Direct and Facilities & Administrative (F&A) Costs Of Research at Colleges and Universities

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The operation of any enterprise involves costs that pertain to a specific project, as well as general costs. For administrative and accounting purposes, these costs, are grouped into two categories -- direct and overhead. Many of those costs, however, are not discretely direct or overhead, and may appear in either category, depending on the circumstances. Such is the case with costs of federally sponsored research at colleges and universities, except that the concept of overhead cost has been redefined, first as "indirect" cost, and which by federal regulations is now currently termed "Facilities and Administrative" costs, and abbreviated by convention as "F&A" costs.

The basic regulation for ascertaining the costs of federally sponsored research at educational institutions are set forth in Office of Management and Budget (OMB) Circular A-21. This document is designed to provide a government wide approach to determining such costs in the performance of research under federally sponsored projects.

In any consideration of the importance of Facilities & Administrative costs and their relationship to the performance of sponsored research, six points must be clearly understood at the outset:

- Facilities & Administrative costs are real costs that provide reimbursements for certain expenses incurred in conducting or supporting research. Funds paid to an institution for F & A costs of a sponsored project are reimbursed to the institution for expenditures already made.
- 2. The F&A cost rate is established by negotiation with the cognizant federal agency on the basis of costs incurred by the institution in a previous year distributed as prescribed in government regulations as set out in OMB Circular A-21.
- 3. The institution's F & A rate proposal is audited by federal auditors before negotiation of Facilities & Administrative costs rates.
- Depending on how an institution organizes for the management of its research, some costs may be considered either direct or F&A, but must be handled the same under similar circumstances.
- 5. Differences in institutional organization for the management of research are a principal reason for the differences in F&A cost rates among institutions.
- 6. Although F&A cost rates vary among institutions, the variance is generally unrelated to whether an institution is publicly or privately controlled.

Facilities & Administrative Costs Are Real Costs

In undertaking any research project, whether or not it is sponsored by the federal government or by some other organization, the university must cover two components of costs -- those directly attributable to the specific project and those incurred for the general support and management of research. General support and management costs are sometimes referred to as "pooled costs" because they are accounted for and controlled centrally. Examples are library costs, utility costs, the costs of operating and maintaining the plant, and costs of the general administrative organization of the institution.

The classification of particular expenditures as direct or F&A costs depends in part on the institution's organization for managing its business affairs and its methods of managing research. The two classifications of expenditures, however, are equally necessary to achieve the research objectives, and each type of cost is as factual a cost as the other. The institution becomes committed to incurring costs in both categories when it assumes stewardship of a sponsored research project.

Both direct costs and F&A costs are real costs and are generally incurred before the institution is reimbursed. If the sponsors of research projects do not fully reimburse either the direct or F&A costs, these costs must be paid from other institutional funds, such as instruction and departmental research funds - as a result, these programs would be short-changed.

OMB Circular A-21, first published in 1958, was a consequence of the federal government's desire to improve the methods of determining costs for federally sponsored research. The circular followed closely the principles that several agencies had already set for determining the costs of sponsored research at educational institutions. The circular was developed by the Bureau of the Budget (now OMB) with the active participation of federal agencies sponsoring research and after consultation with representatives of educational institutions. It has been amended from time to time when experience showed the need for clarification. The most recent amendments were issued in August 2000.

OMB Circular A-21 deals wholly with the costs of research and other sponsored projects. Its terms clearly exclude any provision for profit or other increments above a project's cost and certain types of expenditures that OMB classifies as "unallowable." According to OMB Circular A-21, allowable costs under federally sponsored research agreements include (1) all expenses that have been incurred solely for work on the project (direct costs); and (2) a share of other costs that are incurred primarily for necessary administrative and service functions related to the sponsored research project (Facilities & Administrative costs). When these two classes of expenditures have been determined, using the principles set forth in OMB Circular A-21, they must be added together obtain the total costs of a research project.

Direct Costs usually include costs of the following types:

- Salaries and wages --salaries and wages of persons employed on the research project
- Personnel benefits--personnel fringe benefits, such as FICA ad retirement plan contributions
- Supplies--consumable supplies needed for the project
- Subgrants or subcontracts
- Travel and communication--all such charges incurred for the project
- Equipment--usually the costs of equipment acquired for specific use in the research project
- Computer use--computer time and necessary supporting services, calculated in accordance with an approved rate schedule for the facility concerned
- Alterations and renovations--costs of alterations and renovations as determined by specific agreement

Facilities & Administrative Costs, on the other hand, are usually divided into the following categories of supporting activities.

The "Facilities" Components:

- Operation & maintenance (O&M) costs, i.e. physical plant operations and routine maintenance activities, utilities, fire and security, janitorial services, repairs, etc.;
- "Use" allowance for buildings (2%) and equipment (6%) or actual depreciation (excluding federal cost portion of buildings and equipment);
- Library expenses, books, staff, etc.

The "Administration" Components:

- General administration offices (president, accounting, payroll, business services, etc;
- Departmental administration (academic deans, department, institutes, centers);
- Sponsored Program administration (Pre and Post award, compliance, technology transfer, etc;
- Student administration services (dean of students, registrar, counseling, job placement, health, commencement, etc.

F&A Cost Rates Are Calculated According to Federal Guidelines

The rate for reimbursement of Facilities & Administrative costs is calculated according to the procedures set forth in OMB Circular A-21. The computation of this figure involves an in-depth analysis of the institution's financial data in order to calculate the total amount of Facilities & Administrative costs incurred by all programs of the institution, chiefly that for programs of sponsored research and other organized research. An early step in the course of preparing the F&A worksheet material is the computation of the costs to be allocated to the following "Major" functions:

1. Instruction – Teaching and training and by federal definition includes unrestricted departmental research;

- Organized Research Generally received from external sponsors for specific activity and therefore separately budgeted and accounted for as a restricted funds; the majority of which are likely to be federal;
- 3. Other Sponsored Activities misc. sponsored training, public service, etc;
- 4. Other Institutional Activities.

Accumulation of these four cost grouping are key to the establishment of the actual amount that, for example, will become the modified total direct cost (MTDC) base for that particular function, e.g., Organized Research, and which is used as the denominator, or "base," in the formula (F&A/MTDC Base = F&A rate).

Another fundamental step is to ascertain the total expense incurred by the institution for the operation of all its administrative and central or supporting component activities described here as Facilities & Administrative costs. The objective is the calculation that will be used as the numerator in the formula immediately above. Within this objective is the need to distribute the total amount of institutional Facilities & Administrative costs among above listed major functions of the institution. There are a variety of decisions encountered and appropriate methodologies implemented during this process, and a major concern is the adherence to the university's Cost Accounting Standards disclosure report as these decisions and accounting strategies for the F&A work papers are completed.

For example, one university may distribute its O&M costs among the four functions in proportion to the amount of space occupied by each function based upon periodic space studies; another university may determine that the O&M costs are to be distributed to those functions on the basis of the amount of salaries and wages incurred by each where space is used jointly. Both methods are appropriate and both serve to establish total O&M costs attributable to each of the four functions.

The final step is to calculate the actual F&A cost rate as a percentage to an appropriate base, and the normal practice the use of modified total direct costs (MTDC) as the base. The organized research rate is established by calculation of two separate ratios, i.e. one for the Facilities component and another for the Administrative component of organized research to its applicable MTDC base. Each ratio is subsequently converted into its corresponding percentage representation by multiplying the ratio by 100. The two resulting percentages, are added together to arrive at the institution's "proposed" rate, which if federally approved is then applied to each sponsored project at the institution to determine the portion of the Facilities & Administrative costs to be recovered.

<u>F&A* Costs Attributable to Research Activities X 100 = % F&A Rate</u> Modified Total Direct Costs of those Research Activities

*Note: The "Administrative" rate portion may not exceed 26%

In order to achieve greater costing equity brought about because of organizational structure of its various units and resulting differences in operational cost patterns, an institution may decide to develop more than one F&A cost rate. A separate calculation may be made, for instance, for its agricultural school, a medical school, or for projects conducted at remote locations. For example, if a project's performance must take place at a remote location and therefore does not require or benefit from the "Facilities" components of the rate, then an "off-campus" rate may be negotiated in which the facilities portion of the F&A is eliminated. Use of an "off-campus" rate is

generally appropriate where fifty percent or more of the project's performance period occurs at the remote site. When separate rates are needed each is calculated according to the procedures established by OMB Circular A-21, using costs attributable to the separate location or organizational unit.

F&A Cost Rates Are Audited by Federal Auditors

Colleges and universities do not unilaterally determine the ultimate F&A rate to be applied to its research projects Upon completion of all the calculations discussed, the institution prepares their F&A cost proposal as described and submits the working papers and supporting data to the institution's federal cognizant audit agency for review. The federal agency will then undertake an extensive examination of the proposal, which may include a site visit and/or requests for additional information until their review is completed. Differences of opinion concerning the conclusions reached by the federal agency is settled by negotiations between the institution and representatives of the agency. The government and the institution then reach an agreement on the formal F&A cost rate approved for the year(s) under discussion.

Some Costs May Be Classified Either as Director or F&A

The way in which an institution organizes its business and administrative affairs has a direct bearing on whether costs fall within the direct or the F&A cost category. Examples of costs that may be treated either as director as Facilities & Administrative costs, depending on institutional management procedures, are listed below:

- administrative and clerical personnel*
- purchasing
- social security, retirement contributions, and group insurance
- vacations, holidays. And sick leave
- hospitalization and medical services
- postage and communications (both local and long distance)
- stationery and office supplies
- stock-room technical supplies
- books and periodicals
- janitorial services
- security expenses
- liability insurance, workmen's compensation
- utility costs

*Note: Circular A-21, Section F.6 Departmental administration expenses_indicates that "the salaries of administrative and clerical staff should normally be treated as F&A costs" but recognizes that exceptional circumstances may allow for direct costing of those expenses. Institutions are responsible to determine the appropriateness of including such costs in a proposal. Institutions may require a written justification for their approval that describes why those costs exceed the normal services_provided by departmental staff. Examples of such circumstances are provided by the OMB Circular's Exhibit C (see Attachment A).

In reviewing the above listing of costs it is easy to recognize, as stated in the beginning, that these items do not "discretely" belong to the direct or F&A categories, and, consequently, the need for an institution to be wary of inconsistent classifications between the two. For example, one institution may be able to track and assign its technical supplies from a stock room directly

to the benefiting projects and thereby be able to recover them as direct costs. Another institution may decide that such tracking is too costly and categorize them as Departmental Administration expense with projects freely drawing the supply "pool" when needed. Under those circumstances the stockroom costs would be included as part of the Facilities & Administrative costs. Both practices are appropriate as long as consistency is maintained and other necessary accounting steps are followed.

From the federal government's perspective, it was determined that universities needed to emphasize greater consistency in and to more fully document the treatment of their operational costs, especially whether the particular institution's accounting system treaded them as direct or F&A costs. As a result, four "standards" from the Cost Accounting Standards (CAS), which at that time were applicable only to federal commercial contractors, were taken from the existing Cost Accounting Standards Board's regulations (48 CFR 9903) and included in OMB A-21 (61 FR 20913) effective May 8, 1996. As a consequence, institutions were required to submit to their cognizant audit agency a Disclosure Statement, CASB DS-2, describing all general and many specific types of expenses normally incurred in its operations. The primary objectives of this amendment to OMB A-21 can be described by recitation of each of the four standards' section heading:

- 1. Consistency in Estimating, Accumulating and Reporting Costs;
- 2. Consistency in Allocating Costs Incurred for the Same Purpose;
- 3. Accounting for Unallowable Costs;
- 4. Cost Accounting Period (i.e., the identification of)

Federal reviews that occur under OMB A-133 audit requirements, F&A rate negotiations, or special project audits generally make special effort to ensure that the institution is maintaining the oversight necessary to ensure that the same item of expense or any category of cost items are treated consistently as described in the institution's DS-2 Disclosure Statement.

Institutional Organization Affects the F&A Cost Rate

Variations in institutional organization and accounting practices are largely responsible for differences in F&A cost rates. On average, at a given university, this variation makes no difference in the total cost, since both types of costs are real and are actually incurred. For example, the total cost of research remains unchanged by transferring fringe benefit costs or telephone costs from the F&A cost classification to the direct cost classification or vice versa. Such a transfer will lower the F&A cost rate of a project, but raise the direct cost. This increase in direct cost can be significant in instances if such costs were formerly spread over an F&A cost pool (with each project sharing a nominal amount) but are now charged in greater amounts since they are spread over much fewer "benefiting" projects.

While all colleges and universities calculate their F&A cost rates in accordance with OMB Circular A-21, rates differ among individual institutions due, in many respects, to the differing organizational structures and accounting approaches previously discussed; therefore, for the reasons given here, an F&A cost rate itself has little meaning. The percentage must be interpreted in terms of the base on which it is calculated and with reference to the allocation (between the direct and F&A categories) of costs incurred by the institution. It is illogical to

compare F&A cost rates among institutions or to draw inferences concerning the reasonableness of F&A cost reimbursement on the basis of the rate alone.

In summary, the total cost of university research, much of which is borne jointly by government and the educational institutions, has two components: direct and Facilities & Administrative costs. Direct costs are generally understood because they are clearly identifiable and related to specific projects. Facilities & Administrative costs are elusive: the concept is subject to misunderstanding; the costs are somewhat "hidden" from project personnel and not readily recognized even though they support research but do not serve research uniquely; however, they are essential to the performance of research. Although each institution must follow OMB Circular A-21 in preparation of its F&A rates, comparisons between the rates of various institutions are not appropriate since the organizational and business operations of each institution affects whether a cost is treated as a direct versus an indirect cost. An impartial cost comparison, consequently, can only be accomplished by use of a project's total costs (direct and indirect) that have been proposed or incurred among separate institutions under the assumption that all costs (to include cost sharing) have been appropriately described.

OMB Circular A-88 designates the cognizant agency and establishes policies whereas that federal agency (cognizant agency) will act for all federal agencies in auditing educational institutions, negotiating F&A cost rates, and resolving audits.

Attachment A

OMB Circular A-21 Exhibit C

Examples of "major project" where direct charging of administrative or clerical staff salaries may be appropriate.

- Large, complex programs such as General Clinical Research Centers, Primate Centers, Program Projects, environmental research centers, engineering research centers, and other grants and contracts that entail assembling and managing teams of investigators from a number of institutions.
- Projects which involve extensive data accumulation, analysis and entry, surveying, tabulation, cataloging, searching literature, and reporting (such as epidemiological studies, clinical trials, and retrospective clinical records studies).
- Projects that require making travel and meeting arrangements for large numbers of participants, such as conferences and seminars.
- Projects whose principal focus is the preparation and production of manuals and large reports, books and monographs (excluding routine progress and technical reports).
- Projects that are geographically inaccessible to normal departmental, administrative services, such as research vessels, radio astronomy projects, and other research fields sites that are remote from campus.
- Individual projects requiring project-specific database management; individualized graphics or manuscript preparation; human or animal protocols; and multiple project-related investigator coordination and communications.

These examples are not exhaustive nor are they intended to imply that direct charging of administrative or clerical salaries would always be appropriate for the situations illustrated in the examples. For instance, the examples would be appropriate when the costs of such activities are incurred in unlike circumstances, i.e., the actual activities charged directly are not the same as the actual activities <u>normally</u> included in the institution's F & A (F&A) cost pools or, if the same, the indirect activity costs are immaterial in amount. It would be inappropriate to charge the cost of such activities directly to specific sponsored agreements if, in similar circumstances, the costs of performing the same type of activity for other sponsored agreements were included as allocable costs in the institution's F&A cost pools. Application of negotiated predetermined F&A cost rates may also be inappropriate if such activity costs charged directly were not provided for in the allocation base that was used to determine the predetermined F&A cost rates.