University of Washington Tacoma
Budgeting Primer for Fiscal Year 2021

Executive Summary

- State appropriations for higher education have declined meaningfully over the decade in Washington (and across the nation).
- Tuition increases have historically covered the decreases in state funding but are now being limited in Washington (and across the nation) while higher education costs continue to increase.
- The UW Tacoma budget process is outlined along with more specific budget instructions for fiscal year 2021.
- The UW Tacoma revenue and expense history are presented as additional background and expense trends are analyzed against revenue.
- The UW Tacoma budget guiding principles are referenced together with certain best practices and an overview of key budget terms.
- An appendix and references are provided for those interested in budget analysis and further reading.

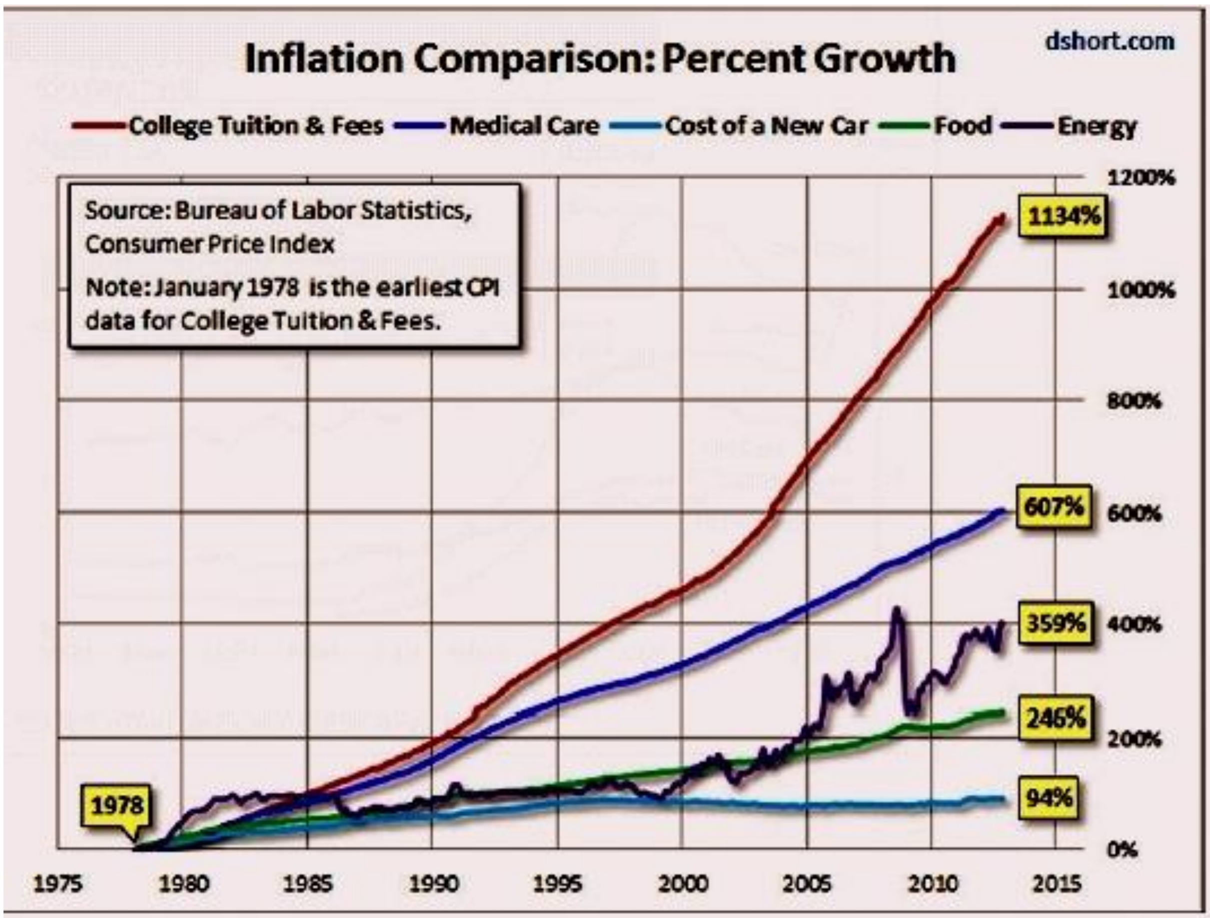
Everyone agrees that transparency about budgets is a best practice and that more transparency is needed. But transparency is not just about sharing budget numbers. Transparency must include the larger context for the numbers (e.g. historical trends and benchmarks, both national and local), a clear understanding of the process to develop the budget, and documentation of the values, practices, and terms supporting the process that together create clarity about our financial realities and decisions. The Primer is intended to provide this more comprehensive guide to UWT budgeting.

National and state appropriation and tuition trends

> *Presidents of state universities lament that their annual appropriations from the state legislature are now inadequate. [However,] most accounts of the financing of higher education in 1910 indicate that state university presidents considered their governors and legislators to be both frugal and unpredictable* (Thelin, 2011, loc. 326).

As Dr. Thelin points out in his history of American higher education, the challenge of securing state funding for higher education is not new. However, what may be new is the increasing concern that students, families, and legislators have regarding the rapid increase in tuition over the past decades. For example, the graph from dshort.com (see Figure 1) has been referenced by many to point out the problem with university tuition growth, which is then the basis to criticize the proliferation of climbing walls, the decrease in faculty workloads, and the bloat of administrator salaries in the popular press.

Figure 1. Inflation Comparison.

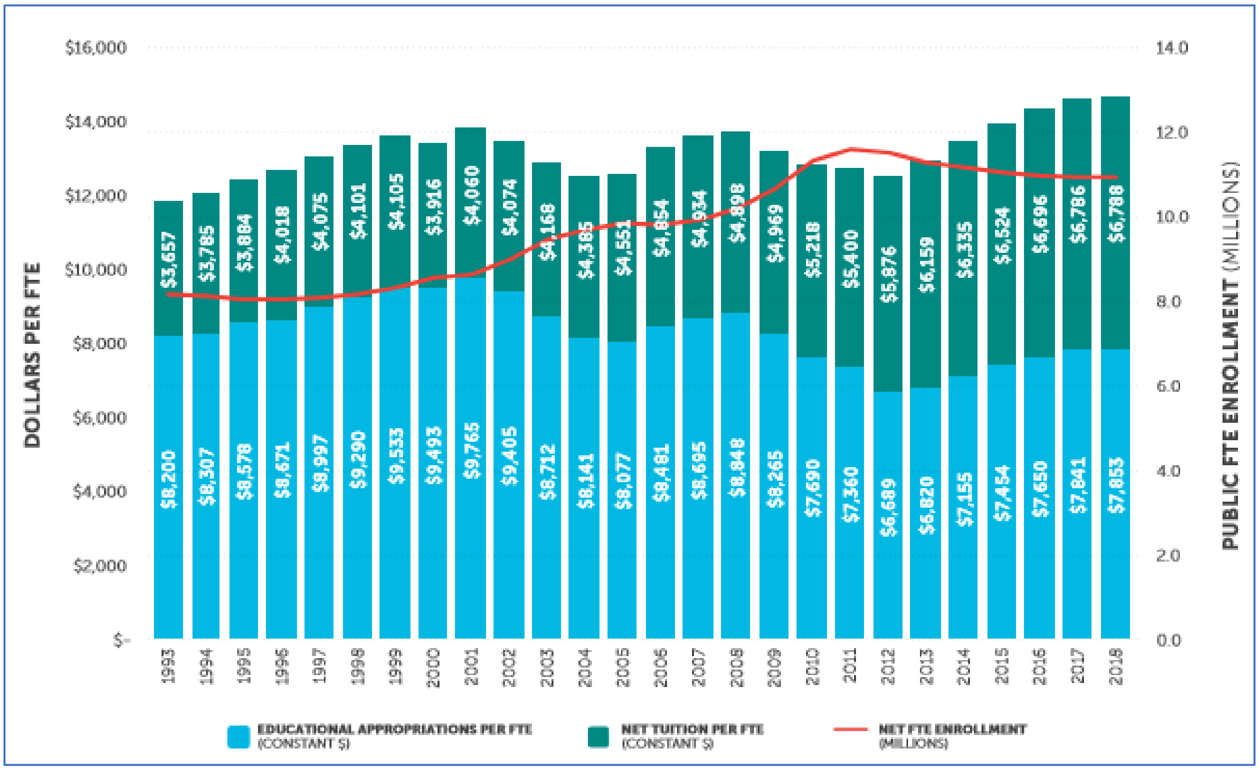


Source: Dartblog.com (sourcing Bureau of Labor Statistics)

While it may be easy to blame administrators, the rapid increase in tuition over the past decades has not been due to out-of-control university costs or administrative bloat. Studies of higher education costs have demonstrated that faculty and administrator salary increases are not causing rapid tuition increases (Desrochers & Kirshstein, 2014). Though there are many reasons why tuition has increased faster than inflation in recent decades, a primary driver is the decrease in state appropriations. Nationally, public universities now receive 54% of education revenue from states, down from the peak of 71% in 2001, as shown in Figure 2 (below). In comparison, UWT received only 32% of operating funds from the state in 2019, down from 71% in 2001 (OPB, 2018).

[Note that there is also a problem with the way the Bureau of Labor Statistics (BLS) tracks higher education tuition: the BLS does not record the actual tuition paid, using list prices instead, and if an institution tuition decreases, it throws out that data point (Archibald & Feldman, 2017). This exaggerates the actual tuition price increase, though tuition is still increasing faster than inflation.]

Figure 2. Public FTSE Enrollment, Educational Appropriations and Net Tuition per FTE.



Source: State Higher Education Executive Officers (SHEEO), 2018.

In any given year and for any given state, the change in education appropriations have varied significantly. In 2018, the average appropriation per student decreased slightly in Washington State, although it increased slightly nationally. Since 2008, Washington State has <u>decreased</u> higher education appropriations per student by 13.3% (in real dollars) while the national average decreased 11.2%, as shown in Table 1. Washington also remains below the U.S. average.

Table 1. Educational appropriations per FTSE in 2018 dollars.

	FY 2008 (pre-recession)	FY 2018	Index to US Average	% Change Since Recession
Washington	$8,034	$6,966	0.89	-13.3%
U.S.	$8,848	$7,853	1.00	-11.2%

Source: State Higher Education Executive Officers (SHEEO), 2019.

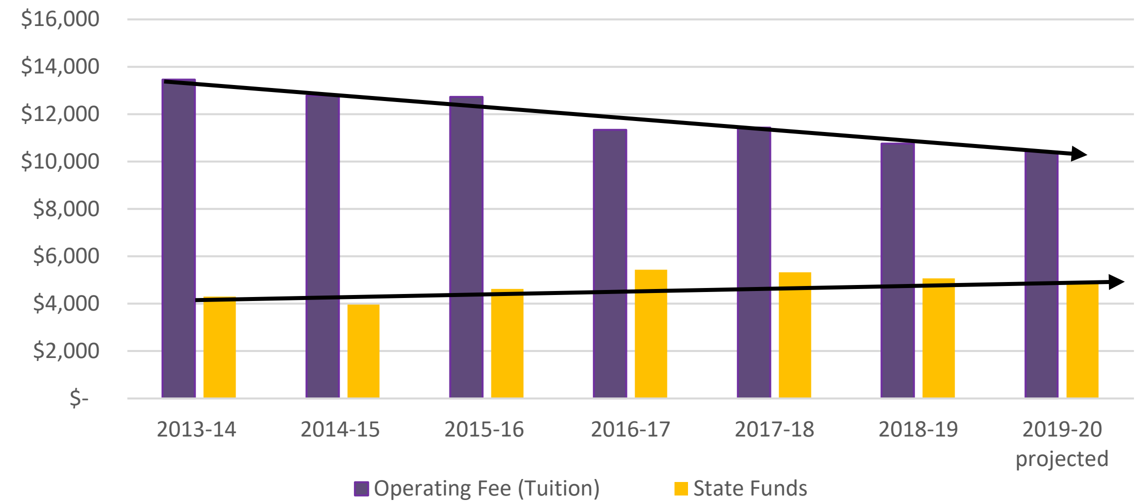
Decreases in appropriations per student over the past decades have been driven by politics that favor lower taxes and smaller government, by statutory requirements that increase (such as for Medicaid and K-12), and by large increases in the numbers of students being served (up 7% since 2008). Given current politics and fiscal constraints, the Washington and U.S. appropriation trends are not likely to change.

The shift in funding from state to student, along with other statutory mandates, new programs, and new student support systems has resulted in large tuition increases to cover costs. These tuition increases have, in turn, increased student debt, causing alarm among legislators, students, parents, and trustees alike. The alarm has resulted in mandates to cap or even decrease tuition in many states. However, it is important to note that, overall, total educational revenue (state appropriation plus tuition, inflation adjusted) per student has only increased 23% in 25 years (SHEEO, 2017), or less than one percent per year on average.

University of Washington Tacoma appropriation, tuition, and cost trends

The funding situation is unique for each university depending on the specific programmatic offerings, state support, fee approvals, etc. For UW Tacoma, over the past five years, net tuition dropped about $2,703 per full time equivalent student (in constant 2019 dollars). During the same period, state appropriations increased by approximately $772 per student, as evident in Figure 3. Taken together, total educational revenue to the University (excluding student fees) decreased $1,932 per student from fiscal year 2014 to 2019.

Figure 3. Appropriations and Operating Fee (Tuition) per FTSE, constant 2019 dollars.



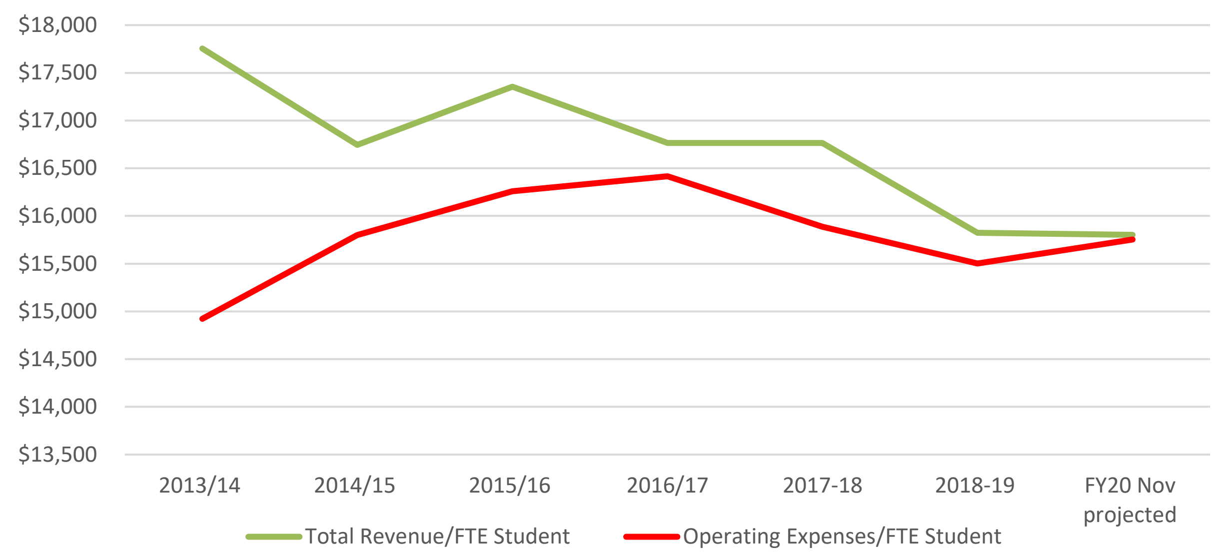
source: EDW AIDB, summer included

Most of the change in tuition and state appropriation since FY2014 occurred in 2017 based on the Second Engrossed Substitute Senate Bill 5954. The bill reduced tuition for public undergraduate resident students while simultaneously increasing appropriations. The Legislature also limited future tuition increases for Washington undergraduate students to no more than the average annual growth in median hourly wages in the state.

Based on the 2017 Senate bill, we might expect tuition to increase by two percent in the next fiscal year. However, that increase only applies to tuition and not to appropriations. The state appropriation for higher education may be increased to cover inflation and growth in the number of students served, or not. Given statutory budget requirements and the anti-tax trend, the likely scenario is that the state higher education appropriation per student will not be increased.

The UWT revenue and cost per student trends are shown in Figure 4. The long-term decrease in state support per student and the limitations on tuition increases are good for taxpayers and students, certainly, but create institutional challenges. Clearly, tuition cannot continue to increase as it has over the past 25 years if we, as a society, want accessible public higher education for most citizens. <u>Yet, if revenue per student cannot be increased, then cost per student cannot be allowed to increase.</u>

Figure 4. UWT total educational revenue and expense per FTSE (2019 constant dollars).



source: EDW AIDB, summer included

The pressures on cost are many: addressing student counseling needs, improving educational outcomes through better advising and technologies, supporting research, funding increased periodical and library costs, and providing real dollar wage increases to faculty and staff are just a few examples. Therefore, until additional appropriation support is available or until we devise a better funding mechanism for higher education in general, difficult choices are likely as we manage institutional costs.

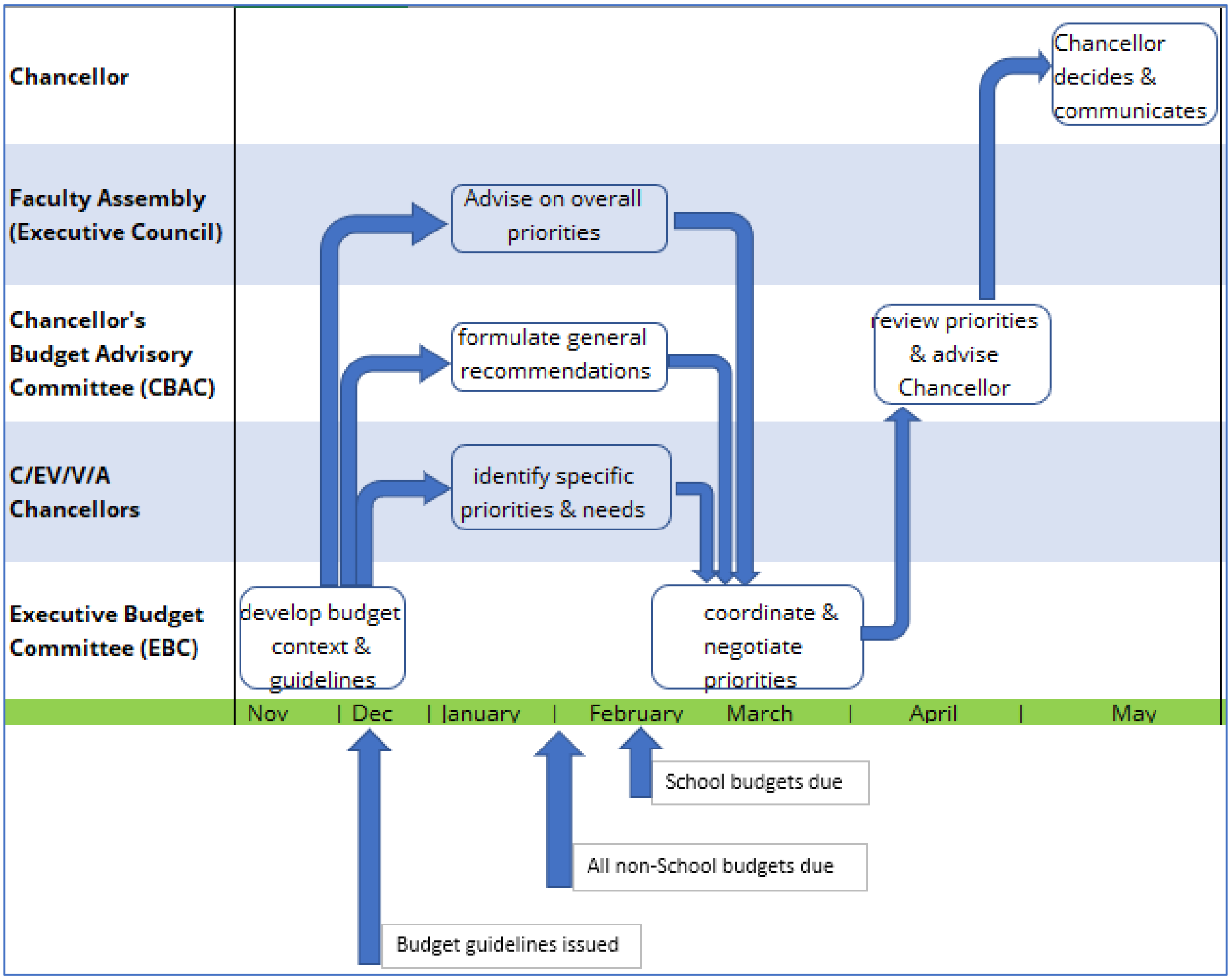
The UWT budget process

The budget guideline for fiscal year 2021 (EBC approved 11/18/2019):

> **Based on the current institutional margin, which at <1% does not provide enough contingency for current year unknowns or capital for future year opportunities, new central funding will be extremely limited for fiscal year 2021 for UWT as a whole and very dependent on enrollment success in fiscal 2020.**
>
> **Although tuition is expected to increase 2%, this increase will be not be enough to cover expected inflation on contracts and merit adjustments. Enrollment growth, anticipated at 2%, will be used to support merit increases and increase the institutional margin back to 3%. Please expect to address new program needs through reallocations.**

At a high-level, the overall budget process (see Figure 5) includes gathering input from faculty assembly, central administrative units as well as faculty, staff, and student representatives (through the Chancellor's Budget Advisory Committee).

Figure 5. UWT Budget Process 2021 (EBC approved 11/18/2019).



Each central administrative unit and school will discuss budget issues and priorities to formulate general recommendations for the Executive Budget Committee (EBC). Even though there is no expected available new funding for new positions or initiatives for FY2021, budget requests can be made with the understanding that supporting such requests will require reallocation from another unit, an obviously difficult decision.

All central administrative units and schools will submit their whole budget for FY2021, with schools including SCH projections as well. Projecting SCH for each school will ensure that we continue to support the program with a 'right-sized' budget.

In general, a budget process is about discovering where there are strategic opportunities and gaps and addressing those opportunities and gaps with additional or reallocated funding. Because the various institutional units are dependent on each other, the budget process must be iterative. For example, if we were hiring 10 new faculty, we would need to ensure that we have the appropriate office space and the corresponding staff and custodial support for those faculty, among other things. Therefore, once budget requests are submitted to the EBC, priorities will be assessed holistically and in reference to university impact goals and long-term needs. Such assessment will be the basis for feedback to the individual budget units for re-prioritization and re-submission.

After review and prioritization, the EBC will share recommendations with the Chancellor's Budget Advisory Committee (CBAC) for a review that is focused on how well the strategic and academic plans are advanced.

The CBAC will also forward their assessments and recommendations to the Chancellor for consideration.

At a detailed level, each group (as identified in Figure 5) will have sub-processes and specific deadlines as determined by that group. The sub-processes will start with a grounding based on this primer. For each auxiliary and self-supporting unit, the full budget along with the projected residual income, if any, will be reported to EBC. In no case should auxiliary and self-supporting units require additional institutional resources.

An essential component of any budget process is understanding what will not get done if a request is not funded. Clearly, if certain faculty lines are not funded, then certain classes will not get taught and student graduations may be impacted. However, faculty lines for new programs may represent investments that the University cannot yet support. In that same vein, it may be desirable to see cuts (or no increases) in Finance and Administration, Information Technology, or other service units. To make that decision, service reductions should be discussed, and impacts understood (assuming benchmarks show that services are delivered cost effectively to begin with).

An Excel spreadsheet will be provided to all budget units to provide a standardized input for any requests that will enable a consolidated summary for the institution, similar to the approach used in last year's budget process.

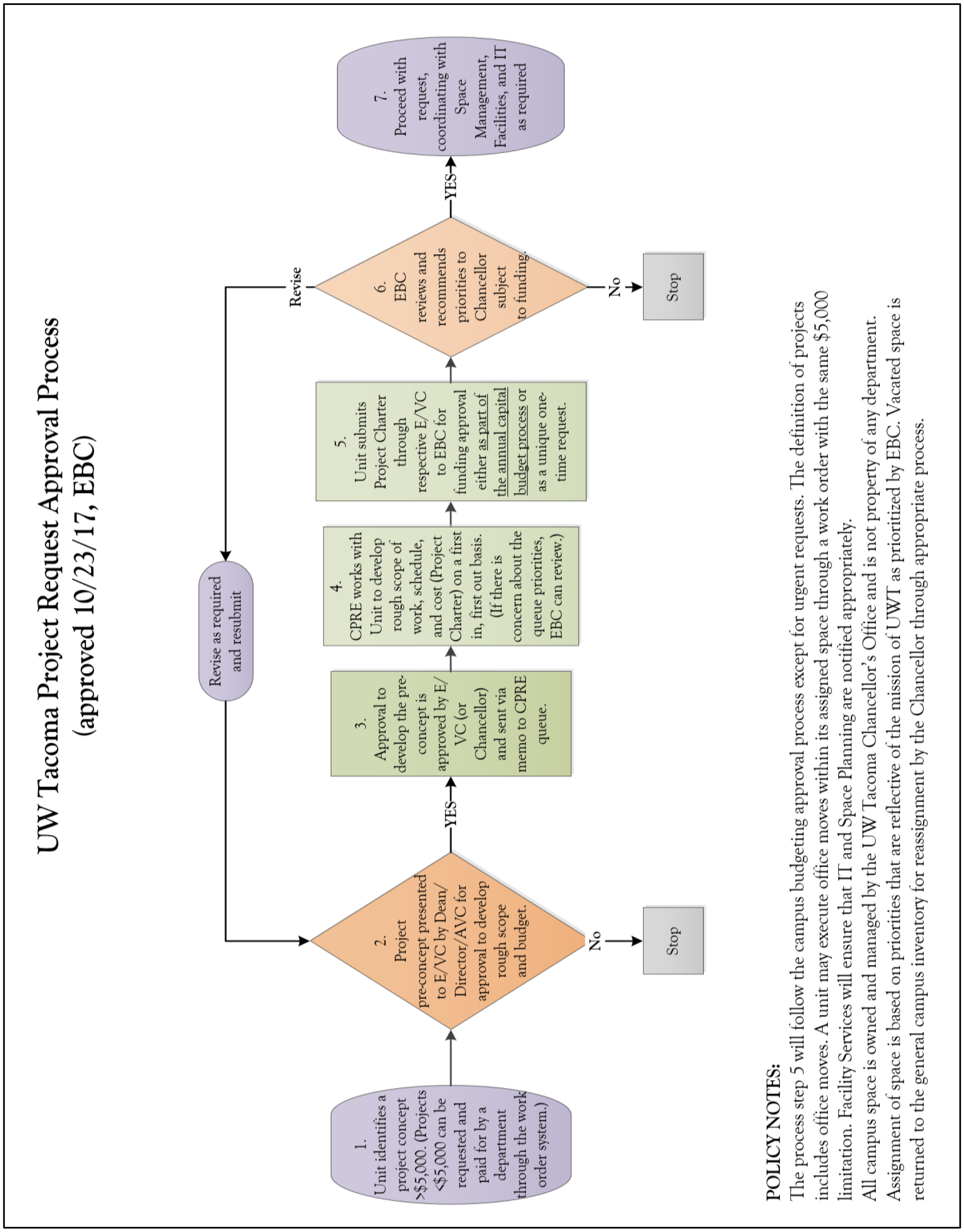
Key process dates for the FY21 budget are:

- campus communication regarding guidelines: December 2
- All non-academic budget requests due: January 31
- Faculty search requests for FY 21 due to AcAff
- AA budget requests due: February 14
- EBC budget discussions: February 24 and March 9
- Final EBC recommendation meetings: March 23 and April 6
- CBAC review and recommendations: April 20
- Chancellor decisions and communication: May 4

[These dates are subject to modification.]

Note that the capital budget process will parallel the operational budget process, as depicted in Figure 6, with final decision made after the operating budget is complete. Capital request decisions will be based on available reserves, state funding, and long-term projections.

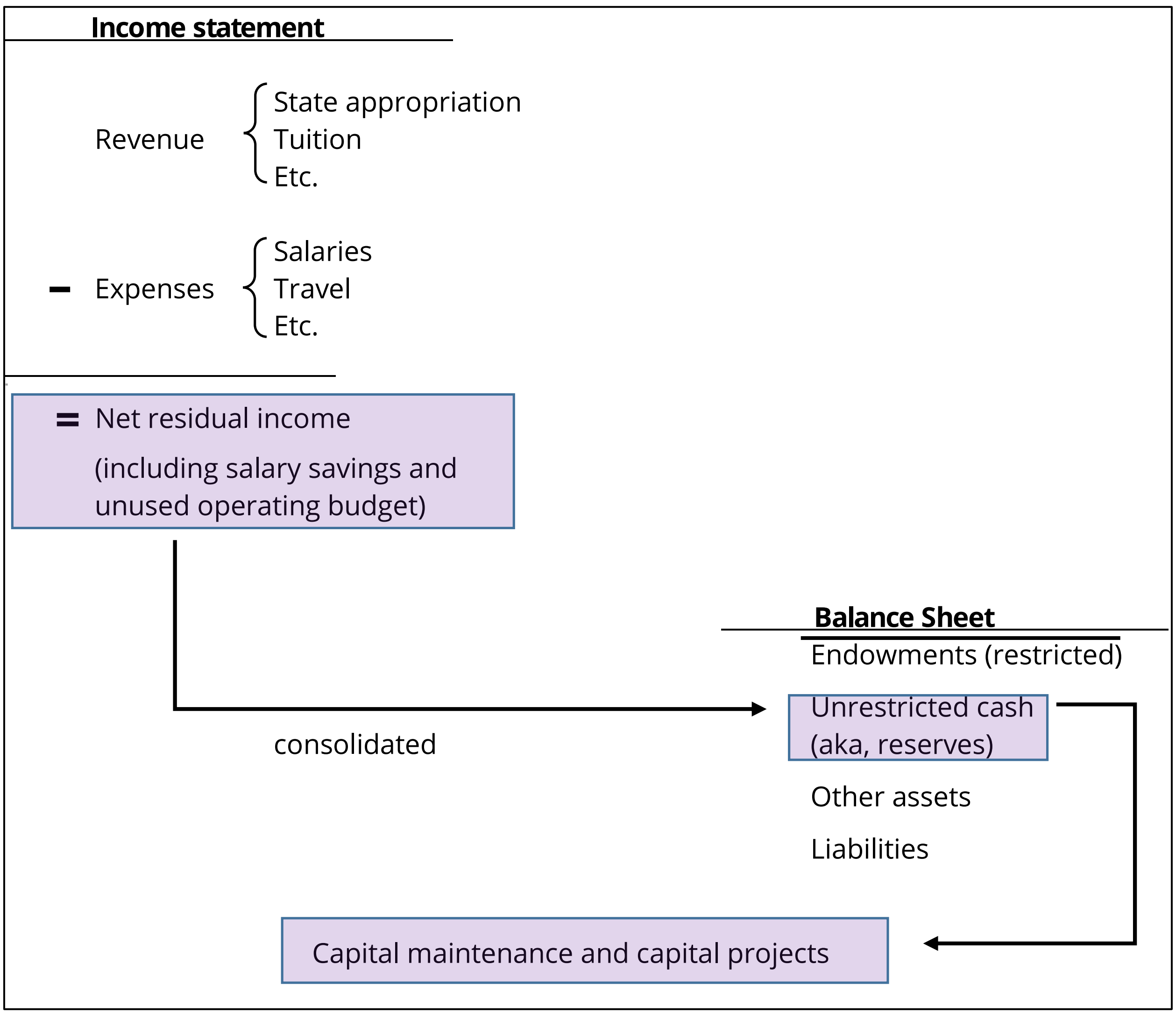
Figure 6. Capital and project request approval process.



The expectation is that the University—and not individual units—will fund capital requests. A college or program is not expected to fund a roof replacement, for example, or to refresh classrooms. However, a college or program may request funding for programmatic improvements (to expand an administrative suite to accommodate growth or to convert a classroom to a class lab, for example) for operating or teaching effectiveness.

It is important to note that UW Tacoma is not receiving enough money to maintain the current inventory of campus buildings and class refresh program from the Building Fee alone. This means that to avoid building problems (such as leaking roofs or heating and cooling difficulties), reserves must supplement the capital budget. Reserves are generated by residual income from operations, as shown in Figure 7.

Figure 7. Cash flow from income statement to balance sheet to capital projects.



UW Tacoma budget history and analysis

Table 2 provides a history of educational revenue and expense for UW Tacoma with FY2020 projected based on the current budget. In order to better understand the trends, the expenses as a percent of total revenue are show below.

Table 2. UW Tacoma educational revenue and expense history, unaudited.

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	2020 Budget
State Funding	$ 14,845,467	$ 15,101,100	$ 18,311,982	$ 23,097,194	$ 23,994,444	$ 24,728,840	$ 25,332,498
Tuition	46,429,708	48,624,991	50,378,380	48,211,116	51,479,831	52,399,409	53,679,902
Other Income	309,089	276,091	486,713	233,054	332,326	548,770	334,723
total revenue	$ 61,584,264	$ 64,002,183	$ 69,177,075	$ 71,541,364	$ 75,806,601	$ 77,677,019	$ 79,347,123
Salaries-Faculty	$ 18,563,236	$ 21,864,490	$ 24,238,175	$ 26,304,461	$ 27,763,956	$ 28,835,978	$ 30,664,627
Salaries-Staff	14,418,417	16,102,759	16,998,150	17,354,053	18,094,900	18,940,485	19,622,389
Benefits	9,341,910	10,021,128	11,911,395	12,959,855	13,099,146	14,200,992	13,811,833
Operations	5,422,053	8,098,269	6,730,403	8,354,994	7,823,877	8,122,320	7,848,287
UWS Overhead	3,317,218	3,727,315	3,803,575	3,966,589	4,167,743	4,270,554	4,397,454
total expense	$ 51,370,817	$ 60,131,543	$ 64,344,620	$ 69,657,491	$ 71,692,065	$ 75,558,599	$ 77,266,196
Net residual income	**$10,213,447**	**$3,870,640**	**$4,832,455**	**$1,883,873**	**$4,114,536**	**$2,118,419**	**$2,080,927**
net residual percent	16.6%	6.0%	7.0%	2.6%	5.4%	2.7%	2.6%

	FY2015	FY2016	FY2017	FY2018	FY2019	2020 Budget
Salaries-Faculty	34.2%	35.0%	36.8%	36.6%	37.1%	38.6%
Salaries-Staff	25.2%	24.6%	24.3%	23.9%	24.4%	24.7%
Benefits	15.7%	17.2%	18.1%	17.3%	18.3%	17.4%
Operations	12.7%	9.7%	11.7%	10.3%	10.5%	9.9%
UWS Overhead	5.8%	5.5%	5.5%	5.5%	5.5%	5.5%

Source: EDW. Adjustments made for one-time capital expenses; not inflation adjusted; no student fee, auxiliary budgets, research, or gift budgets included.

These data show that faculty salaries and benefits are increasing over time as a percent of revenue. This trend is not sustainable.

UW Tacoma budget guiding principles, best practices, and key terms

To document UW Tacoma values related to budgeting, the Campus Budget Committee approved the following budget guiding principles on November 21, 2017.

UWT Budget Guiding Principles

The following guiding principles highlight important values used in the budget decision process by all constituencies at UW Tacoma. We acknowledge that there are many uncertainties that affect the decision process. We understand that all decisions represent risk and tradeoffs and will never be perfect. Therefore, to provide a decision framework for our students and our institution, we adopt the following values for budget development and management.

1. We value the academic mission as the institution's highest priority.

2. We value the campus strategic plan (which incorporates the academic mission and highlights the importance of access) and align budget priorities accordingly.

3. We value the long-term and sustainable perspective. To ensure sustainable budgets, the revenues of an operating cycle should be the only source of funds for continuing operations in that cycle. In addition, the institution will budget an appropriate net residual income each year to manage contingencies and capital needs. [Individual units should not budget for capital needs. Only deans and vice-chancellors should budget contingency funds.]

4. We value enrollment growth as it responds to the needs of the community and students, and to the requirements for institutional vitality (leveraging overhead as well as growing sustainably). Such needs and requirements will be driven by the academic plan and balanced by the availability of resources.

5. We value efficiency and effectiveness. All campus units—academic and non-academic—should show evidence of such in their use of resources using appropriate measures.

6. We value a collaborative and transparent process that prioritizes the common good. Therefore, all sources of revenue and costs are considered in the budget development process. If funds are not used for the original purpose, the funds require re-authorization in order to consider other institutional priorities.

7. We value an understanding of how each unit is part of the larger institution. Budget stakeholders should learn about the institutional challenges and opportunities to better understand the whole.

8. We value transparency and evidence-based decisions. The Chancellor, who holds responsibility for final budget decisions, will provide the rationale for all major budget decisions to the campus.

In addition to guiding principles, there are a number of budget 'best practices' that provide a solid foundation for building a comprehensive and flexible plan to optimize institutional results and student success. One example is the use of financial projections. It is important to look ahead for more than one or two years at a time to assess the probable long-term impact of budget decisions and capital needs.

Additional budget "best practices" include the following:

- All new unit requests should be considered in the context of the <u>total unit budget</u> so that appropriate benchmarks can be reviewed. (Note that reviewing total budgets is not zero-based budgeting, which involves reallocating the total budget without reference to what has been previously allocated.)
- There are two kinds of expenses in any institution or business: <u>operating and capital</u>. The former refers to the ongoing expenses that support the day-to-day institutional processes such as staff and faculty salaries. The latter refers to the one-time investments that are necessary to support discreet projects or needs such as new roofs, building systems, major software systems, lab equipment, and buildings themselves, among other things. Note that capital expenses are typically "capitalized" but this is an accounting treatment and not a defining element. Best practice budgeting manages these two types of expenses using different sources of funds.
- Best practice budgeting recognizes that shortfalls happen. Budgets are only estimates of future outcomes and as estimates, the actual will differ from the budget. If managers are chastised for going over budget, then they will estimate conservatively. If everyone in an institution is estimating conservatively, then the overall budget can be expected to represent an inflated cost for the actual results delivered. The way to counter this overestimating tendency is to <u>use contingency funds</u> at the vice-chancellor and school level. Budget managers should estimate budgets at the expected mean outcome with the understanding that the vice chancellors and deans hold some contingency for deviations from the mean. In this way, budgets are managed as a portfolio of outcomes

across the institution and individual managers are not worried about being short a few dollars at the end of the year due to unforeseen circumstances.

- It is important to recognize that <u>salary dollars are different</u> than operating dollars in a university setting because salaries are the single largest expense. Vacant positions should not be used as a source of funding for operations to avoid the establishment of perverse incentives and unsustainable expectations. Best practice budgeting will sweep salary funds not used because of a vacancy to a central account or to the EVCAA, depending on the source.
- Operating dollars represent an estimate of desired and required activities for the year. Although the intent is to spend all operating dollars in a year, sometimes this is not feasible. To incentivize the use of operating funds to achieve goals in the period for which they were provided and to avoid individual units generating large savings accounts, a) unspent operating budgets should be collected in a central account at year end to support capital needs and b) units should be allowed to keep a small percentage of the unspent budget for future one-time expenses. This encourages appropriate budgeting and avoids the 'use it or lose it' practice.

Using best practice budgeting techniques and readily available data, we can expect to improve the allocation process so that high priorities are fully addressed. Such practices will result in more certainty regarding travel budgets, salary increases, and program investments while providing more transparency about the budget decision process.

In addition to understanding best practice budget philosophies, it is helpful to have the many terms unique to higher education defined. For example, public universities have multiple fund sources, including state appropriations, research grants, philanthropic gifts, and tuition and fees. Each funding source is subject to specific rules on how it may be used, which in turn requires universities to utilize "fund accounting" to maintain separate accounts for each source according to federal and state law.

Budget related terms include:

- Carryforward funds = reserves (which result from prior year unspent budget and over-realized revenue).
- Permanent funds = state appropriation and tuition revenue (based on prior year budget), an ABB unit-level term and not used at the UWT school level.
- Temporary expenses = operating expenditures that are identified as one-time in the budget year.

- Self-sustaining = educational and auxiliary programs that charge “market” rates and are required to cover all related direct and indirect costs.
- Auxiliaries = service programs such as student housing, retail leases, parking and transportation, and food services that support non-educational needs of students, faculty, and staff, and which should be self-sustaining.
- “Summer money” = the net residual income generated from summer quarter after covering all summer related costs and the Urban Waters lease, the faculty research quarter, and the Summer Bridge program.
- Tuition = Operating Fee and Building Fee. The Building Fee is not collected during the Summer quarter.
- Student Fees = Services and Activities Fee (SAF), Student Technology Fee (STF), Course Fees, and the University Y Fee, all of which are allocated for specific purposes.

See http://finance.uw.edu/fmat/oversight/framework for additional references on fund types.

Appendix A: Higher education management accounting (Budgeting 101)
Higher education finance can seem complicated given the variety of funding sources and the various restrictions on those sources. But the important concepts that every administrator should understand include revenue and cost per student and fixed and variable costs.

Revenue is, of course, the state appropriations, tuition and fees, and other income that is available for educational purposes. The important notion is to track total revenue on a per student basis. While it is helpful to receive more state appropriations, if the percentage enrollment growth (in terms of the full-time student equivalent) exceeds the percentage total revenue growth, then the revenue per student has decreased. In that case, it is critical to make sure that the cost per student is well under control.

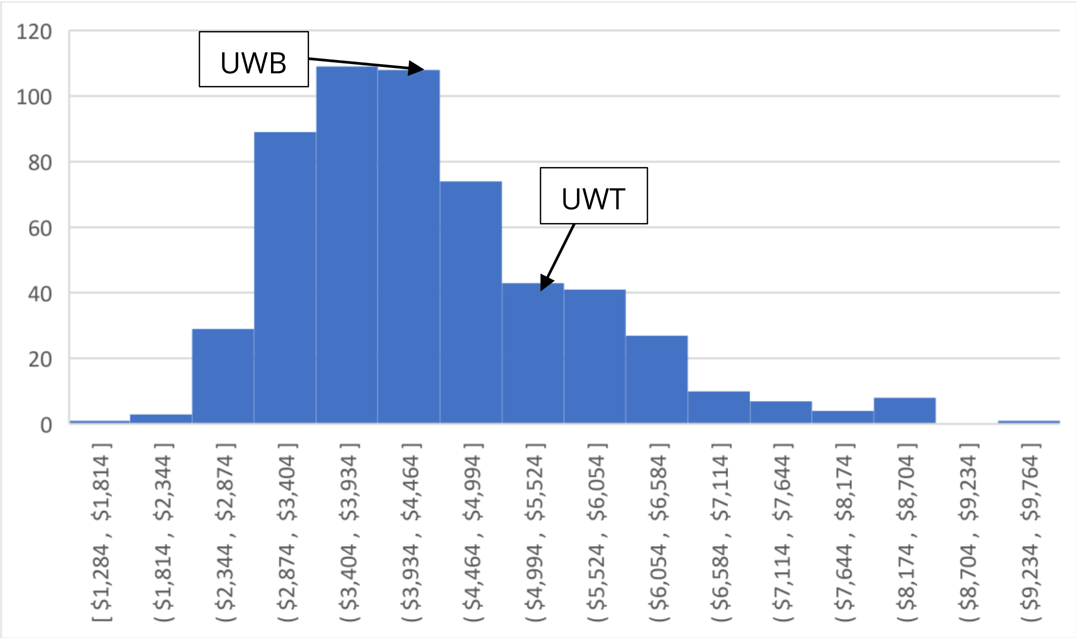
The cost per student is not a constant. The cost per student varies depending on the cost of the various programs and the mix of programs offered. That cost will change depending on how many new faculty and staff are hired and how many new programs are initiated.

Even if enrollment growth is healthy, the cost per student can increase faster than the revenue per student if the institution hires more faculty and staff to serve those additional students. Indeed, new faculty and staff hires can cause the institution to lose money serving those additional students (at the “margin”). The marginal cost increase can exceed the marginal revenue increase through the addition of software or program costs as well.

The cost per student is composed of two major types of costs: direct (or variable) costs and indirect (or fixed) costs. The direct costs vary directly with revenue as you would expect of faculty salaries. If the enrollment of a university were to double, then faculty salary expense would double, all else being equal. The key drivers of total direct cost are the student to faculty ratio and faculty salaries.

Using faculty salaries as a proxy for direct costs, the UW Tacoma variable cost per student in 2015 was about $5,142, as shown in Figure A-1. This is higher than the national mean among 554 public higher education institutions. In comparison, UW Bothell averaged $4,093 per student, just below the mean. The difference is largely based on the student-faculty ratio, which is 22:1 for Bothell and 16:1 for Tacoma (IPEDS, 2015).

Figure A-1. Faculty cost per student among U.S. public universities (2015).



Source: National Center for Educational Statistics (IPEDS).

Note that the cost per student difference between UW Bothell and UW Tacoma may not be entirely comparable if the faculty in Tacoma are getting more release time in order to handle administrative duties performed by non-faculty personnel in Bothell.

Overhead, or the indirect cost, per student is another important metric to monitor to ensure resources are allocated in the most effective manner. Many administrative duties are considered overhead costs. Such costs do not vary directly on the number of students enrolled and are often considered fixed. Indirect costs are not actually ever permanently fixed but rather vary much more slowly. For example, the salary expense of senior administrators is not expected to double if a 5,000-student university expands to 10,000 students. However, the number of deans might increase as colleges are added to support 10,000 students and the number of advisors and fiscal specialists would need to increase slightly as well.

Although there are complexities in any analysis of revenue and costs, the revenue and cost per student and the fixed and variable component of costs are two essential concepts to understand when managing enrollment, course offerings, and all support functions at any university.

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