## Budgeting for an Academic Department at a State University: Can You Believe the Numbers?

## INTRODUCTION

You are the senior accounting faculty member in the business school and your dean, Dean Weller, is asking for help. She is very discouraged after a midyear budget meeting with the Vice President of Finance. The college's Department of Social Work has a large budget deficit, and because of this the VP is inclined towards closing the department entirely or closing its bachelor's program. The department's deficit is the worst in the university and has been so for several years. Weller met with Josh Reynolds, Director of the Department of Social Work, nine months ago, asking him to do his best to reduce expenditures, but Reynolds said then that it wasn't possible - they were down to the bone. The dean has already had to transfer funds from another department to cover the non-base-budgeted salary of a faculty member. The college will also have to cover the final deficit, which means that the other three departments of the college, operating within their budgets, will find any surplus proportionately depleted. Dean Weller tells you that, from a budgetary viewpoint, the college would be better off without Social Work, but that she does not understand what is really going on. The deficit is obvious, but Reynolds says the department is booming there are plenty of students. She asks you to analyze this situation. Visit the department and talk to Director Reynolds. Find out what you can, collect data, and report back as soon as possible. You have access to the budgetary information she has and all other possibly relevant information, including student credit hours and price of tuition. Make the case for or against the Vice-President's inclination.

## BACKGROUND INFORMATION ON THE COLLEGE AND THE BUDGET SYSTEM

The university is facing declining enrollments because of a change in demographics. The number of students graduating from the state's high schools is declining. Efforts to recruit and retain are underway, but between the enrollment decline and rising costs, there are tremendous incentives to find places to cut. Tuition and fees (see Table 1) and other student charges contribute about $30 \%$ to the revenue side of the university, but they do not appear on any college or departmental budget. Only revenues clearly generated by a particular department (e.g., lab fees) are included in that unit's budget. State appropriations, grant funding, endowment earnings, and other revenues make up the remainder of the revenue side of the university budget, but they also are not distributed among the budgets of the colleges or other units. By the same token, no overhead charges appear in college budgets either.

Well before the beginning of the fiscal year, the VP of Finance sends each dean the college's base budget: the total amount available for salaries and other costs. Typically it equals last year's budget (with minor modifications). The deans send the department heads their budgets and then meet with them to discuss their concerns. Finally, the deans meet with the VP of finance to answer standard questions, such as whether departments and the college can come in on budget; whether revenue opportunities exist; where cuts will be taken. Neither the deans nor the department heads have an opportunity to challenge the budget as a whole. Budget changes are usually incremental and often temporary. That is, a dean may secure a one-time transfer of funds for some special purpose, but a permanent increase to the base budget is rare. One exception to this occurs when a new faculty member, not a replacement, is hired ${ }^{1}$. Another occurs in the opposite direction: when there are cuts to the entire university's budget. When or how budget numbers were set originally is lost in the dim past.

[^0]Initially, each department must balance its base budget: allowable expenditures MUST equal planned expenditures. All salaried positions (faculty, administrative, and staff) are budgeted in salary lines with benefits (equaling almost $50 \%$ of salary) in another line. Adjunct faculty, paid by the course, have a low benefit rate-currently 8.5 percent $^{2}$. Their pay appears in a different line. After the known salary, wage, and benefit lines, the remaining base budget dollars are allocated to the operating budget expenditure lines by the department's budget officer. Some might go to the copier, to phone, to travel, to memberships, etc. During the year, each department can change the allocations between various budget lines (except operating line amounts cannot be transferred to salary lines) to address specific needs. Expenditures are recorded as incurred.

About midway through the fiscal year the dean meets again with university officers to discuss whether or not the year's budget will be met. We are now at this point. Every department and every college is evaluated on the variances between the base budget (allowable expenditures) and actual expenditures. The budget spreadsheet has five columns (see Exhibit 1). The first is the original base budget. The second is called the current budget, which is the base budget modified by temporary financial adjustments that occur during the year and that increase or decrease the total amount available to the department (e.g., one-time transfers). The third is year-to-date actual expenditures and actual revenues clearly associated with the department (such as lab or course fees). The fourth is encumbrances-budgetary dollars appropriated for known amounts, mostly salaries, wages, and benefits. The last column is the net of columns 2 less columns 3 and 4 - budget variances. The sum of all budget variances reveals the surplus or deficit of the department. At this moment, there is already a deficit of almost $\$ 50,000$.

## INFORMATION ON THE DEPARTMENT OF SOCIAL WORK

This is an accredited program offering a bachelor's and a master's degree. Both degrees are popular and fully enrolled. About 30 undergraduates earn their degrees annually. The department has the second largest master's program in the university, graduating 50 students annually. Last year, 1,619 and 2,282 credit hours respectively were earned in the undergraduate and graduate courses in the department itself, which had 107 and 119 students enrolled. (Most graduate students take all their credit hours in the school. This is not the case for undergraduates - they take many classes in other departments for general education or electives, etc.) These numbers have been holding steady for several years and are likely to remain so. Most undergraduates and all graduate students are state residents and average around 13.5 and 9.5 credit hours respectively per semester. The director estimates that $35-50 \%$ of the undergraduates enter the university because they want that degree; the remainder transfer in from other programs. About $20 \%$ of the graduate students come from the undergraduate program. Others earned their degree elsewhere or enter the master's program without the undergraduate degree, in which case the program requires far more credit hours. The graduate program is popular because all hiring agencies guarantee graduates a raise upon its completion.

The Council on Social Work Education (the accrediting body) requires a minimum of six full-time faculty for a master's program and two for a bachelor's. The department has seven full-time faculty and two halftime faculty (joint appointments with another department). The director says these faculty numbers barely meet accreditation standards because he is one of them (and therefore can't teach full time) and another faculty member is the field coordinator (which also prohibits full-time teaching). The accrediting body requires a $1: 12$ ratio of full-time-equivalent faculty to students at the master's level and a 1:25 ratio at the undergraduate level. It also requires that each undergraduate student participate in a minimum of 400 actual hours of field study and each graduate student participate in 900 hours. These hours are spent serving various agencies around the area (hospitals, alcohol and drug treatment centers, juvenile halls, etc.) - some of which are 60-100 miles away. Field study necessitates small groups and individualized supervision and

[^1]therefore requires a large number of adjunct faculty. In the most recent year, adjuncts were used for 38 classes and field study requirements. The department pays approximately $\$ 100,000$ (plus $\$ 8,500$ required benefits) for adjuncts annually, about $60 \%$ of which is for the graduate program.

The base budget of the Department of Social Work is $\$ 1,045,000$, of which $\$ 1,037,000$ is salaries, wages, and benefits (see Exhibit 2). In that latter amount, $\$ 47,646$ is budgeted adjunct wages and $\$ 4,050$ is adjunct benefits. The full adjunct needs are not base-budgeted. The faculty member who is currently paid for by the college is not in the base budget. (His salary and benefits appear in the "current budget" column as a transfer.) The department anticipated other revenues of approximately \$61,000: \$6,000 (base-budgeted) from field study fees, $\$ 14,000$ curriculum fees (allocated to all departments by the university), and $\$ 41,000$ of buyout money from faculty grants, which frees up money that can be used to hire adjuncts or pay for other expenditures. The latter cannot be guaranteed annually. The dean hopes that the faculty will receive additional grants in the future, but no one can promise it. The department also anticipates having to spend a total of $\$ 75,000$ on other operating expenditures, which include the copy machine and phone, membership fees, faculty development funds (travel - \$1000 each), expenditures on student handbooks, replacement of computers, etc. All actual receipts or expenditures can be seen in Exhibit 1.

## CONVERSATION WITH THE DIRECTOR OF SOCIAL WORK

You ask, "Josh, how were you able to get these numbers past the dean and VP last year when it came time to approve the base budget?"
Josh answers, "We simply don't report our needs. We can’t. They don’t allow us to. So, we show our faculty, administrative, and staff salaries and we base-budget about only $\$ 47,000$ of adjunct pay - less than half of what we need. The remaining amount of the base, about $\$ 13,000$, we say is for operating expenses. It's a joke, really, considering that we have to spend about $\$ 70,000$ to $\$ 80,000$."
"But," you say, "if the VP has seen adjunct pay of $\$ 100,000$ or so for years, how can she not insist on base budgeting it?"
Josh replies, "It's a mystery. I think she hopes the problem will disappear. The thing is, if she were to insist that the full amount needed to be base-budgeted, then she'd have to find money to increase our base budget and she doesn't have it, or it would have to come from somebody else's budget. Eventually, it does come from the budgets of others, from other departments in our college."
Josh continues, "Anyway, the remainder of our base-budget money, $\$ 13,000$, is randomly distributed among the operating budget lines. (See Exhibit 1.) We can’t operate on that. So we spend what we must. In theory, adjuncts should only be hired if money is available, but we must hire them or not offer classes. We can't do that, although sometimes I'm tempted just to see the reaction if we didn't offer those classes. This spring we have 21 classes or field study courses being offered by adjuncts - none are electives.
"Some years ago, two factors played a large part in our growing deficit. First, about $\$ 30,000$ of adjunct wages used to be paid by the Continuing Education Division of the university. Then, due to budget cuts, the University changed its policies, leaving us to pay those wages ourselves. That amount was never added to our base budget. Another major factor was the drying up of grant funding - a phenomenon occurring across many disciplines. Our faculty continues to secure grants, but not as many and for not as large amounts. We used to be able to rely on grants that brought in $\$ 60,000$ to $\$ 80,000$ a year, which would offset supplies, travel, and assistantship costs. We have also just lost a large, nonrenewable multiyear grant that financed a faculty member. As you know, the college is paying that salary this year. I have no idea what's going to happen next year.
"A faculty member who secures grant funding can buy out of his or her teaching responsibilities and the grant money can be used to pay for adjuncts, supplies, travel, etc. Our budget officer will reduce the salary line by the amount paid by the grant and transfer those dollars to the other expenditure lines. It will appear in the year-to-date column of the spreadsheet. Since faculty salaries are much larger on a per-class basis than that of an adjunct, course buyouts help us pay for things beyond the adjunct wage. Unfortunately, we can't rely on annual grant money. The university encourages departments to engage in revenue-creating
opportunities, but we can't think of how to create such opportunities because of substantial teaching loads and tightening in the funding agencies.
"We are as careful as we can be. We avoid long-distance calls. The faculty often pays for their own supplies. We need all the adjuncts, and we are not paying them outrageous amounts. We simply cannot come in on budget. Even if we kept operational expenditures (expenditures outside of salaries and wages) to ZERO, we would have a deficit! I don't know what we can do. I know we're doing a good job - the programs are well enrolled, the undergraduates all get jobs. (What other program can say that?) The master's graduates all get raises. There is a need for licensed social workers in the state. We contribute so much to the community through the fieldwork requirements. The faculty all work hard - they have active research programs and some manage to achieve grant funding. This past year, the indirect funds generated by the department through grants came to about $\$ 102,000$. This was real money that went directly to the university coffers, not to us.
"We could cut travel, but travel is a necessary part of being an academic. We present our research at conferences, learn what others are doing, and gain new ideas about teaching, research, and acquiring funding. We only give $\$ 1,000$ to each faculty, but those who generate the grant funding get much more.
"The faculty are stressed. They don't understand why they're viewed as an albatross, and they are afraid that department will be closed. Closing one of the programs just doesn't make sense. If we closed the undergraduate program, I would estimate a savings of about $\$ 13,000$ - operational costs attributable to undergraduates only. About $40 \%$ of the adjunct wages and benefits would also be saved. Phones and copier expenditures are mostly fixed. Faculty can be asked to continue to use old computers for an extra year or two, but there is a limit. We are not wasting money. We only have two non-teaching administrative assistants who handle the needs of students and faculty and work with the budget requirements of the grants of the department. They are pretty busy. Another important point is that there are other undergraduate and graduate social work programs around the state, so our students could choose to go elsewhere. I expect an additional $\$ 15,000$ to be spent by the end of the fiscal year in the operating budget area. This will result in a deficit of approximately $\$ 65,000$. I hope you can find some way to help us."

## REQUIRED:

As requested by Dean Weller, you are to assess the financial situation of this department and present your results in a way convincing to the vice president of finance. You will have to make several assumptions please indicate them clearly. The dean would like to use your information at the next budget meeting. Your information should be presented clearly so that a nonfinancial person will understand. Make recommendations and present them in an appropriate format. Understand that given the current budget system, your college will be better off if the department is closed because all the expenditures of that department will be removed from the books of the college and the deficit will disappear. BUT, will the university benefit? You may assume that if a program is closed, the university can lay off faculty people without penalty. You do not need to consider facility costs such as maintenance or depreciation.

Note: In the world of non-profits, the word "expenditure" is used instead of "expense."

1) What contribution is the unit making currently, both financially and otherwise?
2) What effect will the closing of the department have on the university?
3) What effect will the closing of the bachelor's program have on the university?
4) Overall, what is the problem? Why does this department look so bad financially?

## Table 1

Fall 2008-Spring 2009 Resident (|n-State) Tuition and Fees
(Amounts are per semester. Fees cannot be avoided.)

| Undergraduate Tuition \& Fees |  |  |  | Graduate Tuition \& Fees |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# of Credits | Tuition | Fees | Total | \# of Credits | Tuition | Fees | Total |
| 1 | 239.00 | 171.00 | 410.00 | 1 | 357.00 | 201.00 | 558.00 |
| 2 | 478.00 | 171.00 | 649.00 | 2 | 714.00 | 201.00 | 915.00 |
| 3 | 717.00 | 171.00 | 888.00 | 3 | 1,071.00 | 201.00 | 1,272.00 |
| 4 | 956.00 | 171.00 | 1,127.00 | 4 | 1,428.00 | 201.00 | 1,629.00 |
| 5 | 1,195.00 | 171.00 | 1,366.00 | 5 | 1,785.00 | 201.00 | 1,986.00 |
| 6 | 1,434.00 | 490.00 | 1,924.00 | 6 | 2,142.00 | 475.00 | 2,617.00 |
| 7 | 1,673.00 | 490.00 | 2,163.00 | 7 | 2,499.00 | 475.00 | 2,974.00 |
| 8 | 1,912.00 | 490.00 | 2,402.00 | 8 | 2,856.00 | 475.00 | 3,331.00 |
| 9 | 2,151.00 | 490.00 | 2,641.00 | 9 | 3,213.00 | 475.00 | 3,688.00 |
| 10 | 2,390.00 | 490.00 | 2,880.00 | 10 | 3,570.00 | 475.00 | 4,045.00 |
| 11 | 2,629.00 | 490.00 | 3,119.00 | 11 | 3,927.00 | 475.00 | 4,402.00 |
| 12 | 2,868.00 | 965.00 | 3,833.00 | 12 | 4,884.00 | 950.00 | 5,234.00 |
| 13 | 3,107.00 | 965.00 | 4,072.00 | 13 | 4,641.00 | 950.00 | 5,591.00 |
| 14 | 3,346.00 | 965.00 | 4,311.00 | 14 | 4,998.00 | 950.00 | 5,948.00 |
| 15 | 3,585.00 | 965.00 | 4,550.00 | 15 | 5,35.00 | 950.00 | 6,305.00 |
| 16 | 3,824.00 | 986.00 | 4,810.00 | 16 | 5,712.00 | 971.00 | 6,683.00 |
| For each additional credit add \$239.00 |  |  |  | For each additional credit add \$357.00 |  |  |  |


| Exhibit 1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Budget of the School of Social Work |  |  |  |  |  |  |
| Budget of the School | Up to date as of April 10. (fiscal year ends June 30) |  |  |  |  |  |
|  | Base Budget | Current <br> Budget | YTD Actual Expenditures | Encumbrances | Budget Variances | Notes fro major items |
| revenues |  |  |  |  |  |  |
| fees | $(6,000)$ | $(6,000)$ | $(7,289)$ |  | 1,289 | Course fees |
| other |  | $(77,760)$ | $(93,332)$ |  | 15,572 | Shared curriculum fees \& Salary transfer from College |
| total | $(6,000)$ | $(83,760)$ | $(100,621)$ |  | 16861 |  |
| faculty salaries | 559,994 | 613,994 | 457,750 | 106,250 | 49,994 | Course buyouts (grants) |
| adjuncts | 47,646 | 47,646 | 86,333 | 24,667 | $(63,354)$ | Additional adjuncts |
| classified wages | 61,820 | 61,820 | 48,862 | 13,381 | (423) |  |
| prof wages | 58,560 | 58,560 | 45,461 | 13,626 | (527) |  |
| total salaries/wages | 728,020 | 782,020 | 638,406 | 157,924 | $(14,310)$ |  |
| benefits | 309,512 | 333,272 | 268,131 | 66,328 | $(1,187)$ |  |
| total compensation | 1,037,532 | 1,115,292 | 906,537 | 224,252 | $(15,497)$ |  |
| memberships |  |  |  |  |  |  |
|  | 4,219 | 4,219 | 6,700 |  | $(2,481)$ | conference and acrediation fees |
| postage | 1,025 | 1,025 | 887 |  | 138 |  |
| printing and copy | 531 | 531 | 3,341 |  | $(2,810)$ |  |
| leasing | - | - | 1,452 |  | $(1,452)$ |  |
| supplies and materials | 800 | 800 | 7,364 | 51 | $(6,615)$ | Chairs and desks replaced |
| travel | 2,477 | 2,477 | 29,743 | 340 | $(27,606)$ | Extra travel for grant writers |
| equipment | - | - | 6,137 |  | $(6,137)$ |  |
| telephone | 3,543 | 3,543 | 4,880 | 340 | $(1,677)$ |  |
| maintenance of equip | 1,200 | 1,200 | 2,936 |  | $(1,736)$ |  |
| total operating exps | 13,795 | 13,795 | 63,440 | 731 | $(50,376)$ |  |
|  |  |  |  |  |  |  |
| net expenses | 1,051,327 | 1,129,087 | 969,977 | 224,983 | $(65,873)$ |  |
|  |  |  |  |  |  |  |
| net revenues \& exp | 1,045,327 | 1,045,327 | 869,356 | 224,983 | $(49,012)$ | Deficit is through April only. An increase in it is anticipated |

Amounts in brackers are positive (additional money available) except in the budget variance line. There they are negative amounts.

Exhibit 2

| Budget of the School | Up to date as of April 10. (fiscal year ends June 30) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base <br> Budget | Current <br> Budget | Y-T-D Actual <br> Expenditures | abrances | Budget <br> Variances |  |
| revenues |  |  |  |  |  | Notes for major items |
| fees | $(6,000)$ | $(6,000)$ | $(7,289)$ |  | 1,289 | revenues from field course fees |
| other |  | $(77,760)$ | $(93,332)$ |  | 15,572 | revenues from shared curriculum fees |
| total | $(6,000)$ | $(83,760)$ | $(100,621)$ |  | 16,861 | (large \# = transfer from other unit) |
|  |  |  |  |  | - |  |
| faculty salaries | 559,994 | 613,994 | 457,750 | 106,250 | 49,994 | + balance due to course buyouts |
| adjuncts | 47,646 | 47,646 | 86,333 | 24,667 | $(63,354)$ | - balance due to need for more adjuncts |
| classified wages | 61,820 | 61,820 | 48,862 | 13,381 | (423) |  |
| prof wages | 58,560 | 58,560 | 45,461 | 13,626 | (527) |  |
| total salaries/wages | 728,020 | 782,020 | 638,406 | 157,924 | $(14,310)$ |  |
| benefits | 309,512 | 333,272 | 268,131 | 66,328 | $(1,187)$ |  |
| total compensation | 1,037,532 | 1,115,292 | 906,537 | 224,252 | $(15,497)$ |  |
|  |  |  |  |  | - |  |
| memberships | 4,219 | 4,219 | 6,700 |  | $(2,481)$ | fees for conferences and accrediting body |
| postage | 1,025 | 1,025 | 887 |  | 138 |  |
| printing and copy | 531 | 531 | 3,341 |  | $(2,810)$ |  |
| leasing | - | - | 1,452 |  | $(1,452)$ |  |
| supplies and materials | 800 | 800 | 7,364 | 51 | $(6,615)$ | May be misclassified - several chairs and desks replaced |
| travel | 2,477 | 2,477 | 29,743 | 340 | $(27,606)$ | extra travel for grant writers |
| equipment | - | - | 6,137 |  | $(6,137)$ |  |
| telephone | 3,543 | 3,543 | 4,880 | 340 | $(1,677)$ |  |
| maintence of equip | 1,200 | 1,200 | 2,936 |  | $(1,736)$ |  |
| total operating exps | 13,795 | 13,795 | 63,440 | 731 | $(50,376)$ |  |
|  |  |  |  |  | - |  |
| net expenses | 1,051,327 | 1,129,087 | 969,977 | 224,983 | $(65,873)$ |  |
|  |  |  |  |  | - |  |
| net revenues \& exp | 1,045,327 | 1,045,327 | 869,356 | 224,983 | $(49,012)$ | this deficit is through April, more expenditures are anticipated. |

Up to date as of April 10. (fiscal year ends June 30)


[^0]:    ${ }^{1}$ Hiring full-time faculty has become a bureaucratic nightmare. While it was once easy to hire a replacement for a faculty member, that is no longer the case because of reduced resources throughout the university. The department head must prove that a replacement is necessary, and this is not an easy task. Hiring an additional faculty member is almost impossible. Adjuncts, who are paid by the course and who have no benefits and no guarantee of further employment, may be hired to teach specific courses.

[^1]:    ${ }^{2}$ At this university, adjuncts do not receive any health insurance, retirement contributions, or other benefits. Their low benefit rate is attributable to payroll taxes and some minor contribution to university overhead.

