Office for Research Guide: Budget Preparation

Introduction: The core elements of a research budget

In preparing an external research funding application, one of the key responsibilities of the first Chief Investigator is the preparation of the budget. A budget ensures that sufficient resources are available to complete the research work that is being undertaken. It should be based on a full analysis of expected research project costs and not just what you are asking the funding body to pay for.

A well prepared budget will add weight to the argument that you are able to achieve the outcomes set out in your project and give confidence to assessors that the project aims will be achieved.

The total research budget project cost is made up of all direct and indirect costs. **A funding body may cover all, some or none of your indirect costs**, so it is important that you carefully read the funding rules. Where indirect costs are not permitted, you or your College will have to cover these costs.

Direct costs of research are costs incurred specifically to carry out a project.
For example:

Personnel	Salaries, and salary on-costs: Includes you, other CIs, research associates/assistants, other administrative/technical staff, PhD students, etc.
Consumables	Supplies and materials needed to complete the project: Items usually consumed over a year or within the life of a project. Generally NOT basic office supplies.
Equipment	Specifically for the project: lab, video and computer equipment.
Travel	Field trips/professional meetings: field work, collaborative/professional meetings, governance meetings. Includes mileage, rental car, airfare, hotel and per-diems, conference registration, in-country travel, airport transfers.
Subcontracts	Collaborating with another institution/agency.
Participant Support	Program attendees (if allowable): the cost of attendee(s) support for duration of the conference/workshop/program. Includes: travel costs, meals & lodging, attendee stipend.
Other	Cost share (if required): Funding body requires that the institution provide resources to show support for the proposed project (could be a cash contribution or in- kind).

Indirect costs of research are costs which cannot be directly attributed to a project, but which are nonetheless incurred by the University. For example:

- **University facilities & services-** Library, IT**,** human resources**,** finance**,** insurance & legal**,** security.
- **Space & Infrastructure-** Lab & office space, major items of research equipment or specialist infrastructure

Indirect costs are usually only included in the budget for contract and commercial research. This means we are pricing the delivery of our services appropriately, and meeting our 'competitive neutrality' requirements – the obligation not to use publicly funded assets to subsidise the delivery of a service (and thereby unfairly limit competition in the marketplace).

Profit Margin

In regards to contract and commercial research, the Profit Margin can be amended according to:

1. The type of Client e.g. large corporation, government, Small or Medium Enterprise (SME) or not-for-profit organisation - with the profit margin descending in that order.
2. The project's duration i.e. for longer term projects the profit margin may be decreased.
3. Any other variables. I.e. The innovation of the project.

The VU salary on-costs are predetermined; however the current Infrastructure charges are flexible with the benchmark being between 20- 30% for contract and commercial research. The Profit Margin is able to be amended accordingly, taking the above matters into consideration and ranges from 0-30%, with 30% being the preferred option for contract and commercial research.

Grants exempt from the inclusion of Indirect Costs

Grants which are listed on the Australian Competitive Grants Register (ACGR) are classified as "Category 1" grants, and are exempt from having to include indirect costs of research. This is because Category 1 grants return a higher percentage to the University as part of the Higher Education Research Data Collection (HERDC) return and block grant funding process.

Grants listed on the ACGR must meet a number of criteria, including being nationally competitive, for research only, nationally advertised and available to universities throughout Australia, having a well-defined mechanism for competition, selection by a well-qualified panel, and in most cases, the funding scheme must have an annual budget of $1 million or more. Typical examples of these are ARC and NHMRC grants.

Philanthropic trusts usually do not allow for indirect costs to be included for funding consideration.

Always read the funding rules/guidelines carefully before developing your budget.

In-kind contributions are costs for a research project that are typically funded by the University, however if you have a multiparty grant you might also have industry or government participants that provide project resources as an in-kind contribution. In-kind is as important as the funded components because it can add weight to the feasibility of a project proposal and can contribute to the 'value for money' proposition that is becoming increasingly important in grant proposals. In some schemes, in-kind contributions may be an absolute requirement of the budget.

Examples of in-kind contributions for a research grant include:

- The salaries of continuing university staff working on the project
- Access to specialised facilities or data
- Prorated use of machinery/equipment

There are many ways of presenting in-kind information based on the funding rules of the funding body and budget templates. More often than not, you may not value the in-kind but you would still

reference it in your budget justification or elsewhere in the proposal, in areas such as 'Research Environment', 'Role of Personnel' and 'Approach and Methodology'.

Example: Suppose the use of a blast furnace is necessary for your project. If you have access to a blast furnace, you can include that access as an in-kind contribution. Another similar project application may have to purchase time or buy the equipment outright- this shows how your project is value for money. In this example you may not give a cash figure, but a narrative description of blast furnace use and ease of access to it.

Steps in Preparing a Budget

Step 1: Make a list of what is essential and would add value

Your budget should be aligned with the philosophy and strategy of your project as a whole. Ask yourself the following questions to identify the foreseeable costs of your project.

The Big Questions:

- **What do you want to achieve?** – What is the focus of your research and what are the expectations of key stakeholders such as the funding body, the University and your research team?
- **What must you do well to succeed with this project?** – You need to identify the key success factors for the project. This can be a complex question in a research project where the outcomes are usually not known at the start of the project and where the directions of the project may change based on research progress and findings.
- **What can you do?** – What are the strengths and weaknesses of your resources and capabilities?
- **What might you do?** – What opportunities may arise and what threats/risks may emerge in a rapidly changing environment?
- **What should you do?** – Identification of options and specific research activities.

Specific Questions:

- What is the study about?
- Why are you doing this study?
- Where will it be carried out?
- What type of data will be required?
- Where will the data be found?
- What will be the sample design?
- What techniques of data collection will be used?
- How will the data be analysed?
- In what style will the report be written?

Learning from the past:

- What have you done in the past and what would you do differently if you could?
- What have you learned from the past that would create better outcomes in this project?

Step 2: Check funding rules of the funding body

Review the funding body's guidelines. Some funding bodies are very specific about how proposal budgets should be prepared. You should not guess nor deviate from the proposal instructions.

Checklist:

- ☐ What are the specified target (ceiling) amounts?
- ☐ What is the award start date and duration?
- ☐ Are there budget specifications from the funding body?
- ☐ Are there limitations for the inclusion of indirect costs of research?
- ☐ What level of detail is required for cost breakdowns?
- ☐ Are there any required items in the budget, such as travel to a conference or planning session?
- ☐ Are there any unallowable items, such as personnel, international travel, indirect costs?
- ☐ Are there cost-sharing or cash-matching requirements?
- ☐ Does the funding body have a budget form or format they require you to use to enter costs? If so, transfer your numbers to it.
- ☐ Does the funding body require you to submit a budget narrative/justification?

Step 3: Categorise and Cost the items

As you calculate what the project will cost, keep in mind your answers from Step 1 and the limitations imposed in Step 2.

Checklist:

- ☐ Group expenses according to categories: personnel (salaries and on-costs); consumables, equipment, travel, subcontracts, participant support, indirect costs and other.
- ☐ Include other resources for funding if necessary.
- ☐ Make sure your budget is realistic - do not inflate costs.

- [ ] Ensure costs are reasonable, allowable and related to the research project.

- [ ] Cost your travel expenses according to ATO rates: http://law.ato.gov.au/atolaw/view.htm?docid=TXD/TD201316/NAT/ATO/00001

- [ ] Use Excel to double-check your math.

- [ ] Ask two people to review your budget: someone in your area, and someone outside your area.

- [ ] Get approval to provide cost-sharing or cash-matching.

- [ ] Ask the Office for Research to check that your final budget makes sense and complies with funding body's requirements.

Step 4: Justify the items

Make it clear that you have left no stone unturned in carefully considering this project. A well- defined budget justification can enhance the evaluation of the project by the assessors and panel.

Checklist:

- [ ] A detailed case for the resources is provided, showing what alternatives have been considered and rejected, providing a cost-benefit appraisal where appropriate.
- [ ] The budget justification follows the same order and naming of budget items as in the detailed budget / budget form, so reviewers can easily compare the two documents.
- [ ] Everything in the budget is referenced in the budget narrative, and everything mentioned in the project description that would incur cost is explained in the budget justification.
- [ ] Emphasis is placed on *why* a budget item is needed, rather than repeating the budget descriptions and figures.
- [ ] Reference has been made to the project methodology/approach to justify need.
- [ ] No assumption has been made that assessors know why certain budget items are required.
- [ ] Any cost-matching provisions have been explained in full.

Step 5: Review the budget

Treat the first budget you complete as a work-in-progress. To ensure your budget is realistic, ask yourself:

- Are all costs included in your budget reasonable, allowable and related?

Allowable refers to costs that may be charged to a grant or contract.

Related refers to costs that are necessary for the success of the project.

Reasonable refers to actions a prudent business person would employ.

Checklist:

☐	Have you included any items that may be required by the funding body, such as travel to a conference or planning session, and allocated funds for that appropriately?
☐	Have you double-checked with the funding body to see if they do NOT allow certain kinds of expenses, such as personnel, international travel, indirect costs, etc. and excluded those items from your budget?
☐	Have you included cost-sharing or cash-matching, if required? If so, have you received appropriate approval?
☐	Have you used the funding body's budget form or format (if applicable) to enter your costs?
☐	Have you written a budget narrative/justification if required?
☐	Have you included indirect costs if allowed by the funding body?
☐	If including another institution on your proposal, have you received a letter of support or commitment from that institution's research office for their intended scope of work on the project, as well as a budget?
☐	Have you double-checked your math?
☐	Did you have someone else in your area, and also someone outside your area, review your budget?
☐	Is everything in your budget referenced in the project description and budget narrative as well? Be sure everything mentioned in your project description that would incur cost is shown in the budget.

Avoid the Common Pitfalls

- Only budgeting for what you can ask the funding body for - the budget process is about identifying **ALL** of the costs required to complete your project.
- Starting with the allowed maximum and concentrating on what you can get for that instead of calculating the full cost of doing the research project.
- Over-emphasising salaries because it is the largest item and not giving due explanation for all other costs.

- Forgetting about salary on-costs: Unlike overheads, these are compulsory costs incurred by the University in relation to staff salaries and should not be confused with indirect costs.
- Not considering the appropriate salary range and position classification.
- Not taking into account anticipated salary merit increases.
- Forgetting to include VU Indirect Costs for commercial projects
- Underestimating amounts (flights, hotel rates, etc).
- Forgetting internal charges for VU researchers, e.g. Use of labs or equipment time.
- Not taking into account additional charges for equipment purchases – delivery, installation, training, ongoing maintenance.
- Not giving consideration to foreign currency fluctuations and how this may impact the budget.
- Not including GST where applicable.
- Under-budgeting.

Contract Research - *In addition to the points above, consider:*

- Including your own time, with a mark-up where appropriate
- Timing of payments – preferably in advance of the work
- Conditions of payment – delivery or acceptance?
- GST exclusive
- Subcontractor/collaborator management

Assessor Comments:

The following Assessor comments are taken from a variety of ARC and NHMRC applications. They highlight the necessity of thorough justifications (Step 4) as well as careful review of the budget (Step 5), and reference some of the common pitfalls to be aware of.

More detailed case for the resource required:

- "Justification of the role of personnel is weak: why are the postdoc and RA positions required?"
- "The total travel costs requested appear excessive. Why does the researcher need to travel at all, let alone twice during the trial?"
- "What is the justification of the remuneration per session per participant?"

Showing what alternatives have been considered and rejected, providing a cost-benefit appraisal where appropriate:

- "Why are free recruitment processes such as SEEK website not being used for staff recruitment?"

Ensuring everything mentioned in the project description that would incur cost is explained in the budget justification:

- "Similarly the costs associated with the interviews themselves - taping and transcription but also travel and accommodation if they are to be conducted elsewhere - have not been included in the budget"
- "It is stated in the justification of the budget E1 that… But this doesn't accord with the method outlined in the main part of the proposal"

Double checking of figures:

- "The Year 3 budget requests 5 nights' accommodation for CIB at $200 per night, but the amount in the budget is $2000."
- All proposed experiments require a total of 780 animals, however only 750 have been budgeted for in terms of purchase and surgery.

Under-budgeting:

- "The proposed budget is perhaps a little small for the magnitude of the tasks that are proposed."

Comments that you should be aiming to garner from Assessors are those around the budget appearing carefully considered and well justified.

- The project is feasible and the timelines and **budget are sound and well justified**
- The budget is appropriate given the complexities of data collection - **I am persuaded of the need** for two full time research associates in each of the Australian locations
- The request for supplies **would seem to have been carefully considered** with respect to animal husbandry, consumable supplies and some equipment necessary for the completion of the experiments.
- Given the leverage of international efforts proposed, and the availability to the team of data, **this is exceptionally good value for money.**

Online budget templates to use: **http://research.vu.edu.au/funding.php**

For research grant applications, use the **OFR GRANTS budget template**

For contract and commercial research, use the **VU Contract and Commercial Research Pricing template**

Contacts:

For further assistance with your budget application, seek assistance from the following areas:

For assistance with your budget preparation & commercial & contract research	Contact your Research Facilitation and Development Manager
For peer review and mentors	Contact your College Research Director and/or your Research Facilitation and Development Manager
For research grant application schemes	Contact the Office for Research

Adapted from the UNSW Budget Preparation Guide