RECOVERY OF UNIVERSITY INFRASTRUCTURE COSTS

Introduction

Research grants and consultancies increase the University of Western Australia's total income and enhance its reputation, but they also add to the University's cost burden unless there is a provision for the recovery of indirect or infrastructure costs. If the University is successful in attracting grants and consultancies that provide only the direct costs of projects and make no contribution to the University's infrastructure costs, those projects are, in effect, subsidised from income received for other purposes. The University's capacity to maintain an adequate research infrastructure in those circumstances will diminish rapidly over time. In this context, research infrastructure includes existing facilities and equipment (including laboratory and office space); existing research support staff (including UWA-funded research assistants and technical officers, etc.); administrative support; and other indirect research infrastructure and support services such as libraries, computer services, telecommunications, power and lighting, and building maintenance and cleaning.

Development of the policy

In 1992, the University undertook an extensive review of infrastructure costs. Various options on how to allocate infrastructure costs to specific projects were considered. The most accurate way is to identify all indirect costs for each project, but it is too unwieldy to tally these costs on a project-by-project basis. Another method is to calculate standard indirect costs across the University and to apply the costs to each project, but it takes a long time to develop a satisfactory profile of these costs across all departments. In the long run, it was decided to adopt principles already established by the AVCC and CSIRO on the use of a salary multiplier for estimating infrastructure costs. The principles can be applied to all forms of research activity, including grants, contracts, tenders, consultancies and services.

Three multipliers were developed to provide an estimate of infrastructure costs for high-cost, medium-cost and low-cost areas. The multipliers reflect institutional costs within each broad research area. They are currently based on actual costs extracted from Table 7.3 of Unistats and the University's Annual Report (with adjustments). The multipliers reflect the average ratio between total research costs and the direct salary costs of teaching-and-research staff (including salary on-costs and superannuation) within each broad research area. To calculate the infrastructure charge for a project, the appropriate multiplier is applied against the imputed cost of academic staff devoted to that project.

A salary multiplier is generally used when estimating the University's cost support for a project, so that the total value (cash, plus in-kind support) of the University's contribution can be calculated. The advantage of a multiplier is that it can be justified to sponsors of research and consultancies by reference to the data from which the three rates were derived. However, the accuracy of the calculation of infrastructure costs by this method very much depends on reliable estimates of the imputed cost of academic staff time on each project, because the multiplier is applied against the imputed cost in each case.
As an alternative to the multiplier, and especially when seeking cash from sponsors, infrastructure costs can be recovered by applying a fixed rate against the total direct costs of a project. The generally accepted standard rate when infrastructure costs are to be recovered in full is 35%. A standard rate of 15% is normally applied when infrastructure costs are not to be recovered in full, usually because the University may benefit from the funded activity in other ways. This issue is explained further under ‘Rates’.

**Imputed cost of academic staff time**

The imputed cost of academic staff time committed to a project should be included in budgets whenever the full cost of a project is being charged, because it is one of the direct costs. For these purposes, the imputed cost of academic staff time includes not only the proportionate salary, but also all salary-related on-costs (such as payroll tax, workers’ compensation insurance, etc) and superannuation contributions by the University. In consultancies, it is acceptable to use a professional hourly rate, e.g. $100/hour, in lieu of the imputed cost. A professional hourly rate normally includes a provision for overheads (infrastructure).

The imputed cost does not have to be included in cash budgets if the University is receiving other benefits from the activity being funded, such as research training opportunities, or items of equipment, etc.

When using the multiplier method of calculating infrastructure costs, the imputed cost of academic staff time needs to be known, because the multiplier is applied against it. Academic staff time for these purposes includes any research fellows employed on the project, and teaching-and-research staff (but not support staff such as research officers and research assistants).

**When to apply an infrastructure charge**

A charge for infrastructure costs should be applied to each grant, contract, tender, consultancy and service negotiated with, or received from external parties with the exception of:

(a) grants provided under formal research grant schemes, such as the ARC, NHMRC etc (unless the schemes allow an overhead to be charged);

(b) charitable foundations;

(c) bona fide donations;

(d) scholarships for educational purposes only.

**Rates**

It is important to recognise that the total cost of a project includes infrastructure costs, but there is a difference between the cost of a project and the price charged to undertake it. As indicated already under ‘Imputed cost of academic staff time’, the University may receive other benefits from a funded activity, such as research training opportunities, or items of equipment, etc. In those cases, the imputed cost of
academic staff time need not be included in the budget, despite the fact that it forms part of the total real cost of the activity. Similarly, there may be good reasons for not charging standard rates for infrastructure on occasions. For example:

A substantial portion of a budget may be committed to the purchase of equipment that will remain with the University at the end of the project. Equipment is a form of infrastructure.

An activity may be undertaken wholly, or in part, at premises which are not part of the University's costs, eg. a sponsor's laboratory.

Some infrastructure costs may occasionally be included as direct costs in a budget, eg. floor space, animal care, etc.

As indicated under 'Development of the policy', the current standard University rates are 35% of total direct costs when full infrastructure costs are being charged and there are no other benefits to the University, and 15% in all other cases. In situations where a reduction in the standard rates is proposed, an application for a lower rate to be applied must be made to the Pro Vice-Chancellor (Research) through the Executive Dean. The application must specify the reasons why the standard rate should be reduced. An infrastructure charge will be waived completely only in extraordinary circumstances; the minimum charge will not normally be less than 4.8% of total direct costs. Where a reduction in the standard rates of 35% or 15% is approved, the relevant Faculty will normally bear the loss of income.

When using salary multipliers to calculate full infrastructure costs as part of the University's in-kind contribution, the current rates are as follows:

High-cost departments/centres: 127% of the imputed cost of academic staff time (133% if salary on-costs and superannuation are excluded)

Medium-cost department/centres: 114% of the imputed cost of academic staff time (137% if salary on-costs and superannuation are excluded)

Low-cost departments/centres: 100% of the imputed cost of academic staff time (120% if salary on-costs and superannuation are excluded).

Allocation of income received for infrastructure

Income received for infrastructure is allocated according to the principles applying to the allocation of the University budget: currently, 68% to faculties and 32% to academic services. Income received for the imputed cost of academic staff time is also allocated on this basis.

A report for each Faculty, detailing the sources of income received for infrastructure, is sent to Executive Deans on a six-monthly basis, with a copy to the Pro Vice-Chancellor (Research).

Executive Deans are encouraged to allocate income received for infrastructure directly to the departments undertaking the activities that attracted the income.
Example of how an infrastructure charge is calculated

The following example illustrates how an infrastructure charge is calculated when using the two standard rates and the multiplier. It is based on a simple one-year budget in a high-cost department.

<table>
<thead>
<tr>
<th>Project costs:</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>5,000</td>
<td>29,000</td>
</tr>
<tr>
<td>Plus imputed cost of academic staff time * (including salary on-costs)</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Total direct costs</td>
<td></td>
<td>39,000</td>
</tr>
</tbody>
</table>

Plus infrastructure costs:

| Example (i) – full cost recovery (35%) | 13,650 |
| Example (ii) – part cost recovery (15%) * | 5,850 |
| Example (iii) – multiplier (127%) 127% of imputed cost of academic staff time ($10,000) | 12,700 |

Total project cost:

| Example (i) - | $52,650 |
| Example (ii) - | $44,850 |
| Example (iii) - | $51,700 |

* The imputed cost must be included as a direct cost when estimating the total value of the University's in-kind contribution. It is an optional direct cost when calculating a cash budget where the University is receiving other benefits from the activity. Thus, in example (ii), in many cases it would be quite reasonable for the direct costs to be shown as $29,000 rather than $39,000. Infrastructure costs would then be $4,350 (15% of $29,000) and the total project cost $33,350.