WORKING DRAFT:
Overhead at UC Berkeley.

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Abstract

We compare the effective overhead at UC Berkeley against UC Santa Barbara, by identifying the part of the budget that goes towards directly to teaching and research versus overhead costs. The effective overhead of one such calculation for UC Berkeley is roughly 215%, while for UC Santa Barbara it is roughly 159%. While neither figure is small, it does suggest that bringing UC Berkeley's numbers more in line with UC Santa Barbara's would generate significant savings, to the extent of completely dealing with the budget deficit.

We also present alternative calculations and welcome guidance.

1 Introduction

We discuss Berkeley's overheads on teaching and research largely by comparison with UC Santa Barbara, the next largest member of the UC System that does not have an associated medical center. This ongoing analysis centers on salaries which along with associated benefits comprise the bulk of Berkeley's expenditures. These analyses suggests that Berkeley could save in excess of $100 million annually, with our best estimates suggesting numbers more on the order of $200 million dollars, if UC Berkeley overheads were in line with those at UC Santa Barbara.

We make no claim nor do we believe UC Santa Barbara especially effective, just more effective than UC Berkeley.

We note this is a working document, and highly value feedback.

We note there is perhaps something to learn from best practices elsewhere beyond employee compensation. For example, it appears Santa Barbara escapes significant expenses (on the order of $77 million) in student healthcare which Berkeley does not (and to be fair, neither does UCLA).See section 3. A particularly area where Berkeley overhead precentage significantly exceed UCSB's is management expenditures — $136 million (59% overhead rate) versus $29 million (26% overhead rate).

2 Overhead Calculations

2.1 IPEDS 2014.

From 2014 ipeds datafiles [3], we have UC Berkeley spending $232 million on faculty salary to UC Santa Barbara's $112 million. For non instructional salary totals, we have $653 million versus $208 million [4].

The non-instructional salaries include research salaries which are respectively $82 million and $25 million, and Berkeley also spends significantly more, $25 million versus $4 million, on the category of "Librarians, Curators, Archivists and Academic Affairs and Other Education Services - outlays" which we also take to directly serve our research, teaching and public service mission.

Deducting those costs leaves 546 million versus 179 million for UC Santa Barbara for total overhead.

Basic Calculation. The effective overhead of this calculation for UC Berkeley is 235%, and 159% for UC Santa Barbara. Were Berkeley consistent with Santa Barbara on this overhead, its noninstructional salaries would engender a savings of 177 million in salary alone: the 546 million of overhead would be reduced to $(1.59 \times 232) = 369$ million.

Using an estimated associated benefit rate of 36% as suggested by [8], yields a saving of 241 million dollars in salaries and benefits alone using data from 2014 data. More recent data which we discuss below suggests a widening gap between Berkeley and Santa Barbara.

Alternatively, one could argue that research induces overhead as well. The first yields a possibly illegal overhead rate on federal funds of 174% for Berkeley. Thus, we include a calculation where the rate is limited to 57%: the federally negotiated overhead on research grants.

Large Research Overhead Calculation. We add research and faculty salaries which yield totals 314 million and 137 million respectively. The associated overhead rates are then respectively 174% and 152%. The associated savings for Berkeley were these equal 94 million (using the calculation $1.36 \times (546 - 314 \times 1.52)$).

Standard Research Overhead Calculation. On the other hand, were the research overheads limited to say 57% (our typical research overhead rate), we remove that from the overheads instead getting "teaching overheads" of 499 million [1] and 165 million, respectively. This teaching overhead rate then becomes 215% and 147%. Equalizing that overhead would save 190 million.

2.1.1 Specific areas for further examination.

These are from the IPEDS non-instructional staff data [4]. The base for computing overhead percentages, we will use is faculty salaries ($232M or $112M).

Management Overheads. $136M (59%) versus $29M (26%). Imputed savings: $75M in salary, $102M total compensation.

[1] We calculate this as follows: $546 - .57 \times 82$, reducing the $546 million by the federal overhead on $ 82 million.

Business/Finance. $97M (42%) versus $31M (28 %). Imputed savings: $32M in salary, $43M in total compensation.

Office and Administrative Support. $69M (30%) versus $20M (18%). Imputed savings: $28M in salary, $38M in total compensation.

Student Services. $64M (28%) versus $19M (17%). Imputed savings: $25M in salary, $34 M in total compensation.

Computer, Engineering, and Science. $105M (45%) versus $37M (33%). Imputed savings: $28M in salary, $38M in total compensation. [2]

2.2 Salary data

We also worked with salary data files [2]. Here we heuristically computed direct and indirect salary expenditures for 2015. The computation is embodied in publicly available code [10].

Regular Pay. Our heuristics estimate total direct salaries (teaching,research, museum, agronomists) as $379 million and $173 million out of total salaries $1082 million and $415 million for Berkeley and Santa Barbara respectively. This is using the regular pay fields in that data.

Imputed overhead rates are 185% and 140%. Equalizing would save Berkeley $170M in salary or $232M in total compensation.

Total Wages. Using total wages rather than base pay (e.g., including summer salary), we get $440M and $194M out of $1185M and $447M. Imputed overhead rates are

Imputed overhead rates are 169% and 127%. Equalizing would save Berkeley $185M in salary or $252M in total compensation.

Adjusting for auxillary. One could legitimately remove things like housing associated salaries from overhead since they are paid for from pools that are distinct from the research/teaching/public service missions. Thus, we use data from 2015 Consolidated Financial Reports [9, 6] which suggest that auxilary salaries and wages are $46M and $36M respectively. We note that.

With these adjustments to say the total wage scenario we get imputed overhead rates of 158% and 112%. Equalizing would save Berkley 180M in salary or 245M in total compensation.

3 Other Questions/Issues.

1. **Student health expenditures** from the Berkeley Consolidated Report [6] in 2015 has a non-salary expense of $72M. For Santa Barbara [9] this is $11M. Admittedly, UCLA Consolidated Report [7] also contains a large non-salary expense for this category.

2. **The number of Affiliates/Non-Employees** has moved from 1921 in 2008 to 4209 in 2016 [1]. Do these people incur expense? Are they included in salary data?

[2] We expect this particular category may have good justification via differences in research activity.

3. **Other Provisions** increased from a $20M in the 2014 Consolidated Financial Statement [5] to $123M in the 2015 Consolidated Financial Statement [6]. This amount is assigned to Cost of Instruction (as for example is the vast majority of the Deans offices). One wonders what Other Provisions is, especially with respect to instruction. The amounts for UC Santa Barbara and UCLA are non-existent with respect to instruction.

4. **Financial Aid**. Santa Barbara appears to provide more percentage-wise in terms of financial aid: $135M(58%) for Berkeley versus $83M (74%).

4 Some remarks.

For Berkeley to function, one certainly needs many people beyond teachers and researchers to properly accomplish our mission. For example, we certainly need an admissions office and a registrar. These absolutely central tasks, however, cost a modest $4.5M and $3.5M in total. Berkeley, moreover, is slightly more efficient than Santa Barbara in this categories.

For comparison purposes, Dean's offices total expenses are around $47.5M and Vice Chancellors another $34M. Again, Santa Barbara does better in these categories.

Incidentally, faculty brought in roughly $748M in research funds in 2015, and the overhead on this of $175M. Moreover, millions more on graduate student researcher tuition goes directly to the university for roughly 2000 GSR positions. For comparison purposes faculty (non-summer,non-lecturer) wages are around $210M.

5 Data Remarks.

The Integrated Postsecondary Education Data System is maintained by the National Center for Education System and collects information from colleges and university using standardized methodologies.

References

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[5] University of California. Berkeley: Campus financial report 2013-2014, 2015.

[6] University of California. Berkeley: Campus financial report 2014-2015, 2015.

[7] University of California. Los angeles: Campus financial report 2014-2015, 2015.

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