



Policies, Procedures and Guidelines

Complete Policy Title:

Capital Projects Planning and Implementation Policy

Policy Number (if applicable):

n/a

Approved by:

Board of Governors

Responsible Executive:

Vice-President (Operations & Finance)

Date(s) of Original Approval:

December 14, 2023

Date of Most Recent Approval:

December 14, 2023

Supersedes/Amends Policy Dated:

- Approval Authorities for Construction and Maintenance Projects, June 5, 2014

Policy-Specific Enquiries:

[Vice President \(Operations & Finance\)](#)
[Associate Vice-President & Chief Facilities Officer](#)

Disclaimer: If there is a discrepancy between this electronic policy and the approved copy held by the University Secretariat, the approved copy prevails.

Accessible Format Requests and General Policy Enquiries: policy@mcmaster.ca

TABLE OF CONTENTS

SECTION I: INTRODUCTION	1
PURPOSE AND SCOPE	1
TERMS AND DEFINITIONS	2
SECTION II: CAPITAL PLANNING OVERVIEW.....	4
PLANNING PRINCIPLES	4
PLANNING DOCUMENTS	4
University Campus Plan	4
Capital Plan	4
Asset Management Plan.....	5
Energy Management Plan	5
SECTION III: PLANNING AND IMPLEMENTATION PROCESS	6
PROJECT PLANNING PROCESS OVERVIEW	6
PROJECT IMPLEMENTATION PROCESS OVERVIEW	6
PROJECT COMMITTEES	6
Project Planning Committee – Level 4 and 5 Capital Projects.....	6
Project Steering Committee – Level 5 Capital Projects	6
Universal Steering Committee – Level 4 Capital Projects	7
Project Working Group – All Level 1-5 Capital Projects.....	7
PROJECT DOCUMENTATION	7
Business Case.....	7
Project Intake Form	8
Project Implementation Plan.....	8
SECTION IV: CAPITAL PROJECT APPROVALS	9
SECTION V: PROJECT IMPLEMENTATION	11
SECTION VI: PROJECT COMPLETION REPORT	12
APPENDIX A: RELATED POLICIES AND DOCUMENTS.....	13

SECTION I: INTRODUCTION

1. McMaster University is committed to excellence in all aspects of planning, design and construction activities and to its position as a research-intensive, student-centred institution.
2. The Vice President Operations & Finance (“VPOF”) is the general authority accountable for the Capital Project Planning and Capital Project Implementation at the University and has delegated responsibility jointly to the Associate Vice-President & Chief Facilities Officer (“AVP & CFacO”) and the Associate Vice-President & Chief Financial Officer (“AVP & CFO”) for the Capital planning process ensuring the co-planning of the Capital Plan and integration with multi-year financial projections to ensure alignment with the financial capacity of the University. The Capital Project Implementation Process is delegated to the AVP & CFacO.
3. The Capital Projects Planning and Implementation Policy will adhere to the governance and operational excellence principles of the University while maintaining fiscal responsibility, environmental stewardship and technological innovation.
4. The University is committed to continuously transforming the campus to achieve alignment with the University’s [Sustainability Policy](#) and [Net Zero Plan](#) through planning, innovation, and the implementation of technologies to reduce the environmental impact and promote conservation.

PURPOSE AND SCOPE

5. The purpose of this Policy is to:
 - a) **Outline the framework for the Capital Projects Planning and Implementation process.**
 - (i) The framework describes the responsibilities and processes for ensuring consistent and methodical capital planning and capital project implementation that facilitates the development of the University’s physical assets to be guided by a best practice approach for planning, design and construction ensuring quality design, sustainability features, energy management as well as landscapes and landmark buildings that enrich the community experience; and
 - b) **Promote the efficient and economic use of capital resources within the financial capacity of the University.**
6. This Policy applies to all Capital Projects undertaken at the University by all departments, Faculties and staff and includes capital projects using any source of McMaster financial resources under the administration of the University and that utilize an external contractor to implement the project. Individual Faculties and Departments may not approve or undertake capital projects without consultation with Facility Services and, where appropriate, the VPOF.
7. This policy applies to all Capital Projects at the University defined as follows:
 - a) **Level Five-Capital Project** with a project value of \$20 million or more.
 - b) **Level Four-Capital Project** with a project value of \$10 million and less than \$20 million.
 - c) **Level Three-Capital Project** with a project value of \$2 million and less than \$10 million.
 - d) **Level Two-Capital Project** with a project value of \$500,000 and less than \$2 million.
 - e) **Level One-Capital Project** with a project value of less than \$500,000; and

- f) **Emergency Project:** a capital project that results from a major break in the infrastructure or major service disruption as well as a health & safety risk that needs to be addressed immediately. Project value may vary.

TERMS AND DEFINITIONS

- 8. For the purpose of interpreting this document:
 - a) Words in the singular may include the plural, and words in the plural may include the singular;
 - b) **Approval Authority** means the committee or individual within the University's governance or management structure with the responsibility to commit the University according to the [Approval and Signing Authority Policy](#);
 - c) **Account Holder** means the employee who has the highest level of decision-making authority for a budget unit in a Faculty, department or other operating unit;
 - d) **Area AVP** means Area Assistant/Associate Vice-President or designate.
 - e) **Business Case** refers to the document/template that describes the support and justification for a proposed project on the basis of expected benefit to the University. It also includes Project Capital Budget and Operating Budget projected implications. A template document to be used for capital projects can be found on the [Financial Affairs website](#).
 - f) **Capital Project** means a project that is valued greater than \$100,000 and results in an expansion of the University's built physical assets and infrastructure by way of new buildings or results in capital improvements to existing buildings as additions or renovations, funded and managed by McMaster University and that are part of the University's [Capital Plan](#), Asset Management Plan or have received specific approvals from relevant governance bodies. Maintenance Projects are excluded from the definition of capital projects.
 - g) **Change Order** means a document that is issued for a specific component of the project scope within the original intent of the project with no change to the approved overall project budget;
 - h) **Cost Overrun** occurs when the actual cost of a project exceeds the budgeted cost.
 - i) **Maintenance Project** means projects that are required to maintain existing assets in efficient operating condition, but do not result in capital improvements. Maintenance projects can be carried out either by University staff or an external contractor.
 - j) **Scope Change** means a change in design that deviates from the original functionality or intent of the project;
 - k) **Total Project Budget** means the overall financial budget for a capital project incorporating all construction and soft costs of a project, including consultants, furniture, signage, non-recoverable (net) taxes, etc., but excluding operating budgets.
 - l) **Operating Budget** means ongoing operating expenses post-construction; these include expenses for maintenance, custodial, utilities etc.

- m) **Project Completion** means the implementation activities for the project have been completed, including financial closing, such that the desired business outcomes and objectives have been met.
- n) **VPOF** means the Vice-President (Operations and Finance);
- o) **AVP and CFacO** means the Associate Vice-President and Chief Facilities Officer, or designate; and
- p) **Administration** refers to University employees responsible for the management of the affairs of the University.

SECTION II: CAPITAL PLANNING OVERVIEW

9. The ongoing development and enhancement of the McMaster University campus is an important and essential process that requires careful and methodic planning. Campus design has significant impacts on the University community, including staff, students and faculty and reflects the University's strategic framework, goals and aspirations.

PLANNING PRINCIPLES

10. Planning principles are established by the Administration from time to time and are to be reviewed and revised periodically as required. The principles should reflect the University's academic mission, strategic goals and aspirations, and be incorporated into all detailed planning.
11. The University [Campus Plan](#) and the [Capital Plan](#) are developed and implemented by the planning principles. The same planning principles apply to individual projects and must ensure excellence, functionality, high-quality design, sustainability, and integration with the Campus Plan.
12. As part of its commitment to human and societal health and well-being, the University will strive to be a leader in excellence in design, cohesive development, sustainable building, conservation, and protection and improvement of the natural environment in all capital projects.

PLANNING DOCUMENTS

13. The following University Plans will set out overarching guidance in the planning and prioritization of capital projects.

University Campus Plan

14. The University Campus Plan is a long-term dynamic (10-year) document that provides a guiding framework to the University for future growth, land use development, and preservation of the campus. The University Campus Plan is used to evaluate and guide campus growth, future development, and landscapes, as well as preserve and enhance important campus features.

Capital Plan

15. The Capital Plan establishes University capital priorities with consideration of the departmental business need, the University's financial capacity and the approved University Campus Plan. The Capital Plan guides the investment and growth of the University's physical assets such as buildings, and infrastructure and is a detailed list of approved capital projects, projects in progress and future investment priorities for a defined fiscal period.
16. The annual capital planning process draws from the Capital Plan and engages both academic and administration groups across campus to produce a prioritized list of capital projects for implementation in the appropriate budget year.
17. The Capital Plan informs initial prioritization, planning, construction and operating financial budgeting and projections. The process is completed in parallel to enrolment, compensation, and other planning matters to validate across the University that there are sufficient resources to achieve the Plan.

Asset Management Plan

18. The [Asset Management Plan](#) identifies the deferred maintenance and infrastructure renewal projects required across all campus buildings to maintain the University assets in a state of good repair. The annual capital planning process will draw on the asset management plan to establish a prioritized list of deferred maintenance and infrastructure renewal projects to be implemented for the appropriate budget year. The University establishes an annual financial allocation for deferred maintenance and infrastructure renewal projects through the budgeting process.

Energy Management Plan

19. The University is committed to maintaining a safe and sustainable campus and, through the annual [Energy Management Plan](#), establishes various projects with the aim of creating a sustainable campus environment. The projects are aimed at reducing its utility consumption and GHG emissions in accordance with the targets established in the University's [Net Zero Roadmap](#).

SECTION III: PLANNING AND IMPLEMENTATION PROCESS

PROJECT PLANNING PROCESS OVERVIEW

20. The planning process begins with the identification of a business need or requirement that starts a capital project planning phase to create, enhance or improve the University's capital assets.
21. A detailed Project Intake Form is required for all Level 5 projects. Levels 4-1 require an abridged Project Intake Form ("PIF"). The Project Intake Form is to receive sign-off and acceptance of the department users, financial affairs and Facility Services staff.

PROJECT IMPLEMENTATION PROCESS OVERVIEW

22. A project enters the Implementation Stage when the project planning process is complete and after the project is approved by the appropriate authority in accordance with the [Approval and Signing Authority Policy](#). The project approval may be as an individual approval as a business case or through the Planning and Resources Committee ("PRC").

PROJECT COMMITTEES

23. The following Committees will be set up for relevant projects:

Project Planning Committee – Level 4 and 5 Capital Projects

24. A Project Planning Committee shall be formed at the outset of all Level 4 and 5 projects and will include representatives of the project's user groups, staff responsible for campus and facilities planning, and staff responsible for project implementation. The project planning committee will continue to exist until the project implementation begins and Project Working Group has been formed.
25. The membership of the Project Planning Committee will be assembled by the AVP & CFacO (or designate) with input from the Dean(s) and relevant area AVPs.

Project Steering Committee – Level 5 Capital Projects

26. A Project Specific Steering Committee will be established for all Level Five Capital Projects. The Committee should include the relevant Budget Owner(s), the VPOF, AVP & CFacO, Director, Design and Construction, Director of Finance, Facility Services, Internal Audit and the Project Manager. Additional membership is to be established by the committee on an as-needed basis. The AVP & CFacO will serve as committee chair.
27. The Steering committee's role is to oversee and monitor project progress to ensure due diligence in the use of University funds throughout the project life cycle and to recommend progression through project milestones. Project cost overruns and scope changes will be reviewed by the Steering Committee prior to proceeding through the governance approval process in accordance with the *Approval and Signing Authority Policy*.
28. The Steering Committee will review and approve the project Business Case prior to proceeding through the Governance approval process.

Universal Steering Committee – Level 4 Capital Projects

29. A Universal Steering Committee will be established to govern all Level Four Capital Projects and will include the AVP & CFacO, Executive Director Design & Construction, Director of Finance, Facility Services and Audit staff with additional members on an as needed basis.
30. The Universal Steering Committee's role is to oversee and monitor project progress to ensure due diligence in the use of University funds throughout the project life cycle and to recommend progression through project milestones. Project cost overruns and scope changes will be reviewed by the Steering Committee prior to proceeding through the governance approval process in accordance with the [Approval and Signing Authority Policy](#).
31. The Steering Committee will review and approve the project Business Case prior to proceeding through the Governance approval process.

Project Working Group – All Level 1-5 Capital Projects

32. A Project Working Group is established for all levels of Capital Projects at the project initiation stage and will include representatives of all project stakeholders and must include representatives from: Primary Project Users, key project stakeholders, Design and Construction, Budget Owners, and Financial Affairs. The membership of the Project Team will be assembled by the Executive Director, Design and Construction and the Budget owner(s). The Project Manager/Project Director will serve as committee Chair.
33. The Project Team provides expertise and input to the project throughout the planning and execution process and assists in the development of the business case, budget, and schedule. The Project Team provides ongoing guidance regarding project deliverables throughout the project life cycle. The business case will include post-construction operating expenses and a plan for allocating these costs to budget envelopes.
34. The Project Team will review and approve the project Business Case prior to proceeding through the Governance approval process.

PROJECT DOCUMENTATION**Business Case**

35. Business Cases are to be prepared for all Level 4 and 5 projects, using the approved Business Case template or checklist (available on the [Financial Affairs website](#)) and in collaboration with the Budget Owner, the Financial Affairs and Facilities teams. Business cases are to be reviewed and approved by the Steering Committee or Project Working Group and will follow the *Approval and Signing Authority Policy* for all required governance and approvals. The Business Case provides justification for the project and will specify all desired functional requirements for the project consistent with the academic priorities and requirements and will address the following:
 - a) Strategic Fit;
 - b) Detailed description of business need;
 - c) Project Scope;

- d) Options and Analysis;
- e) Governance and oversight;
- f) Risk management;
- g) Change management;
- h) Total project costs, including escalation and HST;
- i) Funding sources and uses;
- j) Operating costs; and
- k) Ancillary costs.

Project Intake Form

- 36. Project Intake forms are to be prepared for all capital projects by Design & Construction and have an accompanying Capital Budget sheet. Project intake forms are approved by the Director, Design & Construction as well as budget owners and key stakeholders.
- 37. The intake form shall include where known:
 - a) Full project scope for the project or programs;
 - b) Proposed project schedule;
 - c) Funding sources;
 - d) Operating costs where applicable; and
 - e) Total estimated project costs.

Project Implementation Plan

- 38. Documented Project Implementation Plans are to be developed for all Level 4 and 5 projects and updated throughout the life of the project. The Director, Design and Construction, will determine if other projects require a Project Implementation Plan. Project plans are reviewed and approved by the Steering Committee and should include:
 - a) Business case;
 - b) Project intake form;
 - c) Capital Budget Sheet;
 - d) Project schedule;
 - e) Risk register;
 - f) Communication Plan;
 - g) Governance; and
 - h) Change Management Process

SECTION IV: CAPITAL PROJECT APPROVALS

39. The Capital Project Approvals process outlined below ensures that approved decisions are informed and influenced by the University [Campus Plan](#) and the [Capital Plan](#), are in accordance with the [Approval and Signing Authority Policy](#), and have appropriate oversight and monitoring of project outcomes and budgets.
40. The approval process for individual projects is as follows:
- a) **Level 5 Projects (>\$20M):**
- (i) Governance approvals are to be obtained at each of the following stages:
 - Business case, with Total Project Budget including Class D construction cost estimate
 - Total Revised Project Budget including a Class C estimate (100% Design Development (DD)) if higher than that defined in the Business Case
 - Contractor award if value is greater than \$20 Million
 - A final Post implementation Closeout Report submitted within 12 months of Project Completion
 - Approvals related to consultant award, contractor award and cost overruns, all in accordance with the *Approval and Signing Authority Policy*.
 - (ii) The PRC reviews and recommends the project to the Board of Governors (“BoG”) for approval.
- b) **Level 4 Projects (between \$10M to <\$20M):**
- (i) Governance approvals are to be obtained at each of the following stages:
 - Business case, with Total Project Budget including Class D construction cost estimate
 - Total Revised Project Budget including a Class C estimate (100% Design Development (DD)) if higher than that defined in the Business Case
 - Contractor award if value is greater than \$10 Million
 - Approvals related to consultant award, contractor award and cost overruns, all in accordance with the *Approval and Signing Authority Policy*
 - (ii) Project Universal Steering Committee reviews and recommends the project approval to the PRC.
- c) **Level 3 Projects (between \$2.0M to < \$10M)**
- (i) AVP & CFacO reviews and recommends project approval to the VPOF.
 - (ii) The VPOF approves all Level 3 projects and applicable budget increases in accordance with the signing authority policy.
 - (iii) Each project requires updates to the office of the VPOF at least 2 times during the project lifecycle.
- d) **Level 2 Projects (between \$500K to < \$2.0M):**

- (i) Executive Director, Design and Construction recommends project approval to the AVP & CFacO
 - (ii) AVP & CFacO approves all Level 2 projects and applicable budget increases in accordance with the *Approval and Signing Authority Policy*
- e) **Level 1 Projects (<\$500K):**
- (i) Assistant Director, Project Planning, Design and Construction or Director, Facilities Maintenance recommends project approval to the Executive Director, Design and Construction
 - (ii) Executive Director, Design and Construction approves all Level 1 projects and applicable budget increases in accordance with the *Approval and Signing Authority Policy*
- f) **Emergency Project (Value Varies)**
- (i) Executive Director, Design and Construction, recommends project approval to the AVP & CFacO
 - (ii) AVP & CFacO approves all Emergency Projects
 - (iii) If the value of the Emergency Project exceeds the authority of the AVP & CFacO, reporting on the project to be completed in accordance with the *Approval and Signing Authority Policy*. Advance approvals are not required.

SECTION V: PROJECT IMPLEMENTATION

41. The VPOF is accountable for capital project implementation and delegates the responsibility to the AVP & CFacO as appropriate and subject to the parameters established through the business case process, and in consultation with the Project Steering Committee.
42. The AVP & CFacO must ensure that appropriate project management procedures are established and the [Project Management Framework](#) is implemented correctly.
43. The Project Management Framework as detailed in the Project Management Manual, ensures that:
 - a) The University and the individual project user's interests are considered in all projects;
 - b) Essential design standards are developed, reviewed and revised as needed;
 - c) All new buildings and projects with an exterior component or public area are reviewed by the Design Review Committee;
 - d) The process of selection and procurement of architects, engineers or other professional services are executed in accordance with University procurement policy and applicable legislation;
 - e) All projects are completed according to approved budget and schedule;
 - f) All project cost increases that exceed the approved budget are approved by the appropriate level;
 - g) All required project status and reporting to Steering committees, PRC and BoG are completed and communicated in a timely manner;
 - h) The University's commitment to sustainable buildings, conservation, protection and improvement of the natural environment is incorporated into every project where possible;
 - i) All regulatory requirements are known and adhered to; and
 - j) An established change management process is developed and implemented.

SECTION VI: PROJECT COMPLETION REPORT

44. In order to ensure accountability and to identify lessons learned, all Level 5 capital projects are required to submit a Project Completion report to the PRC and the BoG within 12 months of Project Completion.
45. The Project Completion report will be prepared in consultation with the Project Steering Committee and will provide the following information:
 - a) Project overview;
 - b) Budget information;
 - c) Challenges and lessons learned;
 - d) Successes; and
 - e) Other relevant information.

APPENDIX A: RELATED POLICIES AND DOCUMENTS

This Policy is to be read in conjunction with the following policies, statements, legislation, and collective agreements. Any question about the application of this Policy or related policies shall be determined by the Vice-President (Operations & Finance) and in conjunction with the administrator of the other policy or policies. The University reserves the right to amend or add to the University's policies and statements from time to time (this is not a comprehensive list):

- [Approval and Signing Authority Policy](#)
- [Accessibility Policy](#)
- [Business Case Checklist or Template](#)
- [By-Laws of the Board of Governors](#)
- [McMaster University Campus Plan](#)
- [Capital Plan](#)
- [Central Bank Borrowing Policy](#)
- [Energy Management Plan](#)
- [McMaster's Strategic Plan](#)
- [McMaster University Policy Framework](#)
- [Net Zero Road Map](#)
- [Project Management Methodology Framework](#)
- [Sustainability Policy](#)