ANALYSIS OF FACILITIES AND ADMINISTRATIVE COSTS AT UNIVERSITIES



OFFICE OF SCIENCE AND TECHNOLOGY POLICY

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EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF SCIENCE AND TECHNOLOGY POLICY WASHINGTON, D.C. 20502

July 21, 2000

Dear Member of Congress:

I am pleased to provide you with the Office of Science and Technology Policy's (OSTP) report, *Analysis of Facilities and Administrative Costs at Universities*. Our report provides the analysis of indirect costs requested by Congress in the National Science Foundation's Authorization Act of 1998 (Public Law 105-207).

The Federal government's investment in academic research, and the associated education of scientists and engineers, is critical to continued economic progress, national security, health care, environmental quality, and our standing as the world's leader in science and technology. Consequently, this administration has steadily increased research funding to universities to meet these national needs.

About three-quarters of the federal investment in research supports the direct costs of conducting research, i.e. those costs that can be directly attributed to a specific research project. These costs include funding for scientists' salaries, equipment, chemicals and other materials.

The remainder of the investment reimburses indirect costs. These are general expenses that cannot be associated with a specific research project, but are used collectively by many research projects at the academic institution. The two major components of indirect costs are for the construction, maintenance and operation of facilities used for research and for supporting administrative expenses such as financial management, institutional review boards and environment, health and safety management. OMB Circular A-21, which sets forth the cost accounting principles for federally funded university research, refers to these indirect costs as Facility and Administrative (F&A) costs. In addition to federal support, universities also contribute significantly to the cost of performing research and thereby leverage the government's investment. This government-university partnership has been the hallmark of our scientific world leadership, both in the discovery of new knowledge and technologies and their application to the public good.

The OSTP report finds the following:

- 1) F&A costs (judged by negotiated F&A rates) as a percentage of project costs have remained steady during the past decade;
- 2) F&A rates at colleges and universities appear to be slightly lower than those at other types of research institutions, such as federal laboratories and industrial facilities; and
- 3) Universities are paying for a portion of reimbursable F&A costs as a result of federal statutes, agency policy, state policies, and internal university policies and practices.

The report also analyzes the potential impact of a number of suggested policy changes designed to reduce or control the growth of F&A costs to the Federal government. We conclude that if these federal policy changes were implemented to further reduce F&A reimbursement, the resulting shift of costs to universities would be detrimental to the research enterprise. These additional costs could end up either reducing university spending for research and education, or being passed on to students through increased tuition rates.

We believe that the Federal government should not introduce new obstacles to the recovery of valid facilities costs that might discourage university leadership from making needed investments in research facilities. These investments have helped increase the productivity of modern research, and will enhance the ability of research faculty to make important scientific and technical breakthroughs in the future, as well as to educate future generations of scientists and engineers. The F&A costs associated with research projects are real costs of performing research and the Federal government should share in these costs to the extent that they benefit federally sponsored activities. We believe that enactment of any of the mechanisms for decreasing F&A cost recovery that are discussed in this report could result in reduced investments in building and renovating needed scientific facilities, thus jeopardizing future research capability and the scientific/technological workforce.

I firmly believe that thoughtful dialogues between the Federal government and the universities on ways to increase administrative efficiency are the best way to assure a wise and productive government investment. We at OSTP are committed to this principle and have worked hard to foster this kind of constructive dialogue, particularly through the ongoing efforts of the National Science and Technology Council (NSTC) Task Force on the Federal Government-University Partnership.

I hope you will find this report and its findings useful in your consideration of federally funded university research. Dr. Arthur Bienenstock, OSTP Associate Director for Science is available to brief you and your staff. Please feel free to contact him at 202-456-6130.

Sincerely,

Meal Lane

Neal Lane Director

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Introduction

During the past fifty years, federal agencies have developed policies for reimbursing research institutions for the direct costs of research and for a portion of the costs of facilities and administration (F&A). Congressional interest in these policies has been long-standing. Most recently, the NSF Authorization Act of 1998 (Public Law 105-207) requested that OSTP address six issues related to F&A costs (or indirect costs) reimbursement. These six issues include:

- 1. An analysis of the federal indirect cost reimbursement rates (as the term is defined in Office of Management and Budget Circular A-21) paid to universities in comparison with federal indirect cost reimbursement rates paid to other entities, such as industry, government laboratories, research hospitals, and nonprofit institutions.
- 2. An analysis of the distribution of the federal indirect costs reimbursement rates by category (such as administration, facilities, utilities, and libraries) and by the type of entity; and determine what factors, including the type of research, influence the distribution.
- 3. An analysis of the impact, if any, that changes in Office of Management and Budget Circular A-21 have had on the federal indirect cost reimbursement rates, the rate of change of the federal indirect cost reimbursement rates, the distribution by category of the federal indirect cost reimbursement rates, and the distribution by type of entity of the federal indirect cost reimbursement rates; and the federal indirect cost reimbursement (as calculated in accordance with Office of Management and Budget Circular A-21), the rate of change of the federal indirect cost reimbursement, the distribution by category of the federal indirect cost reimbursement.
- 4. An analysis of the impact, if any, of federal and state law on the federal indirect cost reimbursement rates.
- 5. An analysis of options to reduce or control the rate of growth of the federal indirect cost reimbursement rates, including such options as benchmarking of facilities and equipment cost, elimination of cost studies, and mandated percentage reductions in the federal indirect cost reimbursement, and assess the benefits and burdens of the options to the federal government, research institutions, and researchers.
- 6. An analysis of options for creating a database that would serve two functions; tracking the federal indirect cost reimbursement rates and the federal indirect cost reimbursement and supporting analysis of the impact that changes in policies with respect to federal indirect costs reimbursement and supporting analysis of the impact that changes in policies with respect to federal indirect cost reimbursement will have on the federal government, researchers, and research institutions.

This report addresses these six issues. In conducting our analysis, OSTP used input from the RAND report, <u>Paying for University Research Facilities and Administration</u>; data provided by the Council on Governmental Relations; discussions and data provided by a small group of public and private research universities; discussions with OMB and federal agencies; and other published reports.

Overview of Facilities and Administrative Costs

The federal government invests approximately \$15 billion annually in science and engineering research at U.S. academic institutions. About three-quarters of this supports the direct costs of conducting research, while the other one-quarter covers (F&A) costs.

Research institutions are eligible for reimbursement of F&A costs related to federal grants and contracts. Three Office of Management and Budget (OMB) circulars provide guidelines to federal agencies and research universities for financial management. These include Circular A-21, Cost Principles for Educational Institutions; Circular A-110, Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations; and Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations.

OMB Circular A-21 classifies research costs into two categories: 1) direct costs, and 2) F&A costs (also known as indirect costs).

Direct costs are those costs associated with a specific project such as salaries for scientists and wages for project team members. Direct costs also include materials and supplies, travel, project-specific equipment and subcontracts to other organizations.

 $F\&A\ costs$ are shared expenses related to university facilities and administration. Facilities costs are defined as allowances for depreciation and use of buildings and equipment; interest on debt associated with buildings and equipment placed into service after 1982; operation and maintenance expenses, and library expenses. Administrative Costs are defined as general administration and general expenses such as the central office of the university president, financial management, general counsel, and management information systems; departmental administration; sponsored-projects administration; and student administration and services that are excluded or limited when computing rates for research.

Determining the F&A Rate¹

The F&A rate is determined by dividing the facilities and administrative costs by the Modified Total Direct Costs (MTDC). Modified Total Direct Costs is equal to direct costs minus exclusions (such as equipment and subcontracts). MTDC is considered the accepted base for allocating F&A costs because these costs are thought to be a reasonable indicator of how much benefit the project derives from the shared facilities and administration. Because subcontracts and equipment can involve very large expenditures and yet do not necessarily take advantage of a university's infrastructure, they are excluded from MTDC when calculating the base.

A university's F&A rate is computed by dividing its F&A costs by its MTDC. F&A rates of about 50 percent of MTDC are typical of universities. A common misunderstanding is that a 50 percent F&A rate means that 50 percent of total expenditures are for overhead. This is not the case. Because the F&A rate is the ratio of F&A costs to MTDC (rather than total costs), F&A costs may account for only one quarter of total costs, when the F&A rate is 50 percent.

If there are no exclusions from direct costs (such as equipment and subcontracts) then all costs are either MTDC or F&A costs. In this case, a typical 50 percent F&A rate would mean that for each \$100 in MTDC, \$50 in F&A costs would be allocated. The \$50 in F&A costs out of a total budget of \$150 means that one-third of project costs are F&A costs in this example.

F&A rates are established through negotiations between the federal government and individual institutions. The established rates are used to bill the federal government for the F&A cost portion of federal programs, when not restricted by program statutes or agency policies.

Analysis

Our analysis of the six major issues raised in the NSF Authorization Act of 1998 (Public Law 105-207) follows:

Issue One: Comparison of F&A Rates across Sectors

A 1996 Arthur Andersen study found that actual indirect costs for research activities in universities, federal laboratories, and industry are strikingly similar, despite common perceptions that there are wide differences.² The study reviewed actual indirect costs at seven universities, 13 federal laboratories, and 13 industrial firms. The seven universities' indirect costs averaged 31% of total research costs, comparable to 33% and 36% of total research costs found at the federal laboratories and for-profit firms, respectively.

Issue Two: Distribution of F&A Rates by Spending Category.

While many believe that F&A costs consume an increasing share of federal research dollars, with a corresponding decrease in funds going directly to research, analysis indicates otherwise. Data available from the Office of Naval Research and the Department of Health and Human Services indicate that negotiated F&A rates have remained stable for at least a decade at approximately 50%.³ The average rates for administration have declined somewhat, while rates for facilities have increased commensurately. The decline in the administration rate can be attributed to the imposition of the administrative cap in 1991. In terms of negotiated rates, the cap on administration costs narrowed differences between public and private universities, but the differences in facilities rates are still noticeable. According to RAND, this is likely due to some combination of private universities using more expensive facilities; depreciation accounting instead of use allowances; use of debt-financed instruments to fund construction; and greater incentives, on average, for private universities to recover F&A costs than for their state-supported counterparts.⁴

Our analyses further indicate that the F&A rate is often not an accurate reflection of a university's actual recovery. To understand this, representatives of OSTP and OMB met with a group of university representatives from private and public institutions. We asked the university representatives if their actual F&A recovery reflected their negotiated F&A rate. If it did not, we asked what accounted for this.

Our discussion revealed that some federal statutes and agency policies may limit the amount a university can recover for F&A spending on federal grants. In addition, state policies as well as internal institutional policies may limit F&A recovery. As a result of these policies, most universities have two rates: the negotiated F&A rate and what many of the university representatives referred to as their "effective" F&A rate. The effective F&A rate is a reflection of what is actually recovered.

Data collected from this small group of institutions demonstrates how a university may have an effective F&A rate that is lower than its negotiated F&A rate. For example, a private university X has a negotiated rate of 48%. However, because of various policies it has an effective rate of approximately 44%, meaning that it doesn't recover indirect costs at the 48% level. As Table 1 indicates, university X has different rates from most of the federal agencies. This is due to federal policy, either dictated by statute or by agency practice, and institutional policies.

² Arthur Andersen, LLP, "The Costs of Research: Examining Patterns of Expenditures Across Research Sectors," prepared for the Government-University-Industry Research Roundtable of the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine, Chicago, Ill., March 1996.

³ RAND, pp. 33-44.

⁴ RAND, p. 33.

Table 1: Private University X: Effective F&A Rates with Various Federal Agencies		
Agency	Rate %	
Negotiated Rate	48.00	
National Institutes of Health	45.95	
Department of Education	23.63	
Department of Defense	43.47	
Department of Energy	39.00	
National Aeronautics and Space Administration	47.11	
Department of Commerce	48.00	
Department of Transportation	5.45	
Department of Justice	48.00	
Department of Agriculture	14.00	
Veterans Administration	00.21	
Department of the Interior	49.20	
National Endowment of the Arts	0.00	
National Science Foundation	46.08	
National Endowment of the Humanities	26.06	
Environmental Protection Agency	48.00	
Library of Congress	0.00	
ALL (weighted average)	44.44	

Another university, public university Y shows a similar pattern. (Table 2.) Its negotiated rate is 37.06%. Yet, its effective rate is approximately 30% due to policies of the federal government, state governments, and the university itself.

Agency	Rate %
Negotiated Rate	37.06
Army	33.19
Department of Energy	35.93
National Aeronautics and Space Administration	32.03
Office of Naval Research	34.94
National Science Foundation	26.50
Department of Education	31.34
National Institutes of Health	34.17
Air Force	36.32
Department of Agriculture	10.11
Department of Commerce	27.48
Department of Interior	12.99
Miscellaneous	30.96
ALL(weighted average)	30.42

Some of the reasons for the differences between the negotiated and effective rates are:

Federal Policies and Practices

1. Most USDA project grants are limited by statute to 14% of total costs for facilities and administration. In addition, land grant colleges and universities often undertake cooperative agreements at 0% F&A cost reimbursement.

- 2. NIH agency policy caps Training Grants at 8% F&A cost reimbursement.
- 3. Many international programs from USAID and other federal programs do not allow F&A costs.

Institutional Policies

- 4. Quite often a university will waive F&A cost reimbursement for Young/New Investigator Awards in order to maximize the start-up funds provided to the scientist.
- 5. Some universities meet the NSF 1% statutory cost-sharing requirement through reductions in reimbursements for indirect costs.
- 6. Sometimes a university may agree to lower F&A rates on some federal research projects because of perceived pressure from agency program officers. If the research is of paramount importance to the university, it may accept the award without full recovery.

State Policies

7. In many states, indirect costs recovery does not stay at the university, but rather is passed through to the state. In these cases, universities may not pursue full recovery.

To determine the degree to which the universities are assuming some of the F&A costs of performing government-sponsored research, we analyzed public data from the Council on Governmental Relations (COGR), which conducts an informal annual survey regarding F&A costs of its member institutions (which includes most major research-intensive universities). The results of this analysis suggest that the difference between institutions negotiated rates and their effective recovery rates equals approximately \$0.6 billion. This could be construed as \$0.6 billion of F&A costs that are not recovered annually.⁵ While the COGR data are incomplete and some discrepancies do exist, this estimate provides some indication that the universities pay for some of the F&A costs due to a variety of federal, state, and institutional policies and practices as discussed above. It suggests that, of the \$5 billion that universities report they devote to research from their own funds, approximately \$0.6 billion is the result of facilities and administrative costs, that for a variety of reasons, the Federal Government does not pay.

Issue Three: Impact of Changes in Circular A-21.

During the 1990s, as results of Congressional and public concerns regarding indirect costs at universities, OMB implemented a number of changes in Circular A-21, "Cost Principles for Educational Institutions," to limit the payment of certain costs, to provide clarification for consistent treatment of other costs, and to simplify some administrative procedures. These recent changes have, or may have had, an influence on negotiated F&A rates. These include the cap on administrative rates, the change in the equipment threshold, and the establishment of a fixed utility cost adjustment rate component. According to the RAND analysis,⁶ the effects of these changes are:

- During 1993, the first full year the administrative cap was in effect, negotiated administrative rates were reduced by approximately 2 percent; since that time, administrative rates have remained constant;
- Library rates have remained constant since 1988;
- Depreciation/Use allowance rates for buildings and equipment have increased gradually from nearly 6 percent in 1988 to approximately 9 percent in 1999, although some of the increase has been offset by reductions in operations and maintenance rates;

⁵ RAND's report also relied on data from the COGR survey. RAND estimates the F&A costs not recovered at \$0.8 billion. Unlike the RAND analysis, we did not assume that the MTDC is an independent variable. Rather, we assume that the total Federal budget line is the independent variable. Using the COGR data, this assumption yields estimated F&A costs not recovered at \$0.6 billion. RAND, pp. 18-20.

⁶ For a discussion and analysis of these changes see RAND, 2000, pp. 45-51.

- The magnitude of the effect of the change in the equipment threshold is not known, but it is expected to produce savings for both universities and the government because it reduces the need to track small items or equipment;
- Although the precise effect of the utility cost adjustment is not yet known, it is unlikely to have a significant impact.

Issue Four: Impact of Federal and State Law on F&A Rates.

In addition to the administrative requirements mandated by OMB Circulars, the universities must also satisfy other federal, state and local laws, and regulations regarding the conduct of research. These laws and regulations govern university practices in many areas including hazardous waste, occupational safety, animal care, and the protection of human subjects. While these laws and regulations have been enacted for worthwhile purposes, they have very real administrative costs associated with them

Universities currently below the 26% cap on administrative costs would be paid for any costs associated with implementing these laws and regulations for federal research awards. Those universities that have F&A expenses at, or above, the cap would not be paid for any additional costs above the cap, including costs resulting from new requirement. Consequently, new law and regulations may require that some universities provide additional resources.

Issue Five: Options to Reduce or Control the Rate of Growth of Federal F&A Reimbursement Rates.

In recent years, Circular A-21 has been revised to incorporate numerous measures to contain F&A costs, promote efficiency, improve equity, and minimize unexplained variations in rates across institutions. (See appendix A for a detailed description of each of these revisions.) The General Accounting Office estimated that the revisions to establish an administrative cap in 1991 resulted in an annual saving of \$104 million.⁷

Other revisions have streamlined and improved the consistency of the F&A rate determination process, and have reduced the variances of rates between institutions. Federal agencies use F&A savings to fund more research projects. These recent revisions have increased accountability in the indirect cost system, and have responded to concerns raised by Congress and others about the need to ensure the appropriateness of federal payments for indirect costs.

There are other options to reduce federal F&A payments. (Appendix B) These options are grouped into four categories, according to the means by which they could reduce indirect cost payments. Most of these options have been considered previously. Few of these options have been implemented because the benefits derived from them may not be greater than the administrative burden that would be placed upon the Federal government or universities.

While some of these options would reduce federal payments for indirect costs, in many cases, these costs would simply be shifted to universities. The consequences of such shifting are likely to be reductions in total support for research, reductions in total funds spent by universities on other aspects of education, or tuition increases. Any potential savings achieved by reducing federal indirect cost payments would not be realized unless specific federal appropriations were reduced to reflect savings in indirect costs. Alternatively, if savings were achieved, these resources could be redirected to fund additional research grants, as they have been in the past.

⁷ GAO Report RCED 95-74, University Research, Effect of Indirect Costs Revisions and Options for Future Chnages, 3/95.

Issue Six: Options for Creating an F&A Database.

While there are some existing database systems that capture some F&A data, there is no systematic method by which the federal government collects and maintains data on F&A rates and costs. Because of the importance of the issues associated with F&A rates and costs, a central database of federal research F&A costs should be created and maintained that could 1) track the federal indirect cost reimbursement rates and the federal indirect cost reimbursement, 2) provide analysis of the impact that changes in policies would have on indirect costs, and 3) provide analysis of the impact that changes in policies regarding indirect costs would have on the federal government, researchers, and research institutions. Creating such a database would require an organization within the government to take responsibility for collecting and analyzing these data. Data could, for example, be collected from the standardized F&A proposal format that OMB and the agencies are developing with assistance from university representatives. The standard format will be added to Circular A-21. This standard format will streamline the F&A rate proposal preparation and review process and facilitate the federal government's collection of useful F&A data for analysis purposes.

Conclusion

Based on our analysis, we have reached the following conclusions:

- 1. Facilities and Administrative costs (judged by negotiated F&A rates) as a percentage of project costs have remained steady during the past decade.
- 2. While Federal policy could be enacted to further reduce F&A rates, we believe that increased pressure on universities to provide additional cost sharing would be detrimental to the research enterprise. It may have an impact on university spending for both research and education, or it could increased tuition rates.
- 3. F&A rates at colleges and universities are slightly lower than those at other types of research institutions, such as federal laboratories and industrial facilities.
- 4. Universities are paying for a portion of facilities and administration costs that are eligible for reimbursement based on their negotiated F&A rates, as a result of federal statutes, agency policy, state policies, and internal university policies and practices.
- 5. A database for federal research F&A data should be created and maintained. A standard format for F&A rate proposal submission has been developed for this purpose.

The Federal Government's investment in academic research is critical to continued economic progress for our nation. Our research funding to universities continues to increase from \$11.7 billion in 1993 to \$17.8 billion in the FY 2001 President's Budget (an increase of 53 percent). Our analysis, as well as RAND's, indicates that universities are contributing in a significant way to making this investment strong. For this reason, we caution against imposing significant additional costs on research-performing institutions.

Pressure to increase cost-sharing through decreases in F&A recovery, for example, could result in reduced investments in building and renovating scientific facilities, thus jeopardizing future research capability. The federal government should work with universities to insure that appropriate investments in research facilities, instrumentation, and equipment are made. These investments have helped increase the productivity of modern research, and can be expected to further enhance the ability of research faculty to make important scientific and technical breakthroughs in the future.

Appendix A Revisions to OMB Circular A-21 Effecting F&A Costs

- 1. Limitation on Reimbursement of Administrative Costs. As of October 1, 1991, administrative costs charged to grants have been limited to 26% of modified total direct costs (MTDC). The GAO estimated that the 26% cap on administrative costs reduced indirect cost reimbursements by \$104 million for FY 1993.
- 2. Alternative Method for Administrative Costs. In 1993, Circular A-21 was revised to allow universities to exercise the option to claim a fixed allowance for administrative costs the lesser of 24 percent or 95 percent of the most recently negotiated rate and forego preparing an administrative cost proposal. Currently, two universities have exercised this option, which not only limits the administrative costs borne by the federal government, but also reduces the universities documentation burden.
- 3. **Designation of Unallowable Costs**. In 1991, OMB Circular A-21 was revised making the following charges unallowable: alcoholic beverages; alumni activities; personal use of institution-furnished automobiles; defense and prosecution of criminal and civil proceedings, claims, appeals and patent infringement; donations and contributions made by an institution; entertainment; executive and legislative lobbying; insurance against defects; fines and penalties; goods and services for the personal use of employees; housing and personal living expenses of an institution's officers; memberships in any civic, community or social organization or country club; and selling or marketing of goods or services.

New limitations were applied to charges for advertising, public relations, and travel. In 1996, dependent tuition was declared unallowable and ineligible for direct grant support. Additional criteria were added for the allowability of interest costs.

- 4. Elimination of Utilities Special Cost Studies. In May 1996, OMB eliminated the use of special cost studies to recover utilities costs. These studies were complicated and expensive, and the results were difficult to verify. They were often identified as an example of an area of potential abuse and a source of disagreement and distrust between the government and universities. In 1998, a utility cost adjustment (UCA) factor was established to replace the special cost studies for utilities. The UCA is the weighted average incremental rate that the federal government pays above the rate calculated using a standard allocation methodology. Sixty-six universities, which had previously been approved for additional utility recovery following a special cost studies reduced rate variation across institutions.
- 5. **Benchmarking of Facilities.** In 1998, Circular A-21was revised to establish review and documentation requirements to ensure the reasonableness of the costs of large research facilities. For all new facilities projects that exceed \$25 million, and in which at least 50% of the space is allocated to federally-sponsored research, universities are required to present justification documentation to negotiators, including an analysis of the costs and a comparison of those costs to relevant construction cost data. The benchmarks are based on data the National Science Foundation collects biennially and other relevant construction data. In addition, the 1998 revision provided that an institution's cost management process would be reviewed annually for adequacy under OMB Circular A-133 audits for federal programs.

- 6. **Study Direct Charging of Space Costs.** In 1995, the Federal Demonstration Project (FDP) studied the feasibility of direct charging space costs to research grants. The study provides a range of models that might be used to direct charge space costs. The FDP's evaluation and assessment of these models, however, led them to conclude that the administrative costs and organizational disruptions associated with implementation of a system of direct charging facilities costs would exceed any efficiencies that might be gained. Accordingly, the FDP recommended against the development or testing of direct charged facilities costs in order to bring these costs to the peer review process.
- 7. **Depreciation and Use Allowance**. A revision to Circular A-21 in 1996 clarified that, in the case where an educational institution, by its own choice, elects to convert from the use allowance to the depreciation method, the conversion should be made as if the depreciation method had been used over the entire life of the asset. In addition, use allowance recoveries are limited to the acquisition cost of the building, or the fair market value of the donated building. Institutions that report depreciation on their financial statements are required to use the same depreciation method and useful lives.
- 8. Develop a Standard Format for the Submission of F&A Proposals. OMB, with assistance from federal agencies and universities, developed a standard format for the submission of F&A cost proposals to assist universities in completing their F&A rate proposals more efficiently and to help federal cognizant agencies review each proposal on a more consistent basis. OMB is expecting to add the standard format in OMB Circular A-21 shortly.
- 9. Change the Method of Calculating F&A for Smaller Institutions. A 1993 revision allows universities that use the simplified method to calculate F&A rates (i.e., by grouping all the costs in one pool and then dividing by the direct costs) to use either salaries and wages or MTDC as a base to distribute their F&A costs. This change provides more comparability of rates between small (defined as having less than \$10 million in total federal direct costs) and large universities.
- 10. **Capitalization Threshold for Equipment.** In 1996, the threshold for capitalizing equipment was raised from \$500 to \$5,000 (or the institution's own selected capitalization threshold for its owns accounting records, if lower) thereby reducing paperwork and administrative costs for academic institutions.
- 11. Cost Accounting Standards Board (CASB) Standards. A 1996 revision to Circular A-21 included requirements that all awards be governed by Cost Accounting Standards (CAS) to achieve uniformity. Four standards were to be implemented to develop uniform accounting practices, including consistency in: estimating, accumulating, and reporting costs; allocating costs incurred for the same purpose; accounting for unallowable costs; and the definition of the cost accounting period (i.e., fiscal year, calendar year). Larger institutions were required to disclose their cost accounting practices by submitting a Disclosure Statement prescribed by the CASB. Small institutions with less than \$25 million in federal funding are subject to the CAS, but are exempt from the Disclosure Statement filing requirements.

Appendix B Options to Reduce F&A Costs

Discussed below are four categories of policies aimed at reducing F&A Costs. For various reasons, as discussed in the report (page 14), these policies are not appropriate at this time.

Group A: Eliminate or Limit Payments for Specific F&A Costs

This category contains a number of options that would disallow or limit current payments for specific types of indirect costs. One option could be to eliminate federal payments for interest costs on new university facilities. Currently, Circular A-21 allows universities to be compensated for the use of their buildings, capital improvements, and equipment through either depreciation or a use allowance. This option would exclude institutions' interest on debt from their F&A cost pools. Exercising these options is likely to hinder the universities' performance of research in critical areas involving toxic materials, such as semiconductor processing and molecular biology.

Another option in this category would be to eliminate some general administration costs (e.g., the President's or other non-academic salaries), which in most cases would be incurred by institutions even if they were not conducting research. Alternatively, the statutory cap on salaries (currently set at the Federal Executive Level II rate of \$141,300) could be extended to all direct and indirect personnel supported by federal grants, rather than the current restriction, which applies only to the direct costs of NIH grants. Universities have indicated that existing salary caps are hindering their ability to perform clinical research. The impact of applying them to other personnel is unknown.

Benefits: Some of these options could potentially achieve meaningful savings in indirect costs. For example, eliminating facility interest costs could decrease the current facilities component of indirect costs by about one percentage point, from 8 percent to 7 percent, which would yield an estimated savings of \$100 million. Another benefit of these approaches would be that they are consistent with the principle that the federal government "assists" university research but does not "purchase" such research, as it would if research were performed through a contract mechanism.

Burdens: These options could also limit federal payments for legitimate F&A costs that, in some cases, could then simply be shifted to universities. This cost-shifting could potentially affect the quality of research, and could, for example, cause universities to delay needed renovations and construction of facilities if they are no longer reimbursed for the interest costs associated with these projects. These options could also reverse the Federal government long standing policy regarding the allowability of these cost items.

Group B: Establish Caps or Flat Rates for Specific Costs

This set of options would establish new rate limitations for specific types of indirect costs and/or reduce current rates by a pre-determined level. For example, one option could be to establish a cap on Facilities costs (e.g., 25 percent), comparable to the cap on Administrative costs. This would have the effect of establishing a maximum total F&A rate for all universities (e.g., 51 percent). There is some precedent for this approach: some federal agencies currently pay a maximum indirect cost rate, either through appropriations language (e.g., USDA programs) or through grant proposal requirements (e.g., NIH training grants). As indicated above, exercising this option is likely to hinder the universities' performance of research and education of students in critical areas involving toxic materials, such as semiconductor processing and molecular biology.

Similarly, an alternative could be to establish a permanent university-specific rate for total F&A costs based on some historical measure (e.g., a 5-year average). Other options include freezing all F&A rates at their current levels; reducing F&A rates across the board by a fixed percentage over a period of time to achieve a predetermined level of savings, e.g., a 10 percent reduction over 5 years; or allowing schools to receive 90 percent of current negotiated rates without submission of a F&A proposal.

Benefits: Any limit on or reduction to F&A rates would reduce federal indirect cost payments directly. For example, assuming all other factors remain unchanged, a one percent reduction in the average indirect cost rate would produce \$100 million in savings in F&A reimbursement. However, the savings could not be realized without decreasing the budgets for federal agencies supporting university research, including the National Science Foundation and the National Institutes of Health.

Burdens: These options could create disincentives for universities to invest in research infrastructure and support. Furthermore, these options could generate wholesale changes to the method by which the federal government supports F&A costs at a time when there is no clear evidence that the system requires major restructuring. The wholesale changes could include establishment of a national flat F&A rate, the awarding of projects based on total costs, or a requirement for cost sharing in the F&A costs. These changes would alter the federal government policy as stated OMB Circular A-21 to "bear its fair share of fair share of the total costs" for research and reduce the government's role in supporting the nation's research enterprise. The options could also lead universities to change their cost accounting practices to direct charge more of their costs, thus increasing the administrative burden for accounting and reducing efficiency.

Group C: Eliminate or Restrict Special Studies

This set of options would further address current Circular A-21 policy on special studies. One option could be to lower or eliminate the Utility Cost Adjustment (UCA) below the current 1.3 percentage points rate. Another option would be to eliminate Special Studies for Libraries, which are used by a few universities to claim library costs above the standard allocation method. In 1995, OMB proposed to eliminate special studies for libraries, based on evidence that the studies were biased. However, due to the uncertain effects of changes to university libraries and their services that have been brought about by the increased use of the Internet and on-line research, OMB deferred its decision to eliminate special studies for libraries pending further evaluation of the impact of these changes on the costs of library services benefiting research. An additional option related to libraries could be to include library costs under the administrative cap.

Benefits: These options would simplify the F&A rate negotiation process by eliminating universities incentive to conduct complex and expensive special studies and the federal government's need to review and monitor these studies. Any changes to allowable costs under Circular A-21 could achieve savings for the federal government, particularly for universities already at the 26 percent cap.

Burdens: These options, in particular the library options, could shift allowable and legitimate costs to the universities. In addition, these options could disrupt the implementation of the UCA, which was put into effect only in 1996.

Group D: Promote Efficiency by Simplifying the Process and Creating Incentives

This set of options would simplify the complicated process that is undertaken when the federal government negotiates indirect cost rates with universities. One option for simplification would be to encourage universities and agencies to extend current rates (e.g., from 3 to 5 years). Rather than periodically reviewing rates, as is the current practice, F&A rates would only be re-negotiated if an institution could document a significant change in its F&A costs. This option would promote stability in F&A payments for both the federal government and universities. Another option would be to allow schools to use 90% of current negotiated rates without submission of a F&A proposal when there are no material increases in the institution's organized research base.

Benefits: The primary benefits of these options would be simplification of a complex process that can be adversarial as the federal government and institutions routinely negotiate F&A rates.

Burdens: Like many of the options in Group B, these options could generate changes to the method by which the federal government supports F&A costs at a time when there is no clear evidence that the system requires major restructuring.



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