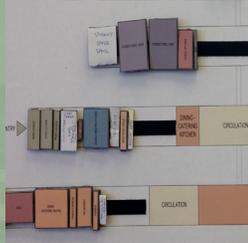
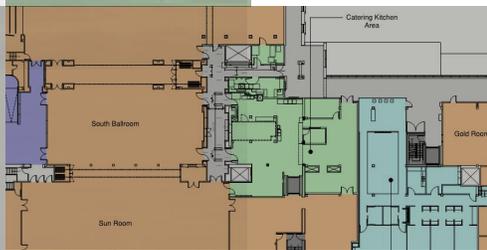
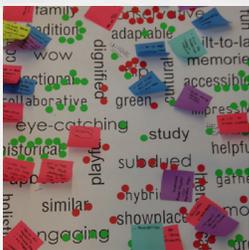


FEASIBILITY STUDY

SPRING 2016

Iowa State University Memorial Union



SPECIAL THANKS are given to the students and core team members, whose understanding of the building’s functional needs, operational demands and dedication to service to students and customers provided unequalled insight into the requirements for future success. This group of contributors dedicated much time to provide regular feedback and insight throughout the study process and will continue to be the ambassadors of the Union’s mission and values.

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01 EXECUTIVE SUMMARY

The Memorial Union is the “**life-learning classroom**” of campus. It is a place where students come to create, discover, interact, collaborate, celebrate, and to learn. It is the one building on campus that truly serves students throughout their entire education, from their first visit to campus, to graduation breakfast, and beyond as alumni.

From its construction in 1928, through 11 additions, a surge in the student population, and changing campus needs, **there has not been a holistic assessment completed** on the allocation of space, amenities, and student needs for the building. As a result, **critical needs** including improving wayfinding, right-sizing space, updating infrastructure, improving amenities, etc., **have not been addressed comprehensively**. In 2015, the Memorial Union engaged in an assessment to discover these needs.

GOALS AND OBJECTIVES

The focus of this assessment is to identify holistic building needs, to develop recommendations and to provide a flexible and thorough implementation plan. Specific goals for the study were developed through conversations with Campus Administration, the Memorial Union leadership team, students, and key stakeholders. The study’s primary goals and objectives were to:

- Determine the best potential use for the hotel floors and repurpose the space vacated to improve tenant/user spaces, wayfinding, and the student experience in the building.
- Expand dining seating.
- Improve and expand student organization and student activity areas.
- Enhance multicultural student resources.

IDENTIFIED NEEDS

The Memorial Union Feasibility Study included staff and tenant evaluation interviews, online student surveys, a charrette with staff and tenants, and multiple student charrettes. In all, **over 865 stakeholders provided input** on needs and desires for the building. Requests for **increased space** from the stakeholders **were modest and stayed within the focus of the study**.

A space analysis was completed and preliminary space test fits developed to summarize the gathered information. The analysis and test fits found that **many identified needs were able to be met within the existing building footprint** through strategic reorganization. **The space needs that require expanding the building footprint include:** additional meeting rooms, an auditorium, expanded Dining Services kitchen space, expanded student organization space, collaborative work area, Multicultural Center expansion, expanded lounge areas, office space for other collaborators on campus, and other various amenity spaces.

Potential opportunities were discovered with **an addition** on the northeast side of the building to **address a portion of the unmet needs**.

KEY FINDINGS

Most tenant spaces in the building **are undersized** to meet the current student demand.

- Seating for dining is significantly undersized.
- Student organization growth has exceeded the space available.
- Meeting rooms for 75–125 people are highest in demand in the building.
- There is not enough space in the Multicultural Center to accommodate growing student needs.
- The Veterans Center is undersized to fulfill programming.
- The Admissions Visitor Center is undersized to serve the current volume of demand.

The MU Hotel operation will cease as it would not be able to recoup the cost to bring the facility up to modern standards.

Significant wayfinding issues are noted throughout the building, but most notably on the Third Floor.

SUMMARY OF RECOMMENDATIONS

The recommendations of this report represent a holistic reorganization of the Memorial Union. This broad-stroke approach gives an opportunity to meet a majority of current identified needs, to improve wayfinding throughout the building, and to provide an opportunity to meet the needs of a growing student population. The proposed recommendations include **over 100,000 sf of renovation** to existing space and a **24,000 sf addition** to the building.

FOURTH-SIXTH FLOORS:

Repurpose hotel floors with office and administrative space.

THIRD FLOOR:

Move Student Organizations and Leadership space to this floor.

- Provides opportunity for collaboration, growth and ownership of space and a 55% expansion of space.
- Allows access to meeting rooms in highest demand by students.

SECOND FLOOR:

Expand the Multicultural Center. Provide space for the Multicultural Student Affairs Office. Convert existing New Student Programs office space into a flexible meeting room seating 75-100.

- 685 additional square feet of office space and 855 square feet of shared meeting space are included and allows for collaboration between these two groups.
- Add a movable partition to allow the new meeting room to meet multiple room scheduling needs.

FIRST FLOOR:

Expand dining seating and the Dining Services kitchen.

- 200+ seats are provided within the study recommendations.
- Additional seating is provided during surge hours in the recreation area.

GROUND FLOOR:

Relocate Veterans Center to Ground Floor. Expand Visitors Center and University Book Store storage in their existing locations.

- Expanding square footage will accommodate a larger portion of the identified programming.
- Expanding dining seating will accommodate high demand hours and support the Visitors Center high volume of guests.
- Provides the potential to increase number of prospective student recruits.

PHASING AND COST:

For the purpose of this study, **phases should be considered a series of sequences**. The phases were strategically developed to focus renovations around vacated areas. This proposed phasing would start with vacating the hotel floors and construction of the addition. As an area is renovated and repurposed, a new space in the building is vacated. Consideration was given to the relocation of specific services and departments based on needs, available space, the ability to minimize multiple relocations for any entity, and to reduce the interruption of key building services.

The following chart summarizes phasing and cost to support these recommendations. A 24 month design phase will precede construction and renovation. **Total project cost is estimated at \$52,000,000 with a duration of five years, including design.**

PHASING AND COST SUMMARY

PHASE FLOOR	PROPOSED USE	CURRENT USE	GOALS MET	CONSTRUCTION DURATION/ COST
1 Fourth-Sixth + Addition	Memorial Union Support, Multicultural Student Resources	Hotel Guest Rooms	Repurpose hotel room floors, expand multicultural services, add freight elevator	Addition 12 mo. \$10,500,000 - \$11,500,000
				Reno 8 mo. \$9,500,000 - \$10,500,000
2 Third	Student Leadership	Administrative/ Student Resources	Expand student organization and student activity spaces.	8 mo. \$8,000,000 - \$9,000,000
3 First	Public and general student services	Student Leadership	Increase dining seating areas, relocate student recreation space.	\$12,000,000- \$13,500,000 12 mo.
4 Ground	Public and general student services	Recreation	Expand Visitor Center, Veterans Center, UBS Storage, relocate student services	\$9,000,000 - \$10,500,000 8 mo.
5 Second	Meeting Space	Meeting Space	Refresh existing amenities, add meeting room space	\$3,000,000 - \$4,000,000 5 mo.

⁰² PARTICIPANTS

A COLLECTIVE GROUP OF THOUGHTS AND EXPERIENCES

MEMORIAL UNION ADMINISTRATION AND GOVERNANCE

Richard Reynolds, Past Director
Corey Williamson, Interim Director
Memorial Union Board of Directors

IOWA STATE UNIVERSITY ADMINISTRATION

Martino Harmon, Senior Vice President,
Student Affairs
Ellen Rasmussen, Associate Vice
President for Academic Planning and
Resources

FACILITIES PLANNING AND MANAGEMENT

Daniel Sloan, University Architect
Margie Tabor, University Planner

STUDENT GROUPS AND ORGANIZATIONS

Student Government
Business Council
College of Agriculture and Life Sciences
Freshman Council
Graduate and Professional Student
Senate
Greek Governing Councils
Inter-Fraternity Council
Inter-Residence Hall Association
International Student Council
KURE
Lesbian, Gay, Bisexual, Transgender and
Ally Alliance
Leaders United for Change

Minorities in AG
Memorial Union Student Building Staff
Multicultural Leadership Council
National Agri-Marketing Association
Student Union Board

MEMORIAL UNION STAFF AND STAKEHOLDERS

Building Managers
Business Services
Event Management Office
Facilities and Custodial Services
General Services
ISU Dining-Catering
ISU Dining-Retail
Hotel Memorial Union
Mechanical Department
Memorial Union Marketing
Multicultural Center
Multicultural Student Affairs Office
MU Market and Cafe
CyBowl and Billiards
Workspace
University Offices
Campus Organizations
Copy Center
Greek Affairs
International Student and Scholars
New Student Programs
Student Activities Center
Souls Family Visitor Center
Student Legal Services
Study Abroad Center

University Book Store
University Lectures Office
U.S. Postal Station

DESIGN TEAM

Mark Nevenhoven, INVISION,
Principal in
Charge
Michael Dean, INVISION, Designer
Kerry Weig, INVISION, Architect
Tom Foldes, Bluestone Engineering,
Principal in Charge
Dennis Forinash, Bluestone Engineering,
Mechanical Engineer

FIRE SAFETY ADVISORS

Tom Henriksen, Ames Fire Department
Troy Carney, ISU Environmental Health
and Safety

CORE TEAM MEMBERS

Anthony Behnke, Student Government

Corey Williamson, Interim Director

Dan Breitbarth, Past Student Government

Dan Sloan, University Architect

Ellen Rasmussen, Associate Vice President for
Academic Planning and Resources

George Micalone, Assistant Director & Director
of Student Activities

Jeffrey Miller, Past Production, Campus Dining
Services

Kevin Schalinske, Past President, Faculty Senate

Kristi Patel, Assistant Director, Retail Services,
Campus Dining Services

Margie Tabor, University Planner

Martino Harmon, Senior Vice President, Student
Affairs

Nancy Keller, Past Director, ISU Dining Services

Richard Reynolds, Past Director

Rita Phillips, Director, Iowa State University
Book Store

Robert Bosselman, Memorial Union Board
of Directors

Stephanie Salasek, Past Associate Director, Office
of Admissions



WE COME TO COLLEGE NOT
ALONE TO PREPARE TO MAKE A
LIVING, BUT LEARN TO LIVE A LIFE.

- M.J. RIGGS, FIRST PRESIDENT, MU BOARD

03 GOALS AND OBJECTIVES

HOW WE MEASURE SUCCESS

The following goals and objectives were provided by Memorial Union Administration as guidelines of how to measure the success of this Feasibility Study.

FEASIBILITY STUDY GOALS

- Determine the best potential use for the hotel rooms
- Repurpose the space vacated to improve tenant/user spaces, way finding, and the student experience in this building

OBJECTIVES

- Repurpose hotel room floors with offices with the best function and fit
- Expand dining seating
- Improve and expand student organization and student activity areas
- Enhance multicultural student resources

STUDY GUIDELINES

- Begin by staying within existing wall boundaries
- Limit renovation to recently updated spaces
- Propose an achievable plan under reasonable timeframes and budgets
- Identify opportunities available with expansion to the northeast

INVESTIGATION POINTS

REPURPOSE HOTEL FLOORS

- Review all potential options: hotel, offices, meeting rooms, and others
- Relocate destination spaces to this area of the building

EXPAND DINING SEATING AND RETAIL

- Provide 200 additional dining seats (this is the minimum quantity needed to meet current needs)
- Provide additional seats to accommodate future needs as planning diagrams allow
- Maintain current function and explore additional retail opportunities

IMPROVE AND EXPAND STUDENT ORGANIZATION AND STUDENT ACTIVITIES AREAS

- Address growth in student organizations
- Create shared office space for all organizations and student groups
- Create shared office and collaboration space
- Improve student life and quality of workspace

ENHANCE MULTICULTURAL STUDENT RESOURCES

- Expand the Multicultural Center to allow for additional student and programming space
- Expand services and offerings at the Memorial Union with the relocation of Multicultural Student Affairs office space to the building

FUTURE STUDY OPPORTUNITIES

During the course of this study, an auditorium along with additional meeting space was identified as a current need. However, it was determined that an auditorium was out of the scope of the goals of the current study. Future studies at the Memorial Union or other locations on campus will be required to assess this need. Additional meeting space has been addressed in a previous study of the Memorial Union.



Students participating in a space adjacency exercise.

04 OVERVIEW

CHANGING NEEDS



PROJECT WEBSITE

Study materials are posted on the Memorial Union website:

www.mu.iastate.edu/about/feasibility-study/

The Memorial Union has evolved throughout time to adapt to the changing needs of the students and campus it serves. In recent years, the student population has grown to record levels, student Organizations have increased to an all time high, and the needs of students have changed. The Memorial Union is in need of evolving once again to meet the needs of the students.

UNIVERSITY GROWTH

In 1928, the Memorial Union opened to serve the needs of 3,982 students enrolled at Iowa State University. The number of students enrolled at the university has soared 860% to 36,001. Since the completion of the last significant building planning study, enrollment has climbed from just over 25,000 students to over 36,000, a nearly 44% increase.

In addition to the general student enrollment, the university has seen a growth in total minority and international

enrollment. The Multicultural Center was opened in 2008 to serve the needs of the ever growing multicultural students on campus. However, the total minority enrollment has jumped 47% since 2011.

Along with this growth of the student population, the number of student organizations, Greek life, opportunities and student activities have also increased. In 1994, the current student organization and student activities spaces were opened in the Memorial Union to serve 513 student organizations. During the fall of 2015, the number of student organizations has ballooned to 856, a 170% increase.

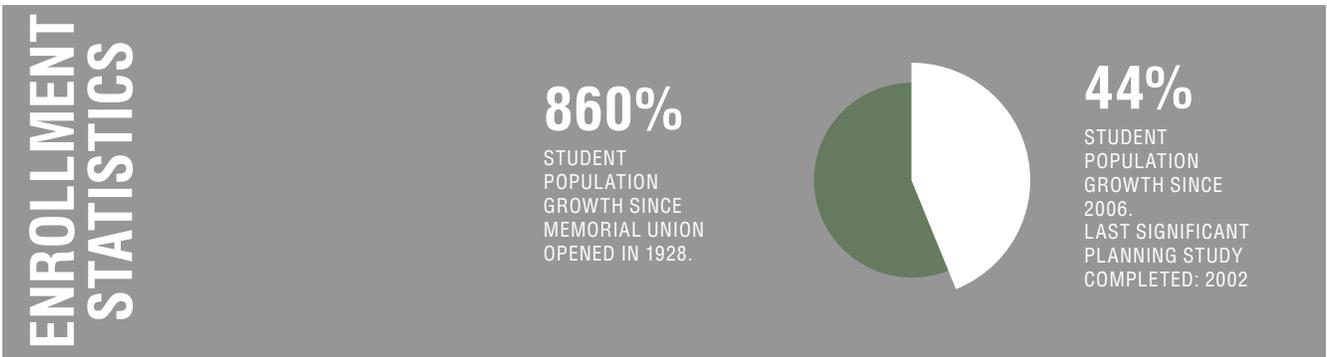
CORE VALUES AND MISSION

The Mission of the Iowa State University Memorial Union is:

- To nurture common ground
- Enrich and sustain individual lives, and remember

The Memorial Union believes:

- That the Memorial Union is a student-centered, full partner in the educational process
- That building community builds loyalty and social responsibility
- That programs and facilities are a unifying force
- That ideas and experiences are powerful ingredients in holistic development
- That participatory decision-making builds world citizens and leaders
- That service and convenience provide essential support to individuals reaching for long-term goals
- That remembrance of alumni and our service personnel is an active duty



The Memorial Union values:

- Participation, exploration, experience, service, volunteerism
- Social interaction, collaboration, partnerships, inclusiveness, unity
- Creativity, discovery, inventiveness, active risk-taking and problem solving
- Celebration, kindness, friendship, romance
- Comfort, security, heritage, tradition, memories, stories
- Proudfoot's classic architectural design

HISTORY OF THE MEMORIAL UNION

The Memorial Union has undergone significant renovations and acquired many additions since it opened its doors in 1928. Some significant milestones:

- 1928 –4000 students
- 1939--South Addition. South Ballroom, Commons Expansion
- 1950–53 NW Addition. Pride Lounge, Main Lounge, Gallery, offices
- 1955–Browsing Library, Chapel
- 1964–65 NE Addition. Campanile Room, Pioneer Room, meeting rooms
- 1977–Southeast addition-Location of current Multicultural Center, ISSO and Study Abroad Offices

- 1995–Food Court, Dining, SOC, SAC renovation
- 2008–South Expansion. University Book Store, Soult's Family Visitor's Center

In all, there have been 11 additions to the Memorial Union over the years and countless renovations to adapt to modern needs; however, this study is the first holistic building review.

PAST STUDIES

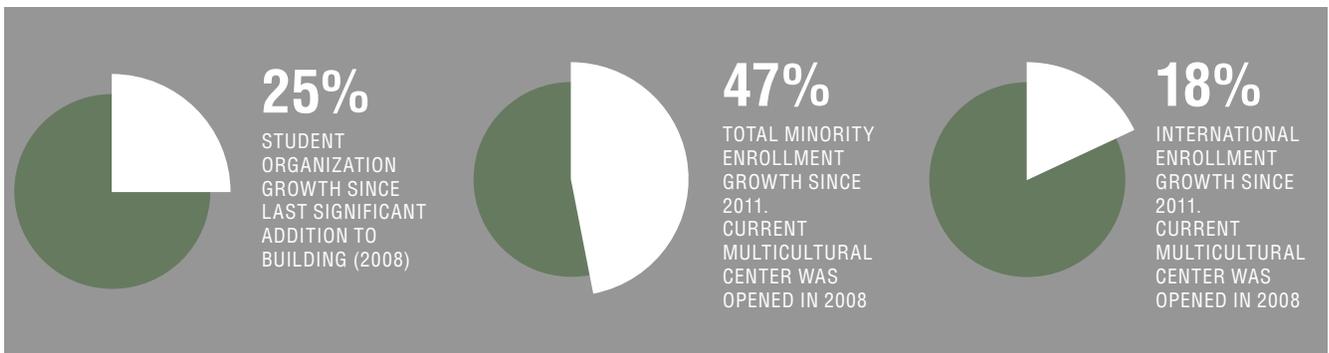
The last significant master plan for the Memorial Union was completed in 2002. The first of three phases identified by this study was completed in 2008, with a total project cost of approximately \$24 million. Work included:

- Expansion and renovation of the University Book Store
- Ballrooms, dining, and wayfinding improvements
- construction of the Soult's Family Visitor Center, the Multicultural Center,
- Durham Great Hall rehabilitation,
- Infrastructure upgrades such as increased sprinkler coverage in the building.

These past architectural studies have indicated the need for a holistic review of space and services provided at the Memorial Union, and identified three critical needs:

- Increase space to meet growing demand
- Improve wayfinding
- Upgrade facilities, including finishes, technology, amenities, etc.

Spaces previously studied by the Memorial Union have been included in the space needs summary of this report as continued needs. Supplemental information on the related studies can be found in the Appendix.



CHANGING NEEDS

Life in the Union has adapted and changed over the years as lifestyles, technology, and space expectations from the student population have changed. Since the completion of the original building, there have been multiple additions to the Memorial Union and the building footprint has grown 240%.

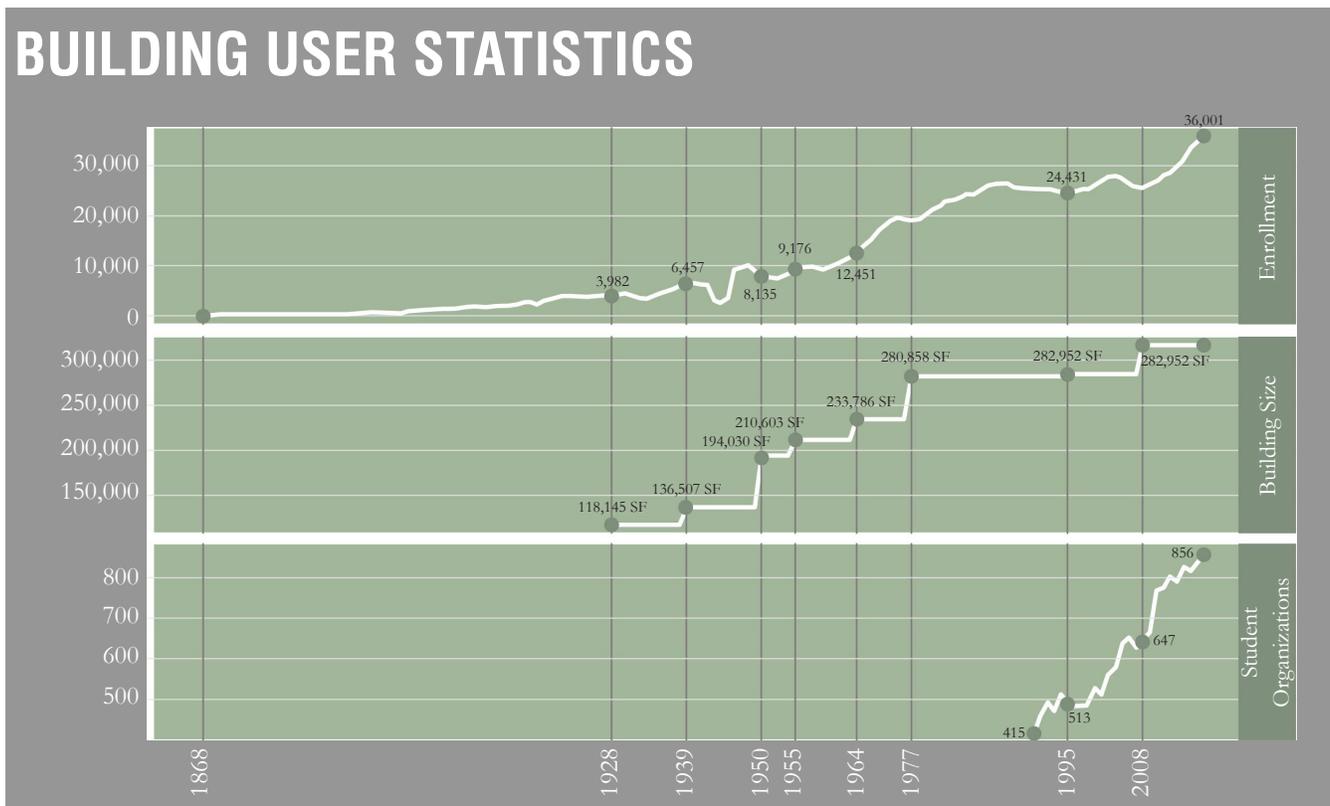
The numerous changes to technology during this century have changed the landscape on how students learn, think, communicate, interact, study, and socialize. While students are easily able to connect to some resources online, they are now driven to the Memorial Union for different reasons than years past.

The goals for the previous additions and renovations to the Memorial Union have revolved around specific needs of the time. The intent of this study is to take a holistic view of

the Memorial Union to determine what opportunities are available to meet the demands of these changes, and to provide a planning tool for future renovations and/or additions to the building.

LOOKING FORWARD

Since the Memorial Union has opened its doors to the University community, needs have changed significantly. Those needs will continue to change in the future. This study places a focus on creating spaces within the building to provide future flexibility and readaptation to address the unknown future needs.





THE MEMORIAL UNION SERVES AS THE FOCAL POINT OF COMMUNITY FOR STUDENTS, FACULTY, STAFF AND ALUMNI ON IOWA STATE'S CAMPUS.

- COREY WILLIAMSON, MEMORIAL UNION INTERIM DIRECTOR

05 BUILDING USE CURRENT SPACE ALLOCATION

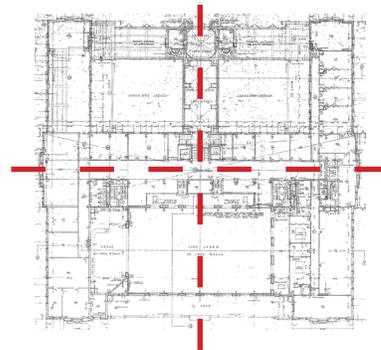
The Memorial Union receives over 2 million visitors each year and is home to more than 30 services for the University, the student body, campus visitors, and student organizations.

SERVICES AVAILABLE IN THE MEMORIAL UNION

Browsing Library & Chapel
Campus Organizations Accounting
Catering Services
Computer Labs
Copy Center
Dining Services
Event Management Offices
Gold Star Hall
Student Government
Graduate and Professional Student Senate
Greek Affairs
Hotel
Information Center
International Students & Scholars
Leadership and Service Programs
Lectures Program
Maintenance Shop
Multicultural Center
New Student Programs
Parking
Post Office
Pride Veterans' Lounge
Recreation Center
Soult's Family Visitor Center
Study Abroad Center
Student Activities Center
Student Legal Services
Student Organization Space
Student Union Board
Study and Lounge Spaces
Ticket Office
University Book Store
Veterans' Center
Video Phone
Workspace

CURRENT BUILDING USE

A classically-designed Beaux Arts building, the Memorial Union is organized along two strong axes through each of the major coordinates: north/south through Gold Star Hall and east/west through the primary historic corridors on the First through Sixth Floors. This historic planning concept provided built-in wayfinding strategies and a strong circulation backbone for the many services the building inherently would provide.



Over time, eleven additions and countless renovations occurred. During these modifications to the Memorial Union, building services were plugged into available space to maximize funds for each project. Building users and building occupants have made the most of the space available, but most would agree that strategic reorganization would realize distinct benefits in wayfinding, space utilization and functional relationships between services.

A holistic review of the building provided under this study reveals like services displaced from each other, challenges for wayfinding and inefficiencies in space utilization. Current utilization diagrams of the building are provided in the Appendix for reference.

06 BUILDING DATA FACILITIES AND INFRASTRUCTURE

STAKEHOLDER SATISFACTION SURVEY

In June 2014, thirty-six building stakeholders participated in a facility services survey conducted by MU Administration to understand the perceptions of the building from a stakeholder's perspective, to discuss appearance and services, to review custodial care and maintenance and to provide an open venue for suggestions for building improvement. Findings of the Satisfaction Survey include:

DOING WELL

Visual appearance of the building

- Landscaping
- Lighting
- Parking facilities
- Overall building condition

OPPORTUNITIES FOR IMPROVEMENT

- Signage within MU
- Elevator maintenance

SUGGESTIONS PROVIDED RELEVANT TO THIS STUDY

- Signage: Additional signage, interactive stations, more ready access to building maps, directional signage to destination locations, more signage for Student Activities Center and MU department offices that get more outside traffic
- Beautification: Conversation seating on terrace, adding green space
- Mechanical: Temperature control, elevator maintenance, general maintenance
- Elevators 1 & 2: Currently under regular service; Elevators will need upgrading as function changes on Fourth–Sixth Floors and more regular traffic is using these floors
- Freight elevator: Users would like to add a new freight elevator outside of the existing boundaries of the building. Alternatively, Elevator 5 could be updated to be a true freight elevator. Location and floors served were reviewed and discussed under this study.

This survey provides insight that the existing facilities are adequately maintained and functional, but that wayfinding and infrastructure could be improved in the building.

INFRASTRUCTURE

An additional assessment was completed by the Intelligent Systems and Engineering Services Corporation (ISES) in the spring of 2015 on the condition of building infrastructure: plumbing, heating, cooling, sprinklers, elevators, etc. The building received a designation of “Fair”, noting the following concerns needing to be addressed in the next 10 years:

- ADA compliance
- Original HVAC equipment: steam-reduction station, air handlers, chilled water pumps, fan coil units in Fourth-Sixth Floors, ventilation fans, exhaust equipment
- Dated electrical equipment: transformers, motor control center, switchboards, devices, lighting fixtures
- Dated plumbing materials and equipment: piping, back-flow preventors, fixtures
- Elevators 1, 5, 8 and 9 need modernization: cab deficiencies, controllers, drive machines

ISES estimates recommended infrastructure and deferred maintenance costs at over \$26 million. As costs are developed for this study, dollars will be associated to address some, but not all of these identified concerns. Future detailed project budgets should be adjusted to include required deferred maintenance costs.

316,713 // Square feet of building space

7 // Floors

11 // Number of additions

2,000,000 // Visits per year

52,877 // Meeting room reserved hours per year

35,000 // Number of visits to Soult's Family Visitor's Center

850 // Current student organizations on campus

30,228 // Dining transactions per week

12,000 // University Book Store transactions per week

36,001 // Current student enrollment (Fall 2015)

⁰⁷ PROCESS DATA COLLECTION

FEASIBILITY STUDY PROCESS OVERVIEW

A specific process was implemented during the study with three phases—Discovery, Strategy, and Implementation. The Memorial Union Administration desired developing a method for information gathering from a variety of stakeholders throughout the study to direct the decision making process.

DISCOVERY

The early information-gathering phase was Discovery. Discovery included online questionnaires, interviews, presentations and charrettes to gather significant information about needs, and concerns prior to commencement of design solutions.

STRATEGY

The strategy phase included the development of a space analysis document, space allocation diagrams, and organizational strategies to guide design.

IMPLEMENTATION

The implementation phase included gathering all of the information from the Discovery and Strategy phases into specific design strategies that could be tested against the space needs. Cost opinions and potential phasing diagrams were developed, along with conceptual plan diagrams.

During the early stages of the Discovery phase, numerous activities were developed to seek feedback from nearly 550 individuals with various backgrounds. The activities included:

- Student worker presentation and interactive discussion with 100+ Memorial Union student workers
- Student survey: 300+ student responses to an online survey about the needs and desires for the Memorial Union
- Student charrette: planning and programming exercises with over 30 student leaders from Student Government, student organizations, and other areas on campus
- MU Board conversation: interactive conversation with Memorial Union Board on the needs and desires for the future of the Memorial Union
- Core Team/building stakeholder charrette: planning and programming exercises with over 60 people from the building, including tenants and other stakeholders

After discovering the need for an addition to the building to meet growing needs, an additional group of input was sought. This included a question and answer session with student organization leaders, presentations to a public audience, and an additional student survey yielding a total participation number of over 315 people. Findings from this Q&A session are provided later in this report. In total, the study included feedback from nearly 865 people throughout the process.

STUDENT WORKER PRESENTATION & STUDENT SURVEY

The student worker presentation and student survey were centered around the following set of core questions:

- How often do you visit the MU in a typical week?
- What services draw you to the MU?
- What services did you not know existed at the MU?
- Can you easily find the services within the MU?
- What is your favorite location in the MU?
- Are there areas that are not well known within the MU that everyone should know about?
- Rank your five priorities of spaces you would like to see added to the MU.
- List features (if any) you have seen at Student Unions on other campuses that you would like to see in the MU.
- Share any other comments you have or hear from students regarding the MU.

THEMES FROM STUDENT SURVEY

- More dining options desired
- More seating for dining is required
- Increased flexibility and better organization of space would improve use and function of the building
- Areas of student ownership i.e. lounges and work areas desired
- Private study areas desired
- Auditorium desired for large events, speakers, movies
- Fine dining/restaurant would be a nice option
- Improve way finding
- Manage crowding in building

The full range of write-in responses to open questions is included in the Appendix.

SURVEY HIGHLIGHTS

INCLUDED:

58% of student responders who visit the Memorial Union more than twice a week other than for work

TOP SERVICE DRAWS TO THE MEMORIAL UNION:

University Book Store, MU Market & Cafe, Dining, Commons, Lounge & Study Areas

UNFAMILIAR SERVICES/ AMENITIES

Copy Center, Soult's Family Visitor Center, Browsing Library, Terraces, Post Office, Student Resource Areas, Multicultural Center

MOST DIFFICULT TO FIND SPACES

Workspace, ISSO, Study Abroad, Copy Center

MEMORIAL UNION BOARD INTERVIEW

To gain additional perspective on the needs of the Memorial Union, INVISION met with the Memorial Union Board of Directors in September 2014. The MU Board comprises of students, administrators and alumni. The group was asked four questions. Key responses are noted.

WHAT DOES THE MEMORIAL UNION MEAN TO STUDENTS?

- Gathering place
- Alumni focal point
- Community center for the University
- Always accessible
- Central location on campus
- Place to let your hair down
- Space for students to develop outside of the classroom as leaders and teammates
- Collaboration opportunities
- Leadership opportunities
- Everyone has a different story of how they use the Union

WHAT SERVICES ARE MOST USED IN THE MEMORIAL UNION?

- Dining
- Hotel
- University Book Store
- Student recruitment
- Special events
- Alumni retail
- Student office space
- Parking ramp

WHAT SERVICES SHOULD BE PROVIDED IN THE MEMORIAL UNION?

- Office space
- Printing
- Student services
- Meeting rooms
- Expanded student office space
- Collaboration space
- Auditorium
- Additional meeting rooms
- Social spaces
- Student answer center

WHAT WOULD YOU CHANGE ABOUT THE MEMORIAL UNION?

- After hour availability to more spaces
- Flexible room layouts
- Better utilization of space
- More green space around building
- Visually improve terraces
- Combine east and west student organization and student activity office spaces
- Wayfinding
- Revamp recreation space

The large takeaways from this discussion were that space is at a premium and that better utilization could address a variety of needs. The general feel is that the building is providing the services it needs to, but that there is always a desire to improve and provide new opportunities for collaboration and student activities. And most importantly, the focus should remain on student services at the Memorial Union.

TENANT AND STAKEHOLDER INTERVIEWS

Interviews with key tenants and stakeholders were conducted to understand current and future needs along with other recommendations for the building.

DEPARTMENT NEEDS

Overwhelmingly, tenant and stakeholders are feeling the press of a growing student population, noting that the growth has affected nearly everyone. The result is a request for more space. Additional spaces requests include offices, flexible work areas, meeting rooms, and adequate storage areas.

LOCATIONS

Most tenants and stakeholders interviews are happy with their current locations and do not have a strong desire to move to another location in the building, although they see the opportunities that arise from making a change. Departments feel the MU is the right location for their services.

Wayfinding is an issue for most departments.

RECOMMENDATIONS

Tenants and stakeholders would like to see updated seating areas throughout the Memorial Union. The inclusion

of collaboration space and a theater/ auditorium was offered by 16 of the 18 groups interviewed.

A larger seating area for food court guests, a freight elevator connecting all floors, improved wayfinding, a central employee lounge and a more “Iowa Statey” feel were all provided as recommendations for consideration.

WHAT IS WORKING WELL?

There was no question from this group on what is working well: staff, the level of service provided, and the continued focus on students and student life.

STAKEHOLDER CHARRETTE



Following the development of the space needs analysis, a series of charrettes and presentations to students, core team members, and stakeholders were conducted to gather thoughts, share data collected, and to test outcomes.

The stakeholder charrette was composed of four visualization exercises in which stakeholders were asked to step outside of their current way of thinking to visualize what qualities and relationships would comprise the ideal Memorial Union at Iowa State University.

The first exercise was visual listening in which multiple boards of photos were displayed and stakeholders were provided with stickers to designate which images were most and least appealing to them in reference to the Memorial Union. An additional board of words was displayed and rated by the stakeholders in a similar manner with stickers. Short discussions followed about the selections with the most likes and dislikes.

The next two exercises provided stakeholders with the opportunity to re-organize the Memorial Union tenants, offices, meeting rooms, and other services through an adjacency and stacking activity. In each exercise, all of the existing tenant, office, meeting room and other service spaces were provided in loose form cut-outs to stakeholders. In small groups, they were challenged to think about how they would put the pieces back together, first in ideal adjacencies in the building with no limits on square footage available on each level, and then again with proportionally-sized pieces to fit in a vertical stacking diagram representing floor plates.

VISUAL LISTENING

TOP "LIKES"

- Light, bright
- Green space
- Open space
- Respect history of building
- Variety of seating options (booths, open/flexible seating, etc.)

TOP "DISLIKES"

- Ultra-modern installations
- Corporate or care center feel
- Non-functional space
- Super graphics
- Crowded terrace
- Limited-use spaces

WORD ASSOCIATION

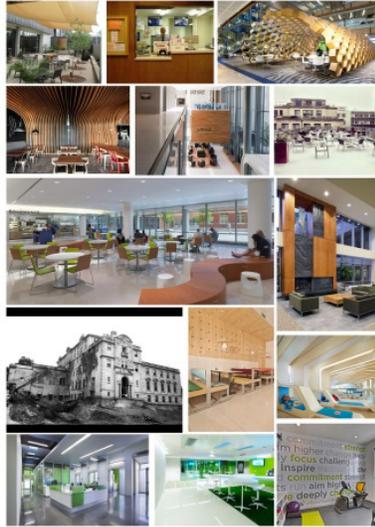
TOP "LIKES"

- Gathering
- Collaborative
- Memorable
- Functional
- Historical
- Accessible

TOP "DISLIKES"

- Subdued
- Hierarchical
- Conservative
- Living room
- Hip

STUDENT CHARRETTE



Similar to the stakeholder session, the student charrette provided an opportunity to provide input on aesthetic desires, space adjacencies, organization and general comments through Visual Listening, Word Association, Space Adjacency Diagramming and Stacking Diagrams.

Many responses from the students were similar to the stakeholder group. The top responses are provided at the right.

VISUAL LISTENING

TOP "LIKES"

- Light, bright
- Green space
- Natural materials
- Respect history of building
- Variety of seating options (booths, open/flexible seating, etc.)
- Active terrace/ lake

TOP "DISLIKES"

- Ultra-modern installations
- Corporate or care center feel
- Non-functional space
- Large wall graphics
- Crowded terrace

WORD ASSOCIATION

TOP "LIKES"

- Accessible
- Engaging
- Functional
- Historical
- Useful
- Memorable
- Tradition

TOP "DISLIKES"

- Conservative
- Contemporary
- Quiet
- Showplace
- Similar
- Subdued
- Hierarchical
- Living Room



While tackling the stacking and adjacency diagrams, the students quickly discovered the many challenges of the physical building characteristics and layout, and offered insight into their desires and the challenges they found in these exercises. Matrices of the results are provided in the Appendix.

ADJACENCY DIAGRAM

- 30%+ desired the hotel rooms to remain in the building
- 80%+ wanted additional dining options such as a sit-down dining venue or additional dining retail
- All groups felt that administrative offices would work on the fifth or sixth floors
- All groups felt that the Veterans Center should be located adjacent to Gold Star Hall
- All groups felt that student organizations, the Student Activities Center, SUB, and other student

groups could move from their current location, but needed to be located together

- All groups indicated additional dining seating as a priority on ground and first floor
- 80%+ groups felt that the recreation space needed to be re-thought, either relocated, new entertainment options added or reduced in size

STACKING DIAGRAM

- 15%+ of students felt that the hotel rooms should remain where they are
- All groups felt that new food venues should be on ground or first floors
- 65%+ of groups felt that at least some portion of administrative offices should remain on third floor
- 80%+ of groups placed Student Organizations, the Student Activities Center, SUB, and other student groups on third floor

- 80%+ of groups placed additional dining seating on first floor
- 80%+ of groups kept some portion of recreation space on ground floor
- Added program spaces: help desk, computer docking/print stations, convenience store, meeting rooms, expanded student office space

SPACE NEEDS ANALYSIS

To determine a baseline for a space needs analysis, INVISION collected information from the student survey and the MU board comments, and then met with each of the core tenants, units and service groups who currently reside in the Memorial Union.

EACH GROUP WAS ASKED

- To think about their existing space and how it met their current needs
- Identify their future (next 5-10 years) programmatic space needs
- Consider what additional services they could provide if they had more space

Responses yielded a conservative group of requests for additional space needs. The group as a whole indicated that they could continue to “make-do” with their current space. The majority of stakeholders interviewed were happy with their current location and were willing to compromise to some degree on the quantity and quality of space to ensure they would be able to remain in the Memorial Union. Functions located elsewhere that contribute and support students, both pre-collegiate and those currently enrolled, were also included in the data gathering and overall space analysis.

Based on the information collected from these interviews and combined with the survey responses, a preliminary space summary was developed to serve as the

basis for space planning. Programmatic space needs for each group were quantified, functional adjacencies among groups in the building were identified, and the criticality of student and visitor access determined. This informed and facilitated testing various options for the potential reallocation and repurposing of space.

Existing units, services, and activities occupy approximately 153,000 square feet in the building; a total of nearly 240,000 square feet was requested through the data gathering phase.

Through the study process, it was determined that an additional 30,000 net square feet could be made available by:

- Repurposing the hotel floors (4-6)
- Repurposing the hotel front desk and office into a building information desk
- Reducing and reallocating the amount of space currently utilized by recreation services

With this additional space, the total space available for reallocation and repurposing is about 100,000 square feet.

The study identified specific program areas that could not be accommodated within the existing building footprint; in some cases this was due to the quantity of additional program area requested, the physical attributes of the space, needed infrastructure, or the need to be located adjacent to existing functionally

compatible space. In addition, the configuration of existing walls, support structure, and circulation patterns could not always be adapted to accommodate some of the large, functional areas identified. These requests totaled over 50,000 square feet. Spaces that cannot be accommodated in the existing building footprint include an auditorium, a catering kitchen, and several large meeting spaces.

SPACE NEEDS ANALYSIS—NEEDS SUMMARY

While modest increases in additional space were requested by most units, and many needs can be met through the renovation and repurposing of existing space, there is simply not adequate space in the building to support all the programmatic activities requested.

When comparing available space versus the needs of the current Memorial Union occupants and services, the space available is nearly equivalent to the space requested. However, the available space cannot accommodate program spaces determined not to be part of this study, allow for future services, fully meet current identified needs, and limits future space expansion.

This study anticipated that the requested space needs could not reasonably fit within the existing available space in the Memorial Union and that an addition to the building should be considered to meet more of the identified existing needs.

The following pages provide the basis of design space needs analysis. A summary finding of the space needs analysis is provided at the right. The full space analysis and summary are located in the Appendix.

AVAILABLE SPACE

EXISTING SPACE TO BE RENOVATED	152,944 SF
SPACE AVAILABLE FOR REPURPOSING	29,460 SF
RECREATION SPACE & HOTEL FLOORS	

TOTAL SPACE AVAILABLE

IN EXISTING FOOTPRINT:	182,404 SF
PROPOSED ADDITION:	24,000 SF

TOTAL REQUESTED SPACE SUMMARY

GROUP	CURRENT SF	TOTAL REQUESTED SF
Administration	5,199	5,949
Dining-Catering*	4,055	5,255
Dining-Retail*	25,328	34,600
Greek Affairs	2,185	3,110
ISSO	3,200	3,600
ISU Printing Copy Center	1,100	1,350
Lounges	4,565	4,565
Meeting Rooms	28,105	32,605
Multi-Purpose Meeting Room*	0	5,000
Auditorium*	0	40,000
M-Shop	2,500	2,950
MU Operations**	2,508	4,108
Multicultural Center	3,655	5,490
Multicultural Student Affairs	0 in MU	3,700
New Student Programs	1,855	1,855
Post Office	275	275
Souls Family Visitor Center	2,296	5,146
Student Leadership	14,003	24,003
Student Legal Services	305	925
Student Recreation	10,730	5,000
Study Abroad	3,800	3,800
University Book Store	33,530	36,880
University Lectures	435	810
Veterans Center-Expansion	415	4,690
Workspace	2,900	3,600
TOTAL	152,944	239,266

*Requested space includes programming that cannot be accommodated within the existing building boundaries or in an addition to the northeast.

**Reference to support spaces similar to restrooms, IT, electrical and storage rooms, etc.

08 DESIGN CONSIDERATIONS

The following design considerations were established to guide the study recommendations.

BUILDING SYSTEMS

During the discovery portion of the study, facility staff called to attention the aging infrastructure of the building. Updates to outdated boilers, air handling units and electrical systems need to be addressed in the older portions of the building. Currently, outdated equipment does not utilize current technology to achieve higher performance and efficiencies.

ACCESSIBILITY

Two existing passenger elevators that serve the First through Sixth Floors continue to have mechanical issues and are consistently being repaired. With the proposed adaptation of the hotels floors, it is projected that these elevators will be used more often by visitors of the tenants on the upper floors.

SERVICE

A large freight elevator is needed to connect the ground floor and third floors to allow for better access between maintenance, custodial, catering and storage areas to meeting rooms. The elevator will also provide better access for other tenants primarily during the peak times of the year such as Orientation, Destination Iowa State, the text book reservation program and other large events hosted within the Memorial Union.

TRADITION AND HISTORICAL RELEVANCE

Tradition and historical importance is alive at the Memorial Union. From the traditions revolving around the Zodiac to the Four Seasons Fountain and the significance of the Maintenance Shop to the sacredness of the Gold Star Hall, the Memorial Union holds historical relevance for the entire campus.

The Memorial Union has had 11 additions in the 87 years it has served the University. In 1953 and 1965, the Northeast and Northwest additions created the historical north and west elevations and finalized the original vision of the building. Today these elevations are arguably the most significant and recognized sides of the building and serve as the true monument of the memorial within. Recommendations of this report intend to uphold this long and enduring history by preservation of the significant elevations and historic fabric of the building.

WAYFINDING

Wayfinding remains a key component for building improvement. The recommendations of this report attempt to improve wayfinding through strategic planning of services and adjacencies at each level of the building. Opening nodes on key vertices with views to the outdoors will assist with orientation. Additionally, the new addition will utilize a corridor with a direct connection between the parking ramp and building at each level, allowing access to the building to be the same from each level and visible from the exterior.

FLEXIBILITY

- The recommendations of this study are intended to provide future flexibility with many pieces of like-sized furniture that can be interchanged as future space needs change. The timeframes in which phases are implemented also allows for some flexibility in future strategic planning.
- As work is completed, it will be important to keep flexibility and the ability to meet future changing needs at the forefront of discussions when planning specific room locations and sizes.

IMPLEMENTATION PLAN

This study's success hinges on a successful implementation plan. Careful planning to make the best use of surge spaces within the building in a way that is least disruptive to the many functions and services provided 24/7/365 will make the implementation most successful.

SECTIONAL DIAGRAM

A key organizational strategy was to assess the ideal building function by floor.

Assigning a general purpose to each level of the building provides a framework to improve the general understanding of how the building functions, wayfinding, and functional adjacencies. The section diagram on the following page depicts the conceptual discussion of the administrative review team during this study.

SIXTH FLOOR

- Administration offices
- Director's suite
- Business Office
- Shared meeting room

FOURTH/FIFTH FLOOR

- Student resources: amenities, services and departments that meet specific student needs on campus
- Department offices
- Meeting rooms
- Student services
- Events Management Office

THIRD FLOOR

Student leadership: space for students to take ownership of; amenities to serve activities and functions; get desired functions closer together on one floor.

- Student organizations
- Student Activities Center
- Greek Affair
- Lounges
- Small meeting rooms

SECOND FLOOR

Campus visitors/campus functions: most known floor by off-campus visitors; major access from multiple directions; significant number of spaces that need to remain where they are (i.e. ballrooms); this floor has an architecturally formal feel, and many public use functions.

- Soultz Family Visitor Center (ideal location) Multicultural Center
- Large meeting rooms
- Lounges/pre-function space

GROUND FLOOR/FIRST FLOOR

General student population: foundation of building is a student focus; most accessible floors; high-traffic and frequent stop spaces.

- Post office
- Book Store
- Dining—retail
- New Student Programs
- Copy center
- M-Shop
- Workspace
- Lounges

DIAGRAM TESTING

With the sectional diagram as a guideline, the next step towards making a recommendation was to put diagram tests to paper. Numerous scenarios were sketched with data collection in hand. Each option was presented to the administrative team and carefully reviewed. Early tests proved that there were many options and ways to approach the diagramming strategy, and that

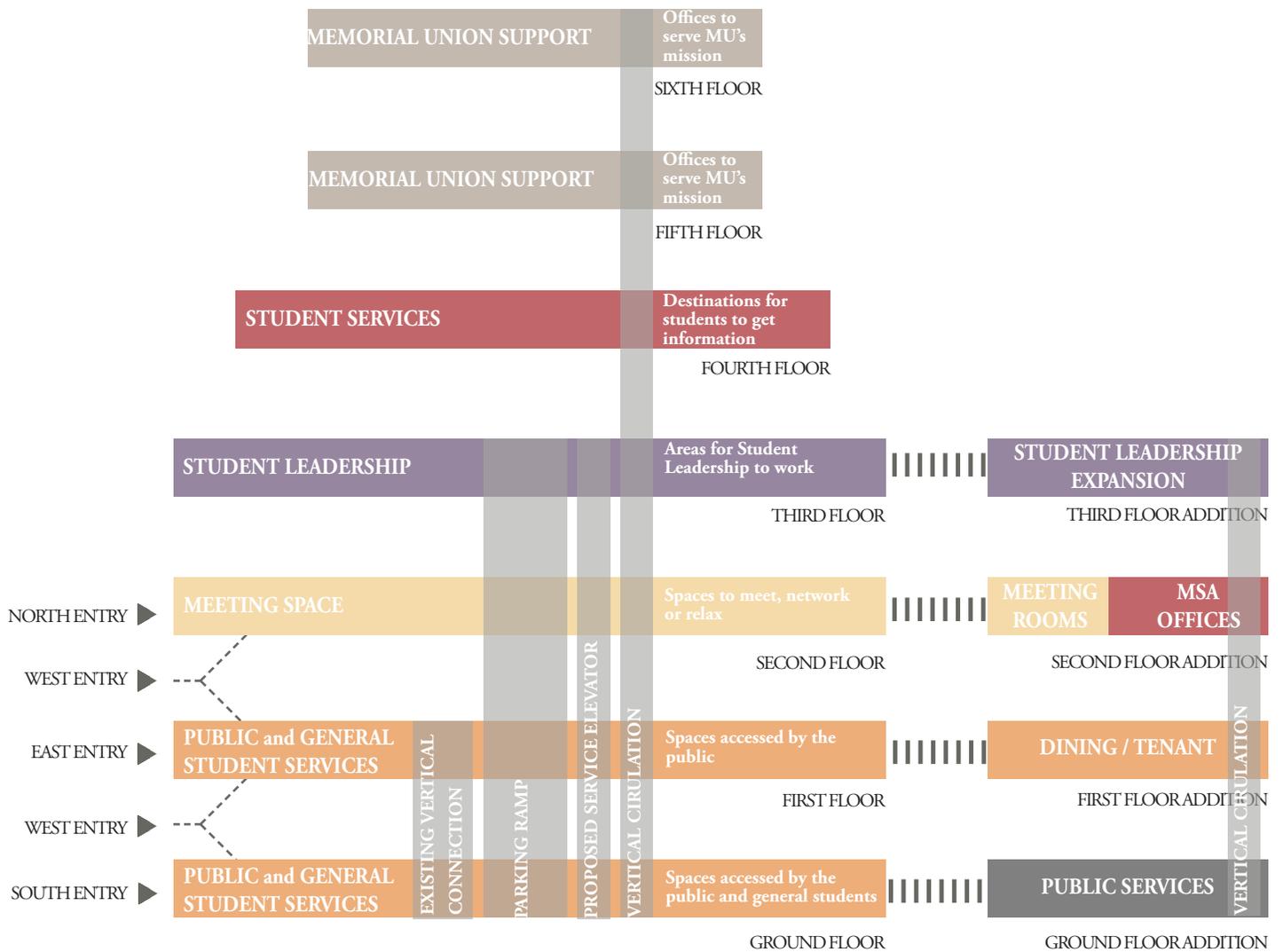
several key guidelines would need to be held. They included staying within existing wall boundaries as much as possible; explore additions to the building that can create significant benefits to the function of the building; minimize complete relocation of stakeholders in recently updated spaces (last 10 years); and create an implementation plan that could be achieved under reasonable timeframes and budgets.

RIGHT-SIZING

In addition to the guidelines, there was also effort to think about right-sizing spaces as new strategies were developed. Right-sizing includes both increasing under-sized spaces to meet current needs and also reducing over-sized spaces to either meet current University standards, where a function has changed, or where a function moved into a space as-is and not appropriately sized from the beginning. Right-sizing has become critical across the ISU campus as the student population grows at a rate higher than new space is available. Shared spaces were also incorporated into planning strategies to maximize available space and meet more needs of the building's stakeholders.

ADDITIONS

An addition to the northeast was considered as part of this study. Indications of other potential addition locations are provided, but require further study. Refer to the Appendix for additional information on a past study to add meeting room space to the south.



PROPOSED SECTIONAL DIAGRAM
INDICATING GENERAL PURPOSE BY FLOOR

09 RECOMMENDATIONS

PLAN AND SPACE ANALYSIS & PLAN DIAGRAMS

The following recommendations are based on data collection, analysis and supplemental information received through the duration of this study. These recommendations represent a culmination of multiple iterations and illustrate a path to increase utilization and to provide flexibility within the Memorial Union. They allow for expansion and reorganization of critical resources for students while adapting a historical building to meet the needs of today's students.

Proposed locations and adjacencies are indicated in the diagrams. Further programming, space analysis, and testing of fit and function are recommended as future projects are implemented. Flexibility has been planned into these diagrams to allow for revised and future programming needs to be accommodated.

The recommendations of this report meet the goals and objectives outlined and provide a sound footing for strategic planning for the Memorial Union for the next 10–15 years. Further study and future programming exercises will further define specific needs and space planning diagrams.

STUDY GOALS AND OBJECTIVES

The recommendations address the goals and objectives of this study are achieved as follows:

REPURPOSING THE HOTEL FLOORS

- Many iterations and plan diagram testing led to office space being the best fit for relocation to fourth-sixth floors as the guest rooms are vacated.
- Proposed office relocations can happen in a timeframe as required. Because the hotel room repurposing will provide surge space, fourth-sixth floors can be repurposed on a timeline that meets budget and space needs.

EXPAND DINING SEATING

- In the diagrams provided, it is estimated that an additional 200-250 seats could be added to the existing count.
- Number of seats added will depend on type of furniture and seating selected. It is recommended to consider a variety of seating types to create definition of spaces and a greater selection to patrons.
- Expansion will require the relocation of student office space.

IMPROVING AND EXPANDING STUDENT ORGANIZATION AND STUDENT ACTIVITY AREAS

- Relocation of student office spaces to third floor will provide an opportunity to review space allocation and organization within this group of students and advisors.
- Opening up the connecting corridors on third floor will address the desire for more collaborative work areas.
- Potential future additions will provide an additive opportunity to expand student office space. As shown, and with the collaboration area included, the net student organization space will meet projected future space needs.

MULTICULTURAL CENTER EXPANSION & MULTICULTURAL STUDENT AFFAIRS OFFICES

- The relocation of the Multicultural Student Affairs adjacent to the Multicultural Center will require an addition.
- Expansion of the Multicultural Center will provide additional space for multicultural student organizations.
- Sharing the current Gold Room will allow the Multicultural Center and Multicultural Student Affairs to expand current programming and provide surge space for their services. In off hours, the room could be booked as a general meeting room.

After testing multiple planning schemes, discussions with the Administrative Team, and receiving feedback from the Core Team, the following proposed space analysis and planning diagrams are provided to meet the needs identified in this study. During the exploration of plan layout options, efficiencies were discovered in some locations while limitations caused by building infrastructure and existing architecture were found in others. Requested space has been provided within these limitations and efficiencies.

Special consideration was given to minimize duplication of spaces. When stakeholders adjacent to each other requested similar programmatic needs, it was decided to create shared spaces to meet that need (i.e. meeting rooms). Furthermore, when stakeholders requested specific needs that duplicate amenities currently available at the Memorial Union, it was decided not to include them in the floor plan diagrams (i.e. large meeting rooms).

Refer to the Appendix for a full space analysis and summary.

THERE ARE MANY NEWER AND LARGER COLLEGE UNIONS IN THE NATION, BUT NOT ALL OF THEM ARE AS ARCHITECTURALLY SIGNIFICANT AND FAITHFUL TO THEIR ORIGINAL MISSION AS THE MEMORIAL UNION.”

– RICHARD REYNOLDS,
MEMORIAL UNION PAST
DIRECTOR

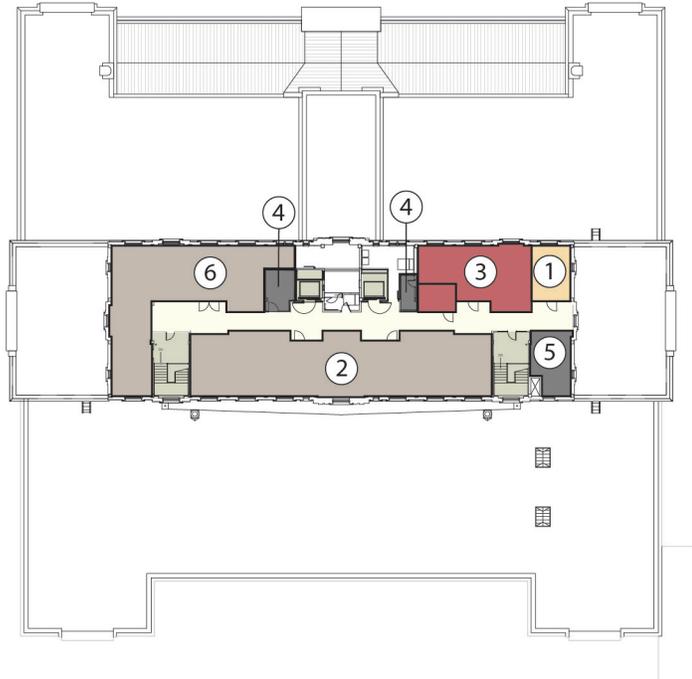


SPACE ANALYSIS

A summary of the collected needs and desires of building stakeholders:

GROUP	CURRENT SF	TOTAL REQUESTED SF	SF INDICATED ON PROPOSED PLAN DIAGRAMS
Administration	5,199	5,949	5,330
Dining-Catering	4,055	5,255	5,055
Dining-Retail	25,328	34,600	31,900
Greek Affairs	2,185	3,110	included in Student Leadership SF
ISSO	3,200	3,600	3,455
ISU Printing Copy Center	1,100	1,350	2,000
Lounges	4,565	4,565	4,565
Meeting Rooms	28,105	32,605	29,551
Multi-Purpose Meeting Room	0	5,000	0
1,000 Seat Auditorium	0	40,000	0
M-Shop	2,500	2,950	2,500
MU Operations	2,508	4,108	9,787
Multicultural Center	3,655	5,490	6,965
Multicultural Student Affairs	0 in MU	3,700	2,725
New Student Programs	1,855	1,855	2,000
Post Office	275	275	450
Soults Family Visitor Center	2,296	5,146	6,664
Student Leadership	14,003	24,003	22,193
Student Legal Services	305	925	560
Student Recreation	10,730	5,000	4,825
Study Abroad	3,800	3,800	3,455
University Book Store	33,530	36,880	36,555
University Lectures	435	810	645
Veterans Center-Expansion	415	4,690	2,000
Workspace	2,900	3,600	3,515
TOTAL	152,944	239,266	186,695

PROPOSED SIXTH FLOOR PLAN



KEY

	Public Services
	Memorial Union Support
	Student Leadership
	Meeting Space
	Student Services
	Building Services
	Vertical Circulation
	Public Circulation

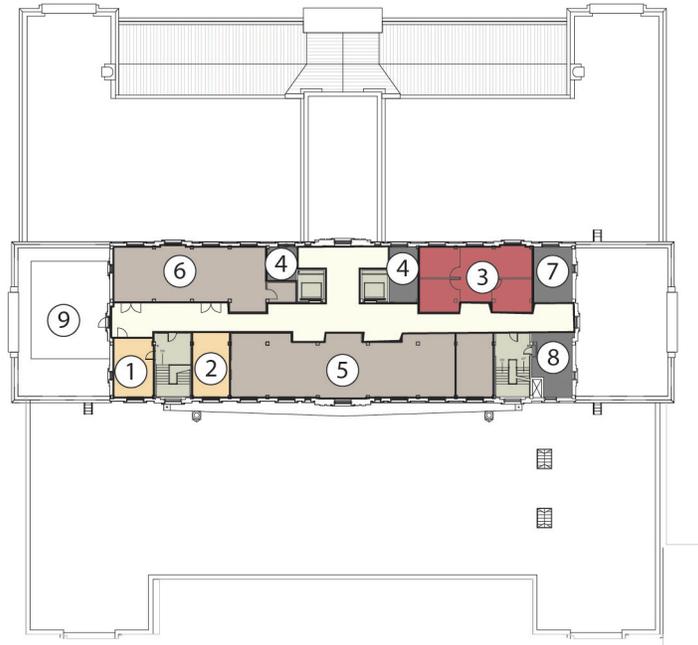
SPACES

- Renovated Space:
- ① Shared Meeting Room (192 SF)
 - ② Administrative Offices (1,740 SF)
 - ③ Student Legal Services (560 SF)
 - ④ Restrooms
 - ⑤ Staff Lounge (223 SF)
 - ⑥ Director's Suite (1,434 SF)

KEY NOTES

- The Director's suite and MU administrative offices will be relocated to the sixth floor to provide an administration suite.
- Student Legal Services will be relocated to the sixth floor to provide privacy and security to students using their services.
- A shared conference room will be added to this floor to allow for flexible use between the tenants on the floor.

PROPOSED FIFTH FLOOR PLAN



KEY

	Public Services
	Memorial Union Support
	Student Leadership
	Meeting Space
	Student Services
	Building Services
	Vertical Circulation
	Public Circulation

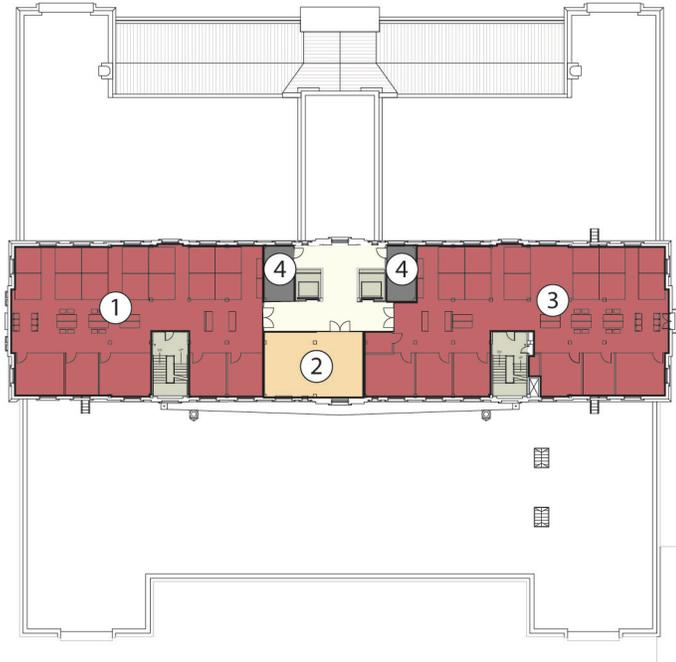
SPACES

- ① Shared Meeting Room (233 SF)
- ② Meeting/Ready Room (222 SF)
- ③ University Lectures Office (645 SF)
- ④ Restrooms
- ⑤ Event Management Offices (1,305 SF)
- ⑥ Dining Offices (815 SF)
- ⑦ Custodial Office (192 SF)
- ⑧ Custodial Storage (223 SF)
- ⑨ Terrace/Patio (750 SF)

KEY NOTES

- Event Management, Dining/Catering, and University Lectures work closely together, therefore, they have been located together on the fifth floor.
- Two meeting rooms have been added to accommodate private meetings with potential clients of Event Management. They can also be transformed into ready rooms for wedding clients.
- The west terrace will be configured to allow for small outdoor gatherings allowing for impeccable views of Lake Laverne.

PROPOSED FOURTH FLOOR PLAN



KEY

	Public Services
	Memorial Union Support
	Student Leadership
	Meeting Space
	Student Services
	Building Services
	Vertical Circulation
	Public Circulation

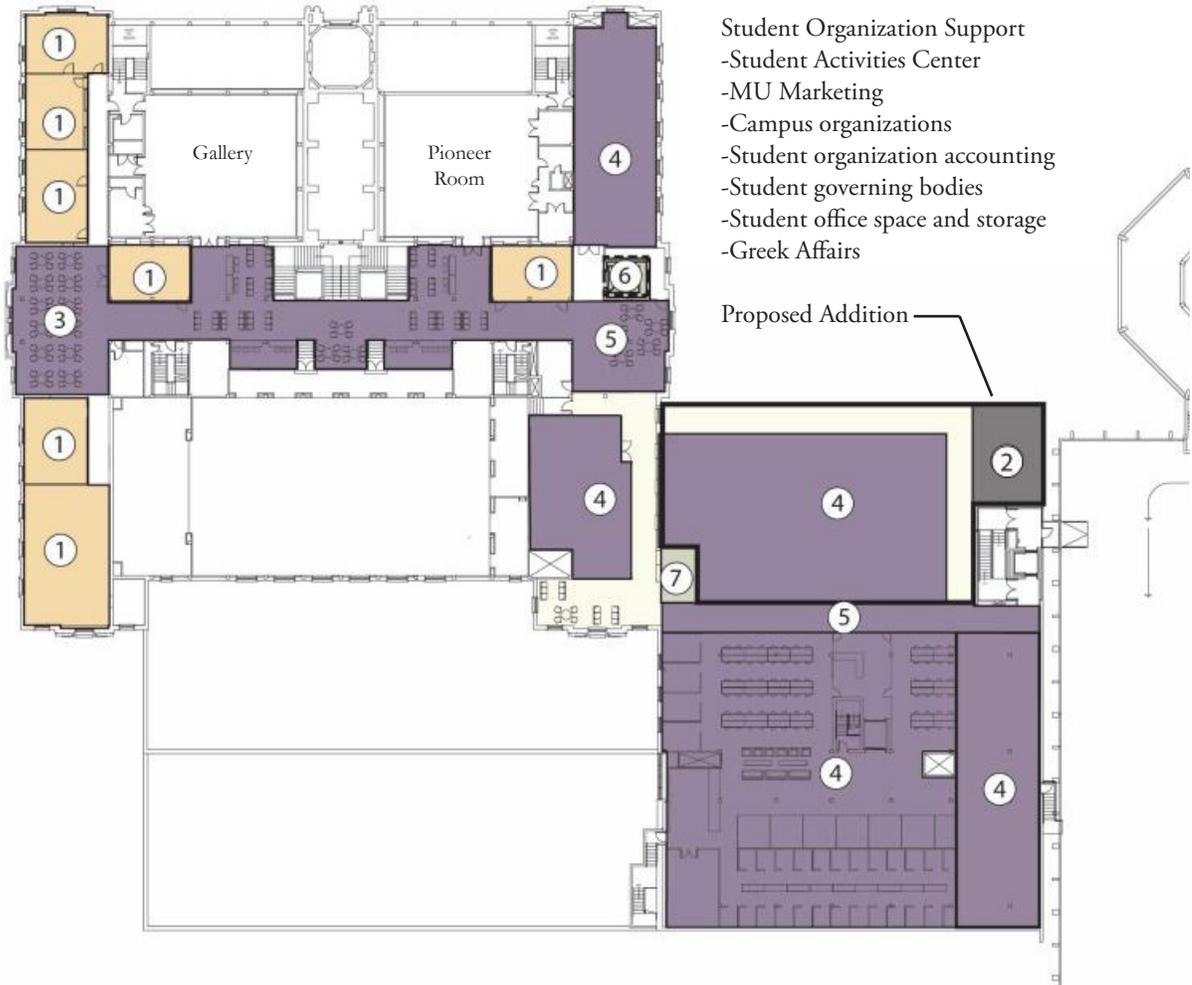
SPACES

- Renovated Space:
- ① ISSO (3,455 SF)
 - ② Shared Meeting Room (595 SF)
 - ③ Study Abroad (3,455 SF)
 - ④ Restrooms

KEY NOTES

- ISSO/Study Abroad
- Both tenants have similar office functions.
- The fourth floor provides easier accessibility and wayfinding to the tenant spaces than their current location.
- Sharing of meeting rooms and similar office functions is possible.

PROPOSED THIRD FLOOR PLAN



Student Organization Support
 -Student Activities Center
 -MU Marketing
 -Campus organizations
 -Student organization accounting
 -Student governing bodies
 -Student office space and storage
 -Greek Affairs

Proposed Addition

KEY

- Public Services
- Memorial Union Support
- Student Leadership
- Meeting Space
- Student Services
- Building Services
- Vertical Circulation
- Public Circulation

SPACES

- ① Small Meeting Room (4,555 SF total)
- ② Restrooms and Storage
- ③ Semi-Private Study Area (1,275 SF)
- ④ Student Organization Support (17,556 SF total)
- ⑤ Student Collaboration Space (4,637 SF)
- ⑥ Alternate Freight Elevator Location
- ⑦ Proposed Freight Elevator Location

KEY NOTES

STUDENT LEADERSHIP

- Third floor presents the best opportunity within the current footprint of the building to bring student leadership groups together in one space.
- The main corridor will be reconfigured to create a student lounge/collaboration space.
- The addition provides opportunity to expand the proposed student leadership area to accommodate the ongoing growth, future needs and numbers of student organizations.

MEETING ROOMS

- The small/medium sized meeting rooms will be relocated to the west side of the floor to maximize the views to Lake Laverne.
- The Pioneer Room and Gallery will remain as is.

GREEK AFFAIRS

- Relocated to the third floor to allow collaboration between Greek life and the Student Activities Center.



View at Third Floor Student Leadership space in addition and shared collaborative space.

PROPOSED SECOND FLOOR PLAN



KEY

	Public Services
	Memorial Union Support
	Student Leadership
	Meeting Space
	Student Services
	Building Services
	Vertical Circulation
	Public Circulation

SPACES

- ① Meeting Rooms (3,480 SF total)
- ② Pre-function Space (480 SF)
- ③ Post Office (450 SF)
- ④ Restrooms and Building Support
- ⑤ New Men's Restroom (520 SF)
- ⑥ Reflection Rooms (580 SF)
- ⑦ Multicultural Center (6,965 SF)
- ⑧ Multicultural Student Affairs (2,725 SF)
- ⑨ Student Collaboration Space
- ⑩ Proposed Freight Elevator Location
- ⑪ Alternate Freight Elevator Location
- ⑫ Main Lounge
- ⑬ Green Room (260 SF)

MEETING ROOM ADDITION

For purposes of this report, past study work completed on a potential addition to the south has been excluded. The addition would expand meeting room capacity, flexibility, and variety. Refer to the Appendix for past study information. Costs associated with this addition are not included in this report.

KEY NOTES

MULTICULTURAL CENTER EXPANSION & MULTICULTURAL STUDENT AFFAIRS OFFICES

- The addition allows for Multicultural Student Affairs (MSA) to be relocated to the Memorial Union to be adjacent to the Multicultural Center (MCC).
- Relocation of the main public corridor allows for enhanced access between MSA and MCC.
- Relocation of existing small conference rooms allows the MCC to expand in its current location.
- The Gold Room can be incorporated into the layout of the MCC providing additional meeting room space to the MCC.

MEETING ROOMS

- Additional meeting room for 75–100 occupants (the most requested type of meeting room) will mirror the Cardinal Room and will be located where New Student Programs currently resides.
- A green room will be added adjacent to the Great Hall to house presenters.
- The Colonel Pride Lounge will be opened up to the Main Lounge to allow for enhanced views toward central campus.

POST OFFICE

- Relocated to the historical information desk to make room for the men's restroom relocation.

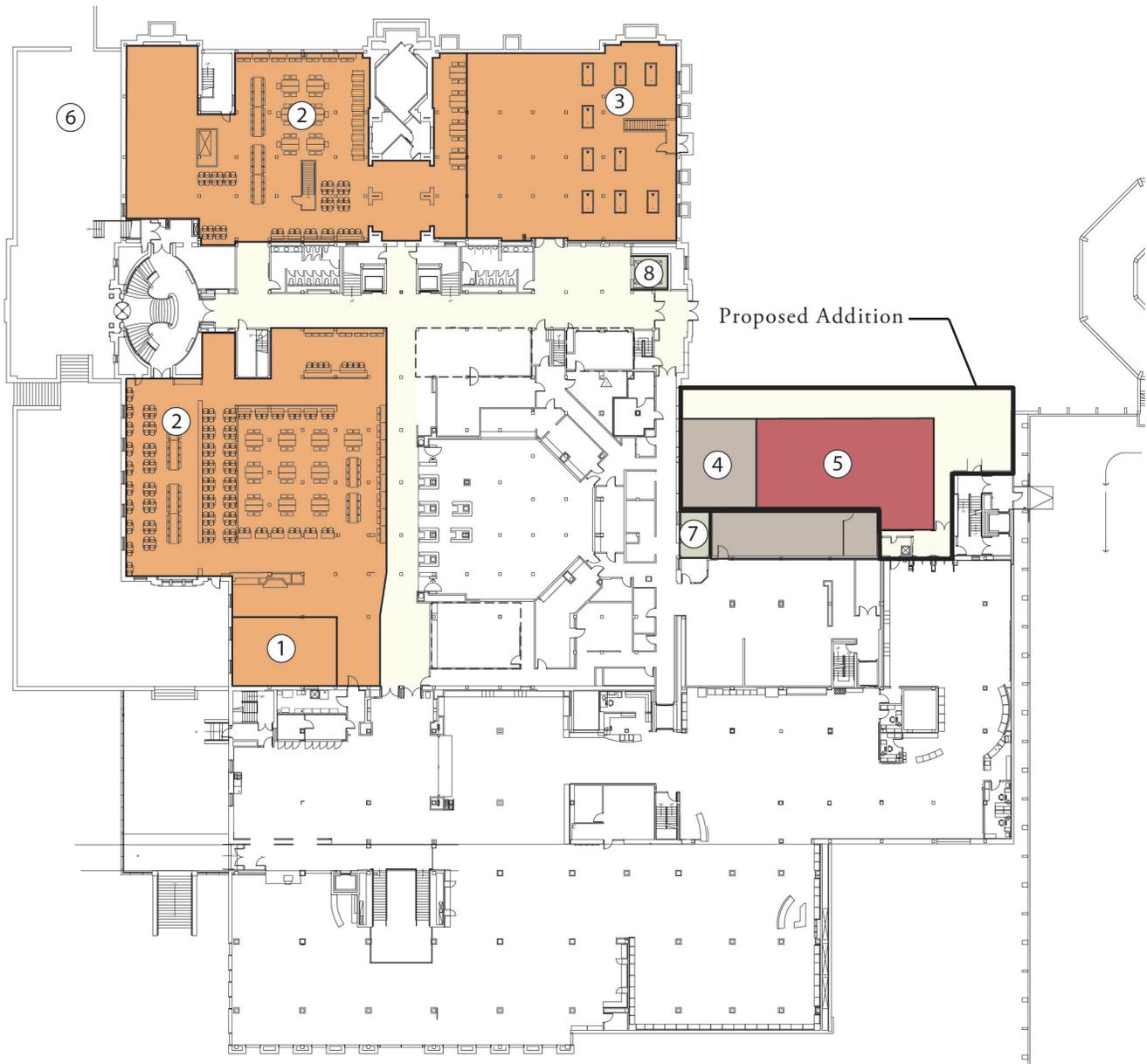
GENERAL SERVICES

- Men's restroom will be relocated and enlarged.
- Reflection rooms and computer stations will be added to the Main Lounge.



View at second floor through new corridor and collaborative work area

PROPOSED FIRST FLOOR PLAN



KEY

	Public Services
	Memorial Union Support
	Student Leadership
	Meeting Space
	Student Services
	Building Services
	Vertical Circulation
	Public Circulation

SPACES

- ① Dining Retail (900 SF)
- ② Dining Seating (14,047 SF total)
- ③ Student Recreation (4,825 SF)
- ④ Dining Kitchen Expansion (1,025 SF)
- ⑤ Office/Retail/Service* (2,000 SF)
- ⑥ Terrace
- ⑦ Proposed Freight Elevator Location
- ⑧ Alternate Freight Elevator Location

NOTE

*The following spaces have approximately the same proposed space requests and can be viewed interchangeably in the proposed diagrams:

- New Student Programs
- Veterans Center
- ISU Printing Copy Center

Refer to plan areas labeled ⑤

KEY NOTES

UNIVERSITY BOOK STORE

- No changes to the retail floor.
- Additional space request for Pick Up At Store was not met due to current confines of space.

DINING KITCHEN

- Additional kitchen space provided to meet growing student population dining needs.

DINING SEATING

- Expansion of the current seating area provides additional seating for peak times during the day and flexible expansion of the student recreation space after hours.

DINING RETAIL SPACES

- Additional dining tenant space has not been provided due to space constraints. Additional locations require further study of the current retail operations and layout.

- Queuing conflicts for the existing Panda Express and Panda Sushi areas have been improved by opening the corridor adjacent to these tenant spaces to allow for additional queuing space.

STUDENT RECREATION SPACE

- Student recreation space has been reduced to meet dining seating needs while still providing space for billiards tables and other student recreation activities. Bowling lanes will be removed from the building.

VETERANS CENTER

- The Veterans Center, New Student Programs or ISU Printing Services could be located in the new addition to the northeast on the first floor. The Veterans Center will expand to provide additional programming and services to veterans, provide a social space, and study areas.
- Relocated area provides easy access for students/community while providing an area for privacy.



View on first floor in the Student Recreation Center.

PROPOSED GROUND FLOOR PLAN



KEY

- Public Services
- Memorial Union Support
- Student Leadership
- Meeting Space
- Student Services
- Building Services
- Vertical Circulation
- Public Circulation

SPACES

- ① Visitor Center Expansion (4,368 SF)
- ② Lounge/Dining Seating (1,575 SF)
- ③ Office/Retail/Service* (2,000 SF)
- ④ New Restrooms
- ⑤ UBS Storage (7,670 SF)
- ⑥ Mechanical (2,975 SF)
- ⑦ Storage (4,961 SF)
- ⑧ Workspace (3,515 SF)
- ⑨ Proposed Freight Elevator Location
- ⑩ Alternate Freight Elevator Location
- ⑪ Student Organization Storage (2,940 SF)
- ⑫ Loading Dock Expansion

NOTE

*The following spaces have approximately the same proposed space requests and can be viewed interchangeably in the proposed diagrams:

- New Student Programs
- Veterans Center
- ISU Printing Copy Center

Refer to plan areas labeled ③

KEY NOTES

UNIVERSITY BOOK STORE

- University Book Store offices to remain in current location. Existing space was constructed in 2008.
- Stockroom expansion to house the expanding order fulfillment area based on the growing number of online sales including merchandise, textbooks, and the increased need for flexible/secure space for merchandise during high-demand times.

WORKSPACE

- Relocated to be more accessible to users.
- Current location is hidden and difficult to find.
- Use of the studios has increased based on the current programming.

SOULTS FAMILY VISITOR CENTER

- Ideal location is near the ramp on second floor. However, since there is not a location on second floor available and the current location was constructed in 2008, an expansion of the current space is recommended.

NEW STUDENT PROGRAMS

- Relocated to be adjacent to the Soult's Family Visitor's Center.
- Easy access to South entrance for facilitating bus travel plans during Thanksgiving and spring breaks.

NEW RESTROOMS

- New men's and women's accessible restrooms will be placed in a centrally-located area.

MAINTENANCE/CUSTODIAL/ LOADING DOCK

- Remains on lower level to provide access to the loading dock area.
- Relocated to the current Workspace location to provide easy access to the new freight elevator.

LOADING DOCK

- Expanded lay down area for the dock to provide flexibility during peak seasons.

OTHER SPACES

- No revisions to the current M-Shop and Student Organization Storage areas.



View at Ground Floor through new corridor and to new dining seating and retail.



Conceptual exterior of addition.

PLANNING CONCEPTS

The following general ideas were considered in providing a preliminary rendering of the exterior of the addition. Additional study and programming is required to develop final design recommendations.

- Respect the historic architecture of the existing building
- Touch the building lightly
- Provide better circulation and movement through the building with visible wayfinding from the exterior of the building
- Material selection that is coherent in the context of the historic building

STUDENT LEADERSHIP FEEDBACK

In March 2016, INVISION presented updated study findings to a group of student organization leaders. Students were invited to ask questions, and participated in a survey about their associations with the Memorial Union, followed by Memorial Union administration presentations to additional groups on campus.

In all, 14 organizations participated, with over 315 participants in the question-and-answer sessions. A survey was distributed to collect data including:

- Would your student organization benefit from the proposed plan to renovate and expand the Memorial Union?
- What services would you be most enthusiastic about enhancing as a result of a renovation and expansion to the Memorial Union?
- What needs should be addressed in this planning study?

TOP STUDENT OBJECTIVES

1. Additional dining and lounge seats (81%)
2. Dedicated space for Student Organizations and Student Activities space (79%)
3. Repurpose current hotel to provide more direct services to students (54%)
4. Improvement to facility infrastructure (50%)
5. Increase multicultural space and services (41%)
6. Increase dedicated space for veterans (31%)
7. Other (8%)

KEY FINDINGS

More than three-quarters (78%) of students who participated in the feedback sessions indicated that their student organization would benefit from the proposed plan to renovate and expand the Memorial Union. Several students mentioned that this project would help enhance access to space for studying, meeting and collaborating with their organizations.

Some respondents explained that their student organizations would benefit from the plan because it provides additional large meeting rooms and a centralized space for their offices where all their efforts are unified to make their activities more efficient. They indicated it would be more feasible for them to have student organization space on one floor to encourage all student organizations to have better connections with each other and to share resources and ideas.

KURE noted that they needed to “move out of Friley Hall” because “Friley Hall wanted them out!” Some said that “space is filling up in Gerdin Business Building and they needed more options” for meeting locations. Latin Student Initiatives also cited their current lack of office and storage space on campus. Most stated that increased student organization space would “end the confusion over where we are located” and would provide “space to store organization supplies and make transfer of prop materials easier each year.” One club wanted to involve the Memorial Union in their activities by hosting all events and club activities at the Memorial Union to be more accessible to their club members.

Meeting room space is critical for student organization success. Many expressed the difficulty they faced in reserving rooms in Gerdin Business Building and in obtaining the same room for meetings. Access to meeting space with up to date technology and big enough to accommodate 70 people or more on a weekly basis was noted as desirable.

Students noted that the West and East Office spaces are too cramped. Relocation of the student organization and activities areas will encourage organizations to better utilize space and resources within the Memorial Union. A student organization focused space would “provide opportunities for events at the Memorial Union” and “encourage student engagement.”

More dining and hangout space was important to some respondents. One respondent noted, “culinary science class would be able to serve food in the MU if there were more space.” Another stated they would use the “workshop and bowling and billiards for social events.”

Only 16% of the respondents explained that their student organizations would not directly benefit from the proposed plan to renovate and expand the Memorial Union. Several of those respondents indicated their “students rarely leave the building that houses their college, i.e.VetMed.” Others said that “major departments provide areas for student organizations,” they “are small enough to use Gerdin” or they “usually stay in Curtiss”.

STUDENT FEEDBACK

- The renovation would create a more visible, accessible, convenient, interactive, and nicer space.
- It would draw attention to the Memorial Union
- A student organization focused space would:
 - provide more opportunities for events at the Memorial Union
 - encourage student engagement and exposure from the additional foot traffic
- There would be:
 - more office space for interactions between students and administration
 - additional study group space for collaboration
 - increased space for Student Government

Overall, the feedback from the students has been positive and a campaign focusing on disseminating key details of the concepts should continue with the general student body. Continuing to receive student feedback and engaging students in the process is recommended to ensure their current and future needs are addressed.

¹⁰ IMPLEMENTATION PHASING AND COST PROJECTIONS

Critical to the success of the recommendations of this study is an implementable phasing plan. Careful consideration was given on how to vacate one area of the building, repurpose it, move in and then vacate and start the process with a new area again. This strategy allows for surge space, an effective move management plan, as well as the ability to assess each phase individually in timing, funding and spaces to be relocated.

PHASING STRATEGY

PHASE 1 aims to meet the first objective of the study, to repurpose the hotel room floors. The vacant hotel rooms will inherently be the first surge space that can be repurposed in the building. By relocating office spaces to fourth-sixth floors, third floor space is freed to become the next surge space for repurposing. This phase also includes the construction of the addition and freight elevator to increase available square feet, meet more of the identified project needs, provide additional programming options to the Multicultural Student Affairs office, and to provide an improved student experience in the building early in the project.

PHASE 2 meets another objective of the study, improving and expanding student organization and student activity area. Relocating these office spaces and adding much-desired collaboration space on the third floor seeks to unite the student office spaces in the building and give students ownership of a larger portion of one floor of the building. This phase would also include the relocation and updating of small meeting rooms on third floor as well as restrooms. This phase will provide surge space on first floor. Phase 2 will also include the expansion of the Multicultural Center on the second floor to increase student work and activity space.

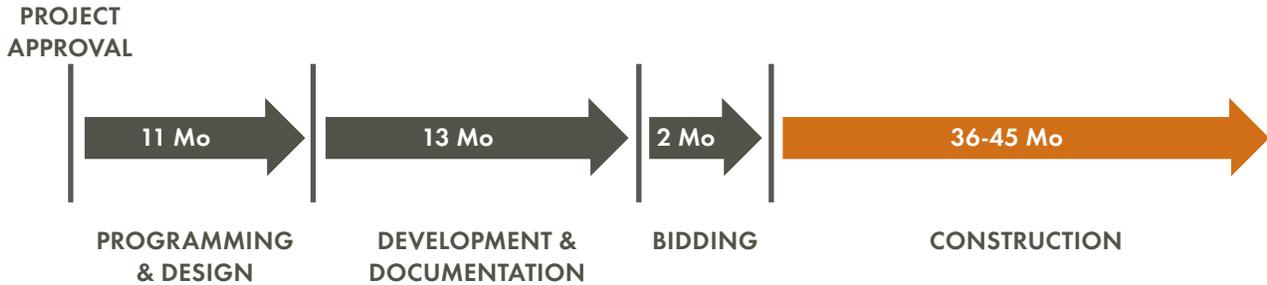
PHASE 3 meets the study objective of expanding dining seating. This objective is achieved within the existing building boundaries by the relocation of office space from the first floor. When complete, the three primary objectives of this study have been met.

Additional phases provide opportunities for the improved adjacency and wayfinding improvements in the building as well as meeting stakeholder increased space needs.

PHASE 4 allows for the growth of the Soult's Family Visitor Center on ground floor, the growth of the University Book Store stock room, and the relocation of the Workspace to a more public area of the building. This phase could be implemented at any time during construction.

PHASE 5 expands the Multicultural Center, adds additional meeting room space, and opens the Main Lounge to the north central campus and Campanile on the second floor. This phase also includes a new men's restroom and a new green room. This phase is somewhat independent of other phases with the exception of the relocation of the administrative and New Student Programs offices, and could occur during any prior phase if desired.

PHASING SCHEDULE



The following scheduling information is provided as a guideline for planning.

DESIGN PREPARATION SCHEDULE

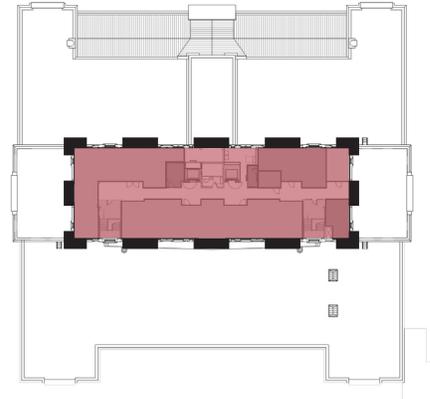
ACTIVITY	DURATION
Programming	6 months
Schematic Design	5 months
Design Development	6 months
Construction Documents	7 months
Bidding	2 months

CONSTRUCTION SCHEDULE

PHASE	SQUARE FEET	DURATION
PHASE 1	45,000	12 months
Addition	24,000	
Hotel floors	21,000	
PHASE 2	21,000	8 months
Third floor (student leadership and meeting rooms)		
PHASE 3	28,000	12 months
First floor north (dining seating/student recreation)		
First floor south (dining seating)		
PHASE 4	23,000	8 months
Ground floor (Souls Family Visitor Center, dining seating, other)		
PHASE 5	7,000	5 months
Second floor (meeting room, study rooms, restrooms)		

There is opportunity to overlap phases to reduce construction duration.

PHASING DIAGRAMS



Sixth Floor

PHASE 1 RENOVATION FOURTH-SIXTH FLOORS

Fourth-sixth floor repurpose from hotel to office space

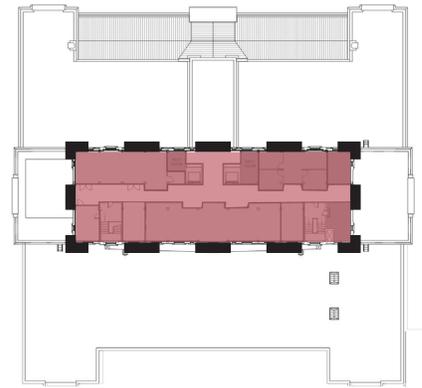
PHASE 1 ADDITION

24,000 sf addition to NE side of building

- Ground-Third Floors

COST PROJECTION

Addition Cost:	Renovation Cost	Freight Elevator Cost
\$400-435/sf	\$450-500/sf	\$1,250,000
24,000 sf	21,000 sf	
\$9,500,000-10,500,000	\$9,250,000-10,250,000	



Fifth Floor

Phase 1 total cost \$20,000,000 - 22,000,000

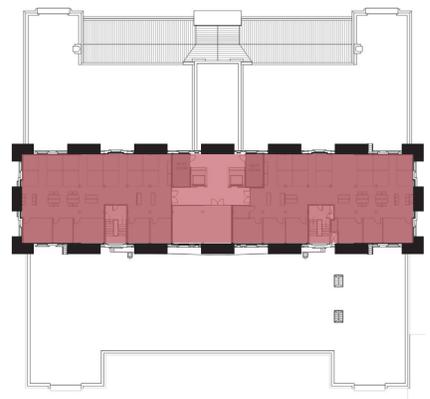
DURATION

24 months design and construction

DEFERRED MAINTENANCE ADDRESSED

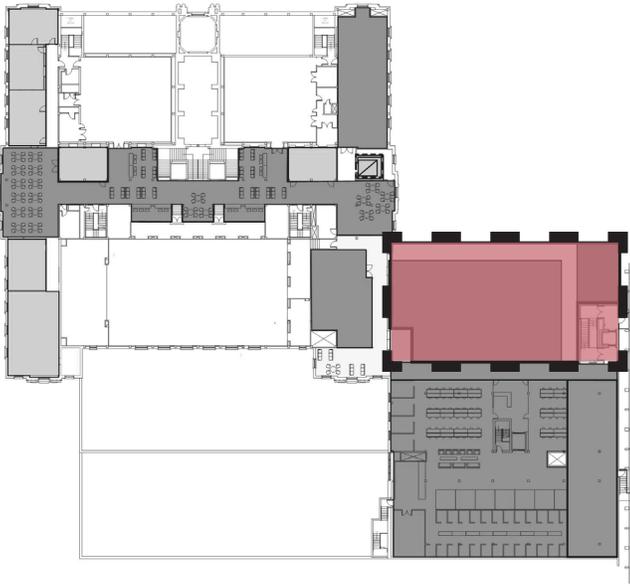
In referenced work areas:

- New plumbing systems & fixtures
- New secondary electrical distribution (primary service was recently updated) with new lighting
- New mechanical/HVAC systems
- New data and telecommunications distribution
- New distribution of sprinkler system from existing mains

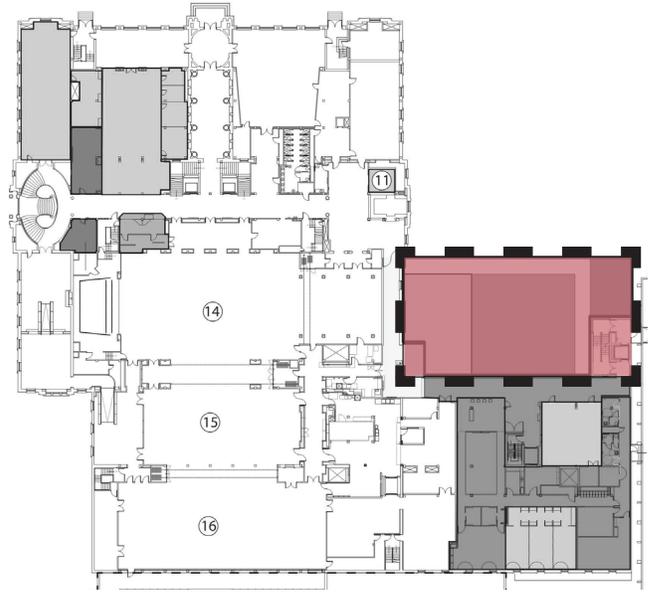


Fourth Floor

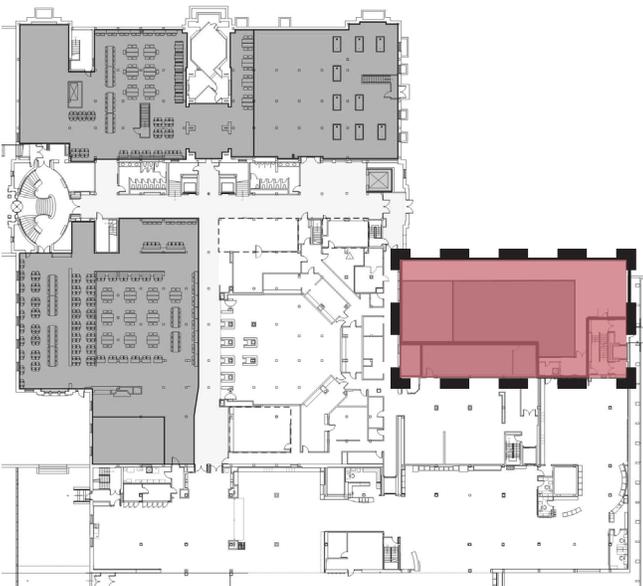
**Colored areas in the adjacent plans delineate portions of the building affected during this phase.*



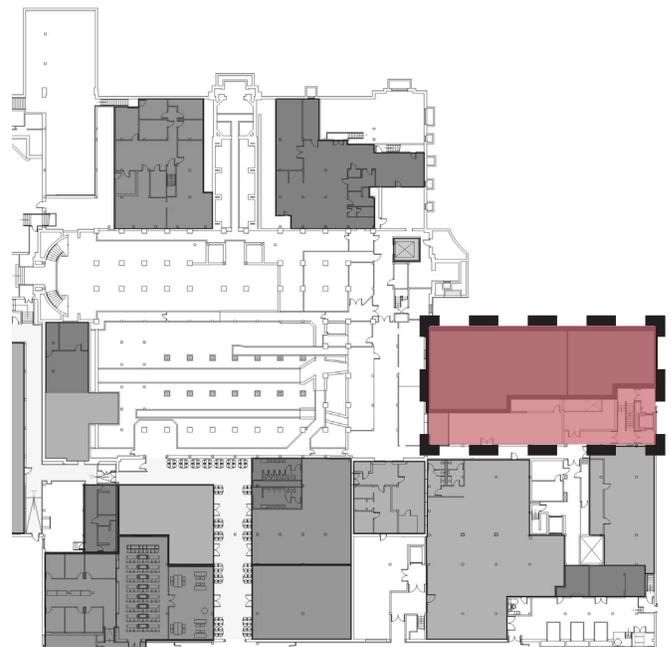
Third Floor - NE Addition



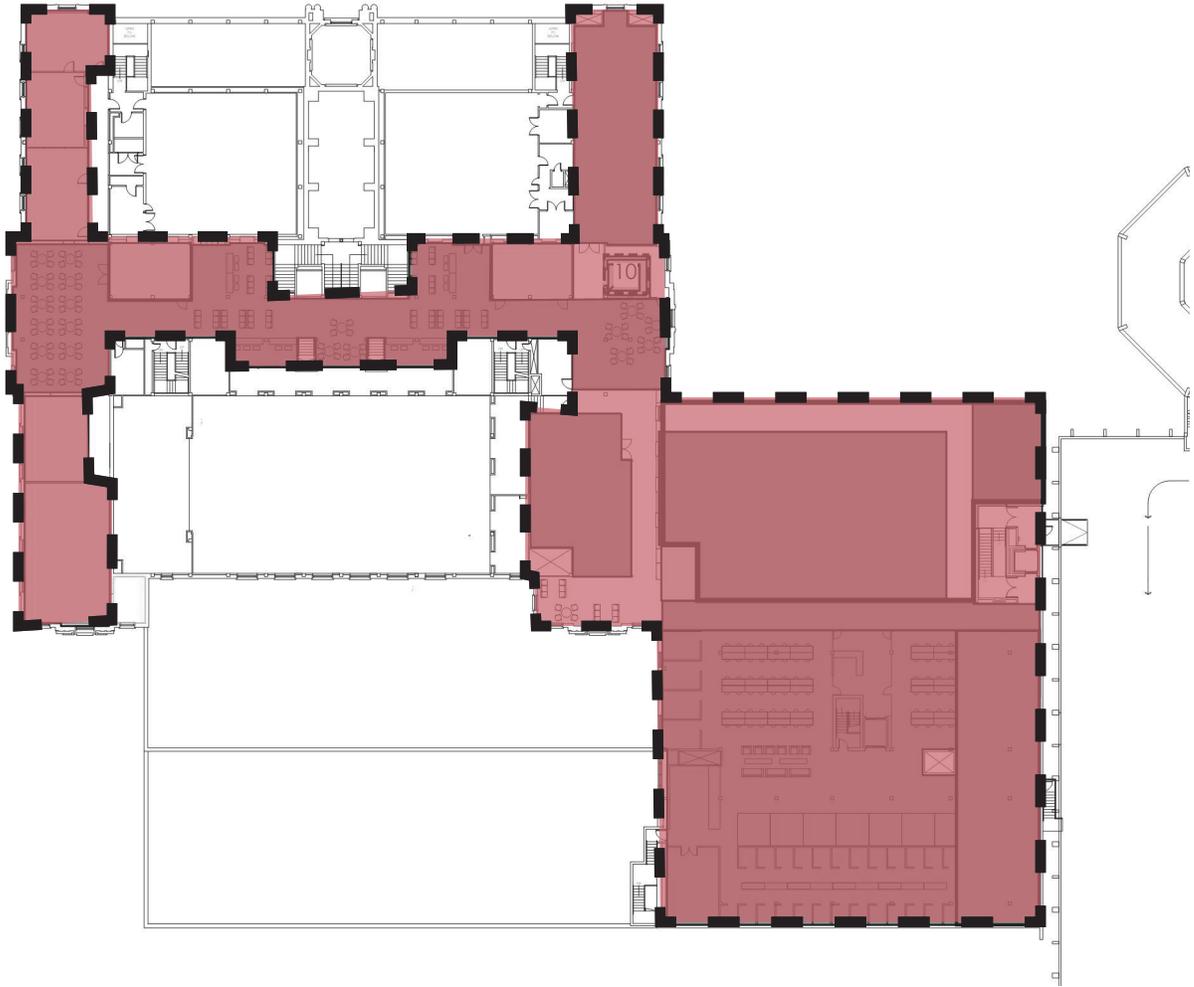
Second Floor - NE Addition



First Floor - NE Addition



Ground Floor - NE Addition



PHASE 2 THIRD FLOOR

Repurpose third floor into student office space, meeting rooms

COST PROJECTION

\$375-430/sf

21,000 sf

\$8,000,000 - \$9,000,000

DURATION

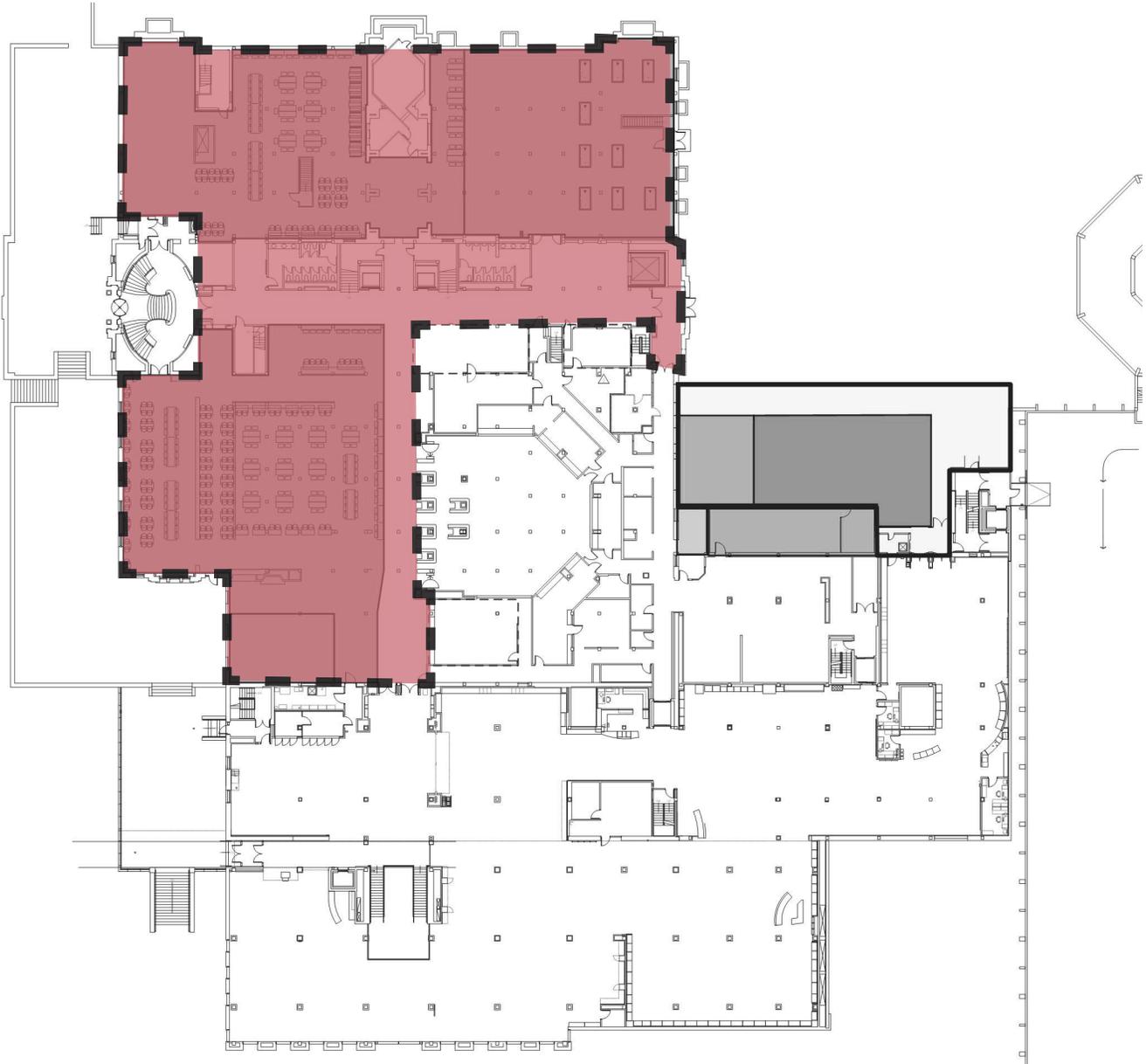
28 months design and construction

DEFERRED MAINTENANCE ADDRESSED

In referenced work areas:

- New plumbing systems & fixtures
- New primary & secondary electrical distribution with new lighting
- New mechanical/HVAC systems
- New data and telecommunications distribution
- New distribution of sprinkler system from existing mains

**Colored areas in the adjacent plan delineate portions of the building affected during this phase.*



PHASE 3 FIRST FLOOR

- Expand dining seating at first floor
- Upgrade terrace

COST PROJECTION

\$425-480/sf
 28,000 sf
 \$12,000,000 - \$13,500,000

DURATION

24 months design and construction

DEFERRED MAINTENANCE ADDRESSED

In referenced work areas:

- New plumbing systems & fixtures
- New primary & secondary electrical distribution with new lighting
- New mechanical/HVAC systems
- New data and telecommunications distribution
- New distribution of sprinkler system from existing mains

**Colored areas in the adjacent plan delineate portions of the building affected during this phase.*



PHASE 4 GROUND FLOOR

- Expand Soult's Family Visitor Center
- Expand University Book Store Stock Room
- Relocate Workspace
- Relocate Mechanical Shop

COST PROJECTION

\$400-450/sf
 23,000 sf
 \$ 9,000,000 - \$10,500,000

DURATION

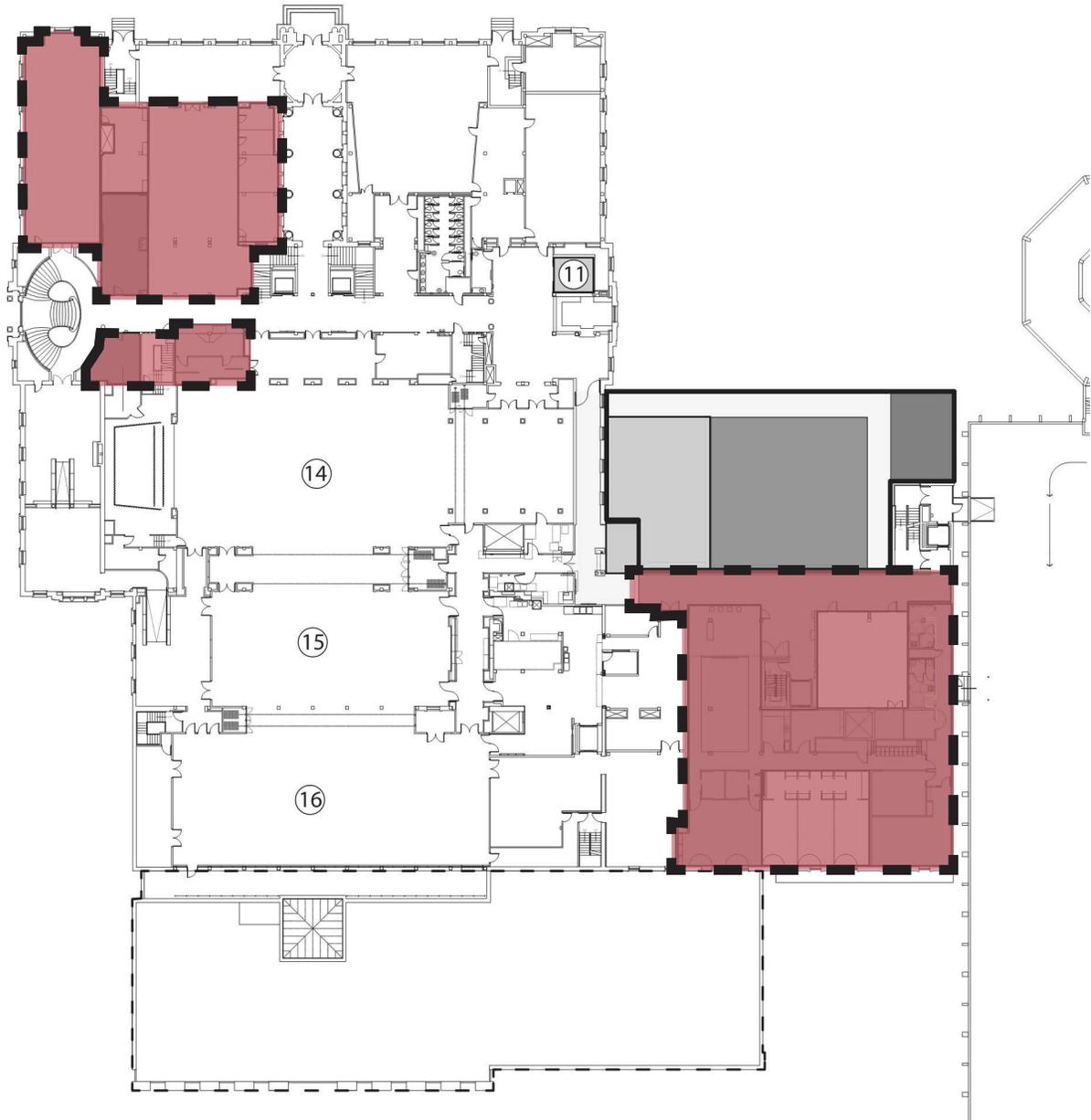
24 months design and construction

DEFERRED MAINTENANCE ADDRESSED

In referenced work areas:

- New plumbing systems & fixtures
- New primary & secondary electrical distribution with new lighting
- New mechanical/HVAC systems
- New data and telecommunications distribution
- New distribution of sprinkler system from existing mains

**Colored areas in the adjacent plan delineate portions of the building affected during this phase.*



PHASE 5 SECOND FLOOR

- Renovate office space into meeting space
- Update Main Lounge
- Reflection rooms
- New men’s restroom
- Green room
- Reconfigure the Multicultural Center

COST PROJECTION

\$425-575sf
 7,000 sf
 \$ 3,000,000 - \$4,000,000

DURATION

20 months design and construction

DEFERRED MAINTENANCE ADDRESSED

- In referenced work areas:
- New plumbing systems & fixtures
 - New primary & secondary electrical distribution with new lighting
 - New mechanical/HVAC systems
 - New data and telecommunications distribution
 - New distribution of sprinkler system from existing mains
 - Elevator 5 updates

**Colored areas in the adjacent plan delineate portions of the building affected during this phase.*

***Portions of Phase 5 can be completed in earlier phases as vacated spaces allows.*

PROJECT COSTS

Project costs per phase are included in this study to provide guidelines for future planning. Costs include a significant amount of infrastructure upgrades, design contingency and soft costs including some furnishings, telecom cabling, abatement, relocation costs, etc. Specialty furnishing and equipment would be in addition to the costs noted.

An inflation factor of 6% has been added to the cost figures to account for a minimal project cost escalation, but all figures should be considered as current costs in dollars relevant to the date of the study. As phases are implemented, an updated cost analysis should be performed to bring forward relevant escalation costs.

Costs provided include costs for a high quality level to match the existing building fabric. Where budget numbers include deferred maintenance items included in the ISES report, general work items that overlap construction and deferred maintenance costs have been identified.

PROJECT COST SUMMARY

The following summary includes project costs for all phases of construction.

PHASE 1	\$20,000,000 - \$22,000,000
Addition	\$8,000,000 - \$9,500,000
Renovation (floors 4 - 6)	\$12,000,000 - \$12,500,000
PHASE 2	\$ 8,000,000 - \$9,000,000
PHASE 3	\$12,000,000 - \$13,500,000
PHASE 4	\$9,000,000 - \$10,500,000
PHASE 5	\$3,000,000 - \$4,000,000
TOTAL	\$52,000,000 - \$59,000,000

All figures should be considered as current costs in dollars relevant to the date of the study

NEXT STEPS

As the University continues moving forward with the renovation and addition recommendations to the Memorial Union, the following items should be considered:

- Update the CPAC community with the results of this analysis and the study.
- Develop an information campaign focusing on disseminating key details of the study to the student body in preparation for a referendum campaign for students.
- Verify calculated student fee increase will support the scope identified in the study.
- Continue discussions with Dining Services to confirm current and future needs and goals.
- Reevaluate need of meeting room space within the Memorial Union.
- Complete site analysis of the East side of the building to confirm the proposed modified access to the parking ramp.