

Plan for the Operation and Maintenance of Infrastructure funded by the Canada Foundation for Innovation (CFI)

Definitions of terms in **bold** can be found at the end of this document.

I. Introduction

All CFI-eligible Institutions, by virtue of an agreement with the CFI, are required to have an Institutional plan in place for the **Operation and Maintenance (O&M)** of all infrastructure funded through the CFI during its **useful life**.

Note that *useful life* is not necessarily equivalent to the *physical life* of an item. While the usability of an equipment item may be decades-long, *useful life* refers to its utility for facilitating the research described in the proposal.

This document outlines the **Institution's** guiding principles and roles and responsibilities for ensuring that **CFI-funded infrastructure** is supported appropriately to be in a state of readiness for research throughout its useful life.

Ongoing O&M support for innovative research infrastructure is a collective effort involving all levels of the Institution, including but not limited to:

- the **Project Leader**
- Collaborators (Co-PIs, users, external collaborators, etc.)
- Department(s) and Faculty(ies)
- Various central administrative units

The ability to make commitments to support the O&M requirements of CFI-funded infrastructure depends on the availability of funds that are not otherwise committed to support the Institution's overall academic enterprise. Examples of Institutional sources of revenue include:

- Researcher-held grant funding from external sponsors
- Start-up awards
- Department and/or Faculty contributions
- User fees
- Contributions from collaborators
- **Research Infrastructure Support (RIS) fund** (this is dependent on eligibility – see Section VI below)

The Institution also receives an allocation of funding, termed the **Infrastructure Operating Fund (IOF)**, from the CFI. The IOF is intended to supplement the sources mentioned above to support O&M costs associated with CFI-funded infrastructure. The Institutional IOF allocation is based on CFI contributions

for all IOF-eligible projects held by the Institution. Each IOF-eligible project generates an IOF allocation of 30% of the maximum CFI amount approved at award finalization. Thus, if a \$1M project received a \$400,000 CFI contribution, then that project generates \$120,000 towards the Institution's total IOF allocation.

II. Guiding Principles

Statement from the Office of the Vice President (Research and Innovation) (OVPRI) on Collaboration and Shared Research Spaces:

The OVPRI strongly encourages the creation of shared research spaces, the use of communal equipment, and the adoption of core facilities whenever possible. All applications for funding of new research infrastructure should seek to establish shared research resources or to add new capabilities to existing core facilities. Such applications will be given a higher priority in adjudication decisions involving the OVPRI over applications involving single-users or those with more limited potential for shared use.

Below are the Institution's Guiding Principles for ensuring that CFI-funded infrastructure is operable and maintained sufficiently throughout its useful life:

- 1. ROLE OF THE OVPRI:** The OVPRI oversees the UofA's responsibility to provide O&M support, which comes from all levels of the Institution, including the Project Leader(s) and the relevant Department(s) and Faculty(ies). The OVPRI will manage the institution's IOF allocation in a transparent manner in ways that:
 - Leverage common O&M needs across facilities, including those not initially linked by a common application,
 - Coordinate with resources available from all levels within the Institution, and
 - Align with the efforts, investments, and priorities of the investigator(s), Department(s), and Faculty(ies) to sustain the infrastructure.
- 2. SHARED RESPONSIBILITY:** The UofA recognizes that ongoing O&M support for innovative research infrastructure is a collective Institutional effort. The Project Leaders, relevant Department(s) and Faculty(ies), and the OVPRI recognize that the CFI IOF allocation is not intended to be sufficient to fully operate the CFI-funded infrastructure for its useful life. These units are committed to allocating funds under their control and identifying other avenues of support external to the Institution to sustain the CFI-funded facilities.
- 3. SUPPORT COMMITTED AT APPLICATION:** The UofA is committed to submitting CFI applications that reflect the Institution's best efforts and practices to identify accurate and realistic O&M costs. Institutional contributions are committed, reviewed, and signed off by the lead Department, Faculty, and the OVPRI at the time of application; these contributions are found in the O&M budget submitted to the CFI as part of the infrastructure request. These commitments are further confirmed by these parties at the time the Award Agreement is executed.

4. **DURATION of SUPPORT:** On-going Institutional support for CFI-funded infrastructure may cease once the infrastructure has achieved its intended purpose as described in the CFI proposal.

III. Institutional Obligations to the CFI

The [CFI Policy and Program Guide](#) (2019, section 6.8) states:

“It is the Institution’s responsibility, in accordance with its established policies and practices, to ensure that appropriate resources are provided for the operation and maintenance of the CFI-funded research infrastructure over its useful life (i.e. the period of time over which the infrastructure is expected to provide benefits and be usable for its intended purpose, factoring in normal repairs and maintenance). As such, the Institution should carefully consider its ability to sustain the infrastructure, prior to the submission of a proposal to the CFI.

To meet this obligation, the Institution must have an internal plan for the provision and administration of operating and maintenance support. The plan should be made available to all relevant stakeholders.”

Accordingly, this document outlines the UofA’s internal plan to ensure O&M support throughout the useful life of all CFI-funded infrastructure. The UofA will achieve this through allocation of Institutional funding support and efforts to obtain such funds from external sources in accordance with the roles and responsibilities outlined in this document.

The CFI affords Institutions flexibility in the distribution of the IOF allocation among the projects held by the Institution; as per the current [CFI Policy and Program Guide](#) (2019, section 6.10.2),

“The institution decides how the IOF funding is to be divided among eligible projects. The institution has the flexibility to distribute its IOF allocation based on actual operating and maintenance needs as opposed to allocating the exact amount to the project that generated it. The institution is therefore encouraged to carefully review and determine how it can make optimal use of the funding.”

IV. Per-Project Allocation of Infrastructure Operating Funds for O&M Support

The O&M costs and potential revenues listed in a CFI application must reflect the Institution’s best efforts and practices to identify accurate and realistic O&M cost/revenue estimates over the useful life of the project.

Estimated O&M costs that were presented at the time of application will form the basis for any request for an IOF allocation for the project. It is recognized that O&M requirements may change between

application and IOF request for many reasons. At the time that the Project Lead makes the request for an IOF allocation, there will be an opportunity to clarify or revise the request.

For further information on minimum requirements that must be considered when developing the O&M budget section of CFI infrastructure applications, please click [here](#).

In accordance with the Guiding Principles (see above) and Institutional obligations to the CFI, the OVPRI distributes the Institution's IOF allocation based on demonstrated need. For all IOF projects set up on July 1, 2019 or later, the OVPRI will allocate the IOF as follows:

- **IOF Funding:**
 - **Per project:** Individual CFI projects may apply for an IOF allocation up to 25% of their CFI award amount. For example, a project that receives \$100,000 from the CFI may apply for up to \$25,000 in IOF to support O&M needs. Projects are not guaranteed to receive the full IOF amount available – per-project IOF allocation will be distributed based on demonstrated need.
 - **Per core facility:** A Faculty or Department may request to combine the available IOF allocation to support the O&M requirements of a suite of CFI-funded equipment from various projects that is available for use in a core facility.
- **RIS Funding:** The remaining IOF generated by the project(s) is directed to the RIS fund and central administrative costs.

V. Application for IOF funding:

A Project Leader may request a project-specific IOF allocation as soon as the first CFI-funded infrastructure item has been installed, or as late as two (2) years after submission of the final financial report to the CFI for the complete infrastructure project. Projects that do not apply for IOF funding within this period will not have any other opportunity to request an IOF allocation. However, a request may be made for an RIS funding in accordance with Section VI below.

The maximum term of an IOF award is five (5) years. Unspent funds remaining after five years will revert to the RIS fund.

The IOF request may include expenses incurred in the year preceding the IOF request. In this case the start date for the IOF award will be the month of the first proposed expenditure. Note that Institutional policy regarding [salary and benefit adjustment](#) (SBA) transfers across fiscal years applies.

IOF awards do not require matching funds, nor is there a holdback associated with IOF awards.

Ongoing Annual Reporting Requirements: Projects that used CFI funds for construction or major renovation of facilities will be required to provide ongoing confirmation of the use of the space for the lifetime of the IOF program at the Institution. In the event that a Project Leader is no longer responsible for the constructed or renovated space, then the Department or Faculty will be required to provide the annual confirmation.

Please contact your Finance Analyst (FA) or Contract Specialist (CS) for instructions on how to apply for IOF. A link to a list of contacts can be found at the end of this document.

VI. Application for RIS funding:

The RIS fund is in place to provide emergency support to supplement the costs of operating and maintaining CFI-funded infrastructure, as well as to cover a portion of the central administrative costs associated with CFI-funded infrastructure.

There is insufficient RIS funding to provide ongoing operating resources for every CFI project. As such, Project Leaders, Departments, and Faculties must be prepared to seek out and commit efficient and effective resources for their projects. RIS funding decisions will favor requests from projects that serve a large set of principal investigators and teams that include a shared-cost arrangement at the Department or Faculty level or which include a commitment for complete support after RIS funds are spent.

In order to be eligible for RIS funding:

- The infrastructure must be within its useful life, meaning it must still be in use to carry out the research described in the approved CFI proposal
- All other potential sources of funds available to address the O&M needs of the project must have been exhausted. Some examples of potential sources of funding:
 - Other researcher-held grants
 - General research accounts
 - Faculty/Department support
 - User fees or one-time contributions from collaborators who use the equipment

RIS fund allocations are for a maximum of one (1) extra year of support. The request for RIS funding must include a justification describing future sources of revenue that will be in place to ensure that O&M costs are covered once RIS funding is no longer available.

If RIS funding is awarded, the Project Leader(s) must report to the OVPRI (through RSO) on the expenditure of this funding. Unspent funds will be returned to the RIS fund.

Please contact your Finance Analyst (FA) or Contract Specialist (CS) for instructions on how to apply for RIS funding. A link to a list of contacts can be found at the end of this document.

VII. Decommissioning of CFI-Funded Infrastructure

As with all infrastructure on the UofA campus, CFI-funded infrastructure may be decommissioned when it is no longer needed for research purposes, non-repairable, or replaced by newer technology. The UofA Equipment Disposal/Retirement procedure can be found [here](#). Note that CFI approval is required when the decommissioning takes place prior to five (5) years from the date of acquisition/implementation of the infrastructure or facility.

VIII. Definitions

Operation and maintenance (O&M): includes advanced technical support, materials and supplies, sustainability, utilities and maintenance, and support for core research facilities.

Useful life (of CFI infrastructure): The CFI defines useful life as, *“The period of time over which the infrastructure is expected to provide benefits and be usable for its intended purpose, factoring in normal repairs and maintenance.”*

Institution: the University of Alberta.

CFI-funded Infrastructure: As per CFI policy, *“the equipment, scientific collections, computer hardware and/or software, information databases and communications linkages used or to be used primarily for carrying out research, including housing and installations essential for their use and servicing, that has been purchased for the University as part of an approved CFI award.”*

Project Leader: the primary applicant on the CFI proposal.

Research Infrastructure Support (RIS) fund: a central funding source held by the Institution that may be accessed to supplement unexpected O&M costs associated with CFI-funded infrastructure when all other sources have been exhausted. The RIS fund also supports central administrative costs involved in managing CFI projects.

Infrastructure Operating Fund (IOF): funding allocated by the CFI to the Institution that represents 30% of the maximum CFI contributions to projects held by the Institution. The IOF may be awarded to Project Holders to support operation and maintenance of their CFI-funded infrastructure.

Links

[CFI Policy and Program Guide \(2019\)](#)

[RSO Institutional Projects team contact list](#)