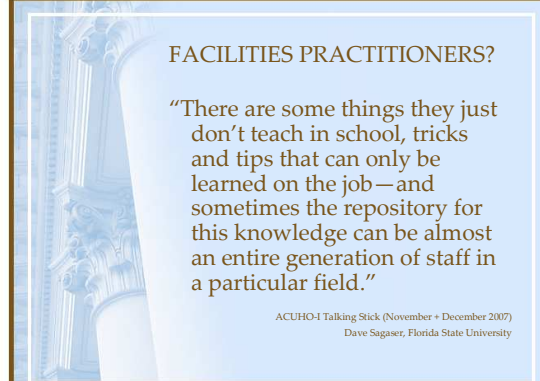


BUILDING A BUILDING:

Building a Housing Professional

Richard DeShields, Senior Director
Central Washington University
NWACUHO 2008



FACILITIES PRACTITIONERS?

“There are some things they just don’t teach in school, tricks and tips that can only be learned on the job—and sometimes the repository for this knowledge can be almost an entire generation of staff in a particular field.”

ACUHO-I Talking Stick (November + December 2007)
Dave Sagner, Florida State University



OVERVIEW

- Discussion of Construction Lingo
- Understand the process of Campus Master Planning and Housing Master Planning
- Review one method of Capital Planning
- Discuss the needs of a Program Review
- Develop Relationships with Facility Groups on campus



ACTIVITY

Facility planning is important to all housing professionals...how much do you already know?



CONSTRUCTION LINGO

GSF
Gross Square Feet

FF&E
Furniture, Fixtures, and Equipment

LEED
Leadership in Energy and Environmental Design

SEPA Review (1971)
State Environmental Policy Act

PRESERVATION
Monies set aside to maintain buildings above general maintenance

DEFERRED MAINTENANCE
A Backlog of maintenance needs in facilities



CONSTRUCTION LINGO

FACILITY AUDIT
Provide framework for developing a long-term plan to meet deferred facility and infrastructure needs

SITE DEVELOPMENT
Preparation of a site for construction (includes items such as reconstruction needs, cultural resource identification, moving existing structures, etc.)

MACC
Maximum Allowable Construction Cost

BID ALTERNATES
Items that could be added to a project if financially appropriate after construction bids opened

CONSTRUCTION LINGO

SCHEMATIC DESIGN
 Architect consults to ascertain the requirements of the project and prepares studies consisting of drawings and documents of scale (includes a preliminary estimate of construction cost)

HVAC
 Heating, Ventilation, and Air Conditioning

BOND RATING
 Moody's Bond Ratings are intended to characterize the risk of holding a bond. These ratings, or risk assessments, in part determine the interest that an issuer must pay to attract purchasers to the bonds. The ratings are expressed as a series of letters and digits. (AAA, AA, A, BAA, BA, B, CAA, CA, C)

ECO CHARETTE OR CHARETTE
 A means of encouraging creativity and focusing attention on resource efficiency (generates ideas for program/facility/etc.)

CAMPUS MASTER PLANNING

- WHAT DO YOU SEE AS THE PURPOSE OF A CAMPUS MASTER PLAN?
- WHAT COMPONENTS SHOULD BE INCLUDED IN A CAMPUS MASTER PLAN?
- SHOULD HOUSING HAVE A PLACE IN THE CAMPUS MASTER PLAN OR HAVE ITS OWN MASTER PLAN?

CAMPUS MASTER PLANNING

Good Practices:

- Honor traditions and values of the institution (implements the vision expressed in University Mission and Strategic Plan)
- Be adaptive to strategic and long range planning of the institution
- Brings coherence to the functions the physical environment is expected to serve
- Understands the different functions that the University serves
- Serve as a guide for both internal space utilization changes and external growth through capital development or landscaping, etc.
- Includes goals and objectives for the University community
- Discuss options for future expansion
- Needs to have ongoing review

CENTRAL WASHINGTON UNIVERSITY MASTER PLAN

Three underlying concepts in the 2005-2010 plan for the Ellensburg campus are particularly noteworthy. First, the plan envisions Central Washington University as a "garden university" in which open and natural green spaces are protected and enhanced. Through deliberate placement of future building sites, it establishes a park-like atmosphere throughout the campus and creates opportunities for human-natural relationships, an element that, throughout the ages, has been thought to stimulate intellectual growth. Second, the plan acknowledges more clearly than previous ones the importance of close physical proximity of areas that serve different functions of the university. These functional regions are labeled "zones" in the plan, and they suggest areas of the campus that are most appropriate for expansion of, for example, academic buildings, residence life, and athletic activities. Last, the plan describes and explicitly recommends protection and expansion of the university's "land bank" of currently undeveloped land. The land bank ensures that the garden university concept can continue even as more structures are added to accommodate growth.

CENTRAL WASHINGTON UNIVERSITY MASTER PLAN:

University Housing and Residence Life

Goal: Provide safe, comfortable, and modern premiere residential communities with services, programs and activities that promote social connections, student learning, personal development, and a rich university experience.

Objectives:

- ❖ Create opportunities and dedicated centers for formal and informal learning and teaching in on-campus residences that foster increased student-faculty contact, active learning, and enhanced interactions in a social context.
- ❖ Collaborate with identified departments on possible joint renovations and construction activities that will connect the living and learning environments.
- ❖ Aim to stay equivalent to or above the current state of local private housing and to keep rental rates less than or comparable to private market housing.
- ❖ Strengthen the character and attractiveness of the residential living communities.

Further Planning Considerations:

- Perform a comprehensive Housing Study and Long Range Facilities Plan that will evaluate the quality of the current residential system, student feedback, and costs for renovation and new building planning.

HOUSING COMPREHENSIVE MASTER PLANNING

- **Customer Research**
 (interviews with campus leaders, stakeholders, surveys, focus groups, market testing of design and pricing options, and demands for housing)
- **Market Analysis**
 (analysis of existing off campus rental rates and housing availability off campus)
- **Peer Institution Review**
 (trends at other colleges, review facilities planning and construction/renovation at other comparable housing programs)
- **Facilities Assessment and Programming**
 (Assessment of housing inventory types; space programming with housing goals, facility configurations, design concepts, safety and security needs, programming needs, optimal site selection)
- **Financial Analysis**
 (assess optimal rental rate projections, decide financing options, and capital budgets and cash flow analyses)

UNIVERSITY HOUSING MASTER PLANNING

Fundamental Concepts

- The campus housing system must be financially self-supporting, although individual projects may require subsidy in some years.
- As such, there is no expectation that funding from the state legislature, general University funds, or donor gifts will be used (although all would be helpful).
- We recognize that housing, dining and other campus auxiliaries are financially inter-related, and may cross-subsidize each others' operations at times.
- A financially self-sustaining housing system must balance rental income and other revenues on the one side with capital costs, operating costs, debt service and reserve requirements on the other. A change in one assumption requires compensating changes in other assumptions to maintain balance.
- The goal of this financial model is to highlight for the University the decisions it will need to make on rate increases, construction quality, and other issues to maintain a financially viable system.
- Room rents are largely driven by the market, and need to reflect what students are willing to pay for the product provided. Periodic market updates will be required.
- The "magic" (if there is any) in making a long range plan sustainable is 1) to raise room rates faster than the rate of operating expense growth and therefore generate additional net revenue and capacity to borrow, and 2) to use net revenue from older projects to subsidize new construction until room rates on new housing projects catch up with bond payments and begin to generate positive cash flow.
- The financial model assumes that all projects (renovations and new construction) will be delivered through traditional University procurement means, with University resources, University land and a University facility operator. CWU can decide whether design-build, design-build or construction management project delivery methodologies are preferable; these choices do not fundamentally alter the financial model. However, delivering a project through a public-private partnership (with a private developer or a 501(c)3 foundation) will alter the assumptions underlying the model in significant ways.

UNIVERSITY HOUSING MASTER PLANNING

Rental Income Assumptions

- Starting room rates for new construction are the same as tested in the survey and used to calculate demand by unit type. Rates were established so that the project could operate at or above breakeven within a couple years of completion.
- Room rates for both renovations and new construction increase at 5% annually through the completion of the plan. In addition, there is a one-time increase of 20% in the year a renovated project returns to service.
- The initial modeling suggested that the Student Village apartments should be rented by the bedroom rather than by the apartment unit, and on an academic year rather than a monthly basis, to capture additional revenues.
- Room rates at Sue Lombard and Kamola would have to be significantly higher for either project to be financially self-supporting.
- The lease term is the academic year for the residence halls and single student apartments, and 12 months for family apartments.
- Projects (both new construction and major renovations) are assumed to rent at 95% average occupancy for the academic year post completion.

Other Revenue Assumptions

- Non-room revenues (e.g., summer sessions, vending contracts) are assumed to equal 1.6% and 1.2% of net rental income for the residence halls and apartments, respectively. These are the same ratios projected by CWU for FY2007.

Financing Assumptions

- For new construction, the average interest rate on 30 year notes is assumed at 5.25 percent. For renovations, the average rate is 5.00% with a 20-year term.
- A debt service coverage ratio of 1.00 (breakeven) is the desired target, although some projects may dip below breakeven. The current plan achieves a 1.0 ratio in every year and a 1.1 ratio in all but three years.

CAPITAL PLANNING

Funding Understandings

- Net Operating Income
- Institutional Support (including reserves)
- Financing Sources (bonded)
- Preservation
- Investment earnings on Reserves
- Debt Service Ratios
- Bed Counts
- Occupancy Levels

Financing Forms

- Cash Funded
- Bonded Projects
- Privatized (Contractual)

CAPITAL PLANNING

Capital Cost Assumptions

- The cost of capital projects is assumed to increase at a rate of 3% per year from the 2007 cost baseline due to inflation.
- Project "soft" costs - such as design fees, utility impact fees, bond fees, contingencies, furniture and equipment - are assumed to equal 38% of the hard construction cost, and are added to the construction cost to determine a current dollar (uninflated) project cost.
- Each new construction or major renovation project is assumed to take 15 months to complete (from start of construction to substantial completion). This means that a building under major renovation will be out of service for one academic year and two summers. Minor renovation projects are assumed to be completed over summers, and have no impact on academic year housing capacity.

Renovations

- The cost for renovation projects is assumed to be equal to 100% of the need identified in the CWU facility audit, plus 1% of the Current Replacement Value annually for ongoing depreciation, escalated to year of projected completion of the project.
- The financial model assumes that some money will continue to be spent each year for annual improvements (small projects) funded out of the annual operating budget. This amount averages more than \$500,000 per year for the first ten years of the plan.

New Construction

- New construction projects should be designed to be revenue-positive as quickly as possible (within 3 years of completion) to support the needed renovation work on existing residence halls. This need to generate income quickly puts downward pressure on the construction budgets for new construction, and will affect construction quality expectations and construction system and material choices. The assumption for the construction cost for new halls is \$150/sqft in current dollars.
- New construction of family housing on campus is not viable without long-term subsidy or above-market rental rates.

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(CWU) Comprehensive Budget FY 2007 - FY 2021


This report includes the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021

Full report includes the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UNIVERSITY HOUSING | | | | | | | | | | | | | | | |
| Operating Expenses | | | | | | | | | | | | | | | |
| Operating Expenses - Personnel | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| Operating Expenses - Materials | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Operating Expenses - Other | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Operating Revenue | | | | | | | | | | | | | | | |
| Operating Revenue - Room Rates | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 |
| Operating Revenue - Other | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| Operating Income | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Capital Expenditures | | | | | | | | | | | | | | | |
| Capital Expenditures - Construction | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Capital Expenditures - Maintenance | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Net Operating Income | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Debt Service | | | | | | | | | | | | | | | |
| Debt Service - Principal | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Debt Service - Interest | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Debt Service Coverage Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

PROGRAM REVIEW

- Program studies permit projects to begin on a more sound footing with information and expectations regarding quantity, quality, and cost.
- Allows for stakeholders to share desires and needs of a facility



PROGRAM REVIEW

Items included should consist of:

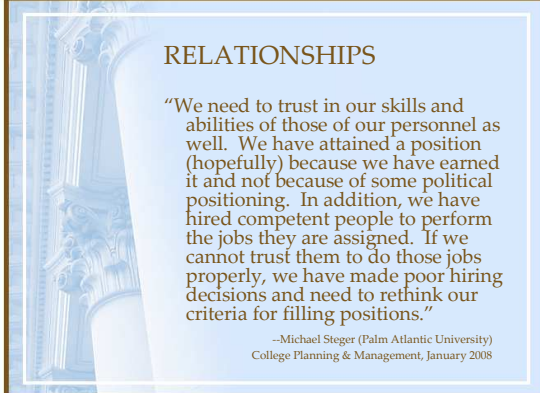
- discussion regarding site
- room types desired
- budget assumptions and needs
- aspiration of the project
- include campus site utility plan
- discussion of "community" needs
- includes sample conceptual unit plans
- outline operational systems
- recommend finishes
- propose budget schedule
- create a "Schedule of Values"



RELATIONSHIPS

- Build a strong team made up of all the stakeholders including residence life staff members, student user groups, and key administrators
- Groom generalists who are competent in more than one trade or specialization

ACUHO-I Talking Stick (July + August 2007)
ACUHO-I Talking Stick (November + December 2007)



RELATIONSHIPS

"We need to trust in our skills and abilities of those of our personnel as well. We have attained a position (hopefully) because we have earned it and not because of some political positioning. In addition, we have hired competent people to perform the jobs they are assigned. If we cannot trust them to do those jobs properly, we have made poor hiring decisions and need to rethink our criteria for filling positions."

—Michael Steger (Palm Atlantic University)
College Planning & Management, January 2008



RELATIONSHIPS

- What role do residence life staff have in the facility development process?
- How do you create effective university teams during the facility development process?