

## **Campus Master Planning: By the University, For the University**

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## **Abstract**

*Campus master planning seeks to integrate university policies, procedures, capital projects and academic strategic plans. It is a process that requires extensive data analysis and policy guidance that can be most challenging at a large institution such as the University of Florida (UF). Many higher education institutions turn to consultants to lead the way through this web of stakeholders, conflicting demands and uncertain capital funding. The UF looked inward to develop its 2005-2015 Campus Master Plan with a process that included visioning, stakeholder committees and detailed technical analysis. It was simultaneously a “bottom-up” and “top-down” process that sought to integrate policies and recommendations within the university’s complex organizational structure. Consultants, including students and faculty, contributed through various, specific data collection and analysis tasks. The UF Division of Facilities, Planning and Construction managed an expansive public involvement process, wrote policies, assessed space needs and prepared geographic information system (GIS) map analysis. The resulting UF campus master plan meets the State of Florida’s unique planning requirements for public universities, provides a framework for sustainable development long beyond the required ten-year horizon, and represents a high degree of consensus from university faculty and other stakeholders.*

## **Introduction of the Organization**

UF is a major, public, comprehensive, land-grant, research university. The state's oldest, largest and most comprehensive university, Florida is among the nation's most academically diverse public universities. Florida has a long history of established programs in international education, research and service. It is one of only 17 public, land-grant universities that belongs to the Association of American Universities.

## **History**

In 1853, the state-funded East Florida Seminary took over the Kingsbury Academy in Ocala. The seminary moved to Gainesville in the 1860s and later was consolidated with the state's land-grant Florida Agricultural College, then in Lake City. In 1905, by legislative action, the college became a university and was moved to Gainesville. Classes first met with 102 students on the present site on Sept. 26, 1906. UF officially opened its doors to women in 1947. With more than 46,000 students, Florida is now one of the five largest universities in the nation.

## **Facilities**

Florida has a 2,000-acre campus and more than 900 buildings (including 170 with classrooms and laboratories). The northeast corner of campus is listed as a Historic District on the National Register of Historic Places. The UF residence halls have a total capacity of some 7,000 students and the five family housing villages house more than 2,200 married and graduate students.

UF's extensive capital improvement program has resulted in facilities ideal for 21st century research including the McKnight Brain Institute, the collaborative Health Professions,

Nursing and Pharmacy Building, the Cancer/Genetics/ICBR Research Center, the Proton Beam Cancer Therapy Center located on UF's Jacksonville campus, and the Biomedical Sciences Building and Pathogens Research Facility, both currently under design/construction. Overall, the university's current facilities have a book value of more than \$1 billion and a replacement value of \$2 billion.

### **Statement of the Problem/Initiative**

The first campus master plan for the University of Florida was produced in 1905, and numerous plan updates have been undertaken since that first effort. In the early 1990's the Florida Legislature enacted a law describing the requirement, process and content of campus master plans for state university system institutions including a minimum five-year update cycle. Under this law, the UF produced plans in 1995, 2000 and 2005. Initially, the university focused on interpreting and meeting these new statutory requirements including ties to capital project funding, a public hearing process for plan adoption, and ambitious coordination with local governments of the community in which the university resides. The resulting plan documents met the requirements and provided guidance for university policies and facility locations, but did not build consensus among university stakeholders or adequately address complex issues of balancing facility expansion with environmental stewardship, community context, infrastructure and transportation needs. The university administration desired a campus master plan that looked beyond the required ten-year horizon and was supported by a consensus of faculty, students, neighborhood residents and other stakeholders.

## **Design**

Following adoption of the 2000 campus master plan, the university created a new position in the Facilities Planning and Construction Division that would take a more active role in implementing and updating the campus master plan. An existing planner position was refocused on environmental planning and GIS mapping. Other staffing needs were met through existing positions, part-time and student intern employees. Initially, much effort was placed in integrating GIS map and database systems with traditional facilities planning platforms of AutoCAD and an Oracle database. The GIS function was deemed critical for the campus planning effort due to its ability to analyze broad spatial data such as hydrology, soils, habitat types, topography, population distribution, walking distance, transit service coverage and many other spatial variables. The GIS platform is consistent with related databases used by state and local government agencies, with whom the UF campus master plan was required to coordinate. Most transportation analysis software, including that used in the UF campus master plan, also has a GIS interface module.

In addition to software integration, the university invested in several data collection efforts including inventories of wetlands, geotechnical conditions, traffic counts, rare plants and wildlife on university property. The rare plant and wildlife inventories were conducted by students in cooperation with the university departments of Botany and Wildlife Ecology. These data were integrated into the Oracle database and displayed with GIS mapping.

The other critical first step was a visioning process that the UF Division of Facilities Planning and Construction conducted during the year preceding the plan update. The visioning process consisted of a series of open workshops that invited discussion about the strengths and weaknesses of the university's physical environment as well as brainstorming about a preferred

future land use scenario. Over the course of six workshops, several focus group meetings and an online survey, university staff gathered recommendations and insights from a broad constituency of faculty, students, staff, administrators, elected officials, public agency staff, neighborhood residents and local business owners. The University Board of Trustees also received a presentation and was invited to provide visioning input through discussion and a survey.

Development of the 2005 campus master plan occurred over an eighteen month period from November 2004 through April 2006. Plan development occurred primarily in the first twelve months of this timeline, with the remaining time devoted to the required public hearing and agency review process specified in Florida statute. The plan's public involvement process included numerous committee meetings and presentations to stakeholder groups, two public workshops, a three-month exhibit and two public hearings that were webcast with feedback available through email and fax.

## **Implementation**

The campus master plan update officially began in fall 2004 with the creation of three presidential committees to guide the process. The three committees were: 1) Transportation Study Committee; 2) Conservation Study Committee; and 3) Master Plan Steering Committee. There was a combined membership of 87 individuals on the three committees including 44 faculty, 16 students, 25 administrators/staff and 2 local government representatives that met a total of fifty-two times over seventeen months. Transportation and conservation are two policy areas that have traditionally generated much debate at UF, so committees were formed specifically to attempt reaching consensus on these sensitive and complex issues. The Transportation Study Committee examined university parking policies, transportation/parking

facility needs and work products prepared by a consultant including parking turn-over studies, employee/student address mapping, traffic counts and future traffic modeling. The Conservation Study Committee delineated university lands to be protected as conservation areas based on existing conditions inventory data. Additionally, this committee wrote policies for land conservation and simultaneously developed a land management plan describing steps needed to properly manage each conservation area. This land management plan was no small undertaking since UF's 2,000 acre main campus includes over 440 acres of conservation land encompassing wetlands, open water and uplands with significant habitat resources. The Master Plan Steering Committee reviewed the work of these two committees along with all other master plan policies and analysis including future land use and building locations.

Consultants were used in the planning process for very specific data-intensive tasks such as future traffic analysis, stormwater impact assessment and inventories of wetlands and geotechnical conditions. A civil engineering consultant was retained to prepare site development and utilities plans for the university's Eastside Campus, a recent land acquisition in need of redevelopment and investment. A different civil engineering firm conducted stormwater impact assessment of the university's proposed ten-year capital construction program. A geotechnical consultant performed preliminary investigation of several sites that the university targeted for future development. An architecture and engineering firm specializing in recreation was tasked with site development and preliminary programming for two specific recreation areas. The University's Urban and Regional Planning Department was contracted and used student talent to provide colored site renderings of the campus master plan's vision. Other academic departments were engaged for plant and wildlife inventories as described previously. A non-profit

community design center, affiliated with the university's College of Design Construction and Planning, hosted a campus master plan exhibition and opening reception for the general public.

The UF Division of Facilities Planning and Construction gathered relevant data from existing sources and these consultants' work, and then integrated it into the Division's database for mapping and analysis. Chief among these analyses was creation of a map depicting composite constraints to development. This map overlays data representing a variety of constraints including wetlands, flood plains, slopes, soils, hazardous materials, geotechnical conditions and archaeological sites. From the analysis, the university was able to identify areas appropriate for development or for conservation depending upon these constraints. The individual data layers also provide information about site conditions that is useful in preliminary construction programming and budgeting. Data analysis also included careful assessment of historic resources, walking distances and urban design characteristics that resulted in a planning framework for future buildings located in strategic infill sites and new walkable centers of development that can be connected with transit service. Based on this framework and identification of constraints, the campus master plan identified future building sites capable of accommodating future development for the next fifty or more years without sacrificing important campus green space and conservation lands.

The UF Division of Facilities Planning and Construction managed the consultants, committees and public involvement process. Ultimately, the Division produced the entire campus master plan including a data and analysis summary report, policy document and maps. These materials were posted to the Division website and produced in compact disk and notebook formats. A glossy brochure summary of the campus master plan was also produced through the UF Office of University Relations.

## **Benefits**

From the perspective of long-term capital planning and land management, key products of this planning process were the mapping of development constraints and identification of realistic proposed near-term and long-term building sites. Although campus master planning is unable to anticipate all future projects and conditions, the UF plan's database and planning framework will enable a rational response to unforeseen conditions in the future.

Enhancement of the university's database and mapping capability is a positive outcome that will serve many applications and ease the burden of future campus master plan updates. The early focus on data development through staff and consultant efforts will be a long term benefit to the university.

The extensive public involvement and committee process, while cumbersome, produced a degree of consensus that had not been achieved in the two preceding plan efforts. There were many opportunities for input during the visioning phase and throughout the campus master plan development process. Many issues that had been troublesome in previous plan efforts were discussed at length and reached resolution in the committee meetings. Faculty expertise in the subject matter of the committee was crucial to reaching consensus, although meetings often resembled an academic debate more so than a campus planning exercise. The campus master plan policies and recommendations were carefully scrutinized, and often written by, committee members with relevant expertise. Because campus and community stakeholders were invited into the process early, the public hearings held at the end of the process were poorly attended despite wide advertising and media coverage. These final steps of plan adoption were more a formality than a contentious public debate as they had been in the past. Negotiations with the

host local governments to address public facility impacts were similarly amicable because their agency representatives had been involved throughout the planning process.

## **Retrospect**

The use of consultant assistance for specific data development and analysis was a strategic decision that made best use of outside expertise, while in-house resources were used for writing policy, preparing maps, producing documents and implementing a public involvement process. These tasks were best accomplished with in-house employees bringing years of experience and personal acquaintance with the campus and community stakeholders that needed to be engaged in the process. University staff did not require a period of fact-finding and orientation to “get up to speed” on local campus issues; instead they had a grasp of the key problems and institutional memory at the start of the process. Complementarily, consultants contributed highly specialized expertise and staff resources to accomplish specific tasks that are data-intensive, labor-intensive or involve areas of unique specialization. The use of academic departments for specific consultant services was also a strategic decision that took advantage of local expertise and allowed stakeholders to make direct contributions to the campus master plan. However, caution must be used in selecting tasks for academic consultation, since these services are often complicated by demands of the academic calendar that may not be compatible with deadlines of the planning process timeline.

The UF campus master plan for 2005-2015 resulted from a process that was arduous, but very successful. Stakeholder consensus and enhanced planning capabilities of the Division are key outcomes. However, campus master planning is an evolving task should be judged by its ongoing process rather than any adopted document. Maintenance of the UF campus master plan

requires a commitment to certain staffing levels, staff expertise and software/database resources. The recommendations and decision-making process of the campus master plan must continually be communicated to new administrators, deans, faculty, students and community stakeholders.

This UF campus master plan was developed with a primarily “bottom-up” approach of committee and stakeholder input, although review and input was also obtained from the highest levels of the university administration. Future updates of the campus master plan would likely benefit from a more robust visioning process with university leadership. Expanded input during future campus planning processes will be sought from high-level university administrators as well as local government and other public agencies such as the regional planning council and state department of transportation. Faculty involvement and committee debate during the 2005 plan process resolved many long-standing technical policy issues, particularly in the areas of sustainable development, conservation management, transportation demand management, urban design and plan implementation procedures. However, policy issues related to campus visioning and ties to academic strategic planning continue to need refinement in future plan updates.