UNIVERSITY OF HOUSTON

Master Plan for the University Center Complex and UC Satellite

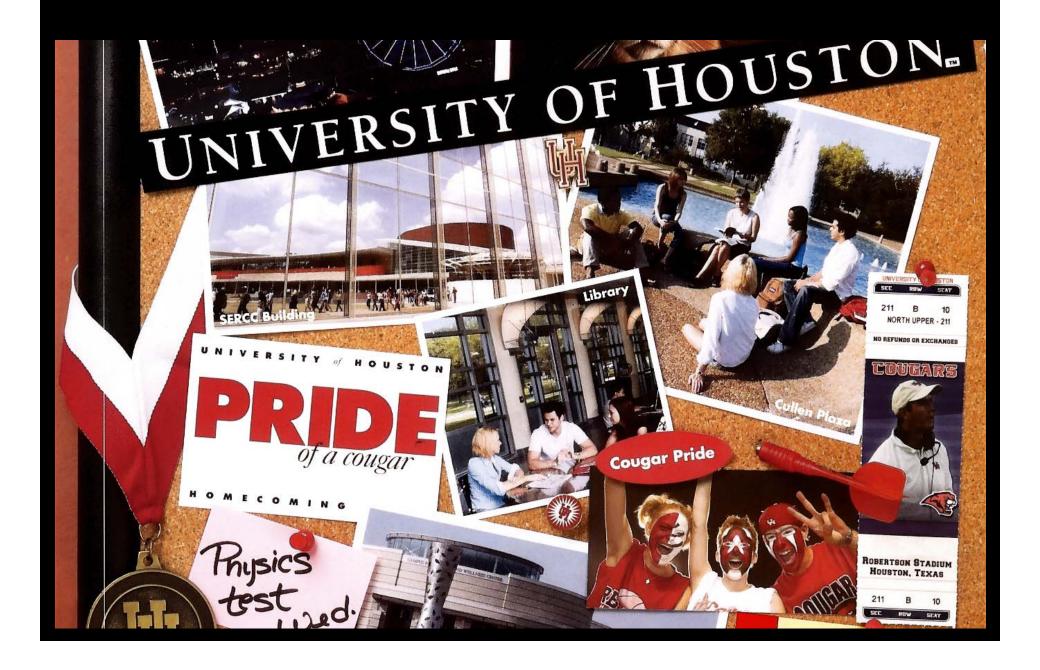
"Through our provisions we create and perpetuate an environment that engages human connections, empowers holistic development, embodies multicultural awareness, that when taken together enriches the campus life experience."





HOLZMAN MOSS ARCHITECTURE

Understanding the Assignment



Team Organization

University of Houston

HOLZMAN MOSS ARCHITECTURE



Brad Lukanic, AIA, LEED AP Principal - Project Manager



Debbi Waters Principal - Programmer & Planner

*HUB firm



MEP Engineering Ajay Shah

Shah Smith & Associates, Inc.*



Food Service Rob White / Peg Rodger

Envision Strategies

Bookstore Consultant

Campus Bookstore Consulting Corporation Market Analysis & Financial Analysis

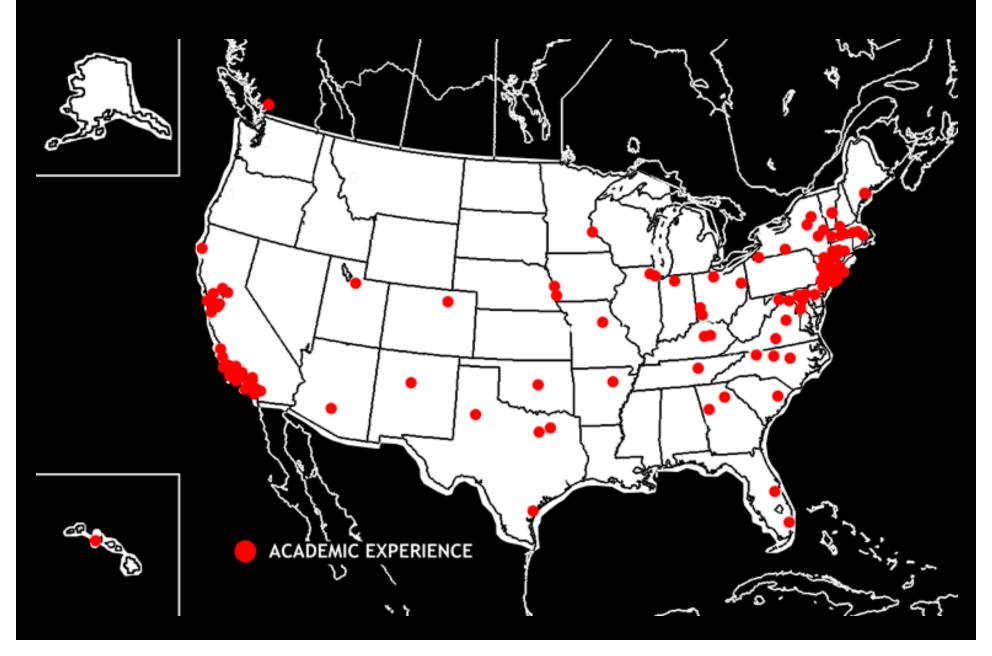
Brailsford & Dunlavey

Cost Estimating

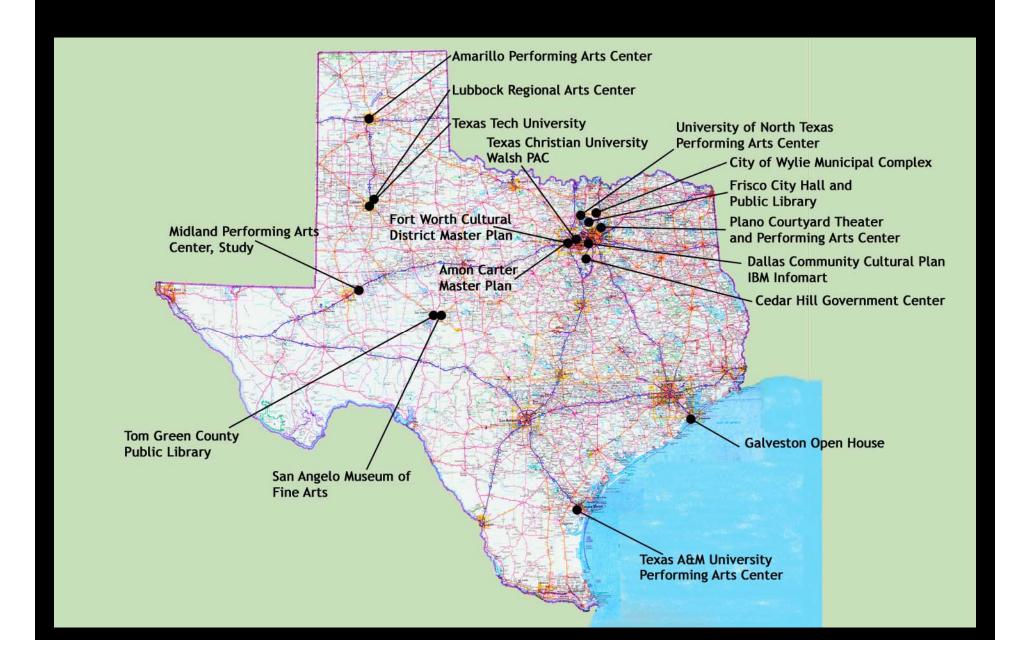
Halford Busby, LLC*

Academic Experience

Holzman Moss has worked on more than 150 campuses



Texas Experience



Texas Experience Amarillo Performing Arts Center Lubbock Regional Arts Center Texas Tech University **University of North Texas Texas Christian University Performing Arts Center** Walsh PAC City of Wylie Munic Frisco City Hall and **Public Library** Worth Cultural Plano Courtyard Theat Midland Performing Art rict Master Plan and Performing Art Center, Study **Dallas Commun** Amon Carter **IBM Infomart** Master Plan Cedar Hill Gove Tom Green County Galveston Open H **Public Library** San Angelo Museum of **Fine Arts** Texas A&M University **Performing Arts Center**

University Centers

| STUDENT CENTERS | SF |
|--|-----------|
| Borough of Manhattan Community College, Fiterman Hall | 80,000 |
| Bowdoin College, David Saul Smith Union | 43,000 |
| Central Connecticut State University, Student Center | 86,000 |
| Delaware State University, Student Center | 73,000 |
| Middlebury College, McCullough Student Center | 45,000 |
| Rutgers, The State University of New Jersey, Livingston Student Center | 54,000 |
| St. Joseph's College, Student Union and Academic Building | 17,500 |
| Texas Tech University, Student Union | 175,250 |
| University of Missouri-Columbia, Student Union | 220,000 |
| University of Otago, Student Union Link | 40,000 |
| University of Southern Indiana, University Center | 170,000 |
| Soka University, University Center | 117,000 |
| | 1,120,750 |
| | |
| PROGRAM/PLANNING | |
| Barnard College, Nexus Mixed-use Building, Program/Plan | 171,000 |
| Colgate University, Student Union and Campus Center, Study | 60,000 |
| Northwestern University, Norris University Center, Study | 160,000 |
| North Carolina State University, Student Life Master Plan | 496,000 |
| Oklahoma State University, Strategic Consulting Services for Student Union | 340,000 |
| San Diego State University - Aztec Center Replacement Study | 312,000 |
| University of California, Riverside, Student Commons, Program/Plan | 175,000 |
| University of the Pacific, University Center, Program/Plan | 68,600 |
| | 1,782,600 |
| TOTAL SQUARE FEET | 2,903,350 |

University Centers

| | Bowdoin College, David Saul Smith Union | Barnard College, Nexus | Central Connecticut State University, Student Center | Colgate University, O'Connor Campus Center | Delaware State University, Student Center | Middlebury College, McCullough Student Center | Northwestern University, Norris University Center | St. Joseph's College, Student Center | San Diego State University, Aztec Center | Soka University of America, Student Center | Texas Tech University, Student Center | University of Missouri at Columbia, Student Center | University of Southern Indiana, University Center Expansion | University of the Pacific, University Student Center |
|------------------------|--|------------------------|--|---|---|---|--|---|---|---|--|---|---|---|
| Programming Services | х | Х | Х | Х | х | Х | х | Х | Х | Х | Х | х | Х | Х |
| Lounges | х | X | х | Х | X | х | X | X | X | X | x | X | X | x |
| Bookstore | X | X | Х | X | х | | X | X | X | X | X | X | X | X |
| Convenience Store | X | | | Х | х | X | Х | Х | X | Х | Х | X | Х | X |
| Copy Center | X | X | X | | х | | | X | | Х | | X | | X |
| Post Office | X | X | х | Х | х | х | | х | | Х | Х | | | X |
| Retail | | X | X | | Х | | | | | | X | х | Х | |
| Meeting Rooms | х | x | x | х | х | x | х | х | | х | X | х | х | x |
| Student Government | х | X | X | Х | х | X | X | х | X | Х | Х | X | Х | X |
| Student Organizations | х | X | х | х | х | х | Х | х | X | X | X | X | X | X |
| Game Room | х | | Х | Х | Х | | Х | х | X | | X | X | | |
| Dining Hall | | X | Х | | | | | Х | X | Х | X | х | Х | X |
| Café / Pub | х | X | | Х | х | х | | | | | х | X | Х | X |
| Multi-purpose Room | Х | X | Х | Х | Х | Х | Х | | Х | | Х | х | Х | |
| Ballroom | Х | X | Х | | | | Х | | Х | | Х | | | Х |
| Auditorium/Theater | | | | | | | Х | Х | | | Х | х | Х | |
| Administrative Offices | х | X | х | х | х | х | Х | х | X | х | х | X | X | |

University of Houston History of Growth

1936

for a

Acreage is

permanent

acquired

campus

1945 **UH** separates from the Houston

Independent School District and operates as a private university

III III IIII IIII IIII IIII IIII

1977 1967 State law The officially University establishes Center opens the UH its doors System



2006 **UH unveils a Master** Plan for growth over the next twenty years, including five distinct districts

I 1927 The University I is founded

1939 First classes are held at current site; 2,067 students attend all Building

1963 **UH** becomes a statesupported classes in Roy G. Cullen institution

1973 **University Center Underground and** the UC Satellite open

2001 Complete Renovation of The University Center Underground following **Tropical Storm Allison**



2007 **UH** enrolls 34,334 students and is the largest and most comprehensiv e component of the UH System



Understanding the University of Houston University Center, UC Underground and UC Satellite - Diversity of Programs and Locations

- **Bookstore**
- **Campus Activities**
- Cougar 1 Card
- Cougar Byte
- Cougar Den
- Council of Ethnic Organizations
- Dean of Students Office
- Food Court
- Frontier Fiesta Association
- Jonorr's Salon
- Meeting Rooms
- Metropolitan Volunteer Program
- Shasta's Cones and More
- Student Government Association
- Student Legal Services
- Student Program Board

- Student Video Network
- Study Lounge
- TV Lounge
- UC Administrative Services
- UC Business Office
- UC CARS Office (Reservations)
- UC Creation Station
- UC Forensics
- UC Game Room
- UC Marketing and **Programs**
- UH Dining Services
- **UH Wellness**
- University Copy Center
- Veterans' Services Office
- Woodforest National Bank
- World Affairs Lounge













Approach to the Work-Centers for Student Life



Working in Partnership with a Multitude of Stakeholders

Interviews

- In-depth interviews of relevant key stakeholders regarding perceptions of current programs and services, as well as anticipated staff growth, departmental space needs and qualitative preferences
- Intercept Interviews

Focus Groups

- Focus groups with University community members (on-campus students, commuter students, faculty, and staff)
 - qualitative perception of the current services
 - desires pertaining to future services and programs





Working in Partnership with a Multitude of Stakeholders

Programming Workshops

- Forum to define expectations and establish common frame of reference
- Presentation of programming concepts using charts, diagrams, models and program data
- Discussion of specific goals and objectives, project needs, square footage requirements for all of the program spaces, architectural and system requirements, desired adjacencies, functional efficiency, and cost implications
- Collective evaluation of options in terms of their ability to achieve the program, design objectives, budget and schedule





Working in Partnership with a Multitude of Stakeholders

Campus Wide Presentations

- Presentation of design concepts at discreet intervals to interested campus constituents
 - non-University Center administrators
 - faculty
 - University Center tenants and staff
 - student body







Our Expectations: The Role of the Client

We expect from our clients:

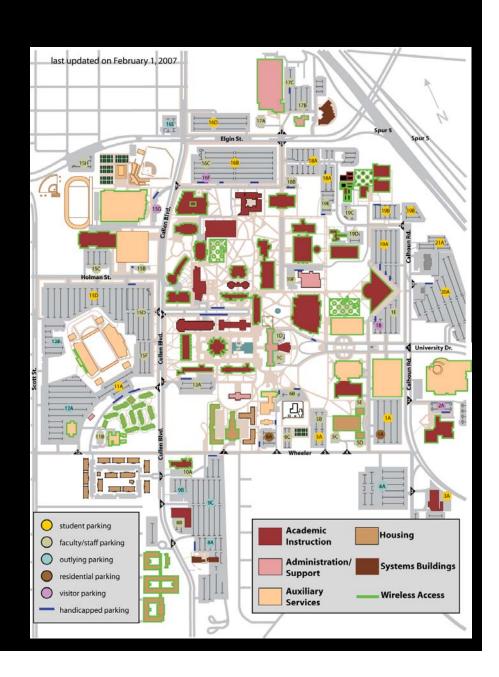
- Active participation to ensure work progresses with a full understanding of the project objectives, schedule and budget
- Attendance at workshops, team meetings and design reviews so that we can collaborate on the development of options and gain consensus
- A willingness to engage in an open design conversation, an ability to provide direction, and as importantly, a conviction in decisions made
- A continuity of key client personnel to insure the successful completion of the Master Plan
- A willingness to exchange ideas and balance priorities, and do so within an established schedule
- Responsibility for defining the project's parameters, whether cost, quality, or quantity, and staying consistent throughout the process





Establishing the Project Criteria

- Get to Know the Project Participants
- Define all Requirements of Master Plan
- Discuss Goals and Objectives with Key Stakeholders
- Confirm the Scope of Work that has Been Outlined
- Confirm the Project Deliverables and Schedule for Completion
- Obtain all Maps, Surveys, etc. of Campus and Site
- Collect Information Concerning Previous Studies
- Collect and Analyze all Relevant Program Data
- Discuss Sustainability Goals

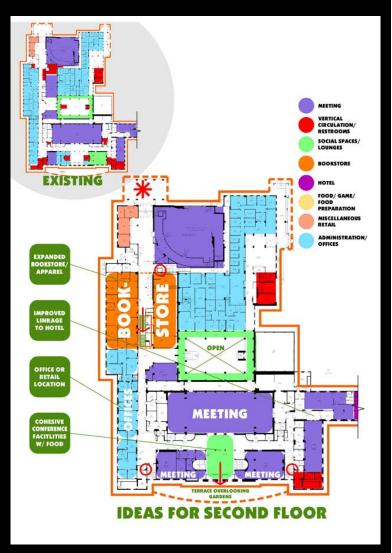


Approach to the Work Existing Buildings / Sites / Campus Analysis

- Review Sites/Buildings Evaluations and Context
- Conduct Existing Buildings Assessment to **Determine Potential for Housing Desired Programs**
- **Establish Priorities for Building Improvements**
- **Establish Priorities for Site Development**
- **Explore Renovation Options**
- **Explore New Construction Options**
- **Establish Entrance Locations**
- Address Parking/Pedestrian Traffic and Circulation



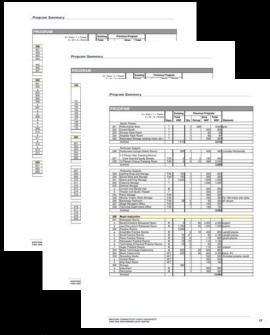
Site Analysis Workshop

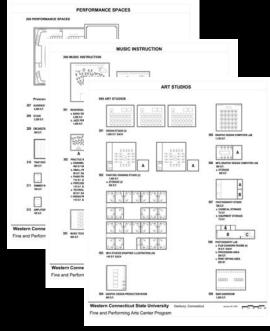


Existing Building Analysis

Programming

- Conduct User Interviews, Focus Groups and Workshops
- Develop Written Program
- Define General Area Dimensions of Spaces
- Establish Total Project Square Footage
- Discuss Specific Technology Needs
- Develop Cost Model







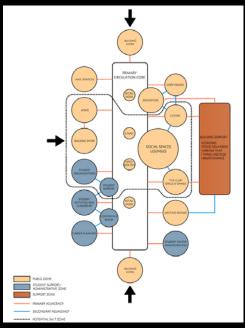
Developing a Program

Room Diagrams

Room Characteristics

Approach to the Work Project Development

- Illustrate Space Planning, Internal Functions of Building
- Prepare Levels Models Illustrating Adjacency and **Stacking Requirements**
- **Develop Building Options**
- **Prepare Massing Models of Building**
- Prepare Conceptual Project Cost Estimates
- **Evaluate Options and Select Most Desirable**



Adjacency Diagrams



Levels Models

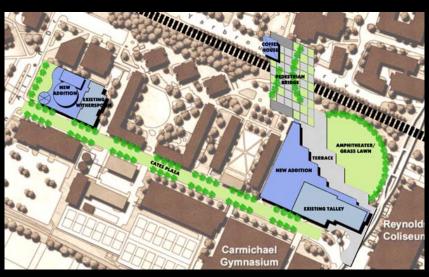
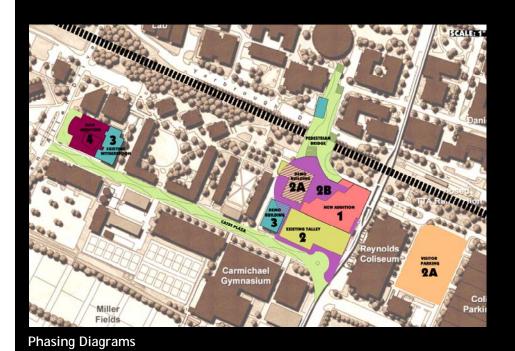
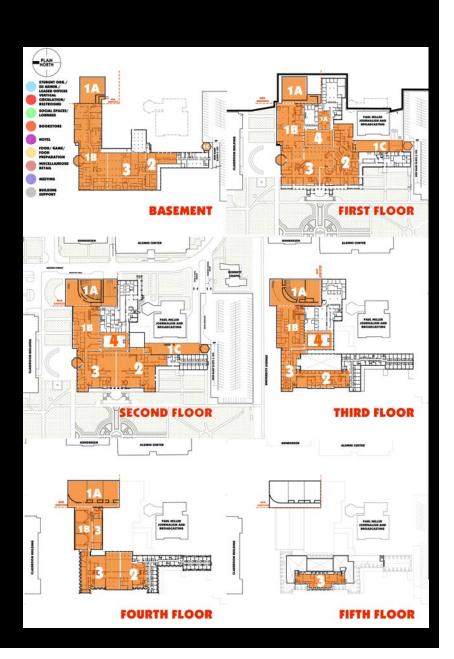


Diagram of Potential New Construction

Approach to the Work Project Development

- Prepare Total Project Cost Model Framework
- Prepare Initial Project Budget
- Establish Realistic Project Schedule
- Determine Phasing Options





Peer Comparisons

NEW ENGLAND

Sakowich Campus Center Merrimack College, North Andover, Mass.



Construction Type: Square Footage: 130,000

Center, Post Office, Game Room, Cybertounge, Student Ori. Can you see activities within the building? Center, rost office, comme noon, systematics. Lan you see activities within the building's activities and cooperative Education, Chapel of St. /. Does it make a good first impression? Campus Ministry Center, Residence Life, Stevens Service Le

Smith College, Northampton, Mass.



Construction Type: New \$23-million

Weiss/Manfredi Architects Architect:

A light-filled building shoehorned into a long site that is na end and wide at the other, this three-level facility is organ a curving, street-like atrium, A skylight tracks the atrium's illuminate the two upper levels, while light floods into the floor because the site was excavated to allow windows in the wise would have been a basement. The facility houses lour areas, a cafe, a multipurpose room, offices, and a booksto Chronicle, March 26, 2004).

Blanchard Campus Center Mount Holyoke College, South Hadley, Mass.



\$15.9-million Architect: Miller Dyer Spears

The newly renovated and expanded Blanchard Campus Cen LOUNGE / ACTIVITY SPACES The newly renovated and expanded Blanchard Campus Cerl
meeting place for the entire Mount Holyoke community. This there adequate lounge and hang-out space?

central atrium with it's a 60-foot skylight, is home to the (- Are the spaces for large amounts of students to gather?)

central atrium with it's a 60-foot skylight, is home to the (- Are the spaces for large amounts of students to gather?) Store, Information Desk, student mail box area, and Stude - Are students enjoying these spaces? Ask them!
Gallery, public Lounge, and Uncommon Grounds Cafe. The - Is the furniture comfortable? harbors the Day Students' Lounge, the Student Programs O(- Is the furniture easily movable? Health Educator's Office, as well as several student organiz - Is there choice in seating options?

Selection of Peer Comparisons

SITE VISIT ANALYSIS EXTERIOR/ CAMPUS Do you like the building?_ Was it easy to find the front door? Are there convenient secondary building entries? Main Dining Hall and Warrior's Den retail dining, Informatio - Can you tell where the OLD and New begins and end? Recreation Complex , Fireplace Lounge, Bookstore, Diversi . Does the building feel part of the campus fabric? Should it?

| | FOOD | LOW |
|--|---|-----|
| PARKING | Is there adequate variety for food choices? | _ 1 |
| How is visitor parking handled? | - Is catering handled appropriately? | - 1 |
| Is it easy to find the building entry from the parking? | - Do they have adequate space for catering? | - ! |
| Is it costly to park? | Can some establishments be open without opening the entire building? Do students look like they are enjoying the food? Ask them! | - ! |
| Is it welcoming to park? | - Is the food cheap (economical)? | - : |
| Is there a vehicular drop-off? | - is the rood cheap (economical): | - ' |
| | RETAIL | |
| NTERIOR | - Do they have cool shops? | _ 1 |
| Do visitors seem welcome? | - Are their some that should be repeated at USI? | _ 1 |
| Can you find a building directory easily? | - Do you like the bookstore? | _ 1 |
| Can you orient yourself in the building? | - Are the textbooks easy to find? | _ 1 |
| Do you get lost as you travel through the building? | - Is it a comfortable space? | _ 1 |
| Is the spirit of the campus reflected in the interior? | - Are their multiple entries to the bookstore? | |
| Do the spaces feel academic? Should they? | | |
| Do the spaces reflect campus tradition? Should they? | STUDENT ORGANIZATIONS | |
| Do the students using the space look comfortable? | Can you easily tell where the student organizations are located? | 1 |
| Are there places for "people watching"? | - Does it look like students are important to the Student Union? | _ 1 |
| Are the light levels comfortable (too dark, too bright)? | - Are the offices accessible 24/7 for student leaders? | _ 1 |
| Is there an adequate amount of natural light? | Would you want to be a student leader in this space? | _ 1 |
| Are the acoustic levels comfortable (too loud)? | | |
| Is it easy to access all areas of the building? | | |
| Does the building look well maintained? | MEETING AND CONFERENCE SPACES | |
| Are there opportunities for impromptu encounters? | - Do you like them? Are they easy to find? | - : |
| Ir there an adequate amount of technology? | - Are they easy to rino: | _ |

Is there a nice quality of material finishes? (carpet, fabric - Can catering easily occur?

Do you feel connected to the outdoors? (Are there views t Are there spaces for entertainment?_ Are there spaces for parties and dinners?

- Are there spaces for meetings? Site Visit Analysis

- Based on what you have seen, how does this union compare to

OVERALL COMMENTS

What are the negative features?

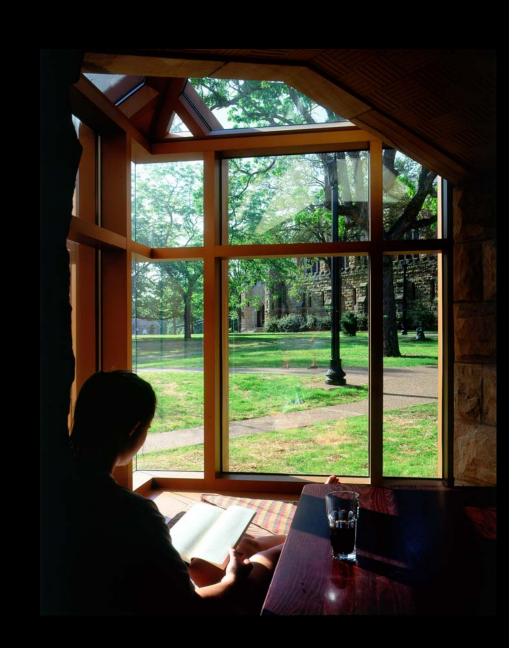


Tour with Oklahoma State University Client

Extraordinary Experience

Listening to Students

- Welcoming Place
- Character Specific to the University
- Choice in Levels of Participation: Campus-wide Events, Small Group Gatherings, Solitary Activity
- Encourage Social Interaction: Students, Faculty, Staff, Alumni, Visitors
- A Variety of Gathering Spaces:
 Large and Small, Active and Tranquil
- A Variety of Meeting Spaces: Student Group Meetings, Study Groups
- Multipurpose / Conference Rooms
- Access to Convenience Services: Marketplace Activities - Bookstore, Post Office, Copy Center
- Food: Flexible Food Format, Specialty Concessions, Variety of Seating, Coffee Bar
- Views In and Out
- Outdoor Space
- Technology Throughout



Managing the Process



Methodology

| | YEAR | | | | | | 200 | 8 | | | | | X |
|---|-------|---|----|----|----|---|-----|-----|----|----|-----|--|-------|
| | MONTH | | JA | ١N | | | FEB | | | MA | ıR | | 3 |
| | WEEK | 1 | 2 | 3 | 4 | 1 | 2 | 3 4 | 1 | 2 | 3 4 | | 4 |
| PRE-PROGRAM ANALYSIS AND SITE ANALYSIS (2 WEEKS) | | | | | | | | | | | | * | 200 |
| 1 Workshop #1-Information Gathering (2-3 Days) | | Г | | • | П | | | | Т | | | | 1 |
| 2 Review Previous Programs and Studies | | | - | - | -1 | | | | П | | | | - |
| 3 Existing Conditions Survey | | | | _ | | | | | | | | | |
| a. Assemble Existing Conditions Documentation | | | | _ | | | | | П | | | | |
| b. Meet with Facility Staff, Organizations Users & Staff | | | | _ | | | | | | | | | 1 |
| c. Conduct Student, Faculty, Staff and Alumni Focus Groups | | | | _ | | | | | | | | | |
| d. Evaluate Current Program and Potential Deficiencies | | | | _ | | | | | | | | #1 | |
| 4 Examine Existing Organizations and Adjacencies | | | | _ | | | | | | | | | |
| 5 Undertake Site and Context Analysis | | Г | | - | - | | | | П | | | ART STUDIOS | |
| 6 Project Engineers to Evaluate Current Building Systems and Infrastructure | | | | _ | - | | | | | | | | |
| 7 Evaluate Current Bookstore Operations and Layout | | | | - | - | | | | | | | SF minor through | |
| 8 Evaluate Foodservice Operations and Layout | | | | _ | - | | | | П | | | 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | Γ |
| 9 Evaluate Pedestrian Circulation Patterns and Adjacent Building Pathways | | | | _ | -1 | | | | Т | | | MI ANDRO DIMON DINOG | |
| 10 Review Vehicular Access, Building Services, and Parking Considerations | | | | _ | - | | | | | | | | |
| 11 Develop Peer List for Comparison (Competitive Context Analysis) | | | | _ | - | | | | | | | | - 5 |
| 12 Develop Customer Survey | | | | _ | _ | | | | | | | | F |
| PROGRAM DEVELOPMENT & ASSESSMENT (6 WEEKS) | | | | | 7 | | | | T | | | We did not not have been a second of the sec | H 200 |
| 1 Workshop #2 - Initial Findings & Student Surveys | | П | | | ┪ | | | • | Т | | | | F |
| 2 Facility Improvement Options Conditions Survey | | | | | | _ | _ | | T | | | THE SHAPE MADE AND ADDRESS ADD | ** 5 |
| a. Determine (if Any) Student Life Program Deficiencies | | | | | | _ | _ | | ı | | | Western Connecticut State University Develop Cores Fine and Performing Arts Center Program | and . |
| b. Review and Provide Strategies to Improve Building Services | | | | | | _ | - | | Т | | | | |
| c. Review and Provide Options for Bookstore | | | | | | _ | _ | | 1 | | | | |
| d. Review and Provide Options for Foodservice | | 1 | | | 1 | - | - | | 1 | | | | |
| 3 Conduct Customer Survey | | L | | | | - | | - | 1 | | | | |
| 4 Determine Renovation/Expansion Potential of UC and UC Satellite | | | | | | - | _ | | | | | | |
| 5 Explore Interior/Plan Organization and Adjacency Options | | Г | | | | | | | 1 | | | Lamond | |
| 6 Propose Building Systems and Infrastructure Improvements | | ı | | | | | ١. | | 1 | | | Legend | |
| 7 Conduct Competitive Competitive Context Analysis | | | | | | | | | - | - | | Duration of Phase | |
| 8 Conduct Competitive Market Analysis | | | | | | | | | -1 | - | | Workshop Meetings | |
| 9 Prepare New Program Summary & Cost to Benefit Analysis | | | | | | | | | 1- | - | | Workshop Meetings | |
| 10 Prepare Preliminary Cost Model Identifying Hard and Soft Costs | | | | | | | | | 1- | - | | Action | |
| | | | | | | | | | | | | | |

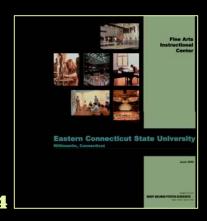
Methodology

| | YEAR | | | | | - | | | | 9.1 | | | | 10 | | | |
|--|-------|---|---|----|---|---|---|----|---|----------|---|------|---|----|-----|----|---|
| | MONTH | | M | AR | | | A | PR | | | М | AY | | | JUL | 1E | |
| | WEEK | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| PROGRAM CONFIRMATION AND CONCEPT DESIGN (2.5 MONTHS) | | | | | | | | | | | | ilo. | | | | | |
| 1 Workshop #3 - Report of Advanced Findings & Concept Approaches | | | | | | • | | | | | | Г | | | | | Ī |
| 2 Refine and Develop Program Data | | | | - | _ | | | | | | | | | | | | |
| a. Define all Project Requirements - AV, Telecom, Acoustical, Etc. | | | | _ | _ | | | | | | | | | | | | |
| 3 Interior/Plan Organization and Adjacencies | | | | - | | | | | | | | | | | | | |
| a. Establish Room and Activity Adjacency Requirements | | | | - | _ | | | | | | | | | | | | |
| b. Develop Space Utilization and Stacking Diagrams | | | | - | _ | | | | | | | | | | | | |
| 4 Develop Concept Program Options | | | | | | _ | - | | | | | | | | | | |
| a. Develop Building Activity Zones and Organization | | | | | | - | - | | | | | | | | | | |
| b. Identify Level of Furnishings and Equipment | | | | | | - | _ | | | | | | | | | | |
| 5 Workshop #4 - Concept Approaches and Recommendations | | | | | | | | | • | | | | | | | | |
| 6 Develop Preliminary Concepts | | | | | | | _ | _ | _ | | | | | | | | |
| a. Alternative Massing Schemes | | | | | | | - | - | - | | | | | | | | |
| b. Alternative Circulation Schemes | | | | | | | - | - | _ | | | | | | | | |
| c. Site Layout | | | | | | | _ | _ | _ | | | | | | | | |
| d. Spatial Relationships | | | | | | | - | _ | _ | | | | | | | | |
| 7 Elaborate on Selected Options | | | | | | l | | | | | _ | - | - | | | | |
| 8 Evaluate Sustainable Design Strategies | | | | | | | | | | _ | _ | - | - | | | | |
| 9 Update Cost Model Based on Additional Findings and Recommendations | | | | | | | | | | - | - | - | - | | | | |
| CONCLUSIONS OF REPORT AND DIRECTIONS PROVIDED (2 WEEKS) | | | | | | | | | | | | | | | | | |
| 1 Workshop #5 - Report of Findings and Recommendations | | | | | | | | | | | | | | | • | | |
| 3 Develop Project Report for University | | | | | | | | | | | | | | _ | - | - | - |
| 4 List Project Data and Provide Recommendations | | | | | | | | | | | | | | _ | - | - | - |
| 5 Provide Schedule and Final Cost Scenarios | | | | | | | | | | | | | | _ | _ | - | - |
| | | | | | | | | | | | | | | | | _ | _ |

Workshop Meetings

Action





Best PracticesExploring Multiple Options and Alternatives





Concept Models

| Site Com | parisons | | | | | | | | | | | |
|-----------------|--------------------------|---|-------------------------------------|---|--|--|---|---------------------------------------|---|--|------------------------|--|
| Site. Number | Description/ Location | Size | Topography | Wetlands Impact | Impact on Wooded Areas | Utilities | .Parking. | _Visibility_ | Belationship to Other Campus Functions | Cost. Considerations | Recommended Ranking | _Comments_ |
| 1 | South Entry | Adequate. Approximately 200,000 SF. | Two levels; each mostly flat. | None. | Reduction of some wooded areas along the entry drive. Parking can be located on cleared area. | Readily available at entry drive. | New parking required. Land available; playing fields will need to be relocated. | Very visible from entry drive. | Distant from current academic functions and student center. | Some additional cost for locating on two grade levels. | 2 | Best site for highly visible location and limited impact to other campus functions. |
| 2 | West | Adequate. Approximately 200,000 SF. | Very steep | Substantial. | Reduction of wooded areas over entire site for building and parking. | Harder for sanitary lines. | New parking required. Difficult and costly on steep grade. | Good visibility from campus drive. | Close to current academic functions and student center. | Substantial costs for building on steep site. | 5 | Costly site on which to build and would require acquisition of the land by WCSU. |
| 3 | Academic Center | Adequate. Approximately 180,000 SF. | Two levels; each mostly flat. | None. | None. | Potential relocation of electrical line. | Relocation of parking required. | Good visibility from West Road. | Next to current academic functions and student center. | Some additional cost for locating on two grade levels. Cost of relocating parking. | 1 | Good location for integration with other campus activities but would require reworking of existing campus facilities. |
| 4 | North Ives | Adequate. Approximately 250,000 SF. | Mostly flat. | Substantial. Agency approval required. | Reduction of wooded areas over entire site for building and parking. | Extension required for sanitary sewer (significant cost). | New parking required. Space available. | Not visible from entry drive. | Distant from current academic functions and student center. | Substantial cost for extending utilities. | 3 | Not recommended due to difficulty of wetlands approval, cost of extending utilities, and distance from academic activities. |
| 5/5a | lves Entry | Adequate. Approximately 200,000 SF. | Varies. | Substantial. | Reduction of wooded areas over entire site for building and parking. | Some extension required (additional cost). | New parking required. Space available. | Not visible from entry drive. | Close to current academic functions and student center. | Limited additional costs. Requires environmental permits. | 4 | Desirable for proximity to existing lives Center but may adversely affect existing lives Center. |
| 6 | Prow | Too small, Approximately 60,000 SF. | Steep. | None. | Limited. | Readily available. | New parking required. | Good visibility from West Road. | Next to current adademic functions and student center. | Substantial costs for building on steep site. Lots of rock. | Too small. | Site is too small for proposed building. |

Site Options

Best Practices Balancing Program and Budget

| Delaware State University Wellness Center and Student Center Dover, Delaware | | | | | | | | | | | HOLZMA ARCHITECTU | N MOSS |
|--|-----|-------|--------|---------|-------------|---|------|-------|-------------|---|---|---------------------------------|
| | | | | | | | | | | | | 5/31/2006 |
| | | | SCEN | #1 | | | SCI | FΝΔΕ | RIO #2 | | | 180.07.000.29.000.09.000.000.00 |
| Student Center Program Draft | | Bas | ed on | et Area | | W / Opt | | | gram Ame | enities | | 1 1 |
| | | Area | Total | ement | | Area | | | Element | 100000000000000000000000000000000000000 | 1 | Existing Total |
| | Qty | NSF | NSF | st/SF | Cost | Qty NSF | NS | SF | Cost/SF | Cost | Remarks | NSF |
| 100 Social Spaces | | | | | | ' | | | | | | 22 |
| Lounges | | | | | | | | | | | | |
| Electronic Information Board | 1 | 10 | | \$170 | \$1,700 | 1 1 | 10 | 10 | \$170 | \$1,700 | | |
| E-Mail Stations | 10 | 24 | 100 | \$170 | \$40,800 | 13531 | 24 | 240 | \$170 | \$40,800 | | |
| Active Lounge | 10 | 2,000 | | \$170 | \$380,000 | 1 4,50 | | 1,500 | \$170 | \$855,000 | | |
| Television Lounge | 1 | 500 | | \$190 | \$95,000 | 1 50 | | 500 | \$190 | \$95,000 | | |
| Study Lounge/Quiet Area | 1 | 500 | | \$190 | \$95,000 | 1 50 | | 500 | \$190 | \$95,000 | | |
| Spiritual Center | 1 | 450 | | \$190 | \$85,500 | 1 45 | | 450 | \$190 | \$85,500 | | |
| Subto | | 130 | 3,70 | 3170 | \$698,000 | (1) | | 5,200 | 3170 | \$1,173,000 | | - |
| and Fred Sandar | | | | | | | | | | | | |
| 200 Food Service | _ | | | | | | | | | | | |
| Vending | 1 | 90 | | \$170 | \$15,300 | 1 9 | 90 | 90 | \$170 | \$15,300 | | |
| "The Club" (Grill/Dance/Games) | | | | | | | | | | | | |
| Kitchen | 1 | 800 | 80 | \$215 | \$172,000 | 1 80 | 00 | 800 | \$215 | \$172,000 | *************************************** | |
| Seating | 100 | 30 | | \$190 | \$570,000 | Office Property | 77.0 | 3,000 | \$190 | \$570,000 | | - |
| Billiards/Video/Pinball/DDR/ | 1 | 2,200 | | \$175 | \$385,000 | 1 2,20 | | 2,200 | \$175 | | Playstation/X-Box | |
| Coffee Bar | | | * | | | | | | 7000000 | - | | - |
| Service Counter | 1 | 300 | 30 | \$215 | \$64,500 | 1 300 | | 300 | \$215 | \$64,500 | | |
| Seating | 20 | 30 | 60 | \$190 | \$114,000 | 20 30 | | 600 | \$190 | \$114,000 | | |
| Subto | | | 6,9 | | \$1,320,800 | | 6 | 5,990 | | \$1,320,800 | | |
| 300 Retail Services | | | | | | | | | | | | |
| Student Mail Services | | | | | | | | | | | | |
| Student Mail Boxes | 1 | 900 | 90 | \$190 | \$171,000 | 1 90 | 00 | 900 | \$190 | \$171,000 | 3,500 Boxes | |
| Package/Mail Room | 1 | 300 | ***** | \$170 | \$51,000 | 1 30 | | 300 | \$170 | \$51,000 | J,JJO BONES | |
| Mailroom Office | 1 | 120 | 1 1000 | \$170 | \$20,400 | 1 12 | | 120 | \$170 | \$20,400 | | |
| | | | | | | *************************************** | | - | | | | |

Best PracticesTotal Project Cost Model and Building Options

| Part | IAN MOSS | HITECTU | ARCH | | | | | | | | | | | | | | | OPTION 2 | | | | | Oklahoma State University STUDENT UNION EVALUATION FOR FACILITY IMPROVEMI Stillwater, Oklahoma |
|---|------------------------------|-----------|---------|-------------|--------|------------|----------|------------|---------|-----------|----------|------------|----------------|---------------|-------------|------------------|-----------|--------------|---|---------------|--------|---------------|--|
| 200 100 | ost Subtotal | | | Subtotal | _ | | | | S | nit Cost | | al I | Subtot | | | Subtotal | | | Subtotal | Unit Cost | | | Begin 2008 |
| Section Sect | | | | | \top | | | | | | | | | | | | | | | | \top | | Site Preparation & Selective Building Demolition |
| Substate | \$ 100,00 \$ 400.00 | | | | \$ | | | | | | | 3 | \$ | | | | | | | | | | |
| Noting Continuention 2000 Pallar was a continuential of the continuent of the contin | \$ 500,00 | _ | | | \$ | _ | OD: | | | | OPTION 3 | | \$ 13 | | - | | | | | | + | | |
| Marchantententententententententententententen | | | | | | | Πι | Subtotal | | | | | | | | | | | | | | | Building Construction in 2006 Dollars |
| Billion | | | | | | | | | + | | | | | \$ 220 | 13,792 | | | | | | | | |
| State Stat | 45 \$ 36,540,00 | \$ 145 | 252,000 | 34,819,430 | \$ | \$ 145 | | | \$ | | | ,000 | \$ 40,0 | \$ 145 | 276,541 | | | | | | | | |
| Solution | | | | | | | | | \$ | | | | | | | 3 11,304,930 | 3 /0 | 101,499 | \$ 14,053,900 | \$ 70 | 70 3 | 200,770 | building Code Opgrades |
| A Landenger and Trendage 5 9,000 | \$ 53,206,54 | | | 51,485,970 | \$ | | | 130,000 | \$ | | | ,000 | \$ 43,13 | | | \$ 31,020,260 | | | \$ 28,074,935 | | | | Subtotal |
| Company | | | | | | | | . 7., 400 | 1 | ć 220 | 20.755 | 240 | | | | | | | | | | | |
| Colories in detendentation \$ 10,000 \$ 7,0 | \$ 200,00 \$ 20.00 | | | | \$ | | 2, | | | | | | \$ 1 | | | | | | | | | | |
| DeSigners Control Undergroung | \$ 200,00 | | | | s | | 1 | ,, | 1 | | , | d | \$ 1 | | | | | | | | | | |
| | \$ 150,00 | | | 150,000 | \$ | | | | | | | 1 | \$ | | | \$ 75,000 | | | \$ 75,000 | | | | D.Adjacent Structure Underpinning |
| State of Control Con | \$ 100,00 \$ 670,00 | | | | \$ | | | 45,536,200 | \$ | | | | \$ 33 | - | - | | | _ | | | + | - | |
| Second Control, Comment and Part (1) 13 13 15 4,317,344 13 15 7,344,462 13 13 13 13 13 13 13 1 | \$ 54,376,54 | | _ | | 1. | - | | | | | | . | | - | | | | | | | + | - | |
| Excitation Number Place 3 8 5 4,877.944 3 8 5 7,544.42 3 8 5 10,46 100,00 5 100,000 | \$ - | | 15% | | \$ | | | | 1. | | | 000 | \$ | | 159 | \$. | | 15% | \$ - | | 15% | 159 | General Conditions, Overhead and Profit |
| Processing Section S | | 8% | 3 | | \$ | 8% | | | 1 - | | | | \$ 10,46 | | | | 8% | 3 | | 8% | 3 | 1 | Escalation (Assume Phased) |
| Seady-framework-bladen Seady-framework-bla | \$ 400,00 | | | 400,000 | \$ | | | 75,000 | 1 - | | | ,000 | \$ 4 | | | \$ 350,000 | | | \$ 200,000 | | 5% | | |
| Total Construction Cost | \$ - | i | 4.5% | | \$ | | | | - | | | | Š | (| 4.55 | \$ - | | 4.5% | s . | | | | |
| Other Product COSTS | \$ 67,826,91 | | | 65,693,403 | \$ | | | | 1. | | | . I | \$ 54.46 | | | \$ 39,329,722 | | | \$ 35,527,519 | | | | Total Construction Cost |
| Higher Ed. Arts Program Total Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Hybrid Construction Cost A. Furnitare - (HST) New and Ensiring Hybrid Construction Hybrid Constructio | | | | | | | | 46,001,200 | \$ | | | .685 | | | | ,,, | | | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | |
| Name Color Name | ost Subtotal | Unit Cost | Unit | Subtotal | - | Unit Cost | | 15 454 403 | 5 | 99/ | | | Subtot | Unit Cost | Unit | Subtotal | Unit Cost | Unit | Subtotal | Unit Cost | u | Unit | OTHER PROJECT COSTS |
| Total Construction Cost | s - | Į. | 0.00% | . | \$ | 1 | | | 5 | 0.6 | 4.20 | | | _ | | | | | | | 00% | 0.009 | Higher Ed. Arts Program |
| B. Fisher and Engineers 89.53 5 2 179.122 128.814 5 2 5 29.766 20.33 5 2 5 30.000 5 16 5 20.000 5 20.000 5 16 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.000 5 20.00 | 1 | | | | 1 | | | , | | | | . | | oct | n C | auctic | net | Co | Total | | Ĩ | | |
| C. Moreatic Equipment Portable Production Equipment - Portable | | | | | \$ | | | | \$ | | 4.5% | 7 - | | ,US L | ш | uctio | I 15 U | | Total | 4 | | | A. Furniture - (NSF) New and Existing |
| E. Food Service Equipment - Portable 20,000 5 6 5 310,000 20,000 5 6 5 320,000 20,000 5 6 5 320,000 5 73,000 5 | 4 \$ 1,311,02 2 \$ 655,51 | | | | \$ | | | 61,857,603 | \$ | | | 129 | 4 | | III 200 222 | 5 257.440 | | 120 024 | £ 170 126 l | | | | |
| P. Internal Building Sprayer & Wayfinding 99,543 5 2 179,156 128,834 5 2 279,040 290,333 5 2 5 278,040 290,333 5 2 5 278,040 290,333 5 2 5 278,040 290,333 5 2 5 278,040 290,333 5 2 5 278,040 290,333 5 2 5 278,040 290,333 5 2 5 28,040 290,333 5 2 5 28,040 298,135 5 6 5 4,770,160 3 12% 7,883,200 12,19% 12% | 2 055,51 | 2 | 32/,/5/ | 631,782 | , | 3 Z | | | | | | | , , | 2 | 290,333 | 2 237,668 | | 128,834 | 3 1/9,126 | > Z | 03 2 | 89,563 | C. moveable Equipment |
| Sabtotal | | | | | 1. | | Ų | Subtotal | \perp | Unit Cost | Unit | 2 | \$ 3 | | | | | | | | | | |
| Profesional Fees Subterial 12:193 12% 4,263,302 12:193 12% 4,719,567 12:193 12% 6,33 322 28,133 5 16 5 4,770,160 3 12½ 7,883,208 12:193 12% 7,883,208 12:193 12:193 12% 7,883,208 12:193 12:193 12% 7,883,208 12:193 12:193 12:193 12% 7,883,208 12:193 | 2 \$ 655,51 \$ 8,186,16 | \$ 2 | 327,757 | | 5 | \$ 2 | | . 1 | , | | 0.00% | . | \$ 5 | 5 2 | 290,333 | | \$ 2 | 128,834 | | \$ 2 | 63 5 | 89,563 | |
| Subtocal 12-195 1 | 0,100,16 | | | 7,701,304 | , | | | . | 1 | | 0.00% | 1 | , ,,20 | | | 3,412,016 | | | 2,407,312 | | | | |
| Other Costs | 2% 8,139,22 | 12% | 12-15% | 7,883,208 | | 12% | 31 | 4,770.160 | s | \$ 16 | 298.135 | ,328 | 6,53 | 12% | 12-159 | 4,719,567 | 12% | 12-15% | 4,263,302 | 12% | 15% | 12-159 | |
| Commissioning Co | | | | | | | 31 | 1,192,540 | | \$ 4 | 298,135 | ,332 | | | | | | | | 1999/3 | | | |
| Name | \$ 339,13 | | | 328,467 | \$ | | 31 | 596,270 | \$ | \$ 2 | 298,135 | ,666 | \$ 27 \$ | | | \$ 196,649 \$ | | | \$ 90,000 | | | | |
| Owner's Administrative Costs | Cost \$ 1,461,60 | | | 1,392,777 | st \$ | Reno. Cost | | 320 000 | | C 16 | 20.000 | 000 | \$ 1,60 | | | \$ 667,244 | | | \$ 439,472 | Reno. Costs | | | |
| No. No. St. No. St. | | | | | | | 31 | | | | | | | | | | | | | | | | |
| C. Permit frees | \$ 200,00 \$ 200,00 | | | | \$ | | - | | \$ | - | 270,100 | 992 | \$ 1 | | | | | | | | | | |
| E. Inopection Services F. Surveys and Testing G. Other Subtotal Testing G. Other Subtotal S 290,000 S 430,000 S 5 10,306 S 10,000 S 10,306 | \$ 200,00 | | | 200,000 | \$ | | | | | | | 1 | \$ | | | \$. | | | \$ 50,000 | | | | |
| F. Surveys and Testing G. Other Sobtotal S 290,000 S 430,000 S 54 S 54 Sobtotal Other Project Costs S 290,000 S 430,000 S 54 S 16,24 Sobtotal Other Project Costs S 2,153,990 S 2,437,760 S 5 3,550,804 S 175,000 S 175, | s - | | | | \$ | | | 7,422,912 | | 12% | 12-15% | ,336 | \$ | | | | | | · . | | | | |
| Subtotal Sub | \$ 140,00 \$ 120,00 | | | | 5 | | | | ١. | | | | \$ 1: \$ 1: | | | | | | | | | | |
| Subtotal S 290,000 S 430,000 S 54 938 4.0% Reno. Cost \$ 1,550,804 S 660,000 | | | | | Ľ | <u></u> | | 309,288 | \$ | | | | | | | | | | | | | | G. Other |
| Owner's Contingency 5% \$ 2,153,960 5% \$ 2,437,760 5% \$ 3,35,000 \$ 5 175,000 \$ 5 175,000 \$ 5 150,000 | \$ 660,00 | | | 660,000 | \$ | | | 1,550,804 | st \$ | Reno. Cos | | 938 | \$ 54 | | | \$ 430,000 | | | \$ 290,000 | | | | Subtotal |
| Owner's Contingency 5% \$ 2,153,960 5% \$ 2,437,760 5% \$ 3,35,000 \$ 5 175,000 \$ 5 175,000 \$ 5 150,000 | \$ 18,786,13 | | | 18,165.837 | s | | | | | | | . | \$ 16.74 | | | \$ 9.425.475 | | | \$ 7,552.286 | | | | Subtotal Other Project Costs |
| TOTAL PROJECT BUDGET \$ 45,233,796 \$ 51,192,957 \$ 74,240 000 \$ 120,000 \$ 120,000 \$ 120,000 \$ 100,000 \$ 279 \$ 279 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 \$ 279 \$ 273 | \$ 4,330,65 | | 5% | 4,192,962 | \$ | | | | | | | ,000 | \$ 3,5 | \$ | 55 | \$ 2,437,760 | | 5% | \$ 2,153,990 | | 5% | 59 | Owner's Contingency |
| TOTAL PROJECT BUDGET | \$ 23,116,78 | | | 22,358,799 | \$ | | | 150,000 | | | | ,000 | \$ 19,77 | | | \$ 11,863,235 | | | \$ 9,706,276 | | | | Total Other Costs |
| TOTAL PROJECT BUDGET \$ 45,233,796 \$ 51,192,957 \$ 74,240 ,000 \$ 120,000 \$ 120,000 \$ 88,052,201 | | | 1 | | | | | : | | | | 1: | | | | | | | | | | | |
| Exclusions: S 397 S 383,947 S 55 500 S 545,000 S 5 | \$ 90,943,693 | | | 38,052,201 | \$ | | | 120,000 | | | | ,000 | \$ 74,240 | | | \$ 51,192,957 | | | \$ 45,233,796 | | | | TOTAL PROJECT BUDGET |
| Secal action Month after 2008 Start @ 3/4%per Month S 339,253 S 383,477 S 5000 S 545,000 S | 14 | | | | La | | | | | | | | | | | | | | | | | | |
| **Assumes slight decrease in future OSU Errollment and No Capital Contributions from Bookstore & Dining Operations. Total Project Cost | \$ 27 \$ 682.07 | | | | \$ | | | E 4E 0CC | Ļ | | | 000 | \$ | | J | | - 1 | | | | | | Exclusions |
| Total Project Cost Solution | 3 662,07 | | | 000,372 | 3 | | | 545,000 | \$ | | | 000 | , , | | | 2 303,74/ | | | 2 337,233 | | | | worker of a market area 2000 start & 374/sper Month |
| Total Project Cost Solution | ٦ | | | | Nev | | | 17,303,244 | \$ | | | 571 | Renov | | | | i. | g Operations | rom Bookstore & Dinin | tributions fr | Contr | No Capital Co | **Assumes slight decrease in future OSU Enrollment and N |
| Total Project Cost | | | | | \$ | | | | | | 5% | ,285 | | | | | | | | | | | |
| Food Service Seating 5 985 \$ 83,118,890 ce 5 5 225 5 293 Counges 5 | | ļ | | | \$ | | | 21,261,287 | \$ | | | 56 | + | C_{OS} | oct. | Proje | tal | To | | | | | |
| Food Service Seating \$ | | Į. | | | Ş | | | | | | | | L | -03 | oct [| 11016 | tal | 10 | | | | | |
| Dining/Kitchen \$ 256 15 279 ESCALATION | _ | | \$ 293 | 225 | \$ | ce Sr | | 83,118.890 | Ś | | | 985 | s | vice Seation | Fond San | | | | | | | | |
| Dining/Kitchen \$ 256 \$ 279 ESCA ATTO | | | 1.0 | | | | | 23,1.3,070 | 4 | | | - 35 | š | | Lounges | | | | | | | | |
| Retail \$ 907 \$ 423,203 | | Ion | uat | ESCA | | | | | Ls | | | 256 | \$ | itchen | Dining/K | | | | | | | | |
| Retail Vanilla Box Oni: S | | | | | | IIIa Br | ' | 623,392 | \$ | | | ,807 | \$ | nilla Bov Oni | | | | | | | | | |
| Multipurpose \$ 256 \$ 333 Multipurpose \$ 331 \$ 431 | Τ_ | | | | Ş | oose | ultipurp | Mu | | | \$ 333 | 256 | Š | | | | | | | | | | |
| Auditorium \$ 356 \$ 463 Auditorium \$ 431 \$ 561 | | | \$ 561 | 431 | \$ | m | | | | | | | \$ | | | | | | | | | | |
| Loading / Service \$ 138 \$ 179 Loading / Service \$ 213 \$ 276 | | į. | \$ 276 | 213 | \$ | Service | oading / | Lo | | | \$ 179 | 138 | \$ | Service | Loading | | | | | | | | |
| | _ | | | | _ | | | | | | | | | | | | | | | | | | |

Best Practices

Planning for Sustainable Environments

An Intelligent Use of Resources

- · A Building For the Students of UH
- A chance to be environmentally and socially responsible
- A strategy for maximizing a sustainable approach
- A sustainable approach beyond building systems and day lighting

Health

• Quality Indoor Environments improve working and learning

Educational

· Providing learning Environments within the building

Environmental

Reducing pollution and protecting the ecosystem

Economic

Creating long-term operational and maintenance savings

Public Relations

 Sending a positive message to students, alumni, and the community about sustainability commitment







Approach to the Bookstore

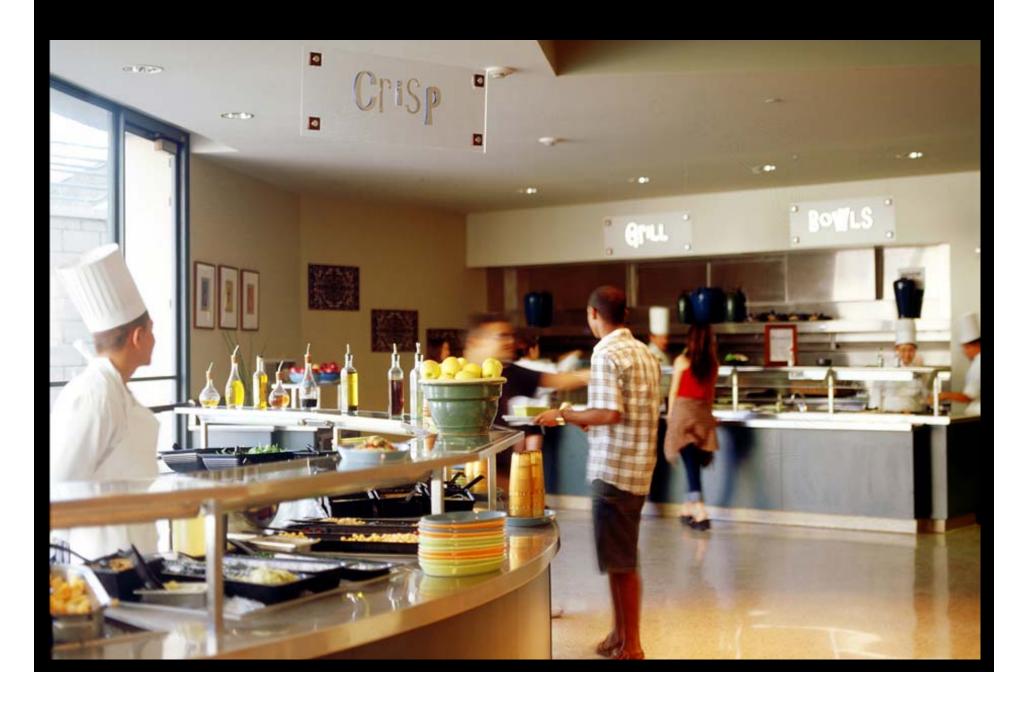


Approach to the Bookstore Ensuring the Financial Stability for the Future

Exploring Key Indicators for the Future

- Sales trend
- · Gross margin trend
- Personnel expense ratio trend
- · Financial contribution trend
- Sales mix trend
- Used textbook ratio trend
- Sales per FTE student trend
- Textbook sales per FTE student trend
- Sales per square foot trend
- Square feet per FTE student trend





Methodology - A Four-Phase Approach

Phase 1 - Assessment of the Current Condition

Phase 2 - Market Research

Phase 3 - Operational Evaluation & Assessment

Phase 4 - Dining Services Master Plan



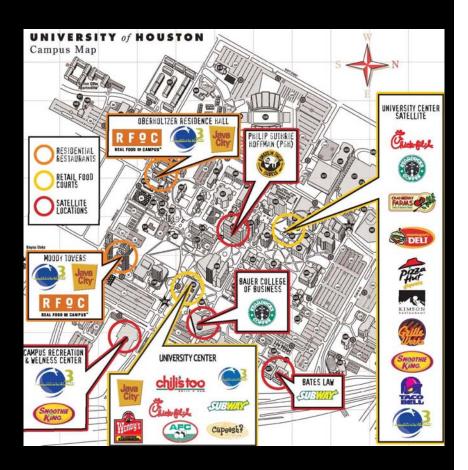


Phase 1: Assessment of the Current Condition

- Confirm Goals and Objectives
- Institutional & Operational Data Gathering
- Assessment of Existing Operations

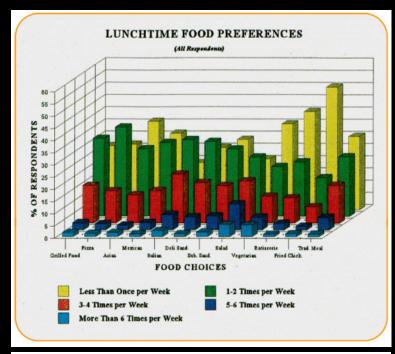
Including review of Residential Dining Program & other Retail Venues on Campus

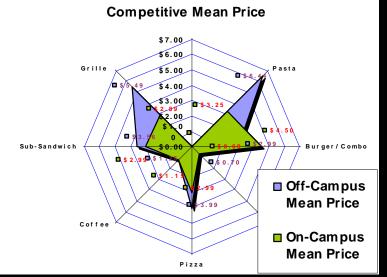
- Mix of Concepts
- Traffic Patterns & Locations
- Meal Plans
- Revenue & Capture
- Catering / Conferencing
- Assessment of Existing Facilities



Phase 2: Market Research

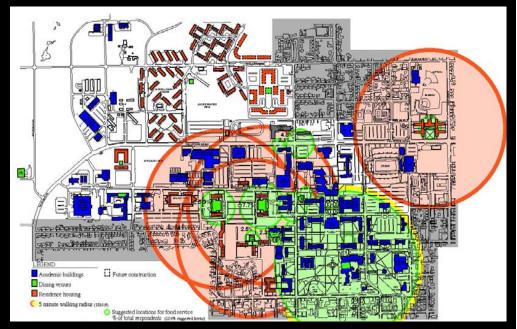
- Interviews and Focus Groups
 - Administrators
 - Students
 - Faculty & Staff
- Web-Based Quantitative Survey
 - Real-Time Data Collection
 - Advanced Statistical Applications
 - Results Interpretation and Presentation
- Local Area Competitive Assessment
- Peer Institution Benchmarking
- Presentation of Phase 2 Findings





Phase 3: Operations Evaluation and Assessment

- Evaluation of Programs & Services
 - Relative to Best Practices
 - Relative to Customer Expectations
 - Relative to University Center Mission / Goals
- Develop / Evaluate Alternative Scenarios
- Present Findings in Working Session Format
- Integrate Feedback into Summary Assessment



Oklahoma State University, Stillwater

Assessment of Food Service

Phase 4: Dining Services Master Plan

- Dining Services Plan
 - Type and Distribution
 - Dining Concepts
 - Meal Plan Recommendations
 - Marketing Strategies
- Implementation Strategies
 - Demand Analyses / Space Programs
 - Project Cost Estimates
 - Design Concept Studies
 - Phasing Plan
- · Present Findings in Working Session Format
- Financial Modeling
- Present Prior to Report Completion
- Presentation of Final Dining Services Plan



University of Washington, Seattle



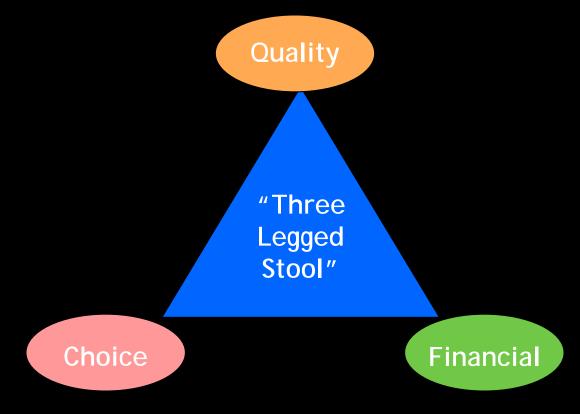
Virginia Commonwealth University, Richmond

Assessment of Food Service

Our Planning Philosophy

The Planning Paradigm

A creative balance between ...



... is unique to every client!

Conducting the Facility Assessment

- Review Available Drawings
- Meet with Physical Plant Personnel to Assess
 - Maintenance and Operational issues
 - Planned Deferred Maintenance
 - Adequacy of Capacity from Campus Systems
- Field Investigate
 - Physical Condition of Equipment
 - Compliance with Present Codes and Standards
 - Opportunities for Energy Conservation
 - Maintenance and Operational Improvements
- Planning/Recommendations
 - Code Compliance
 - Identify Compliance with State of Texas Energy Code
 - Impact on Campus Systems due to New Demand
 - Energy Conservation
 - Replacement/Reconditioning of Equipment
 - Indoor Air Quality



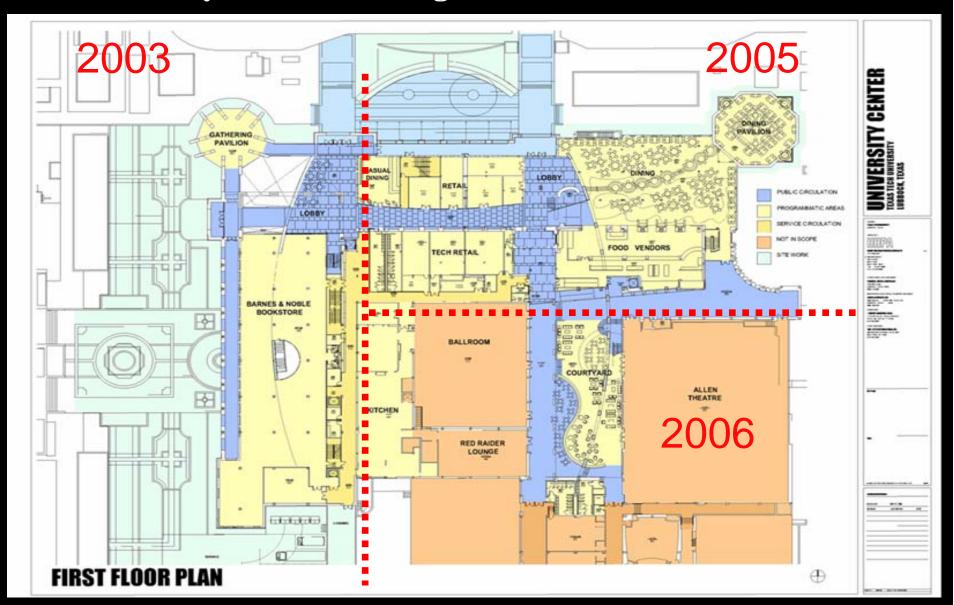




Master Plan Implementation - Transformation of a College Union/University Center



Master Plan Implementation - Transformation of a College Union/University Center



Master Plan Implementation - Transformation of a College Union/University Center









Master Plan Implementation - Transformation of a College Union/University Center



Before















Similar Master Plan for a College Union/University Center

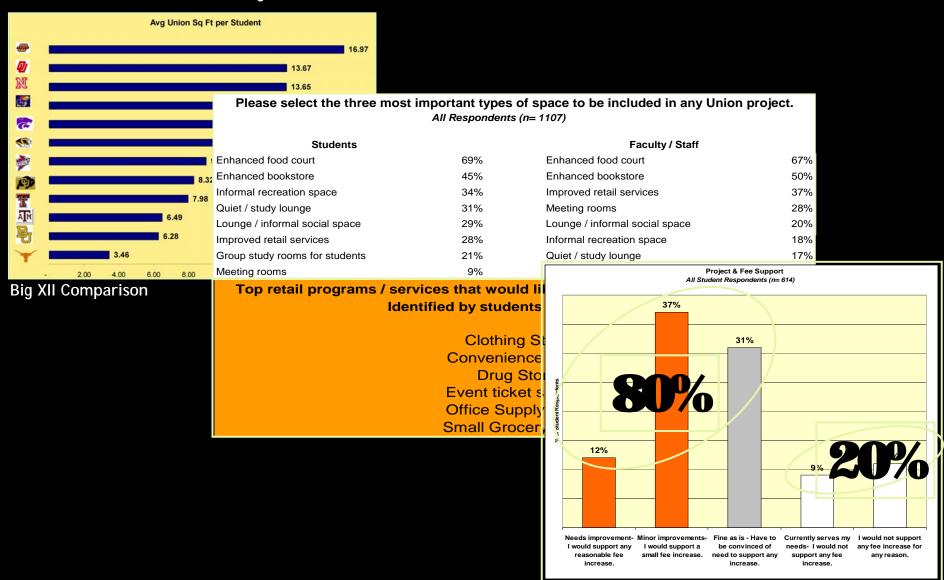
Oklahoma State University, Student Union



Charts prepared by Brailsford & Dunlavey

Similar Master Plan for a College Union/University Center

Oklahoma State University, Student Union



Project and Fee Support

Similar Master Plan for a College Union/University Center

Oklahoma State University, Student Union



View of Campus Plaza

Similar Master Plan for a College Union/University Center

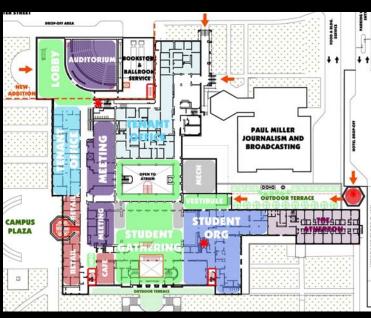
Oklahoma State University, Student Union



View from North West



Student Gathering



Reorganized Floor Plan

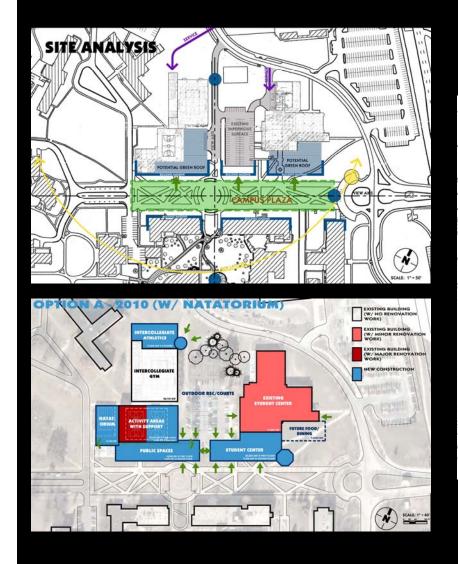


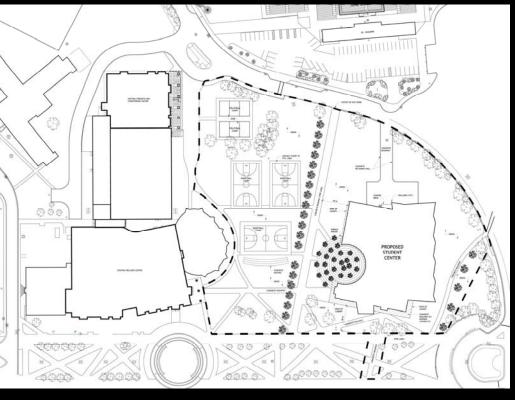
Ballroom

Master Plan for a College Union/University Center that Aligns with Campus-wide Master Plan



Master Plan for a College Union/University Center that Aligns with Campus-wide Master Plan





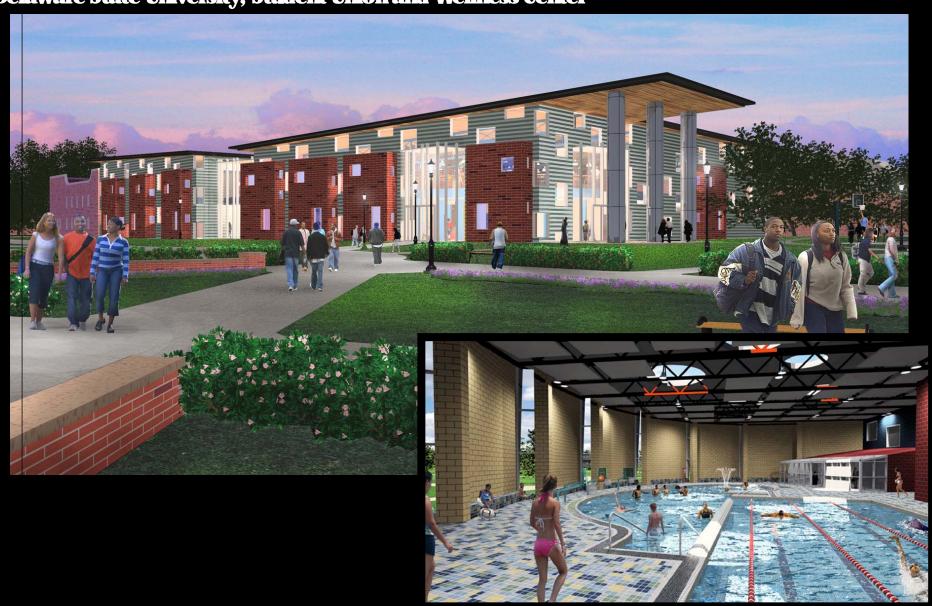
Master Plan for a College Union/University Center that Aligns with Campus-wide Master Plan



Master Plan for a College Union/University Center that Aligns with Campus-wide Master Plan



Master Plan for a College Union/University Center that Aligns with Campus-wide Master Plan



Master Plan for a College Union/University Center that Involves Multiple Buildings

North Carolina State University, Student Life Master Plan



Master Plan for a College Union/University Center that Involves Multiple Buildings

North Carolina State University, Student Life Master Plan

1 UNION / LIBRARY

- Lounge /Gathering
- · Food Service / Dining
- Modified C-Store
- · Engineering Student Organizations
- Outdoor Covered Terrace
- Dining

2 CATES PLAZA

- Closed Street for Pedestrians
- Street Lighting
- · Program Areas
- Landscaping
- · Limited Services Vehicles
- Accessible for Emergency

3 ARTS / UNION

- · Lounge / Gathering
- · African American Cultural Center
- Lecture / Chamber Music (300-Seat)
- · Concert Hall (500-Seat)
- · Black Box Theater (100-Seat) • Flexible Performance Space

CENTRAL UNION

- Lounge /Gathering
- Recreation
- · Food Service / Dining
- · Coffee / Juice Bar
- · Bookstore / Retail
- Student Affairs
- · Student Organizations

Administration

Career Services

· Meeting Rooms

• Stewart Theater (800-Seat)

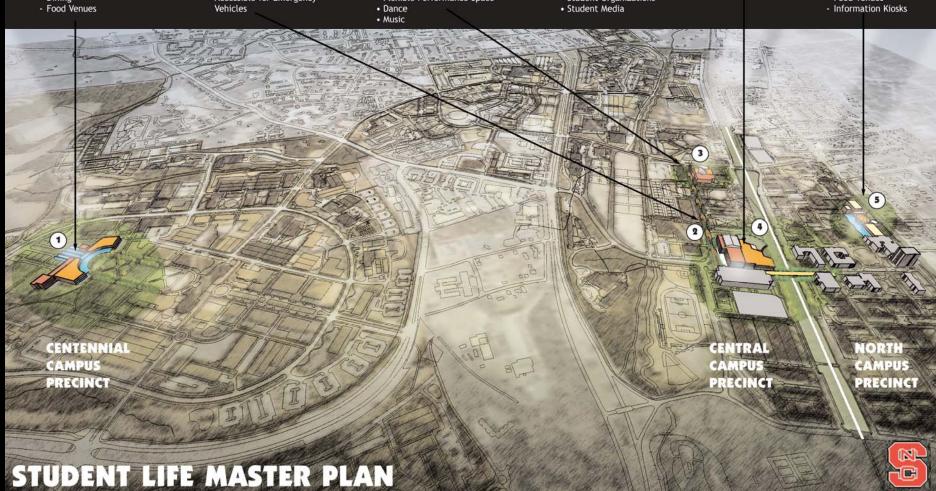
• Ballroom

Cinema

- · Lounge /Gathering
- · Partial Food Service
- Modified C-Store
- · Outdoor Covered Terrace
- Lounge

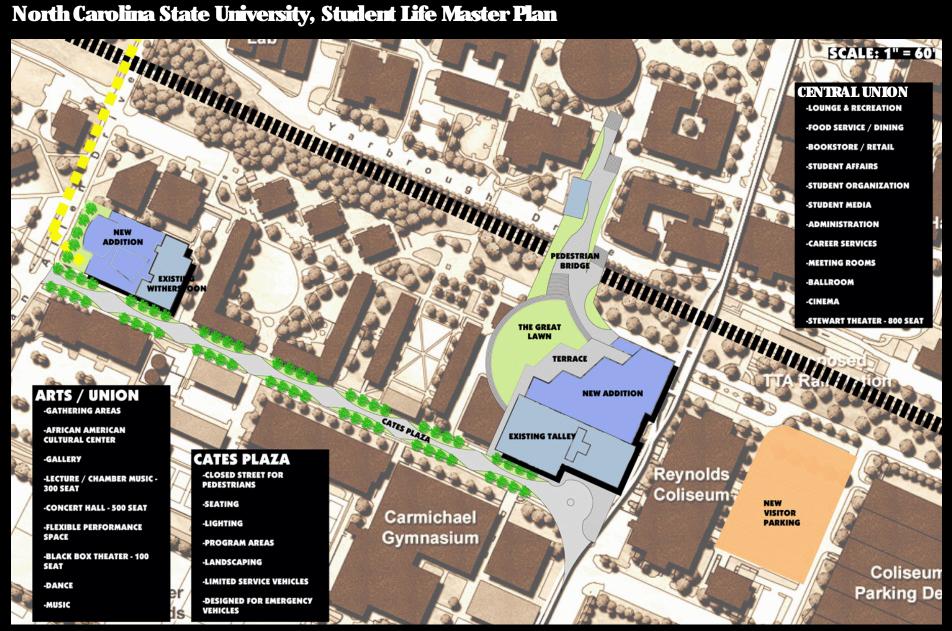
B WOLFPACK

- Dining
- Food Venues



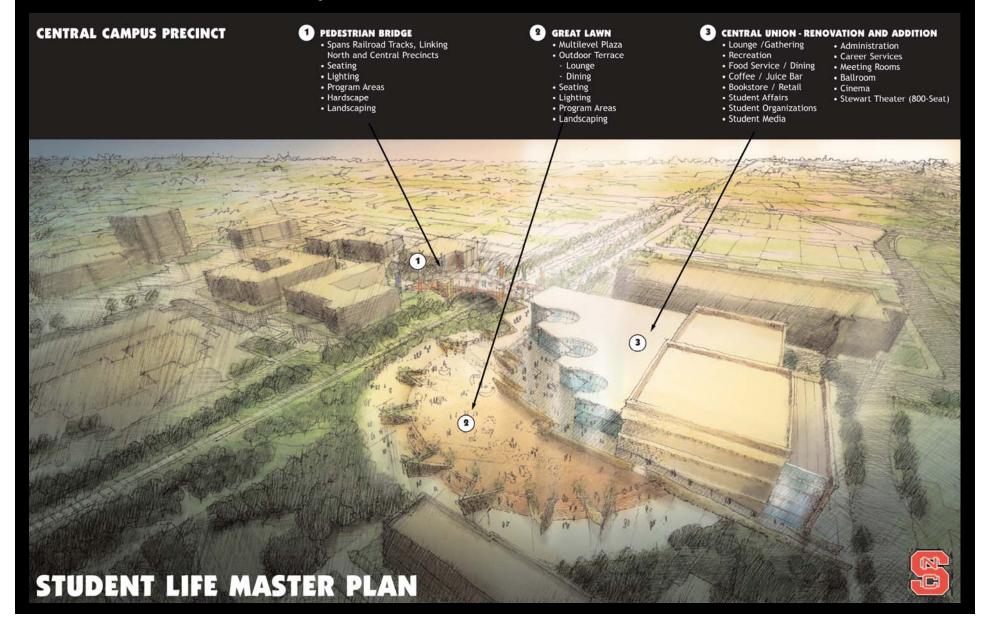
Master Plan for a College Union/University Center that Involves Multiple Buildings

North Carolina State University, Student Life Master Plan



Master Plan for a College Union/University Center that Involves Multiple Buildings

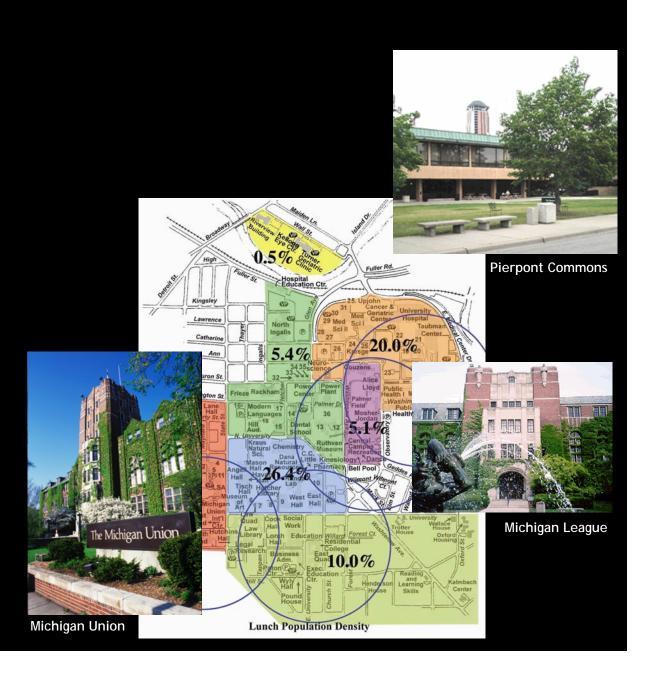
North Carolina State University, Student Life Master Plan



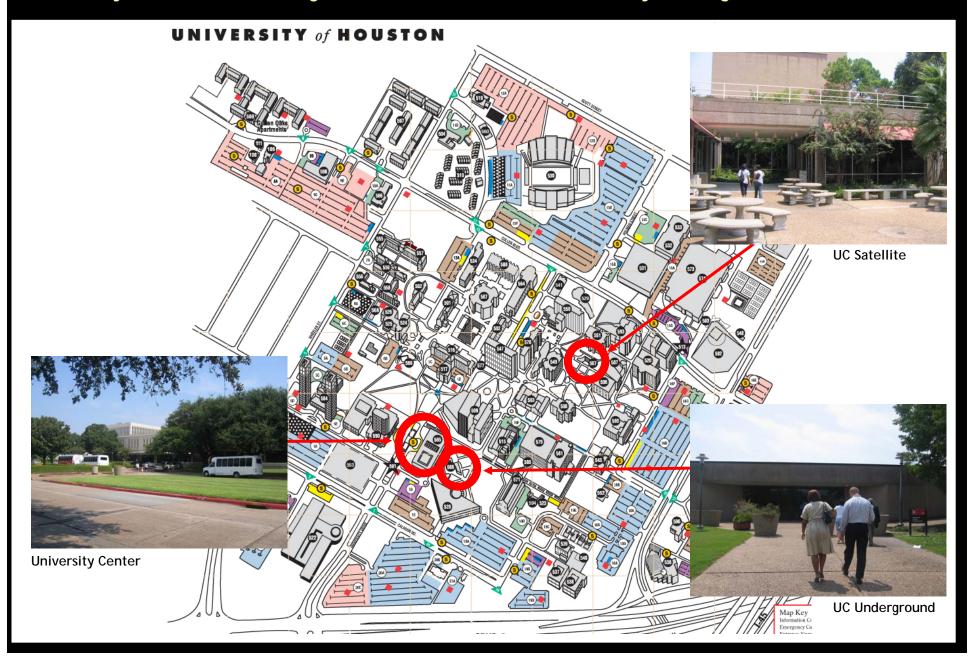
Master Plan for Food Service that Involves Multiple College Union/University Center Buildings

University of Michigan

- Three Unions on Campus
 - Michigan Union Central
 - Michigan League Central
 - Pierpont Commons North
 - Plus Multiple Retail Locations
- Multiple Operators
 - Self-Operated Venues
 - Contracted Venues
 - Tenant Operators
- Three Catering Departments
- Alignment with Residential Dining

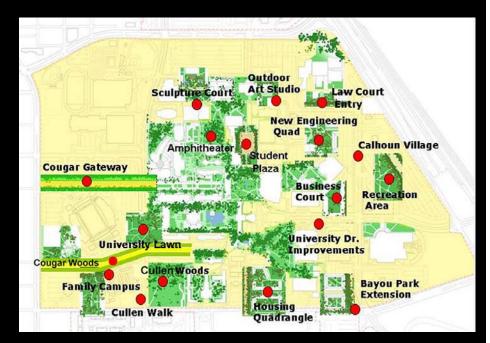


Understanding the Your Project
University Center, UC Underground and UC Satellite - Diversity of Programs and Locations



Understanding the University of Houston Campus Framework Plan

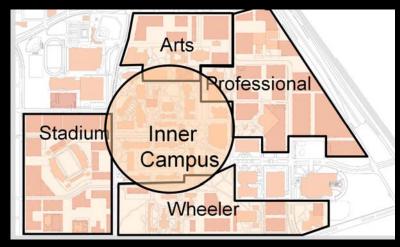
- Increase on-campus residential population to 24% and distribute across campus
- Allow for growth to 41,000 students and 12.2 million square feet
- Provide limited infill opportunities integrated in the inner campus core
- Develop four perimeter precincts for current and future initiatives
- Construct mixed use development unique to each precinct



Campus Framework Plan

University of HoustonA Campus of Transformation

- Shifting from a commuter school to a Tier 1 institution
- Continuing to maintain diversity and accessibility in enrollment while attracting best and brightest
- Implementing the 2006 Campus Framework Plan of which the University Center is a key part
- Growing from close to 35,000 students today, to 45,000 as projected in the Framework Plan
- Transforming from a campus of 4,200 residential students today to an estimated 11,000 (25% increase) in the future
- Initiating mixed-use development projects throughout campus
- Focusing on the creation of new green spaces that extend to the campus borders, connecting to the neighborhood in a series of lawns and greens



Campus Framework Plan

STUDENT UNION BUILDING, ADDITION AND RENOVATION TEXAS TECH UNIVERSITY, Lubbock, Texas









Date: 2003 (PH 1), 2005 (PH 2), 2006 (PH 3) Size: 95,250 s.f. addition; 106,000 s.f. renovation

Cost: \$34.5 million



"It's beautiful. It is really student-oriented. It totally caters to students." - Jeremy Brown, Student Body President. Lubbock Avalanche Journal, October 2, 2003

STUDENT UNION MASTER PLAN OKLAHOMA STATE UNIVERSITY, Stillwater, Oklahoma







PROPOSED PLAN

Date: Size:

2007 365,000 s.f.





MARTIN LUTHER KING, JR. STUDENT CENTER DELAWARE STATE UNIVERSITY, Dover, Delaware







NOW POOL IN THE PARTY OF THE PA

Date: 2009 Size: 73,000 s.f.

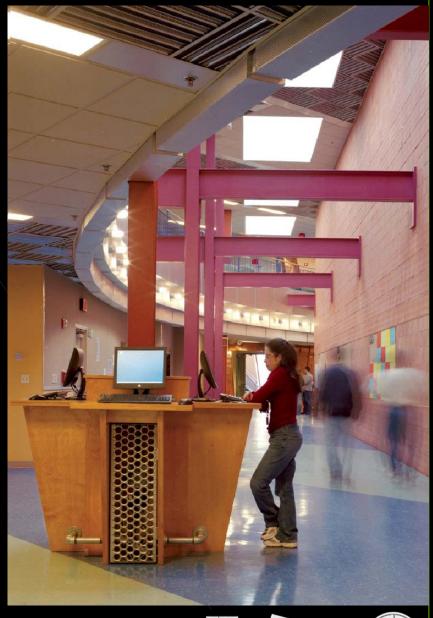










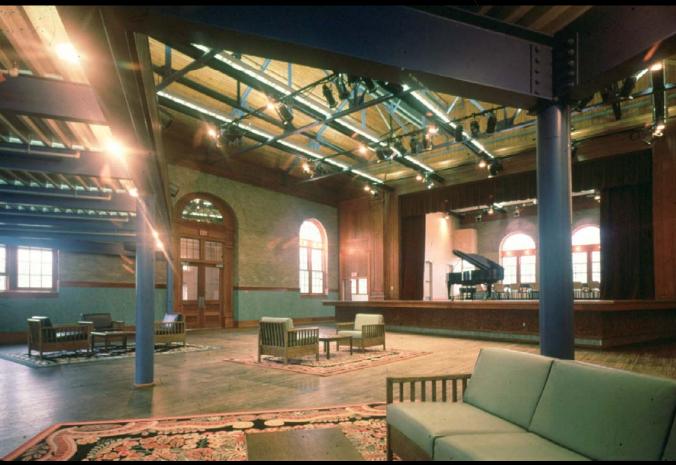


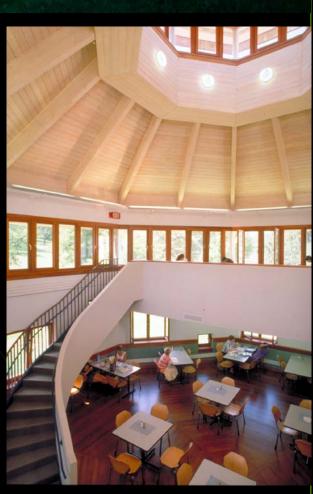
Date: 2002 Size: 86,000 S.F. Cost: \$9,200,000 Students: 11,646

"It's not just another new building on campus. It's a revolution."...Take a minute to admire the flying staircases, the skylights,...It was definitely worth the wait."
- Leslie Porter, Central Focus Summer 2002

McCULLOUGH STUDENT ACTIVITIES CENTER MIDDLEBURY COLLEGE, MIDDLEBURY, VERMONT











Date: Size: 1991 45,000 S.F.

INFORMATION SERVICES BUILDING, ADDITION AND RENOVATION UNIVERSITY OF OTAGO, DUNEDIN, NEW ZEALAND









Date: 2001 Size: 200,000 s.f.



"Lit up like a passenger liner, its sleek shape announces there's a new blockbuster in town...A showcase, it is filled with an ambient glow, allowing passers - by to look directly into the interior."

NEW CAMPUS, MASTER PLAN & FIRST PHASE FACILITIES SOKA UNIVERSITY OF AMERICA, ALISO VIEJO, CALIFORNIA









Date: 2001 (Phase I)

Size: 52,000 s.f. (Phase I); 117,000 s.f. (complete)



"Soka's central outdoor space, bounded by the library, student center, and academic halls, feels simultaneously enclosed and open, with airy breezeways and a high wall of windows on the first floor of the student center. It is the kind of place where students have always gone."

- Dan Halpern, Architecture, December 2001

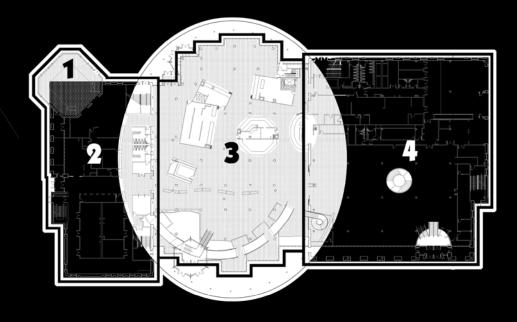
STUDENT CENTER ADDITION AND RENOVATION UNIVERSITY OF MISSOURI AT COLUMBIA, COLUMBIA, MISSOURI











1. Mort's 2. Retail 3. Brady Commons 4. Bookstore PROPOSED PLAN

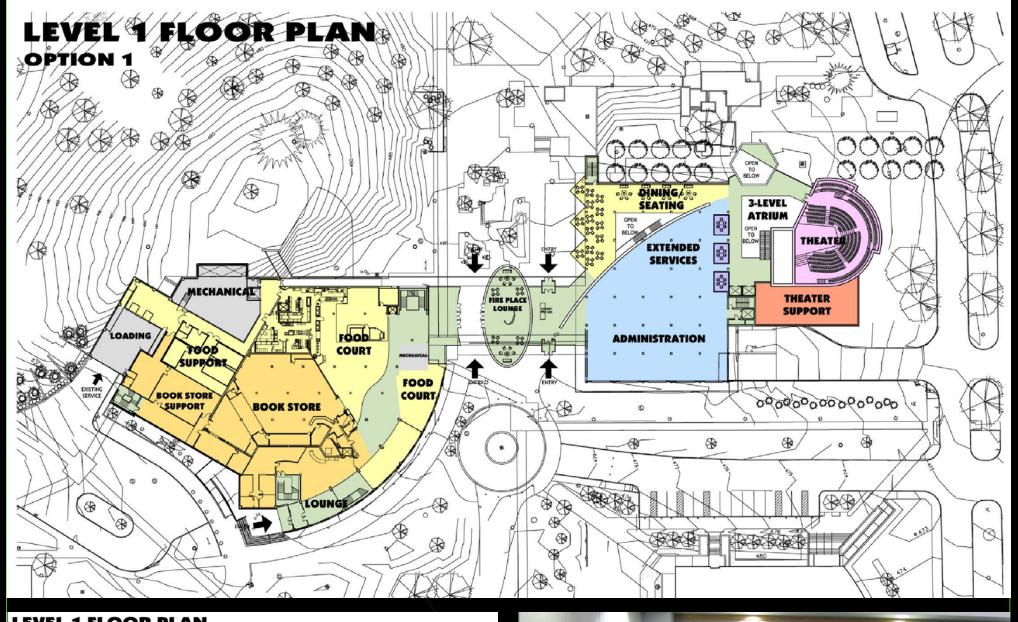
Date: 2008 PH1, 2009 PH2 Size: 236,000 s.f.

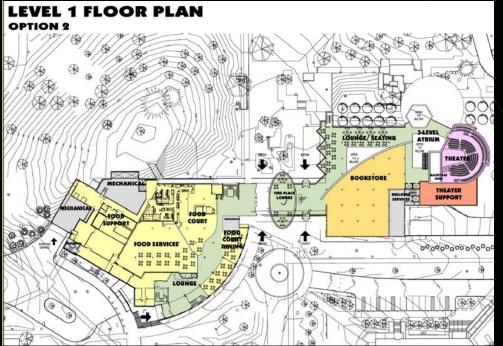


"Holzman Moss Architecture's skill in weaving new and old together into a cohesive whole is a relief to the University of Missouri staff who have wondered whether to raze or renovate the buildings."

- Clarissa Easton AIA, University Architect

UNIVERSITY CENTER EXPANSION UNIVERSITY OF SOUTHERN INDIANA, Evansville, Indiana









Date: 2009

Size: 227,000 s.f. (Total); 57,000 s.f. (Phase 1)



