



Guide to Major Capital Project Delivery



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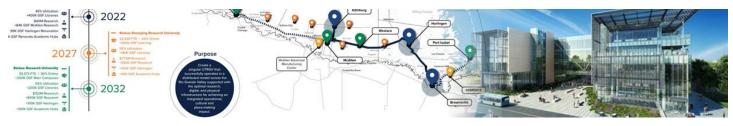


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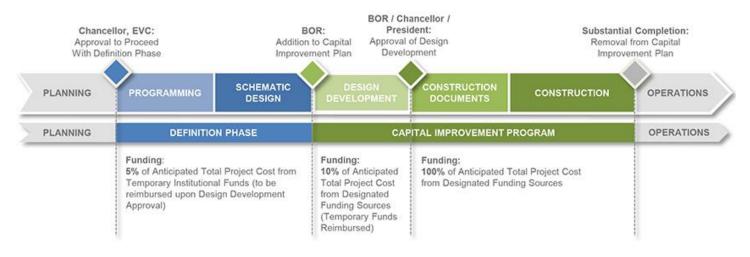
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Guide to Major Capital Project Delivery



Introduction

The UT System Guide to Major Capital Project Delivery was created to provide easy access to the most current policies, procedures, and resources needed to successfully deliver Major Capital Projects for UT System and its institutions. It is continuously updated to serve all stakeholders engaged in the delivery of Capital Projects that meet one or more of the following criteria:

- New building construction with a total project cost of \$10 million or more
- Road, paving, and repair and rehabilitation projects with a total project cost of \$10 million or more
- Any project determined by the Board to be architecturally or historically significant

Areas covered in this Guide include:

- <u>The Project Funding and Approval Timeline</u> Provides step by step tasks and deliverables required to obtain approvals and mitigate risks for each phase of the project
- <u>The UT System Capital Improvement Program</u> Outlines the CIP and provides links to additional information
- <u>Governing Laws, Rules, and Regulations</u> Includes the U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects, which references all Board of Regents Rules and Regulations, Systemwide Policies, State Laws, and Federal Laws governing Major Capital Project delivery for UT System
- <u>Procurement of Goods and Services</u> Includes guidance on procurement strategies and the availability of Systemwide Contracts and Insurance Programs

The Guide is maintained by the UT System <u>Office of Capital Projects</u> in collaboration with other UT System offices, institutions, and external agencies. All questions, comments, and suggestions regarding The Guide should be directed to:

Capital Improvement Program Support

cipsupport@utsystem.edu



Management Policy and Authority

U.T. System Policy

All Major Projects shall be managed and executed in compliance with applicable Federal and State laws, Regents' Rules and Regulations, U. T. System Policies, and agreements between U. T. System offices. Each institution and delegated management authority shall establish and maintain structures, administrative procedures, and designated responsibilities for managing Major Projects as defined by <u>UTS 199 Management</u> <u>of Major Capital Projects</u>.

Project Management Authority

Unless otherwise authorized by the Board of Regents, the UT System Office of Capital Projects (OCP) has delegated authority to manage Major Projects on behalf of the following institutions:

- The University of Texas at Dallas
- The University of Texas at El Paso
- The University of Texas of the Permian Basin
- The University of Texas Rio Grande Valley
- Stephen F. Austin State University
- The University of Texas at Tyler
- The University of Texas Health Science Center at Tyler
- The University of Texas System Administration

The following institutions have been delegated the authority to manage Major Projects on their own behalf:

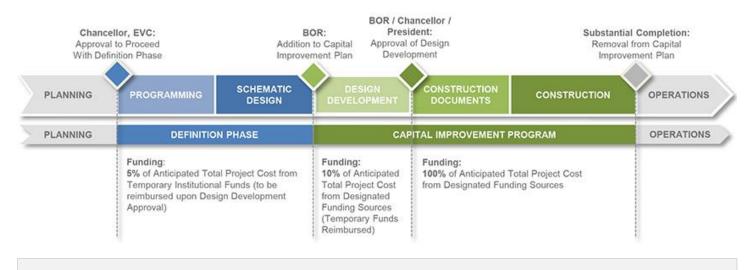
- The University of Texas at Arlington
- The University of Texas at Austin
- The University of Texas at San Antonio
- The University of Texas Health Science Center at Houston
- The University of Texas Health Science Center at San Antonio
- The University of Texas M. D. Anderson Cancer Center
- The University of Texas Medical Branch at Galveston
- The University of Texas Southwestern Medical Center

General Resources

- UTS 199 Management of Major Capital Projects
- Governing Laws, Rules, and Regulations
- Risk Mitigation and Monitoring Plan for Major Capital Projects



The Funding and Approval Timeline



Quick Links for Project Funding and Approvals

- Project Funding
- Project Approvals
- The Project Timeline

Project Funding

The funding and approval processes for Major Capital Projects are generally outlined in the <u>UT System Capital</u> <u>Expenditure Policy</u>, which provides a uniform method for documenting the full capital expenditure lifecycle so that capital expenditure activity can be effectively communicated to the Board of Regents. Additional information and direction regarding capital project financing can be found at the <u>UT System Office of Finance</u> <u>Capital Project Financing Web Page</u>.

Project Approvals

The requirements for obtaining funding and receiving necessary approvals at each major phase of the Major Capital Project delivery process are outlined in the <u>Major Capital Project Approval Process Chart</u>. The approving authorities for Major New Construction and R&R projects are summarized in the <u>Major Capital Project Approval Authority Chart</u> below.

Approval		OCP Managed				Institutionally Managed				
	BOR	Chancellor	President	EVCBA	AVCFPC	BOR	Chancellor	President	EVCBA	AVCCP
Approval to Proceed With Definition Phase (through Schematic Design)										
Contract Authorization - Architects, Engineers, and Design-Build Contractors										
Contract Authorization - Construction										
Contract Management										
Approval of the Facility Program										
Authorize Preparation of Schematic Plans										
Addition to the Capital Improvement Plan										
Authorize Preparation of Design Development Plans								•		
Approval of Design Development (light color designates R&R projects)		۰				۲		•		
Authorize Preparation of Construction Documents										
Approval of Cumulative Changes in Total Project Cost ≤ 10% of BOR Approval								•		
Approval of Cumulative Changes in Total Project Cost > 10% of BOR Approval										

Abbreviations:

AVCCP	Assistant Vice Chancellor, Capital Projects
BOR	Board of Regents
EVCAA	Executive Vice Chancellor for Academic Affairs
EVCBA	Executive Vice Chancellor for Business Affairs
EVCHA	Executive Vice Chancellor for Health Affairs
OCP	Office of Capital Projects
President	Institution President
R&R	Repair and Renovation

The Project Timeline

Major Projects seeking funding and inclusion in The University of Texas System Capital Improvement Program (CIP) must follow the prescribed processes for each of the major phases as defined below. Detailed information regarding the requirements for each phase can be found via the links provided.

<u>Campus Master Planning and Approval</u> Each institution of The University of Texas System is charged with developing and maintaining an Institutional or Campus Master Plan. The Master Plan, approved by the Board of Regents, provides an integrated framework for planning, design, and capital investment decisions that support the institution's unique academic and healthcare mission. Requests to authorize major capital projects are evaluated by the Board of Regents for their consistency and alignment with the approved Master Plan.

<u>The Project Planning Phase</u> consists of each institution's ongoing capital planning and reporting activities. Once an institution has determined that it is ready to proceed with its highest priority project, it can then request approval from the appropriate Executive Vice Chancellor and the Chancellor to secure funding and begin the Project Definition Phase.

<u>The Project Definition Phase</u> approval authorizes expenditures of up to 5% of the anticipated Total Project Cost from reimbursable institutional funds and includes Pre-Project Planning activities, Programming, and Schematic Design. Successful completion of the Definition Phase makes the project eligible for inclusion in the Capital Improvement Program (CIP) upon approval by the Board of Regents.

The Design Development Phase places the project in the UT System Capital Improvement Program and authorizes expenditures of up to 10% of the anticipated Total Project Cost from reimbursable institutional funds. Successful completion of the Design Development Phase makes the project eligible for review and approval to complete the design and build the project in the next phase.

<u>The Construction Documents and Construction Phases</u> authorize full expenditure of the approved Total Project Cost to complete the design and build the project.

<u>**Project Completion and Close-Out</u>** includes administrative and reporting activities for project completion and close-out to remove the project from the CIP.</u>

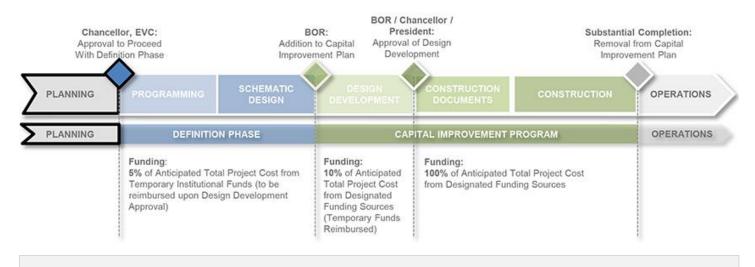
The Operations Phase (not covered in this guide) consists of each institution's ongoing operations, maintenance, and reporting activities.

Resources for Project Funding and Approvals

- UT System Capital Expenditure Policy
- <u>UT System Office of Finance Capital Project Financing Web Page</u>
- Major Capital Project Approval Process Chart
- Major Capital Project Approval Authority Chart



Campus Master Planning and Approval



Quick Links for Campus Master Planning and Approvals

- Introduction
- Benefits of a Campus Master Plan
- <u>The Planning Process</u>
- <u>Campus Master Plan Timeframe</u>
- <u>Campus Master Plan Updates</u>
- <u>Campus Master Plan Content</u>
- Preparation and Submission to the U.T. System Board of Regents
- <u>Resources for Creating and Updating a Campus Master Plan</u>

Introduction

Campus master planning is a comprehensive and collaborative process for gathering, collecting, analyzing, synthesizing, and documenting requirements to acquire, develop, or improve land, a campus, or a campus precinct through a long-range plan. The resulting Campus Master Plan (CMP) should balance and harmonize all affected elements to support the strategic and academic mission of the institution and the growth required in enrollment, programs, and facility support.

A CMP can require considerable time and financial resources to complete. Institutions should plan for the necessary time commitment and budget appropriate funds to cover the cost of the CMP and periodic updates.

The CMP should be consistent with, and firmly rooted in, the institution's strategic plan and should include direct support for the institution's approved mission. It should also address land-use and infrastructure needs which may be beyond the institution's strategic plan. The CMP should align proposed development and/or acquisitions with anticipated funding, including a focus on philanthropy and other external funding *U.T. System Guide to Major Capital Project Delivery* 11

opportunities. Philanthropy should be coordinated with The University of Texas System (U.T. System) Office of External Relations, Communications and Advancement Services.

There should be a relationship between the projects that are identified in the CMP and those projects submitted for inclusion in the Texas Higher Education Coordinating Board Capital Expenditure Plan (MP1) and the U.T. System Capital Improvement Program (CIP). Longer range planning should involve review with the U.T. System Offices of Finance, Budget and Planning, and Business Affairs (BA).

Benefits of a Campus Master Plan (Back to Top)

A campus master plan:

- Develops consensus on sound guiding principles while balancing the visionary with the realistic
- Allows the institution to direct its growth so that every dollar spent improving the physical campus supports the campus mission
- Is responsive to existing internal and external influences and anticipates mid and long-term impacts
- Facilitates collaboration and communication that has a positive impact on the strategic forces that dictate the vision and mission of the institution
- Identifies funding strategies, philanthropic opportunities, planning, and demographic parameters that inform future development decisions
- Is comprehensive and serves a specific purpose
- Is flexible to meet changing academic and planning demands

The Planning Process (Back to Top)

These guidelines are a tool to assist in preparation of a CMP that requires internal approval at the institution level, review and collaboration with U.T. System Administration Executive Vice Chancellors and Chancellor, with subsequent submission to the U.T. System Board of Regents (Board). The Board expects that in most cases the institutions will employ outside consultants to assist them in preparing the CMP. The U.T. System Office of Capital Projects (OCP) is also available to assist the institutions through each step of the CMP process.

As each institution is unique, these guidelines cannot be applied equally across all U.T. System institutions. The guidelines are intended to complement each institution's knowledge and chosen approach that produces a document that provides a specific and achievable roadmap to campus growth, and this guide is available to promote a consistent format and similar types of information in the plans.

Campus Master Plan Timeframe (Back to Top)

The institution should determine the useful life of the document prior to beginning the CMP process. A reasonable period for most CMPs is a 10 to 20-year planning horizon, but the institution should decide what is appropriate based on its knowledge of campus requirements and the findings of the institution's strategic plan, longer range business plan, and academic, research, or health care mission.

Campus Master Plan Updates (Back to Top)

The plan should include recommendations for the frequency at which it might be updated or major events that might trigger an update. Examples include:

- A significant change in institution leadership
- A significant change in institution mission/direction
- A major physical addition to the campus or a new satellite campus
- A major change that is inconsistent with the currently approved CMP

Institutions should continue to coordinate with U.T. System Offices of Academic Affairs (AA) and/or Health Affairs (HA), as well as OCP, on a five to 10-year schedule for updates.

Campus Master Plan Content (Back to Top)

The following includes topics that are the template for creating a U.T. System institution CMP. It is possible that not all topics are germane to each institution and/or campus; however, it does represent information included in CMPs. Emphasis should be placed on the key elements that drive the growth of the campus, whether that is growth in student population, patient care, or research activities.

1. Background Information

1.1. Executive Summary

The executive summary should present the essence of the CMP.

1.2. Introduction

Provide a brief explanation of what went into developing the CMP.

1.3. Institution/Campus History

Consider including a brief history of the institution and campus, including previously completed CMPs.

1.4. Guiding Principles

Provide guiding principles and develop a set of measurable goals and objectives based on the institution's strategic plan.

1.5. Campus Character, Special Attributes, and Places

Describe elements that contribute to the unique aspects of the institution and campus including culturally, historically, or architecturally significant areas or items. Consider addressing open space and landscaping preferences.

1.6. Residence Life and Campus Housing

Describe current campus life facilities and how they support student enrollment, student retention, and residence life.

1.7. Sustainability/Resource Management

Describe the university's strategy related to sustainability and the relationship of the university's sustainability plan to the CMP.

2. Programmatic Planning

2.1. Academic/Research/Healthcare

Consider providing academic programmatic data to address undergraduate, graduate, and doctorate space requirements. State any projected changes or advances in instruction, demand, or academic programs. Address the role of academic, research and/or healthcare planning and delivery in the institution.

2.2. Demographics

Consider providing demographic data for current campus population and any anticipated demographic changes proposed or needed to meet projected enrollment or changes in human volume.

2.3. Enrollment Projections

Consider projecting future enrollment over the life of the CMP including existing and new majors for undergraduate, graduate, Ph.D. and post-doctoral. Address changes that may affect retention and any changes in key ratios, such as student-to-faculty, faculty to class size, distance learning, and support (i.e., housing) etc.

2.4. Space Projection Model

Consider addressing how to accommodate space needs growth related to innovative programs or initiatives (academic, research, and/or health) while utilizing existing facilities and improving functionality and efficiency.

2.5. Classroom and Lab Utilization

Consider quantifying utilization targets when projecting the demand for space, and addressing the amount of time classrooms and labs should be used each day and whether to change the target utilization.

2.6. Non-Academic Facilities Planning

Consider providing facility information for non-academic, quasi-academic auxiliary, and support facilities including wellness, recreation, athletics, performing arts, student support facilities (student center and student services), parking garages, equipment and storage buildings, central thermal plants, maintenance warehouses, and athletic out-buildings.

2.7. Future Land Acquisitions

Based on the planning horizon included, consider indicating the forecasted need for future land acquisitions, if any, and list potential acquisition zones near the campus or other suitable locations.

3. Connectivity and Linkages

3.1. Campus Boundary (Physical)

Consider providing information about changes to campus boundaries including potential acquisitions and disposition of owned property to promote a definitive campus edge that facilitates a strong sense of arrival.

3.2. Campus Edge, Relationships, and Community Connectivity

Consider describing how adjacent community and business relationships affect the future of the university and how the local community can help the university to achieve its goals.

3.3. Transportation Interface

Consider providing information describing the transportation systems (motorized and nonmotorized vehicles, public and private transit, and parking) including existing roads, transit, buses, shuttles, and bipedal means that provide access to and from the campus. Consider including any proposed improvements to public and university-provided transit service and facilities.

4. Infrastructure Considerations

4.1. Provision and Condition

Consider including utility and technology infrastructure information including acquisition, continuing service and expansion, and maintenance for all services. Consider defining current state of repair, life-cycle status, capital renewal issues, and reliability. Consider providing any additional quantity needs, quality of service issues, practical limitations, and alternate methods of service or capacity, with long-term build-out in mind.

4.2. Planning and Coordination/Efficiency and Conservation

Consider developing a coordination document with proposed building areas and utility corridors including main distribution or collection lines, major features and equipment, easements, and right-of-way. Consider discussing energy conservation measures.

5. Architectural Design Guidelines

5.1. Architectural Attributes

Consider defining architectural attributes and values that reflect the campus heritage including significant architecture, special settings or places, and historic features.

5.2. New Construction, Renovations, and Additions

Determine to what degree any new building, renovation or addition will comply with the Architectural Design Guidelines for the campus.

5.3. Building Composition

Consider providing specific guidelines for new buildings or additions that address building height, setbacks, massing, building spacing and dimensional separations, density, and building footprint types. Consider providing specific guidelines for windows and openings, vertical composition, special instances for entrances, and building accessories.

5.4. Materiality

Consider defining any special material requirements including roofs, exterior walls, doors, and windows and whether there is a predominant or specific building exterior material (product or application) to be used throughout the campus.

5.5. Way Finding and Campus Signage

Consider developing an overall plan for directional and building signage including locations, types, and attachment support and connections.

5.6. Exterior Criteria

Consider pedestrian interface, landscaping / green space, gathering areas, site furniture (i.e. benches, trash receptacles, bicycle racks, bulletin boards, and electronic kiosks) and hardscape

items (sign systems, paving materials, art, memorials, and lighting components) should be considered on a campus-wide basis and encompass the aesthetic and functional context in which individual projects will be developed.

5.7. Screening

Provide considerations for aesthetics, accessibility by heavy trucks, safety, and security, for loading docks, dumpsters, and outdoor equipment. These may apply to enclosures for courtyards and small storage buildings as well.

5.8. Security and Risk Mitigation

Consider providing security and risk mitigation principles and address the physical provisions for safety and security through coordination with other campus entities if no campus-wide security plan exists.

6. Implementation Considerations

6.1. Existing (Current) Campus Plan

If a current CMP exists, it could be used to determine what is correct and useful and what should be changed.

6.2. Full Build-out of Proposed Facilities

Consider providing contextual documentation representing land utilization and density of the full build-out of the campus.

6.3. Implementation Plan or Phasing Action Plan

Consider whether the campus wants to provide an implementation timeline to show an order or prioritization of proposed facility build-out and whether phasing plans will be provided.

6.4. Longevity

Consideration of long-term maintenance and operations costs.

6.5. Cost Estimates

Consider whether the institution is willing to provide conceptual cost estimates for any build-out for the CMP, either by phase, priority or building type. Cost estimates are unreliable at the campus planning phase since buildings are undefined and construction market conditions can vary significantly.

7. Appendices

The Appendices may include any documents or exhibits that are referenced or used as a part of the CMP. Examples include any environmental studies, traffic or parking studies, demographic information, space utilization information, facility condition assessments, and any other relevant information provided to U.T. System or the Texas Higher Education Coordinating Board.

Preparation and Submission to the U.T. System Board of Regents (Back to Top)

The last step in the CMP process is submission to the Board. This step requires that certain administrative activities be completed and that a collaborative review process be conducted with U.T. System executive officers leading up to the submission of the CMP to the Board.

The following activities are required to occur prior to CMP submission to the Board.

- 1. Development of the CMP requires a collaborative process with the U.T. System Executive Vice Chancellor (EVC) -AA and/or EVC-HA. Institution presidents and EVCs shall sign off on the CMP prior to submission to other executives for review.
- 2. The institution shall distribute copies of the completed CMP for review, with one copy to each of the following U.T. System executives:
 - Chancellor
 - EVC-AA and/or EVC-HA
 - EVC-Chief Operating Officer (EVC-COO)
 - EVC-Chief Operating Officer (EVC-COO)Associate Vice Chancellor and Chief Financial Officer (AVC- CFO)
 - Associate Vice Chancellor of Budget and Planning (AVC-BUD)
 - Assistant Vice Chancellor of Capital Projects (AVC-OCP)
 - Executive Director of Real Estate (ED-REO)
- 3. If required by the EVC-AA and/or EVC-HA, the institution's representative will present the CMP to interested parties, including the Chancellor, EVC-AA and/or EVC-HA, EVC-BA, AVC-Finance, AVC-OCP, and ED-REO.

The EVC-AA or EVC-HA's office will coordinate the presentation with the institution and other attendees. Additional institution representatives at the presentation should include, as a minimum, the Chief Business Officer, and the campus planning officer. The presentation should include an overview of the planning process undertaken and the major findings of the plan with a period for questions.

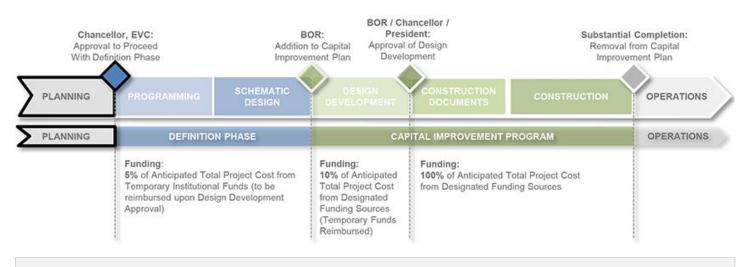
Following the presentation, the institution will refine the CMP based on feedback, if necessary, and resubmit the final electronic version to the same distribution list as previously noted.

4. The final CMP will be presented for approval to the Board via the Academic Affairs Committee or Health Affairs Committee. Institutions will want to keep Board meeting deadlines in mind when navigating through the above preparation steps for submission to the Board.

Resources for Creating and Updating a Campus Master Plan

- <u>Campus Master Planning | The Association of Physical Plant Administrators (APPA)</u>
- <u>Campus Planning | The Society for College and University Planning (SCUP)</u>
- Printable Copy of these Campus Master Planning and Approval Guidelines

The Project Planning Phase



Tasks and Deliverables

- 1. Maintain a Strategic Capital Projects List
- 2. Submit an Annual Capital Expenditure Plan (MP1)
- 3. Determine That a Project Is Ready to Proceed
- 4. Appoint the Project Advocate(s)
- 5. <u>Request Approval to Start the Definition Phase of the Project</u>

Tasks and Deliverables

1. Maintain a Strategic Capital Projects List (Back to Top)

Each Institution is expected to maintain a comprehensive and strategic capital project priority list. In collaboration with the Office of Academic Affairs or the Office of Health Affairs, each institution will regularly review strategic priorities coordinated with the approved Campus Master Plan.

2. Submit an Annual Capital Expenditure Plan (MP1) (Back to Top)

<u>Section 61.0572 of the Texas Education Code</u> further requires that the Texas Higher Education Coordinating Board (THECB) collect information on the capital expenditure plans of public universities, health-related institutions, state, and technical colleges. This includes information on the institution's new construction, major repair and rehabilitation projects, and deferred maintenance needs.

All UT System institutions must complete an annual Capital Expenditure Plan (MP1) as required by the THECB and Bond Review Board (BRB). The MP1 is a Project plan summarizing facilities-related Projects for the succeeding five years, including land acquisitions.

Guidance on submitting the annual Capital Expenditure Plan can be found on the THECB web page for <u>Capital</u> <u>Expenditure Plans</u>.

Resources for Submitting an Annual Capital Expenditure Plan (MPI)

- THECB Capital Expenditure Plans
- Integrated Campus Planning System (ICPS)
- ICPS Capital Expenditure Plan (MP1) Instructions

3. Determine That a Project Is Ready to Proceed (Back to Top)

Once an institution has determined that it is ready to proceed with its highest priority project, it must obtain the approval of the appropriate Executive Vice Chancellor and the Chancellor to obtain funding and begin the project Definition Phase. The Definition Phase is intended to resolve a project's scope, cost, schedule, and change management controls more accurately prior to addition to the CIP. The Definition Phase approval authorizes procurement of professional services and expenditure of temporary funds of up to 5% of the preliminary Total Project Cost for programming, design, engineering, and pre-construction phase services

4. Appoint the Project Advocate (Back to Top)

Recognizing that project success can be greatly improved through increased investments in early project planning, stakeholder engagement, and ownership of the decision-making process, the Board of Regents adopted the requirement to assign a Project Advocate. The Project Advocate should be an individual formally empowered by the Institution's President to represent the college, the department, and/or the programmatic needs of the Institution. The Project Advocate's role spans the entire duration of the project, and includes responsibilities to:

- Lead the user stakeholder committees engaged in the pre-project planning efforts
- Serve as chief administrator of the institution's Change Management Process related to project scope, quality, and cost
- Participate in post-construction facility performance evaluations

In order to be fully effective, Project Advocates must have:

- The trust and confidence of the President
- Subject matter expertise for the type of project proposed
- Easy access to the President and the facilities executive(s) for resolution of critical project issues
- Credibility with peers and programmatic stakeholders
- Strong verbal and written communication skills

Further, Project Advocates should be appointed with the understanding that they will have the following duties, roles, and responsibilities. The Project Advocate:

- Will lead the overall pre-project planning and facility programming committee effort defined by the Institution
- Should organize Campus committee visits to comparable facilities and identify relevant best practices if appropriate
- Will partner with other assigned institutional executives responsible for the delivery, maintenance, and operation of Capital Projects
- Will serve as the primary point of contact for comments and requests from User Groups and anticipated occupants of the proposed facility
- Should clearly define for the project team from the outset, the protocols for communication with consultants and the approval process
- Should be dedicated organizationally and personally to the Project for the duration of the Project, and compensation and other performance or productivity impacts should be resolved in advance of project duties
- Should be comfortable making project presentations to a wide variety of engaged and interested parties
- Should be collaborative and adept at fair and even facilitation of the planning and design process
- Shall not delegate these duties to others nor assign a surrogate without concurrence from campus administration

Confirmation of the appointed Project Advocate is to be included in the President's letter to the appropriate Executive Vice Chancellor of Academic or Health Affairs and the Chancellor to proceed with the Definition Phase of the project.

5. Request Approval to Start the Definition Phase of the Project (Back to Top)

Approval to Proceed with the Definition Phase of the Project authorizes procurement of professional services and expenditure of up to 5% of the anticipated project cost using temporary institutional funds for completing the Owner's Project Requirements, confirming the Basis of Design, resolving the Facilities Program, and completing Schematic Design, including reconciliation of a detailed cost estimate. While temporary funds must be initially provided by the institution, those funds will be reimbursed to the institution from Board of Regents approved funding sources upon Design Development (DD) Approval or upon submission of a project application to THECB (if applicable), whichever is later.

The Request to Start the Definition Phase can be made at any time via memorandum from the President of the institution to the appropriate Executive Vice Chancellor of Academic or Health Affairs and the Chancellor. There are no associated deadlines or requirements to coordinate scheduling with Board of Regents' meetings.

As illustrated in the <u>Request Approval to Start the Definition Phase of the Project Template</u>, the memorandum should contain the following elements:

- Project Description including verification of its priority
- Project Justification
- Identification of the Project Advocate(s) and justification for selection
- Preliminary Total Project Cost
- Anticipated source of funds
- Goals of the Definition Phase
- Key outcomes of the Definition Phase
- Request for Institutional Management (if applicable at the time of the request)

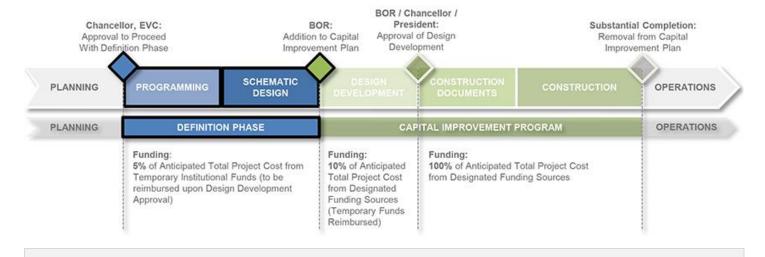
Resources for Requesting Approval to Start the Definition Phase of the Project

Resources for UT System Institutions Only (get access <u>HERE</u>):

• <u>Request Approval to Start the Definition Phase of the Project Template</u>



The Definition Phase



Prerequisites

1. <u>Receive Approval to Start the Definition Phase of the Project</u>

Tasks and Deliverables

- 1. Prepare a Statement of Need
- 2. Procure Professional Services
- 3. Document the Owner's Project Requirements
- 4. Complete the Basis of Design Documents
- 5. Complete the Facilities Program
- 6. Authorize the Start of the Schematic Design Phase
- 7. Complete The Schematic Design and Cost Estimate
- 8. Complete the Executive Summary for Addition to the CIP
- 9. Complete the Online Project Planning Form
- 10. Request Addition of the Project to the CIP

Introduction (Back to Top)

The Definition Phase requirements for major new construction and renovation projects address historic trends that minimized early project planning, encouraged excessive contingencies, and resulted in expensive late changes in project scope and budget. Based on recommendations from the Task Force on Facility Planning for the 21st Century, the new requirements incorporate private sector best practices to promote forward-thinking design innovation, pursuit of construction cost economies, and incorporation of maintenance and operational efficiencies. Accordingly, process changes and new requirements were established to:

- Formalize an early planning process involving key stakeholders
- Foster engagement and ownership of the decision-making process by the Institutions
- Encourage early investment in project definition and requirements
- Emphasizes communication between planning groups and other stakeholders
- Achieve cost and schedule savings by minimizing changes in projects underway

Approval by the appropriate Executive Vice Chancellor and the Chancellor will allow a Major Project to proceed to the Definition Phase. The Definition Phase provides authority for the UT System Administration and the institutional administration to expend institutional funds up to 5% of the anticipated total project cost to select the project architect and other consultants, confirm the basis of design, develop the formal Facility Program document, and develop schematic project plans. These funds will be provided by the institution initially but will be reimbursed to the institution from applicable project funds upon design development approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Led by the Project Advocate, the Definition Phase is expected to include the completion of the Owner's Project Requirements workshop, confirmation of the Basis of Design, resolution of the Facilities Program, and completion of Schematic Design. It is further expected that the institutional leadership will establish a comprehensive and rigorous set of design and change management processes to more accurately resolve project scope and cost prior to requesting full funding and addition to the CIP.

Prerequisites

1. Receive Approval to Start the Definition Phase of the Project (Back to Top)

Before becoming eligible for reimbursement of up to 5% of the preliminary Total Project Cost for Definition Phase services, the President of the Institution must receive formal Approval to Proceed with the Definition Phase of the Project from the appropriate Executive Vice Chancellor of Academic or Health Affairs and the Chancellor.

Tasks and Deliverables

1. Prepare a Statement of Need (Back to Top)

During the initial stages of the Definition Phase, the institution must document the project's justification by preparing a Statement of Need (SoN) which will be used as a basis for ongoing efforts and required submissions. The SoN outlines the project's basic objectives, confirms the project's alignment with the institution's needs and strategic planning goals, and confirms its adherence to the currently approved Master Plan. Key performance indicators and criteria for success are developed to support the SoN, to guide the project definition and execution, and to measure project success throughout the project life cycle. The SoN and keys to success will be included in the subsequent Owner's Project Requirements, Basis of Design, and Facility Programming efforts, the Business Plan, and the Project Planning Form (PPF) submission.

The Statement of Need typically addresses the following:

- Relationship to the department's strategic plan, including current facility deficiencies/inadequacies
- Relationship to the Institution's strategic academic/health plan
- College/Department's historical background
- College/Department's current asset management condition index, including prioritization of future projects
- Available funding
- Expected outcomes and investment metrics from the capital project
- Instructional, research, public service, and continuing education functions
- Master plan directives
- Program analysis of personnel (e.g., faculty and staff, percentage of appointment), enrollment, credit hours and weekly contact hours for academic courses, and research activities
- Statutory requirements and/or other mandates, if any

2. Procure Professional Services (Back to Top)

Professional services procurement, selection of providers, and contract administration needed to fulfill the Project Definition Phase must follow the governing laws, regulations, or statutes outlined in the <u>U.T. System</u> <u>Risk Mitigation and Monitoring Plan for Major Capital Projects</u> as well as the procurement and contracting processes established by the UT System institution managing the contract.

Requests for Qualifications

Requests for Qualifications (RFQs) issued to solicit responses from interested architects, engineers, and design-build contractors must include a requirement that the architect, engineer, and design-build contractor evidence agreement to adhere to the approved Campus Master Plan and a set of criteria applicable to the facility program and the needs of the institution.

Contracts

Contracts with architects, engineers and construction service providers executed and delivered on behalf of the Board of Regents for Major Projects shall comply with guidelines issued by the UT System

Administration Office of General Counsel and shall be written on a standard form approved by the Office of General Counsel. Payment and performance bonds, when required by law for contracts, shall be on a standard form approved by the Office of General Counsel.

Resources for Procurement of Professional Services

General Resources

- Risk Mitigation and Monitoring Plan for Major Capital Projects
- UT System Administration Office of General Counsel Web Site

Resources for UT System Institutions Only (get access HERE)

- <u>Appointment of AE Selection Committee Template</u>
- Appointment of Construction Selection Committee Template
- <u>Request for Appointment of Project Architect Template</u>
- <u>Request for Direct Appointment of Project Architect Template</u>
- <u>Request for Award of Design-Build Agreement Template</u>
- <u>Request for Award of CMAR Agreement Template</u>
- <u>Request for Award of Construction Contract Template</u>

3. Document the Owner's Project Requirements (Back to Top)

The Owner's Project Requirements (OPR) is a written document that defines the goals, functional requirements, and stakeholder expectations surrounding a project's use, operations, and maintenance. It provides guidance and metrics for success for all subsequent design, construction, acceptance and operational decisions to ensure consistency and alignment with established goals. The OPR supplements and informs traditional Facility Programming efforts in order to better address evolving requirements for energy efficiency, sustainability, environmental quality, safety, security, maintenance, and long-term cost of ownership. It is specifically designed to address commissioning requirements early in the design process and, ultimately, to facilitate confirmation that the completed project fulfills its established requirements.

The OPR builds upon the Statement of Need, using collaborative workshops and surveys to gather input from key stakeholders, gain consensus, and establish measurable criteria for success. The Owner's Project Requirements documents normally addresses the following topics:

- Statement of Need
- Project description
- Historical significance
- Funding sources, amounts, expenditures
- Investment metrics
- A project management plan
- Permits, codes, and other impact statements
- Procurement strategy

- Total Project Budget/Cost
- Total duration schedule and required BOR milestone dates
- Requirements from the Institution
- Requirements from operations and maintenance
- Requirements from the Users
- Requirements from the community
- List of Project Stakeholders
- Draft Project Charter

The OPR may be modified and updated as objectives and criteria are further refined in the subsequent Basis of Design and Programming efforts. More on the process for creating the OPR, its requirements, and its format can be found in <u>The American Society of Heating</u>, <u>Refrigerating and Air-Conditioning Engineers</u> (ASHRAE) Guideline 0 – 2013 The Commissioning Process.

Resources for Documenting the Owner's Project Requirements

General Resources

- <u>ASHRAE Guideline 0 2013 The Commissioning Process</u>
- <u>NIBS Guideline 3-2012 Building Enclosure Commissioning</u>
- <u>The Owner's Project Requirements All Owners Resources</u>

Resources for UT System Institutions Only (get access <u>HERE</u>):

- <u>Owner's Project Requirements Workshop Agenda Template</u>
- Stakeholder Owner's Project Requirements Template
- <u>Functional Owner's Project Requirements Template</u>
- <u>Owner's Project Requirements Worksheet</u>

4. Complete the Basis of Design Documents (Back to Top)

The Basis of Design (BOD) is a document that records the thought processes, assumptions, and key performance criteria required to meet the Owner's Project Requirements. It is generally focused on design features critical to overall building performance, and captures important information linking the Statement of Need and the OPR to the Construction Documents. Ultimately, it becomes a key tool in facilitating the commissioning team's evaluation of the project's success in fulfilling the Owner's Project Requirements.

The level of detail in the BOD evolves as the Facility Program and design progress, documenting the underlying reasons for selecting specific components, assemblies, systems and their integration at each phase. While the content of the document will vary from project to project, it should normally address the following topics:

- Fundamental BoD Criteria
- Lifespan of Building Elements Lifespan
- Economic Parameter for Life Cycle Cost Analysis

- Architectural and Engineering Criteria (Pre-Programming Phase)
- Architectural and Engineering Criteria (Post-Programming Phase)

As a direct link between the Owner's requirements and designer's drawings and specifications, additions and changes to the BoD must be fully documented by the capital delivery management team and approved by the Project Advocate.

Resources for Completing the Basis of Design Documents

Resources for UT System Institutions Only (get access <u>HERE</u>):

- Basis of Design Manual
- Basis of Design Template

5. Complete the Facilities Program (Back to Top)

Facility programming is an integrated research and decision-making process that identifies the project scope, including all functional and operational requirements of the work to be designed. This process expands upon the Owner's Project Requirements and the Basis of Design by collecting, analyzing, synthesizing, and documenting significant requirements for the project. The Facilities Program should incorporate the following major elements:

- Signatures of the institution President, the Project Advocate, and key stakeholders
- Executive Summary
- The project goals, needs, and objectives
- Strategic and master planning requirements for the project
- Space and adjacency requirements
- Supporting requirements, including a detailed security assessment for each project
- Site selection with studies and surveys or existing facility studies
- Design Parameters
- Preliminary Project Budget and Schedule
- Project Implementation Strategies
- Required expertise for the project team
- Project issues to be resolved later in the Design Phase
- Special requirements specific to the Institution
- Selection of a project delivery method

Per Rules and Regulations of the Board of Regents Series <u>80402</u> and <u>80404</u>, the program document(s) are expected to be approved by the institution President prior to proceeding into the Design Phase.

Resources for Completing the Facilities Program

General Resources:

- Chapter 12.1, "Programming" by Edith Cherry, FAIA, ASLA, in The Architect's Handbook of Professional Practice by American Institute of Architects. Washington D.C., 2008.
- Problem Seeking: An Architectural Programming Primer, 5th Edition by William M. Peña and Steven A. Parshall. New York, NY: John Wiley & Sons, Inc., 2012.
- Whole Building Design Guide: Architectural Programming

Resources for UT System Institutions Only (get access <u>HERE</u>):

• <u>Approval of Facilities Program Template</u>

6. Authorize the Start of the Schematic Design Phase (Back to Top)

Per BOR Rules and Regulations <u>80402</u> and <u>80404</u>, the authority to release the project architect, engineer, or design-build contractor to prepare Schematic Plans (begin the Schematic Design Phase) resides in the following offices or their delegated agents:

- **OCP Managed Projects** The Assistant Vice Chancellor for Capital Projects
- Institutionally Managed Projects The President of the Institution

7. Complete the Schematic Design and Cost Estimate (Back to Top)

Schematic Design is the initial phase of architectural and engineering design services that produces a diagrammatic representation of the project based on the Facilities Program and further collaboration with the Institution and user representatives. Conceptual studies and alternative schemes are generated and refined to produce floor plans, sketches of the building exterior and interior spaces, outline-level specifications of materials and finishes, and a narrative description of the proposed building systems.

Schematic Design documents normally include:

- An updated Basis of Design
- A preliminary Site Plan
- A preliminary building code analysis
- Plans of existing buildings for renovation projects
- Drawings on a small scale and schematic in nature
- Brief narrative specification descriptions of the proposed component systems, materials, and equipment, presented in the Construction Specification Institute (CSI) MasterFormat
- A preliminary construction schedule
- A construction cost estimate based on (at a minimum) square footage costs for building systems (e.g., foundation, structure, exterior closure, roof, interior construction, specialties, conveying, MEP systems, etc.) typical for the building type and location.

Per the <u>UT System Capital Expenditure Policy</u>, the accompanying cost estimate is expected to be within 30% of the final cost prior to consideration by the Board of Regents. The estimate should contain sufficient detail to *U.T. System Guide to Major Capital Project Delivery* 28

support completion of the <u>FPCC Agenda Item Cost Detail Template</u>, which will be included in the Facilities Planning and Construction Committee Agenda Items and serve as a basis of benchmark comparisons with other similar projects. The cost categories an definitions used in the template are a subset of those normally required for submission to the Texas Higher Education Coordinating Board (THECB) and are outlined in the <u>FPCC Agenda Item Cost Detail Template Instructions</u>. OCP will generate <u>comparative project cost benchmarks</u>, which serve to inform executive decision-making while highlighting the project team's ongoing cost reduction and management efforts.

Resources for Completing the Schematic Design and Cost Estimate

General Resources

• UT System Capital Expenditure Policy

Resources for UT System Institutions Only (get access <u>HERE</u>):

- FPCC Agenda Item Cost Detail Template
- FPCC Agenda Item Cost Detail Template Instructions
- OCP Cost Benchmarking Sources and Methods

8. Complete the Executive Summary (Back to Top)

An Executive Summary is required for all FPCC/BOR Agenda Item requests for adding Major Projects to the CIP. This document is a preliminary and abbreviated version of the Project Business Plan, which must be further developed in the subsequent Design Development phase. The Executive Summary should include the following sections as outlined in the <u>Executive Summary for Addition to the CIP Template</u>:

- Brief Project Description
- Alignment with Campus Master Plan
- Funding
- Strategic Implications
- Project Advocate and Change Management Process
- Operational Costs /Ability of Institution to Absorb Operational Costs
- Key Milestones
- Proposed Site Map
- Pro Forma (if Revenue System Financing Bond Proceeds are requested)

The schematic design cost estimate, operating costs, and funding plan should inform and support the Executive Summary and serve as the basis for the proposed project when added to the CIP. The document should include a Pro Forma if funded by RFS debt, identifying what revenue sources will be used to repay the debt. It must be signed by the Institution's President, Provost, VP for Business Affairs, Director of Facilities, the Project Advocate, and other key stakeholders at the institution.

Resources for Completing the Executive Summary for Addition to the CIP

Resources for UT System Institutions Only (get access <u>HERE</u>):

• Executive Summary for Addition to the CIP Template

9. Complete the Online Project Planning Form (Back to Top)

All institutions requesting the addition of a project to the CIP are required to submit an online Project Planning Form (PPF), which collects detailed information about the project, including its key characteristics, its justification (the Statement of Need), the proposed funding sources, the anticipated timelines for expenditure, and key investment metrics. The PPF is reviewed by the Office of Capital Projects, and the Office of Finance to affirm appropriate costs, justifications, and the appropriate use of Debt and/or Gift funding for presentation to the BOR. Because it contains the information necessary for BOR approval, a current PPF is always required in order for the Project to be presented to the BOR. The PPF can be accessed by visiting the Office of Finance's <u>Capital Project Approval Process Web Page</u>.

Resources for Completing the Online Project Planning Form

- UT System Capital Expenditure Policy
- <u>Capital Project Approval Process Web Page</u>
- Online Project Planning Form

10. Request Addition of the Project to the CIP (Back to Top)

Following the Definition Phase, addition of a project to the CIP authorizes UT System Administration and the institutional administration to expend institutional funds up to 10% of the anticipated total project cost to proceed to Design Development Approval. These funds will be provided by the institution initially but will be reimbursed to the institution from applicable project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Addition of a project to the CIP includes authorization of institutional management of Major Projects so designated in the CIP. Requests for institutional management shall be reviewed and approved by the Assistant Vice Chancellor for Capital Projects. Projects approved for institutional management will be included in the CIP. Projects designated for institutional management shall follow the process, authority, and approvals as outlined in <u>Rule 80404 of the Regents' Rules and Regulations</u> for the full amount stipulated in the CIP.

Prior to requesting the addition of a project to the CIP, it is expected that the institution has completed the Definition Phase requirements with support of the appropriate Executive Vice Chancellor and the Chancellor. A review and presentation process will then be conducted with UT System executive officers and staff,

culminating in a presentation to the Facilities Planning and Construction Committee by the institution's president.

The documents required for Adding a Major Project to the CIP include:

- 1. <u>President's Agenda Item Request Memo</u>, including confirmation of completed Definition Phase
- 2. <u>Online Project Planning Form</u>
- 3. FPCC Agenda Item Cost Detail per the FPCC Agenda Item Cost Detail Template Instructions
- 4. Fully executed Executive Summary
- 5. President's PowerPoint Presentation

The timeline leading up to the president's presentation to the Facilities Planning and Construction Committee is as follows:

- 1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit to OCP (<u>cipsupport@utsystem.edu</u>):
 - a. A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of adding the project to the CIP
 - b. A complete and accurate online Project Planning Form
 - c. A complete and accurate CIP Project Cost Detail
 - d. An electronic copy of the final fully executed Executive Summary (for distribution to the Regents, EVC, Business Affairs, Real Estate, Finance, and OCP)
 - e. An electronic copy of the president's final PowerPoint Presentation
- 2. Based on collaboration with the project team and the information provided in the above listed documents, the Office of Capital Projects (OCP) will generate cost benchmarks for similar projects and will incorporate them into the Agenda Item and PowerPoint Presentation.
- 3. OCP will submit the Executive Summary to the Board Office for inclusion in BOR agenda material sent to the Regents.
- 4. The president's PowerPoint presentation will be included in the overall FPCC presentation and will be set up and ready for presentation by the institution's president at the FPCC meeting.

For additional information on this process, please contact Capital Program Support at: cipsupport@utsystem.edu.

Resources for Requesting Addition of the Project to the CIP

Resources for UT System Institutions Only (get access <u>HERE</u>):

- FPCC / BOR Agenda Item Requirements
- President's Agenda Item Request Letter Template
- Online Project Planning Form
- FPCC Agenda Item Cost Detail Template
- FPCC Agenda Item Cost Detail Template Instructions
- OCP Cost Benchmarking Sources and Methods
- Executive Summary for Addition to the CIP Template
- <u>President's PowerPoint Presentation Template</u>



The Design Development Phase



Design Development Approval of Major Repair and Renovation Projects

Prerequisites

1. Addition of the Project to the Capital Improvement Program

Before proceeding to the Design Development Phase, the Board of Regents must approve the Addition of the Project to the Capital Improvement Program. Upon approval, the institution becomes eligible for reimbursement of up to 10% of the anticipated Total Project Cost from designated funding sources. These funds will be provided by the institution initially but will be reimbursed to the institution from applicable

project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Tasks and Deliverables

1. Authorize Preparation of Design Development Documents (Back to Top)

Per BOR Rules and Regulations <u>80402</u> and <u>80404</u>, the authority to release the project architect, engineer, or design-build contractor to prepare Design Development Plans resides in the following offices:

- For OCP Managed Projects The Assistant Vice Chancellor for Capital Projects
- For Institutionally Managed Projects The President of the Institution

2. Complete Design Development and the Associated Cost Estimate (Back to Top)

Design Development entails the confirmation of the program requirements and schematic design efforts, the continued development and refinement of the project design and detailing, and the expansion of outline specifications and Basis of Design to fully describe the nature and intent of the project prior to developing the construction documents.

Design Development documents normally include:

- Updated Basis of Design
- Complete building code analysis
- Complete drawings to scale
- Further refinement of all plans incorporating Schematic Design review comments, including the number of drawing sheets
- Draft SECO worksheets
- For renovation projects, include existing building plans, elevations, structural, architectural, and demolition plans
- Descriptive specifications with a narrative description of the component systems, materials, and equipment in alignment with the Construction Specification Institute (CSI) MasterFormat
- Descriptive literature cataloguing cut-sheets of proposed systems, materials, and equipment Summary construction schedule, sufficiently tied to the costs and specifications to allow a meaningful analysis
- Construction cost estimate based on detailed quantities and unit costs for all materials, labor, equipment, building systems, general conditions, fees and contingencies in the CSI MasterFormat or Uniformat Assemblies format.

Per the <u>UT System Capital Expenditure Policy</u>, the Design Development cost estimate is expected to be within 10% of the final cost prior to consideration by the Board of Regents. For new construction, the cost estimate should be itemized in accordance with the <u>FPCC Agenda Item Cost Detail Template Instructions</u> for presentation to the Board. With the exception of "Insurance", which is specific to certain UT System projects, the cost breakdown categories are a subset of those normally required for the subsequent submission to the Texas Higher Education Coordinating Board (THECB).

Resources for Completing Design Development

Resources for UT System Institutions Only (get access <u>HERE</u>):

• DD Approval Business Plan Template

3. Complete the Project Business Plan for New Construction Projects (Back to Top)

A finalized Business Plan is required for all FPCC/BOR requests for Design Development Approval of Major New Construction Projects. The Design development cost estimate, operating costs, and funding plan inform and support the Business Plan and serve as the basis for evaluating the proposed project. The Business Plan should include a Pro Forma for all Major Projects funded by RFS debt identifying what revenue sources will be used to repay the debt. If the project is gift or grant funded, the Institution's Representative should confirm when the funds are available, including if there is a date when they need to be spent. Institutions should also address anticipated costs for physical asset recapitalization and long-term facility maintenance.

The Business Plan must be signed by the Institution's President, Provost, VP for Business Affairs, Director of Facilities, the Project Advocate, and other key stakeholders at the institution. The Business Plan normally includes the following sections as further detailed in the <u>Business Plan Template</u>:

- I. Executive Summary
- II. Project Description
- III. Strategic Rationale, Justification and Options
- IV. Summary of Economic Analysis
- V. Opportunities and Risks Analysis
- VI. Success Criteria

VII. Impact of Project Postponement

Appendix A: Proposed Site Map

Appendix B: Pro Forma

Deferred Maintenance and Recapitalization Plan

4. Request Design Development Approval (Back to Top)

Upon completion of the Design Development Phase, Design Development Approval authorizes the UT System Administration and the institutional administration to expend 100% of the anticipated total project cost from designated project funds to complete the project. Expenses from temporary funds provided by the institution will be reimbursed to the institution from applicable project funds upon Design Development Approval or upon submission of the project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Once the institution determines that the project design, cost estimate, and business plan are ready to submit for Design Development (DD) approval, the following steps must be completed for various project categories.

Design Development Approval of Major New Construction Projects (Back to Top)

Design Development Approval for all Major New Construction requires that certain project and administrative activities be completed and that a review and presentation process be conducted with UT System executive officers and staff. The process is as follows:

Documents Required for Requesting Design Development Approval on a New Construction Project:

- 1. <u>President's Agenda Item Request Letter</u> or <u>President's Agenda Item Request Letter Template With TPC</u> <u>Increase</u> including confirmation of completed Definition Phase
- 2. <u>Online Project Planning Form</u> (updated as necessary)
- 3. <u>FPCC Agenda Item Cost Detail per the FPCC Agenda Item Cost Detail Template Instructions</u>
- 4. Finalized <u>Business Plan</u>
- 5. DD PowerPoint Presentation
- 6. DD Fact Sheet (OCP Managed Projects Only)

Timeline for Document Submission for Requests for DD Approval on a New Construction Project:

- 1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit the following to OCP (<u>cipsupport@utsystem.edu</u>):
 - a. A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of DD Approval (Please copy <u>cipsupport@utsystem.edu</u>).
 - b. A complete, accurate and final <u>Online Project Planning Form</u>.
 - c. A complete, accurate and final <u>FPCC Agenda Item Cost Detail</u>.
 - d. An electronic copy of the updated final, fully executed <u>Business Plan</u> to <u>cipsupport@utsystem.edu</u> for distribution to System Offices (OCP, EVC, Business Affairs, Real Estate and Finance).
- For OCP managed projects that are to be presented to the FPCC by the Assistant Vice Chancellor for Capital Projects, approximately 6-8 weeks prior to the BOR meeting: OCP will schedule a dry run of the DD presentation with the AVCFPC, OCP staff, and institution's staff. A draft of the <u>DD presentation</u> and <u>DD Fact</u> <u>Sheet</u> should be submitted to <u>cipsupport@utsystem.edu</u> no later than two (2) days prior to the dry run.
- 3. Based on collaboration with the project team and the information provided in the above listed documents, OCP will generate updated cost benchmarks for similar projects and will incorporate them into the Agenda Item and <u>PowerPoint Presentation</u>.
- 4. OCP will submit the <u>Business Plan</u> to the Board Office for inclusion in BOR agenda material sent to the Regents.
- 5. The DD Approval <u>PowerPoint Presentation</u> will be included in the overall FPCC presentation and will be set up and ready for presentation by the appropriate party at the FPCC meeting.

For additional information on this process, please contact Capital Program Support at: <u>cipsupport@utsystem.edu</u>.

Resources for Requesting Design Development Approval for New Construction

Resources for UT System Institutions Only (get access <u>HERE</u>):

- President's Agenda Item Request Letter Template
- <u>President's Agenda Item Request Letter Template With TPC Increase</u>
- Online Project Planning Form
- <u>CIP Project Cost Detail Template</u>
- <u>Finalized Business Plan Template</u>
- DD PowerPoint Presentation Template
- <u>DD Fact Sheet Template</u> (OCP Managed and AVCFPC presented Projects Only)

Design Development Approval of Major Repair and Renovation Projects (Back to Top)

Per BOR Rules and Regulations <u>80402</u> and <u>80404</u>, the authority to approve the Design Development Plans for all major repair and rehabilitation projects that are not architecturally or historically significant and authorize expenditure of appropriated funds resides in the following offices:

- OCP Managed Projects The Chancellor
- Institutionally Managed Projects The President of the Institution

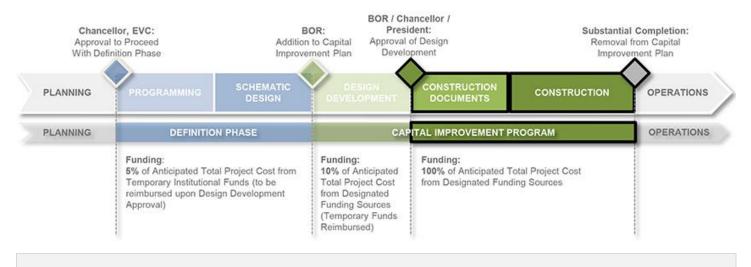
Resources for Requesting Design Development Approval for R&R Projects

Resources for UT System Institutions Only (get access <u>HERE</u>):

- <u>Approval of DD Documents Institutionally Managed</u>
- <u>Approval of DD Documents OCP Managed</u>
- Approval of DD Documents w/ Revised Funding OCP Managed



The Construction Documents and Construction Phases



Prerequisites

1. <u>Receive Design Development Approval</u>

Tasks and Deliverables

- 1. Authorize Preparation of Construction Documents
- 2. Coordinate Systemwide Insurance Program Coverage
- 3. Manage the Project's Construction
- 4. Modify or Augment Project Funding Sources As Necessary
 - <u>Changes to Funding Sources or Cumulative Funding Increases of Less Than or Equal to 10% of the</u> <u>BOR Approved TPC</u>
 - <u>Cumulative Funding Increases Greater Than 10% of the BOR Approved TPC</u>

Prerequisites

1. Receive Design Development Approval (Back to Top)

Upon receiving Design Development Approval, the project team is authorized to spend the remainder of the approved funding to finalize the construction documents and complete construction without further approvals from the Board of Regents. Expenses from temporary funds provided by the institution will be reimbursed from applicable project funds upon Design Development Approval or upon submission of a project application to the Texas Higher Education Coordinating Board (if applicable), whichever is later.

Tasks and Deliverables

1. Authorize the Preparation of Construction Documents (Back to Top)

The Construction Documents phase builds upon the Design Development work by updating the Basis of Design and producing the plans, drawings, and specifications needed to price and build the project. Per BOR Rules and Regulations <u>80402</u> and <u>80404</u>, the authority to release the project architect, engineer, or design-build contractor to begin preparing Construction Documents resides in the following offices or their delegated agents:

- **OCP Managed Projects** The Assistant Vice Chancellor for Capital Projects
- Institutionally Managed Projects The President of the Institution

2. Coordinate Systemwide Insurance Program Coverage (Back to Top)

Projects enrolled in UT <u>Systemwide Insurance Programs</u> should coordinate their activities with the <u>Office of Risk</u> <u>Management</u> to ensure uninterrupted coverage of:

- Builder's Risk Insurance Program
- Rolling Owner Controlled Insurance Program (ROCIP)
- Comprehensive Property Protection Plan (CPPP)

Additional details can also be found in the Construction Risk Insurance Guidance for ROCIP VIII & BR IV.

3. Manage the Project's Construction (Back to Top)

All construction related activities are governed by the laws, regulations, and statutes outlined in the <u>U.T.</u> <u>System Risk Mitigation and Monitoring Plan for Major Capital Projects</u>. Special attention should be given to the requirements established in the Uniform General Conditions for all UT System construction contracts.

Per BOR Rules and Regulations <u>80402</u> and <u>80404</u>, the authority to approve the construction contractor's, design-build contractor's, or construction manager's estimates, guaranteed maximum price, or stipulated sum proposals; sign change orders; and provide general supervision of all Major Projects resides in the following offices or their delegated agents:

- **OCP Managed Projects** The Assistant Vice Chancellor for Capital Projects, executed by the Executive Vice Chancellor for Business Affairs
- Institutionally Managed Projects The President of the Institution

4. Modify or Augment Project Funding Sources As Necessary (Back to Top)

Changes to Funding Sources or Cumulative Funding Increases of Less Than or Equal to 10% of the BOR Approved TPC (Back to Top)

To revise or reallocate project funding sources or to increase total funding by less than or equal to 10% of the BOR approved TPC, the changes must be approved by the following offices or their delegated agents, with copies of the approval documents provided to OCP and the Office of Finance:

- OCP Managed Projects The Chancellor, with the advice of the Deputy Chancellor, the appropriate Executive Vice Chancellor, the Office of Finance, and the institutional president. Draft letters should be submitted to <u>cipsupport@utsystem.edu</u> for review and approval prior to obtaining the president's signature on the letter.
- **Institutionally Managed Projects** The President of the Institution, with the advice of the appropriate Executive Vice Chancellor. Contact <u>cipsupport@utsystem.edu</u> for review if desired.

To provide funding for the increase, the delegated authority may reallocate funding between or among approved projects at the institution if funding for such projects has previously been authorized or is from some other source of approved funds available to the institution.

Cumulative Funding Increases Greater Than 10% of the BOR Approved TPC (Back to Top)

To increase total project funding by more than 10% of the BOR approved TPC, the changes must be approved by the Board of Regents as a Modification to the CIP. Requesting a Modification to an existing CIP Project requires that certain project and administrative activities be completed and that a review and presentation process be conducted with UT System executive officers and staff, leading up to a presentation of the project by the institution president to the Facilities Planning and Construction Committee. The process is as follows:

Documents Required for Requesting a Modification to an Existing CIP Project via BOR Agenda Item:

- 1. President's Agenda Item Request Letter
- 2. Online Project Planning Form
- 3. <u>CIP Project Cost Detail</u>
- 4. Updated Business Plan

Timeline for Document Submission for Requesting a Modification to an Existing CIP Project:

1. Approximately 7 to 8 weeks prior to the BOR meeting (as per deadlines specified for each meeting), the institution will submit to OCP (<u>cipsupport@utsystem.edu</u>):

- a. A president's letter to the appropriate Executive Vice Chancellor (Academic or Health), requesting an Agenda Item for the purpose of a CIP Project Modification and detailing the reason for the modification. Please copy <u>cipsupport@utsystem.edu</u>.
- b. A complete, accurate and final online Project Planning Form, with all information updated to reflect the reason for the modification, as well as the revised scope and TPC.
- c. A complete, accurate and final CIP Project Cost Detail, updated to reflect the revised TPC
- d. An electronic copy of the updated final fully executed Business Plan for Modification of an existing CIP Project to <u>cipsupport@utsystem.edu</u> for distribution to System Offices (OCP, EVC, Business Affairs, Real Estate and Finance). The update should include all revisions necessary to reflect the revised scope and TPC.
- 2. Based on collaboration with the project team and the information provided in the above listed documents, the Office of Capital Projects (OCP) will generate <u>cost benchmarks</u> for similar projects and will incorporate them into the Agenda Item and PowerPoint Presentation.
- 3. OCP will submit the Business Plan to the Board Office for inclusion in BOR agenda material sent to the Regents.
- 4. The party responsible for presenting the modification to the FPCC is determined on a project-by-project basis and will be coordinated by <u>OCP CIP Support</u>.

Resources for Requesting Changes to an Existing CIP Project from the BOR

Resources for UT System Institutions Only (get access <u>HERE</u>):

- What's required when requesting a FPCC / BOR Agenda Item?
- <u>President's Agenda Item Request Letter Template</u>
- Online Project Planning Form
- <u>CIP Project Cost Detail Template</u>
- Finalized Business Plan Template
- President's Power Point Presentation Modification of Existing CIP Project



Project Completion and Close-Out

Tasks and Deliverables

- 1. <u>Coordination of Systemwide Insurance Program Coverage</u>
- 2. <u>Receive Closeout Documents and Warranties</u>
- 3. Achieve Substantial Completion for All Phases of Construction
- 4. <u>Removal from the Capital Improvement Program</u>
- 5. Disposition of Remaining Funds
- 6. Submission to the Texas Higher Education Coordinating Board
- 7. <u>Capitalization of Assets</u>
- 8. Monitor Defects and Warranties

Tasks and Deliverables

1. Coordination of Systemwide Insurance Program Coverage (Back to Top)

At least two weeks prior to an anticipated Substantial Completion (including Partial Substantial Completions), notify the <u>Office of Risk Management</u> (ORM) of the pending Substantial Completion milestone to discuss potential Builder's Risk termination and adding the facility to The UT System's Comprehensive Property Protection Plan (CPPP) insurance policy. Be sure to include ORM in the distribution of the issuance of the Certificate of Substantial Completion.

ORM and the Project Manager should discuss options for terminating/extending the BR coverage in light of anticipated project activity, such as amount and nature of work not yet accepted and/or high risk activity at the project site (HVAC, plumbing, electrical, etc.). Upon termination of Builder's Risk coverage, ORM adds the facility (or portions of the facility) to the Comprehensive Property Protection Program schedule, and responsibility for property insurance on the facility is transferred to the institution.

2. Receive Closeout Documents and Warranties (Back to Top)

Prior to substantial completion, the institution should receive all required closeout documents and warranties from the contractor as per the contractual agreement.

3. Achieve Substantial Completion for All Phases of Construction (Back to Top)

Substantial Completion is defined as the date determined and certified by Contractor, A/E, and Owner when the Work, or a designated portion thereof, is sufficiently complete, in accordance with the Contract, so as to be *U.T. System Guide to Major Capital Project Delivery* 42

operational and fit for the use intended. Projects with multiple phases of construction may have multiple Substantial Completion dates related to various scopes defined in the construction contract.

4. Removal from the Capital Improvement Program (Back to Top)

Once a project achieves Substantial Completion for the last phase of construction, the project will be removed from the Capital Improvement Program.

5. Disposition of Remaining Funds (Back to Top)

After reconciliation, the disposition of remaining funds is determined according to the type of funds remaining as outlined in the <u>UT System Capital Expenditure Policy</u>. Debt funding must be fully expended and/or transferred so that the project can be closed. If remaining RFS or TRB funding is not yet issued, then the authorization simply lapses. However, if remaining RFS or TRB funding is already issued and debt proceeds are on-hand, then those proceeds are either used by the Office of Finance to pay debt service, or they are moved to another fully-authorized Project (with necessary institutional, BOR and/or legislative approval). Remaining PUF funding simply lapses, unless the Chancellor approves moving the funds to another BOR-approved PUF Project. Remaining Institutional Funds are returned to the originating source of the funds.

6. Submission to the Texas Higher Education Coordinating Board (Back to Top)

Pursuant to the <u>Texas Administrative Code Title 19, Part 1, Chapter 17</u>, the Texas Higher Education Coordinating Board may review the following projects or phase of a project at institutions of higher education for Educational and General (E&G) space:

- 1. New construction of building and facilities and/or additions to buildings and facilities having an E&G project cost of \$10 million or greater;
- 2. Repair and renovation projects for buildings and facilities having an E&G project cost of \$10 million or greater;
- 3. Improved real property purchases that the institution intends to include in the E&G buildings and facilities inventory if the purchase price is more than \$1,000,000;
- 4. Energy Savings Performance Contract projects; and
- 5. Projects financed by tuition revenue bonds pursuant to <u>TEC §61.0572 and §61.058</u>.

Educational and General (E&G) Space is defined as: Net-assignable area which is used for academic instruction, research, and support of the institution's mission. It does not include auxiliary enterprise space, space that is permanently unassigned, or space used for operations independent of the institution's mission.

For any CIP project with building costs of \$10 million or more for E&G space, THECB requires institutions submit a completed THECB project application at final completion and once completed project costs are known. Institutions are responsible for submitting this completed project information to THECB no later than 90 days after the project has been added to the THECB institution's Facilities Inventory.

Unless otherwise exempt from THECB review (as described in <u>RULE §17.11</u>), projects should be submitted to the THECB via the <u>Integrated Campus Planning System (ICPS)</u>.

If the project is debt funded (e.g., Permanent University Funds - PUF, Tuition Revenue Bonds – TRB, or Revenue Finance System - RFS), The UT System Office of Finance will issue the debt after the project is submitted to the THECB. The institution may then request reimbursement of funds.

Resources for Submitting Projects to the THECB

<u>THECB Construction Cost Standards</u> <u>Integrated Campus Planning System (ICPS)</u> <u>Integrated Campus Planning System (ICPS) Instructions</u>

7. Capitalization of Assets (Back to Top)

Construction in progress assets are capitalized to the appropriate capital asset categories at the earliest occurrence of

- a. execution of substantial completion contract documents;
- b. occupancy; or
- c. placement of the asset into service.

8. Monitor Defects and Warranties (Back to Top)

Unless otherwise specified or agreed, standard UT System construction contracts require the contractor to repair all defects in materials, equipment, or workmanship appearing within one year from the date of Substantial Completion of the Work. If Substantial Completion occurs by phase, then the warranty period for the Work performed for each phase begins on the date of Substantial Completion of that phase, or as otherwise stipulated on the Certificate of Substantial Completion for the particular phase.



The Capital Improvement Program

Introduction

UT System's Capital Improvement Program (CIP) is a six-year projection of major new construction and repair and rehabilitation projects to be implemented and funded from institution and Systemwide revenue sources. It is a current reflection of the institutions' continuous strategic planning efforts and is subject to modification at any Board of Regents' meeting. Candidate projects are routinely added to the CIP and their statuses are regularly updated to reflect the most current funding, cost, scope, and schedule information.

Major Capital Projects are defined in the Regents' Rules and Regulations <u>Rule 80301: *Capital Improvement*</u> *Program* as any project that meets one or more of the following criteria:

- New building construction with a total project cost of \$10 million or more
- Road, paving, and repair and rehabilitation projects with a total project cost of \$10 million or more
- Any project determined by the Board to be architecturally or historically significant

Detailed information on the current Capital Improvement Program can be found on the <u>Office of Capital</u> <u>Projects Web Site</u>.

Capital Improvement Program Support

The Office of Capital Projects (OCP) provides support for UT System institutions seeking project approvals from the Board of Regents and coordinates project submissions to the Texas Higher Education Coordinating Board. For further information, please contact:

Capital Improvement Program Support

Office of Capital Projects The University of Texas System <u>cipsupport@utsystem.edu</u>



Governing Laws, Rules, and Regulations

Quick Links for Governing Laws, Rules, and Regulations

- Project Compliance and Risk Mitigation
- Building Codes and Standards
- Key UT System Rules, Regulations, and Policies
- <u>External Agencies</u>

Project Compliance and Risk Mitigation (Back to Top)

Facilities belonging to UT System and its institutions are governed, operated, supported, and maintained by the UT System Board of Regents through delegated authority from the Texas Legislature. All parties involved in the management and delivery of the UT System's Capital Improvement Program are charged with maintaining regulatory compliance and mitigating risk throughout the project delivery process.

The laws, rules, and regulations that govern UT System Capital Project delivery are outlined in the <u>U.T. System</u> <u>Risk Mitigation and Monitoring Plan for Major Capital Projects</u>. This plan was developed to help ensure compliance by identifying potential risks and exposures for project stakeholders. An editable version of the template can be downloaded via the link below and further developed as needed.

Resources for Project Compliance and Risk Mitigation

U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects

Building Codes and Standards (Back to Top)

Facilities belonging to The University of Texas System and its institutions are properties of the State of Texas and must comply with State fire, life safety, energy and water conservation standards as outlined in the <u>U.T.</u> <u>System Risk Mitigation and Monitoring Plan for Major Capital Projects.</u>

Building Codes

With the exception of the NFPA standards adopted by the State Fire Marshal and coordination with local fire departments and first responders, facilities belonging to The University of Texas System and its institutions are the property of the State of Texas and are not subject to local building codes. However, failure to meet minimum accepted standards of building construction can result in unsafe conditions and expose UT System

and its institutions to legal claims. All UT institutions are encouraged to coordinate their project planning and construction activities with local safety officials as needed and adopt nationally recognized building standards to ensure adequate safety and provide consistency for design, review, and inspections. The UT System Office of Capital Projects (OCP) has adopted the International Building Code (IBC) as a minimum standard for all projects managed by OCP.

Sustainability Practices

Per Systemwide Policy <u>UTS169</u> *Sustainability Practices*, any new capital or major renovation project will apply, as a minimum, the energy efficiency design and construction principles of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 or the International Energy Conservation Code (IECC) as established by the State Energy Conservation Office (SECO). The planning and design process for all UT System projects must also include consideration of project life cycle cost, recognizing the importance of long-term operations, maintenance, total cost of ownership, budgetary constraints, and programmatic requirements.

With a goal of reducing UT System's non-renewable energy consumption, each institution must evaluate alternative energy designs for all new Major Capital Projects.

Resources for Building Codes and Standards

- U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects
- <u>Systemwide Policy UTS169 Sustainability Practices</u>

Key UT System Rules, Regulations, and Policies (Back to Top)

Regents' Rules and Regulations:

- <u>10501 Delegation to Act on Behalf of the Board</u>
- 20901 Procurement of Goods and Services Contract Management Handbook
- 60101 Acceptance and Administration of Gifts
- <u>80301 Capital Improvement Program</u>
- <u>80302 Building Committees</u>
- 80303 Use of the Available University Fund
- <u>80305 Debt Policy</u>
- 80307 Naming Policy
- 80401 Prevailing Wage Rates
- 80402 Major Construction and Repair and Rehabilitation Projects
- <u>80403 Minor Construction and Repair and Rehabilitation Projects</u>
- 80404 Institutional Management of Major Construction and Repair and Rehabilitation Projects
- 80901 Constitutional and Legislative Restrictions on Capital Improvements

UT Systemwide Policies:

• UTS135 Fire and Life Safety

- UTS137 Historically Underutilized Business (HUB) Program
- <u>UTS142</u> Financial Accounting and Reporting
- UTS145 Processing of Contracts
- <u>UTS168 Capital Expenditure Policy</u>
- <u>UTS169 Sustainability Practices</u>
- <u>UTS199 Management of Major Capital Projects</u>

External Agencies (Back to Top)

All new capital or major renovation projects must meet the current regulatory requirements of the following agencies. (Agency list is not all-inclusive)

State Agencies:

- Texas Commission on Environmental Quality Storm Water
- <u>Texas Department of Health</u> Asbestos
- Texas Department Licensing and Regulation ADA, Boilers, Elevators
- <u>Texas State Fire Marshal</u>
- <u>State Energy Conservation Office</u> (SECO)
- Texas Historical Commission
- Texas Antiquities Committee
- <u>Texas Attorney General</u>
- Public Utility Commission of Texas
- Texas Board of Professional Engineers

National Agencies:

- US Fish and Wildlife Service Threatened & Endangered Species
- Army Corps of Engineers Wetlands and Flood Control
- International Boundary and Water Commission



Procurement of Goods and Services

Quick Links for Procurement of Goods and Services

- <u>Contract Compliance and Risk Mitigation</u>
 - Construction Contract Delivery Methods
 - <u>Construction Manager at Risk (CM-R)</u>
 - Design-Build (D-B)
 - Competitive Sealed Proposal (CSP)
- Systemwide Contracts
- <u>Systemwide Insurance Programs</u>

Contract Compliance and Risk Mitigation

The procurement of goods and services necessary to complete Major Capital Projects is governed by various laws, regulations, and statutes, many of which are outlined in the <u>U.T. System Risk Mitigation and Monitoring</u> <u>Plan for Major Capital Projects</u>. Additionally, all UT System institutions are required by the Texas Education Code to develop and maintain a Contract Management Handbook that provides consistent contracting policies and procedures for their institution.

Per BOR Rules and Regulations, construction contracts and contracts with architects, engineers and technical service providers shall comply with guidelines issued by the <u>UT System Administration's Office of General</u> <u>Counsel</u> (OGC) and shall be written on a standard form approved by the Office of General Counsel. Payment and performance bonds, when required by law for contracts, shall be on a standard form approved by OGC.

Questions regarding the standard contracts and procedures needed for procuring construction, architectural, and engineering services should be directed to the appropriate resources listed below:

For OCP Managed Projects

• Contract Administrator at the UT System Contracts and Procurement Office

For Institutionally Managed Projects

- UT System Office of General Counsel Construction Law web page
- UT System Office of General Counsel Contracts and Contracting Resources web page
- The institution's contracting and procurement office

Resources for Contract Compliance and Risk Mitigation

- U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects
- <u>UT System Office of General Counsel</u>
- <u>UT System Office of General Counsel Construction Law</u>
- UT System Office of General Counsel Contracts and Contracting Resources
- UT System Office of General Counsel Systemwide Contracts
- Texas Education Code Subchapter T. Construction and Repair of Permanent Improvements

Construction Contract Delivery Methods (Back to Top)

<u>Subchapter T of the Texas Education Code</u> authorizes institutions to select from several alternate contracting methods for procuring construction services. To help determine which method provides the best value for the institution, the following sections offer general descriptions, uses, and advantages of the three delivery methods most commonly used for UT System Major Capital Projects.

Construction Manager at Risk (CM-R) (Back to Top)

<u>Section 51.782 of the Texas Education Code</u> defines a Construction Manager-at-Risk (CM-R) as a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for construction, rehabilitation, alteration, or repair of a facility at the contracted price as a general contractor and provides consultation to Owner regarding construction during and after the design of the facility.

The CM-R delivery method is the most widely utilized for UT System projects to date. In this method, the Owner holds both the Project Architect/Engineer and construction contractor prime agreements, and the procurement of the construction contractor (Construction Manager at Risk) occurs during the design phase when pre-construction services from the CM-R add tangible benefit to the designers. This method supports multiple design and construction stages as the overall project design is coordinated. This allows the project to be separated into sequential work packages that support engaging the subcontractor market earlier in the overall delivery of the project.

The initial contract with the CM-R establishes the lump sum Pre-Construction Phase fee, defines percentage values for General Conditions and Construction Phase Fee and a not-to-exceed value for Owner's Construction Contingency and Construction Manager at Risk's contingency. General Conditions, CM-R fee, and CM-R contingency are further defined and contracted along with values for Cost of Work in the Guaranteed Maximum Price proposal (GMP). The CM-R contingency is available to the contractor to address fluctuations in the subcontractor market for material and labor cost increases (escalation) and to address refinements in the design that occur after execution and Owner's acceptance of the GMP. The CM-R's use of Owner's and Construction contingency shall be approved by the Owner via Change Order. After buy-out, savings and funds remaining in the GMP revert to the Owner.

Pre-Construction Phase Fee covers costs for CM-R participation during the design phase to review constructability and develop cost and schedule alternatives.

The CM-R Guaranteed Maximum Price proposal (GMP) is typically submitted at the end of Design Development or early in the Construction Document phase and establishes the overall not-to-exceed value for the work as defined by a specific set of documents provided by the Project Architect/Engineer. The GMP includes detailed information on project scope, estimated costs, and construction schedule. The GMP will also include a defined amount for Owner's Construction Contingency, and these monies are reserved to address costs for unforeseen conditions that are encountered during construction and to address Errors & Omissions (E&O) in the design and construction documents.

As stated, the Owner manages the contract with the Project Architect/Engineer and architectural and engineering fees are included by the Owner in the budget for Associated Building Costs.

Design-Build (D-B) (Back to Top)

<u>Section 51.780 of the Texas Education Code</u> defines Design-Build (D-B) as a project delivery method in which the detailed design and subsequent construction is provided through a single contract with a Design-Build firm; a team, partnership, or legal entity that includes design professionals and a builder.

The Design-Build delivery method is used for projects that have accelerated schedule requirements, and this method is typically used for delivery of projects that are well-defined in the commercial construction market – housing, parking, utility production facilities, etc. Nonetheless, this method can be used for any project type and has been used for delivery of research and clinical space. This delivery method more fully relies on expertise from the commercial construction sector and should have the least amount of direct Owner participation in design refinements and changes.

In this delivery, the D-B team is procured based on a scope of work defined by the Owner, and the D-B contractor proposes a Pre-Construction Phase Fee that includes architectural and engineering fees in the overall proposal. Although the initial scope statement is defined by the Owner, the D-B contractor is responsible for completion of design and creation of the construction documents, and the Owner manages a single prime agreement. Any Owner requested changes are contracted to the Project Architect/Engineer through the D-B contactor.

Similar to the CM-R delivery, the initial contract with the D-B establishes the lump sum Pre-Construction Phase fee which includes all design phase costs, percentage values for General Conditions and Construction Phase Fee and a not-to-exceed value for Owner's Construction Contingency. General Conditions, D-B fee, and D-B contingency are further defined and contracted along with values for Cost of Work in the Guaranteed Maximum Price Proposal (GMP). The D-B contingency is available to the contractor to address fluctuations in the subcontractor market for material and labor cost increases (escalation) and to address refinements in the design that occur after execution and Owner's acceptance of the GMP. An amount of Owner's Construction Contingency is typically included to address costs for unforeseen conditions. The D-B's use of Owner's and Construction contingency shall be approved by the Owner via Change Order. E&O costs are the responsibility of the D-B contractor. After buy-out, savings and funds remaining in the GMP revert to the Owner.

Competitive Sealed Proposal (CSP) (Back to Top)

The Competitive Sealed Proposal (CSP) delivery method most closely compares to the traditional design-bidbuild delivery in that lump sum proposals based on a completed set of construction documents are submitted to the Owner by General Contractors interested in procuring the work. The Owner's best value determination does consider qualifications in conjunction with price, and the selection of a contractor is not based on lowest price alone. Contingency is held by the Owner outside of the contractor's CSP Agreement.

Systemwide Contracts (Back to Top)

OCP and ORM manage competitively procured contracts for use by all UT System institutions for the provision of miscellaneous and technical support services. For institutionally managed projects, the institutions will manage work orders and payments against these contracts locally after the proposal is reviewed and approved for compliance to the Master Agreement.

Inquiries regarding the use of Systemwide contracts should be directed to the appropriate contact for the services available below:

OCP Managed Contracts - Contact the Contract Administrator

- Building Envelope Review/Testing
- Code Compliance Review Services
- Miscellaneous Technical Commissioning Services
- Construction Audit and Miscellaneous Audit Services
- Miscellaneous Forensic Engineering Services
- Miscellaneous Geotechnical Engineering and Materials Testing Services
- Construction Inspection Services
- Structural, Civil, Mechanical, Electrical, and Plumbing Engineering Review Services
- Tower Crane Inspection Services
- Miscellaneous Project Management and Construction Support Services
- Professional Surveying Services
- Testing, Adjusting, and Air Balance Services

ORM Managed Contracts - Contact the Associate Director, Risk Control

- Construction Photo Documentation Services
- Hazardous Waste and Environmental Services

Information on additional Systemwide Contracts can be found on OGC's Systemwide Contracts Web Page.

Resources for Systemwide Contracts

- Office of General Counsel Systemwide Contracts
- <u>UT System Office of Risk Management</u>
- <u>Contact the Contract Administrator</u>
- <u>Contact the Associate Director, Risk Control</u>

Systemwide Insurance Programs (Back to Top)

The <u>Office of Risk Management</u> (ORM) manages a variety of construction related <u>Systemwide Insurance</u> <u>Programs</u>, which provide robust coverage and achieve economies of scale by pooling resources and expertise from across the UT System. Participation in these programs requires the managing authority to use particular contract language and Specification documents and to complete certain tasks and deliverables throughout the project duration. Contacts and further guidance on the programs listed below can be found on the ORM <u>Systemwide Insurance Programs</u> web site and in the <u>Construction Risk Insurance Guidance for ROCIP VIII</u> <u>& BR IV</u>.

Builder's Risk Insurance Program

The Master Builder's Risk Insurance Program provides coverage for physical loss or damage to buildings or other structures while under construction or renovation at the University of Texas System. The program covers the work being completed, contractor or owner furnished equipment, and damage to existing property for designated construction projects. Benefits of the program include consistency of coverage terms and conditions, cost savings, and additional coverages such as soft costs and delay in completion.

Comprehensive Property Protection Plan (CPPP)

The Comprehensive Property Protection Plan (CPPP) finances catastrophic property losses for The University of Texas System and its Institutions. The CPPP consists of two programs:

- Fire and All Other Perils Program Insures against risks of direct physical loss or damage to UT System property. A funded reserve is in place to cover the policy deductible.
- Named Windstorm and Flood Program (Wind & Flood) Insures against risks of direct physical loss or damage to UT System property caused by named windstorm and or storm surge flood events. The Wind and Flood deductible is supported by a funded reserve and a mechanism to issue debt.

Rolling Owner Controlled Insurance Program (ROCIP)

The Rolling Owner Controlled Insurance Program (ROCIP) program provides workers' compensation, general liability and excess liability insurance coverage for all contractors working on designated construction projects for The University of Texas System. Benefits of the program include lower insurance premiums due to bulk purchasing, consistency of insurance provided on each project, enhanced safety and loss control, and cost savings.

Resources for Systemwide Insurance Programs

- <u>UT System Office of Risk Management</u>
- <u>UT System Systemwide Insurance Programs</u>
- <u>Construction Risk Insurance Guidance for ROCIP VIII & BR IV</u>



UT System Management Resources

Access to Resources for UT System Institutions

Employees of UT System institutions can access the source documents, templates, and other resources below to support the successfully delivery of their Major Capital Projects. Access is already provided to anyone who has previously accessed UT System Administration Office 365 resources with an account from one of our institutions. First time users can <u>follow this link for instructions on gaining access</u>.

Quick Access to Resources and Links

Current Resources

Guidelines and Specifications

- Owner's Design Guidelines
- <u>Standard Front-End Specifications</u>
- <u>Technical Specifications</u>
- <u>Campus Master Planning and Approval Guidelines</u>

Procurement

• Prevailing Wage Rates

Project Approvals

- <u>0-Minor Project Templates</u>
- <u>1-Definition Phase Templates and Info</u>
- <u>2-BOR Agenda Item Requests</u>
- <u>3-AE Related Memo Templates</u>
- <u>4-Contractor Related Memo Templates</u>
- <u>5-R&R DD Approval Memo Templates</u>
- <u>6-TPC or Funding Revision templates</u>
- <u>7-Other Miscellaneous Memo Templates</u>

Project Management

- <u>General</u>
- Definition Phase
- <u>Design</u>
- <u>Construction</u>
- <u>Warranty</u>

Risk Mitigation and Monitoring

Legacy Resources (OUTDATED)

- <u>Campus Master Planning Guidelines</u>
- Construction Inspection Manual
- Facilities Programming Guidelines
- Project Management Manual
- <u>Security Planning and Design Guidelines</u>

Current Resources (Back to Top)

These sections provide current source documents, templates, and links to resources to support the successfully delivery of Major Capital Projects for UT System and its institutions:

<u>Guidelines and Specifications</u> – Source documents for guidelines and specifications used on projects managed by the Office of Capital Projects. Except as noted, the guidelines and specifications may be edited as necessary to better serve the needs and requirements of each institution and project.

- <u>Owner's Design Guidelines</u> The Owner's Design Guidelines are a set of supplemental requirements to the A/E contract describing the preparation of the A/E's contract documents. They are referenced and incorporated in the standard contract.
- <u>Standard Front-End Specifications</u> Original source documents for the front-end specifications for the construction contract. NOTE: The Project Insurance and Project Safety specs are required for participation in the ROCIP program and should not be modified.
- <u>Technical Specifications</u> Original source documents for Standard Technical Specifications used on projects

<u>Procurement</u> – Miscellaneous documents and links supporting procurement of goods and services under UT System contracts.

• <u>Prevailing Wage Rates</u> – Current Prevailing Wage Rates of per diem wages in the locality in which the project is to be performed for each craft or type of worker needed to execute the contract.

<u>**Project Approvals**</u> – Miscellaneous documents, templates, and links supporting required project approvals at various stages for UT System Projects.

<u>**Project Management**</u> – Miscellaneous documents, templates, and links supporting project management at various stages for UT System Projects, including:

- <u>General</u>
- Definition Phase
- Design
- <u>Construction</u>
- <u>Warranty</u>

<u>Risk Mitigation and Monitoring</u> - The laws, rules, and regulations that govern UT System Capital Project delivery are outlined in the U.T. System Risk Mitigation and Monitoring Plan for Major Capital Projects. This

plan was developed to help ensure compliance by identifying potential risks and exposures for project stakeholders. An editable version of the template can be downloaded for further developed as needed.

Legacy Resources - OUTDATED (Back to Top)

These outdated resources were issued by the former Office of Facilities Planning and Construction (OFPC) as operational and policy manuals for OFPC staff. While **these documents are outdated and no longer being updated**, they may be downloaded and edited as desired to serve the needs of each institution, organization, and project. Please note than any policies, templates, forms, and letters presented in this section are outdated and are provided for reference and example only. The latest documents can be found in the Current Resources Section.

<u>Campus Master Planning Guidelines</u> – These guidelines were created to aid the institutions of The University of Texas System in planning, documenting, and communicating the Campus Master Plan to stakeholders and administrators.

<u>Construction Inspection Manual</u> – This manual describes the policies and procedures for the effective management of all major capital improvement and was used by all OFPC Construction Inspection staff.

<u>Facilities Programming Guidelines</u> – These guidelines were created to aid the institutions of The University of Texas System in identifying a project's scope, including all functional and operational requirements of the work to be designed.

<u>Project Management Manual</u> – This manual describes the policies and procedures for the effective management of all major capital improvement and was used by all OFPC Program Management staff.

<u>Security Planning and Design Guidelines</u> – These guidelines were created to aid the institutions of The University of Texas System in assessing potential threats and planning security provisions for their capital projects.

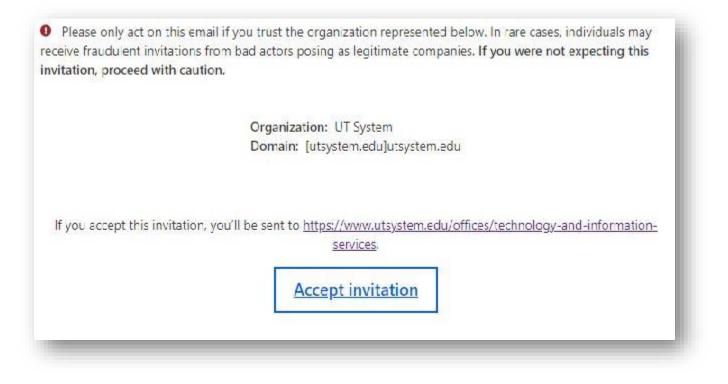


Gaining First Time Access to Resources

Anyone who has previously accessed UT System Administration Office 365 resources with an account from a UT System Institution should already have access. If you have never accessed System Administration resources as a guest before, we have created an automated process for gaining access. **Note: You must make your request while using a UT System institutional email address.**

Instructions for First Time Users

- 1. Send an email to <u>utguest@utsystem.edu</u> from your institutional email address. The email does not need a subject or any content. It is an automated process that only needs the email to originate from a valid UT System Institution email address.
- 2. After their email is verified, you will receive an automated reply like the one below asking you to accept an invitation to join our tenant with a guest account.



- 3. You will then need authorize our tenant to receive information from your account.
- 4. After accepting, you will be taken to a confirmation page.

UNIVERSITY OF TRIAL PROP	
efftest@utsystemlab.com	
Review permissic	ons
U UT System utsystem.edu	u
This resource is not shar	ed by Microsoft.
The organization UT Syste	m would like to:
✓ Sign you in	
✓ Read your name, ema	ail address, and photo
You should only accept if you tro you allow this organization to ac create, control, and administer a policies. UT System has not pro statement for you to review. U about your access. You can remo https://myapps.microsoft.com/u	ccess and process your data to in account according to their ovided a link to their privacy IT System may log information ove these permissions at
Cancel	Accept

This page will let you know that you may need to wait up to 15 minutes before your newly created account is added to the security group. You can view the confirmation page here. Once you have been added, you should be able to access these resources automatically going forward.

Additional Help

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Guest users can request assistance by emailing <u>utguestaccess@utsystem.edu</u>



Capital Resource Dashboards

Introduction

The Office of Capital Projects is committed to transparency and to providing easy access to the most current resources needed to successfully deliver and sustain the capital programs and assets of UT System institutions. OCP maintain the dashboards below to assist all stakeholders in the planning and assessment of our capital resources. Each dashboard can be accessed by clicking on the links or the pictures below.

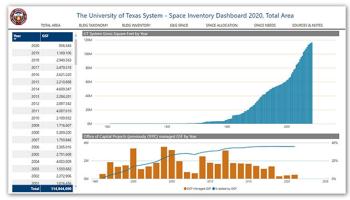
<u>The Capital Improvement Program</u> <u>Dashboard</u>

There are six visualization pages on this report. The report includes information on current CIP projects, CIP funding sources, CIP project schedules, projects in the definition phase (pre-CIP), all active projects (both pre-CIP and CIP projects), and the data sources used.



UT System Space Inventory Dashboard

There are seven visualization pages on this report. The report includes information on total systemwide area by year, areas by taxonomy, space by institution, systemwide E&G space, space allocation by THEC category, actual space vs. projected space needs, and the data sources used.



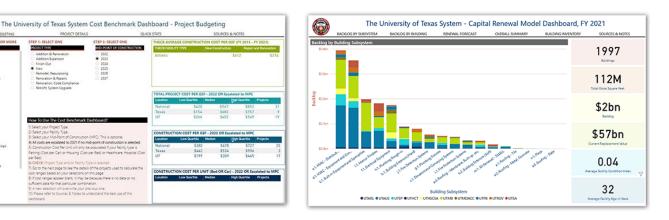
Construction Cost Benchmarks Dashboard

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There are four visualization pages on this report. The report includes instructions on selecting project types with summary results, the details of the projects selected, a statistical summary of project cost vs gross square feet for the selected project types, and the data sources used.

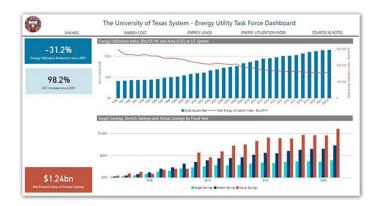
Capital Renewal Model Dashboard

There are six visualization pages on this report. The report includes information on deferred maintenance backlogs by subsystem, renewal forecasts by institution and by subsystem, backlogs by building by campus, an overall summary, building inventories by campus, and the data sources used



Energy Utility Task Force Dashboard

There are five visualization pages on this report. The report includes historical information on energy savings, cost, usage by type, and the energy utilization index, and the data sources used.





Revision History

Date	Revision Summary
09/07/2017	Original Publication
11/01/2018	Removed link to outdated policy: UTS142.5 Policy for Capitalization of Interest Cost
08/24/2021	Updates to the Major Capital Project Approval Process Chart, Major Capital Project Approval Authority Chart; Removed references to the outdated Campus Master Planning Guidelines, Facilities Programming Guidelines, and Security Planning Guidelines
04/12/2022	Added UT System Management Resources pages; Added Capital Resource Dashboard pages; Updated Links
10/01/2023	Added Campus Master Planning and Approval section.
08/21/2024	Added references to Stephen F. Austin State University, new systemwide policy UTS199 Management of Major Capital Projects, and updated links
09/16/2024	Added section on Management Policy and Authority
04/03/2025	Updated Campus Master Planning and Approval Guidelines