# VARIOUS UNDERGRADUATE ENROLLMENTS 

## Budget and Audit Committee

To the Board of Trustees:
Enclosed is the Budget and Audit Committee's written report which I summarized at the May board meeting. Unfortunately, the report is lengthy. Seventeen pages, plus four pages of assumptions are followed by the four computer case models. The report is not light, summertime reading.

It is important to put this material into proper perspective and to issue a caveat to those of you who have not been exposed to financial modeling. At best we can forecast orders of magnitude and demonstrate the general consequences of strategic decisions, but we do not pretend to provide you with absolute certainty because the turn of events seldom match the underlying assumptions of any forecast--in fact or in timing. However, our modeling brings into sharp focus the heavy fixed cost characteristics of the Washington and Lee enterprise which I have noted at past board meetings. Putting it another way, if production (educating thirteen hundred plus students) remains at the current level, we are utilizing capacity fairly efficiently and thereby controlling unit costs. If production drops, the result is over capacity and increased unit costs. Conversely, if production increases (say to a student body of fifteen hundred) we would be close to an optimum level of capacity utilization.

Although our costs are largely fixed, Case A-1, which assumes a status quo decision and increased financial aid, demonstrates the effect of sharply increasing a variable cost. This case is similar to one in which a company decides to increase the advertising and marketing budget in hopes of gaining a larger market share and increased revenues. However, the comparison falls short because Case A-1 contemplates increasing financial aid and recruiting efforts just to maintain our market position. The financial consequences are dramatic.

The bottom line financial question to which we all seek the answer, is, "how much will the various alternatives cost us?" The report answers that question in two ways. First, we calculate projected cumulative operating deficits (out-of-pocket cash outlays) during the eleven year period of the case models. Second, we calculate the amount of additional capital resources which would be necessary to raise within the next year to fund those operating deficits and maintain the same surplus position in which we expect to be in June 1985.

As noted at the board meeting, the Committee felt comfortable with the assumptions used in the four case models. However, there was some concern that the assumed $8 \%$ increase in annual giving revenues might be an overstatement if a coed decision is made. Recently we
made a sensitivity analysis by changing the assumed rate of increase to $6 \%$ for two years and then resuming the $8 \%$ rate for the remainder of the period. The results was insignificant--a diminution over the period of $\$ 998,000$ which is about $3 \%$. However, if any of you believe that a more realistic "worst case" assumption should be made, please call me. We can certainly run the numbers again.

The snows are melting in the Sierra Nevada just in time for early season backpacking. Therefore, I will be incommunicado from June 30 until the luncheon meeting in Lexington on Friday, July 13. If you have any questions about the report or would like any fine tuning of the models, Stewart Epley will be available to answer any questions you may have.

In closing, Stewart and Tom Imeson deserve our best thanks for their careful treatment of a massive quantity of financial data. If nothing else comes from this exercise, they have made a great step forward in financial planning at Washington and Lee.


Jerry G. South
Chairman
Budget and Audit Committee

JGS:bjs
enclosure

The Budget and Audit Committee was asked to assess the effect on the University's finances of continuing the University's all-male undergraduate admissions policy and of admitting women as undergraduate degree candidates. Eleven-year financial projections related to four hypothetical cases were prepared by the staff. The cases include:

Case A assumed all-men undergraduate student body gradually declining over the period to approximately 1,000 from 1,325 .

Case A-1 assumed all-men undergraduate student body maintaining approximately 1,330 enrollment level with increasing level of financial aid and enhanced admission activity.

Case B assumed coed undergraduate student body maintaining a 1,330 enrollment level with a gradually increasing number of women to a mix of about 830 men and 500 women by 1995 .

Case $C$ assumed coed undergraduate student body increasing to an enrollment level of 1,500 - about 1,000 men and 500 women - by 1995.

In all cases the Law School enrollment remains constant at 350 students.
The projections were reviewed by the Budget and Audit Committee at the May 24-25 meetings and reported to the Board in summary form. This report is intended to serve as a more formal presentation of the summary, which the Committee's chairman, Jerry South, made at the May 26 Board meeting.

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Case C - Operating Statement Projections - Dormitory Financing Included

## PURPOSES OF THE REPORT

This report has several purposes:

- To assess the relative impact on operating budgets of the four undergraduate enrollment cases;
- To suggest the relative magnitude of Endowment resources that would be required to finance the operating deficits of several of the cases;
- To review the impact of capital construction and financing costs associated with several of the cases.

Caution: The financial projections have been prepared to portray the effect of remaining all male or coeducating at the undergraduate level. The projections are logical and consistent, one versus the other - that is, for example, they all make use of the same assumptions about inflation, tuition increases, and Endowment spending; they differ only as respects undergraduate enrollments and the presence or absence of women in that student body. The projections are based on reliable data to the extent available. They have required, however, some conjectures about which reasonable persons may differ: for instance, that inflation will continue at six percent annually throughout the projection period; and that the Pratt Fund's total return will be 16 percent each year. Such postulates were unavoidable. They make any single set of projections unreliable as a portrayal of the future. They can only show orders of magnitude. Nonetheless, the projections are helpful and reliable one versus the others to show the relative attractiveness or unattractiveness of the four enrollments cases. In other words, the case models do represent relative reality.

## CASE HIGHLIGHTS

The following table presents key figures for each of the cases.

|  | Cases (Undergraduate Enrollment Shown) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \frac{A}{1} \\ 1,000 \mathrm{M} \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{A}-1 \\ 1,330 \mathrm{M} \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ 1,330 \mathrm{M} \& W \end{gathered}$ | $\begin{gathered} \mathrm{C} \\ 1,500 \mathrm{M} \& W \end{gathered}$ |
| Total Enrollment (350 Law) |  |  |  |  |
| Year 1 | 1,675 | 1,675 | 1,675 | 1,675 |
| Year 11 | 1,360 | 1,680 | 1,680 | 1,851 |
| \% (Decrease) Increase | (19) | - | - | 11 |
| Total Financial Aid (\$000) |  |  |  |  |
| Year 1 | 2,020 | 2,020 | 2,020 | 2,020 |
| Year 11 | 4,125 | 8,073 | 4,871 | 5,267 |

The $\$ 8$ million financial aid figure for Year 11 of Case A-1 is primarily attributable to the enhanced financial aid that likely would be required to maintain enrollment at 1,325 men of the same quality as now.

E and G Expenditures and Transfers
Total - No Dorm Financing Costs (\$000)

| Year 1 | 17,208 | 17,208 | 17,208 | 17,208 |
| :--- | :--- | :--- | :--- | :--- |
| Year 11 | 29,854 | 34,962 | 31,769 | 32,504 |

Cases $B$ and $C$ require new dormitories. The above figures assume that the costs of the dormitories could be handled outside the operating budget.

The higher Year 11 amount for Case A-1 reflects a large share of increased financial aid, which is provided for as Unfunded Financial Aid (in E and G Expenditures).

Note the Year 11 dollar amounts for Case A and Case C. Case C is nine percent more expensive than Case A - but Case C's Year 11 enrollment is 36 percent greater than Case A's. That illustrates the high fixed costs nature of college operations: a big swing in volume (enrollments) causes but a modest change in expenditures.

## $\frac{\text { Per Student }}{\text { Year } 1}(\$)$ <br> Year 11

| 10,273 | 10,273 | 10,273 | 10,273 |
| :--- | :--- | :--- | :--- |
| 21,950 | 20,810 | 18,910 | 17,560 |

The Year 11 per-student figures illustrate the impact of high fixed costs also. Case Cost per student is 20 percent less than the Case A cost per student. That's due almost entirely to spreading relativly inflexible costs over a greater number of students, Case $C$ versus Case A.

Cumulative Deficit or Surplus Years
1-11 (\$000)
No dorm financing
$(12,035)$

$$
\begin{align*}
& (1,292)  \tag{16,534}\\
& (4,892)
\end{align*}
$$

$$
8,771
$$

Including dorm financing
-

$$
2,651
$$

If the Case $B$ and $C$ required dormitories were financed by borrowing that had to be repaid through the operating budget, the impact would be as shown compared to off-operating budget financing.
Cases (Undergraduate Enrollment Shown)
$\underline{1,000 \mathrm{M} \quad 1,330 \mathrm{M} \quad 1,330 \mathrm{M} \& W \quad 1,500 \mathrm{M} \mathrm{\& W}}$
June 30, 1995, Operating Fund Deficit or Surplus (no dorm financing)(\$000)
Added Endowment required by 6-30-85
to equate Ending Fund Balances that date and 6-30-95 - no dorm financing (\$000)
Additional Plant Fund resources
required to keep dorm financing off of Operating Statements $(\$ 000)$ by 7-1-86
by 7-1-87

The amounts just above are what would have to be invested at taxable rates in a debt service Plant fund to provide a cash flow sufficient to pay interest and principal on tax-exempt bond debt incurred to provide cash to pay for the new dormitories required by Cases B and C .

## HOW MUCH WILL IT COST TO

COEDUCATE AND MAINTAIN THE PRESENT SIZE STUDENT BODY?

That vital question has two answers. Both are based on a comparison of where the University will be at the end of 1984-85, after one more year with 1,325 all-men undergraduates; and this report's Case B portrayal of where it will be if it admits undergraduate women for the year 1985-86 and by 1994-95 has an undergraduate enrollment of 499 women and 831 men.

1. In terms of additional capital resources required to be invested to make our June 30,1995 , ending operating fund balance equal to what it will be June 30, 1985.

- Endowment should be increased between now and the end of next year by
\$1,233,000
That sum added to Endowment, with six percent of it spent starting in 1985-86 and that initial amount increased by seven percent each following year (i.e., following our Endowment spending rules), would make the University whole, now versus then, excluding any dormitory financing costs.
- To provide for required Case B dormitories on the "most attractive" basis described on page 16 of this report would require an additional
$\$ 3,000,000$
That sum invested in taxable mortgage securities would provide cash flow (income and principal repayments) sufficient to pay interest and principal on tax-exempt bonds that would be sold to provide cash to pay for the new dorms. The amount shown would have to be on hand by July 1, 1987.

Total investable resources needed
$\$ 4,233,000$
2. In terms of out-of-pocket cash outlays, absent any capital infusions as just outlined, coeducating 1,330 undergraduates would cost us, over the ten years 1985-86 through 1994-95, an aggregate of
$\$ 4,614,000$
That amount includes principal and interest payments on the putative bond issue that would be needed to finance the new dormitory. The $\$ 4.6+$ million is the difference between the operating fund surplus for June 30,1985 , which is $\$ 1,061,00$, and the operating fund deficit for June 30, 1995, a negative $\$ 3,553,000$ (Case B Operating Statement Projections Dormitory Financing Included).

The $\$ 4.6+$ million aggregate ten-year cost of coeducating averages out to about a $\$ 460$ thousand net outgo each year. Year-to-year net losses or gains are shown on the Case B - Financing Included Exhibit, page 2, on the line labelled "Fund Balance Increase or Decrease."

The investment needs/cash outlays shown are the consequence of adding faculty and staff at various salaries at various times during the ten years; and of adding supplies and equipment costs at intervals to provide several women's sports programs - with costs
escalating over the ten years at seven percent for faculty salaries and at six percent for staff salaries and supplies and equipment costs. (The details of additional faculty, staff, and other expenses are spelled out on page 10.) Offsetting the cost increases are incremental dormitory auxiliary service contributions attributable to women because they are expected to favor dormitory housing to a greater extent than does our all-men student body.

## CASES AND COMMENTS

All cases begin with the approved operating budget for 1984-85. The remaining ten years of each case model were computer generated using the assumptions about financial aid described on page 12 and about other factors as set out in the Appendix.

## Case A: The Shrinking Scenario

This case assumes that the University keeps its existing all-men undergraduate policy and that undergraduate enrollments gradually decline from 1,325 , as now, to 1,010 .

This is a financially unattractive case. The accumulated operating deficit at the end of the 1994-95 fiscal year ("Ending Fund Balance") would be $\$ 10.7$ million as compared to a beginning accumulated operating surplus ("Beginning Fund Balance") on June 30, 1985, of over $\$ 1.3$ million. That's an unfavorable swing of over $\$ 12$ million in the eleven years of the Case A model.

The Case A results are due to the labor-intensive, high fixed cost nature of college operations. Of our 160 full-time faculty as of now, a net six positions will be eliminated as professors retire and are not replaced; another nine professors retire and will be replaced at lower salaries. Those on the payroll are assumed to receive annual increases of seven percent. The net increase in total faculty salaries is 80 percent. Six administrative staff members retire and are not replaced; another five retire and are replaced at lower salaries; the net increase in staff salaries and wages, using a six percent annual escalator, is 72 percent. Fringe benefits, at 20 percent of salaries and wages, increase 77 percent. Supplies and equipment have a high fixed cost component (energy, buildings and grounds maintenance, for instance). They were decreased in Case A at half the percent decrease in enrollments, adjusted for inflation at six percent. Total supplies and equipment costs rise by 61 percent nonetheless, in spite of a 19 percent drop in enrollments over the eleven years.

The total increase in all educational and general expenditures is 73 percent for Case A. In addition, fund Transfers increase by over 100 percent. Combined, expenditures and transfers go up 73 percent. On the E and G Revenue side, although tuition per student goes up 97 percent, total Tuition and Fees rises but 60 percent, the consequence of declining enrollments. That modest overall increase in that major revenue item holds down the aggregate increase in all $E$ and $G$ Revenues to 69 percent, even though Endowment Spending, Annual Giving, and Trust Distributions nearly double or more than double. The contribution from auxiliary revenues increases by only 41 percent. Combined, income to cover expenditures and transfers increases 68 percent. That increase versus the 73 percent increase in outgo, over the eleven years of the projection period, results in the $\$ 12$ million decrease in operating funds cited earlier.

One way of countering the unfavorable economic consequences of Case $A$ would be to increase the Endowment supporting the operating budget. To make the operating fund balance at the end of 1994-95 equal what it will be on June 30, 1985 - approximately $\$ 1.1$ million positive - instead of being $\$ 10.7$ million in the red, $\$ 14.2$ million of new Endowment would be needed by the start of the 1985-86 year. That is, that amount, with six percent of it spent in 1985-86 (the maximum percent of market value allowed to be spent under the new Endowment spending rule), and that initial amount increased seven percent annually thereafter (the same annual rate of increase assumed for Endowment spending in all models) would eliminate the Case A negative ending fund balances and provide a $\$ 1.1$ million black ending fund balance at the end of the projection period.

## Case A-1: The Status Quo Scenario

This case assumes that the undergraduate enrollment remains about 1,325, all men.
Given certain key assumptions about accelerated requirements for financial aid in connection with this case, it is financially the most unattractive of the four cases of this report. It would result in an ending operating fund deficit on June 30, 1995, of $\$ 15.2$ million. The aggregate worsening over the eleven years in operating funds would be $\$ 16.5$ million.

The principal reason for the unfavorable change compared to Case A is increased financial aid. Although there are limits to attracting qualified students by enhancing aid offerings, Case A-1 assumes substantial additional no-need grants to attract high-quality men students from a diminishing pool, such that 50 percent of each entering class would receive aid, as compared to only 25 percent for Case A. The incremental added cost of securing those students would be over $\$ 3.9$ million in 1994-95, for example.* (The additional financial aid assumed for Case A-1 is explained below on page 12 under the Key Assumptions About Financial Aid heading.) There would also be additional costs compared to Case A to replace five retiring faculty and one retiring administrative staff member who were not replaced in that model. Personnel costs would increase also compared to Case A by adding three professional admissions staff. The increase in faculty and staff salaries and wages would increase fringe benefits. Supplies and equipment costs increase versus Case A to support the added admissions people, to bring more merit scholarship candidates and guidance counselors to campus, to engage consultants in 1985-86 to help sharpen admissions strategies and tactics, and because of the greater number of students.

There would be some improvements in revenues, Case A-1 versus Case A. The greater number of students would improve tuition and fee revenues. Income from the Treasurer's short-term investments would rise also, because of greater tuition and fee and room and board receipts to be invested. The contribution from auxiliary enterprises would improve - there would be no reduction in dormitory occupancy, or in food service, undergraduate bookstore, and print shop sales. Lastly, the Transfer item for the Capital Reserve Provision - a reduction in operating funds - would be less, Case A-1 compared to Case A, because of more food service contracts. (See page D of the Appendix under Capital Reserve Provision for an explanation of that.)

To counter the Case A-1 end-of-period cumulative operating fund deficit of \$15.2 million and instead produce the $\$ 1.1$ million positive balance that will be on hand June 30, 1985, would require additional Endowment monies by that date of $\$ 19.6$ million.

## Case B: A Coed Undergraduate

Student Body of About 1,330
This case assumes undergraduate enrollment starting at 1,325-but women are admitted starting fall, 1985, so that by 1994-95 the undergraduate student body will be made up of 499 women and 831 men, a total of 1,330 .

The Case B Operating Statement Projections - No Dormitory Financing show a positive $\$ 47$ thousand ending fund balance June 30 , 1995, greatly better than the Case A-1

[^0]deficit - for the same enrollment - of $\$ 15.2$ million. Most of the improvement is because the applicant pool would include women and there would be no requirement to make the substantial incremental financial aid outlays to attract qualified men from a reducing pool. Auxiliary enterprises contributions would go up too, Case B over Case A-1: we would house a greater proportion of women students than we do now of our 1,325 undergraduate men, leading to a new dormitory for 160 students to be opened for the 1988-89 school year.

The savings in Case B financial aid and the increase in auxiliary contributions would be offset by some unavoidable added costs required to coeducate. In personnel, they would be a woman Assistant Athletic Director, two women coaches, three women Athletic Department interns, and a woman Assistant Dean of Students. For Admissions, a reassignment of duties of an existing employee requiring a salary adjustment, a new clerical employee, and a new professional recruiter would be needed. Supplies and equipment costs would have to rise over Case A-1 to provide for added women's sports programs.

Note that we project a positive ending fund balance of $\$ 1.1$ million next year. The Case B projections show a $\$ 47$ thousand positive ending fund balance in 1995. To raise the 1995 fund balance to $\$ 1.1$ million would require $\$ 1.2$ million of new Endowment funds within the next year.

The preceding discussion of Case B assumes that the new 160-bed dormitory that it envisions for fall, 1988, could be financed on the "most attractive" basis described on page 16 in the Capital Costs section of this report: that is, by borrowing at tax-exempt rates and funding the resulting debt service obligation by investing new gifts or Boarddesignated Endowment or both at taxable rates to generate cash to pay off the borrowing. If that could not be done, and the least attractive financing plan had to be invoked (page 16 ), it would have an adverse effect on the projections for Case B. The impact of worst case dormitory financing appears on the Case B Operating Statement Projections Dormitory Financing Included. They show a 1994-95 ending fund balance deficit of over \$3.5 million. To convert that deficit back to the $\$ 1.1$ million positive balance that we will have June 30, 1985, would require another Endowment infusion - in addition to the one cited in the preceding paragraph - of $\$ 5.8$ million, all to be in hand by June 30, 1987.

## Case C: A Coed Undergraduate

Student Body of About 1,500
This fourth case is based on an undergraduate enrollment of 1,501 students, 499 women and 1,002 men, with the first women admitted fall, 1985.

The Operating Statement Projections - No Dormitory Financing are positive: after two early years of operating deficits and reductions in the operating fund balance, operating surpluses appear and the fund balances increase, to $\$ 10.1$ million at the end of the projection period, an improvement of $\$ 8.8$ million. Compared to Case B tuition and fees increase because of more students; so does Treasurer's short-term investment income; so does the auxiliary enterprise contribution. Also, the capital reserve provision drops modestly, Case C compared to Case B: the increased enrollment of Case C results in more Dining Hall contracts. Countering those improvments are increases in Unfunded Financial Aid attributable to the greater number of students, and higher faculty salaries because Case C calls for six added positions compared to Case B. Those new hires increase fringe benefits. Supplies and equipment expenditures go up in Case C compared to Case B because of more students.

Case $C$ would require no Endowment additions.

Case C does require a new dormitory to be opened fall, 1987. Its construction cost and alternate financing arrangements are described starting on page 16. The most attractive financing does not impact on the Operating Statement Projections at all. The least attractive financing alternative - paying all the costs of borrowing to pay for the dormitory from operating funds - are presented on the Case C Operating Statement Projections - Dormitory Financing Included. That route would reduce ending fund balances appreciably, but the 1994-95 accumulated operating surplus of $\$ 4$ million still would be substantial.

Financial aid will be critical to the success of the University over the next decade (and beyond). Because it is so vital, the important financial aid assumptions that support the Operating Statement Projections for the various cases are set out here.

## Undergraduate Financial Aid

Models, A, B, and C all share the same financial aid premises:

- $25 \%$ of each entering class will receive University grant aid. Each recipient will receive $32 \%$ of his/her total cost of attending Washington and Lee (tuition, room, board, books, travel, etc.) in 1984-85, with that percentage rising one point each year to $42 \%$ in 1994-95. This increase is necessary to insure that Washington and Lee's financial aid package will remain attractive against the backdrop of increased competition for high quality students from both private and public institutions.
- Upperclassmen will receive additional financial aid each year equal to the increase in the total cost of attendance.

Model A-1 supposes a continuing all-male enrollment of 1,325-to be drawn from a shrinking applicant pool - without any departure from the 1984 standards for admissions. To achieve that, Model $A-\overline{1}$ posits the following financial aid:

- 1,000 of those male students could be enrolled using the same aid package extended to 25 percent of each entering class as for Case A (1,000 all-male students) described just above.
- The incremental 325 additional quality students would require offering "no-need" financial aid to an additional 25 percent of each entering class. The additional merit scholarships would be for the full amount of tuition in each year of the student's attendance.

Put another way, Case A-1 would mean financial aid to 50 percent of each entering class (instead of 25 percent for Cases A, B, and C), with half the recipients benefitting from appreciably greater dollar grants than the other half.

## Law School

Law school applications nation-wide have begun to decline, and Washington and Lee has begun to feel the effects. Dean Kirgis and Assistant Dean Henneman feel that it is imperative to increase financial aid to law students to counter the decrease in applicants and maintain the quality of our Law School student body. Accordingly, all the cases discussed in this report assume the following Law School financial aid.

The proportion of the Law School student body receiving aid is increased each year, from about 40 percent in 1984-85 to slightly over half in 1994-95, when 180 students are assumed to benefit from financial aid.

The amount of financial aid per student is calculated at a constant 77 percent of tuition each year. For 1984-85 the amount per student will be $\$ 5,000$. In 1994-95 the amount will be $\$ 9,850$, based on that year's tuition of $\$ 12,786$.

The mix of financial aid as between Washington and Lee-funded loans and outright grants changes to decrease the loan proportion and increase the grant percentage. Deans Kirgis and Henneman feel that more from grants and less from loans is essential to improve the University's attractiveness to qualified applicants. The rubric for improving the loan-grant mix reflected in the cases was to set the amount of loan financial aid equal to projected loan monies available, starting with 1985-86.* The remaining financial need of law students (for an increasing number of students at 77 percent of tuition to each) is to come by means of grants. Applying that discipline changes the proportion of loan financial aid from 55 percent in 1984-85 to 27 percent in 1994-95.

## Pratt Fund Use for <br> Financial Aid

For most years since the University received the Pratt bequest, whatever was spent from it was distributed 60 percent to the operating budget for faculty/staff support and 40 percent for financial aid.

The cases of this report depart from that $60-40$ rule. All apply total Pratt Fund spending amounts (figured using the new Pratt spending rules approved in February ( (a) first to cover projected financial aid to the extent not covered by other sources, (b) with any excess of Pratt spending amounts after (a) included as Educational and General Revenues on the Operating Statement Projections, and (c) with any deficiency of Pratt spending amounts after (a) included on the Operating Statement Projections as Unfunded Financial Aid, an element of $E$ and $G$ Expenditures.

An example will make this clearer, using Case B.
For 1991-92, the total financial aid requirement (Law and undergraduate) is
\$3,729,000
Monies available from Endowment spending allocations, fully spendable financial aid gifts, trust distributions designated for financial aid, and Law School financial aid loans
$(1,444,000)$
Remaining financial aid required
\$2,285,000
Total Pratt spending available in 1991-92
(2,350,000)
Pratt remaining - shown as Pratt Spending under the $E$ and $G$ Revenues heading on the Operating Statement Projections for Case B
$\$(65,000)$

* For several years, loans have been extended to Law School students in excess of monies available to be loaned. For instance, Law School financial aid for 1984-85 will total \$705 thousand. Only $\$ 319$ thousand of grant money will be available for law student financial aid. The difference, $\$ 386$ thousand, will come from loans of Washington and Lee funds. Only $\$ 150$ thousand of true loan monies will be available to be loaned out in 1984-85, however - $\$ 138$ thousand from incoming principal and interest payments on prior loans and $\$ 12$ thousand of Endowment income specified to be loaned to law students by donors. The $\$ 236$ thousand to be loaned in excess of the $\$ 150$ thousand true loan monies will come from the current unrestricted (operating) fund. That fund will credit students' account for $\$ 236$ thousand and set up an offsetting Due From Loan Fund receivable amount.

As said above, extending loans in excess of true loan monies available has been going on for several years. The aggregate excess on June 30, 1985, will be $\$ 615,000$.

In 1992-93, the picture changes:
Total financial aid requirement ..... \$4,079,000
Available from non-Pratt sources ..... $(1,523,000)$
Remaining financial aid required ..... \$2,556,000
Total Pratt spending available in 1992-93 ..... $(2,457,000)$
Excess financial aid required after applying allPratt Spending available - shown as UnfundedFinancial Aid under E and G Expenditures onthe Case B Operating Statement Projections

## Financial Aid Excluded

All the cases exclude certain undergraduate honor scholarships that have been specially funded over the past four years by the Best Products Foundation, Philip Morris, Mrs. Dora Lewis, the Delmarva Alumni, the Baltimore Alumni, and in memory of Kent Frazier (several other specially funded honor scholarships are being established). The scholarships have been funded by their donors with the understanding that their gifts will be invested, and both investment earnings and principal will be awarded over a period of years to deserving students. These scholarships all will be self-financing over the period of this report's financial projections and will neither call on the Pratt Fund for support nor create unfunded financial aid.

The amount of awards from these specially funded scholarships, approved as part of the Financial Aid Budget in February, will be $\$ 150$ thousand in 1984-85. That amount is about seven percent of the grand total financial aid that the University will make available from its resources for that year.

If the decision is made to coeducate, certain one-time capital costs would be required. The projects involved, their costs, and their impact on the operating budget are described next.

Gymnasium locker room renovations: The University Athletic Committee, in its January 30, 1984, report to President Wilson on "Coeducation and the Athletic Program," describes as "absolutely essential" the partitioning of the main locker room on the Warner Center's 300 -level to provide adequate locker room space for women. The project would have to completed in time for the arrival of the first undergraduate women students, assumed to be fall, 1985. Professor Ravenhorst has estimated the project cost at $\$ 140,000$, to be expended during 1984-85.

The Capital Projects budget for 1984-85 that the Board approved May 26, 1984, included this project as a contingent project at $\$ 140,000$. Funds to pay for it are available in Plant Fund. The project would have no impact on the operating budget.
(Note: The Athletic Committee's report also refers to several other needed capital projects. Their inclusion in the report perhaps implies that they are related to the coeducation issue. One, for additional playing fields, is described as necessary "whether we coeducate or not," however, which excludes the project as coeducation-related. The other project is the resurfacing of the tennis courts beneath the footbridge. That project has been pending for several years since before the coeducation issue came up again. It has been approved for 1984-85 as part of the Capital Projects budget.

The Athletic Committee's report includes a number of other ". . . probabilities and possibilities for reallocating space and remodelling (to provide for women). . ." Most of them entail reassigning space from present uses and would require no expenditures or only modest ones. Exception: remodelling the balcony space at the north end of the Warner Center gymnasium. That project is described as a "longer-term option," however. In view of the uncertainty concerning these various projects they have been excluded from this analysis.)

Campus lavatories: Mr. Parsons and Mr. Arthur have identified requirements for women's lavatories on campus. The estimated cost of providing them is $\$ 50,000$. That amount would have to be expended in 1984-85 to provide the facilities by fall, 1985.

The approved Capital Projects budget for next year carries this item as a contingency. Funds are available for it in Plant Fund. The project would have no impact on the operating budget.
(The approved Capital Project budget also has a $\$ 10,000$ contingency item to cover overruns on the locker room and lavatories, or to provide for minor unforeseen coeduca-tion-related projects, or both. The contingency item also can be provided from Plant Fund.)

Case B Dormitory ( 1,330 undergraduates, 499 women and 831 men ): The Subcommittee on University Housing and Dining Facilities of the Campus Life Committee, in its April, 1984, report, has determined that housing could be provided for a Case B male/ female undergraduate student body through the 1987-88 school year from a combination of private housing and converting existing University dormitory rooms from singles to doubles. A new dormitory to house 160 students would have to be available for occupancy fall, 1988, however. The Operating Statement Projections for Case B, in the Auxiliary

Enterprises section on page 1, incorporate operating revenues, expenditures, and contributions arising from the additonal students that would be housed in University premises both before and after constructing the new dormitory.

The estimated cost of the new dormitory, at $\$ 22,000$ per bed (a figure deemed reasonable by Mr. Parsons based on his conversations with the University's architects), would be approximately $\$ 3.5$ million. Construction would have to begin the summer of 1987 to have the dormitory available for occupancy fall, 1988. The analyses that follow assume the entire amount required to pay for the structure would be on hand July 1, 1987.

The most attractive financing plan would be to (a) borrow the funds needed to pay for the project at tax-exempt rates and (b) invest a sum at taxable rates to cover the principal and interest payments on the borrowed money. That is what was done respecting the University's three outstanding Virginia College Building Authority (VCBA) bond issues: \$9.4 million of initial investments in a Consolidated Debt Service Fund (carried in Plant Fund) generate sufficient cash to completely amortize principal and interest on $\$ 12.9$ million principal value of bonds outstanding when the initial investments were made.

To provide a net $\$ 3.5$ million to pay for the new dorm would require borrowing about $\$ 3.8$ million. Annual principal and interest payments on that sum would be $\$ 450$ thousand at ten percent over 20 years, assuming financing through VCBA on the same terms as in January of this year. An investment of $\$ 3.0$ million yielding 14 percent (available today from federally-backed residential mortgage securities) would take care of the $\$ 450$ thousand annual obligation.

The University will receive two large estate bequests that combined will be more than $\$ 3.0$ million: Miss Parmly's legacy of $\$ 1.3$ million and Col. John Tucker's benefaction of $\$ 3$ million. They could provide an internal debt service fund to handle dormitory borrowing obligations.

On the other hand, the Endowment could depreciate in value. Some of the Parmly and Tucker gifts might have to be used to satisfy a Col Alto judgment against us, or be retained in Endowment to help offset the reduction a down market could bring about in Endowment Spending allocations under the recently- approved Endowment spending rules. It might be necessary to borrow the cash required to pay for the new dormitory and service the loan from the current unrestricted operating fund. That would be the least attractive financing plan. It would mean providing the entire $\$ 450,000$ of annual debt service payments out of operating monies.

The consequences of doing so are shown on the Case B Operating Statement Projections - Dormitory Financing Included, on page 2, from Transfers through End Fund Balance. (The preceding parts of the projections, through Operating Surplus or Deficit, are unaffected.) Under Transfers, on the line Dormitory Financing Costs to Plant Fund, there appears the $\$ 450$ thousand annual debt service, starting in 1987-88, on the borrowing to pay for the dormitories. The effect on them shows up on the bottom, Ending Fund Balance, line: the deficits increase from 1987-88 through 1993-94, and the $\$ 47$ thousand Case B surplus excluding dormitory financing in 1994-95 becomes a $\$ 3.5+$ million deficit.

Case C Dormitory ( 1,501 undergraduates, 499 women and $1,002 \mathrm{men}$ ). This case requires a new dormitory for 240 students to be available fall, 1987. Construction would have to start in summer, 1986. As for Case B, operating revenues, expenditures, and contributions attributable to students to be housed in University dormitories both before and after the occupancy of the new facility are reflected in the Case $C$ projections under the Auxiliary Enterprises heading.

The estimated cost of the structure would be $\$ 5.3$ million at $\$ 22,000$ per bed. The analyses that follow assume the entire cost of the new dorm would be provided by summer, 1986.

The most attractive financing plan, assuming borrowing $\$ 5.8$ million over 20 years at ten percent, would mean annual debt service payments of \$680,000 starting with 1986-87. A debt service fund mortgage investment returning 14 percent to handle those payments would require $\$ 4.5$ million. If the total debt service fund of $\$ 4.5$ million could be provided, the new dormitory financing would have no impact on operations.

Absent a debt service fund, the worst case financing would require $\$ 680,000$ each year, starting with 1986-87, from the current unrestricted operating fund. The Case C Including Dormitory Financing Exhibit shows the results of doing that. Compared to the Case C -No Dormitory Financing projections, positive ending fund balances from 1986-87 through 1991-92 become deficits; the positive balances for 1992-93 and 1993-94 are diminished appreciably; and the final year ending balance is but $\$ 4$ million compared to over $\$ 10$ million.
(Note: It might be possible to finance new dormitories by means of a sale/leaseback involving private investors and a tax-exempt industrial development bond issue. The cost of leasing under such an arrangement could fall between the best and worst cases discussed above. There is federal legislation pending respecting such plans. Ellis Dunkum, the Coopers and Lybrand partner on our account, told the Treasurer on June 5 that he thinks it likely the legislation will come out of conference prohibiting tax-exempt sale/ leaseback programs.)

## APPENDIX

Assumptions Used

All the cases discussed in the body of this report and portrayed in the eleven-year Operating Statement Projections that are its Exhibits begin with the 1984-85 Operating Budget that was approved by the Board at its May meeting.

The remaining ten years for each case were generated using computer models based on the following assumptions.

## Enrollments

- All cases incorporate class-to-class undergraduate attrition as experienced over the past five years.
- The Case A reductions in undergraduate enrollment (to 1,010 for 1994-95) assume a gradual total reduction of 83 students in the size of the entering freshman class, from 360 for 1984-85 to 277 for 1992-93. The reductions are in approximately equal increments of 10 or 11 men each year through 1991-92, with a final reduction of six men the following year. Mr. Hartog supplied the reductions, based on the projected decrease in the male applicant pool over the period of the projections.
- The Case A-1 undergraduate enrollments (1,330 male students) assume 360 entering freshmen for 1984-85 and 365 each year thereafter.
- Case B (1,330 undergraduate students, male and female) assumes that same size entering class each year. Starting with 1985-86, females are admitted: 80 that year, 90 the next, 120 in 1987-88, 129 the next year, and in 1989-90 and thereafter, 137, which is 38 percent of the freshman class. The number of entering women each year was projected by Mr. Hartog.
- Case C (1,501 undergraduates, men and women) assumes a freshman class increasing from 360 in 1984-85 to 420 for 1987-88. Women are admitted as for Case B. Women are 33 percent of the entering freshman class by 1989-90.
- Law School enrollments are assumed to be constant at 350 each year, with women comprising about one-third of that number. Those figures are consistent with recent enrollments.


## Inflation

- Six percent per year.


## $E$ and $G$ Revenues

- Tuition increases at seven percent each year, from \$6,500 in 1984-85 (net of a $\$ 15$ surcharge in that year and the three following, to provide the University's $\$ 100,000$ contribution to the local hospital's fund drive) to $\$ 12,786$ in 1994-95.
- Fees (application, drop-add, diploma, parking, etc.) are .8 percent of tuition revenues for half the projection period, then one percent. The first percentage is based on the 1984-85 budget. The increase to one percent reflects the likelihood of increases in fees during the projection period.

APPENDIX<br>Assumptions Used<br>(continued)

- Endowment spending is constant for all cases. It is increased seven percent year-toyear. The percent increase is based on the new Endowment spending rules adopted in February, which provide for spending increases of one percentage point over assumed inflation so long as the amounts so called for do not exceed six percent of a three-year moving average of Endowment market values.

The assumed spending amounts are based on an underlying assumption that Endowment market values will increase at least 14 percent year to year from a combination of appreciation, dividend and interest income, and gifts added. That seems reasonable, given that the Endowment's average annual total return from market appreciation plus yield has been nearly 18 percent for the six years through March, 1984, ignoring any gift additions.

- Pratt spending amounts are assigned first to cover financial aid not provided from other sources, as explained in the body of this report under the Financial Aid heading. Any Pratt spending amounts remaining after doing that appear on the Operating Statement Projections as an E and G Revenue item. They vary appreciably case to case as financial aid requirements vary.

Total Pratt spending amounts are the same for all cases. The spending amounts are calculated based on the new Pratt spending rules adopted in February. They provide for increasing Pratt spending year to year by one percentage point over inflation so long as the amounts so called for do not exceed 12 percent of a three-year moving average of Pratt market values. Those rules allow total Pratt spending to increase seven percent in 1985-86 and 1986-87 over the prior years, then six percent in 1987-88 over 1986-87, then $4 \frac{1}{2}$ percent in each subsequent year over the one preceding.

The assumed spending amounts are based on an underlying assumption that Pratt market values will increase 16 percent each year from market appreciation and income combined. That assumption is based on the average annual no-gift-additions 17.8 percent total return that our Pratt Fund managers have achieved for Endowment monies over the past six years.

- Treasurer's Short-term Investments revenue is $2 \frac{1}{4}$ percent of Tuition and Fees, and is based on recent experience. Implicit in that assumption is that short-term money market rates will remain approximately as they are now.
- Treasurer's Long-term Investments revenue is the income on approximately $\$ 2.5$ million of operating fund assets invested with the Endowment. This revenue item, which is the same for all cases, increases seven percent each year, as does the Endowment Spending amount.
- Mr. Hotchkiss supplied the assumption on which Annual Giving revenue is based: it will go up eight percent each year. Annual Giving amounts are the same for all cases.
- Trust Distributions revenues also are the same for all cases. The amounts increase nine percent per year, based on recent experience.


## APPENDIX <br> $\frac{\text { Assumptions Used }}{\text { (continued) }}$

- Miscellaneous revenue is primarily gate receipts from athletic events. The budgeted 1984-85 figure was used through 1988-89, then increased to $\$ 15$ thousand annually more or less arbitrarily.


## Auxiliary Enterprises

- These enterprises are faculty housing; the law bookstore, undergraduate bookstore, and print shop; dormitories; and food service. Fringe benefits of auxiliaries employees are included in expenditure figures.
- Faculty housing figures are the same for all cases, which assumes continued full occupancy of our faculty houses and apartments regardless of enrollments. Revenues and expenses each increase six percent per year, the assumed inflation rate.
-The law bookstore revenues and expenses were increased similarly. The amounts are the same for all cases. (There is no change in Law School enrollment among models.)
- The undergraduate bookstore figures are based on 1984-85 revenues and expenditures per undergraduate student. The per-student amounts were escalated six percent each year. Each was multiplied by the number of undergraduate students for each case to get total revenues, expenditures, and contributions. The totals therefore vary according to undergraduate enrollments of each case.
. The print shop was handled similarly except that total enrollment was used.
- Dormitory figures too are based on per-student revenues, expenditures, and contributions for 1984-85, each increased six percent annually. The number of occupants starts with the 645 students planned to be housed for that year. Occupancy goes up or down thereafter for each model based on projections of increases or decreases in occupancy supplied by the Campus Life Committee subcommittee on housing and dining facilities (all of which assume continuation of our existing rule that all freshmen must live in campus housing).
- Food Service projections also are based on budgeted 1984-85 per-student figures increased six percent per year. The projections assume that all freshmen will continue to be required to take all their meals in the Dining Hall.


## E and G Expenditures

- Faculty Salaries are assumed to increase seven percent annually. The 1984-85 faculty roster was adjusted for future retirements (assumed at age 70), replacements, and additions as supplied by the academic Deans and, for the Athletic Department, by the University Athletic Committee, all as described in the body of this Report.
- Staff Salaries and Wages increase six percent per year. The Treasurer established future staff roster changes from 1984-85 using an assumed age 70 retirement except for several positions whose incumbents he knew to be planning retirement at age 65.


## APPENDIX <br> Assumptions Used <br> (continued)

- Fringe Benefits are 19 percent of total salaries and wages for 1984-85 and a constant 20 percent each year thereafter.
- Supplies and Equipment expenditures incorporate a six percent annual inflation factor. They increase or decrease at half the percentage change in total enrollment. For instance, if total enrollment increases by two percent one year to the next, supplies and equipment costs increase by one percent (adjusted for inflation).
- Unfunded Financial Aid is the excess of total financial aid over amounts available to cover it up to and including all of Pratt spending amounts. Unfunded financial aid is the amount of tuition revenues in the $E$ and $G$ Revenues section of the projections that would have to be forgiven because of a lack of cash from other sources - including all of Pratt spending amounts - to pay for it.
- The Non-cash Employee Compensation Accrual is the increase each year in the University's liability for faculty summer pay earned but not taken, staff vacations earned but not taken, and faculty sabbaticals that faculty will be entitled to in the following year (which they are assumed to have "earned" in the years preceding their sabbaticals).


## Transfers

- The Capital Reserve Provision is based on $\$ 300,000$ for 1984-85, increased by six percent annually. The total amounts so determined have been reduced by $\$ 150$ per dining hall 20 -meal contract, the surcharge that the Board approved five or six years ago to provide for capital purposes. The number of such contract add-ons takes into account the number of entering freshmen, who are required to take the 20 -meal plan.
- Deficits of restricted funds are the "subsidies" the operating budget provides for certain money-losing restricted funds (Shenandoah magazine is an example). The deficits have been escalated at six percent.
- Dormitory Financing Costs are the principal and interest payments we would have to make if we financed the new dormitories required by Cases B and C by borrowing and had no means of taking care of those payments except from the operating budget. These financing costs are explained more fully in the body of the Report under the Capital Costs section.

OPERATIN; STATEMENT PROJECTIONS - JUNE, 1984

CASE A - UG ENRCLLYENT JECLINES TO 1,000, aLL MALE: 350 LAW



```
E and g revEnues
```

TUITION ANO FEES
ENDOWMENT SPENDING
PRATT SPENDING
TREASURER ST INVESTMENTS
treasurer lt investments
ANNUAL GIVING
TRUST OISTRIE
trust oistrieutions
miscellaneous

TOTAL E AND G REVENUES
AUXILIARY ENTERPRISES
REvENuミS
EXPENOITURES

CONTRIEUTION

TOTAL E AND G REVENUES ANO
auxiliary contribution

| \$10.978 | \$ 11.589 | \$12.137 | \$12,746 | \$13,303 | \$13,885 | \$14.512 | \$15.149 | \$15,848 | \$15.632 | $\$ 17,564$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$1,293 | \$ 1.386 | \$ 1.433 | \$ 1.586 | \$ 1,697 | \$ 1,816 | \$ 1,943 | \$ 2.079 | \$ 2.225 |  |  |
| 853 | \& 485 | 488 | 524 | 518 | 504 | 486 | 501 | 441 | 401 | 338 |
| 247 | ¢ 259 | 271 | 285 | \$ 297 | 310 | \$ 323 | 337 | \$ 353 | 371 | \$ 391 |
| 240 | ¢ 257 | \$ 275 | 294 | 315 | 337 | \$ 360 | 335 | $\$ 412$ | 441 | \$ 472 |
| 1.300 | \$ 1,944 | 2.100 | 2,267 | \$ 2,449 | 2,045 | \$ 2.856 | \$ 3.085 | \$ 3.332 | $\$ 3.598$ | \$ 3.886 |
| \$ 1.199 | $\pm 1,307$ | 1.425 | 1,553 | \$ 1.692 | 1.845 | 2.011 | 2.192 | 2,389 | \$ 2,604 | \$ 2,838 |
| \$ 10 | \% 10 | 10 | 10 | 10 | 15 | 15 | 15 | 15 | 15 | 15 |
|  |  |  |  |  |  |  |  |  |  |  |
| \$16,520 | 517,237 | \$13.188 | \$19.265 | \$20,281 | \$21.357 | \$22,507 | \$23,743 | \$25,015 | \$26,443 | \$23,051 |
| \$ 3,007 | ¢ 3,130 | \$ 2.248 | \$3,363 | \$ 3,477 | \$ 3.581 | \$ 3,695 | \$ 3,802 | \$ 3,934 | \$ 4,070 | \$ 4,297 |
| \$ 20697 | 5 2,811 | 52,911 | \$ 3,018 | \$ 3,116 | \$ 3,21. | \$ 3,313 | \$ 3,415 | \$ 3,533 | 3.665 | 3,851 |
| 310 | 319 | 337 | 345 | 361 | 367 | 382 | 387 | 401 | 405 | 436 |
| \$16.930 | 317.556 | \$13.525 | \$19.610 | \$20.642 | \$21,724 | \$22.889 | \$24,130 | \$25,416 | \$26.84\% | \$28,48? |



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COMO SPOOL LISTING

## OPERATING STATEMENT PROJECTIONS - JUNE, 1984

## ENROLLMENT OATA

UG FRESHMEN
ug total students
LAW STUDENTS
total students

## PRCJECTIONS

e anc g revenues
TUITION AND FEES
ENDOWMENT SPENDING
PRATT SPENDING
TREASURER ST INVESTMENTS
TREASURER LT INVESTMENTS
ANNUAL GIVING
TRUST DISTRIBUTIONS
MISCELLANEOUS
total e and g revenues AUXILIARY ENTERPRISES

## REVENUES

EXPENDITURES

CONTRIBUTION
TOTAL E AND G REVENUES ANO AUXILIARY CONTRIBUTION

CASE A-1 - UG ENROLLMENT REMAINS 1,325, ALL MALE; LAN 350

| 1984-85 | 85-86 | 86-87 | 87-88 | 88-89 | 89-90 | 90-91 | 91-92 | 92-93 | 93-94 | 94-95 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 360 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 |
| 1,325 | 1,325 | 1,320 | 1,326 | 1,330 | 1,330 | 1,330 | 1.330 | 1,330 | 1,330 | 1.330 |
| +350 | 350 | 350 | 350 | 350 | 350 | 350 | 350 | 350 | 350 | 350 |
| 1.675 | 1,675 $===$ | 1,670 $==$ $=$ | 1.676 $==$ | 1,680 | 1,680 $===$ | 1,680 | 1.680 $===$ | 1,680 $==-=8$ | 1.680 $==$ $=0$ | 1,580 $===$ |


| \$10,978 | \$11,743 | \$12.527 | \$13,452 | \$14,428 | \$15,438 | \$16,552 | \$17,710 | \$18,950 | $\$ 20,277$ $\$ 2.381$ | $\$ 21,696$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 1,293 | \$ 1,386 | \$1.483 | \$ 1,536 | \$ 1.697 | \$ 1.816 | \$ 1,943 | \$ 2,079 | \$ 2,225 | \$ 2,381 |  |
| \$ 853 | \$ 374 | \$ 176 |  |  |  |  |  |  |  |  |
| \$ 247 | \$ 262 | \$ 280 | \$ 300 | \$ 322 | \$ 345 | \$ 369 | \$ 395 | \$ 422 | \$ 452 | $\$ \quad 483$ $\$ \quad 472$ |
| \$ 240 | \$ 257 | \$ 275 | \$ 294 | \$ 315 | \$ 337 | \$ 360 | \$ 385 | \$ 412 | \$ 3.449 | $\$ \quad 472$ $\$ 3.886$ |
| \$ 1,800 | \$ 1.944 | \$ 2.100 | \$ 2.267 | 2.449 | \$ 2,645 | \$ 2.856 | \$ 3.085 | \$ 3.332 | \$ 3.598 | 3.886 2.838 |
| \$ 1,199 | \$ 1,307 | \$ 1.425 | \$ 1,553 | 1.692 | 1,845 | \$ 2.011 | \$ 2,192 | $\$ 2,389$ $\$ \quad 15$ | \$ 2.604 | \$ 2,838 $\$ \quad 15$ |
| \$ 10 | \$ 10 | \$ 10 | 10 | 10 | 15 | 15 | 15 | 15 | \$ 15 |  |
| \$1t.620 | \$17,283 | \$18,275 | \$19,463 | \$20,913 | \$22,440 | \$24.106 | \$25,861 | \$27,745 | \$29,768 | \$31,938 |
|  |  | ------ | ------ |  |  |  |  | - |  |  |
| \$ 3,007 | \$ 3,191 | \$ 3,380 | \$ 3,586 | \$ 3,811 | \$ 4,035 | \$ 4,282 | \$ 4,534 | \$ 4,811 | \$5,094 | \$ 5.406 |
| \$ 2.697 | \$ 2,866 | \$ 3.032 | \$ 3.221 | \$ 3.420 | \$ 3.625 | \$ 3,843 | \$ 4.073 | \$4,318 | \$ 4.577 | \$ 4,851 |
| \$ 310 | \$ 325 | 348 | 365 | 391 | 410 | 439 | 461 | \$ 493 | 51? | 555 |
| \$16,930 | \$17,608 | \$18.623 | \$19,828 | \$21,304 | \$22,850 | \$24,545 | \$26.322 | \$28,238 | \$30.285 | 532.493 |


| E AND G EXPENDITURES |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| faculty salaries | \$ 6.145 | \$ | 6.541 | \$ | 6.999 | \$ 7,450 | \$ 7.995 | \$ 8.452 | \$ 9.044 | 5 9.473 | \$10,054 | \$10,542 | \$11.280 |
| STAFF SALARIES ANC WAGES | \$ 3.683 | \$ | 3.924 | \$ | 4.152 | \$ 4,381 | \$ 4,643 | \$ 4.921 | \$ 5.199 | \$ 5,449 | \$ 5.751 | 5.6,129 | \$ 6.407 |
| FRINGE BENEFITS | \$ 1.865 | \$ | 2.093 | \$ | 2.230 | \$ 2.366 | \$ 2,528 | \$ 2.675 | \$ 2.849 | \$ 2,934 | \$ 3.161 | \$ 3,334 | \$ 3.556 |
| SUPPLIES AND EQUIPMENT | \& 5.144 | $\pm$ | 5,453 | \$ | 5,787 | \$ 6,141 | \$ 6.517 | \$ 6.933 | \$ 7.358 | \$ 7.808 | \$ 8.286 | \$ 8,816 | \$ 9.355 |
| UNFUNDED FINANCIAL AID | - |  | - |  | - | \$ 8? | \$ 504 | \$ 939 | \$ 1.422 | \$ 1.920 | \$ 2.512 | \$ 3,079 |  |
| non-CASH Employee COMPENSATION ACCRUAL | \$ 70 | \$ | 70 | \$ | 70 | \$ 70 | \$ 70 | \$ 70 | \$ 70 | \$ 70 | \$ 70 | \$ 70 | \$ 70 |
| TOTAL E ANC G EXPENOITURES | \$16,907 |  | 18,081 |  | 19.238 | \$20,495 | \$22.257 | \$23,990 | \$25.941 | \$27,705 | \$29.834 | \$31,971 | \$34,369 |
| OPERATING SURPLUS OR DEFICIT | \$ 23 | \$ | -474 | \$ | -615 | \$ -667 | \$ -953 | s-1,140 | \$-1,396 | 5-1.383 | \$-1.595 | \$-1.686 | \$-1.875 |
| TRANSFERS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CAPITAL RESERVE PROVISION TO PLANT FUND | \$ 231 | \$ | 248 | \$ | 267 | \$ 288 | \$ 309 | \$ 332 | \$ 356 | \$ 381 | \$ 408 | $\$ \quad 437$ | \$ 468 |
| DEFICITS OF RESTRICTED FUNDS | \$ 70 | \$ | 74 | s | 79 | \$ 83 | \$ 38 | \$ 94 | \$ 99 | \$ 105 | \$ 112 | \$ 118 | \$ 125 |
| total transfers | \$ 301 | \$ | 323 | $\pm$ | 346 | \$ 371 | \$ 397 | \$ 425 | \$ 455 | \$ 487 | \$ 520 | \$ 555 | 1 593 |
| FUNO balance increase or decrease | \$ -278 | \$ | -796 | \$ | -961 | \$-1.038 | \$-1,350 | \$-1,565 | \$-1,851 | \$-1.870 | \$-2.115 | \$-2,241 | \$-2,468 |
| BEGINNING FUND BALANCE | \$1,339 | $t$ | 1,061 | \$ | 265 | \$ -696 | \$-1.734 | \$-3,034 | \$-4,649 | \$-6,501 | \$-8,370 | -\$10.485 | -\$12,727 |
| ENDING FUND BALANCE | \$ 1,061 | \$ | 265 | \$ | -696 | 5-1,734 | \$-3,084 | \$-4,649 | \$-6,501 | \$-8,370 | -\$10,485 | -512,72? | -\$15,195 |

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|  | OPERATING STATENENT PROJECTIONS - JUNE, 1984 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Case 8 | UG ENRO | LMENT RE NO | $\begin{aligned} & \text { AINS } 132 \\ & \text { RMITORY } \end{aligned}$ | $\begin{aligned} & 500 \text { WOI } \\ & \text { INANCING } \end{aligned}$ | $\text { EN \& } 825$ | MEN; 350 | LAW |  |  |  |
|  | 1984-35 | 85-80 | 86-37 | 87-88 | 88-89 | 89-90 | 90-91 | 91-92 | 92-93 | 93-94 | 94-95 |
| ENROLLMENT DATA |  |  |  |  |  |  |  |  |  |  |  |
| UG FRESHMEN | 360 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 |
| ug total students | 1.325 | 1.325 | 1.320 350 |  | 1.330 350 | 1.330 350 | 1.330 350 | 1.330 350 | 1.330 350 | 1,330 350 | 1,330 350 |
| LAW STUDENTS | 350 | 350 | + 350 | 350 | 350 | 350 | 350 | 350 |  |  |  |
| total students | 1,575 | 1,675 | $1 / 670$ $===$ | 1,676 $==$ | 1,580 $==$ | 1,680 $===$ | 1,680 $===$ | $\underline{1,680}$ | 1,680 $===$ | $\underline{1,580}$ | $\underline{1.680}$ |
| PROJECTIONS |  |  |  |  |  |  |  |  |  |  |  |
| E AND G revenues |  |  |  |  |  |  |  |  |  |  |  |
| TUITION AND FEES | \$10.978 | \$11,743 | \$12.527 | \$13,452 | \$14,428 | \$15,438 | \$16.552 | \$17.710 | \$18,950 | $\$ 20.277$ $\$ 2.381$ | $\begin{aligned} & \$ 21,696 \\ & \$ 2,547 \end{aligned}$ |
| ENDONMENT SPENDING | \$ 1.293 | \$1.386 | \$ 1.483 | \$ 1.586 | \$1,697 | \$ 1.816 | \$16,943 | \$ 217079 |  |  |  |
| PRATT SPENOING | \$ 853 | \$ 478 | \$ 464 |  |  |  | \$ $\begin{aligned} & \text { \$ } \\ & \$ \\ & \$ 69\end{aligned}$ | \$ 895 | \$ 422 | \$ 452 | \$ 483 |
| treasurer st investments | \$ 247 | \$ 262 | \$ 280 |  |  |  | \$ 350 | $5 \quad 335$ | \$ 412 | s 441 | \$ 472 |
| TREASURER LT INVESTMENTS | \$ 240 |  |  | \$ 29.26 | \$ 2.449 | \$ 2.645 | \$ 2.856 | \$ 3.085 | \$ 3.332 | \$ 3.593 | \$ 3.886 |
| ANNUAL GIVING | \$ 1.800 | \$ 1.944 | \$ 2.100 51.425 | $\$ 2.267$ $\$ 1.553$ | \$ 21.449 | \$ 1.845 | \$ 2.011 | \$ 2.192 | \$ 2.389 | \$ 2,604 | \$ 2.838 |
| TRUST OISTRIBUTIONS MISCELLANEOUS | $\$ 1,199$ $\$ \quad 10$ | $\$ 1,307$ $\$ \quad 10$ | 5 <br> $\$$ <br> $\$$ | $\begin{array}{r}\text { \$ } \\ \$ \\ \$ 1.553 \\ \hline\end{array}$ | $\$ 1.692$ $\$ \quad 10$ | $\$ 1.845$ $\$ \quad 15$ | \$ ${ }^{5} 215$ | \$ 15 | \$ 15 | \$ 15 | \$ 15 |
|  |  |  |  | \$19,878 | \$21,251 | \$22,689 | \$24,252 | \$25,926 | \$27,745 | \$29,768 | \$31,938 |
| total e and g revenues | \$1t,620 | \$17.387 | 518.563 | \$19.878 | \$21.251 | \$22,689 | \$24.252 |  |  |  |  |
| AUXILIARY ENTERPRISES |  |  |  |  |  |  |  |  |  |  |  |
| REVENUES EXPENDITURES | \$ 3,007 | \$ 3,191 | \$ 3,458 | \$ 3.738 | \$ 4,044 | \$ 4,281 | \& 4,543 | \$ 4.810 | \$ 5.105 | \$ 5.405 | \$ 5.736 |
|  | \$ 2.697 | S 2.866 | \$ 3,075 | \$ 3.306 | \$ 3,550 | \$ 3,763 | \$ 3.989 | \$ 4.228 | \$ 4,482 | \$ 4.751 |  |
| CONTRIBUTION | \$ 310 | \$ 325 | \$ 383 | \$ 432 | \$ 494 | \% 518 | \$ 554 | \$ 582 | \$ 623 | 3554 | \& 700 |
| TOTAL E ANO G REVENUES AND AUXILIARY CONTRIBUTION | \$1t,930 | \$17.712 | $\$ 18,946$ | $\$ 20,310$ | $\$ 21.745$ | $\begin{array}{r} \$ 23,20 ? \\ - \end{array}$ | $\begin{array}{r} \$ 241806 \\ -\quad-2-2 \end{array}$ | \$26.508 | $\$ 28.368$ | \$30,422 | \$32,638 |
|  |  |  |  |  |  |  |  |  |  |  |  |



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|  | CASE ${ }^{\text {B }}$ | UG ENROL | LMENT RE DORMITO | AINS 132 Y financ | NG INCLU | $\begin{aligned} & \text { EN \& } 825 \\ & \text { ED } \end{aligned}$ | MEN: 350 | LAW |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984-85 | 85-86 | 86-87 | 87-88 | 88-89 | 89-90 | 90-91 | 91-92 | 92-93 | 93-94 | 94-95 |
| ENROLLMENT DATA |  |  |  |  |  |  |  |  |  |  |  |
| UG FRESHMEN | 360 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 | 365 |
| ug total students LAW Students | 1.325 350 | $\begin{array}{r} 1.325 \\ 350 \end{array}$ | $\begin{array}{r} 1.320 \\ 350 \end{array}$ | 1.326 350 | 1,330 350 | 1.330 350 | $\begin{array}{r} 1.330 \\ 350 \end{array}$ | $\begin{array}{r} 1.330 \\ 350 \end{array}$ | $\begin{array}{r} 1.330 \\ 350 \end{array}$ | 1,330 350 | 1.330 350 |
| total students | $1 / 675$ $===$ | 1,675 $====$ | $\underline{1.670}$ | 1.676 $===$ | $\underline{1 / 680}$ | $\underline{1.680}$ | 1.680 | 1.680 | 1,680 | 1.680 $==$ $=$ | 1,680 $===$ |
| PROJECTIONS |  |  |  |  |  |  |  |  |  |  |  |
| e ano g revenues |  |  |  |  |  |  |  |  |  |  |  |
| TUITION AND FEES | \$10,978 | \$11.743 | \$12.527 | \$13.452 | \$14,428 | \$15.438 | \$16,552 | \$17.710 | \$18,950 | $\$ 20.277$ $\$ 2.381$ | $\$ 21,696$ $\$ 2.547$ |
| ENDOWMENT SPENDING | \$ 1,293 | \$ 1.386 | \$ 1.483 | \$ 1.586 | \$1.697 | \$1.816 | \$ 1.943 | \$ 2.079 |  |  |  |
| PRATT SPENDING | \$ 853 | \$ 478 | \$ 464 | \$ 415 | \$ 338 | \$ 249 | \$ 146 | \$ 65 | \$ 422 |  |  |
| TREASURER' ST INVESTMENTS | \$ 247 | \$ 262 | \$ 280 | \$ 300 | \$ 322 | \$ $\quad 345$ | \$ $\quad 369$ | \$ 395 | \$ 422 | \$ 4541 | $\$ \quad 483$ $\$ \quad 472$ |
| TREASURER LT INVESTMENTS | \$ 240 | \$ 257 | \$ 275 | \$ 294 | \$ 315 | \$ 337 | \$ 360 | \$ 385 | \$ 3.412 |  |  |
| ANNUAL GIVING | \$ 1.800 | \$ 1.944 | \$ 2.100 | \$ 2.267 | \$ 2.449 | \$ 2,645 | \$ 2,856 | \$ 3.085 | \$ 3,332 | \$3.598 | $\$ 3.886$ $\$ 2.838$ |
| TRUST DISTRIBUTIONS | \$ 1.199 | \$ 1,307 | \$ 1,425 | \$ 1,553 | \$ 1.692 | \$ 1.845 | \$ 2,011 | \$ 2,192 | $\$ 2,389$ $\$ 15$ | \$ 2,604 | \$ 2.838 |
| miscellaneous | \$ 10 | s 10 | \$ 10 | \$ 10 | \$ 10 | \$ 15 | \$ 15 | \$ 15 | \$ 15 |  |  |
| TOTAL E AND G REVENUES | \$16.620 | \$17,387 | \$18,563 | \$19,878 | \$21,251 | \$22,689 | \$24,252 | \$25,926 | \$27,745 | \$29,768 | \$31,938 |
| AUXILIARY ENTERPRISES |  |  |  |  |  |  |  |  |  |  |  |
| REVENUES | \$ 3,007 | 5 3,191 | \$ 3.458 | \$ 3,738 | \$ 4,044 | \$ 4.281 | S 4,543 | 34.810 | \$ 5.105 | \$ 5.405 | \$ 5,736 |
| EXPENDITURES | \$ 2,697 | \$ 2,866 | \$ 3,075 | \$3,306 | \$ 3.550 | \$ 3,763 | \$ 3.989 | 54.228 | \$ 4,482 | \$ 4.751 |  |
| CONTRIBUTION | \$ 310 | \$ 325 | \$ 383 | \$ 432 | \$ 494 | \$ 518 | \$ 554 | \$ 582 | \$ 623 | \$ 654 | \$ 700 |
| total e and g revenues and AUXILIARY CONTRIBUTION | \$16,930 | \$17.712 | \$18,946 | \$20,310 | \$21,745 | \$23.207 | \$24,806 | \$26,508 | \$28,368 | \$30,422 | \$32,638 |


|  | \$ 6.145 | s 6,563 | \$7,022 | \$ 7.494 | \$ 8,042 | \$ 8,531 | \$ 9.128 | \$ 9,563 | \$10,150 | \$10,645 | \$11,391 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FACULTY SALARIES | \$ 3.683 |  |  | \$ 4.403 | \$ 4.677 | \$ 4,930 | \$ 5.209 | \$ 5.460 | \$ 5,762 | \$ 6.107 | \$ 6,474 |
| STAFF SALARIES AND WAGES | s 3.683 | \$ 3.944 | $\begin{array}{r}74173 \\ \hline 2.239\end{array}$ | \$ $\$ 2.379$ | + 2.544 | \$ 2,692 | \$ 2.867 | \$ 3,005 | \$ 3.182 | \$ 3,351 | \$ 3,573 |
| FRINGE BENEFITS | \$ 1,865 | \$ 2.101 | \$2.239 | \$ 2.319 | $\$ 2,544$ $\$ 6,510$ | \$ 2,692 | \$ 7.336 | \$ 7.776 | \$ 8.242 | \$ 8,737 | \$ 9.261 |
| SUPPLIES AND EQUIPMENT | 5,144 | \$ 5.453 | 5.782 | \$ 6,134 | + 6.510 | +6,920 | 57.336 | 7 | \$ 99 | 5245 | \$ 408 |
| UNFUNDED FINANCIAL AIO | - |  |  |  |  |  |  |  |  |  |  |
| NON-CASH EMPLOYEE COMPENSATION ACCRUAL | \$ 70 | \$ 70 | \$ 70 | \$ 70 | 70 | 70 | 70 | \$ 70 | 70 | 70 | 70 |
| TOTAL E AND G EXPENDITURES | \$16,907 | \$18.131 | \$19,286 | \$20,480 | \$21,843 | \$23.143 | \$24.610 | \$25,873 | \$27,505 | \$29,155 | \$31,176 |
| OPERATING SURPLUS OR DEFICIT | \$ 23 | \$ -419 | s -340 | \$ -171 | \$ -98 | \$ 64 | \$ 196 | \$ 635 | \$ 863 | s 1.267 | \$ 1.462 |
| TRANSFERS |  |  |  |  |  |  |  |  |  |  |  |
| CAPITAL RESERVE PROVISION |  |  |  |  |  |  | \$ 356 | \$ 381 | \$ 408 | \$ 437 | \$ 468 |
| TO PLANT FUND | $\begin{array}{rr}\$ & 231 \\ \$ \quad 70\end{array}$ | $\$$ $\$ 48$ $\$$ | $\begin{array}{rr}\text { \$ } & 267 \\ \$ & 79\end{array}$ | $\begin{array}{r}5 \\ \$ \\ \hline\end{array}$ | $\$$ $\$ 88$ | \$ 94 | \$ 99 | \$ 105 | \$ 112 | \$ 118 | \$ 125 |
| DORMITORY FINANCING COSTS |  |  |  | 450 | s 450 | \$ 450 | 450 | 450 | \$ 450 | \$ 450 | \$ 450 |
| TO PLANT FUNO | - |  | - |  |  |  |  |  |  |  |  |
| total transfers | \$ 301 | \$ 323 | \$ 346 | \$ 821 | \$ 847 | \$ 875 | \$ 905 | s 937 | s 970 | \$ 1,005 | \$ 1.043 |
| FUND SALANCE INCREASE or decrease | \$ -278 | \$ -742 | \$ -686 | \$ -992 | \$ -945 | \$ -812 | \$ -709 | \$ -301 | \$ -107 | s 261 | \$ 419 |
| BEGINNING FUND BALANCE | \$ 1,339 | \$ 1,061 | 5319 | \$ -368 | \$-1,359 | s-2,304 | \$-3,116 | \$-3,825 | \$-4.126 | \$-4,233 | \$-3,072 |
| ENOING FUND BALANCE | \$ 1,061 | \$ 319 | \$ -358 | \$-1,359 | \$-2,304 | \$-3,116 | $\$-3,825$ $=====$ | $\$-4,126$ $====$ | $\begin{aligned} & \$-4,233 \\ &====\end{aligned}$ | $\$-3,972$ $=-===$ | \$-3,553 $=====$ |

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CASE C - PAGE 1 NO DORMITORY FINANCING



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## OPERATING STATEMENT PROJECTIONS - JUNE, 1984

CASE C - UG ENROLLMENT INCREASES TO 1,500, 500 WOMEN \& 1,000 MEN; 350 LaW DORMITORY FINANCING INCLUDED

## ENROLLMENT DATA

UG FRESHMEN
UG TOTAL STUDENTS LAW STUDENTS

TOTAL STUDENTS

## PROJECTIONS

E ANO G REVENUES

TUITION AND FEES PRATT SPENDING
TREASURER ST INVESTMENTS
treasurer lt investments annual giving
TRUST DISTRIBUTIONS
miscellaneous
TOTAL E AND $G$ REVENUES AUXILIARY ENTERPRISES

REVENUES
EXPENDITURES

CONTRIBUTION
total e and g revenues and
AUXILIARY CONTRIBUTION



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## Effect of Higher-Cost Housing on Financial Models

\$000
Published Models -

| Conventional Dorms | Apartment Housing |
| :--- | :--- |
| @ $\$ 22,000 /$ student | @ $\$ 27,000 /$ student |

Case B - coeducation, no change in enrollment, 160-bed housing to be available fall, 1988

- Cost of project

3,500 4,320

- Bond issue required

3,800
4,700

- Annual debt service

450
550

- Internal Debt Service Fund required by July, 1987, to keep debt service off of Operating Statements

3,000
3,600

- June, 1995, Ending Fund Balance deficits if financing appears on Operating Statements, no added Endowment
- Additional Endowment required to convert those Ending Fund Balances back to the positive $\$ 1.1$ million budgeted for June, 1985

7,000*
8,300*

Case C - coeducation, enrollment increasing
to 1,500 undergraduates. 240-bed housing
to be available fall, 1987

- Cost of projec

| 5,300 | 6,500 |
| :--- | :--- |
| 5,800 | 7,000 |

- Annual debt service

680

- Internal Debt Service Fund required by July, 1986, to keep debt service off of Operating Statements

4,500
5,400

- June, 1995, Ending Fund Balance surpluses if financing appears on Operating Statements, no added Endowment
* \$1.2 million by July, 1985; remainder, to cope with dorm financing, by July, 1987.


[^0]:    * Case A shows $\$ 338$ thousand of Pratt Spending for operations in 1994-95 and no Unfunded Financial Aid. In Case A-1, there is no Pratt Spending in 1994-95 (because it all has been applied to financial aid) and there is $\$ 3,610,000$ of Unfunded Financial Aid (the amount of financial aid not covered by other sources and Pratt).

