

Board of Regents of the University System of Georgia

Real Estate and Facilities

MASTER PLAN GUIDELINES

OCTOBER 2018



UNIVERSITY SYSTEM OF GEORGIA

This document updates scope, process, and approach expectations for master planning projects with University System of Georgia (USG) institutions. Its potential users include consultants pursuing planning projects with USG, and institutions' facilities personnel or others who maintain datasets utilized in master planning.

CONTENTS

INTRODUCTION	1
MASTER PLAN WORK PROGRAM	3
ADDITIONAL PHYSICAL PLANNING STUDIES	8

INTRODUCTION

MASTER PLANNING AND THE FRAMEWORK APPROACH

Since 1997, University System of Georgia (USG) institutions have undertaken campus master planning in accordance with the USG Master Planning Template (1997 Template). The 1997 Template was a comprehensive document essentially designed to create a new master plan from the ground up, with a scope including exhaustive technical documentation and dataset creation. USG and its need for effective physical and capital planning have evolved profoundly since 1997. Accordingly, these new master planning guidelines intend to move USG toward a model that:

- relies on institutionally maintained data, broad stakeholder engagement, and consultant insight;
- analyzes and integrates system frameworks to improve campus functionality and sustainability; and
- provides strong capital-prioritization structures while maintaining long-term, project-specific flexibility.

The resulting plans should establish a long-term framework- and principle-based vision that:

- guides future decision making;
- provides clear and financially feasible near-term priorities;
- establishes concrete criteria for future planning decisions; and
- promotes stewardship of campus assets, especially historic resources.

Physical planning must integrate both financial and academic considerations: academic integration grounds the strategic plan's aspirations within physical realities of the campus, while financial integration helps institutions set realistic capital investment goals.

WHEN IS THE RIGHT TIME TO UNDERTAKE A MASTER PLAN?

USG Real Estate and Facilities (REF) generally recommends that institutions formally update their master plans in approximately 10-year intervals. A master plan process can help resolve lack of clarity around major campus systems, such as transportation or academic program distribution, which makes it difficult to move forward on necessary projects or justify specific capital priorities within an institution-wide context. A master plan process can also help institutions test physical implications of major new initiatives or shifting circumstances, especially those connected to changes in leadership or mission, strategic plan updates, campus acquisition, or institutional consolidation.

MASTER PLAN PROCUREMENT

REF recommends that institutions engage external consultants for master planning. Master plans usually require broad input and buy-in in order to be successful, and consultants, in addition to providing design insights and expertise, can serve as a neutral party to facilitate honest dialogue and mediate issues that might be challenging for internal constituents.

Institutions shall engage REF's Director of Planning at the beginning of the procurement process to solidify scope, fee, data availability, and timeline. *REF shall be consulted even in cases where fees are within the institution's delegated authority.*

DATA INPUTS FOR MASTER PLANNING

The 1997 Template assumed that consultants would verify and update datasets with each planning engagement; since then, data maintenance responsibilities have shifted to individual institutions. Accurate data provides an essential master plan foundation and, for campuses that struggle with data accuracy and maintenance, we outline essential datasets below. The items described below are not an exhaustive list: institutions should provide consultants with additional data that they trust, and consultants should request additional datasets they find useful. *It is the consultants' responsibility to incorporate relevant, available data into analysis and scenario development, even if its use exceeds the basic scope outlined in these guidelines.*

DATA FROM REF

Institutional master planning shall incorporate system-wide assumptions and methodologies so that resulting priorities can be easily justified and understood. To ensure consistency, REF staff will provide the following information:

Enrollment projections

Institutions and consultants shall work with REF staff to develop a range of enrollment trajectories, based on system-wide projections, that ensure the creation of a sound plan.

Space Data

The space utilization methodologies and metrics that USG began developing in 2011 provide the foundation for space-needs

assessment in master planning. These focus on opportunities for improved utilization and efficiency versus more traditional normative space needs projections. Institutions submit data to USG on a semi-annual basis, which facilitates system-wide analysis. REF staff will provide high-level analysis for consultants to incorporate into master planning efforts. REF staff will also provide the following files from institutional submissions:

- Building inventory
- Room inventory
- Course schedule
- Employee headcount and FTE
- Student headcount and FTE

If institutions question the validity of these datasets, they should consult with REF staff to determine appropriate strategies prior to engaging master planning consultants.

It is the consultant's responsibility to work within USG's methodological framework when performing additional in-depth analysis, especially when justifying priority projects or net increases in square footage.

DATA FROM INSTITUTIONS

During the procurement process, REF staff will work with institutions to determine the availability and accuracy of the following highly recommended datasets, as this may influence the master plan scope and fee. In certain cases, targeted data collection within or prior to the master plan may be appropriate.

- Campus base map file in CAD (.dxf or .dwg) or GIS (including campus boundary, topography, buildings, sidewalks, parking lots, utilities, trees, and other relevant site features)
- Parking counts
 - Number of spaces by lot and by type (student, faculty, commuter, etc.)
 - Parking occupancy counts at key times
- Building floor plans in CAD
- 3D building and basemap files, if available (in SketchUp, 3ds Max, Revit, etc.)
- Facility condition assessment reports (FCAR)
- Relevant planning and design documents, including the current strategic plan, previous master plans, campus historic preservation plans (CHPP), district or academic unit physical plans, building design studies, landscape design studies, stormwater master plans, etc.
- If applicable, additional detail for datasets provided by REF staff. For space data, this may include a departmental assignment

field in the room inventory, meeting room schedule records, occupancy tracking for open labs or study spaces, leased-space information, etc.

Consultants should request any additional files they find useful in analysis and should be prepared to describe their analysis approaches and methods for gathering additional data (through surveys, etc.) during the procurement process. Examples of additional data include:

- Sponsored research expenditures, by primary investigator (PI), departments, and year
- PI research lab locations
- Core facility locations
- Course enrollment information by student (for academic adjacency analysis)
- Traffic counts
- Geocoded accident data
- Geocoded crime data
- Hazard vulnerability analysis for natural disasters
- Bicycle infrastructure (designated lanes, parking rack locations, etc.)
- Shuttle routes and schedules
- Campus accessibility issues
- Residential beds and occupancy rates per building, including unit typology, and occupant student year
- Anonymized student and employee address data
- Utility and communications infrastructure condition and capacity data
- Sustainability data and policies, related to:
 - Building energy use intensity (EUI)
 - Transportation demand management
 - Renewable energy
 - Waste management, composting, and recycling
 - Solar and wind modeling, related to building location and orientation
 - Stormwater data (detention volume capacity by basin, etc.)
- Historic preservation data from CHPP, including survey inventory results, building treatment recommendations, historic landscape analysis, and archaeology resources

PUBLICLY AVAILABLE DATA

Consultants should investigate publicly available data to inform the planning process. This can include historic aerials, USGS ecological data, and other sources not explicitly detailed here.

MASTER PLAN WORK PROGRAM

This work program outlines the major scope elements involved in master planning efforts. During procurement, institutions should review this work program and determine if any additional items should be added to the scope of their plan. Scope clarification examples include: determining which institutional landholdings will be included in the master plan, and to what extent; identifying how data availability affects potential areas of analysis; clarifying desired deliverables in specific areas, especially those not outlined in this document; etc.

PHASE I: PROJECT ORIENTATION

This phase orients the consultant team to the institution and establishes a clear project structure.

Project Logistics

This work element establishes clear structures for project communication, governance, engagement, and timeline.

- Establish an appropriate committee structure that provides both clear guidance from institutional leadership and broad institutional perspectives.
- Establish communication channels between the institution, consultant team, and the REF
- Determine planning scope for various campus landholdings and leased facilities (especially important for multi-campus institutions). For example, it may be appropriate to assess financial impacts of leased facilities or analyze academic delivery patterns for remote sites without necessarily including physical analysis and site planning.
- Solidify a master plan schedule including consultant on-campus dates and REF review dates
 - The team shall brief REF at least twice during the planning process. REF may choose to assemble an interdisciplinary team to evaluate specific proposals. The key points for engagement are:
 - A briefing early in Scenarios (Phase III) that provides a summary of key analysis and early scenarios ideas
 - A briefing during Implementation (Phase IV) that provides a summary of scenarios investigations and describes implementation considerations, especially those that will influence likely near-term capital requests.
 - The schedule should include a draft stakeholder-engagement plan. This will include engagement such as initial stakeholder interviews, online surveys, public forums, etc.

Project Context

This work element allows the planning team and planning committee to gain a comprehensive understanding of the institution's mission, educational goals, and the physical characteristics that will inform stakeholder engagement and analysis investigations.

- Review the mission and current strategic plan.
- Review existing planning documentation, including previous master plans, CHPPs, and design studies.
- Carry out preliminary comprehensive physical reconnaissance of campus buildings, grounds, facilities, infrastructure, parking and circulation to identify issues and objectives.

Initial Stakeholder Engagement

This work element will reveal recurrent themes and issues that should be addressed in master plan development.

- Engage stakeholders, including institutional leadership, faculty, staff, students, and external constituents. Topics to explore should include, but are not limited to, the following:
 - Academic
 - Strategic plan
 - Academic organization, existing program offerings, and key areas of growth or change
 - Accreditation issues related to facilities
 - Research and Outreach
 - Pedagogical practices
 - Anticipated new program offerings
 - Cultural
 - Institutional and community decision-making processes and dynamics that may inform future stakeholder engagement
 - Factors that make the institution unique
 - Planning policies and procedures
 - Student life and residential life characteristics and goals

- Financial
 - Capital renewal investment
 - Debt that will influence building reuse
 - Funding and endowment characteristics
- Physical
 - Landscape / ecological issues
 - Transportation patterns and conflict points
 - Building suitability and condition
 - Utility usage, capacity, and condition
 - Environmental stewardship and sustainability policies
 - Safety & security issues
 - Accessibility issues

PHASE I—DELIVERABLES

- Basemap graphics (3D and plan view) for institutional review and verification
- Presentation that orients the committee(s) to the master planning process
- Meeting notes

Note: Much of the information collected during Phase I will appear in Phase II deliverables

PHASE II: ANALYSIS

In this phase, the consultant team develops a comprehensive understanding of existing campus conditions and dynamics. Data sources should include observations and information collected during Phase I, public data sources, and institution-supplied data. Consultants should document qualitative observations where appropriate.

Multi-campus Context

- If applicable, incorporate multi-campus dynamics and resource distribution patterns into all areas of analysis. Areas of investigation may include inter-campus transportation options, enrollment and academic program distribution, faculty and employee distribution, access to specialized resources, residential patterns, student-life amenities, etc.

Land Use

- Map and describe land use patterns including (where applicable) academic, residential, athletic / recreation, agriculture, medical, support, and conservation districts.

- Document campus density patterns, including building coverage and floor-area ratios (FAR) in key districts to inform future campus character / land stewardship scenarios.

Landscape and Ecology

- Assess the natural systems on campus. Elements should include topography, stormwater system features, tree cover, etc. Incorporate broader system observations, beyond campus boundaries, where appropriate.
- Document areas prone to natural disasters such as flooding / storm surge, wind damage, or other weather events, based on existing data and/or stakeholder interviews. Identify flood plains, wetlands, etc. that will affect land use.
- Assess and map the campus open space framework, including edges, entry points, gathering places, building setbacks, circulation corridors, landmarks, pedestrian circulation, streets, etc. Incorporate broader system observations, beyond campus boundaries, where appropriate. (Some landscape observations will overlap with circulation and transportation observations.)
- Document and map open space areas by character and use. Assess the current landscape hierarchy.
- Assess the quality and condition of open spaces, identifying key characteristics and materials that contribute to the institution's landscape identity.

History

- Record any key historic elements (documented in a campus historic preservation plan) that the master plan will need to preserve.
- Investigate patterns of historic campus development. This can include describing natural or built patterns in historic aerials, mapping campus development, charting enrollment patterns and total square footage, etc.
- Identify buildings by year of construction. If the master plan recommends demolition or major changes to facilities at least 50 years old, ensure that recommendations comply with the CHPP. If the CHPP is out of date, additional historic assessment may be required.
- Review historic landscape resources identified in the CHPP.

Circulation and Transportation

- Map and establish a hierarchy for current pedestrian and bicycle networks, including major off-campus connections or gateways.
- Map shuttle and public transit services including routes and stops. Include frequency and ridership where information is available.

- Map and establish the current hierarchy for on-campus vehicular circulation and campus entries.
- Map primary service routes, emergency access routes, and major building service points.
- Document transportation issues and modal conflict points, especially those where vehicular traffic affects pedestrian safety.
- Map existing on-campus parking facilities and identify the number of spaces allocated to students, faculty, staff and visitors. Document present utilization rates of these parking facilities (if data is available).
- Document significant accessibility challenges, especially areas where slope makes navigation difficult.
- Document the existing institutional parking policy and management approach.

Community and Regulatory Context

- Describe and map existing political and jurisdictional entities surrounding the institution, along with any regulations that may effect on-campus development.
- Assess adjacent land use in adjoining neighborhoods and highlight character, issues and concerns (if applicable).
- Inventory major recreation assets or trail corridors that may influence campus development, even those not owned by the institution.
- Locate major commercial districts within walking distance of the campus.

Real Estate

- To the extent that data is available, map institutional land holdings, differentiating institution-owned, institution-leased, foundation-owned, and foundation-leased properties.
- Evaluate impact of leased facilities on the institution's operating budget, including cost per square foot if available.

Academic Programs

- Describe adjacencies and relationships between academic programs. Document current program administrative, instructional, and research locations.
- Document potential areas of academic growth or change based on strategic plan directives.
- Describe research and sponsored-funding patterns. Document and map core facilities. (This task is data dependent.)
- Describe existing library facilities and operations, and the philosophy of library services.

Building Condition and Suitability

- Document and map building condition information, using campus data where available. Evaluate functional suitability of space for current uses, with a focus on the long-term viability of specialized facilities, especially science-intensive buildings.

Building Use and Utilization

- Document and map space distribution by space type, academic unit, etc. Analysis should use codes aligned with the Facilities Inventory and Classification Manual (FICM) and USG methodology.
- Validate and advance space analysis metrics provided by REF staff, aligned with USG methodology .
- Investigate reasons for especially high or low utilization of key rooms and buildings.

Student and Residential Life

- Document and map residential life patterns by number of beds per building, typology, student year, occupancy rates, etc. Include fraternities and sororities in the analysis. Indicate owned, P3, and PPV buildings.
- Evaluate major off-campus residential patterns and their impacts on other systems such as transportation.
- Document and map locations for student services and student life amenities, including food service, student center, bookstore, and student health center.
- Document any existing debt that will affect building reuse.
- Document student life and residential life goals that will influence future development.

Athletics and Recreation

- Document and map on-campus recreational sites, intercollegiate athletic facilities, intramural athletic facilities, and informal recreation spaces.
- Describe current control, management, and scheduling of facilities.
- Assess the adequacy of the existing intercollegiate sports and recreational facilities. Assess athletic facility compliance with NCAA and Title IX standards, if relevant.

Utilities

- Map existing utility corridors (steam, chilled water, potable water, sanitary, natural gas, electrical, communications, etc.) and document potential issues of capacity and redundancy in the current system (based on existing data / stakeholder knowledge)

- Describe and map stormwater facilities and natural features, including detention and retention structures, drainage pipe systems, natural water features, etc.
- Describe existing stormwater management issues including impervious surface patterns, land use limitations, protection of natural drainage features, and other requirements.
- Describe usage patterns, including building EUI and water consumption, using existing data.

Campus Services and Support

- Document key facilities issues for support services not outlined above such as business services, student services, enrollment management, alumni relations, development, public safety, specialty shops, etc.
- Document environmentally influenced safety concerns.

PHASE II—DELIVERABLES

- Graphics-driven presentations for each campus visit
- Meeting notes

PHASE III: SCENARIOS

The Scenarios phase integrates key analysis findings and posits future development concepts. The assessment of future ideas should evaluate how proposed changes will affect multiple systems: for this reason, key tasks are not differentiated by topic area, as they are in Analysis. This phase establishes long-term framework ideas and begins to test near-term capital priorities that address key needs. Additional focused analysis may be required to validate specific scenario concerns—this is especially true for space utilization. Before moving into the Implementation phase, the team must gain consensus and leadership approval on a long-term vision that will enable an in-depth exploration of near-term implementation considerations during the subsequent phase.

KEY TASKS IN ASSESSMENT OF ALTERNATIVES

These integrative, primary tasks are essential master plan components:

- Draft and refine planning principles to guide future development.

- Integrate analysis findings to improve the clarity and functionality of landscape, circulation, transportation, and parking systems. Propose framework adjustments that will clarify campus organization, promote safety and accessibility, and organize future development.

- Propose a long-term land-use framework that maintains its validity with a significant range of enrollment scenarios. Propose density guidelines and/or development sites that promote near-term placemaking and retain adequate long-term growth capacity. This should include zones for academic, residential, medical, conservation, support, athletic / recreation, and agricultural uses (where applicable); and location guidelines for key amenities, especially student life services such as dining.
- Explore near-term building renovation, construction, and/or demolition options that meet key academic or student life needs, improve space efficiency, address deferred maintenance concerns, acknowledge sustainability considerations, and respect historic campus resources.
- Create planning-level cost estimates to assess realistic near-term investment possibilities and evaluate key priorities.

SECONDARY TASKS IN ASSESSMENT OF ALTERNATIVES

The plan should also address these secondary tasks to inform the primary tasks identified above. The depth of these investigations may vary by institution depending on analysis findings and master plan priorities. The team may choose to advance additional elements investigated during analysis and not articulated below.

- Develop sections, sketches, renderings, district plans, etc. to illustrate potential interventions in key locations.
- Establish conservation corridors and explore natural solutions to significant stormwater system issues (focused primarily on-campus, but integrated with off-campus systems).
- Incorporate land-use and site-selection recommendations that reduce impacts from potential natural disaster hazards such as flooding, storm surge, wind damage, and other weather events.
- Identify key plant species that support the institution's current landscape identity and ecology of the region.
- Assess whether existing parking configurations are efficient and located adjacent to appropriate uses.
- Assess alternative parking policies and demand-management practices to mitigate parking demand.
- Assess plan impacts to the broader community and ensure compliance with regulatory constraints.
- Evaluate long-term real estate needs and include any proposed acquisition or disposition of land. Draft criteria for evaluating future acquisition opportunities.
- Define locational criteria (adjacencies) for future academic buildings or expansion of current buildings.
- Propose changes and investment priorities for student life amenities, such as residence life facilities, dining or student services locations, recreational services, etc.

- Create building investment scenarios that incorporate institutional goals as well as building condition, suitability, energy use, and space utilization information. Propose building demolition where appropriate.
- Propose utility corridors that provide redundancy and easy long-term access (usually integrated with the circulation framework). Consider the cost of utility line extensions or capacity issues when evaluating potential building construction proposals.

PHASE III—DELIVERABLES

- Graphics-driven presentations for each campus visit
- Meeting notes

PHASE IV: IMPLEMENTATION

The Implementation phase solidifies plan principles and frameworks, and investigates the viability of potential near-term priorities.

- Finalize framework diagrams for landscape, ecology, transportation (pedestrian, bicycle, transit, service, and vehicular), and parking systems (focused primarily on-campus, but integrated with off-campus systems). Include a utility framework if significant changes are recommended.
 - Identify and illustrate key improvements that may require near-term capital investment
 - Identify locations that should remain free of development, whether for circulation clarity or landscape-asset preservation.
 - Solidify recommendations for policies and practices that balance transportation and parking demands.
 - Ensure that frameworks function in both near- and long-term scenarios
 - Address significant accessibility concerns
- Finalize a long-term land-use framework and development plan.
 - Create a land-use map and describe rationale.
 - Solidify FAR, density, and site guidelines to promote appropriately scaled development. These guidelines may vary for specific campus districts. Include mapped building sites where appropriate.
 - Clarify real estate acquisition and disposition guidelines
- Solidify near-term building renovation, construction, and/or demolition priorities that meet key academic or student life needs, maximize space efficiency, and address deferred maintenance concerns.
 - Explore phasing options and backfill recommendations to promote project feasibility.

- Teams should advance programming, design schemes, and project costs for key near-term projects in order to identify significant feasibility issues. Historic preservation considerations should also be incorporated during this phase.
- Refine planning-level cost estimates to assess realistic near-term investment possibilities and evaluate key priorities.
 - Include near-term building, landscape, and major infrastructure projects, especially those that may require capital dollars from the state.
- Finalize planning principles to guide future development.
 - This may include plan governance structures or data maintenance procedures.
- Identify areas where additional technical studies are recommended, if applicable.

PHASE IV—DELIVERABLES

These items should be submitted to both the institution and REF staff:

- Final report (executive summary and appendices). Institutions will indicate a desired number of printed report copies during project contracting.
- Graphics-driven presentations for each campus visit
- Meeting notes
- Working files, including but not limited to:
 - CAD, illustrative (Adobe Photoshop, Adobe Illustrator, etc.), and 3D basemaps (3ds Max, Sketchup, etc.) for existing conditions and implementation-phase plans
 - Excel files for space analysis, cost estimation, etc.
 - Program-related documents should include FICM codes
 - A packaged version of the final report, including high-res image files. (File formats should be usable on multiple operating platforms. Avoid Apple-specific files such as heic.)

ADDITIONAL PHYSICAL PLANNING STUDIES

This section provides an overview of some potential planning activities that provide more in-depth investigations than those performed in a master plan, as described above. In certain situations, it may be appropriate to incorporate this level of detail into the scope of a master plan, or to study a key issue prior to master plan procurement. Institutions are strongly encouraged to communicate with REF staff when pursuing these studies and to share final deliverables for central archiving. Institutions should also share results of any internal modifications to master plans occurring between formal consultant engagements. This will help prevent project delays during integrated review.

These specific studies should not be considered substitutes for periodic comprehensive master planning.

PRE-MASTER PLAN ASSESSMENTS

Assessments are essentially data-collection or issue-identification exercises, often focused on technical data. These can include facility condition assessments, building suitability assessments, infrastructure capacity assessments, energy use intensity (EUI) calculations, ADA compliance assessments, environmental audits, parking counts, etc. REF generally recommends that institutions engage in such assessments prior to undertaking a master plan, because this information can be useful in evaluating capital priorities. REF staff will work with institutions during master plan procurement to assess data needs.

Campus Historic Preservation Plan

A Campus Historic Preservation Plan (CHPP) should be in place for campuses with architectural, landscape, or archaeological resources approaching 50 years old or older. The CHPP provides a framework for institutions to manage their historic facilities and grounds and make sound decisions concerning capital investment, renovation, and demolition as well as be good stewards of USG's historic resources.

POST-MASTER PLAN STUDIES

Academic Unit Master Plans

After a master plan, it may be appropriate to evaluate in-depth program and facility needs for an individual college within the university, or for a group of related disciplines. This work should engage the institution's provost and facilities personnel to maintain alignment with overall university goals. For R1 institutions with significant research outposts, periodic assessment of facility needs and programmatic resource distribution for satellite locations may be required.

District/Campus Studies

District studies are in-depth design exercises focused on a particular geographic area. These should generally follow a comprehensive master plan to ensure that campus-wide systems, such as parking, pedestrian circulation, and program needs, are considered from a broad perspective.

Building Studies

Programming studies for specific buildings bridge planning and design processes and signal institutional commitment. Institutions are encouraged to consult with REF planning staff during these studies, especially when major programmatic changes are recommended. This will help to prevent delays, either during integrated review, or during the programming phase if the project is approved for capital funding.

Landscape Master Plan

Define landscape typologies and create detailed design recommendations for key example spaces. Establish a landscape structural framework, including a primary pedestrian circulation network. Outline strategies to improve ecological function and minimize or clarify maintenance needs. Establish design guidelines and recommend plant and material standards.

Design Guidelines

Design guidelines detail the desired style, materiality, size and scale of campus buildings and structural improvements, as well as their relationship to interstitial spaces. Many of these components are often incorporated into landscape master plans. Some design guidelines also outline the process and approvals required for project implementation. Institutional design guidelines should augment but not replace REF building design standards.

Wayfinding Studies

The purpose of these studies are to design a system of campus navigational signage. A master plan and/or landscape master plan should generally precede a wayfinding effort to address navigational confusion caused by poor circulation-system clarity. Wayfinding studies incorporate significant accessibility considerations.

Transportation Plans

Transportation plans provide an additional level of design and operational detail that goes beyond the scope of a master plan. Institutions are strongly advised to incorporate multimodal needs into design and recommendations. Activities in transportation planning may include but are not limited to the following:

- Create operational strategies and concrete recommendations in areas such as transportation demand management, parking permitting/pricing structure, shuttle route and frequency alterations, parking demand projections, technology integration, etc.
- Solidify design recommendations such as street sections for key corridors, or proposals for key intersections
- Evaluate financial implications of various strategies.

ADDITIONAL STUDIES

Residential Study

Master plans should incorporate residential elements, including residential districts, bed typology distribution, and priorities for significant investment. Some institutions may seek additional detail, such as to evaluate demand for additional beds through a market study, clarify maintenance and annual investment strategies, or solidify the institution's residence life philosophy in terms of desired typologies or programming initiatives.

Dining Study

These studies evaluate dining amenities on campus, including amenity distribution, operational hours, and financial sustainability. These studies often lead to programming for facility construction or renovation.

Utilities/Infrastructure Plan

Infrastructure plans investigate system conditions and capacity needs, solidify operational initiatives (especially related to maintenance or sustainability), and determine capital priorities. Plans may focus on a particular system, such as electrical distribution, water, sanitary sewer, stormwater, data networks, etc.

Campus Security Plan

Campus security plans promote consistent implementation of security measures across the campus such as card access, locking systems, and facility security planning needs. Plans include evaluation of future investment strategies to ensure appropriate police staffing levels, security systems infrastructure needs, and vehicle traffic controls.

Environmental Stewardship Plan

Environmental stewardship plans articulate policies related to sustainability issues such as energy production and consumption, waste minimization, transportation demand management, water systems, building construction, purchasing, academic integration of sustainability, etc.