changes over the time OSU moved to per credit hour pricing and had tuition increases in the 9-10% range. Increases over $1,000-1,500 (3.5% to 5.2% at current tuition and fees) start showing significant impact on enrollment growth and declines in net revenue.

National Study Results

The Institute of Labor Economics published a study in 2008 by Hemelt and Marcotte on "Rising Tuition and Enrollment in Higher Education" (IZA Discussion Paper No. 3827). The authors looked at data from 1991 through 2007 available in the Integrated Postsecondary Education Data System (IPEDS). They used a multivariate model that included tuition, undergraduate enrollment, financial aid, per capita income, state population, community college tuition rates, and some other variables. They found that, at the mean enrollment total, a $100 increase in tuition and fees (at the median expense of $4,210 annual tuition and fees) resulted in enrollment declines of 0.25% across all institutions. However, declines were more pronounced at Carnegie Research 1 and Top 120 universities, on the order of 0.52% per $100 increase. Freshmen enrollments were more impacted by tuition increases than overall enrollment, particularly at the Carnegie Research I universities. Increases in financial aid had little effect on moderating enrollment losses with tuition increases at Carnegie Research I universities, though it did help at other types of institutions.

Applying this study to current circumstances at OSU is challenging, as the data used are nine years old and were the result of studies taken before the recession and its subsequent large cuts in state funding and increased tuition that occurred then; $100 in 2005 would be $128 now. The enrollment sensitivity could be viewed as a dollar amount (–0.52% per $128) or a percent of tuition (–0.52% enrollment per 1.24% increase in tuition and fees). The study was focused on resident students, so we calculated changes based on dollar sensitivity and percent sensitivity. For resident students, the difference in the dollar sensitivity vs. the percent sensitivity was minimal.

The arithmetic of the calculation shows that from a financial point of view, resident undergraduate tuition increases yield positive revenue despite the enrollment losses—the enrollment is not sensitive enough to price to have a clear "break-even" point in this model.

However, there is a major impact on students that is counter to OSU's mission and values. At a 4% increase in resident undergraduate tuition, the model predicts a loss of over 200 students; at a 9% tuition increase, a loss of over 450 students.

Observations from OSU's Tuition Plateau Change

The Hemelt and Marcotte study did not really apply to non-resident students and used pre-recession data. To try to examine those impacts (i.e., non-resident students and post-recession date), we looked at the results of recent tuition increases at OSU.

In fiscal years 14, 15, and 16, OSU moved from a tuition plateau charge structure for undergraduates to per credit hour pricing. In fiscal years 15 and 16, this translated into tuition increases of about 9-10% for students taking a full-time course load. We looked at headcount enrollment changes in resident, U.S. non-resident, and international undergraduate students in each of those years, compared to the dollar increase in tuition, as well as the change in resident and U.S. non-resident first-time freshmen. The results are shown in Figure A1. For the three student groups, the blue lines are the dollar changes in tuition for a full-time student (the left-hand axis); the orange line, the headcount change in enrollment from the previous year (right-hand axis); and the grey line, the headcount change in enrollment of first-time freshment from the previous year (also the right-hand axis).

Resident undergraduate enrollments in general show no consistent pattern with tuition increases. However, first-time freshmen enrollments did show a significant and persistent drop after the change to per credit hour pricing. There are other factors in play, though, since Oregon's high school class sizes have been shrinking slightly in size. These observations are consistent with the results from Hemelt and Marcotte (2008) that the price sensitivity of resident enrollment is not large, but freshmen enrollments are more sensitive to tuition increases. The trends here yield a point around a 12-15% tuition increase where enrollment losses are large enough that net revenue declines.

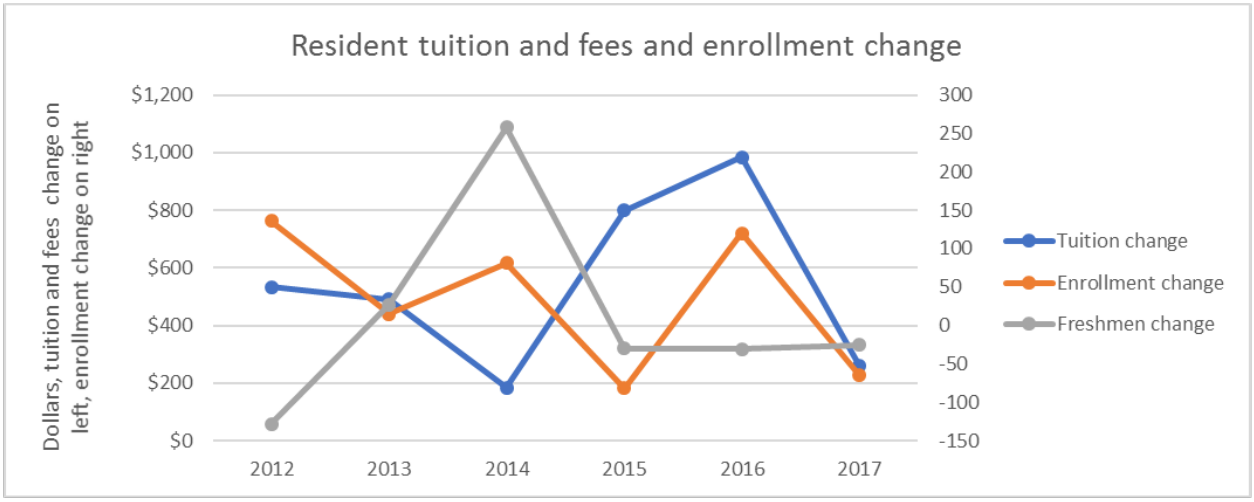
By contrast, non-resident U.S. undergraduate enrollments show a very distinct change with increases in tuition (middle graph in Figure A1). Those enrollments were growing at about 350 students a year prior to FY15, but there was no growth in FY15 and a loss of students in FY16. In FY17 there was no tuition increase (fees increased slightly) and the enrollment grew again, with a particularly large increase in U.S. non-resident freshmen.

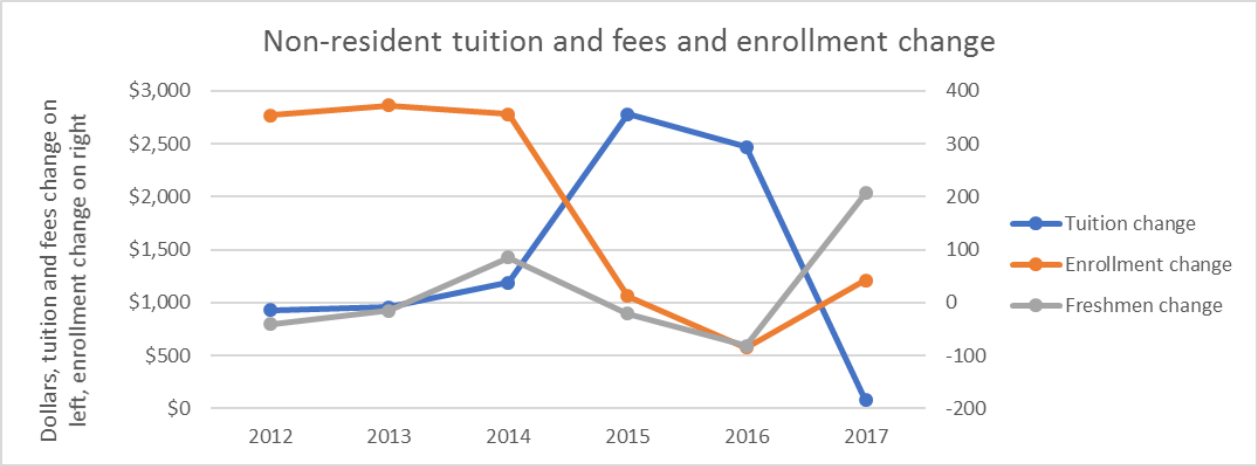
Non-resident international student enrollments (bottom graph) show a similar pattern (freshmen enrollment is omitted here). Enrollments grew in each year, but the rate of growth slowed significantly from growth of about 350 students per year in FY13 and FY14 to about 50 students in FY16. Growth increased by about 175 students in FY17. There are several other factors at play here, including changes in programs and recruiting strategies in the INTO-OSU joint venture.

Tuition increases are not the only cause of these changes, but it is likely that they have played a significant role in enrollment growth or reductions year over year. Increases over $500 per year for resident undergraduates (5.7% at current tuition) correlate with a significant drop in the incoming freshmen class. Increases in non-resident tuition over about $1,200 per year (4.2% at current tuition and fees) correlate with significant drops in enrollment growth or decreases in enrollment. The very small non-resident tuition and fee increase in FY17 (which was entirely a student fee increase) correlates with growth in both U.S. and international non-resident students.

The change most clearly correlated with tuition increase is the percentage point change in growth rate from year to year for non-resident students (i.e., if growth was 1.5% in the first year and 1.0% in the second year, the percentage point change in growth rate is negative 0.5%). The change in growth rate of resident freshmen also correlates somewhat with tuition rate change, but the overall enrollment of resident students does not. Figure A2 shows those correlations.

Figure A1: Trends in tuition and fee changes and changes in enrollment at OSU-Corvallis





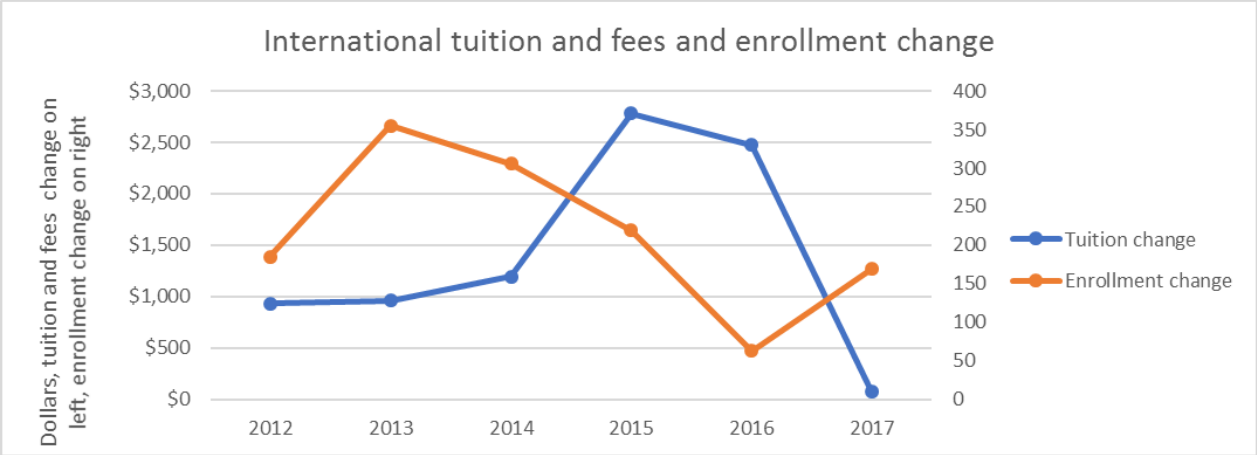
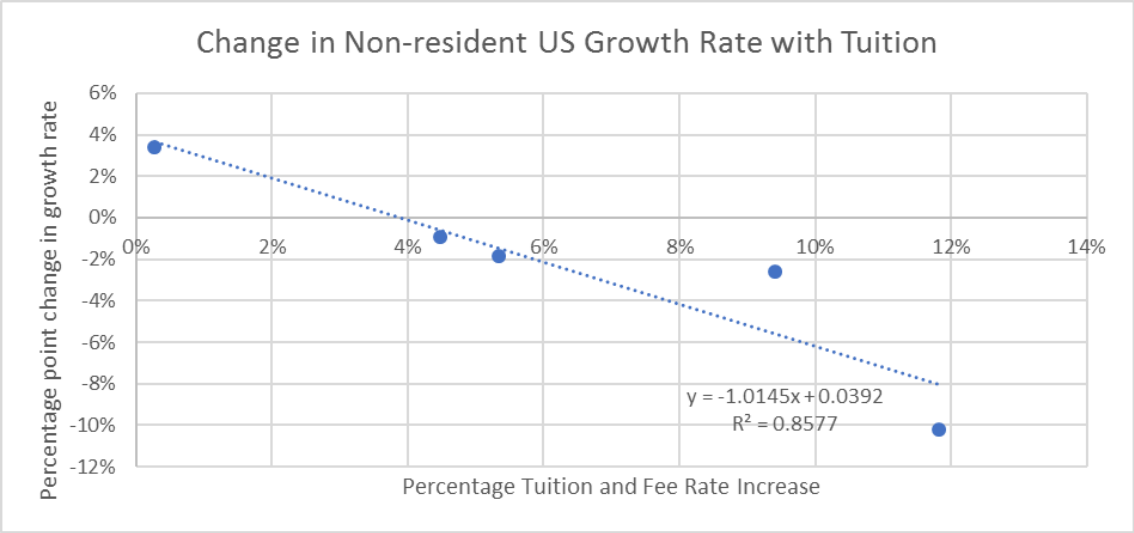
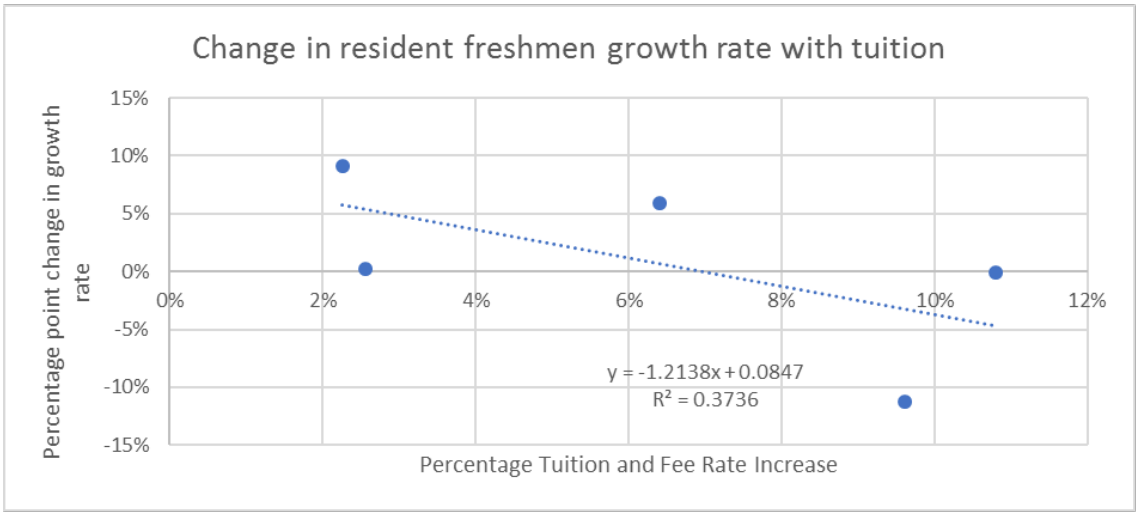
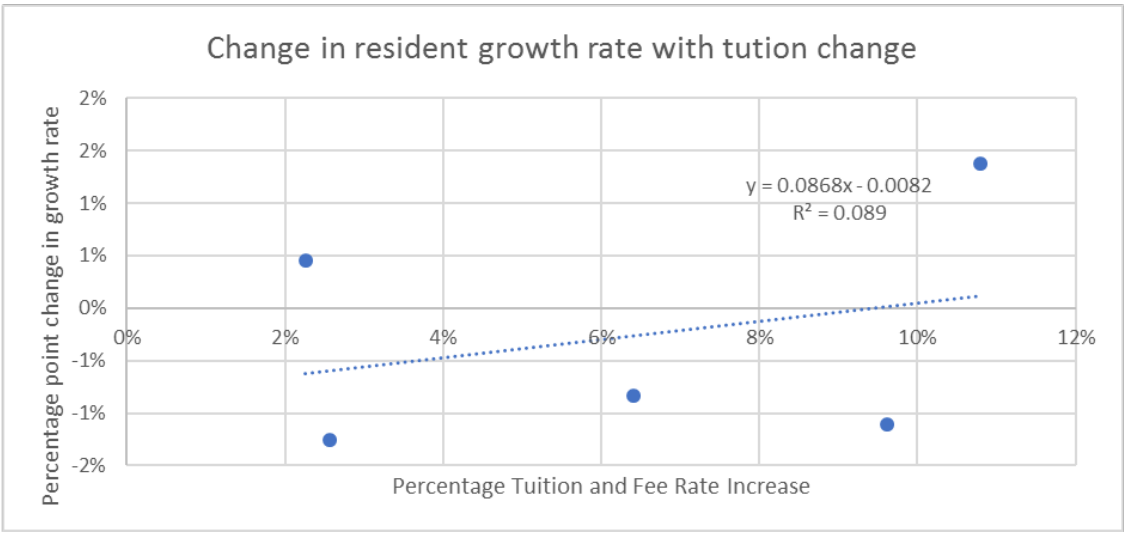


Figure A2: Correlation of changes in enrollment growth rates with changes in tuition and fee rates for non-resident U.S. undergraduates and resident first-time freshmen



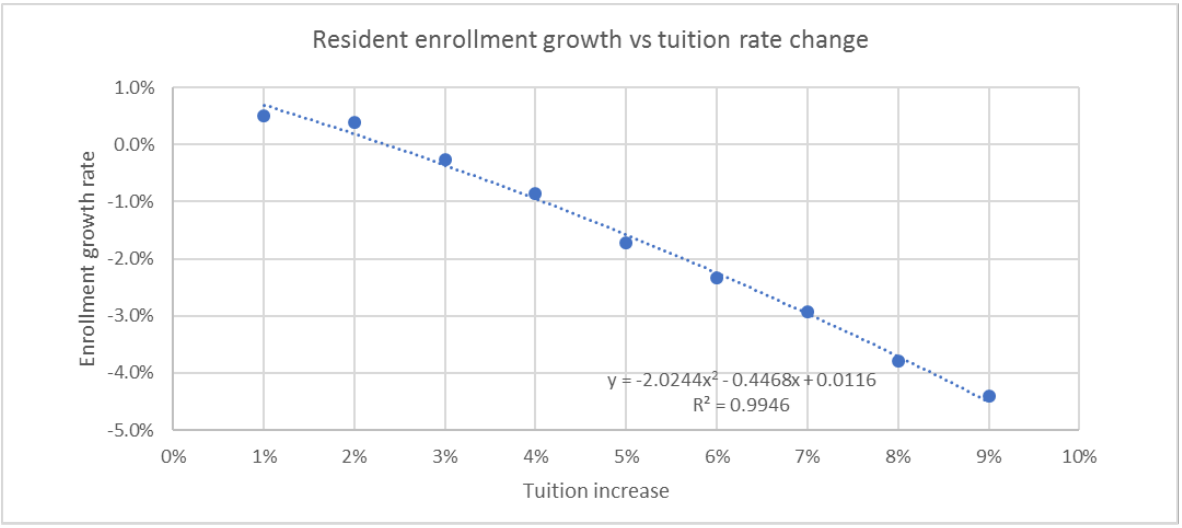


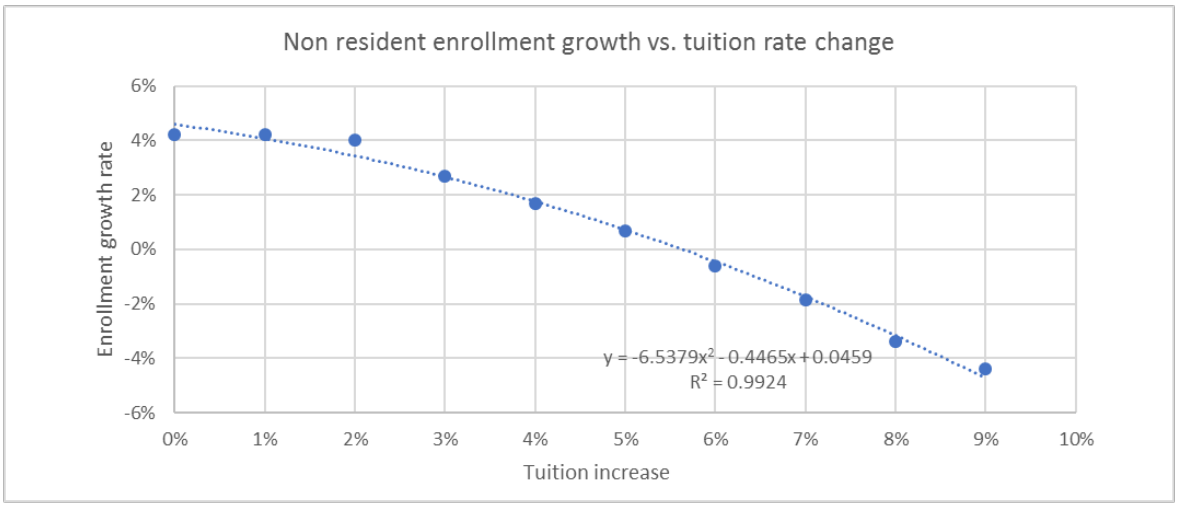


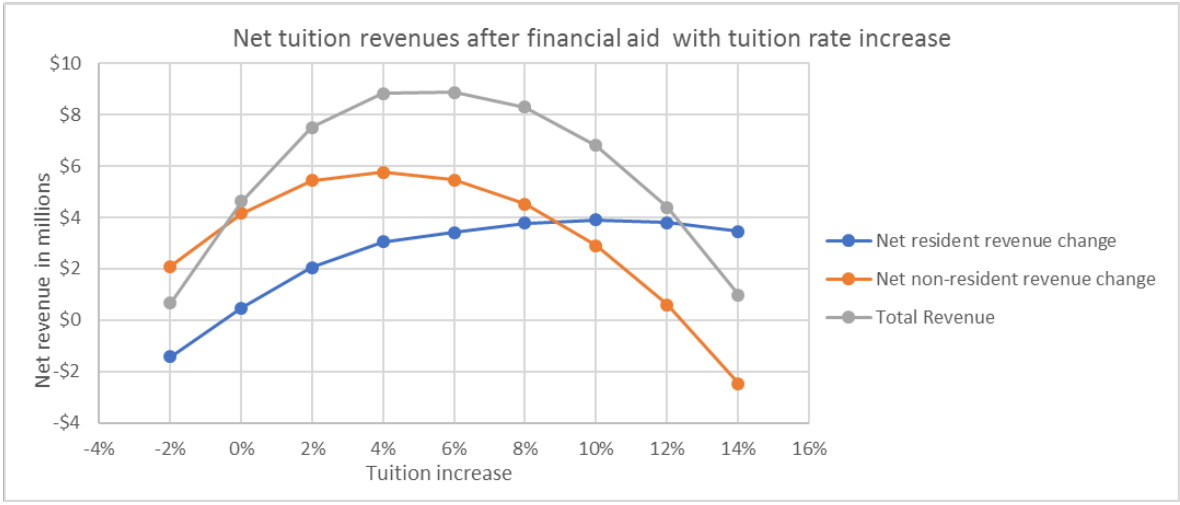
Correlation is, of course, not causality, and there are other factors at work here. This does give some support to assumptions that tuition increases over 4% would have significant impact on non-resident enrollment and that increases over 5-6% would decrease resident freshmen enrollment and overall resident enrollment by significant numbers of students, even though revenue from resident tuition would still increase.

We have tried to use these trends in growth rates from year to year to model overall enrollment growth as a function of tuition. For non-resident students, we assumed a starting point at about 4% non-resident growth at a 2% tuition increase, a maximum of 4.2% growth, and added about a 0.5% additional reduction enrollment growth per percent of tuition increase over 2% to account for regional competition. For resident students, we assumed a decrease of 0.26% growth at 3% tuition (based on this year's results), a maximum increase of 0.5%, and added an additional 0.25% decrease at 5-7% tuition increases and an added 0.50% decrease over that to account for competition from community colleges. This is a very qualitative approach at this point. We then used this modeling to illustrate net tuition revenues with various tuition increases. The results are shown in Figure A3. Non-resident student revenues peak at a 4% tuition increase (with an increase in enrollment of 1.7%), resident student revenues peak at about 10% tuition increases but with a decrease in enrollment of 5%, or about 700 students.

Figure A3: Qualitative models of undergraduate enrollment changes and net tuition revenues with increases in tuition rates







APPENDIX B: PRELIMINARY ADMINISTRATIVE COSTS ANALYSIS 2012-2016

Summary

The Board of Trustees and several other groups at OSU have asked, “Have administrative costs increased?” For a clearer perspective, the question might more specifically be, “Have administrative costs increased too much?” Answering this question requires defining what an administrative cost is and identifying some basis for how much cost is appropriate in a particular category.

Tables B1 and B2 summarize an initial review of salary costs (classified and unclassified) for OSU-Corvallis E&G-funded units by major function. This shows that costs overall have grown faster than inflation, but that growth in many functions have resulted from specific drivers (e.g., enrollment increases) or discrete events (e.g., the change in governance). University administrative salaries have grown about $2.8M above inflation, but this includes significant new costs for governance functions, which were in part offset by a return of about $2.4M in annual assessments that the university previously paid to the Oregon University System. The other major area of administrative costs is in the deans’ offices, and those have grown about $3.3M above inflation (there has been substantial research and enrollment growth to which colleges are responding).

Most functions have grown more than inflation and more than the primary cost driver has, particularly direct academic delivery (up about $27.6M or 27.1% over inflation when enrollment has grown 18.8%). Much of this growth comes from efforts to advance Strategic Plan 3.0 and to provide instructional delivery and support services that are of better quality and more directly accessible to students. The across-the-board growth in part reflects a response to observing that OSU in 2012 was spending significantly less *per student* than our peer institutions. That remains true, although the gap has been reduced in some areas.

Process

As a start to addressing this question, the Office of Budget and Fiscal Planning looked at E&G fund expenditures on the Corvallis campus for fiscal years 2011-12 (before the governance change) and 2015-16 (after the governance change). The expenditures were collected by unit at the next level below vice presidents, vice provost, etc. (so, for example, at the level of the units within the President’s Office such as General Counsel, Government Relations, etc.). The expenditures were sorted by major categories of expenditures (salary, other payroll expenses [OPE], services and supplies, etc.) so the specific areas of increases could be identified, if required.

The initial analysis looked at unclassified and classified salaries as these are most likely recurring commitments, and concerns about administrative costs are typically about numbers of people. Fiscal year 2012 costs were adjusted by HEPI[4] inflation (plus 9.10%) to FY16 dollars for comparison of changes beyond inflation.

Some costs are driven by discrete events (e.g., establishing an audit office because of the governance change), and some grow in response to more continuous cost drivers. Student

[4] HEPI is the Higher Education Price Index, which is a better reflection of university inflation as it accounts for salary growth rates in faculty, which tend to exceed CPI inflation since a large portion of the faculty are long-term employees. CPI inflation in this same period was 7.12%.

services, for example, would generally be expected to increase in costs as the numbers of students increased (not every part of student services would increase of course, but, on average, increases would not be unreasonable if enrollments grew). The notes on drivers/causes in Tables B1 and B2 indicate what the major cost drivers are for different functions.

There have been substantial organizational changes since 2012. The 2016 organizational structure was used for reference and the 2012 structure was adjusted so that the same units were in the same place as in 2016. This allowed direct comparison of changes in expenses.

Classification of Costs

When questions are raised about administrative costs, they are often about overhead costs more generally—costs that are not part of directly delivering instruction, scholarship, or engagement with stakeholders. In this analysis, the following division of units by function was used:

- Direct Academic Program Delivery
    - Schools and departments (costs of department or school heads and staff were not broken out as administration)
    - Ecampus and summer term operations
    - Research centers and institutions
- Administration: Executive, Management, and Compliance Functions
    - At the university level, all the vice provost and vice president offices (with associated staff—which staff are budgeted at this level varies across units), President's Office, General Counsel, Board of Trustees office, Audit Services, Governmental Relations, Equal Opportunity and Access, Provost's Office, University Compliance Office
    - At the college level, all deans' offices and expenses classified under Administrative Support Services (what is included in each of these does vary across colleges)
- Business Operations: Financial, Budget, and Human Resources
    - Business centers, Finance and Administration, Business Affairs, Human Resources, Risk Management
- Capital Planning and Facilities Operations
    - Capital Planning, Facilities Operation, specialized Administrative Services (these provide financial, IT, and business support services provided directly to facilities and capital planning)
- Information Technology
    - Information Services
    - College-level IT support operations, where identified separately
- Marketing and Communications
    - University Relations and Marketing (there are substantial marketing expenses in the colleges, but they are not generally broken out by units)

- Student Services
  - At the university level, Student Affairs, International Programs (there are faculty services here too but the largest work is for students), Undergraduate Studies, Enrollment Management, and Institutional Diversity (there are many responsibilities for this office but a large proportion of them involve working with students)
  - At the college-level, student services where separately identified
- Direct Academic Support
  - At the university level, Research Administration, Graduate School, Library, Academic Affairs operating units (the vice provosts' offices are included in Administration), and Provost's special projects (these are almost all pass-through to academic operations or support)
  - At the college level, Instructional Support and Research Support if called out separately in a dean's office
- Other:
  - Ombuds Office, Alumni Relations, Printing and Mailing, Transportation Services, Conference Services, and Institutional Resources

Administrative Cost Conclusions

There is a lot of information in Tables B1 and B2, much of it showing growth in most functions beyond what inflation and the associated cost driver would suggest. This growth is related to OSU's efforts to improve the quality of our instruction and services to students and to improve access to appropriate services and facilities. As noted earlier, OSU has historically spent significantly less per student than most of our peers. A major reason for this is much lower per student state funding. The university has made outstanding progress in education, research and service despite those funding levels, but the low spending per-student does compromise some critical functions. The increases seen in Table B1, in many cases, (as in direct academic program delivery) reflect intentional efforts to address some of those critical functions.

University administrative salary expenditures that are affected by discrete changes (compliance, regulatory, and governance status changes, as opposed to enrollment growth) have grown about $2.8M above inflation since 2012. $1.4M of that growth is associated with the creation of Audit Services, University Compliance, and the Board Office, along with growth in Risk Management and General Counsel These costs were offset by retention of about $2.4M in annual assessments that had been previously paid to the Oregon University System (the balance of the $2.4M went to cover benefit costs of those salaries and to support some other business and financial services costs assumed by the university).

Some other major areas of administrative cost growth are $0.43M in the Office of Equal Opportunity and Access, which almost entirely reflects commitments for required increased Title IX compliance efforts; $0.28M in Information Services, which reflects major reorganizations in functions in that office since 2012; and $0.49M in Environmental Health and Safety to meet safety requirements identified after an Environmental Protection Agency lab safety review.

There were significant increases in costs in the deans' administrative offices, although this varied by college. The needs of the colleges for support services vary, depending on the nature of academic programs and the types of scholarships. Colleges also structure services

differently, so the specific functions (e.g., student services, administration, etc.) of some parts of the deans' offices need detailed discussion with the deans.

The preliminary analysis provides some guidance on where the institution can look at opportunities to review administrative cost structures. Review of the data and discussion on comparing functions across units and identifying the important drivers of cost increases are continuing. OSU has also recently joined the Academic Benchmarking Consortium, a consortium of universities that will be using a common platform to provide external benchmarking of administrative costs over time and compared to peers. This information will allow the university to better understand its cost drivers for non-faculty labor, identify best practices and target areas for cost containment and reduction.

Table B1: Summary of salary expenditures by organizational function for 2016 compared to 2012 (inflated to 2016 dollars). The notes identify principal drivers of cost increases. Table B2 provides detail of which units are grouped in which functions.

Analysis of Administrative and Other Function Salary Growth--Major unit expenditures by type of function **Corvallis E&G Budget** **2012-2016**

Continuous cost increase drivers:	2012 Number	2016 Number	Growth Rate
HEPI Inflation:			9.10%
Corvallis Headcount enrollment	24,977	29,576	18.4%
OSU Headcount Enrollment	25,741	30,592	18.8%
Fall Ecampus SCH	27,709	54,572	96.9%
Summer SCH	72,771	88,079	21.0%
Graduate Student Enrollment	3,776	4,385	16.1%
International Enrollment	1,852	3,328	79.7%
Gift, royalty, research	$260,753	$323,395	24.0%
Full time employees	4,495	5,107	13.6%
Total employees	11,206	12,981	15.8%
Total expenditures (1,000s)	$871,039	$1,105,236	26.9%

Principal Classification
Administration–executive, management, compliance
Business operations–financial, human resources, safety
Capital and facilities operations
Information technology
Marketing and communications
Direct academic support
Student Services
Direct academic delivery
Other

	2012 Salaries Inflation Adjusted	**2016 Salaries**	**Dollar growth over inflation**	**Major drivers/causes**
University Administration	$10,198,773	$12,955,863	$2,757,089	$1.4M due to compliance, regulatory and governance changes
College Administration	6,991,623	10,262,132	3,270,509	18.8% increase in enrollment, 24% research increase
Business Operations	16,642,402	19,209,001	2,566,599	26.9% total university expenditure increase
Capital and Facilities	5,501,972	6,866,208	1,364,235	26.9% total university expenditure increase
Information technology	6,920,971	8,705,406	1,784,435	18.8% increase in enrollment
Marketing and communications				
Direct academic support	9,320,735	12,860,993	3,540,259	18.8% increase in enrollment
Student Services	11,817,725	13,858,748	2,041,023	18.8% increase in enrollment
Direct academic delivery	101,733,793	129,306,491	27,572,698	18.8% increase in enrollment
Other	911,063	1,321,499	410,436	15.8% increase in total employees
Totals	**$171,576,886**	**$217,183,561**	**$45,606,676**	

Table B2. Detail by major unit of the same data as in Table B1. Color codes as in Table B1.

	2012 Salaries Inflation Adjusted	2016 Salaries	Dollar growth over inflation	Major drivers/causes
President's Office	$452,961	$518,378	$65,418	governance, support staff
Office of General Counsel	637,434	973,040	335,606	compliance changes, governance, Bend and Newport campuses
Ombuds Office	49,081	224,280	175,199	new support for employees and students
OSU Board of Trustees	-	210,042	210,042	required governance function
Office of Audit Services	-	543,799	543,799	required governance function
Government Relations	284,603	317,916	33,313	support staff and governance
Alumni Relations	430,406	518,457	88,051	alumni services
Office of Equity & Inclusion	596,595	1,029,595	433,000	Title IX compliance requirements
Office of Institutional Diversity	-	115,188	115,188	new service to support students and employees
University Relations & Marketing	323,854	331,421	7,567	
University Relations & Marketing				
Office of the Provost	545,654	594,218	48,564	
Provost Special Projects	312,996	337,319	24,324	18.1% increase in total people (students and employees)
Office of University Compliance	-	182,353	182,353	new function, compliance changes, governance required
Extended Campus Admin & Ops	1,943,740	3,435,795	1,492,055	96.9% growth in Ecampus credit hours
Summer Session/Intersession	133,717	200,702	66,985	21.0% growth in summer credit hours
Enrollment Mgmt Assoc Provost	499,410	287,681	(211,729)	
Enrollment Management–other	3,289,997	3,889,558	599,561	18.8% increase in enrollment
Undergrad Studies Admin	-	19,262	19,262	
Undergraduate studies–Units	1,304,615	1,606,925	302,310	18.8% increase in enrollment
Academic Affairs	491,104	358,976	(132,128)	
Academic Affairs–Units	1,124,649	1,398,529	273,880	13.6% increase in full-time employees
Information Services–Assoc Provost	337,067	613,372	276,305	Data security, compliance
Information Services–Units	5,934,623	7,039,756	1,105,133	18.8% increase in enrollment
Library Administration	430,760	367,997	(62,763)	
Library–Units	3,604,962	3,960,347	355,385	18.8% increase in enrollment
Graduate School Admin	1,009,897	1,438,866	428,969	16.1% increase in graduate and professional enrollment
Grad School–Units	394,421	540,495	146,074	16.1% increase in graduate and professional enrollment
VP Outreach & Engagement Admin	826,758	1,163,999	337,241	
Outreach & Engagement Open Campus	78,706	141,819	63,113	
County Extension Offices	15,583	-	(15,583)	
VP for Research Admin	718,062	652,408	(65,654)	
Research Admin Units	2,671,684	4,449,674	1,777,990	24% increase in research, compliance, commercialization
Research CIP Administration	54,872	56,895	2,023	
Research CIP–Units	4,321,834	4,781,175	459,341	24% increase in research, new centers
VP Student Affairs	612,419	468,842	(143,577)	
Student Affairs–Units	2,206,349	2,974,187	767,838	18.8% increase in enrollment
International Programs Admin	356,521	605,197	248,676	79.7% increase in international enrollment, director hire
International Programs–Units	2,036,635	1,914,190	(122,445)	79.7% increase in international enrollment

Table B2 continued

	2012 Salaries Inflation Adjusted	2016 Salaries	Dollar growth over inflation	Drivers/causes
Business Centers Central Admin	$66,430	$245,776	$179,346	added a director and support person
Business Centers–Units	8,696,669	9,843,640	1,146,971	26.9% increase in total university expenditures
Finance & Admin–VP Office	429,997	520,002	90,005	
Associate VP of Finance & Admin	500,841	205,999	(294,842)	
Finance & Admin–Units	3,658,560	4,230,497	571,937	26.9% increase in total university expenditures
Business Affairs Admin	429,997	520,002	90,005	
Business Affairs–Unit	3,658,560	4,230,497	571,937	26.9% increase in total university expenditures
Mail, Transportation, Conference	396,712	402,399	5,687	15.8% increase in full-time employees
Risk Management	178,629	334,842	156,214	compliance changes and governance, and scope
Risk Mgmt Env Health & Safety	337,174	829,752	492,577	24.0% increase in research
Risk Mgmt Emergency Management	291,438	74,615	(216,823)	18.1% increase in people (students and employees)
Capital Planning and Facilities Ops Admin	414,911	394,985	(19,925)	
Capital Planning and Facilities Ops	5,393,515	6,790,019	1,396,504	26.9% increase in expenditures
Institutional Resources	34,865	176,363	141,498	
Dean's Offices	6,144,853	8,687,108	2,542,255	18.8% increase in enrollment, 24% research increase
Instructional Support	368,017	265,394	(102,623)	18.8% increase in enrollment
Research Support	844,006	1,909,235	1,065,229	24% increase in research funding
Admin Support Services	846,770	1,575,024	728,254	18.8% increase in enrollment
IT Support	986,348	1,665,650	679,302	18.8% increase in enrollment
Facilities equipment maintenance	108,457	76,189	(32,268)	18.8% increase in enrollment
Student Services	2,980,130	3,358,700	378,570	18.8% increase in enrollment
	-		-	
Academic Schools and Departments	95,240,213	120,747,000	25,506,787	18.8% increase in enrollment
TOTALS:	**$171,576,886**	**$217,183,561**	**$45,606,676**	