

# Tuition, Financial Aid and Endowment

By Michael L. Whalen

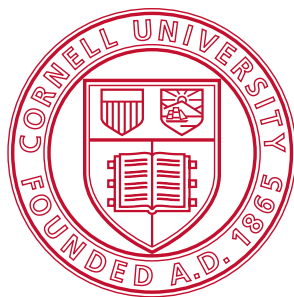
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# TUITION, FINANCIAL AID & ENDOWMENT

## INTRODUCTION

The intertwining policies that govern higher education's setting of tuition, awarding of financial aid, and investment and use of endowments have been the subject of intense scrutiny recently, by the federal government and the nation's press and within academia. Public and private undergraduate tuition—the “sticker price” of attendance—continues to grow at almost all U.S. colleges and universities at rates that exceed the change in consumer inflation. These institutions award financial aid variously, based on merit and financial need, using formulas and patterns that are perceived as opaque. Students are graduating with ever-increasing levels of debt, which may influence career choices. Recent financial gains coupled with changes in how some of the largest college and university investment portfolios are managed have led to a remarkable growth in the size of most higher education endowments. Concern has been expressed that colleges and universities—in inflating prices, saddling students with debt, and arbitrarily limiting the use of their endowment funds—are effectively hoarding wealth, abusing their tax-exempt status as “public charities,” and failing to help the neediest students.

Concern over these issues culminated recently in a request for information concerning institutional policies that was issued by the U.S. Senate Committee on Finance<sup>1</sup> to selected U.S. colleges and universities. This article contains Cornell University's response to that request and provides background on both the Committee's deliberations and Cornell's current and future policies and practices regarding undergraduate tuition and financial aid and the management of the university's endowment and other invested funds.

1 The Committee's jurisdiction covers: (a) bonded debt of the United States, except as provided in the *Budget Act of 1974*; (b) customs, collection districts, and ports of entry and delivery; (c) deposit of public moneys; (d) general revenue sharing; (e) health programs under the *Social Security Act* and health programs financed by a specific tax or trust fund; (f) national social security; (g) reciprocal trade agreements; (h) revenue measures generally, except as provided in the *Budget Act of 1974*; (i) revenue measures relating to the insular possessions; (j) tariffs and import quotas; and (k) transportation of dutiable goods. The Committee operates under the guidance of Chairman Max S. Baucus (D-Montana) and Ranking Member Charles E. Grassley (R-Iowa).

## THE PUBLIC POLICY ISSUE

In a September 26, 2007 U.S. Senate Committee on Finance hearing, Lynne Munson of the Center for College Affordability and Productivity and Jane Gravelle, of the Congressional Research Service gave testimony on offshore investments in hedge funds by higher education endowments. Both veered from the issue before the Committee—whether the use of offshore arrangements served to unfairly avoid taxes—to charge that colleges and universities were hoarding wealth to the detriment of their students and the public.

Munson argued:

...endowment spending practices are stuck in a past when endowments were small, investment gains were marginal, and economic rainy days were frequent. Today higher education endowments are massive and—as we've heard today—aggressively invested. Returns often exceed 12% or more year after year. Yet endowment payouts are miserly—averaging just over 4% last year. The situation begs the question: Is the public benefiting enough? Research indicates the answer is “no.”

Tuition has been going up so rapidly for so long it has reached nearly ungraspable levels. So let me put today's tuition cost in concrete terms. Senators, what would your constituents say if gasoline cost \$9.15 a gallon? Or if the price of milk was over \$15? That is how much those items would cost if their price had gone up at the same rate that tuition has since 1980.

Senators, our colleges and universities need to be reminded that they are education institutions first and foremost—and that that is why they receive the enormous tax breaks they do. Their practices, including their handling of endowment monies, should reflect their priorities as educators.

Gravelle proposed specific remedies to

...the use of offshore feeder corporations that allow tax exempt investors, including educational institutions, to avoid the unrelated business income tax. ... Two possible revisions of current treatment to prevent tax exempt educational institutions from avoiding the unrelated business income taxes by investing in offshore funds are often discussed. The first would be to restrict the use of offshore investments, which would lead to additional taxes collected. It could also cause a shift in investments.

There are a number of policy options that might be alternatives to a restriction of these offshore investments by educational institutions. Private foundations are required to pay out a portion of their assets, and are subject to a minimum rate of 5%, which leads to an average payout of

7%. The overall payout ratio on educational institutions' endowments fall below this level. One option would be to require a payout rate; or to require a payout rate (or a higher rate) for institutions as long as their per student endowment is above a fixed amount. Alternatively, one could relate the payout rate to the earnings rate so as to preserve the real value of the endowment and perhaps some small growth, but not allow it to grow so rapidly. Another option, if the public policy concern is about affordable education, would be to impose a tax on the endowment for schools with tuition increases over a pre-determined threshold.

### IRS Tax-Exempt Concerns

The Internal Revenue Service (IRS) has also expressed apprehension over the same issue. As reported recently in the *Chronicle of Philanthropy*,<sup>2</sup> Steven Miller, the commissioner of the Tax Exempt and Government Entities Division of the IRS, said that the IRS was concerned that many organizations are not making effective use of their assets, given their tax-exempt status.

"Is providing a peppercorn of public benefit enough for a tax exemption?" Mr. Miller asked. "How much savings is too much savings? Should we insist on behalf of the public that the charity provide a public benefit that is commensurate with the charity's financial resources and with the tax subsidy it receives?"

The article describes Mr. Miller as saying that:

...the IRS may want to consider a payout requirement for charities that is similar to the annual requirement for private foundations, which must distribute 5 percent of their assets each year. He said the agency may also use its enforcement tools to crack down on charities that are hoarding assets without providing much benefit to the public.

"We should review existing tools and explore whether we can hold organizations to a standard of commensurate use of assets, at least in the most offensive or egregious cases," Mr. Miller said.

He said the IRS may review how foundations are complying with the requirement to spend at least 5 percent of their assets each year. Critics have suggested that some foundations include too much administrative overhead in meeting the 5-percent threshold.

"It may be time for us to review what is being spent and counted," Mr. Miller said.

<sup>2</sup> Gose, Ben, "IRS Official Says Tax Agency May Step Up Efforts to Identify Ineffective Charities." *The Chronicle of Philanthropy* (Nov. 12, 2007). <http://www.philanthropy.com/news/updates/index.php?id=3441>

The article noted that some who believe that the IRS may be moving beyond its legal mandates viewed Mr. Miller's comments with concern.

Marcus S. Owens, a Washington lawyer who is himself a former commissioner of the IRS's tax-exempt division, urged the IRS to be cautious before stepping into new areas. ... "I would urge the IRS, as it begins to contemplate the concepts of efficiency and effectiveness, and of good governance, to keep in mind that some of those words are not found in the Internal Revenue Code," he said.

Despite these cautions, it is evident that there are those in the federal government who are concerned with the issues of tax-exempt advantage, endowment growth, tuition-setting and payout policies, cost control, accountability, and transparency.

Near the end of his speech, Mr. Miller praised nonprofit organizations for the work they are doing to figure out how they can be more accountable, but he concluded with a warning: "I would ask you not to let those efforts falter, or you may end up with the service or the Congress stepping in."

### Testimony of Educational Associations

The Senate Committee did not invite any higher education officials to testify at its September 2007 hearing. To provide a clarification of the issues raised by Munson and Gravelle, written testimony was submitted to the Committee on October 10, 2007 on behalf of four higher education associations.<sup>3</sup> This document noted that testimony by Gravelle and Munson:

...created the mistaken impression that endowments function like simple savings accounts for colleges and universities that can be spent by an institution however and whenever it chooses. This is simply inaccurate. In fact, an endowment typically consists of hundreds—and in many cases, thousands—of individual funds provided by charitable gifts, as well as some institutional funds that are invested to support the institution's mission in perpetuity.

This testimony observed that there are legal considerations governing payout, including the maximum that prudent fiduciaries may authorize:

Donor restrictions are included in the legal documents that establish an endowment fund, creating binding terms for the manner in which the college or university

<sup>3</sup> The American Council on Education, the Association of American Universities, the National Association of Independent Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges.

may spend the donor's gift. For example, an institution is legally prohibited from spending funds on student financial aid from revenue generated from an endowment fund established by a donor to support cancer research or a professorship in a particular subject. In addition to donor imposed restrictions, there are also external restrictions that affect the payout of endowments. For example, the Uniform Management of Institutional Funds Act (UMIFA) has been recently amended and has already been adopted as modified by several states. UMIFA was modified to provide that if a payout from a fund exceeds seven percent, the fiduciary to the fund may be in violation of the Act's prudent management standards.

The testimony also addressed the function of a spending rule, which helps create a stable and dependable flow of operating support from an inherently variable revenue stream:

...colleges and universities typically employ endowment spending or payout rules that seek to provide predictable and sustained funding for campus operations and the programs and activities for which donors restricted their gifts. ...According to NACUBO, the most common spending rule adopted by institutions is to spend 5 percent of the three-year average of an endowment's market value. ...College and university endowment spending rates have averaged between 4.5 and 5.1 percent of market value over the last decade. For the 765 institutions who participated in NACUBO's 2006 endowment study, the average spending rate was 4.6 percent.

An annual investment return of approximately 9-10 percent is needed to: achieve the typical spending or payout rate goal of 5 percent; reinvest part of the investment earnings to maintain the endowment's value relative to inflation (2.5-3.5 percent); and pay for investment management costs (1-2 percent). In recent years, average investment returns have been strong. For 2005-2006, the overall average rate of investment return was 10.7 percent. Institutions with the smallest investment pools had an average rate of 7.8 percent and institutions with largest investment pools had an average rate of 15.2 percent. However, one only has to go back to 2000-2001 and 2001-2002 to find examples of when returns were not so rosy. In 2000-2001, the average return was -3.6 percent and in 2001-2002 the average return was -6.0 percent.

The testimony further clarified why the proposal to extend a minimum-spending rate to college and university endowments would be problematic:

Private foundations and colleges and universities are very different kinds of tax-exempt institutions. In the case of a private foundation, the public has an interest in ensuring that, in return for the tax advantages

granted to the donor, the foundation, which remains under private control, is adequately serving its charitable purposes by spending its funds in a timely fashion. For foundations, virtually all of their income comes from their endowments and the most effective way to ensure a significant charitable activity may be through a minimum payout requirement. In contrast, charitable donations to college and university endowments are typically given for the express purpose of supporting designated educational or scholarly activities over a long period of time. When a college or university executes its daily operations, it fulfills and engages in its charitable purpose with endowment funds and other sources of revenue. There are many constituencies that play a role in ensuring that these dollars are spent for their intended purposes, including the donors themselves, students, faculty, university administrators, alumni, local residents, and government agencies.

In addressing the question of whether the government should impose tuition price controls through punitive taxation, the testimony noted:

Throughout history governments have sought to impose price controls. Invariably price control efforts have led to shortages of the commodity or service in question and/or deterioration in quality.

Taxing an endowment's earnings would only increase the upward pressure on tuition and decrease the resources available to support institutional programs, including the student financial aid funds that are crucial to making higher education affordable for families from low- and middle-income backgrounds. In addition, taxing endowments would turn a donor-intended charitable gift into a source of government tax revenue.

### The Senate Request

On January 24, 2008, NACUBO<sup>4</sup> released its 2007 endowment study, which highlighted a "...one-year average rate of return of 17.2 percent [for] college and university endowments."<sup>5</sup> On that same day, the Senate Committee announced that it had sent a request for information to the 136 U.S. colleges and universities that had endowments of \$500 million or more, according to the NACUBO study.<sup>6</sup> The Committee posed eleven questions that touched on institutional policies and practices governing tuition, financial aid,

4 National Association of College and University Business Officers.

5 <http://www.nacubo.org/x2376.xml>

6 <http://www.senate.gov/~finance/press/Gpress/2008/prg012408f.pdf>

and endowments. Cornell's response to the U.S Senate is reprinted in Appendix P, beginning on page 26.

In the Committee's press release, Senator Grassley echoed the misgivings voiced by Munson and Gravelle at the September 2007 Senate Committee hearing:

Tuition has gone up, college presidents' salaries have gone up, and endowments continue to go up and up. We need to start seeing tuition relief for families go up just as fast. It's fair to ask whether a college kid should have to wash dishes in the dining hall to pay his tuition when his college has a billion dollars in the bank. We're giving well-funded colleges a chance to describe what they're doing to help students. More information will help Congress make informed decisions about a potential pay-out requirement and allow universities to show what they can accomplish on their own initiative.

## CORNELL'S POLICIES

The U.S. Senate Committee on Finance's request for information provided Cornell an opportunity to explain its tuition, financial-aid, and endowment policies and practices. The questions posed—and what was not asked—necessarily limited the breadth and depth of the discussion of some of these topics. What follows is a more in-depth exploration of these elements in the context of higher education in the United States generally and Cornell specifically.

### Higher Education Viewed Globally

In her second annual academic state of the university address,<sup>7</sup> Provost Bidy Martin drew attention to an article published by *The Economist* entitled "The Brains Business,"<sup>8</sup> which noted that higher education is undergoing a worldwide revolution due to:

- *Democratization* – as the fraction of a country's population that either accesses or desires to access higher education increases
- *Rise of the Knowledge Economy* – as knowledge and its practical application in business and commerce

7 Martin, Carolyn, "Academic State of the University." Cornell University (Mar. 5, 2008). [http://www.cornell.edu/provost/docs/academicStateofU\\_20080305.pdf](http://www.cornell.edu/provost/docs/academicStateofU_20080305.pdf)

8 "The Brains Business." *The Economist* (Sept. 8, 2005). [http://www.economist.com/surveys/displaystory.cfm?story\\_id=4339960](http://www.economist.com/surveys/displaystory.cfm?story_id=4339960)

replace "...physical resources as the main driver of economic growth"

- *Globalization* – as the "death of distance" transforms colleges and universities as it already has changed commercial businesses, "...turning higher education into an export industry"
- *Competition* – as colleges and universities vie for students and resources

*The Economist* further argued that America is the country best poised to meet these challenges because it already "...has almost a monopoly on the world's best universities [and] ...provides access to higher education for the bulk of those who deserve it."

The success of American higher education is not just a result of money (though that helps); it is the result of organisation. American universities are much less dependent on the state than are their competitors abroad. They derive their income from a wide variety of sources, from fee-paying students to nostalgic alumni, from hard-headed businessmen to generous philanthropists. And they come in a wide variety of shapes and sizes, from Princeton and Yale to Kalamazoo community college.

*The Economist* offered two suggestions to countries that are trying to create or revitalize systems of higher education: (a) diversify the resources that support the system (do not rely solely on government funding) and (b) encourage a variety of models, not-for-profit and for-profit, large and small. *The Economist* noted that "...these two principles reinforce each other: the more that the state's role contracts, the more educational variety will flourish."

In the same speech, Provost Martin noted that Cornell exemplifies many of the qualities that *The Economist* finds crucial in the success of higher education:

- access for students regardless of background and ability to pay
- mixed revenue sources
- autonomy combined with state and federal support
- a strong sense of responsibility to the public
- the widest possible range of subjects
- a sophisticated infrastructure for science
- the free exchange of ideas
- a world-class faculty

This is a description of the model pioneered in the 1860s by Ezra Cornell and A.D. White. Its primary features continue to define Cornell today. *The Economist* means to be characterizing U.S. universities taken as a whole; Cornell combines all these features in one. This is Cornell's



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uniqueness—the combination of equity, quality, breadth, and contribution. Everyone does some of what Cornell does, but no one does everything we do. That, for us, is an extraordinary strength and a major challenge.

Of special note in this regard are the varied resources that support Cornell’s function as a private university with a public mission. The university’s responses to the U.S. Senate Committee on Finance—and its endowment, tuition, and financial-aid policies—are framed within a mix of funding sources that have changed over time, defining and shaping Cornell.

### ECONOMIC FRAMEWORK

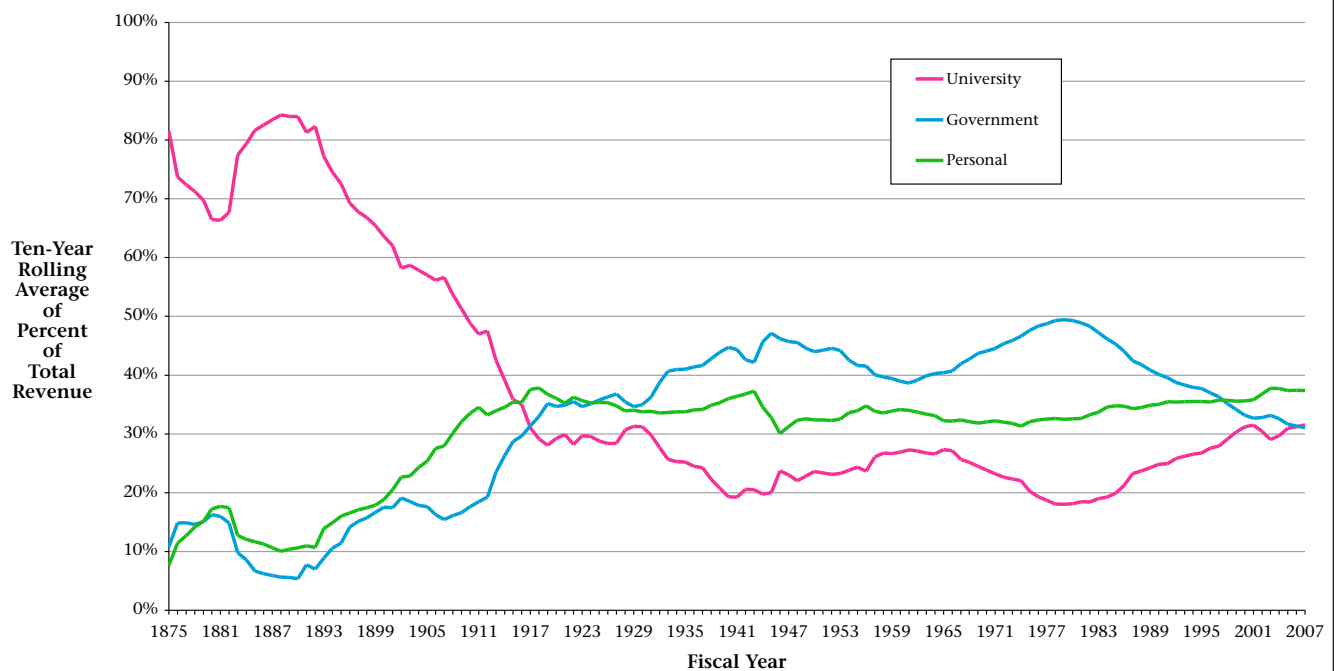
In her speech, Provost Martin noted that the success of higher education in the United States is dependent on a shared funding model that she characterized as a “three-legged stool,” which is composed of:

- *Government resources* that take the form of appropriations, payments for financial aid, and grants and contracts that are made primarily for research

- *Personal resources*, which are payments made by students and their families for tuitions, fees, room and board rates as well purchases made by other customers, including clients of the Cornell University Hospital for Animals, Statler Hotel guests, and attendees of athletic events
- *University resources*, the bulk of which represent gifts and investment returns from endowments that derive primarily from gifts but include other institutional resources as well

The graph below shows that for the first third of its existence, Cornell’s donative resources, including its land-grant endowment and set of significant gifts, provided most of the operating and capital revenue for the Ithaca campus. By the beginning of the 1920’s, the other two “legs of the stool” converged such that all three major revenue streams were comparable. The creation of the four contract colleges in the first half of the twentieth century combined with the rapid increase in federal research funding in the 1960’s and 1970’s caused government funding to dominate. A downturn in government funding as a proportion of

**Ten-Year Rolling Average of the Percent of Total Operating and Capital Revenues \* for the Ithaca Campus from the Date of Cornell University’s Founding in 1865**



\* Excludes employee benefit and debt service costs paid directly by New York State and not recorded by Cornell. Tuition receipts included in the category of “personal” revenues are net of financial aid.

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Cornell's total support over the past four decades—a function of both a decline in the inflation-adjusted level of New York State appropriations for the university's four contract colleges and slower growth in federal grant and contract support for the endowed Ithaca's colleges and research centers—has been balanced by an increase in the use of Cornell's own resources.

The evolution at Cornell of a roughly balanced mix of these three primary revenue sources came about due to: (a) an effort to increase tuition so that it would more fully cover the cost of education; (b) the deployment of financial aid to maintain broad access to higher education; (c) the participation of governments as partners with higher education in funding academic programs, facilities, financial aid, and research investigations; and (d) the proactive management of financial capital and debt. A fifth ingredient—the emergence of inflation as a routine and even controllable economic force—profoundly affects these other factors, especially tuition, and sets the stage for the national conversation that the U.S. Senate Committee on Finance's recent request typifies: why does tuition grow faster than inflation? why can't colleges and universities control their costs?

### TUITION AND COSTS

Cornell's founders thought that tuition should be nominal or nonexistent. The university's charter provided tuition-free education for 128 New York State citizens,<sup>9</sup> and those not covered by this provision were charged \$30 per year (about \$1,900 in inflation-adjusted terms). Ezra Cornell instituted a system whereby any student could pay off the \$30 tuition cost by working for the university doing manual labor. In its first year of operation, the university recorded slightly under \$10,000 in tuition and fees from about 300 paying students. The average cost (operating expenditures plus depreciation of capital investment) of delivering

<sup>9</sup> Cornell's charter stated that the university would "... annually receive students, one from each assembly district of the State...and shall give them instruction...free of any tuition fee." While the university's administration assumed this to mean 128 tuition-free students at any time, New York State's Attorney General interpreted this provision to require that Cornell offer up to 512 concurrent state scholarships (128 times 4 classes, each of which entered in successive years). The Attorney General's opinion eventually prevailed.

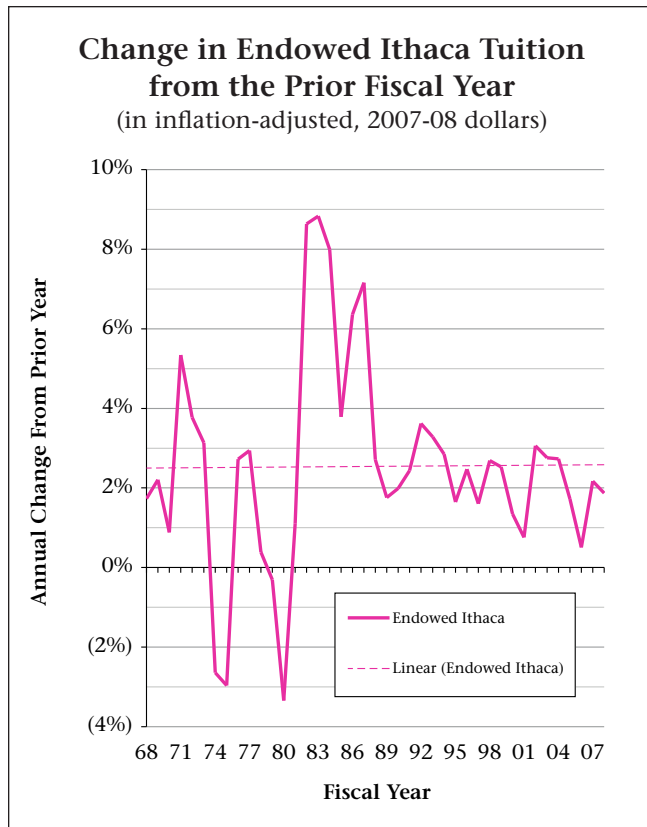
that education to Cornell University's 412 enrolled students was approximately \$200 per student (about \$12,700 in inflation-adjusted terms). Thus, in 1868-69, tuition paid about 15 percent of the cost of education.

The fundamentals of tuition policy that were set in motion by Cornell's charter and its founders remain in place. Need-based financial aid (discussed below) has replaced the merit-based state scholarship system of 1868-69, permitting the institution to charge tuitions that are closer to, though still less than, the cost of education while providing financial assistance to those students who cannot afford this price. Despite the magnitude of that price—Cornell's trustees set tuition at \$34,600 for undergraduates enrolled in Cornell's endowed Ithaca colleges in 2007-08—it remains less than the cost of the education provided. Several studies by individual institutions, including Cornell, as well as a comprehensive analysis performed by the economist Gordon C. Winston<sup>10</sup> have demonstrated that students in private colleges and universities pay between 40 to 60 percent of the cost of their educations. The subsidies in public institutions are even greater due to the provision of substantial state funding. At Cornell, the ratio as of 2002-03 was between 47 percent and 55 percent, depending on the calculation methodology.<sup>11</sup> While Cornell has increased its tuition regularly since 2002-03, it has augmented its financial-aid budget at an even greater rate. It is likely that current Cornell students are paying no more than 60 percent of their education costs through tuition. All students, even those paying the full "sticker" price of tuition, are subsidized, and that subsidy derives from gifts, endowments, government support, and the cumulative investment in the university's physical plant, equipment, and the library's collections that have been made by generations of Cornellians who preceded the current student body.

Cornell's tuition policy is simple: tuition should approach but be less than the cost of education and tuition should increase annually to reflect the cost

<sup>10</sup> Winston, Gordon C. and Ivan C. Yen, *Costs, Prices, Subsidies, and Aid in U.S. Higher Education*. Williamstown: Williams College, 1995. <http://www.williams.edu/wpehe/DPs/DP-32.pdf>

<sup>11</sup> Whalen, Michael L., "The Economics of Higher Education," [In] *Cornell University, 2004-05 Financial Plan, operating and capital*. Ithaca: Cornell University, 2004. <http://www.dpb.cornell.edu/documents/1000033.pdf>



increases that the university experiences in providing that education. Cornell's long-term goal is to keep the annual growth in endowed Ithaca tuition reasonably close to inflation. The graph above demonstrates Cornell's varying success in achieving this outcome. For the period 1967-68 through 2007-08, including the very high inflation years of the 1970's and early 1980's, Cornell increased endowed Ithaca tuition 2.5 percent on average above inflation.<sup>12</sup> Since 1986-87, that growth has averaged 2.2 percent, but the pace remains slightly above the university's long-term goal.

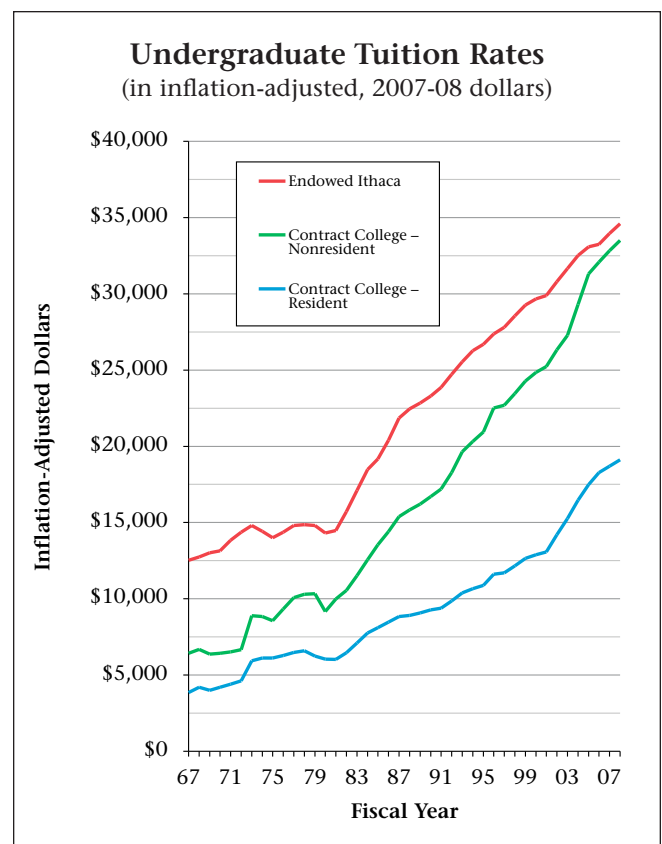
The university sets contract college tuitions similarly, although significant changes in New York State support for the contract colleges and the need to pay for local costs that are not funded through state appropriations affect tuition growth. Also, since the 1990's, Cornell has gradually increased the tuition charged to contract college undergraduates who are not New York State residents to more closely approximate the tuition rate charged to endowed Ithaca students. (See graph

12 As measured by the change in the Consumer Price Index. A more thorough discussion of inflation and how it is measured can be found beginning on page 21.

below.) The university is making this shift to recognize that, in an era of constrained state resources, the instructional appropriations that Cornell receives from New York are intended primarily to benefit New York State residents enrolled at the institution.

### Cost Containment

Achieving cost containment is a challenge, given Cornell's size, decentralized governance structure, and variety of outputs and products. Also, Cornell is currently increasing expenditure for academic programs, financial aid, computer systems and support, and improved facilities, and is expanding certain revenue-producing activities, such as fund-raising and investment management, where the return on investment is substantial. Cornell recognizes that the price of education can be a burden, even for those students who appear to have the means to pay Cornell's full "sticker" rates. The university is concerned about rendering a Cornell education unaffordable for middle-class students who, in not qualifying for grant aid, may incur excessive levels of debt. Along with its tuition and financial-aid policies, Cornell continues to implement





specific cost containment strategies designed to reduce growth pressures on student prices.

- *Workforce Planning* – Launched in November 2001, this effort included a review of eight areas—human resources, financial transactions, alumni affairs and development, information technology, facilities, student support, libraries, and purchasing—with three primary objectives: (a) clarify roles, responsibilities, and accountabilities; (b) realize significant financial savings; and (c) improve the effectiveness of major support functions. Workforce Planning reported major accomplishments as of April 2005, including \$15.7 million in annual, ongoing savings, and has set in motion a continuing institution-wide focus of review and improvement of operational support activities.
- *Energy Conservation* – While Cornell has been engaged in energy conservation and the use of renewable resources for many years,<sup>13</sup> one of its first large-scale initiatives was the Lake Source Cooling (LSC) project. LSC reduces the campus energy use for cooling by 80 percent, conserving over 20 million kilowatt-hours annually. To date, LSC has saved the university a cumulative \$11.3 million in electricity costs. LSC is one of more than 20 of Cornell's supply-side conservation efforts that have been undertaken since the 1980's designed to reduce energy costs for the Ithaca campus.

Other programs include: (a) a 4.4 million-gallon thermal storage tank to hold chilled water that is processed at night, saving approximately \$300 thousand annually; (b) cogeneration of electricity at the steam-heating plant, which supplies over 10 percent of the Ithaca campus's electrical needs; and (c) improved energy management and control systems.

Cornell is also employing demand-side approaches to reduce the need for energy, including: (a) converting light fixtures to high-efficiency fluorescent sources, thereby reducing lighting energy consumption by 30 percent and saving approximately 6 million kilowatt-hours of electricity annually; (b) upgrading and installing occupancy and daylight sensors and digital energy controls; (c)

introducing variable-speed fan and pump drives that reduce electricity consumption by 30 million kilowatt-hours per year; and (d) installing heat exchange systems in facilities that have a high turnover of building air to temper incoming air with heat captured from exhaust air. These strategies yield substantial savings because of the large volume of activity. For example, the buildings with heat exchangers mentioned above exhaust 3 million cubic feet of treated air per minute.

- *Supply Management Services* – Over the past 20 years, Cornell's "purchasing" function has evolved into "supply management," which merges the traditional activities of purchasing (bidding, negotiation, order processing, and delivery) with preferred supplier agreements and strategic sourcing. Cornell expects to save over \$1 million in 2008-09 as a result of these new approaches, especially in the \$15 million expended annually to purchase computer hardware and electrical and plumbing supplies and the institution's significant outlay for scientific and office supplies. Key goals of the program are to ensure a sustained level of high quality, low price, and uninterrupted supply of these essential commodities. The university is also expanding the use of management tools such as eShop, eAuctions, and Ariba (a reporting tool) as well as bundled purchases.
- *Room and Board Rates* – An early component of the Workforce Planning effort was a hiring freeze for nonacademic positions at the Ithaca campus during 2001-02. While the mandate for campus-wide limitation on hiring has been lifted, the Division of Student and Academic Services has continued it as a standing practice. No position is filled unless it is part of an approved staffing plan or has received vice presidential authorization through a waiver submission and review process. The Division continues to require annual staffing plan submissions for all of its operating units, and Divisional workforce planning committee reviews these plans. In addition, any new position request or change must be submitted through a waiver process, reviewed by that same workforce planning committee, and must receive approval from the vice president before it can be filled.

Dining chefs and managers work collaboratively to maintain consistent, industry-benchmarked

<sup>13</sup> Constructed in 1898 on Fall Creek below Beebe Lake, Cornell's hydroelectric plant generates about 5 million kilowatt-hours annually, enough electricity for 600 homes.

food cost targets. They watch market fluctuations in various food categories and plan menus to maintain expected quality standards while controlling food costs as a percentage of sales at target levels. Success in this objective, while providing wholesome and varied food offerings, has been very challenging recently due to the significant impact of fuel costs on food transportation.

Both of these efforts are designed to limit the growth of costs that students ultimately pay for through room and board charges.

- *Cost Allocation Methodology* – Cornell has recently revised its cost allocation methodology (CAM), which is used internally to associate a little over \$250 million of central administrative and support costs with college and operating unit revenue budgets that ultimately must pay for those expenditures. One of the important features of the CAM redesign is the decision to place a “growth collar” on the central administrative and support costs being distributed that will effectively constrain the annual increase in these operating budgets. As Cornell builds these costs into student rates, the growth collar will limit future tuition, room, and board increases.

A second major CAM change is to switch the focus of the calculation from an after-the-fact costing exercise to a before-the-fact planning activity, allowing the university’s administration to more carefully plan for changes in the level of the central administration and support functions.

In addition to these specific efforts, the university is undertaking global reviews of costs and processes. For example, Cornell recently hired a space-planning director to help optimize space utilization and promote the sharing of space. The university is revising budget and costing models to simplify and decrease transaction costs and is revamping activities that span organizations, such as event management, communications, and information technologies, in order to increase efficiency and effectiveness.

### FINANCIAL AID

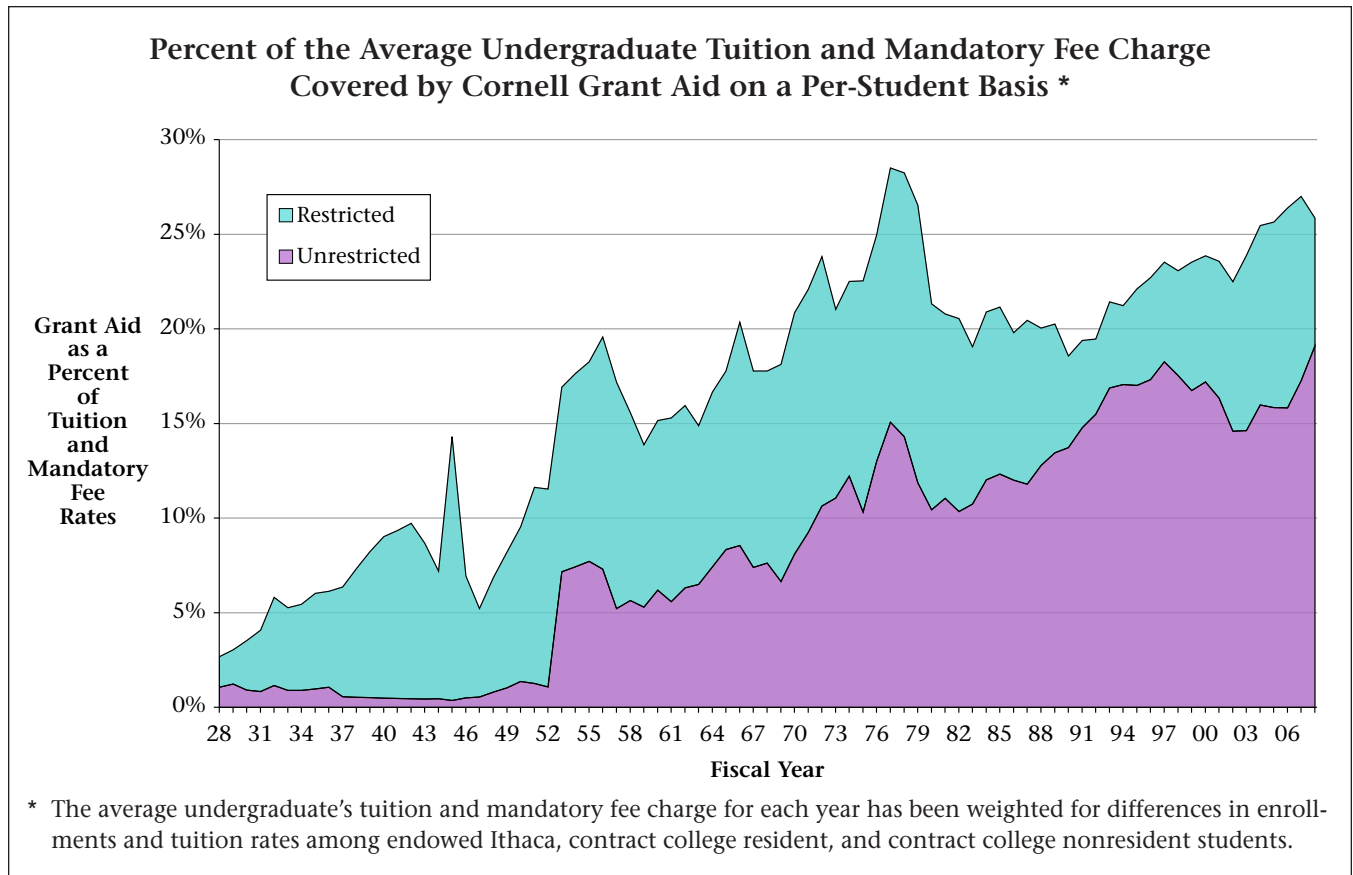
Cornell’s approach to undergraduate financial aid can best be described as a policy of fairness. The university’s current admissions and financial-aid policy (see

page 28) is a modern interpretation of ideas and ideals espoused by Cornell’s founders. Ezra Cornell’s famous motto—“I would found an institution where any person can find instruction in any study”—addressed student access directly by stating that any person should be able to attend, that is, any student without artificial limitation. The motto is best understood as a bold declaration that higher education should be open to the poor, to women, to people of all races and ethnicities, and to individuals of various religious and moral persuasions. These were radical notions in the middle of the nineteenth century, when most colleges and universities were loosely affiliated with Christian denominations and only a handful admitted women or minority students or provided need-based financial aid of any consequence. Both Ezra Cornell and Andrew D. White were convinced that the nation’s progress depended on such a social transformation.

Cornell’s admissions and financial-aid policy is purposefully designed to eliminate the ability to pay for education from influencing both the institution’s offer of admission and the student’s acceptance of that offer. Cornell’s faculty and staff who make admission decisions are not privy to the personal finances of the students applying, and instead base their recommendations on the academic quality and potential of the applicants, among other factors. Once a student is tendered an offer of admission, the university crafts a financial-aid package (if the student seeks such help) that will enable the student to attend.

Determining a student’s financial need and assembling a portfolio of financial-aid resources to meet that need are highly individualized processes.

- First, the university determines the typical *cost of attendance* for a student during the academic year. This cost varies by tuition rate between endowed Ithaca and contract college divisions and between New York State residents and nonresidents in the contract colleges. Tuition also varies for students enrolled in special programs, such as Cornell Abroad. Room and board rates are based on typical on-campus residency and use of Cornell dining services, even when students live off campus. The differential cost of living when studying abroad is also taken into consideration in the calculation. The cost of attendance includes provision for the purchase of books, travel to and from Cornell, and other miscellaneous expenses.



- Second, the *family contribution* is determined. The family contribution is composed of the *parental contribution*—the amount that the student's parents should be able to afford to pay based on an assessment of income and family assets—and a *student contribution* that is based on student assets and how much the student should be able to earn from summer employment. The difference between the cost of attendance and the family contribution becomes the student's *financial need*.
- Third, if the student is eligible for government funding such as federal Pell grants or New York State Tuition Assistance Program awards, these external grant sources are applied to meet the defined financial need.
- Fourth, financial need is then adjusted for student *self-help*, which represents the portion that the student should cover through loans and academic-year work.<sup>14</sup> The federal government subsidizes both components of loan and work-study.

- Finally, the cost of attendance not met by family contribution, external sources, and student self-help is covered by university *grant aid*, which comes from endowments and gifts as well as the institution's general unrestricted operating budget.

The graph above shows the amount of Cornell-funded grant aid that the university has provided per student as a percentage of the average tuition and fee rates charged in each year from 1927-28 through 2007-08. Restricted grant aid comes primarily from endowments donated for that purpose. The 2008-09 sources of support for financial aid can be seen in Appendix G (page 25), which shows that Cornell will commit \$138.9 million of its own resources for that purpose. Of this total, unrestricted grant aid will increase 25 percent, from \$80.7 million to \$101 million, and restricted grant aid will expand 15 percent, from \$29 million to \$33.4 million, as the university institutes its new financial-aid policy for low-income students.

As can be seen in the graph at the top of page 12, Cornell grant aid can cover up to 88 percent of the cost of attendance for students who receive such as-

14 Students sometimes elect to underutilize the loan and work-study components of their financial-aid packages.

**Distribution of Students Based on the Percent of Cost of Attendance Covered by Cornell Grant Aid (2007-08) \***



\* Students enrolled in both semesters of the 2007-08 academic year who were awarded grant aid from Cornell resources.

sistance.<sup>15</sup> While demonstrated need and subsequent awards this great are rare, approximately three-fifths of all grants fall in the 40 percent to 80 percent range.

## GOVERNMENT FUNDING

Federal and state governments (and local governments to a very small extent) are important partners in funding the educational and research activities of higher education, supplying three basic types of assistance:

- *Appropriations* – which underwrite basic operating and capital budgets. At Cornell these appropriations totaled \$198.6 million for 2006-07.<sup>16</sup>

15 Graphed are the 5,077 students enrolled in both semesters of 2007-08 who were awarded Cornell grant aid. The average grant award was \$19,901 and the median was \$20,366. Grant awards ranged from \$210 to \$47,866.

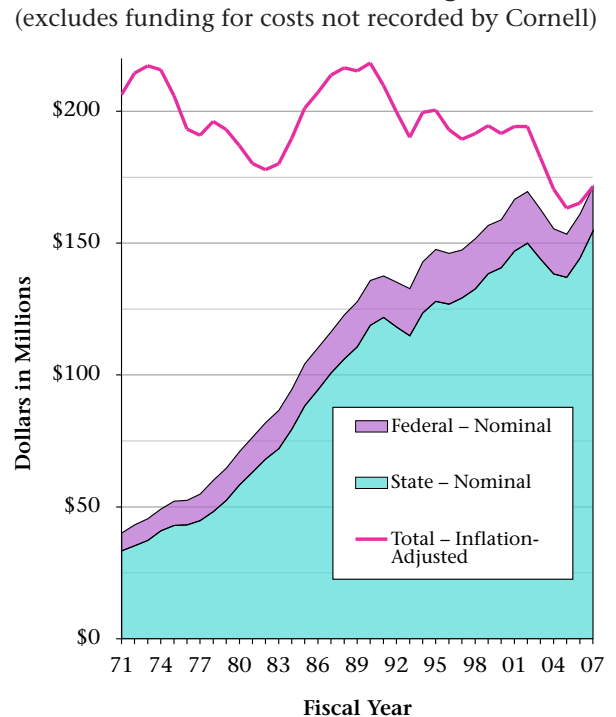
16 Excluded from this total are debt service on state-owned facilities at Cornell and certain employee benefits that are recorded by New York State rather than the university.

- *Grants and Contracts* – which fund primarily the faculty’s organized research projects. Cornell’s federal, state, and local grant and contract activity totaled \$516.4 million for 2006-07.
- *Financial Aid* – which supports undergraduate, graduate, and professional students. Government support for undergraduate financial aid in the form of grants, loans, and work-study opportunities totaled \$45.7 million in 2006-07.

## Appropriations

While government appropriations benefit all of Cornell’s programs, most of this funding (99 percent) supports the four contract colleges and the bulk of it (92 percent) comes from New York State. (See graph below.) In turn, most New York State appropriations are administered through the State University of New York (SUNY). For several years prior to 2006-07, Cornell’s base allocation was established through a SUNY resource allocation methodology that generally treated the university unfavorably because increases in student populations at other SUNY campuses effectively

**Government Operating Appropriations for the Contract Colleges**  
(excludes funding for costs not recorded by Cornell)



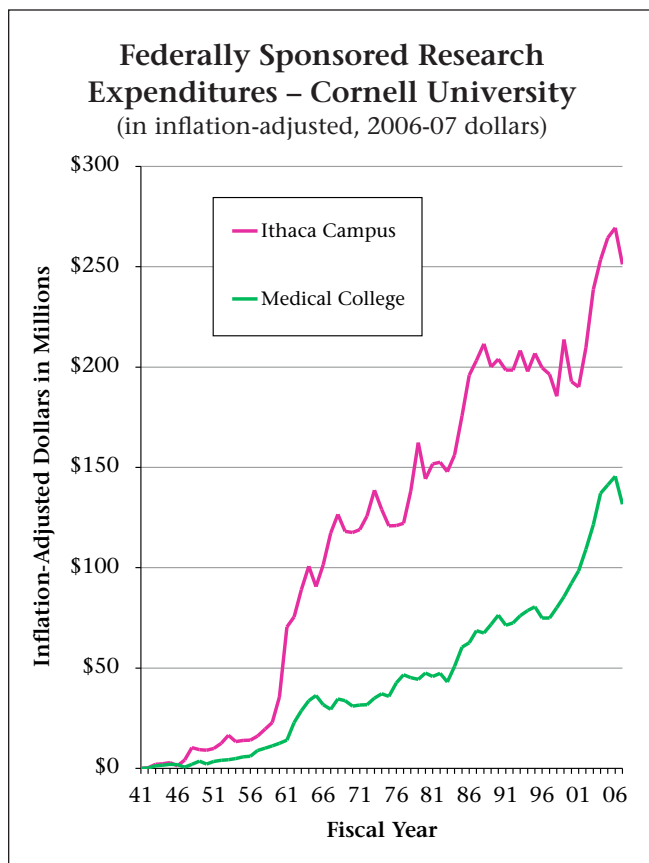
reduced Cornell’s funding. This methodology also provided no inflation for Cornell’s land-grant mission and its provision of instruction for contract college students in endowed Ithaca colleges (so-called “accessory instruction”). Beginning in 2006-07, Cornell’s overall state operating support—while still flowing through SUNY—has been largely separated from SUNY’s regular campus resource allocation process. Within that total, the portion of state operating support attributable to land-grant activities is provided through discrete, line-item funding in the governor’s executive budget. This partition appropriately recognizes that Cornell’s land-grant responsibilities as well as the organizational and financial structures associated with instructional activities are unique and should not be commingled with other SUNY campus resource allocations.

Since 1970-71, there has been nominal growth in government appropriations for the contract colleges, as federal and state funding has expanded at an average annual rate of 4.1 percent. Unfortunately, this growth has not maintained its purchasing power, and government appropriations have declined from \$206

million to \$171 million, in inflation-adjusted terms, over the same period. Appropriations that funded 67 percent of the contract colleges’ operating budget in 1970-71 now support 30 percent of that total. Other revenues—tuition and fees, grants and contracts, gifts, investment income, and sales and services of academic departments—have together supplanted government appropriations as the major sources of operating support. The gradual decline in state funding for the contract colleges—transforming them from state-supported to state-assisted—has been an important factor in the offsetting increase in contract college tuition discussed and illustrated on page 8.

### Grants and Contracts

While Cornell’s faculty have engaged in scholarship and have carried out investigatory projects from the university’s founding, the concept of externally funded research did not develop until the first part of the twentieth century, when commercial firms began to underwrite graduate study by providing “industrial fellowships.”<sup>17</sup> It was not until World War II, however, that substantial external funding was provided to Cornell and other universities in the form of research grants and contracts. As the graph at left shows, the volume of this support expanded rapidly at Cornell, and the university’s federal funding for research totaled \$382.9 million in 2006-07, while overall research expenditures—federal, state, and local government; corporate; foundation; private donor; and institutional funding—reached \$659.4 million in the same fiscal year. Inflation-adjusted expenditures of federally sponsored research on the Ithaca campus expanded rapidly from the early 1960’s through the mid-1980’s, then stalled for over a decade before increasing again in the twenty-first century. Federally sponsored research expenditures at the Joan and Sanford I. Weill Medical



17 “Thanks to [Herbert H.] Whetzel’s initiative, industrial fellowships were established at Cornell, among the first in America. He proposed to the Niagara Sprayer Company of Middleport, New York, that it support investigations in the value of lime-sulfur solution as a spray for apple scab. The company responded in 1909 and apparently made its fortune from the results. Thus the system began by which a manufacturer pays for a graduate student to study a problem which may result in profit for the manufacturer and a doctorate for the student.” Bishop, Morris, *A History of Cornell*. Ithaca: Cornell University Press, 1962.

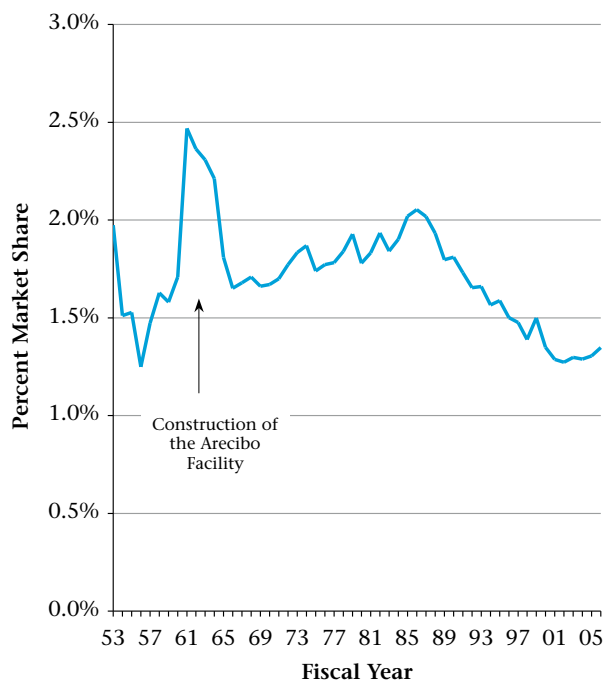


## TUITION, FINANCIAL AID & ENDOWMENT

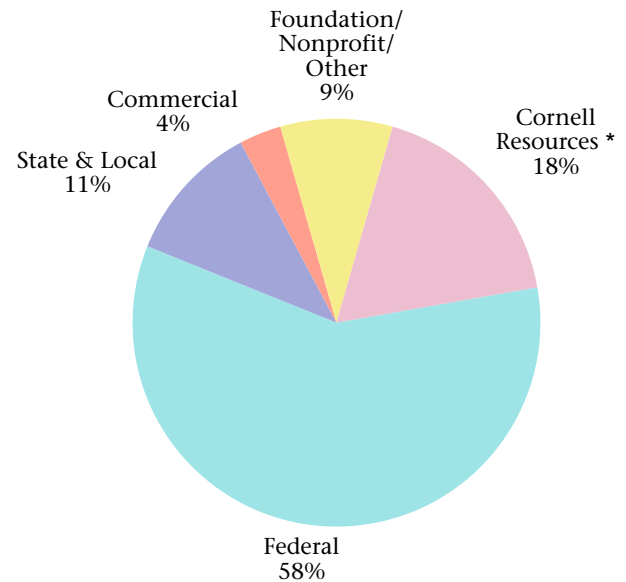
College and Graduate School of Medical Sciences have also increased substantially, though at a steadier pace.

Ithaca campus research growth has been driven primarily by the expansion of federal support for basic science and engineering studies that has been funneled through the National Science Foundation (NSF) and the Department of Defense. The lack of inflation-adjusted growth in federal and New York State appropriations (a portion of which fund basic and applied research) has offset some of this growth. Almost all grant and contract support for the Medical College comes from the National Institutes of Health (NIH). While Cornell's faculty are very effective in garnering a substantial share of federal research support, the university's market share of overall federal research and development funding for science and engineering has changed over time. (See graph below.) A factor affecting Cornell's success in obtaining federal research funding is the U.S. Congress's growing practice of earmarking academic research funding. As reported in the *Chronicle of Higher Education* recently, \$1.6 billion "... was directed to scientific research at almost 500 institutions... [representing] about 5 percent of all federal

**Cornell University's Market Share of Overall Federal Research and Development Expenditures in Science and Engineering**



**Sources of Support for Cornell University Research Expenditures – 2006-07**



\* As per NSF reporting guidelines, *Cornell resources* include: institutional cost sharing, graduate assistantship tuition fellowships, university seed research grants, unrecovered facilities and administrative costs, and the organized research portion of New York State-funded employee benefits.

money for academic research" in 2007-08.<sup>18</sup> As Cornell generally eschews federal earmarks, the university does not effectively compete for this funding source.<sup>19</sup>

Increasingly, Cornell must utilize its own resources to help fund the overall research enterprise. In 2006-07, \$118 million (18 percent of overall research expenditures) was so dedicated. (See graph above.) These expenditures include cost sharing, a portion of the cost of tuition for graduate assistantship holders, facilities and administrative costs attributable to research that cannot be recovered from the sponsors of that activity, institutional funding to encourage new research en-

18 Brainard, Jeffrey and J.J. Hermes, "Colleges' Earmarks Grow, Amid Criticism." *The Chronicle of Higher Education* (Mar. 28, 2008). <http://chronicle.com/weekly/v54/i29/29a00101.htm>

19 While *The Chronicle of Higher Education* reported that Cornell benefited from \$5.1 million in non-shared earmarks in 2007-08, the total was closer to \$4.1 million, according to an analysis conducted by Cornell's Division of Government and Community Relations.

## TUITION, FINANCIAL AID & ENDOWMENT

deavors, and New York State-funded employee benefits costs that are related to research.

### Financial Aid

Most government-funded undergraduate financial-aid programs were created in the 1960's, as successors to the *Servicemen's Readjustment Act of 1944*, popularly known as the "GI Bill." Pivotal federal legislative actions of the time were the *Economic Opportunity Act of 1964* and the *Higher Education Act of 1965*, which is reauthorized periodically. These and other laws created programs to provide grant, loan, and work-study support for low-income students as well as to channel expanded funding to higher education institutions directly. As reported by the College Board,<sup>20</sup> the demand for federal financial-aid funding rose dramatically in the 1970's, so much so that the U.S. Congress reshaped these programs to diminish the cost of federal grant funding, substituting a variety of subsidized and unsubsidized loan programs.<sup>21</sup> More recently, Congress has instituted education tax credits and tuition and fee deductions that benefit middle-income families primarily.<sup>22</sup> These policy changes have: (a) encouraged generations of students to assume ever increasing levels of debt to finance their educations and (b) forced institutions of higher education to commit their own resources to substitute for the missing grant aid. (See graph at right.) Federal loan programs currently account for 40 percent of all student aid, and loans from all sources represent 52 percent of the total. At \$26.3 billion in 2006-07, grant aid funded by colleges and universities from institutional resources exceeded the

20 College Board, *Trends in Student Aid 2007*. <http://professionals.collegeboard.com/data-reports-research/trends/student-aid-2006>

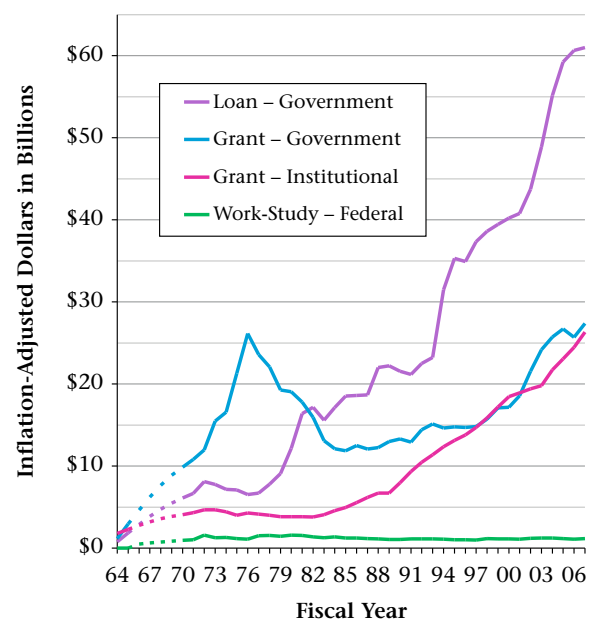
21 The enrollment of first-time freshmen in U.S. degree-granting institutions of higher education climbed from 670,000 to 1,046,000 over the ten years between 1954-55 and 1963-64. This enrollment increased 38 percent in the next two years, rising to 1,442,000. By 1975-76, the number of first-time freshmen had reached 2,515,000—almost two and a half times the number enrolled when Congress passed the 1964 and 1965 acts.

22 Educational tax benefits were introduced in 1998-99 and were projected to total \$5.9 billion in 2006-07. In 2005, taxpayers with incomes above \$50,000 enjoyed 58 percent of all tax education credits and 83 percent of all tuition tax deductions.

total of federal sources (\$19.6 billion) and was slightly less than the total grant aid provided by federal and state resources combined (\$27.4 billion).

Many of these national trends have been mirrored at Cornell over the past 20 years, though differently and in some cases more dramatically. (See graph at the top of page 16.) Federal and state funding for undergraduate grant aid increased nominally but decreased in inflation-adjusted terms, dropping from \$17.7 million in 1987-88 to \$14.6 million in 2006-07. The use of government loan resources for need-based financial aid (which accounted for 92 percent of such loans at Cornell in 2006-07) increased in inflation-adjusted terms through the late 1990's, but has declined since. Cornell-funded grant aid has tripled, in inflation-adjusted terms, over the same period, rising to \$109.3 million in 2006-07. Cornell's recently announced initiative to alter how financial aid is awarded to lower-income students will further transform the trends displayed in this graph by increasing the amount of Cornell-funded grant aid and lowering students' reliance on federal loan programs.

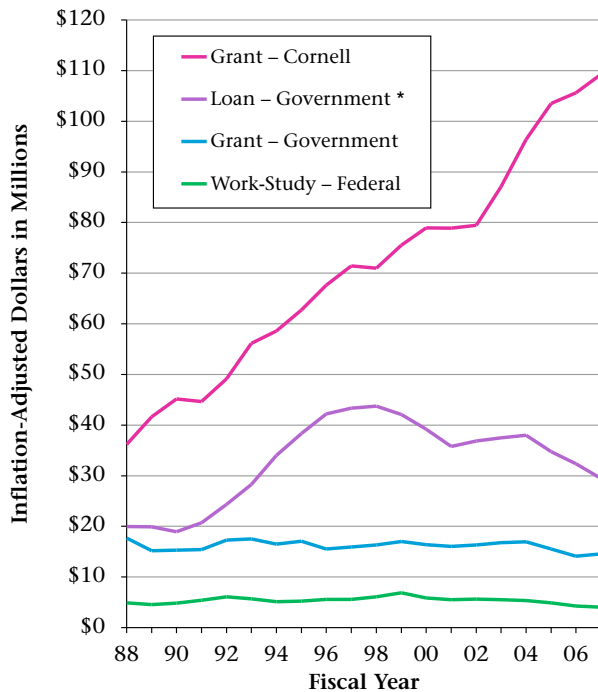
**Selected Sources of Financial Aid for U.S. Postsecondary Education \***  
(in inflation-adjusted, 2006-07 dollars)



\* Data interpolated between 1964-65 and 1969-70.

### Selected Sources of Need-Based Financial Aid for Cornell Undergraduates

(in inflation-adjusted, 2006-07 dollars)



\* Excludes the use of non-need based government loans by students, parents, and guardians.

### ENDOWMENT AND DEBT

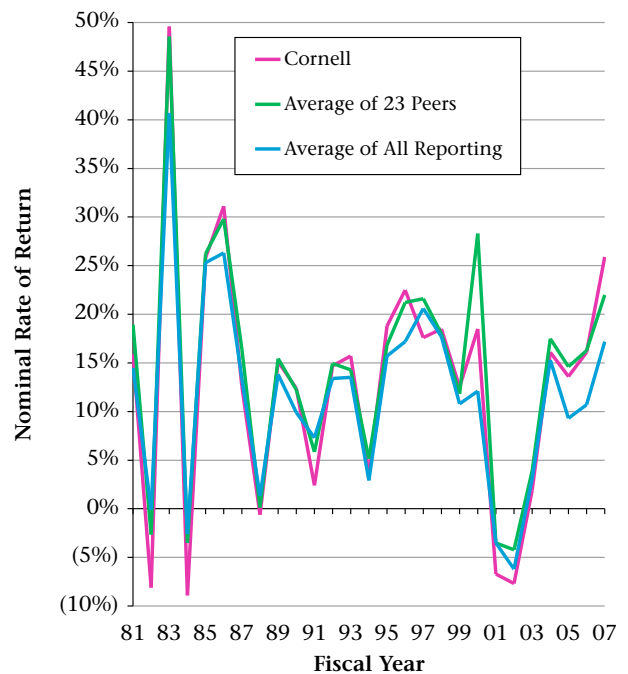
While the purpose of an endowment payout or spending policy is to regulate the use of investment return in a given budget year, such a policy undergirds a more fundamental principle—that in setting payout, university trustees must balance the demands of the present and the needs of the future, a quest that is sometimes referred to as “maintaining intergenerational equity.” A payout policy accomplishes this by:

- Ensuring regular and predictable payout increases to support a variety of university costs that experience inflationary and programmatic growth
- Regulating the absolute level of payout so that it will not reduce the endowment corpus dramatically during periods of lower or negative returns
- Making certain that payout for true endowments continues and the original corpus of the endowment gift is maintained in perpetuity

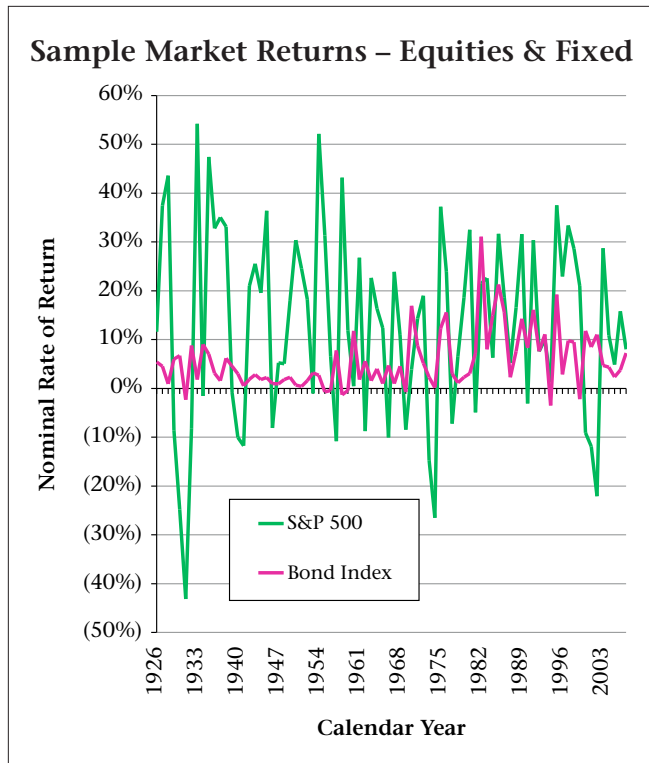
Where possible, universities pool gifts that are to be invested and treat them as mutual funds. This pooling allows a payout policy to be applied uniformly across funds. Payout must be set in advance so that it can be planned as part of the institution’s budget. The payout for a given year could theoretically equal the increase in the market value of the portfolio less the diminution of that value caused by inflation, investment management costs, and any service charges. Ideally, payout should increase annually or at least not decrease precipitously. Unfortunately, neither the total return nor the rate of inflation can be known in advance. For these reasons, institutions employ smoothing rules that link payout to previous investment performance and spending levels. Smoothing rules help to insulate payout growth from the sometimes significant swings in market returns.

The graph below shows that among institutions reporting in the NACUBO Endowment Studies, returns averaged 11.8 percent from 1980-81 through 2006-07. Annual average returns for these institutions varied

### Endowment Investment Returns as Reported by NACUBO †



† Investment returns, net of investment management costs, as reported in the annual NACUBO Endowment Studies.



from 40.7 percent to minus 6.2 percent. Cornell had a cumulative 12.9 percent return over the same period, with swings from 49.6 percent to minus 8.9 percent, while 23 of Cornell’s research university peers<sup>23</sup> had a cumulative 14.3 percent return, with swings from 48.6 percent to minus 4.2 percent.

Such volatility is not unusual. The graph above shows the nominal rates of return for the S&P 500 index and a general bond index for the period 1926 through 2006.<sup>24</sup> While most university endowment portfolios today contain far less domestic equity than they did in 1980-81—including as they do foreign, private, and hedged equity and real-estate and resource-related investments—these endowments will continue to see swings in returns that are related to both the conditions of specific markets and changes in the general economic health of the world.

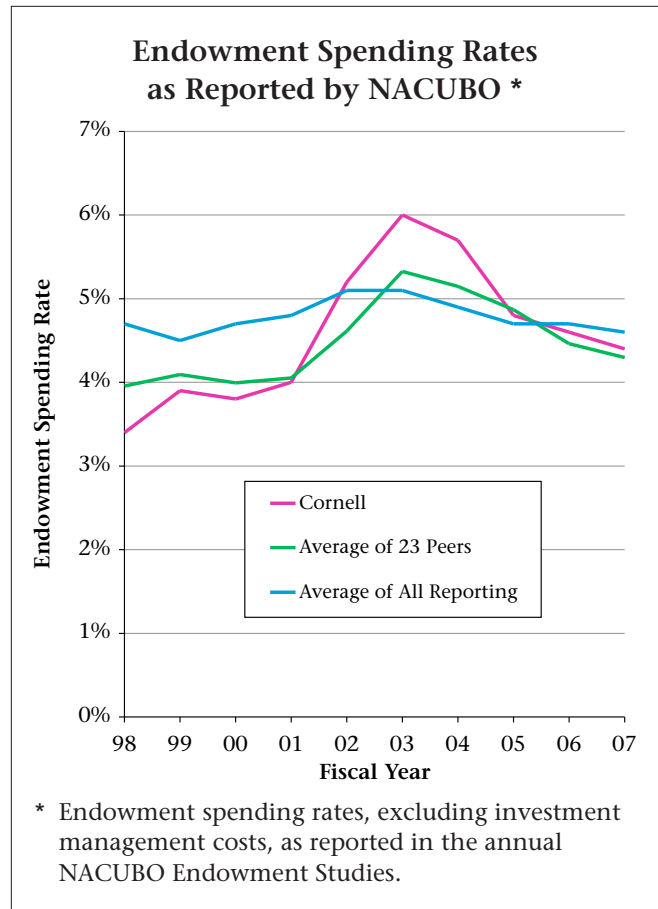
23 Those American institutions with the largest endowments plus universities that Cornell competes with for undergraduate students.

24 The S&P 500 index was reconstructed prior to 1969. The bond index shown is an amalgamation of the Intermediate Term Government Bond Index from 1926 through 1972 and the Lehman U.S. Government/Credit Bond Index thereafter.

## Spending Rates

There is no generally accepted approach used to determine payout and smooth market swings. Each institution crafts a spending policy that fits its own culture and needs, yet common threads do emerge. According to the 2007 NACUBO Endowment Study, most institutions adjust payout annually by employing: (a) a fixed percentage of average market values, (b) a fixed percentage of beginning market values, (c) a fixed percentage of current yield, (d) a percent increase of the prior year’s spending, (e) a unique rate each year, or (f) a combination of these factors.

Despite this heterogeneity in spending policies, there is a remarkable consistency in the level of endowment payout practiced within higher education. The graph below shows that among all institutions reporting in the 2007 NACUBO Endowment Study spending averaged 4.8 percent over the past ten years. Average spending of 23 of Cornell’s research university peers (the endowments of which, together with Cornell’s, accounted for 46 percent of the total reported in 2007)



was 4.5 percent. Cornell's shareholder payout averaged 4.6 percent over this period.<sup>25</sup> Cornell, along with most other institutions, experienced lower-than-normal spending rates during the dot-com bubble and higher-than-normal rates when the bubble burst. More recently, Cornell's spending rate has converged with the rates of its research university peers and the overall average of the institutions that participate in the NACUBO Endowment Study.

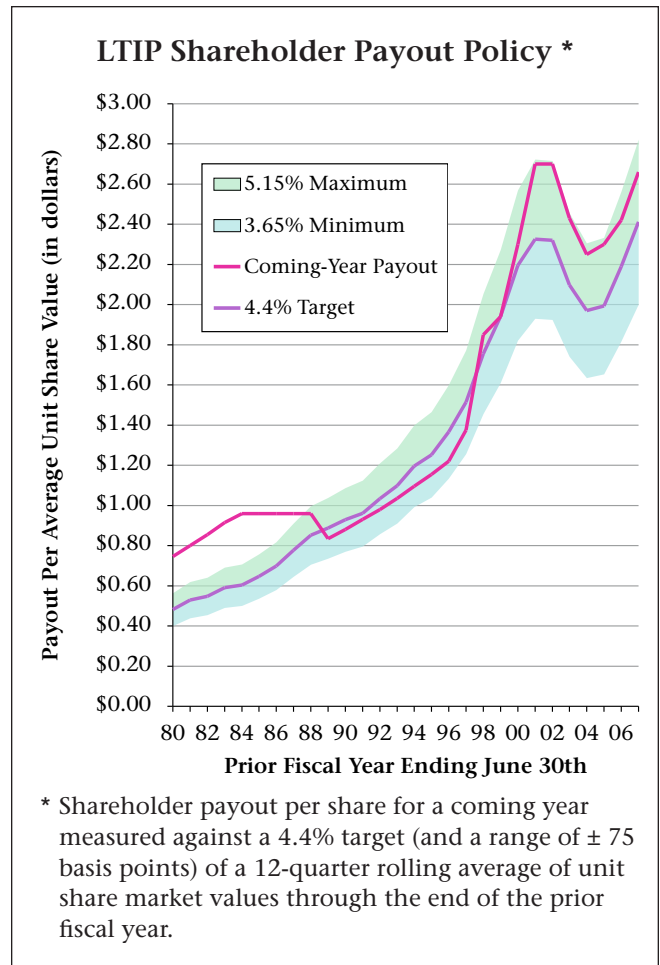
### Cornell's Payout Policy

Cornell's payout policy has the following provisions:

- A per-share payout is set in advance by the trustees as part of the budget approval process.
- The proposed shareholder payout for a coming fiscal year is normally 5 percent greater than the prior fiscal year, as long as that increase allows the payout to remain within a defined target-range of 4.4 percent of a twelve-quarter rolling average of LTIP unit share values, plus or minus 75 basis points.<sup>26</sup>
- In lieu of the normal 5 percent annual increase in payout, the trustees occasionally make step adjustments—both incremental and decremental—to maintain the payout within its target boundaries.

Cornell's shareholder payout policy is visualized in the graph at right, which tracks the annual payout per share and contrasts it with the payout's acceptable target range based on the rolling average of market share values.<sup>27</sup> The goal is to have the coming-year payout (the pink line) track the 4.4 percent target (the purple line).<sup>28</sup> The colored bands represent the permissible variance of the payout to its target.

The change in LTIP market value (represented in the graph as the purple line and its associated colored



bands) isn't used to set payout but instead serves as a test for the adequacy of allowing the payout to grow by inflation. When the test reveals that the proposed payout would be too great or too small, the trustees make stepped changes as course corrections. The use of a 5 percent inflator for the annual growth in payout was predicated on an analysis of long-term inflationary growth and investment performance conducted for Cornell by Cambridge Associates, Inc. While inflation as measured by the change in the Consumer Price Index (CPI) had an average annual growth of 2.5 percent over the past 10 years, the growth has been greater over the past 50 years (4.1 percent). The inflationary growth in higher education costs, as measured by the Higher Education Price Index, trends about one percentage point above CPI inflation. Thus Cambridge Associates recommended that Cornell needed a 5 percent annual increase in endowment payout just to keep pace with the long-term growth in its cost struc-

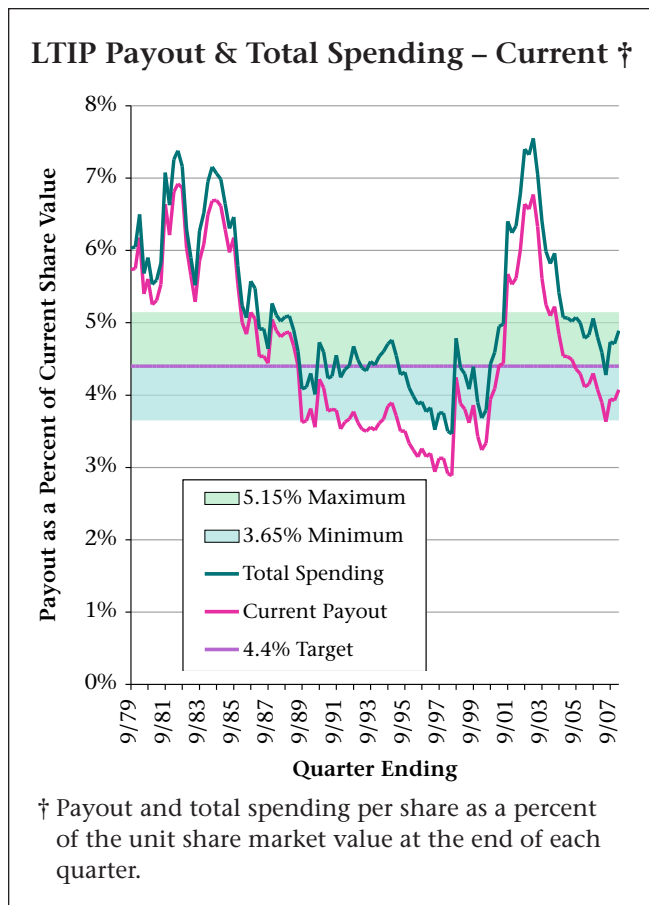
25 Cornell reported shareholder payout for the NACUBO survey. Cornell's overall spending, which included service charges, averaged 5.1 percent for the period 1997-98 through 2006-07.

26 Total spending includes payout as well as investment expense and service charges.

27 This illustration applies the current payout policy and guidelines to all prior years, even those in which payout was set under different policies.

28 The 4.4 percent target is the fraction of the total asset value that should be paid out to shareholders every year, on average.





ture, which is dominated by personnel costs<sup>29</sup> and heavy investments in new technologies.

While the policy assumes that payout could grow at a constant 5 percent per year, it has not often done so. The annual 5 percent growth rate represents an idealized goal against which reality is measured.

The graph above displays the payout and total spending on a current basis (rather than the lagged basis used for the graph on page 18). Both payout and total spending are shown for each quarter as a percent of the unit share market value at the end of that quarter. Total spending, which includes payout as well as investment management expense and service charges,<sup>30</sup> is normally about 70 basis points above a given year's payout.

29 Salary, wage, and employee benefits expenditures represent 60 percent of operating costs at Cornell and in higher education in general.

30 Service charges were instituted by Cornell's trustees in 1948, and are designed to pay for the general and stewardship costs of endowments.

## Mutual Fund or Annuity?

Some aspects of the management of the LTIP make it resemble a mutual fund; other aspects cause it to be similar to an annuity. As with a mutual fund, LTIP additions buy unitized shares, and it is the number of shares alone that determines all future payouts, even though the market value of those shares will change over time. That market appreciation, while not affecting the number of shares, permits future increases in payout level, allowing the fund to keep pace with inflation and causing all endowment shares to be treated equally no matter when they were purchased.

As with an annuity, Cornell makes a long-term and conservative prediction about its return on investment. The university couples that prediction with a commitment to provide a stable source of annual support, adjusted for inflation, for the life of the annuitant. Of course the annuitant in this case is the university itself, or more precisely the 6,900 individual funds that make up the LTIP, and lifespan is measured in centuries if not millennia. At one time, the annuity-like approach influenced how endowments were invested. For example, Cornell's investment portfolio was 97 percent bonds and mortgages 100 years ago. The mind-set that the investment portfolio had to be secured to relatively safe instruments was hinged to a related construct that only interest and dividends could be paid out to shareholders. This aspect of the annuity perspective changed as federal and state laws were revised, allowing trustees greater flexibility to invest in a variety of markets.

Despite the similarities, the LTIP is neither a mutual fund nor an annuity.

- LTIP payout is a composite of interest, dividends, and capital appreciation that is declared in advance rather than after it is earned (as would be the case of a mutual fund). While a mutual fund would distribute all interest, dividends, and realized capital gains annually, LTIP payout may represent only a portion of these earnings in a given year. It is the choice of Cornell's trustees to not distribute all earnings within the year that allows the LTIP to appreciate over time, offsetting the diminishing effects of inflation.
- Unlike the case of an annuity, the university does not enter into a contractual obligation to make periodic payments to its "annuitants." In addition,

the endowment’s extremely long time horizon influences investment and payout choices that are not congruent with the model used by a typical annuity, which assumes an eventual termination of the annuity payments.

### Managing Debt

For the first 100 years of Cornell’s existence, its trustees were parsimonious in the use of debt, believing, as noted in a 1975 trustee report, that “while investments provide resources for the future, debt creates a mortgage against future income.”<sup>31</sup> Cornell had nearly gone bankrupt in the 1870’s and 1880’s and was strained severely during World War I and the Great Depression, incurring \$1.5 million in operating losses and unfunded capital expenses between 1925 and 1937 that were offset by the decapitalization of a portion of the Cornell endowment.<sup>32</sup> Generations of Cornell trustees, including those of the mid-twentieth century, were suspect of incurring obligations that would be difficult to meet. Two factors combined to alter this point of view and helped set in motion the university’s current approach to debt:

- The creation of the Dormitory Authority of the State of New York (DASYN) in 1944, first to construct dormitories for the State Teachers’ Colleges and subsequently (in 1960) to bond construction projects for private colleges and universities
- The need to expand Cornell’s facilities to accommodate both enrollment growth and an expansion in research activities

As described in that 1975 trustee report:

Prior to 1965 the University had little debt. At that time, the pressures to expand University facilities and the ready availability of government-backed credit from both state and federal sources led Cornell’s trustees to re-evaluate and liberalize earlier policies to permit assuming limited amounts of debt for essential facilities—particularly those expected to generate substantial revenues—or whose construction could be partially supported from gifts.

Cornell’s annual debt service payments to DASNY quickly rose from zero in 1962 to \$3.8 million in

31 “Report of the Trustee Ad Hoc Committee on Capital Financing.” Ithaca: Cornell University, 1975.

32 Board of Trustees. “Minutes (Apr. 29, 1939).” Ithaca: Cornell University.

### Outstanding External Debt by Category (dollars in millions)

<u>Category</u>	<u>4/30/71</u> <u>Principal</u>	<u>% of</u> <u>Total</u>	<u>2/29/08</u> <u>Principal</u>	<u>% of</u> <u>Total</u>
Residence/Dining	\$33.4	67%	\$290.7	38%
Physical Plant	3.5	7%	137.2	18%
Academic	7.0	14%	305.7	39%
Other/Miscellaneous	<u>6.2</u>	<u>12%</u>	<u>39.7</u>	<u>5%</u>
<b>Total</b>	<b>50.1</b>	<b>100%</b>	<b>773.3</b>	<b>100%</b>

1972-73.<sup>33</sup> For most of the 1960’s and 1970’s, debt was used to finance dormitories and utility projects, where the debt service could be built into revenue streams with defined rate structures. Few facilities projects that were academic, administrative, or general support in nature were debt financed. The trustees’ approach underwent a second evolutionary change in the last decades of the twentieth century, as the judicious use of debt—within an overall financial framework that viewed endowment and debt as two sides of the same coin—was embraced. The advantageous use of debt has become a form of investment that recognizes that programmatic returns may have the same relevance and currency as financial returns. The university now examines the total amount of debt that it can reasonably incur while maintaining its current debt ratings, and allocates access to that debt as a resource.

As a result of these changes, Cornell expanded its use of tax-exempt debt and began to issue taxable debt (beginning in 1987) and variable-rate debt where rates and terms were advantageous. Cornell has also entered into forward-swap agreements to lock in rates on anticipated borrowings and has issued both tax-exempt and taxable commercial paper when conditions warrant, creating a matrix of debt instruments that approaches the complexity of the university’s investment portfolio. As with investments, debt is managed in a pooled fashion (where permitted), and the internal payment of debt service for various projects is separated from the external repayment of debt by the university. The trustees’ change in approach of using debt to finance academic construction projects can be seen in the table above, which shows that almost

33 “Report of the Advisory committee on Financial Planning to the President” (Cranch Report). Ithaca: Cornell University, 1972.

## TUITION, FINANCIAL AID & ENDOWMENT

40 percent of all external debt is now related to such facilities. There has also been an increase in the use of debt to finance utility projects (shown as “physical plant” in the table) in order to lower energy costs.

There are laws and important rules that govern the use of tax-exempt debt by colleges and universities.

- First, the institution cannot incur tax-exempt debt for projects in order to offset dedicated, restricted gifts that have already been made for the project. If such a restricted gift is received after the bonds have been issued, the institution is required to retire or redeem the tax-exempt bonds (or portions thereof) as rapidly as possible in an amount equal to the value of the gift.
- Second, institutions cannot exploit the difference between tax-exempt and taxable interest rates to obtain a material financial advantage or engage in what is called “overburdening” the market for tax-exempt obligations.

## INFLATION AND PRODUCTIVITY

At the heart of the national debate over college tuition is the fact that tuition and the underlying cost of education have grown faster than the increase in the Consumer Price Index (CPI). Absent from the discourse is any consideration of whether tuition and the cost of education should be expected to grow at the rate of change of a particular assemblage of consumer prices, weighted for their relative levels of consumption. Absent further is any consideration of why prices inflate at all (i.e., why currencies deflate), and why that should be the normal and expected state of affairs.

While the CPI, which measures inflation in day-to-day living expenses of average American consumers, is widely known and often viewed as the definitive measure of inflation, it is only one of many ways to measure the change in the purchasing power of the dollar. Other inflation-measuring indexes include:

- The *Producer Price Index* (PPI), which measures inflation at the wholesale price level
- The *Employment Cost Index* (ECI), which measures inflation in the labor market
- The *Gross National Product Implicit Price Deflator* (GDP-Deflator), which measures the inflationary experience of the nation at large

Besides these general indexes there are many specialized measures, such as the Higher Education Price Index (HEPI), that focus on particular activities. The difficulty in relating general inflationary indexes to specific activities is the potential mismatch between the elements being measured. For example, the CPI tracks the following goods and services:

Food	15.4%
Housing	42.1%
Apparel	4.0%
Transportation	16.9%
Medical Care	6.1%
Recreation	5.9%
Education	5.9%
Other	3.7%
Total	100.0%

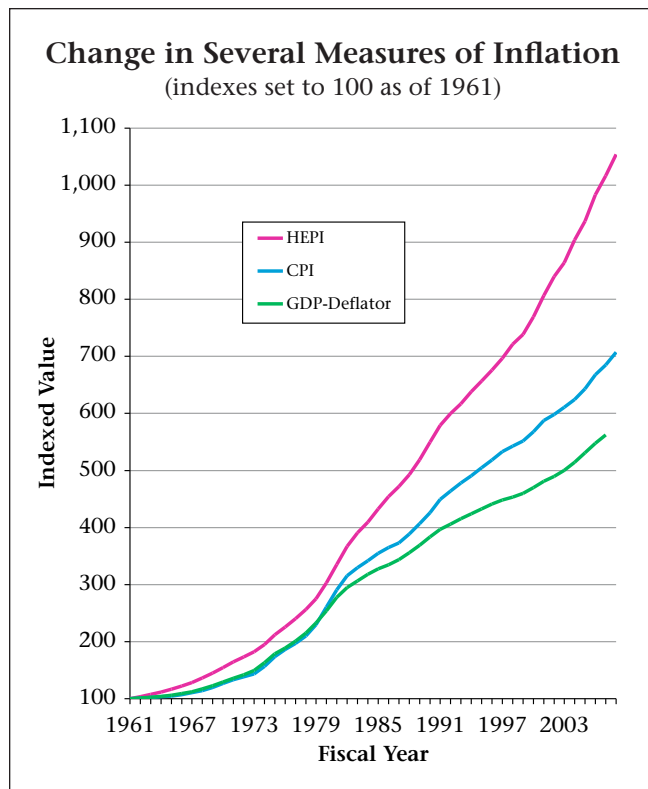
HEPI’s categories differ significantly:

Staff Salaries & Wages	62.3%
Employee Benefits	12.5%
Contracted Services	7.7%
Supplies & Materials	4.4%
Equipment	2.8%
Library Acquisitions	2.5%
Utilities	7.8%
Total	100.0%

The relative change in three of these indexes—HEPI, CPI, and GDP-Deflator—is shown in the graph on page 22. Since 1960-61, the inflationary pressure on higher education has been 49 percent greater than that felt by consumers and 81 percent greater than that experienced in the production of all U.S. goods and services. It is hardly surprising that colleges and universities experience inflation differently from consumers at large.

Beginning in the 1960’s, the economist William J. Baumol described what he eventually called the “cost disease” that affected the personal service sector of the world’s economies—those activities related to the live performing arts, health care, municipal governments, machine maintenance, care of the indigent, education, and other labor-intensive undertakings. He notes that “...inherent in the technological structure of each of these activities are forces working almost unavoidably for progressive and cumulative increases in the real costs incurred in supplying them.”<sup>34</sup> Not only is

34 Baumol, William J., “Macroeconomics of Unbalanced Growth: the anatomy of urban crisis.” *The American Economic Review*, Vol. 57, No. 3 (1967).



the personal service sector of the economy labor-intensive, its workers are often skilled, highly trained, in demand, and expensive, and its cost structure is dominated by that labor cost. The nature of the services rendered by this sector does not benefit readily from the approaches used elsewhere in the economy to gain productivity: the substitution of automation (robotics and systems) for human activity, the outsourcing and offshoring of that human activity to low-wage nations, the increase in the volume of production, and the reduction of product quality. In many cases, the personal service sector of the economy must maintain wage parity with other economic sectors or risk losing workers and is often expected to improve the quantity and quality of its services. (Witness the demand for better and more comprehensive health care, improved elementary and secondary education, wider opportunities for higher education, and improved nursing-home care.) As Baumol noted:

There are at least two reasons why rapid and persistent productivity growth has eluded the stagnant services. First, some of them entail production processes that are inconsistent with standardization. Before one can undertake to cure a patient or to repair a broken piece of machinery it is necessary to determine, case by case, just what is wrong, and then the treatment must be tailored

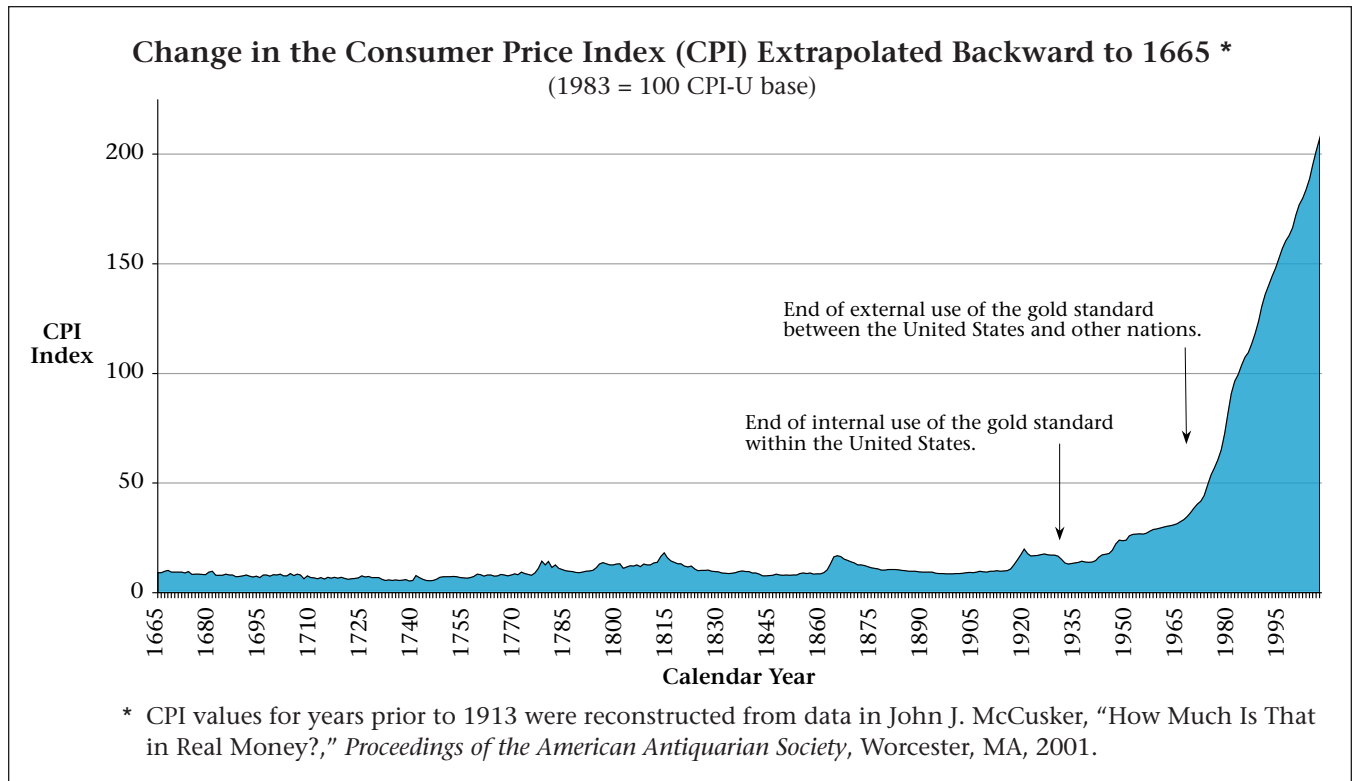
to the individual case. The manufacture of thousands of identical automobiles can be carried out on an assembly line and much of the work done by industrial robots, but the repair of a car just hauled to a garage from the site of an accident cannot be entrusted to automated processes. A second reason why it has been difficult to reduce the labor content of these services is the fact that in many of them quality is, or is at least believed to be, inescapably correlated with the amount of human labor devoted to their production. Teachers who cut down the time they spend on their classes or who increase class size, doctors who speed up the examination of their patients, or a police force that spends less time on the beat are all held to be shortchanging those whom they serve. This, then, is why the stagnant services have consistently proved unamenable to productivity growth.<sup>35</sup>

This does not mean that personal service activities are immune to efficiency. The discussion of cost containment at Cornell that begins on page 8 illustrates the many ways that expenditures can be reduced and productivity improved in higher education. These important advances will not change the fact that there is a pedagogic advantage in maintaining a low student-to-faculty ratio, in limiting the number of large-enrollment classes, in ensuring that undergraduates have access to tenured faculty who are among the best in their fields, and in allowing undergraduates to participate in meaningful research and to develop critical thinking skills. The activities of scholarship and research, which also benefit from a variety of technological advances, are nevertheless inefficient enterprises in which progress is difficult to predict, advances take years, and success is often built upon a careful analysis of many failures. Unless there is a societal imperative to fundamentally change the nature of education, it will remain, along with other personal service sectors of the economy, disadvantaged vis-à-vis other sectors of the economy in terms of productivity gains and, consequently, its costs will continue to outpace the price growth in consumer goods and services.

### Inflation as Normal

The concept that money's purchasing power can change over time is familiar. Less well understood, however, is the fact that chronic inflation is a rela-

<sup>35</sup> Baumol, William J., "Health Care, Education and the Cost Disease: a looming crisis for public choice," [In] *Baumol's Cost Disease: the arts and other victims*, ed. Ruth Towse. Northampton: Edward Elgar, 1997.



tively modern phenomenon. Periods of inflation and deflation occurred repeatedly during this country's history. (See graph above.) They were episodic, linked to major upheavals such as wars, in which the scarcity of goods and services drove up prices. Invariably, inflation subsided, although it sometimes settled at elevated plateaus. An American of the 1850's would have expected to sell farmland for the same \$1 per acre that he paid for it 30 years earlier, and a 2 to 3 percent interest rate was viewed as advantageous as it represented simultaneously the nominal and real return on capital.

Two events changed that pattern in the twentieth century: (a) the increasing globalization of trade, investment, and currency exchange among nations and (b) the unlinking of currencies from commodities such as gold and silver. The U.S. currency system was partially freed from the gold standard during the Civil War, when the federal government, faced with staggering war costs and a dwindling treasury, had to print what amounted to promissory notes—so called "greenbacks"—as legal tender. This currency was backed, not by a precious metal, but instead by the full faith and credit of the nation. Senator Justine S. Morrill of Vermont, the author of the 1865 Land-

Grant Act, railed against the proposal as it was debated in Congress:

If the first step were taken in making paper a legal tender, we must go on. ...having tested this facile mode of paying debts, I fear the stern and honest mode of taxation would be repugnant to many constituencies, and that the doors of the temple of paper money would not soon again be closed. Gentlemen may think otherwise, but, like a certain heroine who "Said she'd ne'er consent, and consented still," Congress would consent. If we have not the virtue and the power to resist the temptation now, while our reputation is spotless, we shall have still less when the whole country becomes debauched.<sup>36</sup>

Despite Senator Morrill's worst fears, the nation and the world moved away from precious metals as the anchor for currency and currency exchanges. One unintended consequence of allowing currencies to float, as they now do, is for prices to rise faster than real changes in productivity. This can occur because of excess demand for goods and services or the need of producers to increase prices to maintain profit margins in the face of increased costs. Governments now attempt to manage inflation through their monetary

<sup>36</sup> Bolles, Albert S., *The Financial History of the United States, from 1861 to 1885*. New York: D. Appleton & Co., 1886.



policies by regulating the amount of money in circulation and the cost of credit issued by central banks, such as the Federal Reserve in the United States.

In theory, it should not matter whether costs and prices inflate, deflate, or remain the same as long as all elements of the economy experience the change similarly. In practice, there is great psychological value in managing the economy to create a low, modulated inflation rate that can be anticipated and accommodated. Because inflation creates the illusion of constant improvement, it masks real (fundamental) changes in costs and earnings. In this capacity, inflation has become the endorphin of the modern economy. Alternatively, lack of inflation, or worse, deflation, connotes regression and deterioration. Even if it is demonstrable that one's decrease in salary is being offset by a decrease in one's cost of living, the former remains difficult to accept.

For higher education, inflation is especially problematic. While tuition, endowment payout, and salary increase rates may be announced six months prior to the start of a fiscal year, they must be planned well before then. That planning involves making educated guesses about hundreds of individual cost elements, most of which will experience a variety of inflationary changes and taken together constitute a complex moving target. Under- or over-estimating these individual inflationary pressures will result in rate changes that fail to maintain parity with the general measures of inflation such as the CPI, even if that goal were desirable. The tendency is to overestimate inflationary growth, as many rates (such as tuition) are difficult to adjust once the fiscal year begins, and the economic penalty for underestimating inflation is real.

### EXTERNAL PRESSURES/INTERIORITY

While it is clearly Cornell's legal prerogative to determine tuition, provide financial aid, and set endowment payout, it has historically considered the interests of all constituencies in establishing policies and making annual rate adjustments for these factors. In doing so, the university attempts to balance the financial need of its academic programs with the significant impact that its tuition and financial-aid practices have on students and their families and to maintain an equilibrium in the use of its endowment between the

pressing demands of the immediate situation and the eventual needs of future generations. Increasingly, the university makes these decisions in an environment where the federal and state government commitment to higher education appears to be wavering, the ability and willingness of students to bear a fair share of the cost of education is in question, and public understanding of university finances is minimal.

In her March 2008 Academic State of the University address, Provost Martin noted that:

...the relative disappearance of a focus on interiority is one of my biggest concerns. I am not talking about an interiority that takes the form of navel gazing or asocial individualism, but one that fosters awareness, a sense of responsibility, the development of individuality, the ability to integrate what we take in and to establish our own sense of value—all things that require engaging with the world around us, with other people, but also engaging with the person we are in the process of becoming.

The importance of this "interiority" can be extrapolated from the individual to the institution as Cornell, in the face of external pressures such as the U.S. Senate Committee on Finance's inquiry, continues to focus its policies on what is best for Cornell and its community of students, faculty, staff, and alumni. Doing so requires that the university employ the balance of freedom and responsibility that was articulated so well by Carl Becker, who observed that despite the free range that he was granted as a faculty member at Cornell he was nonetheless "...very much bound. Not bound by orders imposed upon me from above or outside, but bound by some inner sense of responsibility [to do] ... the best I was capable of doing."<sup>37</sup>

37 Becker, Carl L., "Freedom and Responsibility," [In] *Cornell University: founders and the founding*. Ithaca: Cornell University Press, 1943.

## UNDERGRADUATE FINANCIAL AID

<b>Sources of Funding for Undergraduate Financial Aid</b>						Change from Forecast to Plan	Annual Growth Rate from 87-88
(dollars in thousands)							
	<b>87-88</b>	<b>06-07</b>	<b>07-08</b>	<b>07-08</b>	<b>08-09</b>		
	<u>Actual</u>	<u>Actual</u>	<u>Plan</u>	<u>Forecast</u>	<u>Plan</u>		
<b>Family Contribution</b>							
1. Parental	\$22,189	\$73,932	\$76,889	\$75,500	\$78,520	4.0%	6.2%
2. Student	7,819	16,803	17,307	16,677	17,511	5.0%	3.9%
3. <b>Subtotal</b>	<b>30,008</b>	<b>90,735</b>	<b>94,196</b>	<b>92,177</b>	<b>96,031</b>	<b>4.2%</b>	<b>5.7%</b>
<b>Federal Government</b>							
4. Grants	5,143	9,353	9,695	10,364	11,106	7.2%	3.7%
5. Loans	11,192	27,102	29,500	26,895	27,061	0.6%	4.3%
6. Work/Study	2,769	4,044	4,000	4,068	4,200	3.2%	2.0%
7. <b>Subtotal</b>	<b>19,104</b>	<b>40,499</b>	<b>43,195</b>	<b>41,327</b>	<b>42,367</b>	<b>2.5%</b>	<b>3.9%</b>
<b>State Government</b>							
8. Grants	4,903	5,221	5,250	4,969	4,968	(0.0%)	0.1%
9. Work/Study	692						
10. <b>Subtotal</b>	<b>5,595</b>	<b>5,221</b>	<b>5,250</b>	<b>4,969</b>	<b>4,968</b>	<b>(0.0%)</b>	<b>(0.6%)</b>
<b>Other External</b>							
11. Grants	2,663	7,758	7,803	7,236	7,382	2.0%	5.0%
12. <b>Subtotal</b>	<b>2,663</b>	<b>7,758</b>	<b>7,803</b>	<b>7,236</b>	<b>7,382</b>	<b>2.0%</b>	<b>5.0%</b>
<b>Cornell</b>							
13. Unrestricted Grants	12,751	69,851	88,130	80,735	101,002	25.1%	10.4%
14. Restricted Grants	7,770	39,402	29,012	28,956	33,380	15.3%	7.2%
15. Loans	130	2,380	2,500	2,932	300	(89.8%)	4.1%
16. Work/Study	1,846	4,044	4,000	4,068	4,200	3.2%	4.0%
17. <b>Subtotal</b>	<b>22,497</b>	<b>115,677</b>	<b>123,642</b>	<b>116,691</b>	<b>138,882</b>	<b>19.0%</b>	<b>9.1%</b>
18. <b>Total</b>	<b>79,867</b>	<b>259,890</b>	<b>274,086</b>	<b>262,400</b>	<b>289,630</b>	<b>10.4%</b>	<b>6.3%</b>
<b>Financial-Aid Population</b>							
(on- and off-campus)							
	<b>1987</b>	<b>2006</b>	<b>2007</b>	<b>2007</b>	<b>2008</b>		
	<u>Actual</u>	<u>Actual</u>	<u>Plan</u>	<u>Actual</u>	<u>Plan</u>		
<b>Undergraduate Student Counts</b>							
1. Total Enrollment	12,958	13,562	13,531	13,510	13,641	1.0%	0.2%
2. Overall Financial-Aid Population	N/A	8,347	8,300	8,132	8,291	2.0%	
3. Percent of Total Enrollment		61.5%	61.3%	60.2%	60.8%		
4. Need-Based Financial-Aid Population	5,173	6,181	6,034	6,032	5,956	(1.3%)	0.7%
5. Percent of Total Enrollment	39.9%	45.6%	44.6%	44.6%	43.7%		
6. Cornell-Grant Recipients	3,815	5,551	5,345	5,394	5,347	(0.9%)	1.6%
7. Percent of Total Enrollment	29.4%	40.9%	39.5%	39.9%	39.2%		
8. Pell-Grant Recipients	1,820	1,834	1,800	1,856	1,850	(0.3%)	0.1%
9. Percent of Total Enrollment	14.0%	13.5%	13.3%	13.7%	13.6%		

Notes:

- Family contribution amounts are for students who demonstrate a financial need according to Cornell's methodology. Financial-aid amounts are shown as computed and as awarded.
- Enrollments exclude *in-absentia* and extramural students.
- \* Cornell-grant recipients are those U.S. citizens and permanent residents (excluding international students) who receive need-based grant aid from Cornell resources.
- † The number of Pell Grant recipients for fall 1987 is estimated based on the total funding received by Cornell in that year and the national average of Pell Grant awards.

## U.S. SENATE RESPONSE

The Senate Committee posed eleven questions that touched on institutional policies and practices governing tuition, financial aid, and endowments. Cornell's responses, which have been broken into subsections, is reproduced below.<sup>1</sup>

### Cornell University Response to the Questions Posed by The United States Senate Committee on Finance

February 20, 2008

Much of the information requested by the United States Senate Committee on Finance is regularly published and freely made available to the public through Cornell University's website. ([www.cornell.edu](http://www.cornell.edu)) Published documents that are referenced in this response are listed throughout, with linking URLs where online copies are available.

*1) Please provide the number of undergraduate and graduate students year-by-year for the last ten years.*

**Response:**

Headcount enrollments as of the 6th week of the fall semester of each year are displayed in Table 1 (above at right) for all of Cornell's colleges and schools. "Graduate" includes professional school students.

Reference: Cornell Factbook – Enrollment. ([http://www.dpb.cornell.edu/F\\_Enrollment.htm](http://www.dpb.cornell.edu/F_Enrollment.htm))

*2a) Please provide the total cost of undergraduate tuition (including all fees)—both sticker and average, mean and median—year-by-year for the last ten years.*

**Response:**

Shown in Table 2 (at right) are the applicable "sticker" tuition and mandatory fee rates for incoming freshmen. Cornell has three main undergraduate tuition rates:

- Endowed Ithaca tuition applies to the students enrolled in architecture, art and planning; arts and sciences; engineering; and hotel administration.
- The other two rates are associated with three of the four contract colleges at Cornell that enroll undergraduates:

<sup>1</sup> A copy of this response, including President David J. Skorton's cover letter, can be found at: [http://www.cornell.edu/president/docs/20080220\\_financeResponse.pdf](http://www.cornell.edu/president/docs/20080220_financeResponse.pdf)

**Table 1. Total Enrollment – Headcount**  
(6th Week of the Fall Semester)

<u>Fiscal Year</u>	<u>Undergraduate</u>	<u>Graduate</u>
1997-98	13,294	5,762
1998-99	13,442	5,857
1999-00	13,669	5,985
2000-01	13,590	6,030
2001-02	13,801	6,340
2002-03	13,725	6,512
2003-04	13,655	6,679
2004-05	13,625	6,611
2005-06	13,515	6,683
2006-07	13,562	6,855

agriculture and life sciences, human ecology, and industrial and labor relations. The contract colleges are affiliated with the State University of New York and are chartered under specific state laws. While components of a private university, the contract colleges employ a system of resident and non-resident tuition rates to recognize the financial assistance that New York State provides to Cornell to support these colleges.

Cornell's only mandatory fee—the student activity fee—applies equally to all on-campus undergraduates.

In addition to these main rates, Cornell charges other tuitions for undergraduates enrolled in off-campus programs, within the U.S. and abroad. In some abroad programs, Cornell charges reduced tuition and the hosting university charges the student its own tuition and fees. These off-campus rates (Cornell's or other institutions') are not shown under "sticker."

Reference: Cornell Factbook – Tuition & Mandatory Fees. (<http://www.dpb.cornell.edu/documents/1000212.pdf>)

**Table 2. Tuition & Mandatory Fees Undergraduate – "Sticker"**

<u>Fiscal Year</u>	<u>Endowed Ithaca</u>	<u>Contract Resident</u>	<u>Contract Nonresident</u>
1997-98	\$21,914	\$9,374	\$18,024
1998-99	22,868	9,938	18,988
1999-00	23,848	10,418	19,988
2000-01	24,852	10,922	20,992
2001-02	26,062	12,062	22,292
2002-03	27,394	13,274	23,624
2003-04	28,754	14,624	25,924
2004-05	30,167	16,037	28,567
2005-06	31,467	17,367	30,367
2006-07	32,981	18,241	31,881

The mean net tuition and mandatory fee amounts paid per year are displayed in Table 3 (below), weighted for the relative proportion of student enrollments at the different tuition rates shown in Table 2 (on page 26). Net tuitions were computed two ways: (a) by taking gross tuition revenues and subtracting grant aid from Cornell's sources and (b) by taking gross tuition revenues and subtracting grant aid from all sources: Cornell, governments, and other externalities. Those averages have been contrasted with the weighted average "sticker" prices charged during the period. The first method represents what Cornell experiences as net revenue; the second represents what the student experiences as net price.

The figures in Table 3 (below) represent on-campus enrollments and rates only. The population of students enrolled in off-campus programs (and their attendant special tuition rates) was not considered in these calculations. Factored into the analysis, however, are lower tuition rates that were charged to continuing nonresident contract college students during some of these years.

As is evident in Table 3 (below), Cornell provides most of the grant-aid that its students receive and has increased the proportion of that grant aid as a percent of the "sticker" price over the past six years. Over the past ten years, the fraction of Cornell's "sticker" price paid for from external grant aid—including federal and state resources—has declined steadily, from 7.3% in 1997-98 to 5.6% in 2006-07.

Cornell cannot easily provide the median net tuition and mandatory fee amount charged for the ten-year period, as the university did not track this metric during this time. Until recently, the bursar files that would be required for such a

detailed, person-by-person analysis were purged every year at the start of a new year's billing cycle.

**2b) Please provide the amount of tuition assistance (not including loans or work study) that the university has provided to undergraduate students year-by-year for the last ten years.**

**Response:**

Cornell provides undergraduates with financial aid that helps to pay for the total cost of attendance: tuition, fees, room, board, textbooks, and miscellaneous expenses (e.g., travel to and from home to campus). Thus, the financial aid provided (grant aid, as opposed to loans and work/study) is not just for "tuition assistance," and for some students it exceeds the cost of tuition. Table 4 (at the top of page 28) displays the total amount of grant aid provided in each year from Cornell's resources, including aid to international students.

Reference: Appendix G of Cornell University's annual financial plan booklet, available by fiscal year. ([http://www.dpb.cornell.edu/FP\\_Current\\_Pubs.htm](http://www.dpb.cornell.edu/FP_Current_Pubs.htm))

**2c) For the most recent year, please provide the percentage of students receiving university grants (for example 25%; 50%; 75% and 100% of tuition and fees). Please provide the average grant amount.**

**Response:**

Table 5 (at the bottom of page 28) indicates the number of undergraduates who received grant aid from Cornell's resources, by the ranges suggested in question 2c—including the number

**Table 3. Tuition & Mandatory Fees – Undergraduate – “Sticker” Versus Net**

<u>Year</u>	<u>Tuition &amp; Fees “Sticker” *</u>	<u>Tuition &amp; Fees Net of Cornell Sources *</u>	<u>Cornell Aid Sources as a % of “Sticker”</u>	<u>Tuition &amp; Fees Net of All Aid Sources *</u>	<u>All Aid Sources as a % of “Sticker”</u>
1997-98	\$18,912	\$14,656	22.5%	\$13,274	29.8%
1998-99	19,931	15,374	22.9%	13,930	30.1%
1999-00	20,814	15,994	23.2%	14,508	30.3%
2000-01	21,830	16,815	23.0%	15,255	30.1%
2001-02	23,107	18,041	21.9%	16,426	28.9%
2002-03	24,424	18,718	23.4%	17,057	30.2%
2003-04	25,862	19,375	25.1%	17,597	32.0%
2004-05	27,575	20,391	26.1%	18,665	32.3%
2005-06	29,152	21,475	26.3%	19,830	32.0%
2006-07	30,637	22,520	26.5%	20,814	32.1%

\* Tuition and mandatory fees displayed in this table—“sticker” and both net amounts—have been weighted for the relative proportion of student enrollments at the different main tuition rates shown in Table 2 as well as the lower tuition rates that were charged to continuing nonresident contract college students during some of these years.

of students whose grant aid exceeds 100% of tuition—based on the individual tuition and mandatory fee rates that each paid. (See answer to question 2a above concerning Cornell's various tuition and mandatory fee rate structures.)

Because undergraduate financial aid is awarded based on the overall cost of attendance—tuition and mandatory fees, room and board, books, and personal expenses—a number of students (631 in 2006-07) qualify for grant-aid in excess of their individual tuition and mandatory fee rates.

**3a) Please explain your university's financial aid policy.**

**Response:**

Cornell's undergraduate financial-aid policy—which was predicated on its founding mission as the land-grant university for New York State; its founding goal to extend education to students regardless of race, gender, creed, or economic circumstances; and a history of providing significant financial assistance to students—was adopted by the Board of Trustees in March 1998.

Cornell University makes admissions decisions without regard to the ability of students or parents to pay educational costs. Students who are U.S. citizens or permanent residents and who demonstrate financial need will be assisted in meeting that need through one or more of the following: federal and state grants, employment opportunities, loans, The Cornell Commitment programs, scholarships from endowments and restricted funds, and Cornell grants. Annual adjustments will be made in self-help and family contribution levels.

Cornell will continue its commitment to excellence and diversity in the student population. Self-help levels for individual students may reflect the University's recognition of outstanding merit, unique talent, commitment to work and community service, and its commitment to diversity in the class.

Within this policy, Cornell assists each family in assembling a portfolio of resources that will cover that student's cost of

**Table 4. Grant Aid \* – Undergraduate Cornell Resources**

<u>Fiscal Year</u>	<u>Grant Aid</u>
1997-98	\$56,217,000
1998-99	60,868,000
1999-00	65,463,000
2000-01	67,653,000
2001-02	69,368,000
2002-03	77,679,000
2003-04	87,909,000
2004-05	97,194,000
2005-06	102,959,000
2006-07	109,253,000

\* Includes aid to international students.

attendance. This portfolio is highly customized, taking into account family income; federal, state, and local income taxes; family assets; medical and dental expenses; number of dependents in the family and the number of those dependents in college simultaneously; and a variety of special circumstances (such as noncustodial and self-employed parents). The family's contribution toward educational costs is determined by using the 568 Presidents' Group Consensus Approach methodology.

Cornell is a founding member of the 568 Presidents' Group, named for Section 568 of the Improving America's Schools Act (IASA) of 1994. Section 568 applies only to institutional aid and only to colleges and universities that admit all students on a need-blind basis—that is, without considering the financial circumstances of the student or the student's family. (<http://www.568group.org/>) It permits those institutions:

- To agree to award aid only on the basis of demonstrated financial need

**Table 5. Grant Aid as a % of Tuition & Fees – Undergraduate (2006-07)**

<u>Category</u>	<u>Number of Students</u>	<u>% of Grant-Aid Population *</u>	<u>% of Overall Undergraduate Enrollment</u>	<u>Average Grant</u>
Total with Cornell Grant Aid	5,553	100.0%	40.9%	\$18,778
<=25% of Tuition/Fees	776	14.0%	5.7%	\$3,723
>25% and <=50% of Tuition/Fees	1,207	21.7%	8.9%	\$10,991
>50% and <=75% of Tuition/Fees	1,478	26.6%	10.9%	\$19,118
>75% and <=100% of Tuition/Fees	1,461	26.3%	10.8%	\$26,563
>100% of Tuition/Fees	631	11.4%	4.7%	\$33,368

\* Excludes those international students who are not eligible for financial aid under Cornell's March 1998 financial-aid policy. In the fall semester of 2006, Cornell enrolled 1,070 international students of whom 781 were not eligible for grant aid under that policy. Some of these 781 international students received grant aid under a separate program established to aid international students.



- To use common principles of analysis for determining the need of students for that aid
- To use a common application form for institutional aid
- To exchange certain financial data through an independent third party before the award of institutional aid

Cornell and other Section 568 institutions have jointly developed the Consensus Approach methodology that is applied within reasonable variation within the group. (<http://www.568group.org/methodology/index.html>) The Consensus Approach is derived from the College Board's Institutional Methodology. (<http://professionals.collegeboard.com/higher-ed/financial-aid/im>) The Institutional Methodology is the result of over 50 years of analysis, review, revision, and formulation by the financial aid members of the College Board. As noted by the 568 Presidents' Group:

The Consensus Approach consists of a set of common standards for determining the family's ability to pay for college. It seeks to eliminate much of the variance in need analysis results that has been experienced in recent years. The participating institutions believe that the Consensus Approach, when applied in a consistent manner, serves to diminish or eliminate the divergent results that threaten the long-standing tradition of awarding aid on the basis of need.

Once the net financial need of the student has been calculated ("net" being defined as cost of attendance less the resources that families and externalities can be expected to pay), Cornell uses a mix of university grant, loan, and work/study opportunities to fund that need. This mix is not awarded uniformly, however, as Cornell has goals that it is trying to achieve, such as increasing the number of low-income students and under-represented minorities. Currently, the university reduces the level of loans (and increases the corresponding amount of grant aid) for families with incomes below \$25,000. Beginning in 2008-09 and coming to full fruition in 2009-10, Cornell will eliminate need-based loans for all undergraduates from families with incomes under \$75,000, making it possible for new students to graduate debt-free. Cornell will also cap annual loans at \$3,000 for students from families with incomes between \$75,000 and \$120,000. The details of this are explained in a press release dated January 31, 2008. (<http://pressoffice.cornell.edu/Jan08/fin.aid.endowment.shtml>)

**Reference:** A more thorough discussion of Cornell's financial-aid history prior to the most recent initiative noted above can be found in an article published in May 2005. (<http://www.dpb.cornell.edu/documents/1000030.pdf>)

**3b) How do you inform students and parents of that policy?**

**Response:**

Cornell interacts with prospective students and their families in a variety of ways. The university's approach to admissions and financial aid is featured in its website for prospective

students. (<http://www.cornell.edu/admissions/>) The policy is stated clearly (<http://finaid.cornell.edu/Prospective/Policy.htm>), links are provided to the College Board website and other sites that will be of use to a prospective student (<http://finaid.cornell.edu/Shared/Links.htm>), and an FAQ page (<http://finaid.cornell.edu/Shared/FAQ2007.htm>) provides answers in simple language. Similar information is provided in brochures and other print materials (such as Cornell's "view book" and a separate booklet devoted to financial aid) and at numerous one-on-one and group information sessions. The view book is distributed to over 100,000 first-time freshman prospects and an additional 40,000 copies are given to transfer prospects and others interested in Cornell. Changes in Cornell's admissions and financial-aid policies are featured in university press releases, *The Cornell Chronicle* (a weekly publication of the university), *The Cornell Daily Sun* (a daily, independent, student-run newspaper), and the local and regional press.

**3c) What outreach efforts does your university take to recruit potential low-income students?**

**Response:**

Since Cornell has a need-blind admissions policy, the university does not recruit students by income specifically, but it does have outreach efforts that target students who attend economically disadvantaged high schools. Cornell partners with community-based organizations (such as *Prep For Prep*, *ABC [A Better Chance]*, *Washington Metro Scholars*, and *Venture Scholars*, among others). These organizations all work with students who attend economically disadvantaged high schools or who live in economically disadvantaged neighborhoods. The university's outreach includes bringing prospective students to campus for day and overnight visits, hosting workshops on admissions and financial aid, and conducting information sessions for parents. University staff members also visit high schools in low-income areas and work with counselors and students to introduce them to Cornell.

**3d) How is low-income defined? What is the amount spent on these efforts?**

**Response:**

While Cornell provides financial assistance to all students who demonstrate a financial need and therefore does not focus solely on "low income" students, the university's recently announced initiative to reduce and eliminate loan burdens for some students beginning in 2008-09 provides a surrogate for defining an important income cutoff: families earning \$75,000 or less. This value was chosen as it represents, approximately, the U.S. median family income of families in the 45- to 54-age range (the age span statistically most likely to have college-age eligible children)—in essence the lower half of the income spectrum. Cornell's initiative goes beyond that

income threshold, however, in also reducing the loan burden of families earning between \$75,000 and \$120,000. Cornell included this additional component in its initiative because the university, as noted by Cornell Provost Carolyn A. Martin, believes that it is critical that all students "...excel at their academic work and consider a range of careers without the worry of excessive debt at graduation."

Of the \$109.9 million in grant aid that Cornell expects to spend on undergraduate financial aid in 2007-08 from institutional resources, the university estimates that \$62.5 million in grant aid will go to families at the \$75,000 or less income level. When Cornell's newly announced initiative takes full effect in 2009-10, the institution expects to provide a total of approximately \$76.7 million (in 2007-08 dollars) in grant aid for this population.

**4a) Who determines and decides when tuition increases are necessary?**

**Response:**

Ultimately, the university's president recommends tuition increases and decreases to Cornell's Board of Trustees, which has the authority to make such decisions. The university's provost and her staff provide the analysis and supporting documentation on which the president's recommendation is based. In developing proposals, the provost reviews a range of scenarios with the Provost's Budget Planning Advisory Group. (See answer to question 4b below.)

Reference: See the Cornell University Bylaws, Article XXIII, §2. ([http://www.cornell.edu/trustees/cornell\\_bylaws.pdf](http://www.cornell.edu/trustees/cornell_bylaws.pdf))

**4b) What is the process for making this decision?**

**Response:**

Tuition setting is done in the context of developing Cornell's overall annual financial plan as well as its multi-year, long-range operating and capital plans. The planning process involves discussions of a wide range of revenue and expense categories, including tuition, fees, room and board rates, gift revenues, endowment payout, support from grants and contracts, compensation costs, financial aid, capital and debt-service expenses, maintenance and utility costs, and general operating expenses, among others. Individuals at all levels of the institution are involved, including deans, provosts, and vice presidents. Planning assumptions are also reviewed with representative bodies of the faculty, students, and staff. Several trustee committees review these plans as they develop, prior to the final adoption of a financial plan. Undergraduate tuition rates are formally reviewed by the Provost's Budget Planning Advisory Group, which prepares recommendations for the president to take to the Board of Trustees. This group is composed of the provost, the executive vice president for finance and administration, the deputy provost, the

vice president for student and academic services, the vice president for planning and budget, and the deans of the two largest undergraduate colleges.

Cornell also consults with the trustees of the State University of New York concerning the tuition levels of the four state-assisted colleges at Cornell, three of which enroll undergraduate students.

Setting Cornell's multiple tuition rates requires the university to balance the need to fund the institution's core academic programs and the ability of students and their families to accommodate rate changes. Cornell's financial-aid policy serves to buffer low-income families from the deleterious effects of tuition inflation by adjusting grant aid upward based on cost increases.

**4c) Does the full Board of Trustees vote on tuition increases?**

**Response:**

Yes.

**4d) Are students, parents and the public provided an opportunity to comment on tuition increases prior to final decisions being made?**

**Response:**

As a private institution, Cornell does not have a "public comment" review as part of its tuition-setting process. Two student-elected members, however, sit on the Cornell Board of Trustees. These students serve as full-functioning trustees and vote on all tuition changes, among other duties.

Reference: See the Cornell University Bylaws, Article II, §2.4.c. ([http://www.cornell.edu/trustees/cornell\\_bylaws.pdf](http://www.cornell.edu/trustees/cornell_bylaws.pdf))

**4e) What role does your university endowment play in providing financial assistance to students?**

**Response:**

Of the \$109.9 million in grant aid that Cornell expects to spend on undergraduate financial aid in 2007-08, \$28.1 million, or 25.6%, will come from endowment payout. Cornell's recently announced fund-raising initiative, *Far Above... The Campaign for Cornell*, seeks to increase financial-aid endowment principal by \$225 million, which will augment this by \$11.3 million annually.

**5a) Please explain how your university's endowment is managed and the role of the Board of Directors?**

**Response:**

Cornell's University Investment Office is charged with managing endowment and other invested assets. As provided for in Cornell's bylaws (Article III, §5), the Investment Committee, a standing committee of Cornell's Board of Trustees,

provides policy guidance and oversight for the Investment Office:

a. The Investment Committee shall consist of the Chairperson of the Board and the President of the University, each *ex officio*, together with trustees, emeritus trustees, and nontrustee members to be elected by the Board. The presence of three voting trustee members shall constitute a quorum.

b. The Committee shall determine investment policy, objectives, and guidelines for the University. The Committee shall allocate assets between classes of investments and shall generally supervise management of the University's assets available for investment and the investment office, consistent with the provisions of Article VIII of these Bylaws.

c. There shall be a Chief Investment Officer who shall report to the President and to the Investment Committee, and shall hold office at the pleasure of both. The Chief Investment Officer shall have responsibility for managing the Investment Office. The Chief Investment Officer also shall be responsible for coordinating the University's relationships with investment managers as designated by the Investment Committee.

d. The Chief Investment Officer shall select and appoint outside investment managers and internal investment officers. The Chief Investment Officer may authorize outside investment managers or internal investment officers to purchase, sell, transfer and assign securities, real estate and other investment assets for their assigned portions of the University's investment portfolio within guidelines established by the Committee and to perform such acts with respect to assets held by the University as a fiduciary in the same manner as when held for the University's own benefit.

In discharging its duties, the Investment Office oversees more than 200 investment accounts and partnerships with external investment managers.

**Sb) What are your university's endowment payout and investment policies?**

**Response:**

While the concept of endowment is useful, the institution does not manage its investments based on an "endowment" construct. Instead, the university maintains a number of investment pools or categories for specified purposes, the most significant of which are the Long-Term Investment Pool (LTIP), described below, and the Pooled Balances Investment Fund (PBIF), established to maximize total return derived from the investment of intermediate-term cash balances. Other investment categories include Working Capital, the Separately Invested Portfolio, and Pooled Life Income Funds. The fair value of these assets as of June 30, 2007 is shown in Table 6 (above at right).

**Reference:** The Cornell University Financial Report, 2006-07, page 42. ([http://www.accounting.cornell.edu/CM\\_Images/Uploads/ACT/AnnualReport06-07.pdf](http://www.accounting.cornell.edu/CM_Images/Uploads/ACT/AnnualReport06-07.pdf))

Cornell tailors its investment strategies around these pools and categories. For example, the high turnover in working

**Table 6. Investment Pools/ Categories**  
(at fair value at June 30, 2007)

<u>Pool/Category</u>	<u>Amount</u>
Working Capital	\$3,807,000
Intermediate-term (PBIF)	609,353,000
Long-Term Investment Pool (LTIP)	5,197,503,000
Separately Invested Portfolio	478,902,000
Pooled Life Income Funds	16,935,000
Other	<u>62,725,000</u>
Total	6,369,225,000

capital necessitates a short-term approach, while the assets of the LTIP are invested for the long term. Individual agreements governing many of the funds in the separately invested portfolio and life income funds often dictate the investment approach that is applied. Ninety-two percent of Cornell's endowment is invested in the LTIP, and in turn, 96% of the LTIP is made up of endowments. Thus, the LTIP's investment and payout policies govern the level of resources that are made available annually for most endowments. For clarity (and because this is how these assets are managed), Cornell has based its answers to the questions about endowment investment strategy, performance, and payout policy based either on its overall investment portfolio or the specifics of the LTIP. Table 7 (below) reconciles the differences between Cornell's endowment and its LTIP.

The university employs a unit method of accounting for the LTIP. Each participating fund enters into and withdraws

**Table 7. Reconciliation of Endowment and LTIP** (at June 30, 2007)

	<u>Amount</u>
Total Endowment	\$5,424,733,000
Separately Invested Endowments	(139,064,000)
Contributions Receivable * and Bequests	(135,757,000)
Funds Held in Trust by Others †	<u>(177,691,000)</u>
Endowment Funds in the LTIP	4,972,222,000
Non-Endowment Funds in the LTIP	<u>225,281,000</u>
Total LTIP	5,197,503,000
Percent of Endowment in the LTIP	92%
Percent of the LTIP that is Endowment	96%

\* Unconditional written or oral promises to donate funds in the future that will be treated as endowment.

† Funds that the university neither possesses nor controls but which provide Cornell income or in which the university has a beneficial interest in the assets.



from the pooled investment account based on monthly unit market values. At June 30, 2007, the fair value per unit was \$66.62. Payout is also managed on a unit basis. Cornell's trustees declare a payout per share in advance of the start of the fiscal year, and each fund receives programmatic payout based on the number of unit shares that it "owns" in the pool. (See below for a description of the payout-setting process.)

The LTIP's current payout policy, which was enacted by the trustees in 1988-89 and revised several times through to 1998-99, has the following provisions:

- Payout is set in advance by the trustees as part of the budget process. Total payout for the LTIP consists of programmatic payout plus payout for the general and stewardship costs of the programs supported by the LTIP.
- The proposed programmatic payout for a coming fiscal year is normally 5% greater than the prior fiscal year as long as that increase allows programmatic payout to remain within a defined target range of 4.4% of a twelve-quarter rolling average of LTIP unit share values, plus or minus 75 basis points. The additional payout for general and stewardship costs represents 0.46% of that rolling average. As the rolling average of unit share values extends through the end of the prior fiscal year and the trustees normally declare the programmatic payout in January, the final two quarters of the average are estimated.
- In lieu of the normal 5% annual increase in programmatic payout, the trustees sometimes make step adjustments—both up and down, based on prior investment performance and current market conditions—to maintain the total payout within its target boundaries. As the general and stewardship cost component of payout is a fixed fraction of programmatic payout, it rises and falls with any step adjustment made in programmatic payout.
- Overall spending from the LTIP includes total payout as well as internal investment management expenses and external management fees.

The university's investment strategy incorporates a diversified asset allocation approach and maintains, within defined limits, exposure to the movements of the world equity, fixed income, commodities, real estate, and private equity markets. Based on guidelines established by the Investment Committee, the university's Investment Office directs the investment of endowment and trust assets, certain working capital, and temporarily invested expendable funds. The trustees have established short- and long-term targets for various asset classes, delineating upper and lower ranges for each. The portfolio is rebalanced periodically to maintain asset classes within these limits.

The investment objective is to achieve a total return, net of investment expenses, of at least 5% in excess of inflation, as

measured by a rolling average of the Consumer Price Index. Achieving favorable returns enables the university to distribute increasing amounts over time from its investments so that present and future needs can be treated equitably in inflation-adjusted terms.

Reference: See page 42 of the Cornell University Financial Report, 2006-07 for a description of the LTIP. ([http://www.accounting.cornell.edu/CM\\_Images/Uploads/ACT/AnnualReport06-07.pdf](http://www.accounting.cornell.edu/CM_Images/Uploads/ACT/AnnualReport06-07.pdf))

### *Sc) What is the mission of your university's endowment?*

#### **Response:**

Building on the vision of Cornell University's founder, Ezra Cornell, who aspired to build "an institution where any person can find instruction in any study," the general principle of Cornell's endowment is to support those two fundamental themes: enabling access and providing a comprehensive range of academic offerings and activities.

Endowments provide Cornell with a stable flow of operating revenues that funds core academic activities like instruction and research and allows the institution to admit and educate students from a wide variety of economic backgrounds. Endowed professorships, like the Frank H.T. Rhodes Professorship of Humane Letters, permit the university to hire and retain excellent, world-class scholars. As a case in point, Nobel Laureate Roald Hoffmann holds that professorship. Professor Hoffmann has taught primarily undergraduates at Cornell, and almost every year since 1966 he has taught first-year general chemistry. Some undergraduate financial-aid endowments have special terms that allow the institution, within the framework of need-based aid, to recognize superior academic achievement. For example, the John McMullen Scholarship is awarded to students with potential for exceptional success at Cornell and in the field of engineering. The scholarship is named for John McMullen, who was the president of the Atlantic Gulf & Pacific Dredging Company. Although not a Cornellian himself, on the advice of a friend who was, McMullen bequeathed his estate to Cornell to provide scholarships for engineering students. The first McMullen Scholar entered Cornell in 1925. Receiving this honor places students in a select group of individuals who received McMullen support during their undergraduate years at Cornell.

Cornell's endowment is made up of approximately 6,800 separate funds (as of December 31, 2007). Most have individual uses—some imposed by donor restrictions—that limit or prevent payout from being used in a fully fungible manner. The most common restrictions are tied to the purpose of a fund. A fund may be limited for use by a specific college or department within Cornell or the donor agreement may provide that the payout be reinvested as new principal when the purpose of the endowment gift cannot be executed (e.g., payment of salary that cannot be made when an endowed professorship is vacant

due to turnover). Thus each of Cornell's approximately 6,800 endowment funds has its own mission, and only the most generalized phrases can describe all of them collectively.

In addition, New York State law mandates honoring donor distinctions and restrictions:

(b) Except as may be otherwise permitted under article eight of the estates, powers and trusts law or section 522 (Release of restrictions on use or investment), the governing board shall apply all assets thus received to the purposes specified in the gift instrument and to the payment of the reasonable and proper expenses of administration of such assets. The governing board shall cause accurate accounts to be kept of such assets separate and apart from the accounts of other assets of the corporation. Unless the terms of the particular gift instrument provide otherwise, the treasurer shall make an annual report to the members (if there be members) or to the governing board (if there be no members) concerning the assets held under this section and the use made of such assets and of the income thereof.

**Reference:** See the Laws of New York State, Not-For-Profit Corporation Law (Article 5, §513.b). (<http://public.leginfo.state.ny.us/menuf.cgi>)

**5d) When was the last time that the university's endowment policy was reviewed?**

**Response:**

The university's LTIP payout policy was last reviewed and changed for the fiscal year beginning 1998-99. The institution regularly checks the validity of the policy's assumptions as it sets payout for the coming year.

Investment strategy is reviewed annually by the Investment Committee of the Board of Trustees, and fine-tuned as needed in terms of the portfolio mix. The fundamental approach used for long-term investment—that of seeking the best total return within reasonable levels of risk—has been in place since 1988-89.

**5e) When will it next be reviewed?**

**Response:**

Both of these policies will be reviewed as circumstances dictate.

**6a) Please provide the year-by-year net growth of the university's endowment for the last ten years (in both percentage and dollars).**

**Response:**

This question has been answered for both the endowment (Table 8 above at right) and the LTIP (Table 9 at right).

**Reference:** The Cornell University Financial Reports, various years. ([http://www.accounting.cornell.edu/View\\_Annual\\_Reports.cfm](http://www.accounting.cornell.edu/View_Annual_Reports.cfm))

**Table 8. Endowment**  
(net assets at fiscal year end)

Year	Net Assets	Change from Prior Year	% Change
1997-98	\$2,564,139,000	\$409,025,000	19.0%
1998-99	2,905,741,000	341,602,000	13.3%
1999-00	3,436,928,000	531,187,000	18.3%
2000-01	3,210,370,000	(226,558,000)	(6.6%)
2001-02	2,920,154,000	(290,216,000)	(9.0%)
2002-03	2,914,641,000	(5,513,000)	(0.2%)
2003-04	3,314,228,000	399,587,000	13.7%
2004-05	3,859,610,000	545,382,000	16.5%
2005-06	4,385,161,000	525,551,000	13.6%
2006-07	5,424,733,000	1,039,572,000	23.7%

**6b) What is the amount of donations the endowment has received year-by-year for the last ten years?**

**Response:**

Gifts to the endowment are shown in Table 10 (top of page 34). In accordance with generally accepted accounting principles, Cornell includes in the category of "gifts to endowment" any changes in pledge (contributions receivable) balances for endowments as well as gifts to outside trusts. Pledge balance changes may be positive or negative.

**6c) Please provide the percentage of investment in each asset class (equity, fixed income, hedge funds, private equity, venture capital, etc.) and the amount invested outside the United States.**

**Response:**

The breakdown by asset class for Cornell's overall investment portfolio (described above in answer to question 5b) is shown in Table 11 (bottom of page 34).

**Table 9. LTIP**  
(market value at fiscal year end)

Year	Net Assets	Change from Prior Year	% Change
1997-98	\$2,427,635,000	\$392,837,000	19.3%
1998-99	2,760,263,000	332,628,000	13.7%
1999-00	3,287,965,000	527,702,000	19.1%
2000-01	3,043,876,000	(244,089,000)	(7.4%)
2001-02	2,750,401,000	(293,475,000)	(9.6%)
2002-03	2,720,790,000	(29,611,000)	(1.1%)
2003-04	3,070,235,000	349,445,000	12.8%
2004-05	3,623,192,000	552,957,000	18.0%
2005-06	4,180,389,000	557,197,000	15.4%
2006-07	5,197,503,000	1,017,114,000	24.3%



**Table 10. Gifts to Endowment**  
(including pledge balance adjustments)

<u>Year</u>	<u>Amount</u>
1997-98	\$81,943,000
1998-99	\$95,094,000
1999-00	\$113,619,000
2000-01	\$80,354,000
2001-02	\$103,609,000
2002-03	\$55,090,000
2003-04	\$153,646,000
2004-05	\$121,158,000
2005-06	\$81,603,000
2006-07	\$191,120,000

As noted in Table 11 (below), 17.2% of the overall investment portfolio on June 30, 2007 was invested in foreign equities. In addition, Cornell invests in partnerships and other entities that invest outside the United States. Cornell estimates that its overall foreign investments (equities and indirect investments through partnerships) approximates between 30% to 35% of its investment portfolio. This range includes the 17.2% of foreign equities noted above.

Reference: The Cornell University Financial Report, 2006-07, page 41. ([http://www.accounting.cornell.edu/CM\\_Images/Uploads/ACT/AnnualReport06-07.pdf](http://www.accounting.cornell.edu/CM_Images/Uploads/ACT/AnnualReport06-07.pdf))

**7a) Please explain how you determine what is considered part of the university endowment. In other words, how is your endowment defined?**

**Response:**

Cornell's endowment, which is reported using generally accepted accounting principles, is composed of funds invested by the university and resources managed externally. (See Table 12 at right.) There are two types of endowment:

**Table 11. Investments at Fair Value**  
(at June 30, 2007)

<u>Asset Class</u>	<u>Amount</u>	<u>% of Total</u>
Cash and Cash Equivalents	\$137,757,000	2.20%
Domestic Equities	923,789,000	14.50%
Foreign Equities	1,097,843,000	17.20%
Absolute Return	519,094,000	8.20%
Hedged Equities	1,299,482,000	20.40%
Fixed Income	728,462,000	11.40%
Private Equities	738,445,000	11.60%
Real Assets	892,774,000	14.00%
Other	<u>31,579,000</u>	<u>0.50%</u>
Total	6,369,225,000	100.0%

- *True endowments* are those funds that have been established by donor intent to be invested (generally in perpetuity), with the earnings being used to support the purposes of the endowment. Normally, the principal of true endowments may not be invaded and must be invested in a manner that reasonably protects its basis or book value.
- *Funds functioning as endowment* are primarily otherwise spendable monies that the university's trustees have set aside to be invested in an endowment-like manner. Unlike true endowment, the principal of funds functioning may be expended at the discretion of the trustees.

The externally managed assets include a contributions receivable portion that is part of true endowment and a set of funds that are held in trust by external agents and in which Cornell has a beneficial interest.

**Table 12. Endowment Net Assets**  
(at June 30, 2007)

	<u>Amount</u>
True Endowment	\$3,459,072,000
Funds Functioning as Endowment	<u>1,652,213,000</u>
Subtotal Under Cornell Investment Management	5,111,285,000
Contributions Receivable * and Bequests	135,757,000
Funds Held in Trust by Others †	<u>177,691,000</u>
Subtotal Funds External to Cornell	313,448,000
Total University Endowment	5,424,733,000

\* Unconditional written or oral promises to donate funds in the future that will be treated as endowment.

† Funds that the university neither possesses nor controls but which provide Cornell income or in which the university has a beneficial interest in the assets.

**7b) Are there any other long-term investments that are not included in the endowment as reported to NACUBO?**

**Response:**

Yes. The amount reported to NACUBO for 2006-07 was \$5,424,733,000. For the same period, Cornell's overall investment portfolio was valued at \$6,369,225,000. (See Table 6 on page 31 for a breakdown of these funds.) Most of these assets were invested for the long-term.

**7c) If so, what are they and what are their values?**

**Response:**

As detailed in Table 6 (on page 31), in addition to the LTIP (\$5,197,503,000), Cornell's other long-term investment

categories include the PBIF (\$609,353,000), the Separately Invested Portfolio (\$478,902,000), Pooled Life Income Funds (\$16,935,000), and other miscellaneous categories (\$62,725,000). These amounts are shown at fair value as of June 30, 2007.

**8) What has been the cost of management of the endowment year-by-year for the last ten years?**

**Response:**

The costs of managing the LTIP are shown in Table 13 (below). These include external management fees as well as Cornell's internal management costs, including its investment office as well as investment accounting and oversight functions. Table 13 also shows the annual totals of these costs as a percent of the LTIP's market value for the beginning of the fiscal year in which the costs were incurred. In some cases, external investment managers incurred costs that were netted from the investment proceeds delivered to the university.

**9a) What was the payout (both in dollars and percentage) from the endowment year-by-year for the last ten years?**

**Response:**

The average payout for the period 1997-98 through 2006-07 was 5.1%. At Cornell, the total LTIP payout consists of the monies released during the fiscal year to support the programmatic costs of an individual endowment's purpose and a distribution for the attendant general and stewardship support of these activities. The investment management costs itemized in Table 13 (below) and excluded in Table 14 (at the top of page 36) are separate from this total payout. For

purposes of answering this question, total payout as a percent of market value is shown for the beginning of the fiscal year in which the total payout was applied, in keeping with the 2007 NACUBO convention on the reporting of spending rates:

As a guideline, the calculated spending rate is the percentage of the beginning market value of the investment pool that is made available annually for spending. The rate is calculated net of any expenses for managing and administering the endowment.

**9b) What is the targeted payout (in percentage) from the endowment year-by-year for the last ten years?**

**Response:**

The average targeted payout for the period 1997-98 through 2006-07 was 5.1%. The trustee policy on distributions from the LTIP targets total payout at 4.86% (4.4% programmatic payout plus 0.46 % payout for the general and stewardship costs of the programs supported by the LTIP) of a twelve-quarter rolling average of unit share values  $\pm$  75 basis points. A total payout rate for a coming year could be as low as 4.11% of that rolling average or as high as 5.61% and remain within trustee policy guidelines.

The Board of Trustees establishes a payout rate (target) for a coming fiscal year five months in advance of the start of that fiscal year. The trustees measure that payout against a largely retrospective rolling average of market values in order to smooth out the fluctuations of investment factors that can greatly vary the LTIP's market valuations. Table 15 (at the bottom of page 36) lists those targeted payout amounts per share, the increase in the payout amount per share from the prior year, the twelve-quarter rolling average of unit share values through the end of the prior fiscal year, and the percent

**Table 13. LTIP Investment Management Costs**

<u>Year</u>	<u>External Management Fees</u>	<u>Internal Management Costs</u>	<u>Total Management Costs</u>	<u>Total Management Costs as a % of Beginning Market Value</u>
1997-98	\$7,146,000	\$1,328,000	\$8,474,000	0.4%
1998-99	6,513,000	1,809,000	8,322,000	0.3%
1999-00	6,691,000	2,210,000	8,901,000	0.3%
2000-01	6,827,000	2,225,000	9,052,000	0.3%
2001-02	5,910,000	2,141,000	8,051,000	0.3%
2002-03	5,098,000	2,678,000	7,776,000	0.3%
2003-04	5,794,000	3,435,000	9,229,000	0.3%
2004-05	8,247,000	4,079,000	12,326,000	0.4%
2005-06	10,503,000	4,870,000	15,373,000	0.4%
* 2006-07	10,884,000	6,456,000	17,340,000	0.4%

\* Beginning in 2006-07, Cornell's Board of Trustees significantly restructured the university's Investment Office, increasing the number of staff and the quality of oversight of external investment managers and partners. The Board of Trustees also imposed a cap on internal investment costs vis-à-vis the investment portfolio, and actively manages against this limit.

**Table 14. LTIP – Total Payout**

<u>Year</u>	<u>Total Payout</u>	<u>Total Payout as a % of Beginning Market Value</u>
1997-98	\$75,573,000	3.7%
1998-99	\$104,186,000	4.3%
1999-00	\$115,851,000	4.2%
2000-01	\$142,578,000	4.3%
2001-02	\$177,487,000	5.8%
2002-03	\$185,230,000	6.7%
2003-04	\$173,663,000	6.4%
2004-05	\$169,653,000	5.5%
2005-06	\$186,779,000	5.2%
2006-07	\$205,012,000	4.9%

that those payouts were of each corresponding average market value (e.g., \$2.63 for 2006-07, which the trustees measured against the twelve-quarter average through June 30, 2006).

**9c) If either the actual and/or targeted payout is below 5%, please explain how this meets the needs of the current student body.**

**Response:**

While year-to-year total payout rates targeted by Cornell varied from a low of 4.4% to a high of 5.5%, they averaged 5.1% over the period. (See Table 15 below.) Actual spending rates (using NACUBO’s definition) also varied over the period (from a low of 3.7% to a high of 6.7%). They also averaged 5.1% over the period. (See Table 14 above.)

**Table 15. LTIP – Total Payout Targets**

<u>Year</u>	<u>Total Payout Per Share</u>	<u>Change in Total Payout Per Share From Prior Year</u>	<u>Rolling Average of Unit Share Market Values</u>	<u>Total Payout as a % of 12-Quarter Rolling Average</u>
1997-98	\$1.48	11.9%	\$33.95	4.4%
1998-99	\$1.93	30.2%	\$39.23	4.9%
1999-00	\$2.05	6.1%	\$43.56	4.7%
2000-01	\$2.43	18.5%	\$49.25	4.9%
2001-02	\$2.90	19.4%	\$52.47	5.5%
2002-03	\$2.90		\$52.62	5.5%
2003-04	\$2.63	(9.4%)	\$48.49	5.4%
2004-05	\$2.35	(10.8%)	\$45.33	5.2%
2005-06	\$2.48	5.5%	\$45.29	5.5%
2006-07	\$2.63	6.1%	\$49.22	5.3%

**9d) If there is a material variation between actual and targeted, please explain.**

**Response:**

Actual rates varied more than targeted rates because the actual rates are based on a single sampling point for the divisor (the beginning-year market value) whereas the targeted rates use a smoothing-rule average of a 12-quarter sample for the divisor, which tends to average out peaks and troughs. Cornell’s investment portfolio experienced significant swings in valuation during this particular ten-year period as the dot-com bubble grew and burst. The university also modified and rebalanced its investment portfolio over this period, which also influenced market values. These are differences of timing not substance, as the payout per share that is declared by the trustees is in fact the payout per share that is used throughout the fiscal year. And that payout rate is shaped not only by earnings to date but what the trustees expect to happen over the near term. Both tell the same story that, in fact, Cornell planned and has had an average total payout of slightly over 5% of market value during this period.

Cornell’s use of a smoothing rule, if left on autopilot, will always result in lower-than-average distributions during bull markets and higher-than-average distributions during bear markets. Cornell’s trustees do not allow the smoothing rule to run on autopilot, and make step adjustments in the payout rate as circumstances dictate. For example, the payout rate per share for 2007-08 was originally scheduled to increase 5.3% from 2006-07’s rate. In June 2007, based on strong investment performance to date, the trustees adjusted the payout rate for 2007-08 so that it would represent a 9.9% increase from the prior fiscal year’s level. The data in the third column of Table 15 lists the adjustments that the trustees made in the payout rate annually in response to changing market conditions and with a view of maintaining total payout at or near the long-term 4.86% target.

**9e) What were the top 10 major expenditures from the endowment last year?**

**Response:**

Expenditures made from endowment funds followed, in proportion, the use categorizations of endowment principal. Table 16 (on page 37) provides a list of the major categories of Cornell’s endowment, based on the restrictions placed by donors and the uses to which unrestricted payout has been put.

**10a) How much of the endowment is subject to permanent spending restrictions or limitations set by the original donor?**

**Response:**

As illustrated in Table 16 (on page 37), \$3,462,617,000, or 63.8%, of Cornell’s endowment of \$5,424,733,000 was subject to permanent spending restrictions or limitations set by the original donor as of June 30, 2007.

**Table 16. Endowment Principle Categorized by Use**  
(June 30, 2007 market value)

<u>Category</u>	<u>Unrestricted</u>	<u>Restricted</u>	<u>Total</u>	<u>% of Total</u>
Academic Programs	\$568,540,000	\$1,143,509,000	\$1,712,049,000	31.6%
Student Aid *	200,929,000	1,070,694,000	1,271,623,000	23.4%
Position Support †	351,793,000	551,812,000	903,605,000	16.7%
General Purpose	593,466,000		593,466,000	10.9%
Facilities	38,108,000	87,981,000	126,089,000	2.3%
Student Services	16,155,000	98,304,000	114,459,000	2.1%
Libraries	9,897,000	54,949,000	64,846,000	1.2%
Public Service	15,209,000	23,702,000	38,911,000	0.7%
Institutional Support	31,226,000	5,113,000	36,339,000	0.7%
Miscellaneous Categories	<u>136,793,000</u>	<u>113,104,000</u>	<u>249,897,000</u>	<u>4.6%</u>
Subtotal Categorized	1,962,116,000	3,149,168,000	5,111,284,000	94.2%
Outside Trusts, etc. §		<u>313,449,000</u>	<u>313,449,000</u>	<u>5.8%</u>
Total	1,962,116,000	3,462,617,000	5,424,733,000	100.0%
% of Total	36.2%	63.8%		

\* “Student Aid” includes undergraduate, graduate, and professional student populations and encompasses support for grant aid, loans, and work/study opportunities as well as graduate fellowships and tuition remission programs.

† “Position Support” is composed primarily of endowed professorships designed to support faculty positions.

§ “Outside Trusts, etc.” includes restricted outside trusts, pledges, and bequests where the specific purpose of restriction is not available.

**10b) Of the portion subject to permanent limitations, what percentage is restricted for need-based scholarships?**

**Response:**

Of the \$3,462,617,000 of endowment assets subject to permanent spending restrictions or limitations (as reported above in Table 16), \$1,070,694,000 is categorized as “student aid.” Student aid includes undergraduate, graduate, and professional student populations and encompasses support for grant aid, loans, and work/study opportunities as well as graduate fellowships and tuition remission programs. A total of \$981,680,000, or 28.4% of the \$3,462,617,000 is further limited to grant aid as opposed to student loans and student prizes. (Student prizes are small, non-need-based awards that are given primarily at graduation to recognize exemplary academic achievement.)

All undergraduate financial aid at Cornell is need-based. Graduate and professional student financial aid is awarded based on financial need and merit (although the bulk of it is need-based). The “grant aid” category represented by the \$981,680,000 figure is not pure, however, as some endowments so characterized can be used for both grants and loans (and in some cases, variably from year to year). Also, in accordance with the terms of individual gift agreements, some endowments can be used to support both undergraduate and graduate/professional students, and the proportion of such aid can vary among these populations annually.

**10c) What portion is restricted for undergraduate financial aid?**

**Response:**

Of the \$3,462,617,000 of endowment assets subject to permanent spending restrictions or limitations (as reported above in Table 16), endowments totaling \$750,332,000, or 21.7%, provided payout to support undergraduate financial aid (grant aid, loans, and work/study opportunities). As noted above in the answer to question 10b, the payout from some of this endowment principal may have provided support for graduate and professional students as well in 2006-07.

**10d) Please provide the top five types of restrictions on the endowment by category.**

**Response:**

Table 17 (at the top of page 38) provides a list of the five major types of endowment restrictions by market value of category.

**10e) What percentage of the endowment is subject to significant limitations placed on it due to a decision by the board (or a subcommittee of the board) or a college or university official—such as a set-aside for a specific program?**

**Response:**

As can be seen in Table 16 (above), 36.2% of Cornell’s total endowment is unrestricted. Of the total unrestricted amount,



**Table 17. Endowment Restrictions**  
(June 30, 2007 market value)

<u>Restriction Category</u>	<u>Amount</u>
Academic Programs	\$1,143,509,000
Student Aid *	\$1,070,694,000
Position Support †	\$551,812,000
Student Services	\$98,304,000
Facilities	\$87,981,000

\* "Student aid" includes undergraduate, graduate, and professional student populations and encompasses support for grant aid, loans, and work/study opportunities as well as graduate fellowships and tuition remission programs.

† "Position Support" is composed primarily of endowed professorships designed to support faculty positions.

30.2% is available for the general purpose use of the institution and the remaining 69.8% has a designation or limitation as to use that was placed on it by decisions of the Board of Trustees or its delegatee, the university's president.

**10f) Please provide the investment return to the endowment year-by-year for the last ten years.**

**Response:**

Table 18 (at right below) shows the investment return for the LTIP. As noted in Table 7 (on page 31), almost all of the endowment is invested in this pool.

The annualized average return for this period was 10.2%. The change in LTIP market values referenced in Table 9 (on page 33) differs from the investment return shown in Table 18 as the data in Table 9 includes not only investment returns but also reflects the impact of additions and withdrawals of principal and annual payout.

Reference: The Cornell University Financial Reports, various years. ([http://www.accounting.cornell.edu/View\\_Annual\\_Reports.cfm](http://www.accounting.cornell.edu/View_Annual_Reports.cfm))

**11a) Please explain the fee arrangement to investment advisors.**

**Response:**

Fees vary widely among asset classes. All fees paid, however, are negotiated and determined by the Investment Office, with advice from counsel and under the general oversight of the Board of Trustee's Investment Committee. Fees are outlined as part of the investment management or subscription agreement between Cornell and the advisor/manager.

**11b) How is the fee and compensation measured and determined?**

**Response:**

Fees are measured and determined according to industry standards, within major asset classes. For example, traditional asset class manager fees range from 35 basis points (after eleemosynary discounts) to 150 basis points. Alternative asset class fees range from 100 basis point plus 15% to 30% of carried interest. Manager returns are measured against pre-determined benchmarks, on an after-fee basis.

**11c) What is the process to review reasonableness of the fee and compensation and what comparables are used?**

**Response:**

Compensation and fee review is part of Cornell's overall due diligence process when considering the merit of an investment opportunity. Industry standards, regional focus, and investment type are taken into account when assessing reasonableness for any fee structure—all of which occurs under the general oversight of the Board of Trustee's Investment Committee.

**11d) Who reviews and approves the fee?**

**Response:**

The Investment Committee of the Board of Trustees reviews and approves all investments and related terms, including fees and appropriate benchmarking. The Investment Office oversees the fee payment and ensures compliance with terms negotiated.

**11e) Who pays the fee (the endowment, general funds)?**

**Response:**

Management fees are accumulated along with other investment-related expenses (such as investment accounting and oversight costs) and then apportioned among several investment pools using fair-share proration.

**Table 18. LTIP – Return**  
(net of external management fees)

<u>Year</u>	<u>Return</u>
1997-98	18.5%
1998-99	12.2%
1999-00	18.5%
2000-01	(6.7%)
2001-02	(7.7%)
2002-03	1.9%
2003-04	16.1%
2004-05	13.6%
2005-06	16.1%
2006-07	25.9%



*11f) Please explain what relationship, if any, exists between endowment size and/or growth and the compensation given to the college or university president and the endowment manager.*

**Response:**

There is no direct relationship between Cornell University's endowment size and/or growth and the compensation provided to Cornell's president. The president's compensation is established and maintained by the Board of Trustees. They take into consideration the incumbent's qualifications and performance towards pre-established institutional goals, within a market-competitive range. That range is defined by presidential compensation among peer institutions and considers broad scope data including undergraduate enrollment, graduate enrollment, annual operating budget, annual research budget, advanced degree graduates, faculty headcount, staff headcount and endowment size. The current and former presidents' compensation arrangements do not provide any opportunity for earned incentive payments in relation to any aspect of the role's responsibilities.

In 2006, Cornell implemented a compensation plan for its Chief Investment Officer (CIO). The CIO's compensation is established and maintained considering incumbent qualifications and performance within a market-competitive range. That range is defined by compensation received by top investment officers employed at peer institutions having a similarly sized and similarly managed endowment.

Under the plan implemented in 2006:

- The CIO's compensation consists of a base salary and the opportunity to earn incentive pay based on a combination of quantitative investment performance results and the accomplishment of established annual qualitative performance goals.
- Investment performance returns are evaluated in relationship to standard investment industry benchmarks. The quantitative incentive component of the CIO's pay is based on the fund's performance as compared to pre-established industry benchmarks; it is not calculated on the fund's aggregate growth.

*11g) Please list what endowment-related bonuses, if any, either the college or university president or the investment manager has received year-by-year for the last ten years.*

**Response:**

The current CIO was hired in 2006 and has not yet received any incentive payments based on entity performance. The first opportunity for such incentive is anticipated to occur based upon 2008 entity performance. Former incumbents employed in the CIO role from 1997 to 2006 did not receive any incentive payments based upon the performance of the endowment.