

Budget Instructions, Part 2

Capital

Higher education capital project evaluation system

Predesign

Architect/engineer fees

2023-25 Biennium

June 2022



Office of Financial
Management

Budget Division

CAPITAL BUDGET BASICS

New information for 2023-25 capital budget requests

Look for the **NEW** indicator throughout these instructions for more detailed information on significant new material and changes made for the 2023-25 capital budget instructions. A summary of the most significant changes is listed below:

■ Cost estimates

- For construction projects with an estimated total cost over \$1 million (\$2 million for higher education), agencies must provide cost estimates by completing the Excel C-100 and attaching it in CBS in .xls or .xlsx format. Please note that the CBS 003 report is no longer required and will not be used in OFM or Legislative budget development; some updates to the C-100 are not reflected in the CBS cost estimator due to outdated database architecture.
- Agencies are not required to submit C-100s or CBS cost estimates for minor works subprojects (projects less than \$1 million or \$2 million for higher education institutions) or minor works parent projects. Request totals for each subproject can be entered into CBS without a detailed cost estimate.
- Agencies are also not required to submit C-100s or CBS cost estimates for projects that will not be initiated until budget outyears (2025-27 and after). Please include C-100s for projects with acquisition, predesign, design or construction funds requested in 2023-25. Request totals for each project can be entered into CBS without a detailed cost estimate.

■ Reappropriations

- To ensure reappropriation requests are accurate, agencies must use the most current enacted version in CBS and not the original agency request version from the previous biennium.
 - Agencies do not need to populate answers to the “project description” questions in CBS for reappropriation requests.
 - Agencies do not need to enter a priority for reappropriation requests. Agencies priorities should be focused on new project requests.
 - OFM and the Legislature will request periodic reappropriation updates as they develop their budgets. OFM and the Legislature are developing a new process that would calculate reappropriations based on actual expenditures and future allotted amounts. This will require that agencies accurately account for capital expenditures and allotments. More information about this process will be communicated in Summer/Fall of 2022.
- The agency project management/administration fee calculation is updated. The new calculation is based on the A/E basic service fee, minus 3 percent and multiplied by the sum total of acquisition cost, consultant services cost, maximum allowable construction cost, construction contingency and other costs as identified in the Excel C-100 form. Previously the calculation was minus 4 percent.
- The Clean Buildings standard will apply to many state agency facilities (see Section 5.11). The objective of these laws, passed in 2019 and 2022, are to lower costs and pollution from fossil fuel consumption in the state’s existing building stock. To help OFM and the Legislature identify projects that help meet clean buildings performance standards, please add the acronym “CBPS” to the associated project title in CBS. For example, “CBPS: Administrative building HVAC replacement.”

- Programs and projects (for example, minor works, grants, or loans) where there is a known subproject are required to submit a project list with additional subproject data through CBS 002. If a project list is developed after the release of the Governor’s budget, please contact your capital budget analyst to coordinate the transfer of subproject data when it becomes available.
- The Healthy Environment for All Act (HEAL Act), chapter 314, Laws of 2021 (codified at [RCW 70A.02](#)), was adopted to ensure environmental reviews, funding decisions, and permitting decisions identify and address environmental health disparities in overburdened communities, reduce exposure to environmental hazards on tribal lands, and track and measure implementation of environmental justice in state agencies. Under [RCW 70A.02.080\(2\)](#), beginning on or before July 1, 2023, covered agencies must, where practicable, take specific actions when making expenditure decisions or developing budget requests to OFM and the Legislature for programs that address or may cause environmental harms or provide environmental benefits. Agencies must also consider any guidance developed by the Environmental Justice Council and the Environmental Justice Interagency workgroup under [RCW 70A.02.110](#).
- Agencies should apply for federal [Infrastructure Investment and Jobs Act](#) grants as they become available and request federal expenditure authority and any associated state match as part of the biennial budget process.
- The instructions provide clarification on equipment purchases using bonds or COPs and information on stand-alone equipment COPs.

1.1 Introduction

These instructions are required by statute ([RCW 43.88.030](#)) and are intended to assist agencies through the budget submittal and implementation process. The information submitted by agencies is used by the Governor, the Office of Financial Management (OFM) and the Legislature as a basis for budget decisions.

If you have questions about these instructions or specific capital budget requests, contact your assigned capital budget [analyst](#).

1.2 What is a capital project?

The capital budget includes appropriations for a broad range of construction, renovation and acquisition projects involving state office buildings; colleges and universities; prisons and juvenile rehabilitation facilities; parks and recreation; K-12 schools, affordable housing facilities for low-income persons and people with special needs; water quality, water supply and flood risk reduction infrastructure; and other public capital facilities and programs. A capital project is a project to construct either new facilities or make significant, long-term renewal improvements to existing facilities. Grants made by or passed through the state to fund projects for other entities are also included in the capital budget, and these instructions apply to those projects as well.

Capital projects appropriated in the capital budget are public works under Chapter [39.04](#) RCW and subject to prevailing wage requirements and other applicable laws. Costs for routine maintenance work necessary to keep a facility or asset in useful condition are not typically included in the capital budget and are not an allowable use of state financed bonds.

1.3 Phases and types of capital projects

Predesign

A predesign is a document that explores alternatives, conveys programming information, and provides a cost estimate for a proposed capital project. The predesign should assess which alternative best addresses an identified problem, opportunity, or program requirement and at what cost. Decision makers in the Governor's Office, OFM and the Legislature use this information to determine whether the project should proceed to design and construction.

For more information, see OFM's [Predesign Manual](#). Although predesign is often viewed as the first phase in a major capital construction project, OFM approval of the completed predesign does not guarantee additional appropriations for design or construction.

Predesigns are required for all capital projects with costs expected to exceed \$10 million (RCW [43.88.110\(5\)](#)) and projects with smaller appropriations that are selected by the Legislature or OFM because they are particularly time sensitive, have high risk or are of particular interest to decision makers. OFM has authority to make exception to some of the predesign requirements but must report any exceptions to the fiscal committees of the legislature with a justification. Contact your capital budget analyst for approval early in the predesign process if your agency believes one or more elements of the predesign will not add value for decision makers or if there are other compelling reasons that may warrant an exception.

Design

Design documents form the basis for taking bids and constructing a facility. In the design phase, the needs, ideas, and proposals of the agency are transformed into plans and specifications. Normally, the design phase consists of three basic parts, each of which includes preparation of both drawings and written specifications: schematic design, design development and construction documents.

For most construction projects, an architect/engineer (A/E) assumes overall responsibility as the owner's agent for the design, bid and construction observation functions. This includes ensuring that the project is completed within the limits of an established budget. An A/E also coordinates the activities of other design professionals working on the project.

Construction

The construction phase transforms the needs, ideas, and proposals of the agency, as defined by the plans and specifications, into a physical structure. The construction phase begins with the bid and continues through final acceptance of the construction project and equipping the building for use. Upon completion and approval of the final construction documents, including the bidding requirements, the project is ready for release to contractors to obtain proposals or bids.

There are other alternative contracting methods such as general contractor/construction manager and design build. Capital Projects Advisory Review Board must certify a public body to use alternative contracting methods or provide project by project approval (RCW [39.10.270](#) and RCW [39.10.280](#)).

Grant and loan programs

Grant programs and projects provide capital appropriations to state and local governments, community organizations and tribes for public facilities and land.

Minor works

Minor works projects appear as a parent project in the budget and include multiple subprojects valued between \$25,000 and \$1 million each (for higher education institutions, the range is \$25,000 and \$2 million). Minor works projects should be completed within the biennium.

NEW

Studies

Studies funded in the capital budget, particularly with bonds, should have a clear capital budget nexus. The study should culminate in a capital budget request or inform capital budget decision makers.

1.4 Reappropriations

Because many capital projects and acquisitions require more than one biennium to complete, the capital budget includes reappropriations, which are unspent amounts from enacted appropriations made in the previous two-year budget period that are necessary to complete a project.

Agencies must demonstrate funds are needed to complete the previously approved scope of work. Reappropriations are subject to the conditions and limitations applicable to the original appropriation unless context clearly provides otherwise. Reappropriations are limited to the unexpended balances remaining at the end of the fiscal biennium. The sum of requested reappropriation and actual expenditures may not total more than the enacted appropriation for each project.

1.5 Administrative and staffing costs

Capital project administration costs are for activities directly related to the completion of a capital project or implementation of a program funded in the capital budget. See Chapter 4 for the appropriate use of tax-exempt bond proceeds related to agency administrative and staffing costs. Administrative costs for both grant and loan programs and construction projects are limited by the IRS (Chapter 4), OFM, and in some cases the Legislature. If you have questions about the use of a capital appropriation for administrative and staff costs, please contact your capital budget [analyst](#).

Agencies that employ full-time staff who directly support capital projects must identify these staff functions and their anticipated full-time equivalent (FTE) and supporting expenditures on their Capital FTE Summary.

Common agency accounting practices for administration costs associated with capital projects include charging each project directly for costs incurred or assessing a project administration fee across agency capital projects and using the pooled funds to pay agency project administrative costs.

Grant and loan program administration

Unless specified otherwise in law, an agency administering an existing grant or loan program may charge up to 3 percent of the total new appropriated project costs. Please contact your capital budget [analyst](#) if the agency believes 3 percent is not adequate to implement a program. Exceptions may be granted on a very limited basis with documentation justifying the need, which could include implementing a new program or federal requirements.

Agency construction project management and administration fees

The following guidelines will help clarify appropriate budgeting of administrative and project management expenses for the completion of capital construction projects:

- Major and stand-alone capital projects greater than \$1 million (\$2 million for higher education).
 - » The project management/administration fee is based on the A/E basic service fee, minus 3 percent and multiplied by the sum total of acquisition cost, consultant services cost, maximum allowable construction cost, construction contingency and other costs as identified in the Excel C-100 form. Access the A/E fee [schedule](#) for more information. This rate is intended to be a ceiling, not a target. Agencies must evaluate their project management and administration requirements for each project when requesting these fees. OFM or the Legislature may further adjust agency project management fees based on project complexity and size.
 - » When the Department of Enterprise Services (DES) is responsible for project administration, the project management/administration fee is not included in the capital request. Agencies should select “Project Administered by DES” on the summary tab of the C-100. However, if the project is alternatively financed, additional DES fees will be incurred. Agencies should consult with DES Engineering and Architectural Services when projects are not funded by appropriation. Projects funded through alternative financing mechanisms need to include cost estimates for the additional project management/administration in the capital request for those projects.
- Minor works appropriation with subprojects less than \$1 million (\$2 million for higher education).
 - » The project management/administration fee generally may not exceed 4 percent of the total new appropriated project cost unless approved by OFM.

UPDATED

Architect and engineering fees

For the purpose of budgeting for capital projects, the fees for basic A/E services are calculated using the [Guidelines](#) for Determining Architect/Engineer Fees for Public Works Building Projects and the A/E fee [schedule](#).

The A/E fee guidelines define the basic design services typically needed in every project and provide definitions for reimbursable expenses and extra or other services. The A/E fee schedule is intended as a ceiling for budget purposes, not a target. Agencies must evaluate their specific project requirements when requesting these fees. After projects have been appropriated, agencies are expected to negotiate with A/E consultants to purchase design services based on consultant proposals at a fair and reasonable cost, rather than simply using the budgeted amount to establish the fees.

1.6 Infrastructure Investment and Jobs Act and other federal programs

On November 15, 2021, the federal [Infrastructure Investment and Jobs Act](#) became law. The Jobs Act provides new funding for infrastructure projects. Agencies should apply for these grants as they become available and request federal expenditure authority and any associated state match as part of the biennial budget process.

NEW

BUDGET SUBMITTAL REQUIREMENTS

2.1 Budget request submittal requirements

Each agency must submit a combined PDF “binder” of its capital budget request to OFM. This PDF will be posted to OFM’s website and links shared with the public and Legislative staff.

- If the submittal is below the 20 MB restriction for email, email it to ofm.budget@ofm.wa.gov.
- For agencies *within* the SGN, larger files should be copied to our FTP site by pasting the following address into File Explorer (not a browser) – “[ftp://ftp.ofm.wa.gov/OFM/Capital Budget Submittals](ftp://ftp.ofm.wa.gov/OFM/CapitalBudgetSubmittals)”.
- For agencies *not within* the SGN, files larger than 20 MB can be mailed on a thumb drive to OFM at the following address:

Office of Financial Management
300 Insurance Building
P.O. Box 43113
Olympia, WA 98504-3113

If agencies must resubmit their capital plans to correct an error, they must resubmit both PDF and Capital Budget System (CBS) data.

CBS is available through BudgetWorks. You can logon to BudgetWorks or request access [here](#).

Required components of budget submittals

The following table outlines the required components of the budget submittal and how it must be organized in the PDFs submitted to OFM. For budget submittal definitions and requirements by statute, refer to Chapter [43.88](#) RCW. In addition to this list of required elements, an introductory letter from agency leadership is encouraged but not required.

Tab A	<input type="checkbox"/> Ten-year capital program summary (CBS 001) – CBS report (<i>Chapter 3</i>) <input type="checkbox"/> DAHP review letter and exempt project list (<i>Chapter 3</i>) <input type="checkbox"/> FTE summary – job description and FTE details (CBS 004) CBS report (<i>Chapter 3</i>) <input type="checkbox"/> Maintenance backlog reduction plan (<i>Chapter 1</i>)
Tab B All preservation projects	<input type="checkbox"/> Capital project requests related to preservation (CBS 002) – CBS report (<i>Chapter 3</i>) <input type="checkbox"/> Capital project cost estimate (Attached C-100; <i>Chapter 3</i>)

<p>Tab C All programmatically projects</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Capital project requests related to new or expanded programs (CBS 002) – CBS report (<i>Chapter 3</i>) <input type="checkbox"/> Capital project cost estimate (Attached C-100; <i>Chapter 3</i>)
<p>Tab D Grant and loan programs</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Capital project requests related to grant and loan programs (CBS 002) – CBS report (<i>Chapter 3</i>) <input type="checkbox"/> Project list, including location, for each grant and loan program that is not submitted as a subproject in CBS 002. For grant programs, please also identify match amount and proposed fund source when available. (<i>Chapter 3</i>)
<p>Tab E COP forms</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Certificates of Participation (COPs) – for bond or COP projects, if applicable. (<i>Chapter 3</i>)

2.2 Timeline and dates

Agencies are required to submit their entire capital and operating budget requests no later than **Sept. 20, 2022**. Other timeline and dates of interest for the 2023-35 budget development cycle are available on OFM’s [website](#).

CBS is available through BudgetWorks. You can logon to BudgetWorks or request access [here](#).

2.3 Additional requirements

Reporting requirements for higher education institutions

RCW [28B.77.070](#) requires two- and four-year institutions of higher education to submit capital budget outlines to OFM by August 15 of each even-numbered year, including a description of each capital project and the amount and fund source being requested. Additionally, the two-year institutions shall include the State Board of Community and Technical Colleges’ prioritized ranking of the capital projects. Four-year institutions will include their priority ranking and the capital budget category within which the project was submitted to OFM in accordance with RCW [43.88D.010](#). (Formerly submitted to the Higher Education Coordinating Board, which no longer exists.)

By October 14, 2022, higher education institutions must also provide to their capital and operating budget analysts a balance sheet and projection of estimated income and spending for each institution’s building fee account.

Reporting and budget submittal requirements related to Puget Sound recovery

RCW [90.71.320](#) requires state agencies that are responsible for implementing elements of the Action Agenda to provide to the Puget Sound Partnership (PSP) their estimates of the actions and the budget resources needed for the forthcoming biennium. The statute also requires these agencies to seek the concurrence of PSP in the proposed funding levels and sources included in this proposed budget.

Per Section 309 of the 2021-23 enacted operating [budget](#), PSP must provide the Governor and appropriate legislative fiscal committees with a single, prioritized list of state agency 2023-25 capital and operating budget requests related to Puget Sound by October 15, 2022.

The primary criterion used by PSP to prioritize agency budget requests is how strongly the requests align with the Action Agenda. To facilitate PSP’s mandated budget request prioritization process, all agencies requesting budget changes related to Action Agenda implementation must provide additional information as described in Chapter 13 (HEAL Act and Puget Sound Recovery) of the 2023-25 operating budget [instructions](#).

UPDATED

Budget requests related to compliance with clean buildings law

The Clean Buildings standard will apply to many state agency facilities (see Section 5.11). The objective of these laws, passed in 2019 and 2022, are to lower costs and pollution from fossil fuel consumption in the state’s existing building stock.

NEW

To help OFM and the Legislature identify projects that help meet clean buildings performance standards, please add the acronym “CBPS” to the associated project title in CBS. For example, “CBPS: Administrative building HVAC replacement.” This only applies to new projects requested by agencies. We generally do not change project titles once they appear in an enacted budget with an associated project number.

NEW

Action and investments related to programs that address or may cause environmental harms or benefits

The Healthy Environment for All Act (HEAL Act), Chapter 314, Laws of 2021 ([RCW 70A.02](#)) was adopted for the following purposes:

- Ensure environmental reviews, funding decisions, and permitting decisions identify and address environmental health disparities in overburdened communities.
- Reduce exposure to environmental hazards on tribal lands.
- Track and measure implementation of environmental justice in state agencies.

The following state agencies are “covered agencies” that must implement the requirements of the HEAL Act:

- Departments of Ecology
- Department of Agriculture
- Department of Commerce
- Department of Health
- Department of Natural Resources
- Department of Transportation
- Puget Sound Partnership

If state agencies not specifically covered by the law opt to follow the HEAL Act requirements, they are obligated to follow the law.

Under [RCW 70A.02.080](#), beginning on or before July 1, 2023, the identified agencies must, where practicable, take specific actions when making expenditure decisions or developing budget requests to OFM and the Legislature for programs that address or may cause environmental harms or

provide environmental benefits. Covered agencies must also consider any guidance developed by the Environmental Justice Council and the Environmental Justice Interagency workgroup under [RCW 70A.02.110](#).

Agencies required to comply that are considering a significant agency action initiated after July 1, 2023, are required to conduct an environmental justice assessment. RCW [70A.02.010](#)(12) defines significant agency actions as the following:

- The development and adoption of significant legislative rules as defined in RCW [34.05.328](#).
- The development and adoption of any new grant or loan program that the agency is explicitly authorized or required by statute to implement.
- A capital project, grant, or loan award costing at least \$12,000,000.
- A transportation project, grant, or loan costing at least \$15,000,000.
- The submission of agency request legislation to the Office of the Governor or the OFM for approval.

Any other agency actions deemed significant by a covered agency consistent with RCW [70A.02.060](#). The Environmental Justice Council and the Environmental Justice Interagency workgroup are beginning to develop guidance related to funding decisions and budget requests. In addition to the HEAL Act requirements, please look for additional guidance from the Environmental Justice Council and the Environmental Justice Interagency workgroup to help develop agency biennial and supplemental budget requests.

BUDGET REQUEST CONTENT

3.1 Content required in your request

Information required from agencies for budget requests are required by law and OFM for budget analysis purposes. The information provided should support your budget request by explaining the problem, opportunity or program requirement being addressed; why the problem or opportunity exists; alternatives for addressing it; and the rationale for choosing the preferred alternative.

Prioritize projects. Agencies must prioritize each capital project with a new appropriation in the 10-year capital plan by need and contribution to the goals, objectives, strategies, and activities in the agency's strategic plan.

An equity-focused approach

The Governor is focusing on equity in his 2023-25 budget development. In the 2022 supplemental instructions, new questions were added to ensure that agencies are considering the impacts of budget requests on marginalized communities. Agencies are expected to address these questions thoroughly and fully in their capital budget requests.

3.2 10-year view (CBS 001)

The State Budgeting, Accounting, and Reporting System Act (Chapter [43.88](#) RCW) mandates a long-range approach to capital budget planning. It requires state agencies to submit a plan of proposed capital spending for a 10-year period, starting with the ensuing biennium. This long-range planning is designed to identify future needs and propose capital projects to address those needs. The 10-year capital plan must support the agency's mission and the goals and objectives of its strategic plan.

The 10-year capital program summary report (CBS 001) from CBS provides a summary of the agency's projects in priority order. The 10-year planning process recognizes that major capital projects span several biennia from start to finish. In the 10-year plan, project information must include estimates for present and future operating and maintenance costs, including any debt service that must be paid from a dedicated account.

3.3 Projects (CBS 002)

Projects – detail

Project titles and numbers. Project numbers are automatically generated in CBS and serve as the unique identifier of a project. The project number is used for project monitoring and comparisons throughout the life of the project.

Once enacted in the budget, the project title and number for major and stand-alone projects must not be changed during the life of the project. If the agency requests a reappropriation or new appropriation for an existing project, the agency should copy the project from the enacted version in CBS for subsequent biennia.

Competitive grant and loan program appropriations and minor works appropriations should use a new project number and title with a biennial identifier (“2023-25”) for each biennium. This improves tracking of reappropriations.

Project class. Capital projects are identified as preservation, program, grant, or loan projects.

- **Preservation.** Preservation projects maintain, preserve, and extend the life of existing state facilities and assets and do not significantly change the facility and building footprint to address current or anticipated program changes. Examples include renovating building systems, upgrading utility systems and making other significant repairs.
- **Program.** Program projects primarily achieve a programmatic goal, such as changing or improving an existing space to meet program requirements or creating a new facility or asset through construction, lease, or purchase. This category includes projects ranging from building new facilities to significant renovation of existing facilities. Programmatic projects may also improve conditions, accommodate changes in services or clientele, or increase or maintain federal reimbursement.
- **Grant and loan programs.** Some grants and loans are authorized directly in the capital budget bill for tribal and local or community organizations for various purposes, while other grants and loans are authorized through competitively awarded statutory programs. Statutory grant programs must submit 10-year capital budget requests within the limits specified by statute. Agencies whose grant programs have no specified appropriation limits should submit requests based on a demonstrated need and reasonableness for the pending biennium and on a historical biennial appropriation history for the remaining four biennia. Your OFM budget analyst may have questions about projects on multiple funding lists.

For project class in CBS, select “Grant” for grant and loan programs funded by state sources that are awarded by the state to qualifying recipients. Select “Grant – Pass Through” for programs funded by non-state sources administered by the state and passed-through to qualifying sub-recipients. If a program includes both state and federal funding, choose “Grant – Pass Through” and indicate in the narrative if the state funding is required match and at what rate the State is required to minimally match the non-state funding source.

Starting year. Identifies the year an agency intends to start the proposed project or expenditures for specific purposes.

Agency summary. This is also known as the project summary or recommendation summary (RecSum) text. Provide a brief, clear and concise description of the project, including the problem or opportunity and how the proposed project addresses it. The agency summary should be no more than two or three sentences.

NEW *Project description.* Describe the proposed project. **Please note that answers to the project description questions are not required for reappropriation requests.**

Provide answers to the following questions, which will inform decision makers about the proposed project.

1. Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

2. What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.
3. How would the request address the problem or opportunity identified in question 1? What would be the result of not acting?
4. What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.
5. Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.
6. Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.
7. Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.
8. Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete [IT addendum](#). (See Chapter 10 of the operating budget instructions for additional requirements.)
9. If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 13 (HEAL Act and Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.
10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.
11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?
12. Is there additional information you would like decision makers to know when evaluating this request?

UPDATED

Projects – additional information

Prior to capital budget submittal, agencies should make early contact with affected local governments and review their project lists against local plans and ordinances to ensure consistency with local growth management plans. Agencies must submit verification that a project is consistent with the provisions set forth in the state Growth Management Act (Chapter [36.70A](#) RCW).

Projects – subprojects

Programs and projects (for example, minor works, grants, or loans) where there is a known subproject are required to submit a project list with additional subproject data through CBS 002. If a project list is developed after the release of the Governor's budget, please contact your capital budget analyst to coordinate the transfer of subproject data when it becomes available. If a project includes subprojects, complete the agency summary and project description for the parent project and each subproject. DO NOT enter "See parent project" in the agency summary and project description. Include the location information, when known for subprojects, such as county, city, legislative district, longitude, and latitude.

UPDATED

Pursuant to RCW [70.235.070](#), when distributing capital funds through competitive programs for infrastructure and economic development projects, all agencies must consider whether the entity receiving the funds has adopted policies to reduce greenhouse gas emissions.

Projects – minor works

Agencies must develop a strategic plan for reducing their maintenance backlogs and completing repair projects. This plan must be included in the capital budget submittal (RCW [43.88.030\(6\)\(d\)](#)). One way to reduce maintenance backlogs is through minor works.

Minor works projects appear as a parent project in the budget and include multiple subprojects valued between \$25,000 and \$1 million each (for higher education institutions, the range is \$25,000 and \$2 million). The value for each subproject means the total estimated cost regardless of fund sources.

Minor works projects should be completed within the biennium. Agencies are not required to submit C-100s or CBS cost estimates for individual minor works subprojects (projects no more than \$1 million or \$2 million for higher education institutions). Request totals for each subproject can be entered into CBS without a detailed cost estimate. Submit separate requests and estimates for minor works preservation and minor works programmatic.

Submit separate requests and estimates for minor works preservation and minor works programmatic. See Chapter 4 for allowable and non-allowable use of tax-exempt bond proceeds. If agencies intend to request minor works funding in future biennia, they should enter future funding along with their minor works request.

The following are **not** minor works projects, :

- A phase of a larger project
- A project that, if combined over a continuous time period, would exceed \$1 million (or \$2 million for higher education institutions)
- Supplemental funding for a bigger project that received a separate appropriation
- Planning, design, and studies except for technical or engineering reviews or designs that lead directly to and support a project on the same minor works list
- Movable, temporary, and traditionally funded operating equipment
- Software not dedicated to control of a specialized system
- Land or facility acquisition
- Rolling stock
- Computers
- Funding to supplement projects with funding shortfalls unless expressly authorized
- Moving expenses

See Chapter 4 for additional detail on the allowable and non-allowable use of tax-exempt bond proceeds.

UPDATED

Projects – funding

Provide a reasonable cost estimate of the project and the fund source for the ensuing biennium and future needs. The funding request must be consistent with the project C-100. When a project has subprojects, funding information is required at a subproject level.

The 10-year capital program summary report (CBS 001) is populated by the information provided for the ensuing biennium and future biennia.

Projects – operating impacts

Capital budget requests must identify associated operational costs, including but not limited to the following:

- **Alternatively financed projects.** Agencies proposing that a project or program be funded through lease/purchase or other financing contracts must estimate the lease or debt service costs, including fund source, associated with the funding method.
- **New facility costs.** If construction or property acquisition will bring a new facility online in the 2023-25 or 2025-27 biennia, the agency also must submit a decision package in its operating budget request that reflects the operating budget impacts during that biennium or the outlook biennium. Impacts may include IT and office equipment, moving costs, other one-time costs and new ongoing costs associated with the capital project, such as custodial or maintenance staff and any additional FTEs needed to operate the new or expanded program in the building. Provide the activity number of the decision package in the operating budget request in the narrative box.
- **Habitat and recreation land acquisitions.** Agencies proposing the acquisition of land, or capital improvement of land for which the primary purpose is recreation or wildlife habitat conservation must identify the projected operation and maintenance costs for at least the two biennia succeeding the next biennium, including the source of funds from which these costs are proposed to be funded, as required by RCW [43.88.030\(6\)\(p\)](#).

Operation and maintenance information for multiple acquisitions within one request or within a minor works list must be submitted at the subproject level.

Submit an operating budget request if the associated operation and maintenance costs of the acquisition impact the 2023-25 or 2025-27 operating budget. Contact your assigned operating budget analyst for details.

When requesting funding for recreation or wildlife habitat land acquisition through the Recreation and Conservation Office (RCO), submit estimates of the operation and maintenance costs to RCO. Contact Mark Jarasitis at RCO (360) 902-3006 for assistance.

Projects – cost estimates (information also included in C-100 Excel spreadsheet)

See Chapter 3.

Projects – attachments

Agencies must attach the following documentation in CBS:

- **The C-100** (Excel cost estimating [form](#)) is required for all construction projects over \$1 million (\$2 million for higher education). Please attach the C-100 as an Excel file in CBS. For more information, see the cost estimating section below.

UPDATED

- **Documentation from the Department of Archaeology and Historic Preservation (DAHP) and affected tribes.** In accordance with Executive Order [21-02](#), agencies must consult with DAHP and affected tribes on the potential effects of projects on cultural resources and historic properties proposed in state-funded construction or acquisition projects, including grant or pass-through funding that culminates in construction or land acquisitions. Consultation with the department of archaeology and historic preservation and affected tribes must be initiated early in the project planning process, and must be completed prior to construction, demolition or taking title. Agencies must attach a letter from DAHP confirming that the proposed capital project was reviewed. (Some agencies may have an exemption from this requirement from DAHP.) If the request is a grant that contains multiple subprojects, ensure that this requirement is contained in the application process or the contract. Contact Dr. Rob Whitlam at DAHP (360) 890-2615 for assistance. Please allow DAHP a minimum of 30 days for review. If mitigation is anticipated, please ensure it is worked into the project schedule and budget.
- **Pictures** (optional).
- Where applicable, **subproject lists** with details such as locations, rankings and descriptions.
- Where applicable, **IT project request addendum**.
- **Other documentation** that may inform decision makers.

3.4 Reappropriations (CBS 002)

For a project that requires more than one biennium to complete and for which an unexpended balance is anticipated at the end of the biennium, an agency must request that funds be carried forward (reappropriated) to the next biennium. Agencies must demonstrate that funds are needed to complete the previously approved scope of work. Minor works projects should be completed in the biennium in which they are appropriated.

NEW

When requesting a reappropriation, agencies should follow these guidelines:

- The reappropriation request must not exceed the remaining expenditure authority amount. Reappropriations must retain the same project title, number and description as the enacted appropriation. To ensure reappropriation requests are accurate, agencies should copy forward the enacted budget version of a project and not the original agency request from the previous biennium.
- Agencies do not need to populate answers to the “project description” questions in CBS for reappropriation requests.
- Agencies do not need to enter a priority for reappropriation requests. Agencies priorities should be focused on new project requests.

NEW

OFM and the Legislature will request periodic reappropriation updates as they develop their budgets. OFM and the Legislature are developing a new process that would calculate reappropriations based on actual expenditures and future allotted amounts. This will require that agencies accurately account for capital expenditures and allotments. More information about this process will be communicated in Summer/Fall of 2022.

3.5 Cost estimates (C-100)

Agencies must conduct due diligence analyzing and submitting their project cost estimates in the standard format required for capital project budget requests to OFM.

UPDATED

For construction projects with an estimated total cost over \$1 million (\$2 million for higher education), agencies must provide cost estimates by completing the Excel C-100 and attaching it in CBS. **Please note that the CBS 003 report is no longer required and will not be used in OFM or Legislative budget development; some updates to the C-100 are not reflected in the CBS cost estimator due to outdated database architecture.**

NEW

Agencies are not required to submit C-100s or CBS cost estimates for minor works subprojects (projects less than \$1 million or \$2 million for higher education institutions) or minor works parent projects. Request totals for each subproject can be entered into CBS without a detailed cost estimate.

NEW

Agencies are also not required to submit C-100s or CBS cost estimates for projects that will not be initiated until budget outyears (2025-27 and after). Please include C-100s for projects with acquisition, predesign, design or construction funds requested in 2023-25. Request totals for each project can be entered into CBS without a detailed cost estimate.

3.6 Capital FTEs (CBS 004)

Agencies must provide a summary of capital full-time equivalent (FTE) staff necessary for and related to the capital project or program. The summary includes:

- Staff and expenditures budgeted for capital projects in the 2023-25 biennium. These are all FTEs either wholly or partially funded by the capital budget. Accurate FTE information allows us to estimate the impact of the enactment of the capital budget.
- Proposed number of staff and staff-related expenditures for the 2023-25 biennium, by account and by program.
- Narrative describing the role of proposed FTEs and an explanation for any changes from the 2021-23 biennium.
- Account and level of anticipated expenditures for the FTEs.

See Chapter 4 for the appropriate use of tax-exempt bond proceeds related to staffing costs.

FINANCING GUIDELINES

UPDATED

This chapter of the capital budget instructions is prepared in collaboration with the Office of the State Treasurer and provides financing guidelines for the issuance of general obligation bonds and Certificates of Participation (COPs). The main purpose of the chapter is to help ensure that the state's debt issuance meets the IRS' requirements for tax-exempt obligations. The chapter provides an overview of the methods of finance the state uses; allowable and non-allowable capital budget cost financed by tax-exempt financings; and the private activity restrictions on tax-exempt financings. Finally, this chapter reviews a questionnaire used to evaluate the appropriate funding source for bond/COP-funded projects.

4.1 Methods of finance

Capital projects are financed with cash balances, revenues received over time or with proceeds of financings. Most state financings are conducted through the issuance of general obligation bonds or through COPs. Both general obligation bonds and COPs are issued by the state several times a year in the public securities market.

State bonds and COPs are usually issued as tax-exempt (i.e., the interest paid to investors is exempt from federal income tax) securities, as tax-exempt borrowing rates are lower than taxable rates. Tax-exempt financings are subject to federal tax regulations regarding the types of projects being financed, the pace at which proceeds are spent and the use of the asset during the financing term.

General obligation bonds

Various purpose general obligation (VPGO) bonds are the traditional form of state debt financings for non-transportation capital projects. VPGO bonds are payable from general state revenues and backed by the state's pledge of its full faith, credit, and taxing power. Unless specifically exempted, VPGO bonds are subject to a state constitutional debt limit, which requires that the maximum annual payment of principal and interest on debt subject to this limit not exceed a specified percentage of average general state revenues for the six preceding fiscal years. VPGO bond sales generally occur semiannually to provide funding for six months of expenditures on a variety of capital projects across the state.

UPDATED

The State Finance Committee (SFC) authorizes the issuance of bonds and other State obligations that have been approved by the Legislature. The SFC, which is comprised of the governor, lieutenant governor, and treasurer, implements financing policies, and determines the conditions, covenants, terms, and requirements of state financings, as applicable.

Program parameters. Proceeds of tax-exempt bonds must be spent on capital expenditures, in accordance with state accounting guidelines and federal tax laws applicable to tax-exempt obligations. Proceeds of tax-exempt bonds may be spent on grants, but loans to entities besides state or local government units – including non-profit organizations, the federal government, or federal agencies – are not allowed under federal tax laws. Certain upfront costs such as design, delivery and setup, and training may qualify for financing. Expenditures for sales and use tax on purchases of equipment and construction of capital projects can also be financed. More detailed information on the allowable uses of tax-exempt financing is provided later in this chapter. All

property financed on a tax-exempt basis is subject to federal tax restrictions regarding private business use (see the private activity restrictions on tax-exempt financing section below).

Certificates of participation

The issuance of COPs provides the state with an alternative way to finance essential equipment and real estate acquisitions, including construction, over a multi-year period. The program is structured by agencies entering into financing contracts (aka lease-purchase, or lease lease-back) for the property being acquired. These individual financing contracts are then pooled under the state's master financing agreements, which provide the security for the issuance of COPs that are sold to investors. The proceeds from the sale of COPs are then used to reimburse the agency for the cost of the acquisition. The pooled approach provides agencies with the benefits of economies of scale and access to the state's low-cost, tax-exempt financing rates. COPs offer investors leasehold interest in the property, and the promised revenue stream from the repayment of the financing contracts made by state agencies.

UPDATED

This form of financing contracts is subject to approval by the State Finance Committee (SFC), which also approves the aggregate amount of financing contracts outstanding. SFC guidelines for use of the program are provided in the [Guidelines for Use of Financing Contracts](https://www.tre.wa.gov/home/debt-management/state-finance-committee/) at <https://www.tre.wa.gov/home/debt-management/state-finance-committee/>.

State law requires prior legislative approval of real estate financing contracts in the capital budget. Most equipment financings do not require explicit legislative authorization, although the Office of the State Treasurer (OST) policy requires legislative approval prior to financing major acquisitions of equipment or information systems.

Program parameters. Proceeds generated from financing contracts and the issuance of COPs must be spent on capital expenditures, in accordance with state accounting guidelines and federal tax laws. All property financed on a tax-exempt basis is subject to federal tax restrictions regarding private business use (see the private activity restrictions on tax-exempt financing section below). Financing contracts cannot be used to provide funds for grants or loans. Proceeds of financing contracts must be spent on assets serving an essential public purpose. Agencies must represent that the property is essential for carrying out its functions and responsibilities.

Proceeds from a COP sale are provided to an agency exclusively on a reimbursement basis. Please note, that in keeping with IRS tax-law, an agency must submit a Notice of Intent to Finance (NOI) to OST no later than 60 days after making the expenditure for it to be eligible for reimbursements.

Expenditures for sales and use tax on purchases of equipment and construction of capital projects can be financed. Certain upfront costs such as design, delivery, and setup, may qualify for financing on a reimbursement basis. Note that design costs may not be financed before equipment is acquired or construction begins because design, by itself, does not create a tangible asset as required by the COP program to provide security for investors who purchase COPs. More detailed information on the allowable uses of tax-exempt financing is provided in the next section.

A real estate project must be ready to proceed before it is financed. For acquisitions, agencies must first acquire the building or land and obtain title to the property prior to the issuance of the COPs. Financing of the cost of acquisition then is provided on a reimbursement basis. For new

construction, OST requires agencies to have entered into a construction, design-build or general contractor/construction manager (GCCM) contract for the project prior to the issuance of the COPs. Construction projects are subject to public works requirements. IRS guidelines for the use of tax-exempt proceeds require such funds to be spent within 18 months from the sale date of the COPs.

4.2 Long-term, tax-exempt financing restricted to capital projects

Regulations adopted by IRS restrict the purposes for which tax-exempt bonds and COPs may be issued. IRS regulations severely limit the ability to issue long-term, tax-exempt obligations to finance current operating expenses. The use of long-term, tax-exempt financing for capital projects or purposes is treated relatively more favorably because the proceeds of the obligations are used to pay capital expenditures for capital projects that have useful lives reasonably commensurate with the maturities of the obligations being issued to finance the expenditures. For multiple projects financing together through bonds, the useful life is the average useful life of all the projects financed. Property financed through COPs are monitored on project-to-project basis. The information below distinguishes allowable capital purposes from non-allowable operating expenses.

Agency administrative and staffing costs

Proceeds of tax-exempt bonds or financings are intended for the acquisition, construction, and renovation of capital assets. Do not use them to subsidize operating costs such as ordinary maintenance or administrative staff expenses. IRS tax rules relating to staffing costs are very restrictive. As part of the reimbursement process for COP financed projects, OST requires detailed accounting records to document staff time or other labor charges. Contact OST for further information on the requirements. In general, treasury regulations (primarily, [§1.148-1](#), [1.148-2](#), and [1.148-6](#)) do not allow for any costs not directly related to a capital project(s) to be funded with long-term financings.

Allowed:

- Project-related administrative costs for tasks directly related to a financed project, including project support services such as processing agreements, contracts and change orders, managing bid processes and verifying invoices. Project-related administrative costs must be identified as such in accounting records.
- Project-related management fees for project design, land use applications, environmental impact statements and other environmental assessments, hazardous material assessments and building code plan review directly related to a financed project. This also covers project-related management costs related to consultant selection, contract negotiation, administration of consultant agreements and public works contracts for individual capital projects that are directly related to a financed project. These costs must be identified as such in accounting records.
- Staff costs for the time and expenses directly related to coordinating and delivering a project. Project-related staff costs must be identified as such in accounting records.
- Tasks associated with the support of project management operations for multiple projects including staff management, staff support, accounting and management of public information that are directly related to a financed project.

Not allowed:

- Regular staff operating costs.
- Agency administrative costs related to capital budget development, capital facility development, long-range budget planning and policy initiatives.
- Non-project specific tasks associated with regulation and policy development, contract development, interagency initiatives, or legislative oversight.
- Non-project specific tasks associated with overall general comprehensive planning for facilities and infrastructure, the identification and prioritization of capital projects and the preparation of agency capital requests. The provision of emergency services and infrastructure management.

Acquisition – land and buildings

Allowed:

- Expenditures for the acquisition of real property, whether obtained by purchase or condemnation under the applicable eminent domain laws of the state, including expenses directly and necessarily related to such purchase or condemnation.
- The cost of improvements to real property, such as buildings, structures, land improvements, roads, and bridges. Costs may include land and improvement costs, appraisal fees, title opinions, surveying fees, real estate fees, title transfer taxes, easements of record with an extended term, condemnation costs and related legal expenses.
- Relocation costs that are payments made to owners or occupants of property that the state is acquiring. These costs can be financed long-term when paid pursuant to federal or state statutes.

Planning and consultant services for predesign and design work

Allowed:*

- Preliminary technical studies developed from program statements that reflect the functional characteristics and architectural requirements of a specific capital improvement project (predesign).
- Architectural and engineering services, such as schematic design, design development and construction documents.
- Archeological and historic structure survey, consultation, and consultant services.
- Reimbursable expenses provided in an executed contract for professional and technical services.
- Artwork funding as required by RCWs [28A.335.210](#), [28B.10.027](#) and [43.17.200](#).
- Fees for construction management and observation.
- LEED certification fees as part of a construction project.

Not allowed:

- Expenditures for general long-range development plans, master plans, historical or archeological research, feasibility studies, statements, capital and maintenance project planning, or other similar expenditures which are not associated with a specific capital project.
- Unpredictable or unusual legal expenses (other than those associated with land acquisition) which are not ordinarily provided in the budget for a capital project.

***Additional COP financing restrictions:** Design costs for a capital project may not be financed with a COP before construction begins because design, by itself, does not create the tangible asset which is necessary to secure the financing. Once construction contracts are executed and COPs are issued, certain upfront costs such as design, delivery, setup, and some training may be reimbursed from COP proceeds.

Construction

Site improvement costs

Allowed:

- Site improvement such as construction or replacement of sidewalks, bridges, ramps, curbs, pedestrian bridges, and tunnels, building terraces, retaining walls and exterior lighting; rerouting of utilities; and erosion control.
- Demolition of buildings and structures, clearing, grubbing, and grading if preceding a financed project to be undertaken on the same site.
- Artwork funding as required by RCWs 28A.335.210, 28B.10.027 and 43.17.200.

Not allowed:

- Routine maintenance of land improvements.
- Expenditures to acquire or construct temporary facilities or for facilities where abandonment or replacement is imminent. This does not include temporary facilities required during construction.

Roadwork

- **Allowed:** Expenditures related to the construction, extension, replacement, reconstruction or upgrading of a new road or parking lot. The following are considered part of roadwork costs: all necessary signing, landscaping, erosion control, drainage, lighting, bridges, safety and control structures.
- **Not allowed:** Repairs or resurfacing of existing roads to temporarily extend useful life are not allowed.

Facilities preservation

Allowed:

- Expenditures for the reconstruction, preservation and improvement of existing buildings or structures that materially extend their useful lives, including:
 - » Site developments necessarily required or related to the preparation of a site for reconstruction purposes (see “Site Improvement Costs”).
 - » Required built-in, special purpose or other fixed equipment where such equipment is permanently affixed or connected to real property in such a manner that removal would cause damage to the real property to which it is affixed.
 - » Expenditures for the installation or replacement of water control structures such as dams, culverts, aqueducts, drainage systems, locks, spillways, reservoirs and channel improvements.
- Interior work including demolition, moving walls, new carpet or floor surfaces, new finishes, replacement of electrical and plumbing facilities and installation of new equipment.

Not allowed:

- Normally recurring expenses.
- Labor fees associated with moving equipment between facilities.
- Ordinary maintenance such as patching, painting, caulking, weatherproofing, insulating, adding storm windows, replacing doors, replacing gutters and shingles, repairing vandalism or cleaning. An aggregation of ordinary maintenance does not create a long-term financed capital project.

Utilities, safety, and codes

- **Allowed:** Expenditures for the acquisition, construction, replacement, modification, or extension of utility systems, including construction or replacement of utility lines between buildings, replacement, or installation of utilities to off-site supply systems, and replacement of complete boiler or central air conditioning or ventilation systems.
- **Not allowed:** Minor replacement of corroded or leaking pipes inside a facility; replacement of unsafe or undersized wiring; repairs to stop leaks; replacement of heating or cooling coils; replacement of radiators, fans, or motors; re-tubing of boilers; addition of controls or valves for energy conservation as a standalone project or replacement of thermostats, timers and other items that are consumed or worn out in the ordinary course of use of a capital facility.

Project-related equipment – (see below for a standalone equipment financing)

Allowed:

- Built-in equipment permanently attached to the building or improvement and considered to be an integral part of the structure, without which the building or improvement will not function. Built-in equipment is generally included in the base construction budget and estimate. Examples include plumbing fixtures, heating, ventilation and air-conditioning equipment, electrical equipment, elevators, and escalators.
- Fixed equipment attached to the building or improvements for purposes of securing the item and contributing to the facility's function. Fixed equipment is generally included in the base construction budget and estimate. Examples of fixed equipment financed as part of a larger building project could include shelving, cabinets, bolted furniture, solar arrays, or electric vehicle charging stations.
- Some movable equipment can be considered long-term and an appropriate use of bond or COP funding if it is part of a new construction or major renovation project. Examples include movable equipment that is necessary for the functioning of the facility and in place in support of a program but is not necessarily attached to the facility. Examples of allowable movable equipment include desks, conference tables and chairs, cubicle partitions, non-consumable lab equipment, picnic tables, and unaffixed appliances. Movable equipment included in a capital project should be included in a separate equipment budget and estimated as furniture, fixtures, and equipment (FF&E) in the C-100 cost estimate. For renovation projects, FF&E should be repurposed and reused whenever possible. A separate operating budget/IT package to coincide with opening a building should be submitted for items traditionally funded out of the operating budget.
- Some costs of purchasing or developing information/software systems may be allowed under certain circumstances. For additional information, consult with OST staff. Please also consider whether your IT project falls under Office of the Chief Information Officer (OCIO) oversight.†

UPDATED

Not allowed:

- Consumable inventories, as defined in the [State Administrative and Accounting Manual \(SAAM\)](#), are supplies consumed in the course of an agency's operation or incidental items held for resale. Examples include office, janitorial and chemical supplies, and laboratory glassware.
- Equipment traditionally funded out of the operating budget, IT and office equipment such as computers, fax machines, networking equipment, projectors, copiers, custodial equipment, and grounds equipment cannot be financed as part of a capital project request. However, certain equipment can be financed with a standalone COP (see below) or cash accounts.
- Spare or replacement parts for equipment.
- Temporary equipment to be used for a period less than its useful life. For example, research equipment for a short-term project.

NEW

Equipment – Standalone (COPs Only)

While generally not authorized through the capital budget, certain equipment may be financed directly by agencies through the issuance of COPs. This includes standalone acquisitions (i.e., vehicles), or other types of equipment that may not be eligible to be included in a capital project request (i.e., computers). The term of the equipment financing must be less than or equal to the maximum useful life of the asset. The useful life is determined by the [SAAM capital asset class codes and useful life schedule](#).

Allowed:

- Tangible equipment with a useful life greater than two years and a total acquisition amount greater than \$10,000 (i.e., vehicles, computers, office furniture).
- Energy efficiency upgrades to a facility (i.e., HVAC, LED lighting, solar panels).
- IT Hardware can be financed along with associated licenses, software, and warranties, with certain limitations. (See **Additional COP financing restrictions** below)

Not allowed:

- Consumable inventories, as defined in the [SAAM](#), are supplies consumed in the course of an agency's operation or incidental items held for resale. Examples include office, janitorial and chemical supplies, and laboratory glassware.
- Software as a Service (SaaS), Cloud based IT products or other IT service agreements.
- Temporary equipment to be used for a period less than its useful life. For example, research equipment for a short-term project.

†**Additional COP financing restrictions:** Agencies considering COP financing for IT projects should contact OST early in the planning process and be aware that prior legislative approval is required for major acquisitions. Agencies are required – without exception – to receive explicit vendor permission to grant a security interest in all elements of the information system contained within the financing request.

4.3 Private activity restrictions on tax-exempt financing

All agencies planning to finance capital projects with bonds or COPs, and who anticipate engagements with nongovernmental entities on their projects, are strongly encouraged to consult with OST early in the process.

Private business use

In general, Congress and the federal government consider the tax exemption for interest on state and local bonds to be a federal subsidy provided to state and local governments. This is because the federal government foregoes the revenues that it would otherwise receive from income taxes imposed on interest income received by taxpayers who own municipal bonds. Therefore, the provisions of the federal Code and related U.S. Treasury regulations that apply to tax-exempt obligations are intended to restrict the benefits of this federal subsidy to governmental purposes of state and local governments and not to allow benefits of the subsidy to be transferred to persons other than state and local governments.

“Private business use” means use by any person other than the state or another local government unit of the state, and includes use by any private for-profit or nonprofit corporation (e.g. 501(c)(3) organizations), limited liability company, general or limited partnership, association or an individual person engaged in a trade or business activity. It also includes use by the federal government or any federal agency. Private business use includes: ownership by the nongovernmental person of the financed property or use of the financed property by a nongovernmental person under a lease, management contract (unless it is a “qualified” management contract under IRS guidelines), “output contract” (such as a contract to purchase water or electricity produced by a financed facility), research agreement (with certain exceptions under IRS guidelines), a “naming rights” contract, or any other arrangement that provides similar “special legal entitlements” to a nongovernmental person to use the financed property. However, the use of financed property by a nongovernmental person simply as a member of the general public or under certain, specified short-term use arrangements (involving terms of use not exceeding 50, 100 or 200 days, depending on the type of arrangement) do not result in private business use. Also, use of financed property by private individuals not engaged in a trade or business activity is not private business use.

In summary, an issuer must reasonably expect on the issue date that the issue will not meet the following tests at any time during the term of the issue:

1. Private Business Use Test **and** Private Security or Payment Test, **or**
2. Private Loan Financing Test

Limits on private business use (private business use test)

In general, the amount of private business use of proceeds of a tax-exempt governmental financing is limited to the lesser of 10% or \$15 million of proceeds of the issue. In addition, no more than 5% of the proceeds of the issue may be used for any “unrelated” private business use — i.e., a private business use that is not functionally related to the governmental purpose of the tax-exempt financing. These limitations are measured on the basis of the average amount of private business use in each year during a measurement period generally corresponding with the overall term of the bond or COP issue.

Private payments or security (private security or payment test)

An issue of tax-exempt bonds with private business use in excess of the limits described above would not violate private activity bond restrictions *unless* the state also expects to receive payments from private business users for their use of the financed property (or payments by others in respect of property that is used for private business use) having a present value exceeding 10% of the present value of debt service on the bonds, regardless of whether those payments are pledged to

pay the bonds. For this reason, bond proceeds used to make grants may be used for private business use so long as the state has no expectation or right to receive payments from the grantee (except only for violations by the grantee of conditions of the grant). Loans to nongovernmental persons from bond proceeds are not permitted as there would be both private use and private payments.

Moreover, use of tax-exempt bond proceeds to make loans to governmental persons also may be disallowed because of federal tax compliance issues relating to monitoring of the actual expenditure and investment of bond proceeds loaned to the governmental borrower. This is because the bond proceeds are treated as “spent” only when spent by the borrower and not when used to make the loan.

However, for COPs, the analysis differs in that the focus is on the amount of private business use, regardless of whether the state receives any payments in respect to the financed property. Like VPGO bonds, a COP-financed property would generally violate private activity bond restrictions if payments from private business users of the financed property were to exceed the applicable limitations. However, there is a second consideration because the financed property itself is pledged as security for the COPs. Private business use of the financed property results in a corresponding amount of private security, which is a violation of private activity bond restrictions regardless of the amount of private payments. That is, if a portion of the COP-financed property representing more than the lesser of 10% or \$15 million of proceeds of the COP issue is used for private business use, or if more than 5% of the proceeds of the issue is used for any “unrelated” private business use, this would cause the issue to violate the restrictions on private security as distinguished from private payments.

Strict limit on tax-exempt financing of private loans (private loan financing test)

In addition, under a separate and independent restriction, no more than the lesser of 5% or \$5 million of the proceeds of an issue may be used, directly or indirectly, to make or finance loans to any person other than a state or local government unit. This is referred to as the “private loan financing test.” Because of the size of the state’s bond issues, the lower \$5 million limit almost always applies.

NEW

In addition to IRS restrictions, the use of state bond proceeds, whether tax-exempt or taxable, to make loans to private persons or entities may be subject to additional constitutional restrictions. Please discuss with your capital analyst.

Use of taxable obligations for private use portions of capital projects

A capital project that is expected to involve both private business use **and** private payments, **or** a private loan as described above may require some of or all the financing to be executed on a taxable rather than tax-exempt basis or require the use of funds not derived from a borrowing to pay the cost of that part of the project expected to be used for a private business use. If the project requires taxable funding, the agency may request funding from the State Taxable Building Construction Account (Account 355). Consult your OFM capital budget analyst for more information.

Most recent bond acts include provisions which permit the state treasurer, on behalf of the SFC, to cause bonds authorized to be issued as tax-exempt bonds instead to be issued as taxable bonds if necessary to comply with IRS requirements. Recent bond acts also permit authorized taxable bonds to be issued as tax-exempt bonds using a similar approval process if code requirements have been met.

Examples:

1. If a state agency leases excess office space in a financed building to commercial businesses, a federal agency, or a private non-profit organization, the portion of the proceeds allocated to the cost of the privately leased space is considered used for nongovernmental purposes.
2. Suppose bond proceeds are used to make a loan to a port district for the construction of an industrial building, and that the port district constructs the building and leases space in the building to various commercial tenants and uses rental income from the building to repay the state loan. In this case, the bond proceeds used to make the loan to the port district would be treated as a private business use.
3. If proceeds of a bond issue with a 25-year term are used to construct leasehold improvements for a state agency that leases office space in a privately-owned building for a term of 15 years, and the estimated useful life of the leasehold improvements is 20 years, the proceeds of the bond issue allocable to the cost of the leasehold improvement that will revert to the private building owner at the end of the lease term would be treated as used for private business use.
4. If proceeds are loaned to a housing authority to build an apartment building that the housing authority leases to a separate limited partnership in which the housing authority is the general partner and private investors are limited partners, the financed apartment building is considered used for private business use, and the private loan financing test would be met.
5. If proceeds are loaned to a city to build a sewage treatment plant, but the city enters into a long-term management contract with a private company to operate the sewage treatment plant for the city, and the management contract fails to meet IRS requirements for a "qualified management contract," the plant is considered used for a nongovernmental purpose.

An agreement by a nongovernmental person (such as a business corporation or the federal government) to sponsor research performed by a governmental person (such as a state university) may result in private business use of the property used for the research. Consult with OST as it may be possible to structure research agreements with nongovernmental persons to avoid private business use of the property.

NEW **Reimbursements of Prior Expenditures with Tax-Exempt Bond Proceeds.** IRS Code (26 CFR § 1.150-2) allows a bond issuer to use the proceeds of its issuance to reimburse prior expenditure **provided** that the issuer has adopted an official intent to for the expenditures to be reimbursed. An official intent declaration allows for the reimbursement of expenditures made up to 60 days before the adoption of the official intent. With an adopted official intent declaration, expenditures can be reimbursed with bond proceeds up to 18 months after the expenditures have been made (or up to three years after a project is placed in service or abandoned).

The state meets the official intent requirements by including in each capital budget bill (that appropriates expenditures from tax-exempt bonds) a section like the following:

“To the extent that any appropriation authorizes expenditures of state funds from the state building construction account, or from any other capital project account in the state treasury, for a capital project or program that is specified to be funded with proceeds from the sale of bonds, the legislature declares that any such expenditures for that project or program made prior to the issue date of the applicable bonds are intended to be reimbursed from proceeds of those bonds in a maximum amount equal to the amount of such appropriation.”

With respect to reimbursement of prior expenditures with proceeds of COPs, OST requires state agencies who participate in the COP program to submit a NOI, which includes the required reimbursement declaration.

4.4 Financing framework

General obligation bonds

Bond authorizations. All state general obligation debt must be authorized by a 60% vote by the Legislature. In addition, no bonds may be issued without prior legislative appropriation of the proceeds. Bonds are issued by the SFC under the authority granted by the Legislature. As authorized by the SFC, the issuance of bonds is administered by OST.

Consolidated cash flow financing. OST manages cash flow financing for multiple projects across multiple agencies in accordance with U.S. Treasury regulations to minimize administrative tax compliance monitoring over the life of the borrowing. Bond sales are sized to fund agency and OFM estimates of expected capital expenditures over a six-month period. In estimating cash flow needs, OST also considers remaining bond proceed balances and seasonal spending patterns. This type of cash flow financing ensures that funds are not borrowed until they are needed. Consolidating funding needs also produces pricing efficiencies in the sale of bonds, ensuring the state receives the lowest possible cost for all capital projects. It results in issuance amounts which meet the minimum size thresholds preferred by investors, and minimizes the costs of issuance such as underwriting, legal, and rating agency fees. Bond proceeds received on the closing date are immediately transferred to the appropriate funds as directed in the capital budget and by the bond authorizations.

25-year final maturities with level debt service. VPGO bonds are typically structured with level payments of principal and interest over a 25-year period. This serial amortization structure provides a disciplined repayment schedule which spreads the cost of the project over the life of the asset. It means that some of the bonds are repaid one year after issuance, some in the second year, some in the third year, and so forth each year until the last bonds are repaid in 25 years. In an interest rate environment with higher rates at longer maturities, serial amortization is also less expensive than repaying the debt at one maturity. The True Interest Cost (TIC) is the aggregate interest rate for the entire series based on the present value of the weighted average of the individual interest rates for each maturity. To meet the requirements of the federal Internal Revenue Code (the “Code”), the aggregate average life of projects funded with each series of bonds – that is, the assets being purchased or constructed – must exceed the aggregate average life of the bonds. For every series of bonds, OFM certifies that this requirement has been met.

Certificates of participation

The certificates of participation program uses standardized documentation, which minimizes legal and administrative costs for agencies. Once financing documents have been completed and borrowing rates set by the market, each agency receives a detailed schedule of semi-annual payments due on its outstanding leases. Funds are made available to agencies on a reimbursement basis upon the closing of the COP sale. Agencies must provide receipt of detailed invoices and proof of payment by the deadlines established by OST prior to the issuance of COPs. To ensure compliance with tax and legal requirements, OST periodically requests information to monitor the spend-down of proceeds and the use of the facilities that have been financed.

COP authorization. The state is authorized by Chapter [39.94](#) RCW to enter into financing contracts for agencies to acquire real and personal property (real estate and equipment). Financing contracts are lease/purchase contracts or capital leases with a term of more than one year, which provide that title to the property secures performance of the state, or transfer title to the property to the state by the end of the term. Each agency financing equipment or real estate under this program pledges its budget appropriation for payment of the lease. This is true regardless of whether it may anticipate making payments from other revenues.

The form of financing contracts is subject to approval by the SFC, which also approves the aggregate amount of financing contracts outstanding. The SFC guidelines for use of the program are shown in the [Guidelines for Use of Financing Contracts](#) at <https://www.tre.wa.gov/home/debt-management/state-finance-committee/>. State law requires prior legislative approval of real estate financing contracts, typically in the capital budget. Most equipment financings do not require explicit legislative authorization, although OST policy requires legislative approval prior to financing major acquisitions of equipment or information systems.

Project financings. Unlike bonds, COP borrowings are “secured” financings, meaning investors have rights to the underlying property if investors are not repaid on a timely basis. For this reason, COP financings are for tangible assets that could be relinquished if the Legislature chooses not to appropriate funds for lease payments. Agencies must be able to offer a security interest in the asset being acquired and must commit to maintain the property in working order and condition over the life of the borrowing. If a state agency cannot reasonably make these representations about the property to be financed, the property is not suitable for COP financing.

Borrowing term. The term of each financing contract must be greater than one year and no longer than the expected useful life of the asset being financed. Standardized guidance on the useful life of specific assets is available in SAAM, Chapter [30.50](#), Capital Asset Class and Location Code List and Useful Life Schedules. For unique or used equipment, OST staff can provide assistance. OST limits the maximum maturity to 25 years to efficiently pool multiple transactions in each COP issuance.

For administrative efficiency, OST has established a minimum borrowing threshold of \$10,000 for each lease. Smaller financing requests for equipment of the same expected useful life can be combined.

Other financing contracts

Occasionally, the state finances construction projects with a 63-20 financing contract. In this structure, tax-exempt lease revenue bonds are issued by a non-profit corporation on behalf of the state. The non-profit corporation causes the project to be built through a fixed price contract with a private real estate development company. The state agency makes lease payments over time to a trustee and takes title to the property at the final maturity. Costs of issuance and ongoing fees on 63-20 financings are typically higher than on COP financings and the borrower usually pays higher interest rates. Use of a 63-20 financing contract requires legislative authorization. In addition, the SFC must approve both the financing contract and the non-profit corporation issuing the lease revenue bonds on behalf of the state.

For additional information, consult the SFC's [Guidelines for the Use of 63-20 Financing Contracts](https://www.tre.wa.gov/home/debt-management/state-finance-committee/) at <https://www.tre.wa.gov/home/debt-management/state-finance-committee/>

4.5 Evaluating the appropriate funding source for bond- and COP-funded projects

For projects requested with bond funding, please consider these questions as you develop your request. For any project that answers any of the questions 1 through 6 **and** question 7 with "yes," the projects may need to be fully or partially funded with taxable bonds or COPs. Similarly, for any project that answers questions 8 through 10 with "yes," the projects may need to be fully or partially funded with taxable bonds or COPs. For guidance, please see the "Private activity restrictions on tax-exempt financing" section above.

1. Will any portion of the project or asset ever be **owned** by any entity other than the state or one of its agencies or departments?
2. Will any portion of the project or asset ever be **leased** to any entity other than the state or one of its agencies or departments?
3. Will any portion of the project or asset ever be **managed or operated** by any entity other than the state or one of its agencies or departments?
4. Will any portion of the project or asset be used to perform **sponsored research** under an agreement with a nongovernmental entity*?
5. Does the project involve a **public/private venture**, or will any entity other than the state or one of its agencies or departments ever have a **special priority or other right** to use any portion of the project or asset to purchase or otherwise acquire any output of the project or asset such as electric power or water supply?
6. Will any portion of the bond/COP proceeds be **granted or transferred** to nongovernmental entities or granted or transferred to other governmental entities which will use the grant for nongovernmental purposes?
7. If you have answered **"Yes" to any of the questions above**, will your agency or any other state agency **receive any payments** from any nongovernmental entity, for the use of or in connection with, the project or asset?
8. Is any portion of the project or asset, or rights to any portion of the project or asset, expected to be **sold** to any entity other than the state or one of its agencies or departments?
9. Will any portion of the bond/COP proceeds be **loaned** to nongovernmental entities or loaned to other governmental entities that will use the loan for nongovernmental purposes?
10. Will any portion of the bond/COP proceeds be used for **staff costs for tasks not directly related** to a financed project(s)?

BUDGET IMPLEMENTATION

The capital budget is enacted after the House and Senate pass, and the Governor signs, a compromise budget. For more information, see A [Guide](#) to the Washington State Budget Process.

Once the budget is enacted, agencies must follow a process before spending their appropriation. This chapter outlines the steps for agencies to expend funds, beginning with OFM assigning an Expenditure Authority (EA) code.

5.1 Allotments

After the EA code is assigned, agencies must submit allotments for expenditures, revenues, and FTEs.

The Budget, Accounting, and Reporting System Act (Chapter [43.88](#) RCW) outlines the legal authority and responsibility of the Governor and OFM to allot public funds. OFM publishes allotment instructions that describe the agency's responsibilities and requirements for submitting initial allotments, amended allotments and special allotments to detail the plan of expenditures, revenue estimates and related full-time equivalent (FTE) estimates of enacted budgets. (Visit OFM's [website](#) for the allotment instructions after the 2023-25 budget is enacted.)

Agencies must use The Allotment Management and Review System (TALS-AMR) for submitting allotments to OFM. No expenditures may be incurred prior to OFM approval of allotments.

5.2 Minor works lists

Once the capital budget is enacted, submit final minor works project lists, including requested revisions to the project lists, to OFM for review and approval, and to the House Capital Budget and Senate Ways and Means committees for review and comment.

Minor works lists submittal must include:

- Parent project number and project title.
- Minor works projects and budget estimates.
- Explanation of variances from the enacted capital budget minor works lists.
- Alternate minor works projects, if applicable.

No expenditures may be incurred prior to OFM's written approval of the updated minor works lists and allotment schedule. With OFM approval, savings from a minor works subproject may be transferred to another minor works subproject for which the project budget allocation is insufficient, or to fund an alternate minor works subproject that is approved by OFM. Minor works projects must be completed within the biennium in which they were appropriated.

5.3 Art allocation

Capital appropriations for the original construction of public buildings (including K-12 facilities) and, in the case of higher education institutions, renovations and remodels costing more than \$200,000, require the purchase of public artwork and is calculated in CBS and the C-100 cost estimating form. Artwork acquisition and installation is coordinated in conjunction with the

Washington State Arts Commission Art in Public Places program. Agencies should be prepared to coordinate with the Washington State Arts Commission for projects funded in the enacted budget beginning with the design appropriation.

5.4 Major project status and final closeout reports

Agencies administering a major capital project or projects specifically identified for reporting requirements by OFM, as required by RCW [43.88.160](#), must submit a major project status report to OFM each July 1 and December 31. Major project status reports are required for projects with a total anticipated cost of \$5 million or greater, or \$10 million for higher education institutions, regardless of the phase of the project (e.g., if only funded at predesign). "Total anticipated cost" means the sum of the anticipated cost of the predesign, design, and construction phases of the project.

After a major project is completed, an agency must also submit a major project final closeout report to OFM. Agencies must report project savings following the completion of projects to OFM.

Agencies must use the report [template](#) posted on OFM's website.

5.5 Transfers

Subject to certain restrictions, the Governor, through OFM, may transfer project savings to another project for which the appropriation is insufficient (RCW [43.88.145](#)). An agency may request such a transfer by submitting a letter to OFM. No expenditures may be incurred prior to OFM approval of the transfer request and allotment schedule.

5.6 Status updates for reports and studies funded by the budget

Please check in quarterly with your capital budget analyst to update them on reports and studies funded by the capital budget. This update should identify any risks to the successful, on-time completion of the study or report. For cabinet agencies, at least two weeks must be included in the project schedule for OFM budget and Governor's Office policy review. Please submit completed reports and studies to PolicyEXO@ofm.wa.gov.

5.7 Life cycle cost analysis and life cycle cost tool

These life cycle cost analysis tools use a Washington-specific discount rate to estimate the present value of future costs. This rate is updated annually and is identified in both Excel workbooks available on OFM's website.

During predesign

For predesign projects, agencies must use OFM's life cycle cost analysis [model](#) to compare the long-term costs of project alternatives (LCCM, RCW [39.35B.050](#)). This model evaluates the tradeoff over time from increased capital investment in the purchase and/or construction of facilities. Please refer to the predesign manual for more information.

The model and instructions are available on OFM's [website](#).

During design, construction, and project close

After a project enters the design phase, agencies must use OFM's life cycle cost [tool](#) (LCCT) to demonstrate how the building design contributes to energy efficiency and conservation. The LCCT

is required for facilities with an area of 5,000 square feet or greater (Executive Order [13-03](#)). The LCCT evaluates the tradeoff over time from increased initial capital investment in high-performance energy system components that may include, but are not limited to, the building envelope, HVAC system, water-using fixtures and/or lighting. OFM will not allot construction funds until the analysis is completed.

The tool, instructions and training webinars are located on OFM's [forms](#) page.

5.8 State efficiency and environmental performance executive order

The state efficiency and environmental performance executive order requires, subject to available funding, newly constructed, state-owned (including lease purchase) buildings be designed as zero energy or zero-energy capable and include consideration of embodied carbon. In unique situations where a cost effective zero-energy building is not yet technically feasible, buildings must be designed to exceed the current state building code for energy efficiency to the greatest extent possible (Executive Order [20-01](#)). The State Efficiency and Environmental Performance Office provides guidance on zero energy projects through the [Zero Energy Toolkit](#).

Since most state facilities are currently operating below their maximum feasible energy efficiency, agencies must also adopt and implement plans to reduce energy use in state-owned facilities. In most cases, agencies will choose to adopt tools to improve energy efficiency, operations, process management, and occupant behavior in the short term, while accelerating planning for deep facility retrofits and new construction in future years.

5.9 Environmental performance of construction materials

To accelerate the reduction of embodied carbon and improve the environmental performance of construction materials, agencies shall, whenever possible, review and consider embodied carbon reported in environmental product declarations when evaluating proposed structural materials for construction projects.

5.10 Sustainable standards

Any building project that receives over \$10 million in funding from the capital budget must be built to sustainable standards. "Sustainable building" means a building that integrates and optimizes all major high-performance building attributes, including energy efficiency, durability, life-cycle performance, and occupant productivity, and minimizes greenhouse gas emissions.

5.11 Clean buildings standard

On May 7, 2019, Governor Inslee signed into law House Bill 1257, commonly referred to as the Clean Buildings law. The Clean Buildings standard will apply to Tier 1 buildings, which are large non-residential buildings, including state agency facilities, greater than 50,000 square feet in floor area.

On March 25, 2022, Governor Inslee signed into law Senate bill 5722, which creates new Tier 2 buildings, which are multifamily residential, nonresidential, hotel motel and dormitory buildings exceeding 20,000 square feet in floor area and multifamily residential buildings with floor areas equal to or exceeding 50,000 square feet.

UPDATED

The objective of these laws is to lower costs and pollution from fossil fuel consumption in the state's existing building stock.

Tier 1 buildings: The law required that Commerce develop and implement an energy performance standard for Tier 1 buildings and provide incentives to encourage efficiency improvements. State agencies are eligible to participate in the incentive program if their buildings meet criteria required to participate. While mandatory compliance with the standard does not start until 2026, agencies should plan for how they will comply with these standards and submit associated budget requests, as several biennia of improvements may be necessary.

Staged compliance timeline for Tier 1 buildings:

- June 1, 2026, for buildings over 220,000 square feet,
- June 1, 2027, for buildings over 90,000 square feet but less than 220,000 square feet, and
- June 1, 2028, for buildings over 50,000 square feet but less than 90,000 square feet.

Tier 2 buildings: This new law requires that Commerce develop reporting requirements for covered Tier 2 buildings including benchmarking, operations and maintenance planning and energy management planning. Reporting requirements will become effective in 2027 for Tier 2 buildings. Tier 2 buildings, including state-owned facilities, are also able to participate in an incentive program starting in 2025.

5.12 Expected use of bond proceeds and certificates of participation

OFM staff will contact agencies to answer a set of questions for the Office of the State Treasurer (OST) once the budget is enacted, to help verify that individual projects are eligible for funding from tax exempt bonds or certificates of participation, both of which are subject to IRS rules.

5.13 Bond fund cash flow plans

OST conducts a regular survey to collect updated information on agency cash flow needs. This assists in planning future bond sales. Requested agencies must complete and return the bond fund cash flow estimates form, expected use of proceeds form, and any supporting materials to OST by the due date.

SUPPORT AND CONTACT INFORMATION

6.1 CBS Support

For assistance in using the Capital Budgeting System (CBS), a user tutorial and job aids are located at <https://ofm.wa.gov/it-systems/budget-and-legislative-systems/capital-budget-system-cbs>

Direct questions to the OFM Help Desk by telephone (360) 407-9100 or [email](#).

6.2 Other contacts

Art allocation

[Mike Sweney](#), Washington State Arts Commission, (360) 228-4080

Growth Management Act compliance/local government contacts

[David Andersen](#), Department of Commerce, (509) 434-4491

Bond fund cash flow plans

[Leslie Yonkers](#), Office of the State Treasurer, (360) 902-9020

Certificates of participation

[Matt Schoenfeld](#), Office of the State Treasurer, (360) 902-9022

Archaeological and cultural resources

[Dr. Rob Whitlam](#), Department of Archaeology and Historic Preservation, (360) 890-2615

Building commissioning, energy services and LEED™

[Engineering and Architectural Services](#), Department of Enterprise Services, (360) 902-7272

Puget Sound recovery

[Diamatris Winston](#), Puget Sound Partnership, (360) 464-1231

Recreation and Conservation Office grant programs

[Mark Jarasitis](#), Recreation and Conservation Office, (360) 902-3006

Office of the Chief Information Officer ociopolicy@ocio.wa.gov

Clean Buildings, Department of Commerce buildings@commerce.wa.gov

SEEP and Zero Energy Buildings [Zero Energy Toolkit](#), hanna.waterstrat@commerce.wa.gov

HIGHER EDUCATION CAPITAL PROJECT EVALUATION SYSTEM

Overview

Section 7.1 summarizes the purpose of the capital project evaluation system, and the state’s strategic and financial environment. This section highlights changes to the scoring process for 2022. Key dates also are provided.

Section 7.2 describes the evaluation framework and defines project categories.

Section 7.3 outlines the evaluation process, including evaluation panel structure and process phases.

Section 7.4 includes submittal guidelines, instructions for project proposals, and a checklist for required elements. It also includes descriptions of the project evaluation criteria.

Section 7.5 provides the expected project cost ranges by type of facility and construction cost index for escalating costs to mid-construction date.

Section 7.6 lists minimum thresholds for project submissions.

7.1 Project evaluation objectives and schedule

Background

The capital project evaluation and scoring system provides insight into the state’s higher education goals for capital facilities and provides decision makers with a legislatively required analysis of the relative value of potential capital projects.

Statutory requirements. Chapter [43.88D](#) RCW mandates a process for evaluating and scoring capital project requests by the state’s four-year higher education institutions. The law highlights the importance of strategic planning in the facility prioritization process, stating that the process must emphasize “objective analysis, a statewide perspective, and a strategic balance among facility preservation, new construction, and innovative delivery mechanisms.”

The statute requires a transparent and objective system that gives four-year institutions the opportunity to articulate their capital facility needs while enabling decision makers to identify tradeoffs and make the best strategic choices, given limited state resources.

State strategic and financial context. In accordance with RCW [43.88D.010](#), OFM is to score projects based on, at a minimum, an evaluation of enrollment trends, reasonableness of cost, the ability of the project to enhance specific strategic master plan goals, age and condition of the facility (if applicable), and impact on space utilization. RCW [28B.77.070](#) directs OFM to provide the Governor and Legislature with a single prioritized list of all the major projects for consideration of funding (including projects scored previously for early stages of development). Section 7044 of the 2021-23 capital budget (SHB 1080) states that OFM may, but is not obligated to, develop one prioritized list of capital projects. As a result, OFM will not prepare a single prioritized list for the 2023-25 biennium proposed budget.

2019 Higher Education Space and Cost Study. Section 1023, Chapter 298, Laws of 2018 directed OFM to conduct a Higher Education Facilities Study that included learning space utilization standards for higher education facilities and reasonableness of cost standards for higher education capital projects. The final report was published in August 2019 with revisions in April 2020 and is available on OFM's [webpage](#).

What remains the same for 2022

Over several biennia, the evaluation process incorporated changes that have been maintained for this year's evaluation process. A recap of the process that remains the same follows:

1. Project proposals will be submitted and reviewed electronically.
2. Evaluation panels will have an orientation meeting and then two meetings to review and score project proposals. All meetings will be done through video conferencing. Institutions are required to provide a checklist with each project proposal on which they will certify the items that have been submitted.
3. Institutional priority lists will be submitted separately to OFM's higher education capital budget analyst and added to the results after panel scoring is complete.
4. Section 7034, Chapter 332, Laws of 2021 requires OFM to score higher education capital project criteria with a rating scale that assesses how well a particular project satisfies criteria. In addition, OFM may not use a rating scale that weighs the importance of those criteria. A multiplier will be added to weight criteria equally within a category.
5. Section 7044, Chapter 332, Laws of 2021, states that OFM may, but is not obligated to, develop one prioritized list of capital projects for the Legislature.
6. Projects in the stand-alone subcategory are those valued between \$2 million and \$10 million and are separate from the major projects costing more than \$10 million. Overarching criteria will not be applied to stand-alone projects.
7. Projected degree totals will be measured against the most current data available in OFM Statewide Public Four-Year Dashboard. 2020-21 data is expected to be published by the Education Research and Data Center in August.
8. Expected project cost range standards are based on maximum allowable construction cost (MACC) rather than total project cost because of the 2019 Higher Education Facilities Study.
9. OFM cost standards allow for consideration of higher-than-expected costs per square foot if exigent circumstances can be demonstrated.
10. OFM will use the existing Facility Planning and Evaluation Guide (FEPG) space utilization standards and scoring criteria for classroom and class laboratories.
11. Proposals for minor works and predesign phase work are not scored in this process. Requests for these are submitted as Capital Budget project requests.

What's new for 2022

Notable changes for the 2022 scoring process are:

1. OFM has a new C-100 cost estimating form for 2023-25 biennium project.
2. A C-100 form is required for all submitted projects. CBS003 report is not required.
3. Revised degree target overarching scoring criteria to factor how the proposed project will contribute to an increase in degrees.
4. New template for calculating reasonableness of cost (Chapter 5).
5. Minor changes to scoring criteria.

2022 schedule

Key Process Dates

Action	Target date
Institutions nominate scoring panel members	May
Capital budget instructions, scoring process instructions and evaluation guidelines posted	June
OFM recruits scoring panel members	June - July
OFM publishes table with point totals for all scoring criteria	June
Predesigns due from agencies for projects (prerequisite for submitting proposals over \$10 million)	June 30
Institutions submit preliminary list of proposals	June 30
Informal Q&A period with agencies	Ongoing
Institutions submit project proposals and institutional priority form	August 15 *
Evaluation panel orientation/distribute proposals for review	August 22
Panel members review project proposals	Aug 22 - Sept 7
Scoring meeting 1: scoring panel members meet virtually to discuss proposals and form questions for institutions	September 7
Institution response period	September 7 - 14
Scoring meeting #2: scoring panel members meet virtually to complete scoring	September 15
OFM compiles scoring results	September - October
Institutions submit 2023-25 capital budget requests to OFM	September
OFM publishes scoring results and transmits to legislative fiscal committees and four-year institutions	November 1 *
Evaluation of scoring process	November
Governor's budget proposal transmitted to Legislature	December 20 *
* Statutory date	<i>Updated: May 2022</i>

Contacts

- [Darrell Jennings](#), Capital Budget Assistant to the Governor, OFM, (360) 584-4734
- [Jen Masterson](#), Senior Capital Budget Assistant to the Governor, OFM, (360) 810-0117

Resources

Forms, documents and links to resources needed for the scoring process are available on the Capital Projects Scoring System [webpage](#):

- Proposal checklist
- Institutional priority form
- Project proposal forms
- Availability of space / campus utilization template
- Program related space allocation template
- Degree Totals and Targets template
- C-100 cost estimating tool
- [OFM Statewide Public Four-Year Dashboard](#)
- Studies and reports

7.2 Project categories and scoring framework

Scoring framework

Capital requests. Each institution should develop a capital request based upon program-based strategic planning and/or facility master planning. As required by Chapter [43.88D RCW](#) each institution should submit a prioritized list of the proposed projects for the ensuing six-year period to OFM by August 15, 2022.

Institutions should submit a project proposal for any project expected to have a cumulative total project cost (predesign through construction) of more than \$2 million.

Institutions do not need to resubmit a project proposal for projects that have already been scored in a prior evaluation process unless the design process has resulted in a significant change in project scope, schedule or cost from documents previously submitted to OFM and the Legislature, or if the project score is more than two biennia old. Institutions should consult with OFM's higher education capital budget analyst about whether a change is significant enough to require that a new or amended proposal be submitted. Projects that have not been scored but have received an appropriation for predesign or design in prior biennia must still be submitted for scoring (Chapter [28B.77.070 RCW](#)).

Category. Based upon the project's primary purpose, the institution must select a scoring category (growth, renovation, replacement, research, infrastructure, or acquisition) within which it recommends the project be evaluated. Some projects may fit multiple evaluation categories. For example, both renovation and enrollment growth, or both enrollment growth and research. In such cases, a useful rule of thumb is to assign the project to the category purpose that encompasses the majority of project square footage and/or cost. Institutions are encouraged to consult with OFM for questions about project classification before submission.

Major or stand-alone projects. A major project is a project with a total cumulative cost (predesign, design and construction) of more than \$10 million and generally takes two to more biennia to complete. A stand-alone project is one with a total cumulative cost of between \$2 million and \$10 million and is generally requested and completed in one biennium. Stand-alone projects will be evaluated as a subcategory under the relevant major category of growth, renovation, replacement, or research.

Evaluation criteria. There are both subjective and objective evaluation measures included in the scoring criteria. Evaluation panels will interpret and score subjective criteria and OFM will provide scores for objective evaluation measures based upon information provided in the submitted materials when appropriate. Each institution should be prepared to make a strong case for how its project is in the best interest of the state. The project proposal must specifically address the evaluation criteria. Institutions must provide a clear and accurate description of the facility need or problem addressed by the project and a thoughtful analysis of the suggested option to meet the need or solve the problem.

Evaluation. Each project will be evaluated and scored within one of the defined categories. In terms of scoring, capital projects will only be compared to other projects within the same category (i.e., growth projects will only be compared to growth projects and not to renovation projects). Furthermore, major and stand-alone projects will be considered separately within a category. The system has not been designed to compare projects across categories.

There are two types of scoring criteria:

- **Overarching criteria:** applicable only to major projects in growth, renovation, replacement, and research categories.
- **Category-specific criteria:** applicable to all projects.

The information generated by the higher education project evaluation process is made available to inform and guide the Governor and the Legislature in their development of capital budget proposals and outyear planning.

Capital project categories and definitions

Each capital project request should be made exclusively within one of the following six categories, based on the institution's assessment of the project's primary purpose and following definitions:

Growth. Projects for which the primary purpose is to accommodate enrollment growth increases at main and branch campuses, at existing or new university centers, or through distance learning should be requested in this category. Growth projects should provide significant additional student capacity. Proposed projects must demonstrate that they are based on solid enrollment demand projections; provide enrollment access more cost-effectively than alternatives, such as university centers and distance learning (if such alternatives are not proposed); and make cost-effective use of existing and proposed new space.

Land acquisition associated with a specific growth request should be included as an element of the project request in this category.

Renovation. Projects that renovate facilities to restore building life and upgrade space to meet current program requirements should be requested in this category. Renovation projects should represent a complete renovation of a total facility or an isolated wing of a facility. A reasonable renovation project should cost between 60 and 80 percent of current replacement value and restore the renovated area to at least 25 years of useful life. New space may be programmed for the same or a different use than the space being renovated and may include additions to improve access and enhance the relationship of program or support space.

Replacement. Facilities that cannot be renovated cost-effectively are considered replacement projects. New space may be programmed for the same or a different use than the space being replaced and may include additions to improve access and enhance the relationship of program or support space.

Research. Projects with the primary purpose of promoting economic growth and innovation through expanded research activity should be proposed in this category, even if the project involves renovation or replacement of an existing facility. In assigning projects that serve both the research and the instructional missions, consider the percentage of assignable square feet allocated to each mission.

Infrastructure. This category is intended for major or stand-alone campus infrastructure projects that exceed the minor works threshold limit of \$2 million. These projects may be inside or outside a building. Examples of infrastructure projects include the replacement of an electrical system, installation of a new steam tunnel or the development of a water distribution system. These projects generally would be completed (predesign through construction) in one biennium.

Acquisition. This category is intended for the acquisition of land for which no specific facility project is being proposed at this time, including the acquisition of facilities and/or land with built improvements. Land acquisition needed for a specific facility should be included in the category most closely associated with the facility. For land acquisitions associated with a specific growth request, see the Growth category.

7.2 Project evaluation and scoring process

Evaluation panels

Evaluation panel composition. The project evaluation and scoring process involves formation of project evaluation panels with representation from the following:

- Four-year institutions – capital facilities and academic affairs
- Council of Presidents
- Department of Enterprise Services
- Other state agencies

Panel members play a key role in the process. Selection and panel composition is determined by OFM in consultation with legislative staff. Each institution can identify up to two individuals with capital facilities expertise and up to two individuals from academic affairs to serve as evaluators. **A prerequisite for nomination/selection is that panel members can attend both meetings.**

Evaluation panel guidelines. Each evaluation panel will be composed of individuals who will evaluate and score a subset of the projects. The panels will operate under these basic guidelines:

- Panel facilitators will be composed of OFM, Council of Presidents, and legislative capital budget staff. Facilitators will participate ex officio in scoring discussions, but do not score proposals.
- Panel members must participate in both scoring meetings. If a panel member is unable to attend both, their scoring will not be considered.
- Representatives from four-year institutions will not score proposals from their own institutions.
- Panel members will review project proposals individually, then meet to discuss and come to an agreement on the scoring.
- Depending upon proposal volume, panel members may be asked to evaluate and score projects in one or more categories.
- Questions for institutions raised during panel discussions will be noted by each facilitator and submitted to the appropriate institution by OFM. Panel members should not conduct their own research by contacting institutions or others about proposals.

Evaluation and scoring process phases

Panels work through a multipart process that will take place in two meetings. Panel members should have completed a preliminary review of all proposals assigned to them for the first meeting.

OFM will distribute process instructions and project submittals to panel members, who will independently review them and note any questions they have about the proposals and how to apply the criteria. Panel members will forward any questions about individual requests to the panel facilitator in advance of the first panel meeting. Institutions will have the opportunity to respond to panel questions in writing prior to the meeting.

Proposals should be scored objectively based on information provided by the institutions through the submittals and responses to any follow-up questions posed by the panels through OFM.

Panel meeting 1: proposal review and Q&A with facilitators

- Conduct group discussion of assigned project proposals
- Discuss application of criteria to project proposals
- Review and Q&A submitted in advance of panel meeting 1
- Provide facilitator with any follow-up questions to institutions that panel needs for final scoring

Panel meeting 2: further review and final scoring

- Review institutions' responses to panel members' questions
- Review preliminary scores of assigned project proposals
- Agree to consensus score for each assigned project proposal

The purpose of the second meeting is to determine a final evaluation panel score for each project within each category. Evaluation panels will assign scores to each project under their review.

Evaluation process

Evaluation and scoring process objectives. The evaluation process has the following objectives:

- Conduct a transparent, fair, and understandable project review process.
- Provide decision makers with comprehensive and accurate analysis of how well potential capital projects satisfy the categorical criteria.
- Provide comparable information for scored proposals.
- Respond to legislative direction to OFM to coordinate the evaluation and scoring of capital facility project requests from the four-year higher education institutions.

Question and answer period. Institutions are encouraged to send questions about the scoring process to OFM at any point before evaluation panels meet. Questions and answers applicable to all institutions or the process will then be shared with all.

Presentation of scoring results. Scoring results will be announced by November 1, 2022. OFM will conduct meetings with each institution to explain the scoring and debrief about the process at the request of the institution.

Process debrief and review

The purpose of this final phase is to improve the process for the next biennium. OFM will ask participants to provide feedback, identify strengths and weaknesses, and recommend changes. Institutions and other stakeholders will have an opportunity to comment and provide suggestions on process, categories, and evaluation criteria.

7.4 Project proposal submittal guidelines

Submittal instructions and due date

Institutions are responsible for making sure that all required proposal packet materials are submitted to OFM by:

Document	Due date	Submit materials to
Institutional priority form (send separately from project proposal packet)	August 15, 2022	Email to: Darrell.Jennings@ofm.wa.gov
Project proposal packets and resubmittal checklists	August 15, 2022	If file is below 20 MB, email to: Darrell.Jennings@ofm.wa.gov . Files larger than 20 MB can be placed on an agency FTP site for download, or mailed on a thumb drive to: Office of Financial Management Attn: Darrell Jennings 300 Insurance Building PO Box 43113 Olympia, WA 98504-3113

Institutional priorities

Institutions may submit a prioritized list of up to five project proposals. The institutional priority form (one per institution) is submitted electronically to the OFM higher education capital budget analyst. This form is available on OFM's Capital Projects Scoring System website. Institutional priorities will remain confidential from the evaluation panels until after their scoring process is complete.

Priority points may be allocated among the institution's top **five capital project proposals, including both major and stand-alone projects.**

Project proposal requirements

New proposals

- Each project may only be submitted within a single scoring-category.
- Each proposal must include a signed project proposal checklist.
- **Project proposals are limited to 10 pages**, not including any supplemental and supporting documentation and appendices, such as availability of space/campus utilization form, program related space allocation form, project cost estimates, diagrams and sketches, appendices, cover sheet, title page and table of contents. Please limit to only what is necessary for scoring.

Resubmittals. Institutions with projects that were scored in the last two biennia and not funded, do not need to submit a project proposal for scoring unless the design process has resulted in a significant change in project scope, schedule or cost from documents previously submitted to OFM and the Legislature. To resubmit projects, institutions need only to submit a proposal checklist for projects that are part of an institution's budget request for biennium 2023-25.

Proposal packet format

Project proposals should be organized into three parts:

- Brief summary and description of the project
- Evaluation criteria responses:
 - Overarching evaluation criteria responses (if applicable): how the project addresses the statewide and the institutional planning criteria
 - Category-specific evaluation criteria responses: how the project addresses each individual evaluation criterion within the category
- Appendices: supplemental and supporting templates, forms, and documentation, including technical exhibits. Limit appendices only to materials that are relevant to information needed for scoring.

Content instructions

Each project proposal should address the following elements. See Exhibit A in Chapter 5 for scoring criteria applicability.

Summary narrative: project scope and description. Succinctly describe the proposed project, including the following information:

- Category and subcategory of project request
- Problem statement (including consequences of taking no action), short description of the project and its benefits, and a description of any alternatives considered
- History of the project or facility
- Programs addressed or encompassed by the project

Overarching scoring criteria

Major project submittals in the growth, renovation, replacement, and research categories will be evaluated by two overarching criteria: whether a project is integral to statewide policy goals and the extent to which the project fits within existing campus strategic and academic plans.

Integral to achieving statewide policy goals. Identify the statewide goal or goals the project addresses and describe how and the specific extent to which it will do so.

Integral to institutional planning and goals. Describe the proposed project's relationship and relative importance to the institution's campus master/facilities plan and strategic plan.

The statewide goals relate to increasing the number of bachelor's and advanced degrees awarded, including bachelor's degrees in the [high-demand fields](#) identified in the [OFM Statewide Public Four-Year Dashboard](#). Use the Degree Totals and Targets template and submit as an appendix to the proposal packet.

General category scoring criteria

The following criteria apply to the six scoring categories. See Exhibit A for category applicability.

Promotes access. Access-related projects to accommodate enrollment growth at all campuses, at existing or new university centers, or through distance learning. Growth projects should provide significant additional student capacity. Proposed projects must demonstrate they are based on solid enrollment demand projections, more cost-effectively provide enrollment access than alternatives such as university centers and distance learning and make cost-effective use of existing and proposed new space.

Adequacy of space. Identify lack of suitable space and the upgrades needed to address program standards and needs.

Space utilization. Identify the average number of hours per week that each classroom seat and classroom lab is expected to be utilized in fall 2022 on the proposed project's campus. If the campus does not meet the utilization standards of 22 hours per classroom seat and/or the 16 hours per class lab, describe any institutional plans for achieving that level of utilization. Fall 2022 utilization should be estimated by increasing the fall 2021 actual enrollment by the fiscal growth factor by which the 2022-23 academic year state-supported enrollments is budgeted. Use the Availability of Space/Campus Utilization template. Submit the template as an appendix to the proposal packet.

Building condition. Provide the facility's most recent condition score (1 superior–5 marginal functionality) in the 2016 Comparable Framework [study](#) and summarize the major structural and systems conditions that resulted in that score. Provide selected supporting documentation in appendices and reference them in the body of the proposal.

*For renovation projects only, identify whether the building is on the Washington Heritage Register, and if so, summarize its historic significance.

Efficiency of space allocation. For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with the Facility Evaluation and Planning [Guide](#) (FEPG) assignable square feet standards. If any proposed allocations exceed FEPG standards, explain the alternative standard that has been used and why.

Example: efficiency of space allocation – FEPG standard

FEPG room classification number	FEPG room classification type	Project ASF per station	FEPG standard	Meets standard (Y/N)	Comments
110	Classroom	20	16-26	Y	
110	Classroom	30	16-26	N	Exceeds standards due to programmatic need for demonstration space
210	Class lab – physical science	70	40-90	Y	
215	Class lab – services			N/A	Sized appropriately to serve two labs
230	Computer lab	45	60	N	Falls below FEPG guideline, but meets programming needs
250	Research lab	80		N/A	Sized for research program needs
255	Research lab – service			N/A	Sized appropriately to serve research labs
311	Faculty office	140	140	Y	
311 & 312	Faculty chair office	175	175	Y	
311 & 312	Dean’s office	200	200	Y	
313	Student assistants	140 per 4	140 per 2 min.	Y	4 student assistants = 2 FTEs
314	Clerical office	140	140	Y	2 FTEs
315	Office service, clerical station	100	100	Y	2 FTEs
316 & 317	Staff & other office	120	120	Y	
350	Conference room	300	310	N	Total SF shown; FEPG = total office area/12; project SF insignificant amount below standards, still meets FEPG guideline of 20 SF per station
610	Auditorium/ lecture hall	20	15-16	N	Additional SF needed to meet ADA requirements due to site conditions
FEPG room classification number	FEPG room classification type	Project ASF per station	FEPG standard	Meets standard (Y/N)	Comments
760	Hazardous material storage		As appropriate by code	N/A	Sized appropriately to serve labs
770	Hazardous waste storage		As appropriate by code	N/A	Sized appropriately to serve labs

Identify the (a) assignable square feet in the proposed facility; (b) the gross square feet; and (c) the net building efficiency (“a” divided by “b”).

Reasonableness of cost. Provide detailed cost estimates for the entire project, regardless of fund source. Complete and attach the Excel C-100 form for each project. If project costs exceed OFM cost standards (see Chapter 5 for reference), provide a description of any building or system alternatives that are expected to result in significant operational savings. Selected systems alternatives for which a life-cycle cost analysis shows net present savings over baseline options may receive additional points.

Program-related space allocation. Identify planned use of proposed space, including assignable square footages by use type in the Program Related Space Allocation template. Submit the template as an appendix to the proposal packet.

Age of building since last major remodel (renovation and replacement categories). Identify the number of years since the last substantial renovation of the facility. If only a portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple wings of a building that were constructed or renovated at different times, calculate; and provide a weighted average age, based upon the gross square feet and age of each wing.

Significant health, safety, and code issues. Identify whether the project is needed to bring the facility to current life safety or energy code requirements. Clearly identify the applicable standard or code and describe how the project will address these issues. Cite examples of existing conditions that do not comply with current codes that the project will correct. Provide selected supporting documentation in appendices and reference them in the body of the proposal.

Enrollment growth (growth category). Identify the estimated number of additional FTE students the project is expected to enable the institution to serve when the space is fully occupied. Describe the method by which additional FTEs are calculated, including an analysis of probable student enrollment demand from project completion to full occupancy. Also provide an estimate of the number of additional FTE enrollments in high-demand fields and the fields in which such growth is expected to occur.

Per RCW [43.88D.010\(1\)\(a\)](#), growth projects must also demonstrate that they can more cost-effectively provide enrollment access than alternatives such as university centers and distance learning.

Criteria specific to the research category

Impact on economic development. Identify any specific state, regional or local economic development plans associated with the project and describe how it would support them. Demonstrate that federal or private funding is likely to be available to support the research that would be conducted in the facility. Summarize and estimate the expected economic benefits of the project and provide selected supporting documentation in a clearly referenced appendix.

Impact on innovation. Explain how the research activities proposed for the project will advance areas of existing preeminence or position the institution for preeminence in a field or area. Evidence of existing or potential research preeminence could include, but is not limited to, funding history, faculty qualifications, publications, patents, or business spin-offs, etc.

Availability of research space. Describe the extent to which there is sufficient square footage in existing campus facilities to conduct the proposed research.

Adequacy of research space. Describe the functionality and adequacy of existing campus research space. How will the new project address any existing or planned research needs, including expanded research capability?

Contribution of other funding sources. Identify the source and amount of capital planning and construction costs that will be covered by sources other than the State Building Construction Account or State Taxable Building Construction Account. Provide supporting documentation demonstrating the likelihood that such non-state revenues are likely to be available and any restrictions on their use.

Criteria specific to the infrastructure category

Evidence of increased repairs and/or service interruption. Identify prior repairs and/or service interruption beyond routine preventive maintenance activities. Describe increasing utility and/or maintenance costs and/or system unreliability. Address the impact of deferring the project. Provide selected supporting documentation in appendices and reference them in the body of the proposal. Examples of supporting documentation include, but are not limited to, work order history on repairs, number of call-outs to outside contractors to address a specific problem, utility bills demonstrating increased costs over time due to an issue that needs to be corrected, or evidence of cessation of services due to required repair(s), etc.

Impact on institutional operations without infrastructure project. Describe the impact to existing operations or impact to funded or planned construction projects should this infrastructure project not occur.

Engineering study. Identify whether there is a completed comprehensive engineering study, site survey and recommendations or opinion letter. Provide referenced supporting documentation in appendices.

Reasonable estimate. Provide a recent detailed cost estimate applicable to the scope of work and carried out by an experienced project manager.

Resource efficiency and sustainability. Document project benefits associated with low-impact development, improvements in energy and resource conservation, and use of renewable energy sources. “Low impact development” refers to an approach to land development that works with nature to manage stormwater as close to its source as possible. Examples include bio-retention facilities, rain gardens, vegetated rooftops, rain barrels and permeable pavements. “Renewable” energy systems include, but are not limited to, hydroelectric power, active or passive solar space, heating or cooling, domestic solar water heating, windmills, waste heat, biomass and/or refuse-derived fuels, photovoltaic devices, and geothermal energy.

Criteria specific to the acquisition category

Reasonableness of cost. Provide an appraisal of the land or facility to be acquired and costs for two comparable acquisitions in the same area. Provide the cost estimate for the entire project regardless of fund source plus as much detailed cost information that is available based on the project phase.

Intended use. Indicate the intended use of the property, whether for instructional building, non-instructional building or other.

Percentage of buildable area. For land acquisitions with unusable structures, indicate the percentage of the total property that is suitable for development based on the results of an environmental review and engineering inspection of the property. Address the suitability of the property in terms of condition and location.

Building condition. For facility acquisitions or land acquisitions with usable facilities, indicate the condition of the facility using the methodology prescribed in the [2016 Comparable Framework update](#) as evaluated by an architect or engineer.

Capital improvements required. For facility acquisitions, provide a cost estimate for the funds required to adapt the facility to the proposed use.

Savings to operating costs. Submit estimates of operating savings because of this acquisition. Present the savings in terms of years of payback of the cost of the acquisition.

Exhibit A – criteria matrix

	Category	Growth	Reno.	Replace.	Research	Infrast.	Acq.
Overarching criteria: Major projects only	Increase number of bachelor's degrees	X	X	X	X	Not applicable	Not applicable
	Increase number of bachelor's degrees in high-demand fields	X	X	X	X		
	Increase number of advance degrees	X	X	X	X		
	Integral to campus/ facilities master plan	X	X	X	X		
	Integral to institution's academic plan	X	X	X	X		

Category-specific scoring criteria	Promote access	X					
	Adequacy of available space		X	X	X		
	Availability of space in relation to HECB utilization standard	X	X	X	X		
	Building/ facility condition		X	X			X
	Enrollment growth	X					
	Efficiency of space allocation in relation to FEPG	X	X	X			
	Meets building efficiency guidelines (ASF/GSF)	X	X	X			
	Reasonableness of cost	X	X	X	X	X	X
	Program-related space allocation	X	X	X			
	Age of building or last major remodel		X	X			
	Significant health, safety and code issues		X	X		X	
	Impact on economic development				X		
	Availability of research space				X		
	Impact on innovation				X		
	Other funding sources				X		
	Integral to achieving statewide policy goals				X		
	Evidence of increased repairs/service interruption					X	
	Impact on operation without project					X	
	Engineering study					X	
	Resource efficiency and sustainability					X	
	Support by planning					X	X
	Intended use						X
	Buildable area or usable facilities						X
Capital improvements required to adapt existing facility to proposed use						X	
Savings to operating costs						X	

Project proposal appendices

Required forms, supplemental and supporting project documentation, limited to materials directly related to the evaluation criteria, such as:

- Excel C-100 cost estimating tool (required for each project proposal)
- Degree Totals and Targets template
- Program related space allocation template
- Availability of space/campus utilization template
- Degree and enrollment growth projections
- Selected excerpts from institutional plans
- Efficiency of space allocation table
- Data on instructional and/or research space utilization
- Additional documentation for selected cost comparables
- Selected materials on facility conditions
- Selected materials on code compliance
- Tables supporting calculation of program space allocations, weighted average facility age, etc.
- Evidence of consistency of proposed research projects with state, regional or local economic development plans
- Evidence of availability of nonstate matching funds
- Selected documentation of prior facility failures, high-cost maintenance and/or system unreliability for infrastructure projects
- Documentation of professional assessment of costs for land acquisition, land cleanup and infrastructure projects
- Selected documentation of engineering studies, site survey and recommendations or opinion letters for infrastructure and land cleanup project

7.5 Project cost standards

Expected project cost range in January 2019 dollars

The following expected maximum allowable construction cost (MACC) per square foot for program types are from the 2019 [Higher Education Facilities Study](#), prepared by NAC Architecture and Ayers Saint Gross.

Program type	Number of data points	Standard deviation	Expected MACC/GSF
Classrooms	31	99.84	\$405
Instructional labs	34	99.43	\$397
Research labs	8	136.36	\$545
Administration	38	96.44	\$406
Libraries	5	64.97	\$340
Athletic	3	81.53	\$385
Assembly, exhibit, and meeting rooms	8	68.85	\$428

Construction cost index 2022

The following data is based on 2022 first quarter Global Insight forecast for state and local government spending and is to be used for adjusting the expected costs from January 2019 to the mid-construction date for comparison to project estimates.

Mid-construction date	Construction index						
February-19	1.0000	November-22	1.2654	August-26	1.4461	May-30	1.3073
May-19	1.0103	February-23	1.2778	November-26	1.4586	August-30	1.3146
August-19	1.0153	May-23	1.2899	February-27	1.4711	November-30	1.3219
November-19	1.0192	August-23	1.3017	May-27	1.4835	February-31	1.3291
February-20	1.0185	November-23	1.3137	August-27	1.4960	May-31	1.3364
May-20	1.0215	February-24	1.3259	November-27	1.3700	August-31	1.3437
August-20	1.0293	May-24	1.3377	February-28	1.2413	November-31	1.3511
November-20	1.0409	August-24	1.3495	May-28	1.2485	February-32	1.3585
February-21	1.0642	November-24	1.3613	August-28	1.2557	May-32	1.3659
May-21	1.0904	February-25	1.3731	November-28	1.2630	August-32	1.3733
August-21	1.1215	May-25	1.3849	February-29	1.2704	November-32	1.3807
November-21	1.1655	August-25	1.3969	May-29	1.2778	February-33	1.3882
February-22	1.2108	November-25	1.4090	August-29	1.2852	May-33	1.3956
May-22	1.2383	February-26	1.4212	November-29	1.2926	August-33	1.4031
August-22	1.2524	May-26	1.4336	February-30	1.3000	November-33	1.4105

Adjustment of expected cost ranges

Institutions should use the Reasonableness of Cost [template](#) to calculate the expected weighted-average cost of the proposed project at the mid-point of construction. Here is an example of how to determine the expected cost range for a specific project:

Facility Type: Classrooms

Construction Dates:

Start: August 2023
End: December 2025
Midpoint: October 2024 (calculated)

Construction Index for Midpoint: 1.3535 (interpolated from index table)

Expected MACC in 2019 dollars: \$405 (from expected cost range table)

Expected MACC at construction midpoint: \$548 ($\405×1.3535)

7.6 Minimum thresholds for capital projects

Minimum requirements for project proposals

Proposed capital projects must pass the following minimum thresholds before being evaluated.

All categories, except infrastructure and acquisition:

- Project may not be an exclusive enterprise function such as a bookstore, dormitory, or contract food service.
- Project meets LEED™ silver standard requirements, in compliance with Chapter [39.35D RCW](#).
- Institution has a greenhouse gas and vehicle emissions reduction policy in place, in compliance with [RCW 70A.45.050](#) and [RCW 47.01.440](#).

Design phase proposals. A predesign completed in accordance with OFM's predesign manual must be on file with OFM by July 1, 2022, for any project for which the institution is seeking design and/or construction funding for the 2023-25 biennium.

Growth. RCW [43.88D.010\(1\)\(a\)](#) requires growth projects to demonstrate that they are based on solid enrollment projections and that they can more cost-effectively provide enrollment access than alternatives such as university centers and distance learning.

Renovation. Projects should cost between 60 and 80 percent of current replacement value and extend the useful life of the facility by at least 25 years.

Acquisition. The proposal must not purchase land for a current facility funding request.

Infrastructure. The project must not be a facility repair project.

Stand-alone, infrastructure, and acquisition projects. The proposal is a single stand-alone project requesting funds in one biennium.

PREDESIGN MANUAL

8.1 About the predesign

Purpose of the capital project predesign

The Office of Financial Management (OFM) is required by RCW [43.88.110\(5\)](#) to institute procedures for reviewing capital projects proposed by state agencies. A predesign is one step in a comprehensive review and funding process for state agency capital construction.

The intent of a predesign is to explore alternatives for proposed capital projects. The predesign should assess which alternative best addresses the problem, opportunity, or program requirement and at what cost, generally at less than schematic-level design information. Decision makers in the Governor's Office, OFM and the Legislature use this information to determine whether the project should proceed toward design and construction.

Predesign basics

It is highly recommended that agencies schedule an initial scoping meeting with their OFM capital budget [analyst](#) and predesign consultant (if selected) to confirm the predesign requirements and expectations for the project. To ensure that major construction projects are carried out in accordance with legislative and executive intent, design and construction appropriations may not be expended or encumbered until OFM has reviewed and approved the agency's predesign.

Predesigns **are** required for all capital construction projects:

- Valued over \$10 million, or
- Projects selected by the Legislature or OFM because they are particularly time sensitive, have high risk or are of particular interest to decision makers.

UPDATED

Note: For projects under \$10 million that involve: (a) housing of new state programs, (b) a major expansion of existing state programs or (c) relocation of state agency programs, agencies must submit a modified predesign to OFM's facilities oversight [program](#). This includes the consolidation of multiple state agency tenants into one facility, as directed by RCW [43.82.035](#). Information about the modified predesign is available on OFM's facilities [webpage](#). Projects that meet the capital requirements for predesign on major facility projects with an estimated project cost of \$10 million or more are not required to prepare a modified predesign.

If an appropriation for a predesign is included in the budget, the predesign scope must align with any associated budget provisos. Agencies undertaking a predesign without an appropriation should coordinate with their capital budget [analyst](#).

OFM has authority to make exception to some of the predesign requirements but must report any exceptions to the fiscal committees of the legislature with a justification. Contact your capital budget [analyst](#) for approval early in the predesign process if your agency believes one or more elements of the predesign will not add value for decision makers or if there are other compelling reasons that may warrant an exception.

NEW

Pre-design submittal

For projects to qualify for design consideration in the capital budget, submit the pre-design no later than July 1 of even-numbered years, as required in the capital budget [instructions](#). If pre-design and design are funded in the same biennium, OFM will not release the allotment for design of the project until the pre-design is approved (RCW [43.88.110](#)).

UPDATED

- If the pre-design is below the 20 MB restriction for email, email it to ofm.budget@ofm.wa.gov, your OFM capital budget analyst.
- For agencies *within the SGN*, larger files should be copied to OFM's FTP site by pasting the following address into File Explorer (not a browser) – "[ftp://ftp.ofm.wa.gov/OFM/Capital Budget Submittals](ftp://ftp.ofm.wa.gov/OFM/Capital%20Budget%20Submittals)." Please notify your capital budget analyst as files are posted on the FTP site as it is not monitored year-round.
- For agencies *not within the SGN*, files larger than 20 MB can be placed on an agency FTP site for download or mailed on a thumb drive to OFM at the following address:

Office of Financial Management
Capital Budget
P.O. Box 43113
Olympia, WA 98504-3113

Pre-design review and approval

After receiving a pre-design, OFM will review the document to ensure that projects are carried out in accordance with this pre-design manual and the direction provided in the capital budget. OFM may require changes or additional information before approval. Agencies should make an appropriate allowance in their consultant contracts for the time involved in the OFM review and approval process. Approval of the completed pre-design does not guarantee additional appropriation for design or construction.

To facilitate the approval process, we recommend agencies meet with OFM and legislative staff to present a high-level summary of their pre-design and to answer any preliminary questions. Agencies should contact their capital budget [analyst](#) to schedule this meeting.

Please note that the purpose of a pre-design is to explore alternatives for proposed capital projects. Pre-designs also provide professional cost estimates to inform appropriation amounts. If a pre-design is completed several biennia before design funding is appropriated, it may have limited value for decision makers. In some cases, agencies may be required to complete additional analysis if the pre-design for a project is more than two biennia old, or less in areas experiencing rapid market changes.

8.2 Contents of a pre-design

A pre-design should include the content detailed in this section. Contact a capital budget [analyst](#) early in the pre-design process if specific content detailed below will not aid decision makers in assessing which alternative best addresses the problem, opportunity or program requirement. OFM will approve limited scope pre-designs on a case-by-case basis.

Executive summary

Summarize the problem, opportunity, or program requirements; alternatives considered; preferred alternative; and why that alternative was selected. Include basic project cost information.

Problem statement

- A. Identify the problem, opportunity or program requirement addressed by the project and how it will be accomplished.
- B. Identify and explain the statutory or other requirements that drive the project's operational programs and how these affect the need for space, location, or physical accommodations. Include anticipated caseload projections (growth or decline) and assumptions, if applicable.
- C. Explain the connection between the agency's mission, goals, and objectives; statutory requirements; and the problem, opportunity, or program requirement.
- D. Describe in general terms what is needed to solve the problem.
- E. Include any relevant history of the project, including previous predesigns or budget funding requests that did not go forward to design or construction.

Analysis of alternatives (including the preferred alternative)

- A. Describe all alternatives that were considered, including the preferred alternative. Alternatives may include collocation, renovation, leased space, purchase, new construction or other options explored. Include the following:
 - i. A no action alternative. Describe the programmatic outcome of not addressing the problem or opportunity. Do the problems which were driving the project still exist? Are the necessary technologies available to meet the project objectives within the proposed project funding and timeline?
 - ii. The advantages and disadvantages of each alternative. Include a high-level summary table with your analysis that compares the alternatives, including the anticipated cost for each alternative.
 - iii. Cost estimates for each alternative.
 - a. Provide enough information so decision makers have a general understanding of the project costs.
 - b. To compare the life cycle cost of different alternatives, use OFM's Life Cycle Cost [Model](#) (LCCM, RCW [39.35B.050](#)). Include the completed life cycle cost summary as an appendix. OFM's LCCM is the only authorized tool for the completion of this section because it provides a standard methodology and set of assumptions for state agency facility construction.

Note: In addition to the LCCM, there are two other additional life cycle cost analysis tools maintained by the state, the Life Cycle Cost Tool (LCCT) maintained by the OFM and the [Energy Life Cycle Cost Analysis \(ELCCA\)](#) maintained by the DES Energy Program. Although these two tools are not required for predesign, they are required in early stages of in design phase for state agency facility construction projects. Consider incorporating these tools in predesigns where the focus of the project is the replacement of building systems.

- 1) OFM's Life Cycle Cost Tool (LCCT) is used for the design of facilities with an area of 5,000 square feet or greater (Executive Order [13-03](#)) to demonstrate how the building design contributes to energy efficiency and conservation. The tool, instructions and training webinars are available at OFM's forms [webpage](#).
- 2) The DES Energy Program's Energy Life Cycle Cost [Analysis](#) (ELCCA) is required for projects over 25,000 square feet (RCW [39.35.050](#)). This tool evaluates energy-using systems such as heating, cooling, lighting, building envelope and domestic hot water.
- iv. Schedule estimates for each alternative. Estimate the start, midpoint, and completion dates.

Detailed analysis of preferred alternative

- A. Describe the preferred project alternative in detail, including the following:
- i. Nature of space. How much of the proposed space will be used for what purpose (e.g., office, lab, conference, classroom, etc.).
 - ii. Occupancy numbers.
 - iii. Basic configuration of the building, including square footage and the number of floors.
 - iv. Space needs assessment. Compare the project space needs to currently recognized space planning guidelines and identify the guidelines used. These may include
 - a. OFM's Statewide Space Use [Guidelines](#).
 - b. For four-year higher education facilities, Facilities Evaluation and Planning [Guide](#).
 - c. For community and technical colleges, the Facilities Coding [Manual](#) for space use coding, the Capital Analysis [Model](#) (Chapter 6, appendix H), and Policy Manual and [Guidelines](#) on Utilization of Classrooms and Labs.
- B. Site analysis
- i. Identify site studies that are completed or underway and summarize their results. These studies may include:
 - a. Phase 1 environmental survey assessment
 - b. Geotechnical assessment
 - c. Transportation or traffic studyPlease be prepared to provide these documents upon request.
 - ii. Provide the following:
 - a. Location.
 - b. Building footprint and its relationship to adjacent facilities and site features. Provide an aerial view, sketches of the building site and basic floor plans.
 - c. Water rights and water availability.
 - d. Stormwater requirements.
 - e. For projects including proposed land acquisition, please attach a title report including legal description and analysis of easements as an appendix to the predesign document. Please also detail any acquisition issues.
 - f. Property setback requirements.
 - g. Potential issues with the surrounding neighborhood, during construction and ongoing once operational.
 - h. Utility extension or relocation issues.
 - i. Potential environmental impacts:
 - (i) Green space and natural amenities that need to be preserved or accorded special treatment.
 - (ii) Required or potential site mitigation, including history of possible contamination.
 - (iii) Wetlands and shoreline impacts, including a wetlands delineation and the need to fill wetlands.
 - (iv) Shoreline jurisdiction issues.
 - (v) Requirements for the State Environmental Policy Act, National Environmental Policy Act, or an environmental impact statement.
 - (vi) Other regulatory requirements, such as hydraulic project approval and U.S. Army Corps of Engineers permits.
 - j. Parking and access issues, including improvements required by local ordinances, local road impacts and parking demand.
 - k. Impact on surroundings and existing development with construction lay-down areas and construction phasing.

- C. Identify whether the proposed project is consistent with applicable long-term plans (such as Thurston County and Capitol campus master plans and agency or area master plans) as required by RCW [43.88.110](#). Please be prepared to provide pertinent documentation submitted to planning authorities.
- D. Consistency with other laws and regulations. Provide documentation that indicates the preferred option is consistent with the following:
 - i. High-performance public buildings (Chapter [39.35D](#) RCW). All state-funded buildings 5,000 square feet or more must be designed, constructed, and certified to the LEED™ silver standard at a minimum.
 - ii. The state efficiency and environmental performance (SEEP) executive order requires, subject to available funding, newly constructed state-owned (including lease purchase) buildings be designed as zero energy or zero energy capable, and include consideration of embodied carbon. In unique situations where a cost-effective, zero energy building is not yet technically feasible, buildings must be designed to exceed the current state building code for energy efficiency to the greatest extent possible (Executive Order [20-01](#)). For questions about SEEP or zero energy buildings, please visit the [Zero Energy Toolkit](#) or contact SEEP Director Hanna Waterstrat at hanna.waterstrat@commerce.wa.gov.
 - iii. Proposed building projects over 20,000 gross square feet must follow the state energy standards for clean buildings, per RCW [19.27A.210](#).
 - a. Tier 1 Buildings: non-residential buildings, including state agency facilities, greater than 50,000 square feet in floor area. State agencies are eligible to participate in the incentive program if their buildings meet criteria required to participate. While mandatory compliance with the Standard does not start until 2026, agencies should plan for how they will comply with these standards and submit associated budget requests, as several biennia of improvements may be necessary.
 - b. Tier 2 Buildings: multifamily residential, nonresidential, hotel motel and dormitory buildings exceeding 20,000 square feet in floor area and multifamily residential buildings with floor areas equal to or exceeding 50,000 square feet. This new law requires that Commerce develop reporting requirements for covered Tier 2 buildings including benchmarking, operations and maintenance planning and energy management planning. Reporting requirements will become effective in 2027 for Tier 2 buildings. Tier 2 buildings, including state-owned facilities, are also able to participate in an incentive program starting in 2025. For more information, see Commerce’s [website](#) or contact buildings@commerce.wa.gov.
 - iv. Compliance with required vehicle charging capability for new buildings that provide on-site parking (RCW [19.27.540](#)).
 - v. Greenhouse gas emissions reduction policy (RCW [70A.45.050](#)), including consideration of:
 - a. The state's limits on the emissions of greenhouse gases established in RCW [70A.45.050](#);
 - b. Statewide goals to reduce annual per capita vehicle miles traveled by 2050, in accordance with RCW [47.01.440](#), except that the agency shall consider whether project locations in rural counties, as defined in RCW [43.160.020](#), will maximize the reduction of vehicle miles traveled; and
 - c. Applicable federal emissions reduction requirements.
 - vi. Archeological and cultural resources (Executive Order [21-02](#) and Section 106 of the National Historic Preservation Act of 1966). Agencies must consult with DAHP and affected tribes on the potential effects of projects on cultural resources and historic properties proposed in state-funded construction or acquisition projects, including grant or

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pass-through funding that culminates in construction or land acquisitions. Consultation with the department of archaeology and historic preservation and affected tribes must be initiated early in the project planning process, prior to construction or taking title. Agencies must attach a letter from DAHP confirming that the proposed capital project was reviewed. (Some agencies may have an exemption from this requirement from DAHP.) If the request is a grant that contains multiple subprojects, ensure that this requirement is contained in the application process or the contract. Contact Dr. Rob Whitlam at DAHP (360) 890-2615 for assistance. Please allow DAHP a minimum of 30 days for review. If mitigation is anticipated, please ensure it is worked into the project schedule and budget.

- vii. Americans with Disabilities Act implementation (Executive Order [96-04](#)).
- viii. Compliance with planning under Chapter [36.70A](#) RCW, as required by RCW [43.88.0301](#).
- ix. Information required by RCW [43.88.0301](#)(1).
- x. Other codes or regulations.

- E. Identify problems that require further study (for example, environmental contaminants, traffic studies or IT or other infrastructure challenges). Evaluate identified problems to establish probable costs and risk.
- F. Identify significant or distinguishable components, including major equipment and ADA requirements in excess of existing code.
- G. Identify planned technology infrastructure and other related IT investments that affect the building plans. [Contact](#) the Office of the Chief Information Officer (OCIO) to coordinate IT requirements. Some projects may require oversight by OCIO and the Technology Services Board. See RCW [43.88.092](#) and [43.105.205](#) (for higher education).
- H. Identify any site-related security measures such as setbacks, lighting, etc. and/or physical security measures such as security systems, barrier protection, etc. for the project.
- I. Describe planned building commissioning to ensure systems function as designed.
- J. Describe any future phases, plans or other facilities that will affect this project, including impacts to current lease contracts. Include detail on the need to backfill space or cost assumptions for vacant space.
- K. Project management and delivery method alternatives considered.
 - v. Provide a comparative discussion of the pros and cons of the project delivery methods considered for this project and offer a recommendation of proposed procurement method for the preferred alternative. The delivery methods considered could include design-build, phased construction, general contractor/construction manager (GC/CM) or conventional design/bid/build. The proposed method of project delivery must be justified.
 - (a) For design-build, link the justification to RCW [39.10.300](#) for uses, RCW [39.10.320](#) requirements and RCW [39.10.330](#) for process.
 - (b) For GC/CM, link the justification to the requirements in RCW [39.10.340](#) for uses, RCW [39.10.350](#) for requirements and RCW [39.10.360](#) for process.
 - vi. Describe how the project will be managed within the agency:
 - (a) Identify roles and responsibilities for the project.
 - (b) Identify in-house staffing requirements for the proposed project.
 - (c) Identify consultant services, DES resources or additional staff needed to manage the project.
- L. Schedule
 - vii. Provide a high-level milestone schedule for the project, including key dates for budget approval, design, bid, acquisition, construction, equipment installation, testing, occupancy and full operation.

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- viii. Incorporate value-engineering analysis and constructability review into the project schedule, as required by RCW [43.88.110\(5\)\(c\)](#).
- ix. Describe factors that may delay the project schedule, such as an environmentally sensitive location, possible presence of archaeological or historical assets, or possible contamination of the site or buildings undergoing renovation.
- x. Describe the permitting or local government ordinances or neighborhood issues (such as location or parking compatibility) that could affect the schedule.
- xi. Identify when the local jurisdiction will be contacted and whether community stakeholder meetings are part of the process.

Project budget analysis for the preferred alternative

- A. Cost estimate. Provide the following:
 - i. Major assumptions used in preparing the cost estimate
 - ii. Summary table of Uniformat II Level 2 cost estimates
 - iii. The [C-100](#) in Excel
- B. Proposed funding
 - i. Identify the fund sources and expected receipt of the funds.
 - ii. If alternatively financed, such as through a Certificate of Participation (COP), provide the projected debt service and fund source. Include the assumptions used for calculating finance terms and interest rates. For assistance, please contact Matt Schoenfeld at the Office of the State Treasurer at 360-902-9022 or [email](#).
- C. Facility operations and maintenance requirements
 - i. Define the anticipated impact of the proposed project on the operating budget for the agency or institution. Include maintenance and operating assumptions (including FTEs) and moving costs.
 - ii. Show five biennia of capital and operating costs from the time of occupancy, including an estimate of building repairs, replacement, and maintenance.
 - iii. Identify the agency responsible for ongoing maintenance and operations, if not maintained by the owner.
- D. Furniture, fixtures, and equipment. Clarify whether furniture, fixtures and equipment are included in the project budget. If not included, explain why.

8.3 Appendices

Appendix 1: Predesign checklist and outline

A predesign should include the content detailed here. OFM will approve limited scope predesigns on a case-by-case basis.

Executive summary

Problem statement, opportunity, or program requirement

- Identify the problem, opportunity, or program requirement that the project addresses and how it will be accomplished.
- Identify and explain the statutory or other requirements that drive the project's operational programs and how these affect the need for space, location, or physical accommodations. Include anticipated caseload projections (growth or decline) and assumptions, if applicable.
- Explain the connection between the agency's mission, goals, and objectives; statutory requirements; and the problem, opportunity, or program requirements.
- Describe in general terms what is needed to solve the problem.
- Include any relevant history of the project, including previous predesigns or budget funding requests that did not go forward to design or construction.

Analysis of alternatives (including the preferred alternative)

- Describe all alternatives that were considered, including the preferred alternative. Include:
 - A no action alternative.
 - Advantages and disadvantages of each alternative. Please include a high-level summary table with your analysis that compares the alternatives, including the anticipated cost for each alternative.
 - Cost estimates for each alternative:
 - Provide enough information so decision makers have a general understanding of the costs.
 - Complete OFM's Life Cycle Cost [Model](#) (RCW [39.35B.050](#)).
 - Schedule estimates for each alternative. Estimate the start, midpoint, and completion dates.

Detailed analysis of preferred alternative

- Nature of space – how much of the proposed space will be used for what purpose (i.e., office, lab, conference, classroom, etc.)
- Occupancy numbers.
- Basic configuration of the building, including square footage and the number of floors.
- Space needs assessment. Identify the guidelines used.
- Site analysis:
 - Identify site studies that are completed or under way and summarize their results.
 - Location.

- Building footprint and its relationship to adjacent facilities and site features. Provide aerial view, sketches of the building site and basic floorplans.
- Water rights and water availability.
- Stormwater requirements.
- Ownership of the site, easements, and any acquisition issues.
- Property setback requirements.
- Potential issues with the surrounding neighborhood, during construction and ongoing.
- Utility extension or relocation issues.
- Potential environmental impacts.
- Parking and access issues, including improvements required by local ordinances, local road impacts and parking demand.
- Impact on surroundings and existing development with construction lay-down areas and construction phasing.
- Consistency with applicable long-term plans (such as the Thurston County and Capitol campus master plans and agency or area master plans) as required by RCW [43.88.110](#).
- Consistency with other laws and regulations:
 - High-performance public buildings (Chapter [39.35D](#) RCW).
 - State efficiency and environmental performance, if applicable (Executive Order [20-01](#)).
 - State energy standards for clean buildings (RCW 19.27A.210).
 - Compliance with required vehicle charging capability for new buildings that provide on-site parking (RCW 19.27.540).
 - Greenhouse gas emissions reduction policy (RCW [70.235.070](#)).
 - Archeological and cultural resources (Executive Order [05-05](#) and [Section 106](#) of the National Historic Preservation Act of 1966). If mitigation is anticipated, please note this in the predesign with narrative about how mitigation is worked into the project schedule and budget.
 - Americans with Disabilities Act (ADA) implementation (Executive Order [96-04](#)).
 - Compliance with planning under Chapter [36.70A](#) RCW, as required by RCW [43.88.0301](#).
 - Information required by RCW [43.88.0301](#)(1).
 - Other codes or regulations.
- Identify problems that require further study. Evaluate identified problems to establish probable costs and risk.
- Identify significant or distinguishable components, including major equipment and ADA requirements in excess of existing code.
- Identify planned technology infrastructure and other related IT investments that affect the building plans.
- Identify any site-related and/or physical security measures for the project.
- Describe planned commissioning to ensure systems function as designed.
- Describe any future phases or other facilities that will affect this project, including impacts to current lease contracts. Include detail on the need to backfill space or cost assumptions for vacant space.

- Provide a comparative discussion of the pros and cons of the project delivery methods considered for this project and offer a recommendation of proposed procurement method for the preferred alternative. The proposed method of project delivery must be justified.
- Describe how the project will be managed within the agency.
- Schedule.
- Provide a high-level milestone schedule for the project, including key dates for budget approval, design, bid, acquisition, construction, equipment installation, testing, occupancy and full operation.
- Incorporate value-engineering analysis and constructability review into the project schedule, as required by RCW [43.88.110\(5\)\(c\)](#).
- Describe factors that may delay the project schedule.
- Describe the permitting or local government ordinances or neighborhood issues (such as location or parking compatibility) that could affect the schedule.
- Identify when the local jurisdiction will be contacted and whether community stakeholder meetings are a part of the process.

Project budget analysis for the preferred alternative

- Cost estimate.
 - Major assumptions used in preparing the cost estimate.
 - Summary table of Uniformat Level II cost estimates.
 - The [C-100](#).
- Proposed funding.
 - Identify the fund sources and expected receipt of the funds.
 - If alternatively financed, such as through a COP, provide the projected debt service and fund source. Include the assumptions used for calculating finance terms and interest rates.
- Facility operations and maintenance requirements.
 - Define the anticipated impact of the proposed project on the operating budget for the agency or institution. Include maintenance and operating assumptions (including FTEs) and moving costs.
 - Show five biennia of capital and operating costs from the time of occupancy, including an estimate of building repair, replacement, and maintenance.
 - Identify the agency responsible for ongoing maintenance and operations, if not maintained by the owner.
- Clarify whether furniture, fixtures and equipment are included in the project budget. If not included, explain why.

Pre-design appendices

- Completed Life Cycle Cost [Model](#).
- A letter from DAHP.
- Title report for projects including proposed acquisition.

Appendix 2: Glossary

Acquisition. This type of project includes the acquisition of land, structures, and buildings. These are fixed assets that have no relationship to the addition or improvement to, or the repair or replacement of, existing fixed assets. Examples of an acquisition are the purchase of a tract of land or a building.

Alternate financing. Proposals that cover a wide range of financial contracts that call for the development or use of space by state agencies through a contractual arrangement with a developer or financing entity. Financing may involve the sale of debt obligations (certificates of participation, or COPs, through the State Treasurer) or funding from a private developer. Title to the property involved may transfer to the state either upon exercise of an option or at the termination of the contract.

Constructability review. A review by an independent consultant or contractor to determine if a project can be physically built as designed. This is to reduce construction change orders and claims. Conduct this review at 75–95 percent completion of the construction documents.

Consultant. A person or entity who provides advice or services to an agency/institution.

Contractor. A person, firm or corporation who, in the pursuit of an independent business, undertakes or submits a bid to construct, alter, repair, add to, subtract from, improve, move, or demolish any building, excavation or other structure, project, development or improvement attached to real estate or to do any part thereof.

Design/bid/build. A method of project delivery subject to provisions in Chapter [39.04](#) RCW in which the agency/institution contracts directly with a single entity responsible for the design of a project and competitively bids the construction services for the construction project.

Design/build. A method of project delivery subject to provisions in Chapter [39.10](#) RCW in which the agency or institution contracts directly with a single entity that is responsible for both design and construction services for a construction project.

Facility. A building or other structure with at least one wall, a roof, and a permanent foundation, regardless of occupancy.

Furniture, fixture, and equipment (FF&E). The moveable furniture, fixtures, or equipment that require no permanent connection to utilities or to the structure.

General contractor. A contractor whose business operations require the use of more than two unrelated building trades or crafts whose work the contractor will superintend or do in whole or in part. A general contractor does not include an individual who does all work personally without employees or other specialty contractors as defined in this glossary. The terms “general contractor” and “builder” are synonymous.

General contractor/construction manager (GC/CM). A firm with which an agency or institution has selected and negotiated a guaranteed maximum allowable construction cost for a project. A competitive selection process is used through formal advertisement and competitive bid to provide services during the design phase that may include life cycle cost design considerations, value

engineering, scheduling, cost estimating, constructability, and alternative construction options for cost savings and sequencing of work. The GC/CM acts as the construction manager and general contractor during the construction phase. The GC/CM process is subject to provisions in Chapter [39.10](#) RCW.

LEED™ silver standard. The U.S. Green Building Council leadership in energy and environmental design green building rating standard, referred to as silver standard.

Life cycle cost. The capital and operational cost of a construction item, system or building during its estimated useful life.

Master plan. A document setting forth the concepts and guiding principles for development of campus facilities, landscaping, and infrastructure.

Midpoint of construction. Date midway between the commencement date and substantial completion date.

Operations and maintenance (O&M) costs. The costs of the regular custodial care and repair, annual maintenance contracts, utilities, maintenance contracts and salaries of facility staff performing O&M tasks. The ordinary costs required for the upkeep of property and the restoration required when assets are damaged but not replaced. Items under O&M include the costs of inspecting and locating trouble areas; cleaning and preventive work; replacement of minor parts; power; labor; and materials. O&M work is required to preserve or restore buildings, grounds, utilities, and equipment to their intended running condition so they can be effectively used for their intended purpose.

Phased construction. Construction that is split into multiple phases due to fund availability and/or occupancy issues, such as completing a renovation in an occupied building.

Project budget. The sum established by the agency/institution that is available for the entire project, including the construction budget; acquisition costs; costs of furniture, furnishings, and equipment; and compensation for professional services and all contingencies.

Project delivery system. Method of how an owner plans to contract a project, such as design/bid/build, design/build, GC/CM, etc.

Unifomat. A system for classifying building products and systems by functional subsystem, such as substructure, superstructure, or exterior closure.

Value engineering (VE). A systematic, orderly approach to defining a facility's required function, verifying the need for the function, and creating alternatives for providing the function at minimum life cycle cost. Value is the lowest life cycle cost to achieve the required function. VE is a problem-solving system that emphasizes the reduction of cost while maintaining the required quality and performance of the facility.

Zero energy building. The total amount of energy used by the building on an annual basis is roughly equal to the amount of renewable energy created on site. Buildings that are zero energy capable are designed to be as efficient as zero energy buildings, so that these buildings can achieve zero energy when on site renewable energy is added in the future.

Chapter 9

Guidelines for Determining Architect/Engineer Fees for Public Works Building Projects (effective July 1, 2015)

When budgeting for state capital projects, the estimated value of the Architectural/Engineering (A/E) Basic Services fee (Exhibit A) can be determined by using these fee guidelines. The guidelines are divided into three levels determined by the type and complexity of the building. They are used in the preparation of capital budget requests for Washington State public works building projects under the jurisdiction of the Department of Enterprise Services, universities, natural resource agencies, and the Department of Transportation. A/E Basic Services are defined in this document.

The payment of A/E fees represents some of the most important dollars spent on a project. These funds are an investment affecting both the quality and successful completion of a project. Recognizing this, calculation of a fee structure to obtain quality design at a reasonable cost presents a challenge. There are pros and cons associated with any system used to set fees, and there is great variation in the types and complexity of state construction projects.

These fee guidelines originally were the outcome of a study coordinated by the Office of Financial Management (OFM) to review other fee guidelines and identify approaches used by other states. The study included state agencies, the Washington Council of the American Institute of Architects, American Council of Engineering Companies of Washington, and state universities. State agencies documented examples within state government where the existing fee system posed problems, and they proposed changes that would improve the state system. Higher education agencies provided evaluations of the scope, magnitude, and methods used to establish fees for design services at peer institutions. Updates to the fee guidelines also have considered issues raised by the design community.

Use of the Guidelines

These fee guidelines should be used in preparing capital budget requests to determine the maximum amount that may be payable for A/E basic service fees in fixed price agreements and percent of construction cost agreements. The guidelines define the standard basic services (based on the definition of basic services) that should be included in each design phase of state public works projects for the typical design/bid/build process. They also provide further definition of what are considered reimbursable expenses, extra and other services.

Agencies may choose to pay design consultant fees or allow extra and other charges in a manner other than described in these guidelines, and any additional cost (above the level provided by the guidelines) may be paid from other agency resources.

Percent Fee Compensation

The standard fee schedule has been prepared to establish a basis for determining the scope and cost of design services and to focus the attention of agencies on the quality, capability, and prior performance of the firms being selected for public works projects.

The fee schedule is used to prepare capital budget requests. The actual contracts for basic services payable to the A/E shall be a negotiated fixed amount or percentage of the maximum allowable construction cost of the project not including fees; licenses; permits; sales taxes; contingencies; and change orders caused by A/E errors or omissions, or change orders which do not require design consultant services. Based on the specific circumstances of each project, the final negotiated fee may be above or below the guidelines shown on the schedule. In addition to the basic services fee, allowances will be negotiated for services not covered in the basic services contract.

Maximum Allowable Construction Cost

The Maximum Allowable Construction Cost (MACC) is defined as the total sum available to the general contractor for construction purposes, including all alternates. The MACC excludes Washington state sales tax, professional fees, project contingency funds, or other charges that may not be under the scope of the general contractor. The budget for A/E basic services is based on the MACC plus construction contingency as reflected in the Capital Budgeting System (CBS) and the updated cost estimating form (C-100). The negotiated fee for A/E basic services should be based on the MACC only as shown in Exhibit A – A/E Fee Schedule.

Remodel Design

A/E costs and effort may vary greatly between individual remodeling projects of the same dollar amount. Consequently, each project will be analyzed on an individual basis. As a general rule, the fee will be based upon the building type classification. When program changes are significant or if warranted by other conditions, fees noted under those schedules **may** be increased by *up to three percent* for basic services. Factors to be considered include:

- Age and character of the building
- Availability and accuracy of existing plans and specifications
- Extent and type of program revisions
- Requirement to maintain the building's existing character
- Extent of mechanical and electrical involvement

Phased construction in occupied buildings may substantially affect the construction schedule. More field observation and coordination may require consideration of additional fees beyond the basic services contract amount.

Fee Modifications

It is recognized that there may be considerable variance between projects of a similar size and type that may necessitate modification of the A/E fee schedule. Examples of special circumstances that may necessitate such modifications include:

- Unusual site conditions
- Unique problems requiring specialized or extensive consulting services
- Renovations required by additions to an existing structure
- Unusually slow or fast development schedule (fast track, design build, GC/CM)
- Contractor design (fire protection systems)
- Large portions of work outside the control of the prime architect (wetlands mitigation)

Other circumstances where a fee modification may be appropriate include the following:

Repetitive Design

Where all or part of a project is a site adaptation of a previous design, the basic services fee shall be negotiated, recognizing the reduced level of services. This usually reduces the program analysis, design, and bidding document preparation costs to an amount necessary to update the documents for site work, code revisions, etc. Reductions must be considered on a case-by-case basis.

Equipment and Substantially Reduced Work Requirements

Where a project involves a substantial amount of expensive equipment that may be relatively easy to accommodate, fees should be reduced accordingly. Likewise, any contract or modification to a contract where work requirements are substantially less than indicated by the application of a percentage fee need to be addressed separately. Projects with disproportionate elements of high cost, such as earth moving, may be relatively easy to design and fees should be reduced accordingly.

Prototype Design

The initial design of a prototype facility, such as a housing unit at an institution, may warrant a full design fee based on the previous development of the prototype. However, the fee for A/E basic services for all additional replications of the prototype constructed at the same time or at other locations in the future shall be calculated at 40 percent of full fees.

Policy Regarding Geographic Location of Consultant

It is the state's policy to obtain the highest quality design services for a fair and equitable payment to the design firm. The state recognizes that the investment for quality design services is directly related to a well-organized construction process and maximum functionality of the completed project. With this in mind, proposals for design services will be accepted from all firms wishing to work for the state, and evaluated based on the firm's capability, competency, and experience in successfully completing similar projects.

The fee structure should be appropriate for each project, regardless of the location of the consultant. The basic services fee includes all travel costs associated with the performance of basic services within a 50-mile radius of the project. General expenses for the cost of travel and per diem between 50 and 350 miles shall be based on state rates and may be reimbursable to the extent they are reasonable and negotiated within the A/E agreement. Travel expenses beyond 350 miles for both the agency and consultants must be justified in writing when submitting a budget request to OFM.

Basic Services Fee Breakdown

The following is a guide for splitting the A/E fee into approximate percentages for each phase of work. Although it is not intended to be absolute, significant deviations should be closely reviewed. The intent of the guidelines is to ensure that design requirements progress in an orderly manner and that essential planning and system development occur when most beneficial to the project. Essential elements of the work should be completed and approved prior to initiating succeeding design phases. For a more detailed explanation of activities normally included in each phase, see the A/E Basic Services section.

The basic fee categories are described below:

Percent of Basic Services Fee	
Schematic Design	18
Design Development	20
Construction Document	31
Bidding	2
Construction	27
Project	2

A/E Basic Services

A/E Basic Design Services consist of the services described in the following pages and are included on the Capital Project Cost Estimate within CBS. These design services include normal architectural, structural, civil, mechanical, and electrical engineering services.

Schematic Design Services (18 Percent)

In the Schematic Design phase, the A/E provides those services necessary to prepare Schematic design documents consisting of drawings and other documents illustrating the general scope, scale, and relationship of project components for approval by the agency. Design should be conceptual in character, based on the requirements developed during the predesign phase, approved by the agency, or program requirements provided by the agency and reviewed and agreed upon by the A/E.

Schematic design includes the following:

Project Administration	Services related to schematic design administrative functions including consultation, meetings and correspondence, and progress design review conferences.
Disciplines Coordination	Coordination between the architectural work and engineering work and other involved consultants for the project. When specialty consultants are used, additional coordination beyond basic services may be required and negotiated for appropriate phases of the work.
Document Checking	Review and coordination of project documents.
Consulting Permitting Authority	Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes.
Data Coordination User Agency	Review and coordination of data furnished for the project by the agency.
Architectural Design	Services responding to scope of work (program/predesign) requirements and consisting of preparation of conceptual site and building plans, schematic sections and elevations, preliminary selection of building systems and materials, development of approximate dimensions, areas and volumes.
Structural Design	Services consisting of recommendations regarding basic structural material and systems, analysis, and development of conceptual design solutions.
Mechanical Design	Services consisting of consideration of alternate materials, systems and equipment, and development of conceptual design solutions for energy sources/conservation, heating, ventilating and air conditioning (HVAC), plumbing, fire protection, and general space requirements.
Electrical Design	Services consisting of consideration of alternate systems, recommendations regarding basic electrical materials, systems and equipment, analysis, and development of conceptual design solutions for power service and distribution, lighting, communication raceways, fire detection and alarms, and general space requirements.
Civil/Site Design	Services consisting of site planning including layout of site features, building position, preliminary grading, location of paving for walkways, driveways and parking, and fencing locations. Also included are the normal connections required to service the building such as water, drainage, and sanitary systems, if applicable.

Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Specifications	Services consisting of preparation for agency's approval of proposed development of architectural outline specifications, and coordination of outline specifications of other disciplines.
Materials Research	Services consisting of identification of potential of architectural materials, systems, and equipment.
Scheduling	Services consisting of reviewing and updating previously established project schedules or initial development of schedules for decision-making, design, and documentation.
Cost Estimating	Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Parametric costs shall reflect the level of design elements presented in the schematic design documents, plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist user agency with analyzing scope, schedule, and budget options to stay within the MACC.
Presentations	Services consisting of appropriate presentation(s) of schematic design documents by the A/E to agency representatives.

Design Development Services (20 Percent)

In the Design Development Phase, the A/E shall provide those services necessary to prepare from the approved schematic design documents, the design development documents consisting of drawings and other documents to fix and describe the size and character of the entire project for approval by the agency. Consideration shall be given to availability of materials, equipment and labor, construction sequencing and scheduling, economic analysis of construction and operations, user safety and maintenance requirements, and energy conservation.

Design development includes the following:

Project Administration	Services consisting of design development administrative functions including consultation, meetings and correspondence, and progress design review conferences with user agency.
Disciplines Coordination	Coordination of the architectural work and the work of engineering with other involved consultants for the project.
Document Checking	Review and coordination of documents prepared for the project.
Permitting Authority Consulting	Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes. Assist in obtaining approval from approving agencies as required.
User Agency Data Coordination	Review and coordination of data furnished for the project by the agency.
Architectural Design	Services consisting of continued development and expansion of architectural schematic design documents to establish the final scope, relationships, forms, size, and appearance of the project through plans, sections and elevations, typical construction details, three-dimensional sketches, materials selections, and equipment layouts.

Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Structural Design	Services consisting of continued development of the specific structural system(s) and schematic design documents in sufficient detail to establish basic structural system and dimensions, structural design criteria, foundation design criteria, preliminary sizing of major structural components, critical coordination clearances, and outline specifications or materials lists.
Mechanical Design	Services consisting of continued development and expansion of mechanical schematic design documents and development of outline specifications or materials lists to establish approximate equipment sizes and capacities, preliminary equipment layouts, required space for equipment, chases and clearances, acoustical and vibration control, visual impacts, and energy conservation measures.
Electrical Design	Services consisting of continued development and expansion of electrical schematic design documents and development of outline specifications or materials lists to establish criteria for lighting, electrical and communication raceways, approximate sizes and capacities of major components, preliminary equipment layouts, required space for equipment, chases, and clearances.
Civil/Site Design	Services consisting of continued development of civil/site schematic design documents and development of outline specifications required for the project that are normally prepared by the architect. See the Extra Services section for detailed civil design services beyond basic services.
Specifications	Services consisting of preparation for the agency's approval of proposed General and Supplementary Conditions of the Contract for construction, development of architectural outline specifications, coordination of outline specifications of other disciplines, and production of design manual including design criteria, and outline specifications of materials lists.
Scheduling	Services consisting of reviewing and updating previously established schedules for the project.
Cost Estimating	Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Parametric costs reflect the level of design elements presented in the design development documents, plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist user agency with analyzing scope, schedule and budget options to stay within the MACC.
Presentations	Services consisting of appropriate presentation(s) of design development documents by the A/E to agency representatives.

Construction Document Services (31 Percent)

In the construction documents phase, the A/E shall provide the services necessary to prepare for approval by the agency – from the approved design development documents; construction documents consisting of drawings, specifications, and other documents describing the requirements for construction of the project; and bidding and contracting for the construction of the project.

Project Administration	Services consisting of construction documents, administrative functions (including consultation, meetings and correspondence), and progress design review conferences.
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Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Disciplines Coordination	Coordination of the architectural work, with the work of engineering, and with other involved consultants for the project.
Document Checking	Review and coordination of documents prepared for the project.
Permitting Authority Consulting	Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes. Assist in obtaining approval from approving agencies as required.
User Agency Data Coordination	Review and coordination of data furnished for the project by the agency.
Architectural Design	Services consisting of preparation of drawings based on approved design development documents setting forth in detail the architectural construction requirements for the project.
Structural Design	Services consisting of preparation of final structural engineering calculations, drawings, and specifications based on approved design development documentation, which details structural construction requirements for project.
Mechanical Design	Services consisting of preparation of final mechanical engineering calculation, drawings and specifications based on approved design development documentation, setting forth in detail the mechanical construction requirements for the project.
Electrical Design	Services consisting of preparation of final electrical engineering calculation, drawing and specifications based on approved design development documentation, setting forth in detail the electrical construction requirements for the project.
Civil/Site Design	Services consisting of preparation of final civil/site design drawings and specifications based on approved design development documentation required for the project, which are normally prepared by the architect. See the Extra Services section for detailed civil design services beyond basic services.
Specifications	Services consisting of activities of development and preparation of bidding documents, Conditions of the Contract, architectural specifications, coordination of specifications prepared by other disciplines, and compilation of the project manual.
Cost Estimating	Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Parametric costs shall reflect the level of design elements presented in the Construction documents plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist user agency with analyzing scope, schedule, and budget options to stay within the MACC.
Scheduling	Services consisting of reviewing and updating previously established schedules for the project.
User Agency Assistance	Provide necessary information to user agency for the preparation of OFM requirements for release of allotments including preparation of cost statistics.

Bidding Phase (2 Percent)

In the Bidding Phase, the A/E, following the agency's approval of the Construction Documents and the most recent statement of probable construction cost, shall provide those services necessary for the A/E to assist the agency in obtaining bids and in awarding and preparing contracts for construction. In the case of phased construction, the agency may authorize bidding of portions of the work.

Project Administration	Services consisting of bidding administrative functions.
Disciplines Coordination	Coordination between the architectural work and the work of engineering and other involved consultants for the project.
Bidding Materials	Services consisting of organizing, coordinating, and handling Bidding documents for reproduction, distribution and retrieval, receipt, and return of document deposits.
Addenda	Services consisting of preparation and distribution of Addenda as may be required during bidding and including supplementary drawings, specifications, instructions, and notice(s) of changes in the bidding schedule and procedure.
Bidding	Services consisting of participation in pre-bid conferences, responses to questions from bidders, and clarification or interpretations of the bidding documents, attendance at bid opening, and documentation and distribution of bidding results.
Analysis of Substitutions	Services consisting of consideration, analysis, comparisons, and recommendations relative to substitutions proposed by bidders prior to receipt of bids.
Bid Evaluation	Services consisting of validation of bids, participation in review of bids and alternates, evaluation of bids, and recommendation on award of contract.
Contract Agreements	Assist using agency in notification of contract award, assistance in preparation of construction contract agreements when required, preparation and distribution of sets of contract documents for execution of the contract, receipt, distribution and processing, for agency approval, of required certificates of insurance, bonds and similar documents, and preparation and distribution to contractor(s) on behalf of the agency, of notice(s) to proceed with the work.

Construction Contract Administration Phase (27 Percent)

In the Construction Contract Administration phase, the A/E shall provide services necessary for the administration of the construction contract as set forth in the General Conditions of the Contract for Construction.

Project Administration	Services consisting of construction contract administrative functions including consultation, conferences, communications, and progress reports.
Disciplines Coordination Document Checking	Coordination between the architectural work and the work of engineering and other involved consultants for the project. Reviewing and checking of documents (required submittals) prepared for the project.
Permitting Authority Consulting	Services relating to applicable laws, statutes, regulations and codes of regulating entities relating to the agency's interests during construction of the project.

Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Construction Administration	Services consisting of processing of submittals, including receipt, review of and appropriate action on shop drawings, product data, samples, and other submittals required by the contract documents. Distribution of submittals to agency, contractor, and field representatives as required. Maintenance of master file of submittals and related communications.
Construction Field Observation	Services consisting of visits to the site at intervals appropriate to the stage of construction or as otherwise agreed to become generally familiar with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the contract documents, and preparing related reports and communications. A/E to chair project meetings.
Project Representation	Services consisting of assisting the agency in selection of full- or part-time project representative(s).
Documents	Services consisting of preparation, reproduction, and distribution of clarification documents and interpretations in response to requests for clarification by contractors or the user agency. Maintenance of records and coordination of communications relative to requests for clarification or information (RFI). Preparation, reproduction and distribution of drawings and specifications to describe work to be added, deleted or modified, review of proposals, review and recommend changes in time for substantial completion, assisting in the preparation of modifications of the contracts and coordination of communications, approvals, notifications, and record-keeping relative to changes in the work. Additional fees for changes to the scope of a project shall be negotiated.
Scheduling	Services consisting of monitoring the progress of the contractors relative to established schedules and making status reports to the user agency.
Cost Accounting	Services consisting of maintenance of records of payments on account of the contract and all changes thereto, evaluation of applications for payment and certification thereof, and review and evaluation of cost data submitted by the contractors for work performed.

Project Closeout (2 Percent)

Project Closeout	Services initiated upon notice from the contractor that the work is sufficiently complete, in accordance with the contract documents, to permit occupancy or utilization for the use for which it is intended, and consisting of a detailed inspection for conformity of the work to the contract documents, issuance of certificate of substantial completion, issuance of a list of remaining work required (punch list), final inspections, receipt and transmittal of warranties, affidavits, receipts, releases and waivers of lien or bonds, permits, and issuance of final certificate for payment.
Record Documents (As-Builts)	Receive and review the contractors marked up field records. Supply the record documents to user agency. (Transferring the contractor's record of field changes to the original record drawings may be authorized by the owner as an additional service.)
Operations and Maintenance Manuals	Services consisting of processing, reviewing, commenting on, taking appropriate action, and transmitting Operations and Maintenance Manuals provided by the contractor to user agency.
Warranty Period	Continued assistance to investigate contract problems that arise during the warranty period.

A/E Extra Services/Reimbursables and Other Services

The majority of projects should be completed within the structure of the basic fee schedule.

However, some projects will be more complex and require a range of Extra Services/Reimbursables and Other Services, which will be negotiated for specific tasks. These services typically require specialist expertise and may not neatly fall within one phase of service or another. As projects become more complex, they demand a variety of special studies and services. Extra Services/Reimbursables are services generally provided by the same A/E providing the basic services, and Other Services are those services generally provided by additional specialty consultants, either as subs to the prime A/E or as independent consultants directly contracted with the agency.

Extra services are not intended as an adjustment to basic services and should reflect actual anticipated cost. The following provides a guideline for evaluating the pricing of Extra and Other services, and establishing the eligibility of reimbursable expenses.

A. Pricing Consultants and Subconsultant Personnel

Multiplier	Negotiated rate within a range of 2 to 3.2 times employee direct base salary (not including fringe benefits, taxes, retirement contributions, or profit sharing).
Employees of Firm	Negotiated rate not to exceed a maximum of \$150 per hour.
Principal of Firm	A Principal is defined as a partner of a partnership, a stockholder of a corporation, or a duly authorized officer. The negotiated rate is not to exceed \$200 per hour.
Special Consulting Services	When special consulting services not normally associated with traditional project design are necessary, the fee may be outside of the above guidelines (such as expert witness or special investigations).
Service Charge on Sub-Consultant	Ten percent service charge may be added to work incorporated by addenda to the original agreement.

B. A/E Extra Services/Reimbursable Expenses

When drafting the A/E agreement, the Project Manager should review the following list in determining eligible reimbursable items. It is not all inclusive or exclusive and should only be used as a guide.

Alternative Cost Studies	Additional costing beyond the parametric estimates required in basic services as requested by the agency.
Energy Life Cycle Cost Analysis (ELCCA)	All projects over 25,000 square feet are required by Chapter 39.35 RCW to be analyzed for the cost of energy consumption and operation during its entire economic life.
Life Cycle Cost Analysis (LCCA)	All projects valued over \$5,000,000 or projects constructing new building space over 5,000 square feet are required to perform a life cycle cost analysis to evaluate the total cost of ownership for the building or building system. Agencies will utilize the Life Cycle Cost Tool (LCCT) which standardizes rates and methodology to perform the analysis.
Commissioning and Training	Cost to the A/E of assembly, tabulation, and indexing of all shop drawings and submittals on all equipment, controls, systems, and participating in an independent commissioning of the project and providing initial operator training on the maintenance of systems.

Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Enhanced Commissioning	A longer post occupancy phase, commonly referred to as enhanced commissioning, may be necessary to achieve the long-term desired performance of a new building or system. This work generally includes monitoring energy performance after construction, additional training to facility staff, and system adjustments to ensure the building continues to operate as originally designed.
On-Site Representative	On-site observation beyond the periodic site visits required under basic services for construction field observation.
Thermal Scans	Cost of an examination of a structure for thermal loss on existing facilities to be remodeled.
Value Engineering Participation and Implementation	Cost to the A/E for participation in the value engineering study and implementation of the accepted ideas that generate during the study.
Travel and Per Diem	Customary and approved costs to A/E during the course of basic and additional services (based on state rates and limited to between 50 and 350 miles).
Renderings, Presentations, and Models	Cost for special presentations, renderings, and models required for the project.
Document Reproduction	Additional cost of printing and mailing bidding and construction documents.
Advertising	Cost of required advertisements and placing bidding documents in plan centers announcing the bidding of the project.
Constructability Review Participation and Implementation	Cost to the A/E for participation in the constructability review and implementation of the accepted changes.
Leadership in Energy and Environmental Design	Cost of providing services for negotiation, documentation, and associated services required for sustainable design project certificates with the U.S. Green Building Council.
Separate Bid Packages	Cost to the A/E for preparation of separate bid packages typically used in GC/CM type projects.
Professional Liability Insurance	Where coverage is required in excess of \$1 million, reimbursement of excess premium costs will be considered as a reimbursable cost.

C. A/E Other Services

Consultant Selection Cost	Additional costs for private sector members of a selection committee if required (Chapter 39.80 RCW).
Specialty Consultants	<p>Cost of only those additional consultant services beyond A/E services provided under basic services. Specialty consultants include, but are not limited to:</p> <ul style="list-style-type: none"> • Acoustical Consultant • Civil Engineering additional services may include: <ul style="list-style-type: none"> ◆ Studies, reports, and calculations required to determine adequacy of existing systems or those required for permit review such as drainage, fire protection, or sewer ◆ Storm drainage design and connections ◆ Design or study of issues for "sensitive areas" such as wetlands, steep slopes, or flood plains ◆ Water supply connections to wells, treatment systems, storage, and off-site main extensions ◆ Sanitary sewer design and infrastructure ◆ Road and pavement improvements ◆ Storm water quality and quantity computations, reports, design and details ◆ Temporary erosion and sediment control reports and drawings ◆ Special studies and reports for other agencies • Communications Consultant • Cost Estimating Consultant • Electronic/Audio Visual Consultant • Elevator Consultant • Hazardous Material Consultant • Hospital/Laboratory Consultant Interior • Design Consultant Indoor Air Quality • Consultant Kitchen Consultant • Landscape Consultant • Quality Control Consultant Security Consultant
Geotechnical Investigation	Cost of subsurface testing and evaluation.
Commissioning	Cost of an independent commissioning of the project.
HVAC Balancing	Cost to balance systems.
Site Survey	Cost of conducting a survey independent from design A/E.
Testing	Cost of a technician's services in acquiring and testing samples of materials used in the project as required in the state building code.
Energy LCCA Review	Fee to be paid for review of the energy life cycle cost analysis.
Value Engineering	Cost for performing the required value engineering study on a project by an independent multi-disciplined team.

Guidelines for Determining Architect/Engineering Fees for Public Works Building Projects

Constructability Review/Plan Check	Cost for an independent consultant or contractor to review bid documents and determine if a project can be built as designed.
Graphics	Cost of special graphic and signage design.
Design/Code Plan Check	Cost of an independent plan check if not available within the local jurisdiction.
Other	Costs for requested documents, fax expenses, and special mail service when requested by owner.

D. Non-Eligible Expenses

- Consultants hired at A/E's option to perform basic services required by contract.
- Postage and handling of submittals, bid documents, correspondence, etc.
- Telephone expenses (local calls and line service).
- Copies of documents used by the A/E to perform normal services and not provided to owner.

A/E Fee Schedule - Building Types

<u>Schedule A</u>	<u>Schedule B</u>	<u>Schedule C</u>
<p>Facilities with more than average design difficulty:</p> <ul style="list-style-type: none"> Art galleries Auditoriums (with stage) Communications buildings Courthouses Detention/correctional facilities, maximum Exposition buildings Extended care facilities Fish hatcheries Heating and power plants Hospitals Laboratories (research) Medical office facilities and clinics Mental institutions Museums Observatories Research facilities Sewer treatment plants Special schools Theaters and similar facilities Veterinary hospitals Water treatment plants 	<p>Facilities with average difficulty:</p> <ul style="list-style-type: none"> Apartment buildings Archive building Armories Auditoriums (without stage) College classroom facilities Computer rooms Convention facilities Day care families Detention/correctional facilities, minimum and medium Dining halls/institutes Dormitories Fire and police stations Gymnasiums Laundry and cleaning facilities Libraries Neighborhood centers and similar recreation facilities Nursing homes Office buildings Recreational building Residences Schools (primary and secondary) Science labs (teaching) Stadiums, multi-purpose Storage facilities, cold Transportation terminals Vocational schools 	<p>Projects with less than average design difficulty:</p> <ul style="list-style-type: none"> Civil and utility projects Emergency generator facilities Farm structures Greenhouses Guard towers Industrial buildings without special facilities Parking structures and garages Printing plants Prototype facilities (for any replication of previously designed facility) Service garages Shop and maintenance facilities Simple loft-type structures (without special equipment) Stadiums, grandstand type Warehouses

EXHIBIT A
A/E FEE SCHEDULE

MACC	Sch A	Sch B	Sch C	MACC	Sch A	Sch B	Sch C
\$100,000				\$4,100,000	10.40%	8.99%	7.59%
\$200,000				\$4,200,000	10.37%	8.97%	7.57%
\$300,000				\$4,300,000	10.34%	8.94%	7.54%
\$400,000	Basic Services fee amount to be negotiated for projects with a MACC less than \$1,000,000			\$4,400,000	10.32%	8.92%	7.52%
\$500,000				\$4,500,000	10.29%	8.90%	7.50%
\$600,000				\$4,600,000	10.27%	8.87%	7.48%
\$700,000				\$4,700,000	10.24%	8.85%	7.46%
\$800,000				\$4,800,000	10.22%	8.83%	7.44%
\$900,000				\$4,900,000	10.20%	8.81%	7.42%
\$1,000,000	11.75%	10.30%	8.85%	\$5,000,000	10.17%	8.79%	7.40%
\$1,100,000	11.67%	10.22%	8.77%	\$5,100,000	10.15%	8.77%	7.38%
\$1,200,000	11.60%	10.15%	8.70%	\$5,200,000	10.13%	8.75%	7.36%
\$1,300,000	11.53%	10.08%	8.63%	\$5,300,000	10.11%	8.73%	7.35%
\$1,400,000	11.46%	10.01%	8.56%	\$5,400,000	10.09%	8.71%	7.33%
\$1,500,000	11.40%	9.95%	8.50%	\$5,500,000	10.06%	8.69%	7.31%
\$1,600,000	11.34%	9.89%	8.45%	\$5,600,000	10.04%	8.67%	7.29%
\$1,700,000	11.29%	9.84%	8.39%	\$5,700,000	10.02%	8.65%	7.28%
\$1,800,000	11.23%	9.79%	8.34%	\$5,800,000	10.00%	8.63%	7.26%
\$1,900,000	11.18%	9.74%	8.29%	\$5,900,000	9.98%	8.61%	7.24%
\$2,000,000	11.13%	9.69%	8.25%	\$6,000,000	9.96%	8.60%	7.23%
\$2,100,000	11.09%	9.65%	8.20%	\$6,100,000	9.94%	8.58%	7.21%
\$2,200,000	11.04%	9.60%	8.16%	\$6,200,000	9.93%	8.56%	7.20%
\$2,300,000	11.00%	9.56%	8.12%	\$6,300,000	9.91%	8.54%	7.18%
\$2,400,000	10.96%	9.52%	8.08%	\$6,400,000	9.89%	8.53%	7.17%
\$2,500,000	10.92%	9.48%	8.05%	\$6,500,000	9.87%	8.51%	7.15%
\$2,600,000	10.88%	9.44%	8.01%	\$6,600,000	9.85%	8.49%	7.14%
\$2,700,000	10.84%	9.41%	7.98%	\$6,700,000	9.83%	8.48%	7.12%
\$2,800,000	10.80%	9.37%	7.94%	\$6,800,000	9.82%	8.46%	7.11%
\$2,900,000	10.76%	9.34%	7.91%	\$6,900,000	9.80%	8.45%	7.09%
\$3,000,000	10.73%	9.30%	7.88%	\$7,000,000	9.78%	8.43%	7.08%
\$3,100,000	10.70%	9.27%	7.85%	\$7,100,000	9.77%	8.42%	7.07%
\$3,200,000	10.66%	9.24%	7.82%	\$7,200,000	9.75%	8.40%	7.05%
\$3,300,000	10.63%	9.21%	7.79%	\$7,300,000	9.73%	8.39%	7.04%
\$3,400,000	10.60%	9.18%	7.76%	\$7,400,000	9.72%	8.37%	7.03%
\$3,500,000	10.57%	9.15%	7.74%	\$7,500,000	9.70%	8.36%	7.01%
\$3,600,000	10.54%	9.12%	7.71%	\$7,600,000	9.68%	8.34%	7.00%
\$3,700,000	10.51%	9.10%	7.68%	\$7,700,000	9.67%	8.33%	6.99%
\$3,800,000	10.48%	9.07%	7.66%	\$7,800,000	9.65%	8.31%	6.97%
\$3,900,000	10.45%	9.04%	7.63%	\$7,900,000	9.64%	8.30%	6.96%
\$4,000,000	10.42%	9.02%	7.61%	\$8,000,000	9.62%	8.29%	6.95%

MACC	Sch A	Sch B	Sch C	MACC	Sch A	Sch B	Sch C
\$8,100,000	9.61%	8.27%	6.94%	\$12,100,000	9.11%	7.83%	6.55%
\$8,200,000	9.59%	8.26%	6.93%	\$12,200,000	9.10%	7.82%	6.54%
\$8,300,000	9.58%	8.25%	6.91%	\$12,300,000	9.09%	7.81%	6.53%
\$8,400,000	9.56%	8.23%	6.90%	\$12,400,000	9.08%	7.80%	6.52%
\$8,500,000	9.55%	8.22%	6.89%	\$12,500,000	9.07%	7.79%	6.52%
\$8,600,000	9.53%	8.21%	6.88%	\$12,600,000	9.06%	7.78%	6.51%
\$8,700,000	9.52%	8.19%	6.87%	\$12,700,000	9.05%	7.77%	6.50%
\$8,800,000	9.51%	8.18%	6.86%	\$12,800,000	9.04%	7.76%	6.49%
\$8,900,000	9.49%	8.17%	6.85%	\$12,900,000	9.03%	7.76%	6.49%
\$9,000,000	9.48%	8.16%	6.84%	\$13,000,000	9.02%	7.75%	6.48%
\$9,100,000	9.46%	8.14%	6.83%	\$13,100,000	9.01%	7.74%	6.47%
\$9,200,000	9.45%	8.13%	6.81%	\$13,200,000	9.00%	7.73%	6.46%
\$9,300,000	9.44%	8.12%	6.80%	\$13,300,000	8.99%	7.72%	6.46%
\$9,400,000	9.42%	8.11%	6.79%	\$13,400,000	8.98%	7.71%	6.45%
\$9,500,000	9.41%	8.10%	6.78%	\$13,500,000	8.97%	7.70%	6.44%
\$9,600,000	9.40%	8.09%	6.77%	\$13,600,000	8.96%	7.70%	6.43%
\$9,700,000	9.39%	8.07%	6.76%	\$13,700,000	8.95%	7.69%	6.43%
\$9,800,000	9.37%	8.06%	6.75%	\$13,800,000	8.94%	7.68%	6.42%
\$9,900,000	9.36%	8.05%	6.74%	\$13,900,000	8.93%	7.67%	6.41%
\$10,000,000	9.35%	8.04%	6.73%	\$14,000,000	8.92%	7.66%	6.40%
\$10,100,000	9.33%	8.03%	6.72%	\$14,100,000	8.91%	7.65%	6.40%
\$10,200,000	9.32%	8.02%	6.71%	\$14,200,000	8.90%	7.65%	6.39%
\$10,300,000	9.31%	8.01%	6.70%	\$14,300,000	8.89%	7.64%	6.38%
\$10,400,000	9.30%	8.00%	6.70%	\$14,400,000	8.88%	7.63%	6.38%
\$10,500,000	9.29%	7.99%	6.69%	\$14,500,000	8.88%	7.62%	6.37%
\$10,600,000	9.27%	7.98%	6.68%	\$14,600,000	8.87%	7.61%	6.36%
\$10,700,000	9.26%	7.97%	6.67%	\$14,700,000	8.86%	7.61%	6.36%
\$10,800,000	9.25%	7.95%	6.66%	\$14,800,000	8.85%	7.60%	6.35%
\$10,900,000	9.24%	7.94%	6.65%	\$14,900,000	8.84%	7.59%	6.34%
\$11,000,000	9.23%	7.93%	6.64%	\$15,000,000	8.83%	7.58%	6.34%
\$11,100,000	9.22%	7.92%	6.63%	\$15,100,000	8.82%	7.58%	6.33%
\$11,200,000	9.21%	7.91%	6.62%	\$15,200,000	8.81%	7.57%	6.32%
\$11,300,000	9.19%	7.90%	6.61%	\$15,300,000	8.81%	7.56%	6.32%
\$11,400,000	9.18%	7.89%	6.61%	\$15,400,000	8.80%	7.55%	6.31%
\$11,500,000	9.17%	7.88%	6.60%	\$15,500,000	8.79%	7.55%	6.30%
\$11,600,000	9.16%	7.87%	6.59%	\$15,600,000	8.78%	7.54%	6.30%
\$11,700,000	9.15%	7.87%	6.58%	\$15,700,000	8.77%	7.53%	6.29%
\$11,800,000	9.14%	7.86%	6.57%	\$15,800,000	8.76%	7.52%	6.29%
\$11,900,000	9.13%	7.85%	6.56%	\$15,900,000	8.76%	7.52%	6.28%
\$12,000,000	9.12%	7.84%	6.56%	\$16,000,000	8.75%	7.51%	6.27%

MACC	Sch A	Sch B	Sch C	MACC	Sch A	Sch B	Sch C
\$16,100,000	8.74%	7.50%	6.27%	\$20,100,000	8.45%	7.25%	6.05%
\$16,200,000	8.73%	7.50%	6.26%	\$20,200,000	8.44%	7.24%	6.04%
\$16,300,000	8.72%	7.49%	6.26%	\$20,300,000	8.43%	7.24%	6.04%
\$16,400,000	8.71%	7.48%	6.25%	\$20,400,000	8.43%	7.23%	6.03%
\$16,500,000	8.71%	7.48%	6.24%	\$20,500,000	8.42%	7.23%	6.03%
\$16,600,000	8.70%	7.47%	6.24%	\$20,600,000	8.41%	7.22%	6.03%
\$16,700,000	8.69%	7.46%	6.23%	\$20,700,000	8.41%	7.21%	6.02%
\$16,800,000	8.68%	7.45%	6.23%	\$20,800,000	8.40%	7.21%	6.02%
\$16,900,000	8.68%	7.45%	6.22%	\$20,900,000	8.39%	7.20%	6.01%
\$17,000,000	8.67%	7.44%	6.21%	\$21,000,000	8.39%	7.20%	6.01%
\$17,100,000	8.66%	7.43%	6.21%	\$21,100,000	8.38%	7.19%	6.00%
\$17,200,000	8.65%	7.43%	6.20%	\$21,200,000	8.38%	7.19%	6.00%
\$17,300,000	8.64%	7.42%	6.20%	\$21,300,000	8.37%	7.18%	5.99%
\$17,400,000	8.64%	7.41%	6.19%	\$21,400,000	8.36%	7.18%	5.99%
\$17,500,000	8.63%	7.41%	6.19%	\$21,500,000	8.36%	7.17%	5.98%
\$17,600,000	8.62%	7.40%	6.18%	\$21,600,000	8.35%	7.16%	5.98%
\$17,700,000	8.61%	7.39%	6.17%	\$21,700,000	8.34%	7.16%	5.97%
\$17,800,000	8.61%	7.39%	6.17%	\$21,800,000	8.34%	7.15%	5.97%
\$17,900,000	8.60%	7.38%	6.16%	\$21,900,000	8.33%	7.15%	5.96%
\$18,000,000	8.59%	7.38%	6.16%	\$22,000,000	8.33%	7.14%	5.96%
\$18,100,000	8.59%	7.37%	6.15%	\$22,100,000	8.32%	7.14%	5.96%
\$18,200,000	8.58%	7.36%	6.15%	\$22,200,000	8.31%	7.13%	5.95%
\$18,300,000	8.57%	7.36%	6.14%	\$22,300,000	8.31%	7.13%	5.95%
\$18,400,000	8.56%	7.35%	6.14%	\$22,400,000	8.30%	7.12%	5.94%
\$18,500,000	8.56%	7.34%	6.13%	\$22,500,000	8.30%	7.12%	5.94%
\$18,600,000	8.55%	7.34%	6.13%	\$22,600,000	8.29%	7.11%	5.93%
\$18,700,000	8.54%	7.33%	6.12%	\$22,700,000	8.28%	7.11%	5.93%
\$18,800,000	8.54%	7.33%	6.12%	\$22,800,000	8.28%	7.10%	5.93%
\$18,900,000	8.53%	7.32%	6.11%	\$22,900,000	8.27%	7.10%	5.92%
\$19,000,000	8.52%	7.31%	6.10%	\$23,000,000	8.27%	7.09%	5.92%
\$19,100,000	8.51%	7.31%	6.10%	\$23,100,000	8.26%	7.09%	5.91%
\$19,200,000	8.51%	7.30%	6.09%	\$23,200,000	8.26%	7.08%	5.91%
\$19,300,000	8.50%	7.30%	6.09%	\$23,300,000	8.25%	7.08%	5.90%
\$19,400,000	8.49%	7.29%	6.08%	\$23,400,000	8.24%	7.07%	5.90%
\$19,500,000	8.49%	7.28%	6.08%	\$23,500,000	8.24%	7.07%	5.90%
\$19,600,000	8.48%	7.28%	6.07%	\$23,600,000	8.23%	7.06%	5.89%
\$19,700,000	8.47%	7.27%	6.07%	\$23,700,000	8.23%	7.06%	5.89%
\$19,800,000	8.47%	7.27%	6.06%	\$23,800,000	8.22%	7.05%	5.88%
\$19,900,000	8.46%	7.26%	6.06%	\$23,900,000	8.22%	7.05%	5.88%
\$20,000,000	8.45%	7.25%	6.05%	\$24,000,000	8.21%	7.04%	5.87%

MACC	Sch A	Sch B	Sch C	MACC	Sch A	Sch B	Sch C
\$24,100,000	8.20%	7.04%	5.87%	\$28,000,000	8.00%	6.86%	5.72%
\$24,200,000	8.20%	7.03%	5.87%	\$29,000,000	7.96%	6.82%	5.69%
\$24,300,000	8.19%	7.03%	5.86%	\$30,000,000	7.91%	6.78%	5.66%
\$24,400,000	8.19%	7.02%	5.86%	\$31,000,000	7.86%	6.74%	5.62%
\$24,500,000	8.18%	7.02%	5.85%	\$32,000,000	7.82%	6.71%	5.59%
\$24,600,000	8.18%	7.01%	5.85%	\$33,000,000	7.78%	6.67%	5.56%
\$24,700,000	8.17%	7.01%	5.85%	\$34,000,000	7.74%	6.64%	5.53%
\$24,800,000	8.17%	7.00%	5.84%	\$35,000,000	7.70%	6.60%	5.50%
\$24,900,000	8.16%	7.00%	5.84%	\$36,000,000	7.66%	6.57%	5.48%
\$25,000,000	8.16%	6.99%	5.83%	\$37,000,000	7.62%	6.54%	5.45%
\$25,100,000	8.15%	6.99%	5.83%	\$38,000,000	7.59%	6.51%	5.42%
\$25,200,000	8.14%	6.99%	5.83%	\$39,000,000	7.55%	6.47%	5.40%
\$25,300,000	8.14%	6.98%	5.82%	\$40,000,000	7.52%	6.45%	5.37%
\$25,400,000	8.13%	6.98%	5.82%	\$41,000,000	7.48%	6.42%	5.35%
\$25,500,000	8.13%	6.97%	5.82%	\$42,000,000	7.45%	6.39%	5.32%
\$25,600,000	8.12%	6.97%	5.81%	\$43,000,000	7.42%	6.36%	5.30%
\$25,700,000	8.12%	6.96%	5.81%	\$44,000,000	7.39%	6.33%	5.28%
\$25,800,000	8.11%	6.96%	5.80%	\$45,000,000	7.36%	6.31%	5.26%
\$25,900,000	8.11%	6.95%	5.80%	\$46,000,000	7.33%	6.28%	5.24%
\$26,000,000	8.10%	6.95%	5.80%	\$47,000,000	7.30%	6.26%	5.21%
\$26,100,000	8.10%	6.94%	5.79%	\$48,000,000	7.27%	6.23%	5.19%
\$26,200,000	8.09%	6.94%	5.79%	\$49,000,000	7.24%	6.21%	5.17%
\$26,300,000	8.09%	6.94%	5.78%	\$50,000,000	7.21%	6.18%	5.15%
\$26,400,000	8.08%	6.93%	5.78%	\$51,000,000	7.19%	6.16%	5.13%
\$26,500,000	8.08%	6.93%	5.78%	\$52,000,000	7.16%	6.14%	5.12%
\$26,600,000	8.07%	6.92%	5.77%	\$53,000,000	7.13%	6.12%	5.10%
\$26,700,000	8.07%	6.92%	5.77%	\$54,000,000	7.11%	6.09%	5.08%
\$26,800,000	8.06%	6.91%	5.77%	\$55,000,000	7.08%	6.07%	5.06%
\$26,900,000	8.06%	6.91%	5.76%	\$56,000,000	7.06%	6.05%	5.04%
\$27,000,000	8.05%	6.91%	5.76%	\$57,000,000	7.03%	6.03%	5.03%
				\$58,000,000	7.01%	6.01%	5.01%
				\$59,000,000	6.99%	5.99%	4.99%
				\$60,000,000	6.96%	5.97%	4.98%

SCHEDULE A = $90 / (625 + (\text{MACC} / (5357/2418)) ^ 0.38)$

SCHEDULE B = $(\text{SCHEDULE A} + \text{SCHEDULE C}) / 2$

SCHEDULE C = $(9.03 / (57.3 + (\text{MACC} / (5357/2418))^0.25)) - 0.02$