



## Cost Allocation Guidance: Appendix A: Methodology Examples

### Common Sample Methodologies

Table 1: Common Sample Methodologies

Methodology	Methodology Description	Cost-Benefit Rationale	When is it useful?	Supplemental Supporting Documentation	Considerations
<b>Personnel (FTEs/Effort)</b>	Research costs in defined categories are allocated in alignment with effort levels of one or more personnel on multiple projects.	When goods or services used are proportional to the personnel / effort on the projects. (i.e.; more effort = more supplies)	<ul style="list-style-type: none"> <li>When personnel contributions to multiple projects are consistent over a period of time</li> </ul> <p style="text-align: center;"><b>and</b></p> <ul style="list-style-type: none"> <li>When goods or services used are proportional to the personnel / effort on the projects</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>PI Confirmation of the personnel FTE/ effort allocation to project</li> </ul> <p style="text-align: center;"><b>and</b></p> <ul style="list-style-type: none"> <li>Effort allocation calculation</li> </ul> <p><a href="#">View a Personnel Effort Calculation Sample Template</a></p>	<ul style="list-style-type: none"> <li>Changes in headcount or effort</li> <li>Retroactive salary or effort changes, which could affect prior certification or have cost transfer implications</li> <li>Effort paid from other sources may result in disproportionate allocation across benefitting projects (e.g., unpaid visiting scholars, externally paid fellows, cost sharing)</li> <li>Stipendees may need to be included</li> </ul>
<b>Headcount</b>	Expenses are allocated across multiple projects in proportion to the number of participants associated with each individual award.	When expenses are linked to headcount of participants	<p>When the following is known:</p> <ul style="list-style-type: none"> <li>How many individuals are associated with (will benefit) each project</li> </ul> <p style="text-align: center;"><b>and</b></p> <ul style="list-style-type: none"> <li>How many individuals are not participants or will not benefit the project(s) (e.g., mentors, staff, presenters)</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>Headcount</li> </ul>	<ul style="list-style-type: none"> <li>Calculated portion of expense associated with NON-Participants (e.g., mentors, staff, presenters) should be allocated to non-participant support account(s).</li> </ul>

Methodology	Methodology Description	Cost-Benefit Rationale	When is it useful?	Supplemental Supporting Documentation	Considerations
<b>Experiments Performed</b>	Expenses are allocated across multiple projects in proportion to the number of experiments performed for each award.	When goods or services used are proportional to the number of experiments	<ul style="list-style-type: none"> <li>When personnel effort on projects does not reflect accurate usage of goods or services</li> </ul> <p style="text-align: center;"><b>and</b></p> <ul style="list-style-type: none"> <li>When the number of experiments for each project is known</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit</li> <li>Define the specific types of costs that relate to the experiment performed</li> </ul>	<ul style="list-style-type: none"> <li>May contradict FTE allocation</li> </ul>
<b>Square Footage</b>	Expenses are allocated to projects based on space utilization.	When square footage and utilization benefits multiple projects	<ul style="list-style-type: none"> <li>When expenses are most reasonably allocated by space use</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrated space assignment (how it is primarily used) and room measurements</li> <li>If the space is shared for multiple purposes, usage should be reflected in percentages for each purpose. Include this percentage within the calculation.</li> </ul>	<ul style="list-style-type: none"> <li>Confirm that the expense should be allocated as a direct cost rather than through indirect recovery.</li> <li>Space utilization may change and no longer reflect the relative benefit.</li> </ul>
<b>PI/Lab-Determined Benefit/Usage</b>	Research costs in defined categories are allocated to multiple projects based on the benefit to the project determined by the PI.	Aligns with the proportional benefit to each project determined by the PI	<ul style="list-style-type: none"> <li>When personnel effort on projects or another cost basis does not reasonably reflect proportional usage or relative benefit to the projects</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate how cost basis reflects proportional benefit</li> <li>PI confirmation of continued benefit</li> </ul>	<ul style="list-style-type: none"> <li>Changes to the usage of goods or services by projects</li> <li>Consider periodic reviews and discussion/confirmation with PI regarding the continued benefit to projects</li> </ul>

## Examples of Allocation Methodologies by Cost Type

Table 2: Examples of Allocation Methodologies by Cost Type

Cost Type	Methodology & Description	How is Relative Benefit Reflected?	Supporting Documentation	Considerations
<b>General Lab Supplies/Services</b>	<b>Personnel/FTE Effort</b>	Use of general supplies or services, such as glass washing, may be directly associated with the personnel accessing those supplies and the projects they are working on.	<ul style="list-style-type: none"> <li>List or spreadsheet of personnel doing wet lab work, and which projects they are working on</li> <li>Document/Invoice for the general supplies identifying the personnel that accessed the supplies</li> </ul>	<ul style="list-style-type: none"> <li>Analysis required to adjust for personnel doing computational work.</li> <li>Active discussions with PI are required to make adjustments in advance of when charges are incurred.</li> </ul>
<b>REU Participant Catering</b>	<p><b>Headcount</b></p> <p>Catering expenses are allocated across multiple NSF Research Experience for Undergraduates (REU) awards in proportion to the number of REU participants associated with each individual award.</p>	<p>Catering expenses for REU events are linked to headcount of REU program participants when the following is known:</p> <ul style="list-style-type: none"> <li>How many REU participants are associated with each individual REU award</li> <li><b>and</b></li> <li>How many individuals are not REU participants (e.g., mentors, staff, presenters)</li> <li><b>and</b></li> <li>How many individuals the catering will feed</li> </ul>	<ul style="list-style-type: none"> <li>Number of individuals participating in each catered event</li> <li>List of REU participant names and the associated REU award (determined by REU Program administrators)</li> <li>Number of individuals who are not REU participants</li> <li>Headcount allocation calculation</li> </ul> <p><a href="#">View a REU Headcount Example</a></p>	<ul style="list-style-type: none"> <li>Calculated portion of catering expense associated with Non-Participants (e.g., REU mentors, staff, presenters) should be allocated to appropriate (non-participant support) account(s).</li> </ul>
<b>Animal Per Diem</b>	<p><b>Headcount</b></p> <p>Animal per diem costs are allocated across multiple awards in proportion to the number of animals or cages associated with each individual award.</p>	<p>Animal per diem costs are linked to animal/cage count when the following is known:</p> <ul style="list-style-type: none"> <li>How many animals/cages are associated with each individual award</li> <li><b>and</b></li> <li>How many total animals/cages are used</li> </ul>	<ul style="list-style-type: none"> <li>Animal/cage count allocation calculation</li> </ul>	<ul style="list-style-type: none"> <li>See considerations for Other Animal Costs</li> </ul>

Cost Type	Methodology & Description	How is Relative Benefit Reflected?	Supporting Documentation	Considerations
<b>Other Animal Costs</b>	<p><b>Experiments Performed</b></p> <p>Animal-related costs (other than per diem) are allocated across multiple awards in proportion to planned experiments as determined by the PI and defined by the scopes of work.</p>	Other animal costs such as reagent/ apparatus costs are linked to planned experiments within each project scope. These costs may benefit projects in different proportions than animal per diem.	<ul style="list-style-type: none"> <li>PI assessment of the percentage benefit to each project for the allocable animal costs</li> </ul>	<ul style="list-style-type: none"> <li>Check in regularly that the experimental design remains the same; changes to design may impact reagent/supply use.</li> <li>Change of animal model may require additional follow-up with program officer to formally update scope of work.</li> </ul>
<b>Service Contract (Costs in Advance)</b>	<p><b>Determined by PI</b></p> <p>Contract terms generally require payment at commencement of service period. Contracts that benefit multiple projects are allocated a) at time of payment for 1-year/period contracts, or b) debited to an allocation account and journaled for multi-year/period contracts.</p>	<b>Determined by PI</b> in proportional benefit of anticipated usage to each project, as defined by the scopes of work.	<ul style="list-style-type: none"> <li>Demonstrate proportional benefit or cost basis determined by PI, as defined by the scopes of work</li> <li>Copy of Service Contract</li> <li>Copy of Purchase Order, if applicable</li> <li>Retain documentation of each annual/period allocation when a procurement system allows PO Change Orders of costing string.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure journals comply with the Cost Transfer Policy and are performed within 90 days.</li> <li>Consider where the initial cost of capitalized equipment was charged, if entirely to one sponsored award.</li> <li>A non-sponsored suspense or holding account is useful when a procurement system does not allow costing string changes on a standing PO; i.e. year 2 of a multi-year contract could not be adjusted to align with changes in proportional benefit to each project.</li> </ul>
<b>Rent/Other F&amp;A Costs on Non-federal Awards</b>	<p><b>Personnel (FTEs/ Effort)</b></p> <p>Rent or other F&amp;A costs (e.g., telephone) may be charged to non-federal award(s) if allowable by the terms and conditions of the award(s) and may be allocated in line with effort level of one or more personnel.</p>	When F&A costs, such as office rent, telephone, etc. are allowed as direct charges on non-federal awards and can be linked to personnel, they are allocated based on their effort.	<ul style="list-style-type: none"> <li>For rent: square footage or other documentation for the amount of the charge</li> <li>Allocation Calculation based on effort distribution</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the award terms and conditions allow F&amp;A costs as direct charges</li> <li>Budgeting for the specific F&amp;A costs</li> <li>Ensure cost allocation reflects the actual effort for the respective period of the cost, taking into account any salary journals</li> </ul>

Cost Type	Methodology & Description	How is Relative Benefit Reflected?	Supporting Documentation	Considerations
<b>Research Computing Storage</b>	<p><b>Units of storage or User information</b></p> <p>Fees for storing research data can be allocated based on the size of stored files and user data. If such data does not fairly reflect relative benefit, the PI's best judgment of relative benefit may be used.</p>	<p>Data may be stored in a directory that reflects the project that generated or is currently using the data.</p> <p>Usage reports may reflect the users who accessed the stored data and costs can be allocated based on their effort.</p> <p>The PI may determine that neither the unit nor user information reflects relative benefit and may document and support an alternate allocation that does.</p>	<ul style="list-style-type: none"> <li>• Usage reports</li> <li>• Allocation calculation</li> <li>• PI determination of relative benefit</li> </ul>	<ul style="list-style-type: none"> <li>• Data generated on one project may be used by multiple projects over time without any change to its storage location.</li> <li>• User data allocated by salary may allocate costs to projects that fund the user, but do not use the stored data.</li> <li>• PI allocations cannot be based on unallowable methodologies, such as budgets or available balances. They must be the PI's best judgment of allocations according to relative benefit.</li> </ul>

**Costs that usually occur as distributions, and not as allocations:**

*Travel*

- Travel sometimes involves multiple locations benefitting various projects as well as personal travel and novel research. Shared costs should be allocated according to the proportional benefit for each project or activity, which may differ from salary distribution.
- Documentation should:
  - Demonstrate proportional benefit by providing information about how the travel benefits the project(s)
  - Demonstrate how the calculation was created for each travel period
  - Demonstrate how each leg of travel relates to the person traveling and their planned work of the project(s)
- Refer to the school contact list for guidance

### *Capital Equipment*

Capital equipment is acquired or fabricated on sponsored awards when it is necessary to meet the research aims of the project. Acquisition costs are often funded from a single project when it is justified in the proposal and included in the awarded budget or approved by the sponsor during the life of the award. In most instances, federal agencies expect that such equipment will be shared by research users in a lab and do not expect acquisition costs to be allocated to every project that uses it. If a sponsor requires that the acquisition costs are distributed across all benefiting projects, and the relative benefit can be identified, then the proportional benefit to each project should be the basis for allocating the acquisition costs. Refer to the terms and conditions of the project(s) incurring the cost, current federal, sponsor, and University policy prior to charging capital equipment costs to a sponsored project.

- Concerns include:
  - Prior approval from the awarding agency
  - Cost quotes
  - Placement into service
  - Depreciation
  - Revised budget procedures
  - Cost Transfer compliance
  - Title ownership according to sponsor terms specific to project
- Equipment that is used for non-specific projects needs to have proportional cost on non-sponsored account.
- Refer to the school contact list for guidance