

# Strategic Budgeting: Instruction-First Budgeting Bud 2246

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Strategic Solutions for Student Success

# Program Objectives

- College and university reality check—what's working, what's not
- Why current budget models are contributing to an inability to divert funds to solve problems and institute needed changes
- Introduce a budget building model that exemplifies “instruction-first” strategic budgeting
- Hands-on examples—micro and macro

BIG AGENDA...tired already?



# Credit Ratings

- In 2013, Moody's Investors Service put a negative outlook on the entire higher education sector, even at major research universities, which had been spared in previous forecasts. And that came after a year in which the agency downgraded the credit ratings of 22 colleges, including Alabama A&M, Wellesley College and Morehouse College.
- At the same time, Standard & Poor's Ratings Service downgraded 13 institutions, including Amherst College, Tulane University and Yeshiva University. Combined, both agencies upgraded only eight colleges in 2012.



# Credit Rating

- Their reports cited a weakening revenue stream caused by projected long-term declines in national high school students, reduction in government support, a softening of endowment giving, and a growing inability of students and their families to respond to continued increases in tuition.
- While few financial experts foresee mass closings in the years ahead, only 500 or so of the 4,000-plus colleges and universities in the United States seem to have stable enough finances to be truly safe. The remaining colleges, where a vast majority of Americans attend, can no longer hold off the technological, demographic and economic forces quickly bearing down on them.



# Why?

- The cost of college in the past 30 years has gone up ten-fold. Health care has only gone up six-fold, and inflation has only gone up threefold.
- 1980, annual tuition at public and private four-year institutions were 4 and 17 percent respectively of median family income. Today they are currently 9 and 38 percent.
- In 1979, Pell Grants, the need-based grants funded by the federal government to lower-income college undergraduates, covered about 75 percent of the cost of a four-year college education; it now covers approximately 33 percent.



# Why?

- States are getting out of the business of higher education. In 1987, states kicked in about three quarters of what public colleges spent on education; now they contribute about half. The rest has to come from tuition, research grants and endowment giving.
- As a result, public colleges have joined with cash-strapped private colleges on the hunt for more students who can pay full freight—foreign and out-of-state prospects.



# Poor Graduation Rates

- Student Success--While all parents want their kids to complete college, little more than half of those millions who haul their laptops to campus each fall actually end up with a bachelor's degree in six years—42% in four years.
- The United States now has the highest college—dropout rate in the industrialized world, and in terms of 25-to-34 year-olds with college degrees, it has fallen from first to twelfth.



# International Ranking

America's rate of college education achieved by the adult population has slipped from first to sixteenth in the world.

The decline corresponds to the aging of the highly educated workforce that created America's economic dominance.

Source: Programme for International Student Assessment (PISA)





# Foreign Competition

Among the 200 top university rankings per million inhabitants, the US is ranked fifth behind the Netherlands, UK, Australia and **Canada**. Sources: Academic Ranking of World Universities; QS World University Rankings; and the Times Higher Education World University Rankings.

Primacy of access to exclusive top ranking universities is shifting away from the US.

Howard Steven Friedman, [The Measure of A Nation](#), Prometheus Books, 2012.



# Comparative Spending

- Despite the evidence of diminished results, the United States still spends a greater proportion of GDP on higher education than any other country, 3.1 percent versus 2.6 percent for the next highest competitor—Canada.
- This has caused the public to believe that better management would allow American universities to do more with less. Maybe they are right.



# Bubble Ready to Burst?

“Like many situations too good to be true, the:

- dot-com boom;
  - Enron bubble
  - housing boom or the health-care-cost explosion;
- the ever-increasing cost of university education is not sustainable.”

Louis Lataif, Dean Emeritus, Boston University School of Management



# So What!?

If the Bubble bursts, what does that mean for America's universities?

- Budget cuts
- Shifting costs to students
- Impact on outcomes
- Decline in program quality and/or access
- Survival of programs, colleges...



# What is the fix?

Can this industry be saved?

- Declining resources--enrollment
- Fixes costs in excess of revenue—irrational budgeting
- Inability to identify “discretionary” funds for new initiatives

A change in the way we budget funds is needed.



# Budget Building is Typically a Political Exercise

1. Allocation of resources are predicable and based on political, not rationale processes.
2. Wealthier colleges average (9—15%) higher performance—e.g., graduation rates, cognitive skill improvement, continuing to graduate school—more funds randomly get into high impact functions.
3. Lessor funded colleges can match richer colleges performance by strategically allocating funds to high impact areas.



# Strategic Budgeting: What is it?

Using quantifiable measurements (e.g., ratios, trend analysis, return-on-investment, productivity measurements, etc.) to assess institutional effectiveness, it is possible to determine corrective or strengthening funding strategies that will improve outcomes.



# Strategic Budgeting: Why is it important?

- Strategic budgeting helps to eliminate irrational or political interference in the resource allocation process by establishing funding priorities to reach agreed upon objectives.
- Initially strategic budgeting was an important budgeting process to close the gap between affluent and less affluent colleges.
- It may become a survival strategy as funding diminishes or colleges are held more accountable for institutional and student performance.





# An Example: Using Quality Control Techniques to Develop Budgeting Strategies

Using Deming's and Juran's industrial quality control techniques to:

- assess college operational effectiveness; and
- allocate discretionary resources.



# Review

1. Colleges tend to allocate funds in an irrational/politically motivated process—everyone gets a piece of the pie.
2. This practice creates a performance advantage to wealthier colleges—more funds, not a higher percentage, reach high impact areas.
3. Eliminating the funding/performance gap occurs by shifting discretionary funds to high impact areas identified through a quantifiable strategic assessment process.



# Typical Budget Strategies

- Incremental Budgeting (maintaining the status quo)
- Management-by-Objectives (whose objectives?)
- Program Based Budgeting (another word for project management)
- Zero Based Budgeting (sounds better when not attempted)

One type does not fit all....



# Budget Model

## A Strategic Approach for Developing a Budget

Budget development incorporates different strategies for different institutional objectives.

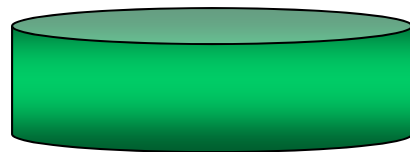
Think of a college as having three primary components of levels of operation.



# Description Of Model

## Level 1 Instructional Salaries

- Funding for all full and part-time faculty
- First dollar emphasis on classroom instruction = primary college mission



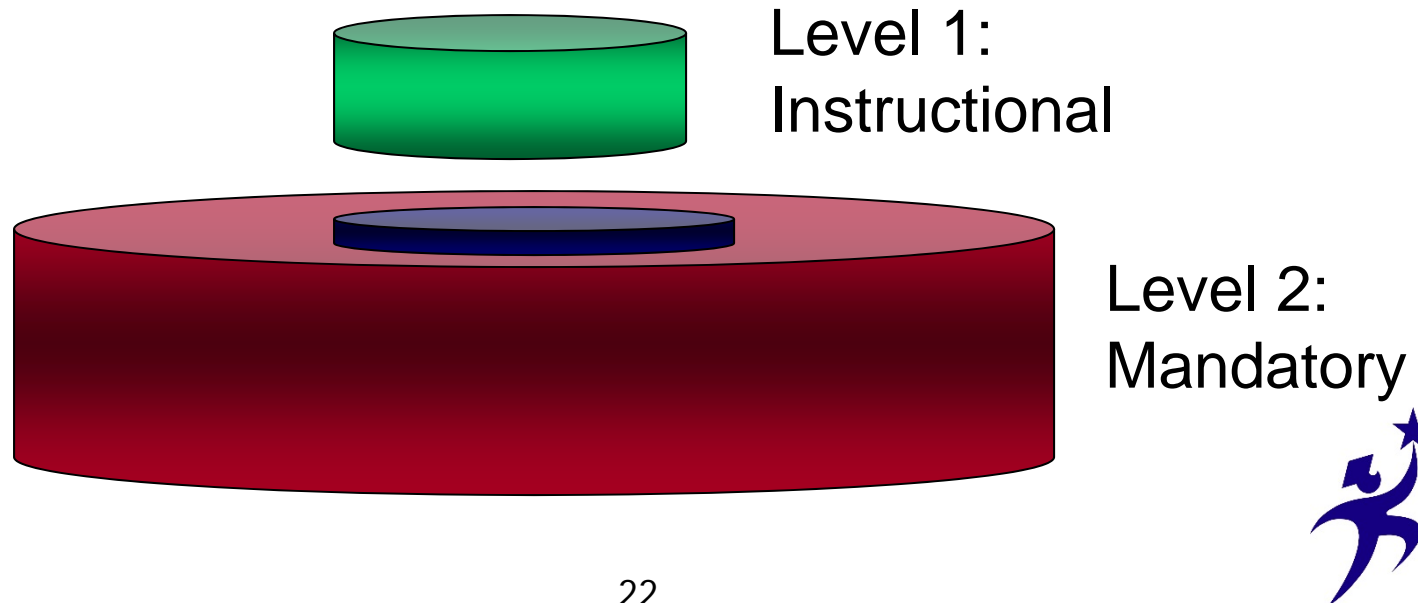
Level 1:  
Instructional



## Description of Model Level 2

### Mandatory Overhead Expenditures

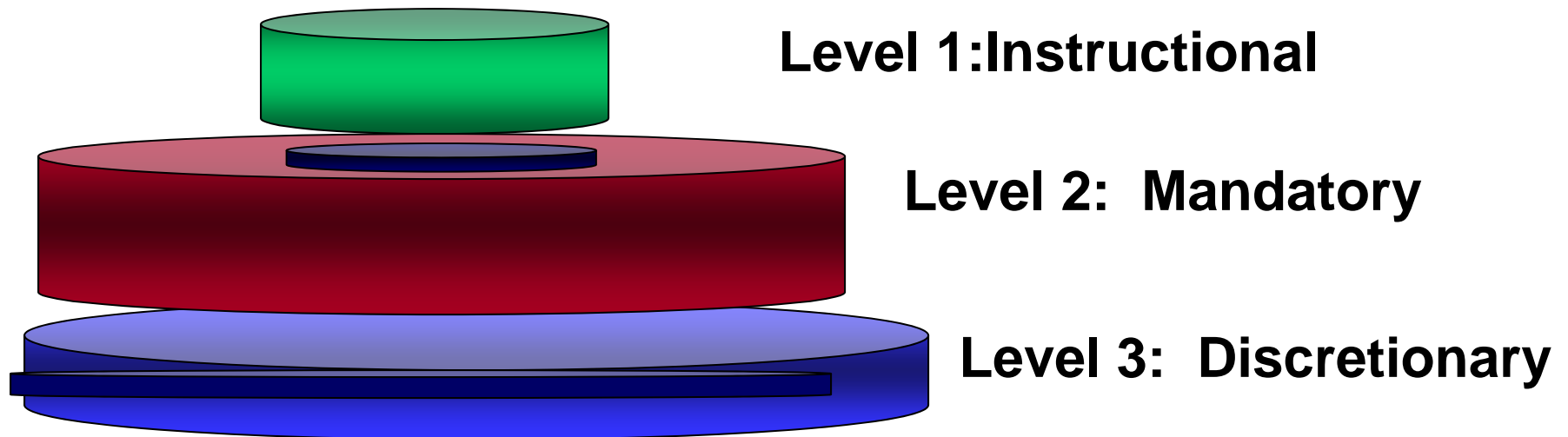
- All other full-time salaries
- Contractual obligations (e.g. debt service)
- Operational requirements (e.g. utilities, housekeeping, telephones, trash removal)



## Description of Model

### Level 3: Discretionary/Supportive Activities

- All accounts without Level 1 or Level 2 definition
  - Travel
  - Supplies
  - Copier Expense
  - Part-time Salaries (Excluding College Work Study)



# Review

Analyzing expenditure patterns and outcomes helps define budget priorities.

Breaking a college's budget into three, or more, functional components recognizes different budget strategies are appropriate and sets measurable objectives for funding.

- Instructional sections (enrollment driven objectives)--ZBB
- Mandatory efficiencies such as energy consumption—MBO/Program /Incremental
- Available discretionary allocations for copiers and travel—incremental/ZBB/MBO





## Using Ratios to Assess Level Instructional Budget Strategies

### Examples of Level One ratios:

- Full time/Part-time faculty
- Credit hours per (FTF equivalent) faculty—e.g., 10
- Revenue per credit (contact) hour
- Expenditure per credit (contact) hour
- Average class size – e.g., FTES (credits) per 3 credit hour calculated section or class.
- Full-time & Part-time faculty loads
- Benchmark or trend between different terms and/or academic years—e.g., enrollments, cost/student, etc..



# Exercise #1: Level One Calculation (macro)

## **ASSUMPTIONS**

- Target Full-time Equivalent Students (FTES) = 5,000
- Credits per FTES = 30 (one year student load)
- Average students per 3 credit section = 27
- Full-time annual teaching load = 10 courses
- There are 125 F/T faculty
- Average P/T faculty salary = \$3,500/section

## **QUESTIONS**

- What is the P/T budget for the year?
- What would be the increase cost if the target was increased to 5,500 FTES?
- What factors would change the budget amounts?



# Exercise Calculation

Step #1: Calculate credits needed to generate 5,000 full-time equivalent students (FTES)

|             |                  |
|-------------|------------------|
| 5,000       | Target (FTES)    |
| <u>X 30</u> | Credits = 1 FTES |
| 150,000     | FTES credits     |



## Step #2

Determine how many credits a three credit hour course will generate.

27 Students per class

X3 Credits per student

81 Credits generated per 3 credit class



## Step #3

Determine the number of sections needed to reach 5,000 target FTES

$$\begin{array}{r} 150,000 / \text{ Target FTES} \\ \hline 81 \text{ Divided by 81 credits/section} \\ 1,852 \text{ Sections} \end{array}$$



## Step #4

Determine the number and cost of part-time faculty sections needed to reach 5,000 FTES.

|                  |                               |
|------------------|-------------------------------|
| 1,852            | Required sections             |
| <u>(1,250)</u>   | Sections taught by FT Faculty |
| 602              | Sections taught by PT Faculty |
| <u>x \$3,500</u> | Per PT Faculty Section        |
| \$2,107,000      | Part-time Budget              |



## Exercise #2 (micro analysis)

The information provided on the following exhibits reflects a real world scenario. The university, after experiencing substantial declines in enrollment, decided to eliminate several programs.

What advice would you provide using the data for the two comparison years?



## Exercise

### Analyzing the Instructional Budget

The following exercise will help you understand how to analyze the instructional component of the budget. The analysis of trend and benchmarking data will help to determine if each department's faculty (full-time and part-time) are in alignment with the college's decline in enrollments.





# **ATTACHMENTS**

## **LEVEL ONE -- PROGRAM REVIEW INSTRUCTIONAL PROGRAMS**



# Steps to Complete the Exercise

**QUESTION #1 (Exhibit 1): Which programs have had the greatest decline in real credit hours? Percentage? Total Hours?**

**QUESTION #2 (Exhibit 2): Which three programs had the greatest decline in productivity? Increase?**

**QUESTION #3 (Exhibit 3): Is there a department that offset declines in FT faculty by increasing PT faculty?**

**QUESTION #4 (Exhibits 1, 2, 3): Do the changes of faculty (FT/PT) reflect the same trends in credit hours for each program?**

**QUESTION #5: Based on changes in productivity, which programs may need to be adjusted?**

**QUESTION #6: What information is missing in this analysis thus far? See Exhibit 6.**



**EXHIBIT 1**

**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**

**SORT BY DECLINING ENROLLMENTS**

| Description          | FY92       | FY99       | % Diff | FY92       | FY99       | Cr Hr/FTEF | % Diff. |
|----------------------|------------|------------|--------|------------|------------|------------|---------|
|                      | Credit Hrs | Credit Hrs |        | Ave Cr Hr. | Ave Cr Hr. |            |         |
| Counseling Psych.    | 6,786      | 3,472      | -49%   | 274        | 231        | -43        | -16%    |
| Accounting           | 10,934     | 6,518      | -40%   | 418        | 362        | -56        | -13%    |
| History              | 17,648     | 10,824     | -39%   | 377        | 264        | -113       | -30%    |
| Communication        | 10,999     | 7,297      | -34%   | 346        | 281        | -65        | -19%    |
| Political Science    | 9,476      | 6,357      | -33%   | 345        | 265        | -80        | -23%    |
| Fine Arts            | 7,984      | 5,431      | -32%   | 243        | 236        | -7         | -3%     |
| Economics            | 7,828      | 5,549      | -29%   | 470        | 427        | -43        | -9%     |
| Philosophy           | 22,068     | 16,035     | -27%   | 399        | 334        | -65        | -16%    |
| HRIR                 | 4,230      | 3,105      | -27%   | 447        | 380        | -67        | -15%    |
| English              | 24,603     | 18,111     | -26%   | 339        | 279        | -60        | -18%    |
| Psychology           | 19,684     | 14,574     | -26%   | 354        | 339        | -15        | -4%     |
| Criminal Justice     | 4,260      | 3,163      | -26%   | 442        | 266        | -176       | -40%    |
| Theology             | 20,650     | 15,425     | -25%   | 359        | 321        | 41         | 11%     |
| Modern Languages     | 9,774      | 7,309      | -25%   | 243        | 221        | -22        | -9%     |
| Pastoral Studies     | 5,093      | 4,062      | -20%   | 192        | 193        | 1          | 1%      |
| Sociology & Anthro   | 11,610     | 9,584      | -17%   | 391        | 342        | -49        | -13%    |
| Classical Studies    | 4,410      | 3,702      | -16%   | 241        | 285        | 44         | 18%     |
| Natural Sciences     | 6,049      | 5,259      | -13%   | 534        | 478        | -56        | -10%    |
| Finance              | 6,302      | 5,492      | -13%   | 573        | 323        | -250       | -44%    |
| Physics              | 3,851      | 3,439      | -11%   | 363        | 287        | -76        | -21%    |
| Biology              | 10,994     | 9,893      | -10%   | 411        | 330        | -81        | -20%    |
| Marketing            | 5,739      | 5,185      | -10%   | 626        | 576        | -50        | -8%     |
| Management Sci       | 9,507      | 8,667      | -9%    | 559        | 482        | -77        | -14%    |
| Social Work          | 12,493     | 12,421     | -1%    | 343        | 336        | -7         | -2%     |
| Chemistry            | 8,560      | 8,712      | 2%     | 405        | 363        | -42        | -10%    |
| Law                  | 21,246     | 21,774     | 2%     | 456        | 411        | -45        | -10%    |
| Theatre              | 2,457      | 2,526      | 3%     | 197        | 211        | 14         | 7%      |
| Management           | 7,146      | 7,531      | 5%     | 536        | 471        | -65        | -12%    |
| Ed. Leader & Pol. S. | 4,344      | 4,794      | 10%    | 233        | 282        | 49         | 21%     |
| Cent. Org Dev.       | 1,026      | 1,293      | 26%    | 188        | 259        | 71         | 38%     |
| Math, Stats & CS     | 15,483     | 19,725     | 27%    | 382        | 340        | -42        | -11%    |
| General Nursing      | 6,639      | 9,116      | 37%    | 120        | 285        | 165        | 138%    |
| Curr. Instr. & P.E.  | 6,774      | 10,722     | 58%    | 333        | 290        | -43        | -13%    |
| Food & Nutrition     | 387        | 1,511      | 290%   | 162        | 378        | 216        | 133%    |

**EXHIBIT 2**

**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**

**SORT BY PERCENTAGE CHANGE IN AVERAGE CREDIT HOURS/FACULTY**

| Description          | FY92       | FY99       | % Diff | FY92       | FY99       | Cr Hr/FTEF |         |
|----------------------|------------|------------|--------|------------|------------|------------|---------|
|                      | Credit Hrs | Credit Hrs |        | Ave Cr Hr. | Ave Cr Hr. | Difference | % Diff. |
| Finance              | 6,302      | 5,492      | -13%   | 573        | 323        | -250       | -44%    |
| Criminal Justice     | 4,260      | 3,163      | -26%   | 442        | 266        | -176       | -40%    |
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| Accounting           | 10,934     | 6,518      | -40%   | 418        | 362        | -56        | -13%    |
| Curr. Instr. & P.E.  | 6,774      | 10,722     | 58%    | 333        | 290        | -43        | -13%    |
| Sociology & Anthro   | 11,610     | 9,584      | -17%   | 391        | 342        | -49        | -13%    |
| Management           | 7,146      | 7,531      | 5%     | 536        | 471        | -65        | -12%    |
| Math, Stats & CS     | 15,483     | 19,725     | 27%    | 382        | 340        | -42        | -11%    |
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| Law                  | 21,246     | 21,774     | 2%     | 456        | 411        | -45        | -10%    |
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| Psychology           | 19,684     | 14,574     | -26%   | 354        | 339        | -15        | -4%     |
| Fine Arts            | 7,984      | 5,431      | -32%   | 243        | 236        | -7         | -3%     |
| Social Work          | 12,493     | 12,421     | -1%    | 343        | 336        | -7         | -2%     |
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| Theatre              | 2,457      | 2,526      | 3%     | 197        | 211        | 14         | 7%      |
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| Ed. Leader & Pol. S. | 4,344      | 4,794      | 10%    | 233        | 282        | 49         | 21%     |
| Cent. Org Dev.       | 1,026      | 1,293      | 26%    | 188        | 259        | 71         | 38%     |
| Food & Nutrition     | 387        | 1,511      | 290%   | 162        | 378        | 216        | 133%    |
| General Nursing      | 6,639      | 9,116      | 37%    | 120        | 285        | 165        | 138%    |

**EXHIBIT 3**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY PERCENTAGE CHANGE IN FULL-TIME FACULTY**

| Description          | FT          |             | Difference | % Diff. | PT           |              | Difference | % Diff. |
|----------------------|-------------|-------------|------------|---------|--------------|--------------|------------|---------|
|                      | FTE Fac--92 | FTE Fac--99 |            |         | FTE Fac.--92 | FTE Fac.--99 |            |         |
| General Nursing      | 44          | 28          | -16        | -36%    | 11           | 4            | -7         | -64%    |
| Accounting           | 23          | 16          | -7         | -30%    | 3            | 2            | -1         | -33%    |
| HRIR                 | 7           | 5           | -2         | -29%    | 2            | 3            | 1          | 50%     |
| Economics            | 15          | 11          | -4         | -27%    | 2            | 2            | 0          | 0%      |
| Cent. Org Dev.       | 4           | 3           | -1         | -25%    | 1            | 2            | 1          | 100%    |
| Counseling Psych.    | 13          | 10          | -3         | -23%    | 12           | 5            | -7         | -58%    |
| Marketing            | 9           | 7           | -2         | -22%    | 0            | 2            | 2          | n/a     |
| Theology             | 41          | 32          | -9         | -22%    | 17           | 16           | -1         | -6%     |
| Communication        | 20          | 16          | -4         | -20%    | 12           | 10           | -2         | -17%    |
| Fine Arts            | 16          | 14          | -2         | -13%    | 17           | 9            | -8         | -47%    |
| Philosophy           | 40          | 35          | -5         | -13%    | 15           | 13           | -2         | -13%    |
| Theatre              | 8           | 7           | -1         | -13%    | 5            | 5            | 0          | 0%      |
| Social Work          | 26          | 23          | -3         | -12%    | 10           | 14           | 4          | 40%     |
| Classical Studies    | 9           | 8           | -1         | -11%    | 9            | 5            | -4         | -44%    |
| English              | 36          | 32          | -4         | -11%    | 37           | 33           | -4         | -11%    |
| Natural Sciences     | 9           | 8           | -1         | -11%    | 2            | 3            | 1          | 50%     |
| Psychology           | 36          | 32          | -4         | -11%    | 20           | 11           | -9         | -45%    |
| Biology              | 22          | 20          | -2         | -9%     | 5            | 10           | 5          | 100%    |
| Management Sci       | 15          | 14          | -1         | -7%     | 2            | 4            | 2          | 100%    |
| History              | 32          | 30          | -2         | -6%     | 15           | 11           | -4         | -27%    |
| Chemistry            | 18          | 17          | -1         | -6%     | 3            | 7            | 4          | 133%    |
| Modern Languages     | 18          | 17          | -1         | -6%     | 22           | 16           | -6         | -27%    |
| Political Science    | 20          | 19          | -1         | -5%     | 8            | 5            | -3         | -38%    |
| Management           | 12          | 12          | 0          | 0%      | 1            | 4            | 3          | 300%    |
| Ed. Leader & Pol. S. | 13          | 13          | 0          | 0%      | 22           | 19           | -3         | -14%    |
| Pastoral Studies     | 11          | 11          | 0          | 0%      | 16           | 10           | -6         | -38%    |
| Law                  | 30          | 30          | 0          | 0%      | 17           | 23           | 6          | 35%     |
| Sociology & Anthro   | 22          | 24          | 2          | 9%      | 8            | 4            | -4         | -50%    |
| Physics              | 8           | 9           | 1          | 13%     | 3            | 3            | 0          | 0%      |
| Criminal Justice     | 7           | 8           | 1          | 14%     | 13           | 8            | -5         | -38%    |
| Math, Stats & CS     | 27          | 34          | 7          | 26%     | 14           | 24           | 10         | 71%     |
| Finance              | 9           | 14          | 5          | 56%     | 2            | 3            | 1          | 50%     |
| Curr. Instr. & P.E.  | 14          | 22          | 8          | 57%     | 6            | 15           | 9          | 150%    |
| Food & Nutrition     | 1           | 2           | 1          | 100%    | 1            | 2            | 1          | 100%    |

**EXHIBIT 4**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY PERCENTAGE CHANGE IN PART-TIME FACULTY**

| Description          | FT          |             | Difference | % Diff. | PT           |              | Difference | % Diff. |
|----------------------|-------------|-------------|------------|---------|--------------|--------------|------------|---------|
|                      | FTE Fac--92 | FTE Fac--99 |            |         | FTE Fac.--92 | FTE Fac.--99 |            |         |
| General Nursing      | 44          | 28          | -16        | -36%    | 11           | 4            | -7         | -64%    |
| Counseling Psych.    | 13          | 10          | -3         | -23%    | 12           | 5            | -7         | -58%    |
| Sociology & Anthro   | 22          | 24          | 2          | 9%      | 8            | 4            | -4         | -50%    |
| Fine Arts            | 16          | 14          | -2         | -13%    | 17           | 9            | -8         | -47%    |
| Psychology           | 36          | 32          | -4         | -11%    | 20           | 11           | -9         | -45%    |
| Classical Studies    | 9           | 8           | -1         | -11%    | 9            | 5            | -4         | -44%    |
| Criminal Justice     | 7           | 8           | 1          | 14%     | 13           | 8            | -5         | -38%    |
| Political Science    | 20          | 19          | -1         | -5%     | 8            | 5            | -3         | -38%    |
| Pastoral Studies     | 11          | 11          | 0          | 0%      | 16           | 10           | -6         | -38%    |
| Accounting           | 23          | 16          | -7         | -30%    | 3            | 2            | -1         | -33%    |
| Modern Languages     | 18          | 17          | -1         | -6%     | 22           | 16           | -6         | -27%    |
| History              | 32          | 30          | -2         | -6%     | 15           | 11           | -4         | -27%    |
| Communication        | 20          | 16          | -4         | -20%    | 12           | 10           | -2         | -17%    |
| Ed. Leader & Pol. S. | 13          | 13          | 0          | 0%      | 22           | 19           | -3         | -14%    |
| Philosophy           | 40          | 35          | -5         | -13%    | 15           | 13           | -2         | -13%    |
| English              | 36          | 32          | -4         | -11%    | 37           | 33           | -4         | -11%    |
| Theology             | 41          | 32          | -9         | -22%    | 17           | 16           | -1         | -6%     |
| Physics              | 8           | 9           | 1          | 13%     | 3            | 3            | 0          | 0%      |
| Theatre              | 8           | 7           | -1         | -13%    | 5            | 5            | 0          | 0%      |
| Economics            | 15          | 11          | -4         | -27%    | 2            | 2            | 0          | 0%      |
| Law                  | 30          | 30          | 0          | 0%      | 17           | 23           | 6          | 35%     |
| Social Work          | 26          | 23          | -3         | -12%    | 10           | 14           | 4          | 40%     |
| Natural Sciences     | 9           | 8           | -1         | -11%    | 2            | 3            | 1          | 50%     |
| Finance              | 9           | 14          | 5          | 56%     | 2            | 3            | 1          | 50%     |
| HRIR                 | 7           | 5           | -2         | -29%    | 2            | 3            | 1          | 50%     |
| Math, Stats & CS     | 27          | 34          | 7          | 26%     | 14           | 24           | 10         | 71%     |
| Biology              | 22          | 20          | -2         | -9%     | 5            | 10           | 5          | 100%    |
| Management Sci       | 15          | 14          | -1         | -7%     | 2            | 4            | 2          | 100%    |
| Cent. Org Dev.       | 4           | 3           | -1         | -25%    | 1            | 2            | 1          | 100%    |
| Food & Nutrition     | 1           | 2           | 1          | 100%    | 1            | 2            | 1          | 100%    |
| Chemistry            | 18          | 17          | -1         | -6%     | 3            | 7            | 4          | 133%    |
| Curr. Instr. & P.E.  | 14          | 22          | 8          | 57%     | 6            | 15           | 9          | 150%    |
| Management           | 12          | 12          | 0          | 0%      | 1            | 4            | 3          | 300%    |
| Marketing            | 9           | 7           | -2         | -22%    | 0            | 2            | 2          | n/a     |

# Summary of Findings

## Notes Regarding Issues:

1. Findings concerning average class size indicates that declines in enrollments have not been met with equal decreases in full-time and/or part-time faculty.

Refer to percentage difference credit hours column to the percentage difference F/T & P/T Faculty column.

Exceptions were noted in bold for percentage declines greater than ten percent (10%).

2. Findings in this category indicate that decreases in full-time faculty were offset with increases in part-time faculty not supported by enrollment.

3. Higher cost per credit hour may reflect high lab costs and be appropriate for the discipline. These programs should be benchmarked against other life programs.

This is a different concern than higher average credit hour costs caused by poor teaching loads (see #1).

4. Decline in enrollment exceeds F/T faculty reductions--i.e., not offset by additional P/T faculty reductions.

## Exhibit 5A – Summary of Findings

|                        | #1          | #2          | #3        | #4             |  |
|------------------------|-------------|-------------|-----------|----------------|--|
| Description            | Av cls size | Incr PT Fac | \$/CRD HR | Excess F/T Fac |  |
| Arts & Sciences        | X           |             |           | X              |  |
| Biology                | X           | X           | X         |                |  |
| Chemistry              | X           | X           | X         |                |  |
| Classical Studies      |             |             |           |                |  |
| Communication          | X           |             |           | X              |  |
| English                | X           |             |           | X              |  |
| Criminal Justice       | X           |             | X         | X              |  |
| Fine Arts              |             |             | X         |                | This Department's average class size appears to be in balance. |
| History                | X           |             |           | X              |  |
| Math, Stats & CS       | X           | X           |           |                | increase in P/T faculty exceeds enrollment growth.             |
| Modern Languages       | X           |             |           | X              |  |
| Natural Sciences       | X           | X           |           |                | increase in P/T faculty exceeds enrollment growth.             |
| Philosophy             | X           |             |           | X              |  |
| Physics                | X           |             | X         | X              | Increase in F/T faculty exceeds enrollment growth.             |
| Political Science      | X           |             |           | X              |  |
| Psychology             |             |             |           | X              |  |
| Sociology & Anthro     | X           |             |           | X              |  |
| Theatre                |             |             | X         |                | This Department's average class size appears to be in balance. |
| Theology               | X           |             |           | X              |  |
| Arts & Sci. (unclass.) |             |             |           |                |  |
| Business               |             | X           | X         | X              | Increase in P/T faculty not justified by enrollment growth.    |
| Accounting             | X           |             | X         | X              |  |
| Economics              | X           |             |           | X              |  |
| Finance                | X           | X           |           | X              |  |
| Marketing              |             |             |           |                |  |
| Management             |             |             |           |                |  |
| Management Sci         | X           | X           |           |                |  |



## Exhibit 5B– Summary of Findings

| Description                     | #1          | #2          | #3        | #4             |  |  |   |  |  |
|---------------------------------|-------------|-------------|-----------|----------------|--|--|---|--|--|
|                                 | Av cls size | Incr PT Fac | \$/CRD HR | Excess F/T Fac |  |  |   |  |  |
| <b>Management Sci</b>           | X           | X           |           |                |  |  |   |  |  |
| <b>Education</b>                |             |             | X         |                |  |  |   | This Department's average class size appears to be in balance. |  |
| <b>Curr. Instr. &amp; P.E.</b>  | X           | X           |           |                |  |  |   |  |  |
| <b>Counseling Psych.</b>        | X           |             |           |                |  |  | X |  |  |
| <b>Ed. Leader &amp; Pol. S.</b> |             |             | X         |                |  |  |   | This Department's average class size appears to be in balance. |  |
| <b>Graduate Institutes</b>      |             |             | X         |                |  |  |   |  |  |
| <b>Cent. Org Dev. HRIR</b>      | X           | X           |           |                |  |  | X | This Department's average class size appears to be in balance. |  |
| <b>Pastoral Studies</b>         | X           |             |           |                |  |  |   |  |  |
| <b>Law</b>                      |             | X           |           |                |  |  |   |  |  |
| <b>Food &amp; Nutrition</b>     |             |             |           |                |  |  |   | This Department's average class size appears to be in balance. |  |
| <b>General Nursing</b>          |             |             |           |                |  |  |   |  |  |
| <b>Nursing</b>                  |             |             |           |                |  |  | X | This Department's average class size appears to be in balance. |  |
| <b>Social Work</b>              |             |             |           |                |  |  |   | This Department's average class size appears to be in balance. |  |

## Exhibit 6: PROGRAM COMPARISONS 1992 & 1999

### COST OF INSTRUCTION PER CREDIT HOUR

| Description             | FY92       | FY99       | % Diff | FY92       | FY99       | Cr Hr/FTEF |      | % Diff. | FY 99      | FY 99    |
|-------------------------|------------|------------|--------|------------|------------|------------|------|---------|------------|----------|
|                         | Credit Hrs | Credit Hrs |        | Ave Cr Hr. | Ave Cr Hr. |            |      |         | Dir Budget | \$/Cr Hr |
| Biology                 | 10,994     | 9,893      | -10%   | 411        | 330        | 330        | -81  | -20%    | 3,789,206  | 383.02   |
| Chemistry               | 8,560      | 8,712      | 2%     | 405        | 363        | 363        | -42  | -10%    | 3,579,563  | 410.88   |
| Classical Studies       | 4,410      | 3,702      | -16%   | 241        | 285        | 285        | 44   | 18%     | 842,553    | 227.59   |
| Communication           | 10,999     | 7,297      | -34%   | 346        | 281        | 281        | -65  | -19%    | 1,952,652  | 267.60   |
| English                 | 24,603     | 18,111     | -26%   | 339        | 279        | 279        | -60  | -18%    | 2,837,718  | 156.68   |
| Criminal Justice        | 4,260      | 3,163      | -26%   | 442        | 266        | 266        | -176 | -40%    | 938,352    | 296.67   |
| Fine Arts               | 7,984      | 5,431      | -32%   | 243        | 236        | 236        | -7   | -3%     | 1,913,921  | 352.41   |
| History                 | 17,648     | 10,824     | -39%   | 377        | 264        | 264        | -113 | -30%    | 2,536,378  | 234.33   |
| Math, Stats & CS        | 15,483     | 19,725     | 27%    | 382        | 340        | 340        | -42  | -11%    | 4,279,009  | 216.93   |
| Modern Languages        | 9,774      | 7,309      | -25%   | 243        | 221        | 221        | -22  | -9%     | 1,930,169  | 264.08   |
| Natural Sciences        | 6,049      | 5,259      | -13%   | 534        | 478        | 478        | -56  | -10%    | 764,984    | 145.46   |
| Philosophy              | 22,068     | 16,035     | -27%   | 399        | 334        | 334        | -65  | -16%    | ?          | #VALUE!  |
| Physics                 | 3,851      | 3,439      | -11%   | 363        | 287        | 287        | -76  | -21%    | 1,314,842  | 382.33   |
| Political Science       | 9,476      | 6,357      | -33%   | 345        | 265        | 265        | -80  | -23%    | 1,805,910  | 284.08   |
| Psychology              | 19,684     | 14,574     | -26%   | 354        | 339        | 339        | -15  | -4%     | 3,936,179  | 270.08   |
| Sociology & Anthro      | 11,610     | 9,584      | -17%   | 391        | 342        | 342        | -49  | -13%    | 2,432,685  | 253.83   |
| Theatre                 | 2,457      | 2,526      | 3%     | 197        | 211        | 211        | 14   | 7%      | 1,403,311  | 555.55   |
| Theology                | 20,650     | 15,425     | -25%   | 359        | 321        | 321        | 41   | 11%     | 2,542,183  | 164.81   |
| Reconciling Adjustment  | 8,358      | 4,226      |        |            |            |            |      |         |            |          |
| Arts & Sciences (total) | 218,918    | 171,592    | -22%   | 352        | 305        | 305        | -47  | -13%    | 49,298,394 | 287.30   |
| Accounting              | 10,934     | 6,518      | -40%   | 418        | 362        | 362        | -56  | -13%    | 2,044,429  | 313.66   |
| Economics               | 7,828      | 5,549      | -29%   | 470        | 427        | 427        | -43  | -9%     | 1,075,330  | 193.79   |
| Finance                 | 6,302      | 5,492      | -13%   | 573        | 323        | 323        | -250 | -44%    | 1,482,238  | 269.89   |
| Marketing               | 5,739      | 5,185      | -10%   | 626        | 576        | 576        | -50  | -8%     | 956,587    | 184.49   |
| Management              | 7,146      | 7,531      | 5%     | 536        | 471        | 471        | -65  | -12%    | 1,720,023  | 228.39   |
| Management Sci          | 9,507      | 8,667      | -9%    | 559        | 482        | 482        | -77  | -14%    | 1,864,056  | 215.08   |
| Business (total)        | 47,456     | 38,942     | -18%   | 508        | 428        | 428        | -80  | -16%    | 15,177,752 | 389.75   |
| Curr. Instr. & P.E.     | 6,774      | 10,722     | 58%    | 333        | 290        | 290        | -43  | -13%    | 2,160,351  | 201.49   |
| Counseling Psych.       | 6,786      | 3,472      | -49%   | 274        | 231        | 231        | -43  | -16%    | 967,411    | 278.63   |
| Ed. Leader & Pol. S.    | 4,344      | 4,794      | 10%    | 233        | 282        | 282        | 49   | 21%     | 1,508,341  | 314.63   |
| Education               | 17,904     | 18,988     | 6%     | 281        | 271        | 271        | -10  | -4%     | 7,268,756  | 382.81   |
| Cent. Org Dev.          | 1,026      | 1,293      | 26%    | 188        | 259        | 259        | 71   | 38%     |            | 0.00     |
| HRIR                    | 4,230      | 3,105      | -27%   | 447        | 380        | 380        | -67  | -15%    |            | 0.00     |
| Pastoral Studies        | 5,093      | 4,062      | -20%   | 192        | 193        | 193        | 1    | 1%      |            | 0.00     |
| Reconciling Adjustment  |            |            | 30     |            |            |            |      |         |            |          |
| Graduate Inst. (total)  | 10,349     | 8,490      | -18%   | 245        | 236        | 236        | -9   | -4%     | 13,737,178 | 354.75   |
| Law                     | 21,246     | 21,774     | 2%     | 456        | 411        | 411        | -45  | -10%    |            | 0.00     |
| Food & Nutrition        | 387        | 1,511      | 290%   | 162        | 378        | 378        | 216  | 133%    | 243,658    | 161.26   |
| General Nursing         | 6,639      | 9,116      | 37%    | 120        | 285        | 285        | 165  | 138%    |            |          |
| Nursing                 | 7,026      | 10,627     | 51%    | 121        | 295        | 295        | 174  | 144%    | 7,710,900  | 390.56   |
| Social Work             | 12,493     | 12,421     | -1%    | 343        | 336        | 336        | -7   | -2%     | 3,007,393  | 242.12   |
| Totals & Averages       | 335,392    | 282,834    | -16%   | 358        | 313        | 313        | -45  | -13%    |            |          |

## Questions/Summary/Conclusion

- Maintaining the status quo is not a winning strategy for higher education.
- When times were “flush”--enrollments were growing, public support was unlimited and tuition increases unchallenged--strategically allocating funds was not critical. There were enough resources to go around for everyone. Politics, not rational or strategic allocations were the norm.
- Today, and into the foreseeable future, strategic allocation of resources into high impact functions will be necessary for survival.



## Questions/Summary/Conclusion

- The survival skill for the 21<sup>st</sup> Century in a highly competitive higher education market will be the ability to find discretionary funds that can be directed into high impact functions.
- That means finding weaknesses, challenging allocations based on rational as opposed to political assessments, and then strategically redirecting/budgeting discretionary funds.
- Strategic budgeting validates the importance of using measurable metrics to evaluate performance and reallocate funds to improve institutional effectiveness.



## USING INSTRUCTIONAL PRODUCTIVITY TO ASSESS BUDGET ALL

QUESTION #1 (Exhibit 1): Which programs have had the greatest decline in real credit hours? Percent:

QUESTION #2 (Exhibit 2): Which three programs had the greatest decline in productivity? Increase?

QUESTON #3 (Exhibit 3): Is there a department that offset declines in FT faculty by increasing PT faculti

QUESTON #4 (Exhibits 1, 2, 3): Do the changes of faculty (FT/PT) reflect the same trends in credit hours

QUESTION #5: Based on changes in productivity, which programs may need to be adjusted?

QUESTION #6: What information is missing in this analysis?

**EXHIBIT 1**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY DECLINING ENROLLMENTS**

| Description          | FY92       |            | FY99   |                       | FY92                  |                       | FY99    |  |
|----------------------|------------|------------|--------|-----------------------|-----------------------|-----------------------|---------|--|
|                      | Credit Hrs | Credit Hrs | % Diff | Ave Cr Hr. Per Facult | Ave Cr Hr. Per Facult | Cr Hr/FTEF Difference | % Diff. |  |
| Counseling Psych.    | 6,786      | 3,472      | -49%   | 274                   | 231                   | -43                   | -16%    |  |
| Accounting           | 10,934     | 6,518      | -40%   | 418                   | 362                   | -56                   | -13%    |  |
| History              | 17,648     | 10,824     | -39%   | 377                   | 264                   | -113                  | -30%    |  |
| Communication        | 10,999     | 7,297      | -34%   | 346                   | 281                   | -65                   | -19%    |  |
| Political Science    | 9,476      | 6,357      | -33%   | 345                   | 265                   | -80                   | -23%    |  |
| Fine Arts            | 7,984      | 5,431      | -32%   | 243                   | 236                   | -7                    | -3%     |  |
| Economics            | 7,828      | 5,549      | -29%   | 470                   | 427                   | -43                   | -9%     |  |
| Philosophy           | 22,068     | 16,035     | -27%   | 399                   | 334                   | -65                   | -16%    |  |
| HRIR                 | 4,230      | 3,105      | -27%   | 447                   | 380                   | -67                   | -15%    |  |
| English              | 24,603     | 18,111     | -26%   | 339                   | 279                   | -60                   | -18%    |  |
| Psychology           | 19,684     | 14,574     | -26%   | 354                   | 339                   | -15                   | -4%     |  |
| Criminal Justice     | 4,260      | 3,163      | -26%   | 442                   | 266                   | -176                  | -40%    |  |
| Theology             | 20,650     | 15,425     | -25%   | 359                   | 321                   | 41                    | 11%     |  |
| Modern Languages     | 9,774      | 7,309      | -25%   | 243                   | 221                   | -22                   | -9%     |  |
| Pastoral Studies     | 5,093      | 4,062      | -20%   | 192                   | 193                   | 1                     | 1%      |  |
| Sociology & Anthro   | 11,610     | 9,584      | -17%   | 391                   | 342                   | -49                   | -13%    |  |
| Classical Studies    | 4,410      | 3,702      | -16%   | 241                   | 285                   | 44                    | 18%     |  |
| Natural Sciences     | 6,049      | 5,259      | -13%   | 534                   | 478                   | -56                   | -10%    |  |
| Finance              | 6,302      | 5,492      | -13%   | 573                   | 323                   | -250                  | -44%    |  |
| Physics              | 3,851      | 3,439      | -11%   | 363                   | 287                   | -76                   | -21%    |  |
| Biology              | 10,994     | 9,893      | -10%   | 411                   | 330                   | -81                   | -20%    |  |
| Marketing            | 5,739      | 5,185      | -10%   | 626                   | 576                   | -50                   | -8%     |  |
| Management Sci       | 9,507      | 8,667      | -9%    | 559                   | 482                   | -77                   | -14%    |  |
| Social Work          | 12,493     | 12,421     | -1%    | 343                   | 336                   | -7                    | -2%     |  |
| Chemistry            | 8,560      | 8,712      | 2%     | 405                   | 363                   | -42                   | -10%    |  |
| Law                  | 21,246     | 21,774     | 2%     | 456                   | 411                   | -45                   | -10%    |  |
| Theatre              | 2,457      | 2,526      | 3%     | 197                   | 211                   | 14                    | 7%      |  |
| Management           | 7,146      | 7,531      | 5%     | 536                   | 471                   | -65                   | -12%    |  |
| Ed. Leader & Pol. S. | 4,344      | 4,794      | 10%    | 233                   | 282                   | 49                    | 21%     |  |
| Cent. Org Dev.       | 1,026      | 1,293      | 26%    | 188                   | 259                   | 71                    | 38%     |  |
| Math, Stats & CS     | 15,483     | 19,725     | 27%    | 382                   | 340                   | -42                   | -11%    |  |
| General Nursing      | 6,639      | 9,116      | 37%    | 120                   | 285                   | 165                   | 138%    |  |
| Curr. Instr. & P.E.  | 6,774      | 10,722     | 58%    | 333                   | 290                   | -43                   | -13%    |  |
| Food & Nutrition     | 387        | 1,511      | 290%   | 162                   | 378                   | 216                   | 133%    |  |

**EXHIBIT 2**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY PERCENTAGE CHANGE IN AVERAGE CREDIT HOURS/FACULTY**

| Description          | FY92       | FY99       | % Diff | FY92                     | FY99                     | Cr Hr/FTEF<br>Difference | % Diff. |
|----------------------|------------|------------|--------|--------------------------|--------------------------|--------------------------|---------|
|                      | Credit Hrs | Credit Hrs |        | Ave Cr Hr.<br>Per Facult | Ave Cr Hr.<br>Per Facult |                          |         |
| Finance              | 6,302      | 5,492      | -13%   | 573                      | 323                      | -250                     | -44%    |
| Criminal Justice     | 4,260      | 3,163      | -26%   | 442                      | 266                      | -176                     | -40%    |
| History              | 17,648     | 10,824     | -39%   | 377                      | 264                      | -113                     | -30%    |
| Political Science    | 9,476      | 6,357      | -33%   | 345                      | 265                      | -80                      | -23%    |
| Physics              | 3,851      | 3,439      | -11%   | 363                      | 287                      | -76                      | -21%    |
| Biology              | 10,994     | 9,893      | -10%   | 411                      | 330                      | -81                      | -20%    |
| Communication        | 10,999     | 7,297      | -34%   | 346                      | 281                      | -65                      | -19%    |
| English              | 24,603     | 18,111     | -26%   | 339                      | 279                      | -60                      | -18%    |
| Philosophy           | 22,068     | 16,035     | -27%   | 399                      | 334                      | -65                      | -16%    |
| Counseling Psych.    | 6,786      | 3,472      | -49%   | 274                      | 231                      | -43                      | -16%    |
| HRIR                 | 4,230      | 3,105      | -27%   | 447                      | 380                      | -67                      | -15%    |
| Management Sci       | 9,507      | 8,667      | -9%    | 559                      | 482                      | -77                      | -14%    |
| Accounting           | 10,934     | 6,518      | -40%   | 418                      | 362                      | -56                      | -13%    |
| Curr. Instr. & P.E.  | 6,774      | 10,722     | 58%    | 333                      | 290                      | -43                      | -13%    |
| Sociology & Anthro   | 11,610     | 9,584      | -17%   | 391                      | 342                      | -49                      | -13%    |
| Management           | 7,146      | 7,531      | 5%     | 536                      | 471                      | -65                      | -12%    |
| Math, Stats & CS     | 15,483     | 19,725     | 27%    | 382                      | 340                      | -42                      | -11%    |
| Natural Sciences     | 6,049      | 5,259      | -13%   | 534                      | 478                      | -56                      | -10%    |
| Chemistry            | 8,560      | 8,712      | 2%     | 405                      | 363                      | -42                      | -10%    |
| Law                  | 21,246     | 21,774     | 2%     | 456                      | 411                      | -45                      | -10%    |
| Economics            | 7,828      | 5,549      | -29%   | 470                      | 427                      | -43                      | -9%     |
| Modern Languages     | 9,774      | 7,309      | -25%   | 243                      | 221                      | -22                      | -9%     |
| Marketing            | 5,739      | 5,185      | -10%   | 626                      | 576                      | -50                      | -8%     |
| Psychology           | 19,684     | 14,574     | -26%   | 354                      | 339                      | -15                      | -4%     |
| Fine Arts            | 7,984      | 5,431      | -32%   | 243                      | 236                      | -7                       | -3%     |
| Social Work          | 12,493     | 12,421     | -1%    | 343                      | 336                      | -7                       | -2%     |
| Pastoral Studies     | 5,093      | 4,062      | -20%   | 192                      | 193                      | 1                        | 1%      |
| Theatre              | 2,457      | 2,526      | 3%     | 197                      | 211                      | 14                       | 7%      |
| Theology             | 20,650     | 15,425     | -25%   | 359                      | 321                      | 41                       | 11%     |
| Classical Studies    | 4,410      | 3,702      | -16%   | 241                      | 285                      | 44                       | 18%     |
| Ed. Leader & Pol. S. | 4,344      | 4,794      | 10%    | 233                      | 282                      | 49                       | 21%     |
| Cent. Org Dev.       | 1,026      | 1,293      | 26%    | 188                      | 259                      | 71                       | 38%     |
| Food & Nutrition     | 387        | 1,511      | 290%   | 162                      | 378                      | 216                      | 133%    |
| General Nursing      | 6,639      | 9,116      | 37%    | 120                      | 285                      | 165                      | 138%    |

**EXHIBIT 3**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY PERCENTAGE CHANGE IN FULL-TIME FACULTY**

| Description          | FT          | FT          | Difference | % Diff. | PT          | PT          | Difference |
|----------------------|-------------|-------------|------------|---------|-------------|-------------|------------|
|                      | FTE Fac--92 | FTE Fac--99 |            |         | FTE Fac--92 | FTE Fac--99 |            |
| General Nursing      | 44          | 28          | -16        | -36%    | 11          | 4           | -7         |
| Accounting           | 23          | 16          | -7         | -30%    | 3           | 2           | -1         |
| HRIR                 | 7           | 5           | -2         | -29%    | 2           | 3           | 1          |
| Economics            | 15          | 11          | -4         | -27%    | 2           | 2           | 0          |
| Cent. Org Dev.       | 4           | 3           | -1         | -25%    | 1           | 2           | 1          |
| Counseling Psych.    | 13          | 10          | -3         | -23%    | 12          | 5           | -7         |
| Marketing            | 9           | 7           | -2         | -22%    | 0           | 2           | 2          |
| Theology             | 41          | 32          | -9         | -22%    | 17          | 16          | -1         |
| Communication        | 20          | 16          | -4         | -20%    | 12          | 10          | -2         |
| Fine Arts            | 16          | 14          | -2         | -13%    | 17          | 9           | -8         |
| Philosophy           | 40          | 35          | -5         | -13%    | 15          | 13          | -2         |
| Theatre              | 8           | 7           | -1         | -13%    | 5           | 5           | 0          |
| Social Work          | 26          | 23          | -3         | -12%    | 10          | 14          | 4          |
| Classical Studies    | 9           | 8           | -1         | -11%    | 9           | 5           | -4         |
| English              | 36          | 32          | -4         | -11%    | 37          | 33          | -4         |
| Natural Sciences     | 9           | 8           | -1         | -11%    | 2           | 3           | 1          |
| Psychology           | 36          | 32          | -4         | -11%    | 20          | 11          | -9         |
| Biology              | 22          | 20          | -2         | -9%     | 5           | 10          | 5          |
| Management Sci       | 15          | 14          | -1         | -7%     | 2           | 4           | 2          |
| History              | 32          | 30          | -2         | -6%     | 15          | 11          | -4         |
| Chemistry            | 18          | 17          | -1         | -6%     | 3           | 7           | 4          |
| Modern Languages     | 18          | 17          | -1         | -6%     | 22          | 16          | -6         |
| Political Science    | 20          | 19          | -1         | -5%     | 8           | 5           | -3         |
| Management           | 12          | 12          | 0          | 0%      | 1           | 4           | 3          |
| Ed. Leader & Pol. S. | 13          | 13          | 0          | 0%      | 22          | 19          | -3         |
| Pastoral Studies     | 11          | 11          | 0          | 0%      | 16          | 10          | -6         |
| Law                  | 30          | 30          | 0          | 0%      | 17          | 23          | 6          |
| Sociology & Anthro   | 22          | 24          | 2          | 9%      | 8           | 4           | -4         |
| Physics              | 8           | 9           | 1          | 13%     | 3           | 3           | 0          |
| Criminal Justice     | 7           | 8           | 1          | 14%     | 13          | 8           | -5         |
| Math, Stats & CS     | 27          | 34          | 7          | 26%     | 14          | 24          | 10         |
| Finance              | 9           | 14          | 5          | 56%     | 2           | 3           | 1          |
| Curr. Instr. & P.E.  | 14          | 22          | 8          | 57%     | 6           | 15          | 9          |
| Food & Nutrition     | 1           | 2           | 1          | 100%    | 1           | 2           | 1          |



**EXHIBIT 4**  
**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999**  
**SORT BY PERCENTAGE CHANGE IN PART-TIME FACULTY**

| Description          | FT          | FT          | Difference | % Diff. | PT          | PT          | Difference |
|----------------------|-------------|-------------|------------|---------|-------------|-------------|------------|
|                      | FTE Fac--92 | FTE Fac--99 |            |         | FTE Fac--92 | FTE Fac--99 |            |
| General Nursing      | 44          | 28          | -16        | -36%    | 11          | 4           | -7         |
| Counseling Psych.    | 13          | 10          | -3         | -23%    | 12          | 5           | -7         |
| Sociology & Anthro   | 22          | 24          | 2          | 9%      | 8           | 4           | -4         |
| Fine Arts            | 16          | 14          | -2         | -13%    | 17          | 9           | -8         |
| Psychology           | 36          | 32          | -4         | -11%    | 20          | 11          | -9         |
| Classical Studies    | 9           | 8           | -1         | -11%    | 9           | 5           | -4         |
| Criminal Justice     | 7           | 8           | 1          | 14%     | 13          | 8           | -5         |
| Political Science    | 20          | 19          | -1         | -5%     | 8           | 5           | -3         |
| Pastoral Studies     | 11          | 11          | 0          | 0%      | 16          | 10          | -6         |
| Accounting           | 23          | 16          | -7         | -30%    | 3           | 2           | -1         |
| Modern Languages     | 18          | 17          | -1         | -6%     | 22          | 16          | -6         |
| History              | 32          | 30          | -2         | -6%     | 15          | 11          | -4         |
| Communication        | 20          | 16          | -4         | -20%    | 12          | 10          | -2         |
| Ed. Leader & Pol. S. | 13          | 13          | 0          | 0%      | 22          | 19          | -3         |
| Philosophy           | 40          | 35          | -5         | -13%    | 15          | 13          | -2         |
| English              | 36          | 32          | -4         | -11%    | 37          | 33          | -4         |
| Theology             | 41          | 32          | -9         | -22%    | 17          | 16          | -1         |
| Physics              | 8           | 9           | 1          | 13%     | 3           | 3           | 0          |
| Theatre              | 8           | 7           | -1         | -13%    | 5           | 5           | 0          |
| Economics            | 15          | 11          | -4         | -27%    | 2           | 2           | 0          |
| Law                  | 30          | 30          | 0          | 0%      | 17          | 23          | 6          |
| Social Work          | 26          | 23          | -3         | -12%    | 10          | 14          | 4          |
| Natural Sciences     | 9           | 8           | -1         | -11%    | 2           | 3           | 1          |
| Finance              | 9           | 14          | 5          | 56%     | 2           | 3           | 1          |
| HRIR                 | 7           | 5           | -2         | -29%    | 2           | 3           | 1          |
| Math, Stats & CS     | 27          | 34          | 7          | 26%     | 14          | 24          | 10         |
| Biology              | 22          | 20          | -2         | -9%     | 5           | 10          | 5          |
| Management Sci       | 15          | 14          | -1         | -7%     | 2           | 4           | 2          |
| Cent. Org Dev.       | 4           | 3           | -1         | -25%    | 1           | 2           | 1          |
| Food & Nutrition     | 1           | 2           | 1          | 100%    | 1           | 2           | 1          |
| Chemistry            | 18          | 17          | -1         | -6%     | 3           | 7           | 4          |
| Curr. Instr. & P.E.  | 14          | 22          | 8          | 57%     | 6           | 15          | 9          |
| Management           | 12          | 12          | 0          | 0%      | 1           | 4           | 3          |
| Marketing            | 9           | 7           | -2         | -22%    | 0           | 2           | 2          |

## Summary Review of Four Key Issues

### Notes Regarding Issues:

1. Findings concerning average class size indicates that declines in enrollments have not been met with equal decreases in full-time and/or part-time. Refer to percentage difference credit hours column to the percentage difference F/T & P/T Faculty column. Exceptions were noted in bold for percentage declines greater than ten percent (10%).
2. Findings in this category indicate that decreases in full-time faculty were offset with increases in part-time faculty not supported by enrollment.
3. Higher cost per credit hour may reflect high lab costs and be appropriate for the discipline. These programs should be benchmarked against other. This is a different concern than higher average credit hour costs caused by poor teaching loads (see #1).
4. Decline in enrollment exceeds F/T faculty reductions--i.e., not offset by additional P/T faculty reductions.

### LEVEL 1: PROGRAM COMPARISONS 1992 & 1999

#### ISSUES

| Description            | ISSUES            |                  |                 |                      |
|------------------------|-------------------|------------------|-----------------|----------------------|
|                        | #1<br>Av cls size | #2<br>Incr PT Fa | #3<br>\$/CRD HR | #4<br>Excess F/T Fac |
| Arts & Sciences        | X                 |                  |                 | X                    |
| Biology                | X                 | X                | X               |                      |
| Chemistry              | X                 | X                | X               |                      |
| Classical Studies      |                   |                  |                 |                      |
| Communication          | X                 |                  |                 | X                    |
| English                | X                 |                  |                 | X                    |
| Criminal Justice       | X                 |                  | X               | X                    |
| Fine Arts              |                   |                  | X               |                      |
| History                | X                 |                  |                 | X                    |
| Math, Stats & CS       | X                 | X                |                 |                      |
| Modern Languages       | X                 |                  |                 | X                    |
| Natural Sciences       | X                 | X                |                 |                      |
| Philosophy             | X                 |                  |                 | X                    |
| Physics                | X                 |                  | X               | X                    |
| Political Science      | X                 |                  |                 | X                    |
| Psychology             |                   |                  |                 | X                    |
| Sociology & Anthro     | X                 |                  |                 | X                    |
| Theatre                |                   |                  | X               |                      |
| Theology               | X                 |                  |                 | X                    |
| Arts & Sci. (unclass.) |                   |                  |                 |                      |
| Business               |                   | X                | X               | X                    |
| Accounting             | X                 |                  | X               | X                    |
| Economics              | X                 |                  |                 | X                    |
| Finance                | X                 | X                |                 | X                    |
| Marketing              |                   |                  |                 |                      |
| Management             |                   |                  |                 |                      |
| Management Sci         | X                 | X                |                 |                      |
| Education              |                   |                  | X               |                      |
| Curr. Instr. & P.E.    | X                 | X                |                 |                      |
| Counseling Psych.      | X                 |                  |                 | X                    |
| Ed. Leader & Pol. S.   |                   |                  | X               |                      |
| Graduate Institutes    |                   |                  | X               |                      |
| Cent. Org Dev.         |                   |                  |                 |                      |
| HRIR                   | X                 | X                |                 | X                    |
| Pastoral Studies       | X                 |                  |                 |                      |
| Law                    |                   | X                |                 |                      |

This Departm

increase in P

increase in P

Increase in F

This Departm

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|                             |  |  |  |  |          |  |              |
|-----------------------------|--|--|--|--|----------|--|--------------|
| <b>Food &amp; Nutrition</b> |  |  |  |  |          |  | This Departr |
| <b>General Nursing</b>      |  |  |  |  |          |  |              |
| <b>Nursing</b>              |  |  |  |  | <b>X</b> |  | This Departr |
| <b>Social Work</b>          |  |  |  |  |          |  | This Departr |

**LEVEL 1: PROGRAM COMPARISONS 1992 & 1999  
COST OF INSTRUCTION PER CREDIT HOUR**

| Description                        | FY92           |                | FY99        |                       | FY92                  |                       | FY99        |  |
|------------------------------------|----------------|----------------|-------------|-----------------------|-----------------------|-----------------------|-------------|--|
|                                    | Credit Hrs     | Credit Hrs     | % Diff      | Ave Cr Hr. Per Facult | Ave Cr Hr. Per Facult | Cr Hr/FTEF Difference | % Diff.     |  |
| Biology                            | 10,994         | 9,893          | -10%        | 411                   | 330                   | -81                   | -20%        |  |
| Chemistry                          | 8,560          | 8,712          | 2%          | 405                   | 363                   | -42                   | -10%        |  |
| Classical Studies                  | 4,410          | 3,702          | -16%        | 241                   | 285                   | 44                    | 18%         |  |
| Communication                      | 10,999         | 7,297          | -34%        | 346                   | 281                   | -65                   | -19%        |  |
| English                            | 24,603         | 18,111         | -26%        | 339                   | 279                   | -60                   | -18%        |  |
| Criminal Justice                   | 4,260          | 3,163          | -26%        | 442                   | 266                   | -176                  | -40%        |  |
| Fine Arts                          | 7,984          | 5,431          | -32%        | 243                   | 236                   | -7                    | -3%         |  |
| History                            | 17,648         | 10,824         | -39%        | 377                   | 264                   | -113                  | -30%        |  |
| Math, Stats & CS                   | 15,483         | 19,725         | 27%         | 382                   | 340                   | -42                   | -11%        |  |
| Modern Languages                   | 9,774          | 7,309          | -25%        | 243                   | 221                   | -22                   | -9%         |  |
| Natural Sciences                   | 6,049          | 5,259          | -13%        | 534                   | 478                   | -56                   | -10%        |  |
| Philosophy                         | 22,068         | 16,035         | -27%        | 399                   | 334                   | -65                   | -16%        |  |
| Physics                            | 3,851          | 3,439          | -11%        | 363                   | 287                   | -76                   | -21%        |  |
| Political Science                  | 9,476          | 6,357          | -33%        | 345                   | 265                   | -80                   | -23%        |  |
| Psychology                         | 19,684         | 14,574         | -26%        | 354                   | 339                   | -15                   | -4%         |  |
| Sociology & Anthro                 | 11,610         | 9,584          | -17%        | 391                   | 342                   | -49                   | -13%        |  |
| Theatre                            | 2,457          | 2,526          | 3%          | 197                   | 211                   | 14                    | 7%          |  |
| Theology                           | 20,650         | 15,425         | -25%        | 359                   | 321                   | 41                    | 11%         |  |
| Reconciling Adjustment             | 8,358          | 4,226          |             |                       |                       |                       |             |  |
| <b>Arts &amp; Sciences (total)</b> | <b>218,918</b> | <b>171,592</b> | <b>-22%</b> | <b>352</b>            | <b>305</b>            | <b>-47</b>            | <b>-13%</b> |  |
| Accounting                         | 10,934         | 6,518          | -40%        | 418                   | 362                   | -56                   | -13%        |  |
| Economics                          | 7,828          | 5,549          | -29%        | 470                   | 427                   | -43                   | -9%         |  |
| Finance                            | 6,302          | 5,492          | -13%        | 573                   | 323                   | -250                  | -44%        |  |
| Marketing                          | 5,739          | 5,185          | -10%        | 626                   | 576                   | -50                   | -8%         |  |
| Management                         | 7,146          | 7,531          | 5%          | 536                   | 471                   | -65                   | -12%        |  |
| Management Sci                     | 9,507          | 8,667          | -9%         | 559                   | 482                   | -77                   | -14%        |  |
| <b>Business (total)</b>            | <b>47,456</b>  | <b>38,942</b>  | <b>-18%</b> | <b>508</b>            | <b>428</b>            | <b>-80</b>            | <b>-16%</b> |  |
| Curr. Instr. & P.E.                | 6,774          | 10,722         | 58%         | 333                   | 290                   | -43                   | -13%        |  |
| Counseling Psych.                  | 6,786          | 3,472          | -49%        | 274                   | 231                   | -43                   | -16%        |  |
| Ed. Leader & Pol. S.               | 4,344          | 4,794          | 10%         | 233                   | 282                   | 49                    | 21%         |  |
| Education                          | 17,904         | 18,988         | 6%          | 281                   | 271                   | -10                   | -4%         |  |
| Cent. Org Dev.                     | 1,026          | 1,293          | 26%         | 188                   | 259                   | 71                    | 38%         |  |
| HRIR                               | 4,230          | 3,105          | -27%        | 447                   | 380                   | -67                   | -15%        |  |
| Pastoral Studies                   | 5,093          | 4,062          | -20%        | 192                   | 193                   | 1                     | 1%          |  |
| Reconciling Adjustment             |                | 30             |             |                       |                       |                       |             |  |
| <b>Graduate Inst. (total)</b>      | <b>10,349</b>  | <b>8,490</b>   | <b>-18%</b> | <b>245</b>            | <b>236</b>            | <b>-9</b>             | <b>-4%</b>  |  |
| Law                                | 21,246         | 21,774         | 2%          | 456                   | 411                   | -45                   | -10%        |  |
| Food & Nutrition                   | 387            | 1,511          | 290%        | 162                   | 378                   | 216                   | 133%        |  |
| General Nursing                    | 6,639          | 9,116          | 37%         | 120                   | 285                   | 165                   | 138%        |  |
| Nursing                            | 7,026          | 10,627         | 51%         | 121                   | 295                   | 174                   | 144%        |  |

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|                              |         |         |      |     |     |     |      |
|------------------------------|---------|---------|------|-----|-----|-----|------|
| <b>Social Work</b>           | 12,493  | 12,421  | -1%  | 343 | 336 | -7  | -2%  |
| <b>Totals &amp; Averages</b> | 335,392 | 282,834 | -16% | 358 | 313 | -45 | -13% |

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## **.LOCATIONS**

age? Total Hours?

y?  
for each program?







**% Diff.**

|      |
|------|
| -64% |
| -33% |
| 50%  |
| 0%   |
| 100% |
| -58% |
| n/a  |
| -6%  |
| -17% |
| -47% |
| -13% |
| 0%   |
| 40%  |
| -44% |
| -11% |
| 50%  |
| -45% |
| 100% |
| 100% |
| -27% |
| 133% |
| -27% |
| -38% |
| 300% |
| -14% |
| -38% |
| 35%  |
| -50% |
| 0%   |
| -38% |
| 71%  |
| 50%  |
| 150% |
| 100% |

**% Diff.**

|             |
|-------------|
| <b>-64%</b> |
| <b>-58%</b> |
| <b>-50%</b> |
| <b>-47%</b> |
| <b>-45%</b> |
| <b>-44%</b> |
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| <b>-17%</b> |
| <b>-14%</b> |
| <b>-13%</b> |
| <b>-11%</b> |
| <b>-6%</b>  |
| <b>0%</b>   |
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| <b>35%</b>  |
| <b>40%</b>  |
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| <b>71%</b>  |
| <b>100%</b> |
| <b>100%</b> |
| <b>100%</b> |
| <b>100%</b> |
| <b>133%</b> |
| <b>150%</b> |
| <b>300%</b> |
| <b>n/a</b>  |

e faculty.

or life programs.

ient's average class size appears to be in balance.

/T faculty exceeds enrollment growth.

/T faculty exceeds enrollment growth.

/T faculty exceeds enrollment growth.

ient's average class size appears to be in balance.

/T faculty not justified by enrollment growth.

ient's average class size appears to be in balance.

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| FY 99<br>Dir Budget | FY 99<br>\$/Cr Hr |
|---------------------|-------------------|
| 3,789,206           | <b>383.02</b>     |
| 3,579,563           | <b>410.88</b>     |
| 842,553             | 227.59            |
| 1,952,652           | 267.60            |
| 2,837,718           | 156.68            |
| 938,352             | <b>296.67</b>     |
| 1,913,921           | <b>352.41</b>     |
| 2,536,378           | 234.33            |
| 4,279,009           | 216.93            |
| 1,930,169           | 264.08            |
| 764,984             | 145.46            |
| ?                   | #VALUE!           |
| 1,314,842           | <b>382.33</b>     |
| 1,805,910           | <b>284.08</b>     |
| 3,936,179           | 270.08            |
| 2,432,685           | 253.83            |
| 1,403,311           | <b>555.55</b>     |
| 2,542,183           | 164.81            |
| <b>49,298,394</b>   | <b>287.30</b>     |
| 2,044,429           | <b>313.66</b>     |
| 1,075,330           | 193.79            |
| 1,482,238           | 269.89            |
| 956,587             | 184.49            |
| 1,720,023           | 228.39            |
| 1,864,056           | 215.08            |
| 15,177,752          | <b>389.75</b>     |
| 2,160,351           | 201.49            |
| 967,411             | 278.63            |
| 1,508,341           | <b>314.63</b>     |
| 7,268,756           | <b>382.81</b>     |
|                     | 0.00              |
|                     | 0.00              |
|                     | 0.00              |
| <b>13,737,178</b>   | <b>354.75</b>     |
|                     | 0.00              |
| 243,658             | 161.26            |
| <b>7,710,900</b>    | <b>390.56</b>     |

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|-----------|--------|
| 3,007,393 | 242.12 |
|-----------|--------|

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