COSTS OF FEDERALLY SPONSORED RESEARCH AT
COLLEGES AND UNIVERSITIES

Costs of Research

Universities incur two types of costs in research which must be accounted for: direct costs and facilities and administrative costs (F&A), also known as indirect costs.

Direct Costs are research costs that can be attributed directly or assigned easily to a specific research project. Examples of direct costs include specific instruments, laboratory supplies, computer time or travel that a project requires, as well as a portion of salaries and benefits of university scientists and research graduate assistants who are working on the project. Portions of university scientists’ salaries are contributed by the university, as well as secretarial and staff support.

Facilities and Administrative Costs are institutional costs that benefit and support research. Also known as indirect costs, F&A costs cannot easily be attributed directly to any one project, but are nevertheless real and necessary to conduct research. They include such items as laboratory space and utilities (e.g. heating and lighting), hazardous waste disposal, campus security and fire protection, libraries, radiation safety, occupational safety, disaster preparedness, liability insurance, compliance with government rules and laws and administrative services. These activities are neither optional nor frivolous.

Indirect Cost / Facilities and Administrative Rates

F&A rates are negotiated as a ratio of indirect costs compared to direct costs. A 50-percent F&A rate is often misunderstood to mean that half of the total costs of a research project are devoted to indirect costs. This is a common misconception. In fact, a 50-percent rate means that for every one dollar of a grant used to pay for direct research costs, 50 cents can be proposed (and charged) as indirect costs. For example, if a faculty member proposes the direct costs of her research project (i.e., salaries, lab supplies, etc.) to be $100,000, then a 50-percent F&A rate would result in an additional $50,000 of proposed indirect costs. The total grant proposal would be for $150,000: $100,000 (67-percent) as direct and $50,000 (33-percent) as indirect.

Financial Resources for Academic Research

In 2005 (the latest figures available from the National Science Foundation), $45.7 billion was spent for research at U.S. universities. The following breaks out the spending by sponsor:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal government</td>
<td>$29.1 billion</td>
<td>63.7%</td>
</tr>
<tr>
<td>Academic institutions</td>
<td>$8.3 billion</td>
<td>18.2%</td>
</tr>
</tbody>
</table>
Universities themselves are the second leading sponsor of research conducted on their campuses. They fund nearly 20 percent of university research expenditures – equaling the combined total of state, industry, foundation, and other non-federal support. Over the past 20 years, according to National Science Foundation (NSF) data, the university share of support for university-based research has grown faster than any other sector.

**Government Oversight**

The calculation of an institution's F&A cost rate is dictated by government rules articulated in OMB Circular A-21 and by Cost Accounting Standards promulgated by the federal Cost Accounting Standards Board. Standards for audits of federal funds are governed by OMB Circular A-133 and its companion document, the A-133 Compliance Supplement.

It is worth noting this excerpt from the statement of purpose in OMB Circular A-21:

“This Circular establishes principles for determining costs applicable to grants, contracts, and other agreements with educational institutions. The principles are designed to provide that the Federal Government bear its fair share of total costs, determined in accordance with generally accepted accounting principles…” (emphasis added)

Facilities and administrative cost payments are determined after a university identifies and documents its costs for all university activities in a recent year, referred to as the base year. These costs are distributed among research, teaching, public service, and other functions of the university. In practice, more costs are distributed to instruction and other functions than are distributed to research. As a result, universities have a powerful incentive to control these costs, because most of them are borne by the universities, not by federal sponsors.

As part of the F&A rate negotiation process, government auditors examine the distribution of costs between research and teaching. Government cost negotiators and the university agree on rates, which then remain in effect for a period of up to three or four years.

**Enhanced Financial Accountability**

Research costs are accounted for with a great deal of care. In recent years, federal agencies have increased audits and oversight of university accounts. The government requires yearly independent audits of university accounts in accordance with government prescribed guidelines in OMB Circular A-133. OMB has tightened the rules governing accountability several times over the past 15 years. These changes, described below, are far-reaching and significant.

- **OMB Circular A-21 was revised in October 1991 to:** 1) impose a cap on reimbursement of administrative costs, a measure that reduced government indirect cost payments by more than $100 million annually at that time; 2) prevent shifting capped indirect costs to uncapped direct costs; and 3) require universities to provide periodic assurances that
reimbursement for building amortization was reserved for research facility expenditures.

- **OMB Circular A-21 was revised in July 1993 to**: 1) specify that long-term predetermined fixed F&A cost rates would be the norm for all universities to serve both as an incentive for stability and to keep costs from increasing; and 2) specify that costs be treated more consistently.

- **OMB Circular A-21 was revised on May 8, 1996 to**: 1) require that the indirect cost rate remain the same throughout the life of a research grant; and 2) apply the rules of the government Cost Accounting Standards Board to both grants and contracts and require formal disclosure of accounting practices.

- **OMB Circular A-21 was revised on July 1, 1998 to**: establish review and documentation requirements to justify construction of new research facilities.

- **OMB Circular A-21 was revised in August 2000 to**: require that cost proposals used to establish F&A cost rates be presented in a prescribed, uniform format as a means to facilitate audits and rate negotiations.

**F&A Cost Rate Variation among Institutions**

Indirect cost (F&A) rates vary from one university to another, principally because *actual costs are different from university to university*. Differences in costs are attributable to differences in space-related costs, including:

1) geographic location;
2) condition of facilities and buildings;
3) methods of financing renovations and construction;
4) intensity of space use;
5) unit cost of utilities;
6) mix of research;
7) age of buildings;
8) amount of renovation and construction of new facilities;
9) building amortization schedules; and
10) ratio of university-financed to government-financed facilities (there is no reimbursement taken for government-financed facilities).

The differences in each of these research space-related factors directly influence F&A cost rates and explain the variation in the rates among institutions.

**The Importance of Indirect Cost Reimbursement**

F&A cost recovery is critically important because costs recovered help to pay for research infrastructure and supporting activities. In particular, research today requires more complex techniques, purer materials, more sensitive instruments, and more sophisticated facilities. Historically, most research facilities have been planned and funded by universities. **In committing to a major new research facility, a university assumes all of the risk.** It plans the building, raises the capital, and then constructs the facility. Only after that process is completed – and then only if
the faculty can successfully compete for research dollars – does the university recover some portion of the costs already incurred through its negotiated facilities and administrative cost rate.

**Capping Indirect Cost Rates Reduces Reimbursement Available for Compliance with Federal Rules and Impedes the Ability of Universities to Maintain Vital Scientific Research Facilities**

The total costs of conducting research must be paid. Limiting federal reimbursement of indirect costs merely shifts those un-reimbursed costs to individual universities. A cap on indirect cost rates would mean that universities that have kept their facilities in good repair or that have moved to rehabilitate and modernize those facilities with the expectation of being reimbursed for space used in the performance of federally sponsored research, would not be able to repay the debt incurred to finance that modernization. Essentially, fewer state-of-the-art research facilities would be built, many adequate facilities would fall into disrepair, and inadequate research facilities would not be revitalized. A cap also reduces reimbursement available for assuring compliance with important regulations. A cap would ultimately cripple our nation’s ability to conduct basic research because the bulk of basic research is performed at universities.

August 10, 2007