NORTH DAKOTA.



Memorial Union / McCannel Hall Master Plan

Final Report July 2017





WTW ARCHITECTS

July 27, 2017

Les Bjore
Director, Design Planning & Construction
University of North Dakota
3791 Campus Road
Grand Forks, ND 58202-9032

Re: Memorial Union / McCannel Hall Master Plan

Dear Les,

WTW Architects is pleased to submit this master plan report for the Memorial Union and McCannel Hall. We enjoyed facilitating this study in collaboration with you and the other members of the project planning committee.

This report defines a new vision for the transformation of campus life at the University of North Dakota. A new 60,000 SF expansion is proposed as a vibrant public concourse linking the Union and McCannel Hall. Second Avenue will be closed to vehicular traffic and transformed into an active tree-lined pedestrian boulevard. A new north entrance to the Memorial Union will be complemented with a gracious new entrance drive plus expanded parking...creating a dynamic new 'front door' to UND along University Avenue designed to relate to the architecture of the historic campus core.

The building interior will be dramatically transformed: filled with daylight, opened up with visual transparency and connectivity, and enhanced school spirit and identity. An active dining and retail main street will link student organization suites, programming and event spaces, and student services to create a new center of student life and campus community.

The WTW planning team worked interactively with the project planning committee as well as numerous students, staff, and administrators who participated in a highly collaborative master planning process. We appreciate the extensive time and effort expended by all members of the University. Special thanks go to you and Cheryl Grew-Gillen for your superb leadership and collaboration with this study.

We are delighted to have been part of this planning effort and look forward to our continuing involvement with the University through the next phase of this exciting project.

Best regards, WTW ARCHITECTS

Paul F. Knell, FAIA Senior Principal

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University of North Dakota Final Report

Executive Summary



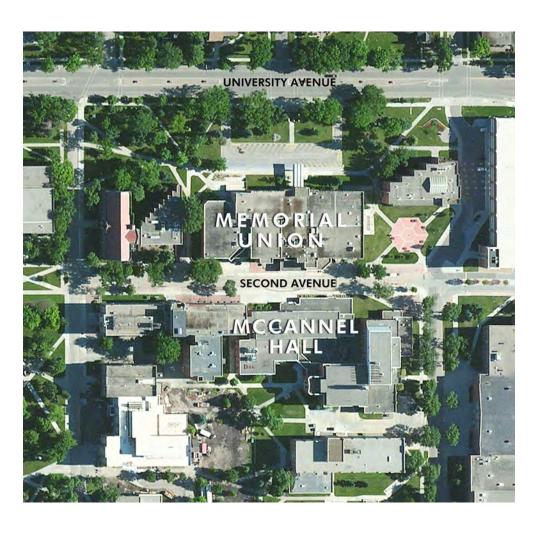




The Memorial Union is the center of campus life at the University of North Dakota. It is home to over thirty University and retail service functions that cater to the needs of students, faculty, staff, alumni, and visitors. The existing facility is highly utilized by the University community for activities ranging from major events and annual programs to a variety of smaller programs and more informal gatherings. The Union's resources also support over 200 registered student clubs and organizations., even with no formally designated space for these groups.

Across Second Avenue from the Memorial Union and linked via an underground pedestrian tunnel, McCannel Hall houses numerous student services, mostly supporting student health, academic success, and professional advancement.

Together, McCannel Hall and the Memorial Union are the epicenters of student services and programs that are vital to student life at UND.





Memorial Union / McCannel Hall Master Plan EXECUTIVE SUMMARY

The Memorial Union was built in three phases – 1951, 1964, and 1983 – with the last significant renovation occurring in 1998, following the Red River Valley Flood. McCannel Hall was built in two phases – 1957 and 1995 – with only minor building improvements since. In October 2015, a facilities conditions assessment was completed and showed significant renewal needs in a broad range of categories for both buildings.

Also in 2015, the Association of College Unions International (ACUI) published An External Review of the Memorial Union and Office of Student Involvement and Leadership at University of North Dakota. This report found that the Union "has a great deal of potential even though it is somewhat dated and has been permitted to drift from its core mission to promote campus community." In addition to staffing and management recommendations, this report also outlined the need to "make significant changes and improvements to the facility that will support and advance student engagement and student success through the programs, services and events facilitated by the staff." Specific recommendations include reorganizing the current building with clear "zones" of use, opening a satellite bookstore within the facility (already completed), and creating "a dedicated space for student organizations."

Benchmark comparison of the Memorial Union space usage to ten unions at institutions of a similar size.

This comparison illustrates that the Memorial Union is undersized and below the national average.

Components	National Average		Memorial Union	
	ASF	Percentage	ASF	Percentage
Food Service	29,067	26.2%	21,379	24.3%
Ballroom Facilities	8,871	8.0%	12,623	14.4%
Conference/Meeting Rooms	10,635	9.6%	5,818	6.6%
Bookstore	13,428	12.1%	1,895	2.2%
Additional Retail Services	4,935	4.4%	4,352	5.0%
Theater/Auditorium	5,832	5.2%	2,608	3.0%
Recreation/Entertainment	5,988	5.4%	5,154	5.9%
Lounge Space	6,595	5.9%	7,949	9.1%
Academic Related	1,616	1.5%	3,468	3.9%
Student Organizations	9,312	8.4%	3,621	4.1%
Administrative	6,449	5.8%	13,702	15.6%
Mutlicultural Centers	2,447	2.2%	5,249	5.9%
Special/Misc. Components	5,969	5.4%	0	0.0%
TOTAL Assignable SF	111,141		87,818	
TOTAL Gross SF	183,382		145,154	



Memorial Union / McCannel Hall Master Plan EXECUTIVE SUMMARY



Given the University's population of 15,000 students, the existing Memorial Union (at 145,152 gross square feet) is just below the ACUI minimum recommendation of ten square feet per student. Each institution has unique circumstances, but benchmark comparison to institutions of a similarly sized student enrollment shows that the Memorial Union is generally undersized by an average of almost 40,000 gross square feet. Similar to the ACUI review, this benchmark comparison shows an extreme deficiency of student organization space. Meeting rooms are also shown to be in deficit, a fact supported by the extremely high utilization of existing meeting rooms. Not all Unions have theaters, but the existing Lecture Bowl is smaller than typical student programming theaters. On the other hand, Administrative office space accounts for more than twice that of the national average for similar student unions.

PROGRAM DEVELOPMENT

Given the needs identified by the facilities condition assessments, the ACUI review, and benchmarking against institutions of a similar size, the University adopted a vision that would explore redevelopment of the Memorial Union and McCannel Hall, including a potential expansion that would integrate the two facilities. This solution would address the deferred maintenance and infrastructure insufficiencies of both buildings, respond to evolving programmatic needs, and reinvigorate the combined facility as the center of student life and campus community.

Through a truly interactive process, a detailed program was developed for this new vision. This process gathered information from a broad base of constituents through a variety of methods, including:

- a campus-wide student survey (1,334 students participated);
- user group interviews with live, interactive polling;
- open forums advertised widely and accessible to all campus constituents;
- peer facility tours tours of four premiere Unions; and
- committee meetings with UND constituents that participated consistently throughout the planning process

In addition to identifying program components to be included in the visioning for the new Memorial Union and McCannel Hall and their space needs, the planning team established potential affinities between program components and preferred locations within the future development.

The proposed program shows the biggest growth in meeting and event space and in student organization and multicultural space. These are consistent with both the identified needs of the University and with observed national trends. Increase in ballroom space will accommodate the desire to host larger events and address existing functional deficiencies. Increase in meeting space will amend an existing deficit and support growing demand. A new student organization suite is proposed to support more than 200 recognized clubs and organizations that currently have no space or resources. Existing multicultural groups and new groups that have been recently relocated to the Union will receive new suites that address their needs and support community development.

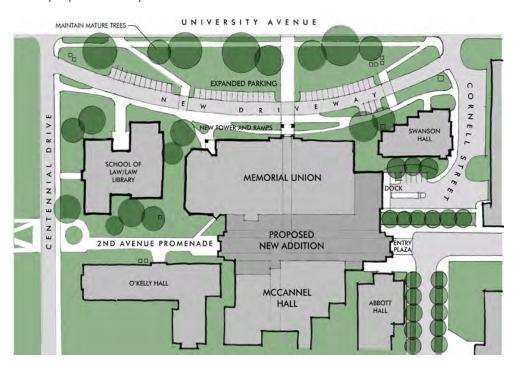


PROPOSED CONCEPT

As part of the long-range vision of the University, this project reaches well beyond the walls of McCannel Hall and the Memorial Union. The proposed site plan illustrates several strategic ideas that will have a multi-generational impact on the overall campus. The new vision for the surrounding site includes:

- a new north tower entrance to serve as the potential beacon of student life and the symbolic front door to the University;
- a new grand entry driveway that provides a gracious drop-off / arrival sequence for the Memorial Union with expanded parking;
- a new delivery dock on the east side of the union that separates pedestrian circulation from service/delivery vehicles with a landscape buffer to screen it from Swanson Hall; and
- full ADA compliant accessibility at the east, north, and west sides of the proposed facility.

Proposed site plan of the Memorial Union and McCannel Hall with the new addition and site upgrades.



The most significant site change comes with closing a portion of Second Avenue to vehicular traffic. This part of campus will become a vibrant pedestrian boulevard that links Columbia Road through the expanded Union to the primary green space of the campus. The new addition will also provide an uninterrupted north-south connection from University Avenue though the Memorial Union and McCannel Hall to the historic core of the campus, allowing these facilities to become a true crossroads of campus life.



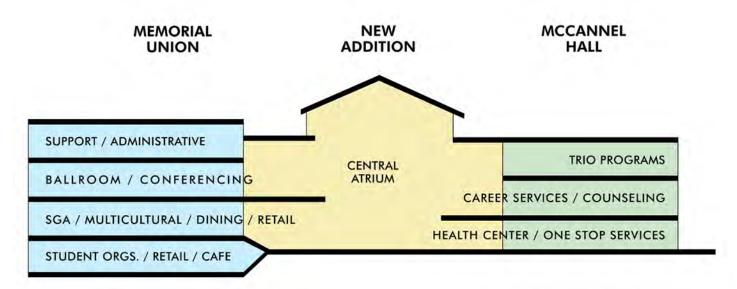
The new tower element, designed to relate to the campus' more traditional Gothic architecture, will serve as the primary entrance to the Memorial Union and front door to the University. Ramped walkways to either side will make this entrance fully handicapped accessible.



Second Avenue will be closed to vehicles and converted into a gracious pedestrian promenade.







The final concept proposes a dynamic multistory atrium to serve as the central public space linking McCannell Hall with the Memorial Union.

On the first floor, new dining areas and retail venues will activate the proposed central public space that provides a unifying element, joining McCannel Hall and the Union. Other key features on this floor include a new information desk, spirit shop, expanded retail dining, multicultural programs, SGA offices, student services and the Health Center. Lounges and public spaces will have flexible furniture, integrated technology, and incorporate University art, imagery, and identity.

On the second floor, the existing ballroom is expanded to the north. A new support kitchen, additional storage, and pre-function lounge spaces will bring added flexibility and efficiency to ballroom events. The existing auditorium may potentially be converted into a larger multipurpose space. New meeting rooms and lounge spaces surround the atrium. Other important destinations on this level include the Counseling Center, Career Services, and Student Involvement & Leadership.

The third floor includes the Dean of Students offices, Trio Programs, quiet lounge and reflection space.

The café and terraced seating area is the central feature of the lower level. Other key features include the gaming and E-Sports lounges, a new multipurpose program space, a collaboration lounge for student organizations, mail, and the expanded convenience store.



The enclosed portion of Second Avenue will become the new pedestrian marketplace / main street of campus life. Portions of the existing south façade of the Memorial Union will be removed to provide direct open connections with the proposed new atrium.



The cascade stairway will provide a tiered public gathering / live performance space to visually connect the main public spaces with the Lower Level. It will also serve as a giant light well, bringing natural day lighting into the lower level of the proposed facility.



WTW Architects
July 2017





In selected areas, the existing public spaces will be opened up to multiple levels. Natural light will make the building interior more fresh and visually appealing. This sense of architectural transparency will help to showcase and celebrate the many activities and programs of the UND Memorial Union.



The new games area in the Lower Level will complement the other dining / technology / entertainment features also planned on this floor.



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July 2017



FINANCIAL EVALUATION

The planning team collaborated with the University in developing a preliminary cost and financial evaluation of the project. To assist in this evaluation, the team retained the services of Jim Welch, the former Business Manager / Union Director at the University of Nebraska Omaha. The team also collaborated with UND representatives from Design, Planning & Construction, the Office of Student Affairs, the Controller's Office, UND Finance and Operations, and Union Administration. As the planning process evolved, so did the financial evaluation. Documentation included in the Financial section of this report represents the refined assessment based on the final design concept, and provides a basic starting point for the implementation of the project.



Memorial Union / McCannel Hall Master Plan

University of North Dakota Final Report

Existing Building Issues

Existing Building Issues







MEMORIAL UNION

Constructed in 1951 with subsequent additions in 1964 and 1983, the Memorial Union has served as the student life center for multiple generations of UND students. Located along University Avenue adjacent to the historic academic core of the UND campus, the existing building is well positioned as the gateway to the University.

In recent decades however, investment in the current facility has been minimal and improvements have been driven more by necessity than by a unified vision. The facility has become outdated. It is not keeping pace with the needs of the next generation of UND students and not fully serving its core mission as a vibrant gathering place for the greater University community.



Existing North Façade

The existing façade along University Avenue includes a mixed architectural vocabulary with multiple architectural styles. The current entry canopy and the switch-back handicapped ramp do not provide an appealing entry sequence into the building. There is an overall lack of unity in the building's architecture.



Existing South Façade

The building's exterior face along Second Avenue is harsh and monolithic. The existing loading dock is directly adjacent to the primary pedestrian entrance which creates public safety issues between delivery vehicles and pedestrians. Operationally, this is problematic and dangerous. Visually, this presents an unappealing image to visitors and prospective students.





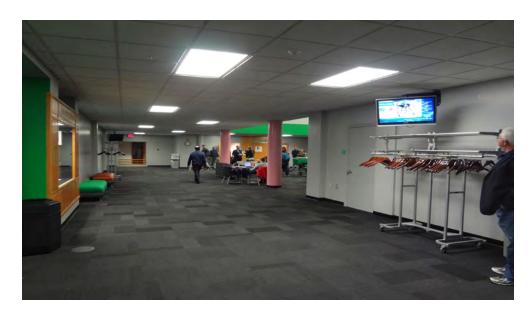
Main Lobby

As a first impression, the combination of wood paneling, graphics, and down lighting in the main lobby is appealing. However, there is limited architectural transparency on the building interior with very little natural light in public spaces.



Public Spaces on Upper Floors

Other public spaces are unexciting. The furniture is a mixture of various outdated styles that have been collected over many years. The occasional coat racks serve a functional need but they, like many other features, could be better integrated into the overall facility design.





Ballroom

The existing Ballroom accommodates multiple large events. The outer lounge area also serves as an overflow space. Storage and back-of-house support spaces are undersized.



Ballroom Pantry

Support spaces such as this pantry are under-equipped to handle the many banqueted events that are routinely hosted by the Memorial Union. Operationally, the MU staff does a superb job in managing the staging and catering of multiple events from minimal support spaces such as these.





Retail Venues

The Convenience Store is one of many retail operations in the Memorial Union that are outdated and not in tempo with current market trends.



Entertainment Space

This multipurpose space known as the 'Loading Dock' was renovated in recent years to host live performances. At times, it also serves at times as a dining/study/meeting area. The potential addition of electronic gaming, pool tables, and ping pong could bring added vitality to this facility.





Memorial Union / McCannel Hall Master Plan EXISTING BUILDING ISSUES

INFRASTRUCTURE DOCUMENTATION

To assess the infrastructure needs of the Memorial Union, a Facility Conditions Report was completed in October 2015 by the ISES Corporation. The report included an evaluation of existing building conditions several categories: accessibility, exterior structure, interior finishes/systems, plumbing, hvac, fire/life safety, electrical, site, vertical transportation, and environmental health. A summary of renewal needs by system with estimated costs from the conditions report is illustrated below.

UNIVERSITY OF NORTH DAKOTA MEMORIAL UNION, 0034

FACILITY CONDITION ASSESSMENT COST SUMMARIES & TOTALS

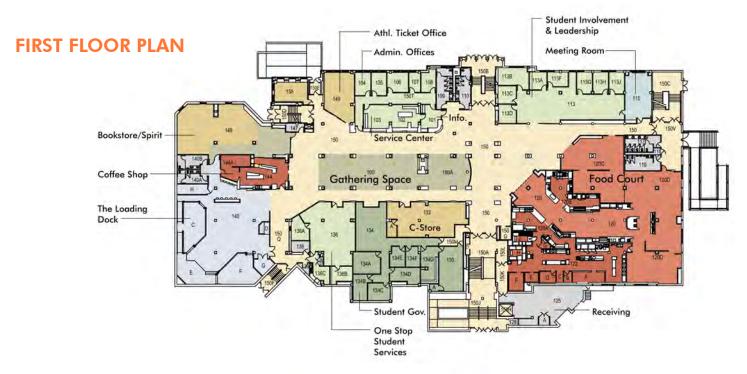
FACILITIES RENEWAL NEEDS BY SYSTEM

Category	Non-recurring Assessment Recommendation	Recurring Component Replacement Costs	Total 10-Year Facility Renewal Costs
ACCESSIBILITY	\$124,546	\$0	\$124,546
EXTERIOR	\$0	\$474,479	\$474,479
INTERIOR	\$0	\$2,487,956	\$2,487,956
PLUMBING	\$6,635	\$2,907,477	\$2,914,112
HVAC	\$0	\$5,207,531	\$5,207,531
FIRE/LIFE SAFETY	\$102,384	\$597,338	\$699,722
ELECTRICAL	\$0	\$4,092,404	\$4,092,404
SITE	\$54,497	\$0	\$54,497
VERT. TRANS	\$0	\$312,017	\$312,017
HEALTH	\$231,072	\$3,034,596	\$3,265,668
Totals	\$519,134	\$19,113,799	\$19,632,933

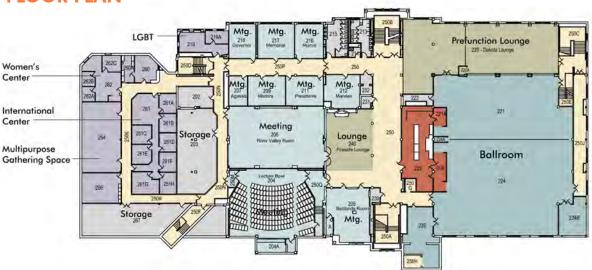


EXISTING BUILDING PLANS

The planning team toured the existing facility, observed existing building operations, and documented existing occupant locations. The mapping plans illustrated below became the starting point for understanding current building functions.

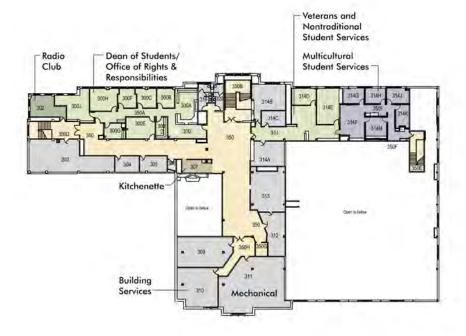


SECOND FLOOR PLAN





THIRD FLOOR PLAN









McCANNEL HALL

Constructed in 1957 with subsequent renovations/additions in 1995, McCannel Hall has served as the home for selected student services and administrative functions for several decades. Recent minor renovations have included improvements to the pharmacy, student health services, Counseling, Career Services and other key services for students.

Located along Second Avenue, McCannell is part of the historic academic core of the UND campus. It is well positioned to form a strategic link and potential student life partnership with the Memorial Union. If joined together, McCannell Hall and the Memorial Union would create a more dynamic focus for student services, student life programs, and the overall student experience at the UND.



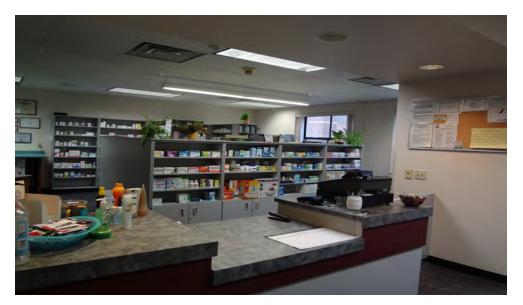
Existing North Facade

As part of the campus historic district, the original north façade of McCannel along Second Avenue shows some of its period detailing and historic character, particularly on the upper floors. The newer one-story addition is more contemporary and less intriguing.



Pharmacy

As part of Student Health Services, the pharmacy provides an important amenity for all members of the university community.





Clinical Spaces

Remodeled several years ago, clinical spaces like this exam room are well-organized and well maintained.



Selected Administrative Offices

Many of the administrative areas are contemporary and professional with well-coordinated finishes and furnishings. Parabolic lighting provides good lighting at desk level.





Older Administrative Offices

Some of the older administrative areas, such as this counseling office, are in need of improvement.



Trio Programs

The central area of the Trio suite has made good use of a challenging space on the third floor. The suspended lighting fixtures are angled, providing added interest at the ceiling.





Memorial Union / McCannel Hall Master Plan EXISTING BUILDING ISSUES

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FACILITY CONDITION ASSESSMENT COST SUMMARIES & TOTALS

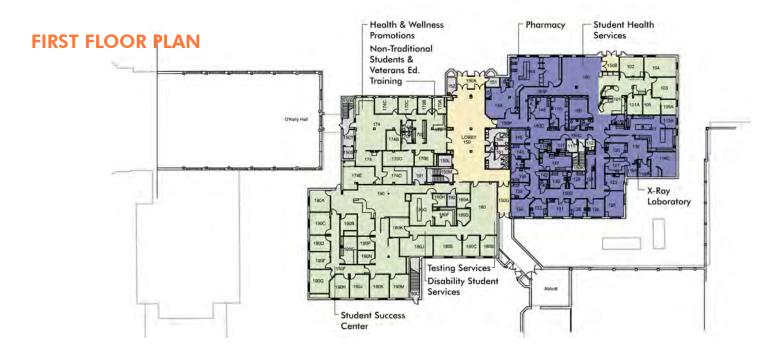
FACILITIES RENEWAL NEEDS BY SYSTEM

Category	Non-recurring Assessment Recommendation	Recurring Component Replacement Costs	Total 10-Year Facility Renewal Costs
ACCESSIBILITY	\$129,461	\$0	\$129,461
EXTERIOR	\$0	\$847,689	\$847,689
INTERIOR	\$0	\$1,019,607	\$1,019,607
PLUMBING	\$21,056	\$139,417	\$160,473
HVAC	\$9,324	\$849,036	\$858,360
FIRE/LIFE SAFETY	\$789,730	\$317,732	\$1,107,462
ELECTRICAL	\$0	\$1,079,841	\$1,079,841
SITE	\$0	\$0	\$0
VERT. TRANS	\$0	\$523,674	\$523,674
HEALTH	\$243	\$0	\$243
Totals	\$949,813	\$4,776,995	\$5,726,808

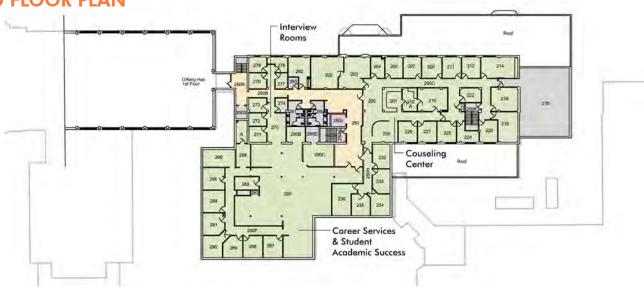


EXISTING BUILDING PLANS

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SECOND FLOOR PLAN

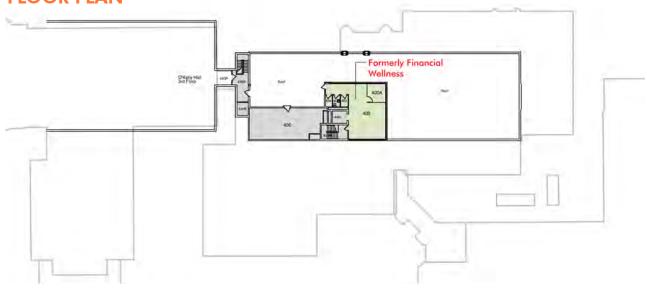




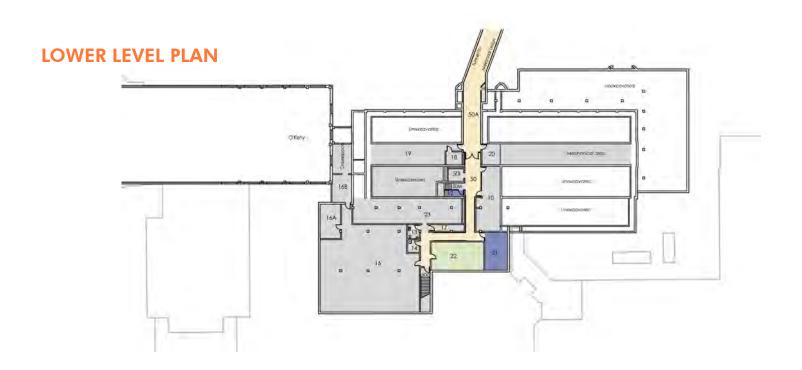
THIRD FLOOR PLAN



FOURTH FLOOR PLAN







Memorial Union / McCannel Hall Master Plan

University of North Dakota Final Report

> Planning Process







Memorial Union / McCannel Hall Master Plan PLANNING PROCESS

In 2016, the University commissioned WTW Architects to undertake a Master Plan for the UND Memorial Union and McCannel Hall. The planning process included an evaluation of the existing facilities, online surveys of students, faculty, and staff; visioning workshops with UND administrators, open forum discussions with the campus at large, meetings with key occupant groups, collaboration with student leaders, and direct interface with designated representatives of the University.

The members of the UND Core Group and Planning Committee are listed below:

UND Core Group

Les Bjore

Director

Design, Planning & Construction

Cheryl Grew-Gillen

Executive Director Memorial Union

Brandon Beyer

UND Student Body President Student Government

Blake Andert

UND Student Body Vice President Student Government

Aaron Flynn

Staff Development Coordinator / Interim Facilities and Operations Memorial Union

Sharon Loiland

Controller
UND Finance and Operations

Dr. Cara Halgren

Associate Vice President and Dean of Students

UND Committee Members

Shawn McHale

President, Student Representative Association of Residence Halls

Ryan Moriarty

Student Building Manager
Memorial Union

Cody Breen

Lead Building Manager Memorial Union

Danielle "Dani" Fox

Memorial Union Service Center

Erica Anderson

At-Large Student (Orientation Team)

Roy Roach

Multicultural Programs & Services (Graduate Service Assistant)

Dr. Cassie Gerhardt

Assistant Dean of Students Office Student Involvement & Leadership

Connie Frazier

Executive Director Housing and Dining

Orlynn Rosaasen

Director Dining Services

Stephanie Walker

Dean of Libraries Chester Fritz Library

Sandra Mitchell

Associate Vice President for Diversity and Inclusion Academic Affairs

Grant Hauschild

Associate Director of Development Student Affairs UND Alumni Association Foundation

WTW Architects

Paul Knell

Executive Vice President Senior Principal

Derek Eversmann

Director of Planning Associate

Jim Welch

Financial Consultant



Memorial Union / McCannel Hall Master Plan PLANNING PROCESS

PROJECT VISION

Based on input from the surveys, workshops, and initial discussions with the University, a strategic goal of the project emerged. The Union and McCannel Hall should be reenvisioned as a joint facility that would serve as a vibrant epicenter of student life and a daily crossroads / gathering place for all members of the University community. The following themes for the planning of this joint facility were identified:

• Front Door

The arrival / greeting point for visitors to the University

Crossroads

The town square of campus life and student engagement

Connections

Join the Union + McCannel + site + accessibility

Transparency

More open, with added daylighting and improved wayfinding

• Infrastructure

Upgrade technology and the MEP systems

• Dynamic Architecture

Make it a more active, vigorous, and energetic facility

• Vision

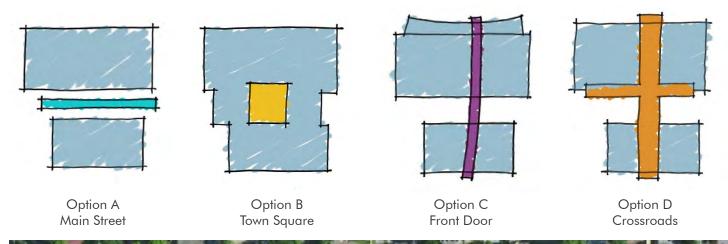
Enhance and strengthen the University community





EXPLORATION OF OPTIONS

The planning team examined a variety of planning options for re-envisioning the Memorial Union and McCannell Hall as a dynamically combined center of campus life. Several of the original planning options are diagrammed below. With input from student leaders and the planning committee, the main street concept (which became designated as the 'campus marketplace') became the preferred option for further planning and refinement.



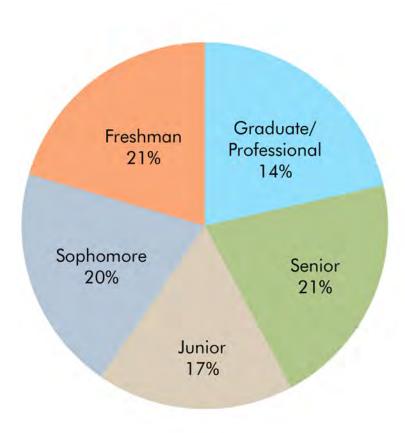




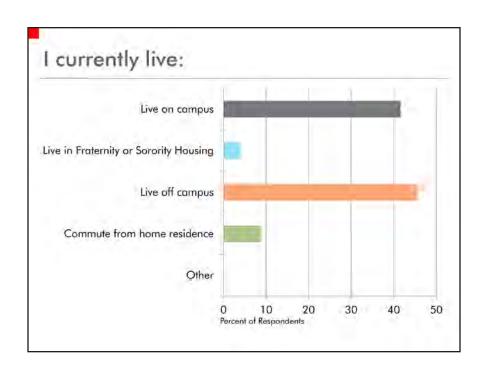


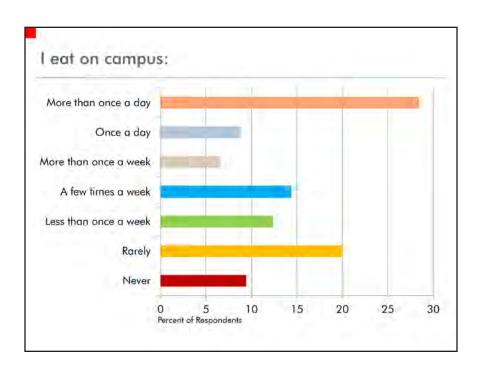


To gather quantitative data about the needs and priorities of UND students, the planning team conducted a campus wide survey. The survey was conducted online in 2016 and ran live from April 20th to May 11th. Student involvement in the survey was excellent. With 1,334 students participating, the survey provided a well-balanced sampling of responses across all classes:

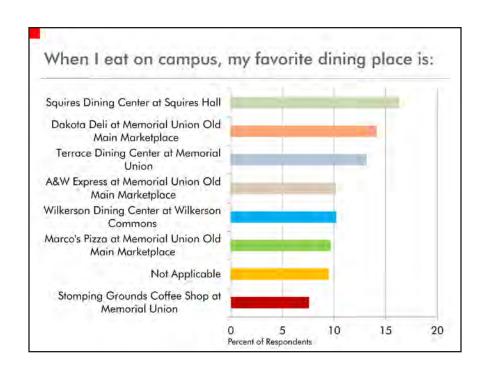


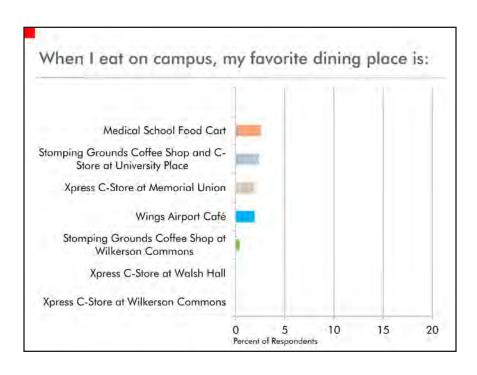




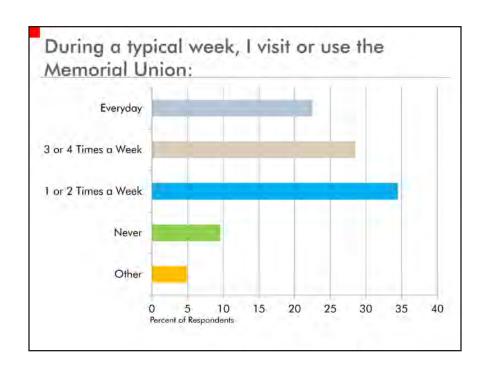


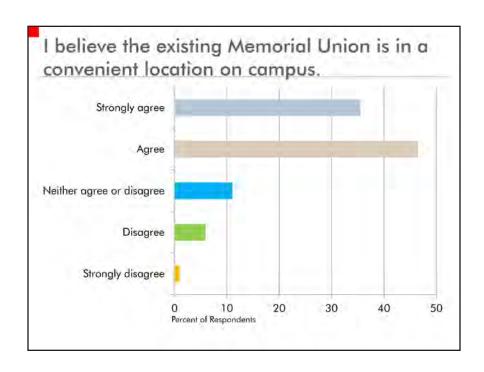




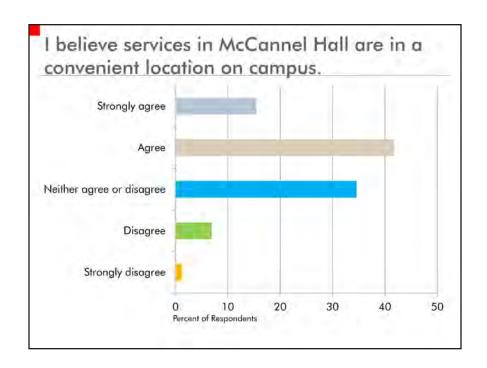


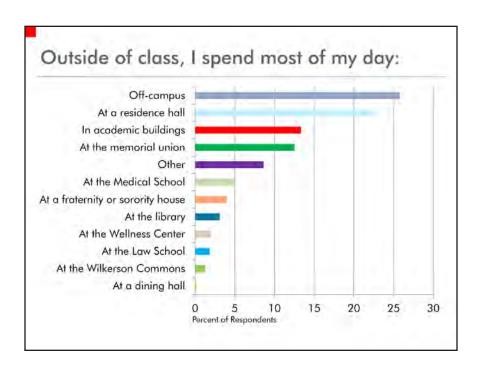




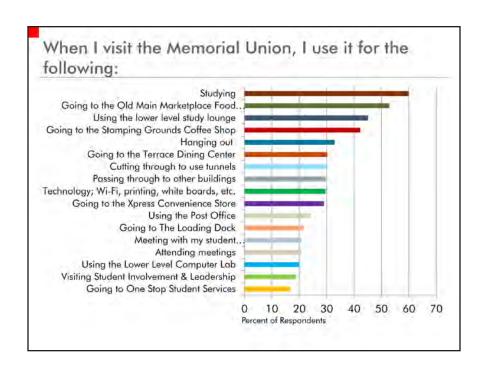


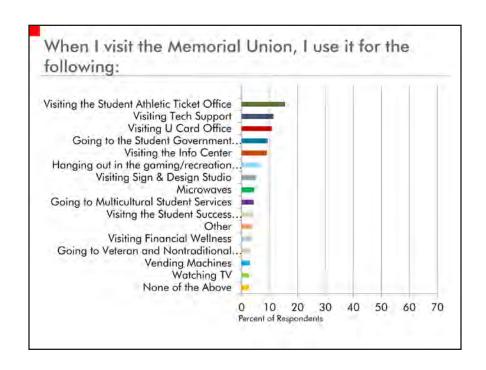




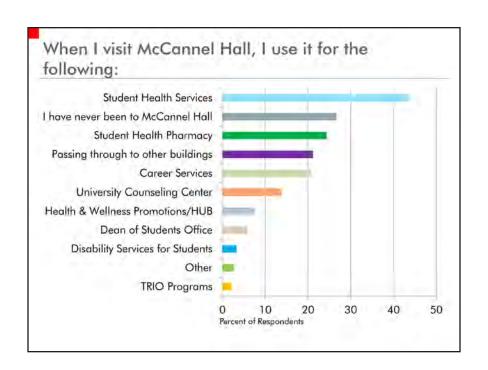


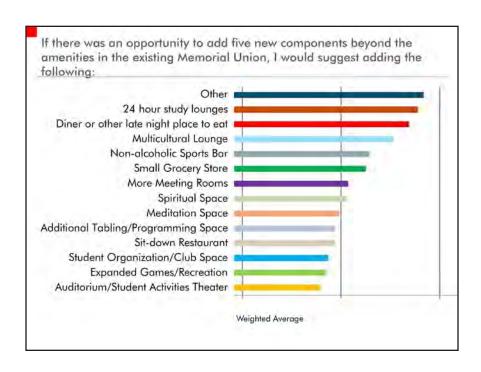




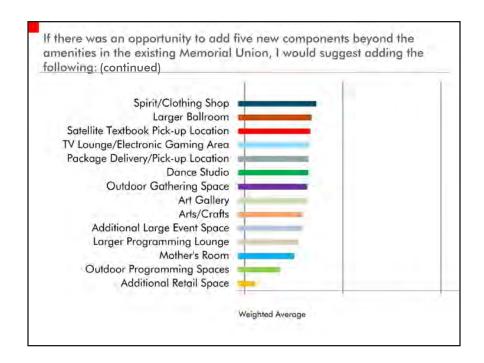












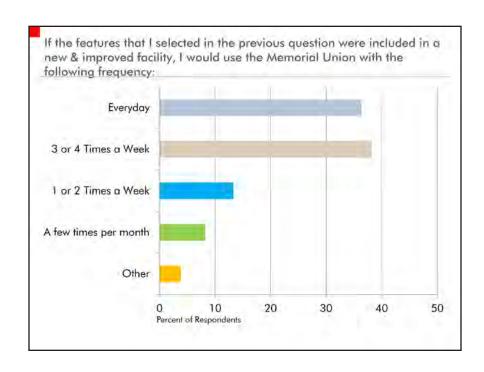
'Other' Student Priority Comments

- Alcoholic Sports Bar
- Nap Space with Pods
- Quieter Study Areas
- More Food Options
- A Well-Known Coffee Shop with Lounge
- Bowling Alley
- LGBT Center



Key Comments from Students

- UND has a very nice Memorial Union. Why would the University decide to update it after the mass budget cuts that have affected everyone on campus and decimated programs?
- Can the money that is going toward all this renovation go towards saving majors that are being cut instead?
- The Union should stay the same because it's perfect. Any additions would be a major waste of University money. We already have plenty of projects going on. Money should be better handled at this University and spent where it needs to be spent, not on things like making the union look better to show off money we don't have.





From visiting other campuses, my favorite feature in other student centers is:

- 24-hour Study Space & Coffee Houses
- More Study Spaces
- More Food Options
- That It Feels like an Epicenter to All Life on Campus
- Bowling Alley
- Little Movie Theaters
- Large Open Space

Memorial Union / McCannel Hall Master Plan

University of North Dakota Final Report

Benchmark Programming

Benchmark Programming





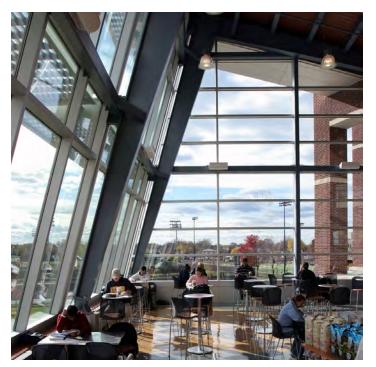
The programming process was a collaborative effort with input from a variety of sources. One of the initial steps was to visit some of the premier student union operations around the country. The goal was to observe some of the best practices in student life programming and to apply these ideas to UND. A summary of visited facilities is outlined below.

OHIO TRIP



The Ohio Union Ohio State University

- "Wow" space / central atrium / OSU spirit
- Grand Ballroom
- Meeting spaces
- Multiple dining options
- Woody's Sports Grill & Pub
- Student organizations



Student Union The University of Akron

- New facility
- Mid-sized "wow" spaces
- Grand ballroom
- Student organizations
- Multiple dining options
- Bowling / Games center



The programming process was a collaborative effort with input from a variety of sources. One of the initial steps was to visit some of the premier student union operations around the country. The goal was to observe some of the best practices in student life programming and to apply these ideas to UND. A summary of visited facilities is outlined below.

COLORADO TRIP



Lory Student Center Colorado State University

- Renovation / Expansion
- Theater with telescoping seating (new)
- Ballroom
- Meeting spaces
- Extensive student organizations space
- Campus transit center



University Memorial Center University of Colorado Boulder

- Renovation / Expansion
- "Wow" space / central atrium
- Newly renovated Ballroom
- Multiple dining options for students
- SGA suite
- Multicultural Center
- Bookstore
- Recreation facilities





Another source of benchmarking information was the national program database developed by the WTW Architects planning team. This database provides data on the amount of program areas (i.e., meeting space, dining, retail, lounge space, administrative, etc.) found in other union facilities for comparison to the UND Memorial Union. By benchmarking the current facility against similar unions in the national database, it is easy to identify potential programming gaps. Appropriate adjustments were incorporated into the proposed new program for the UND Memorial Union.

Components	National	Average	Memori	Memorial Union	
	ASF	Percentage	ASF	Percentage	
Food Service	29,067	26.2%	21,379	24.3%	
Ballroom Facilities	8,871	8.0%	12,623	14.4%	
Conference/Meeting Rooms	10,635	9.6%	5,818	6.6%	
Bookstore	13,428	12.1%	1,895	2.2%	
Additional Retail Services	4,935	4.4%	4,352	5.0%	
Theater/Auditorium	5,832	5.2%	2,608	3.0%	
Recreation/Entertainment	5,988	5.4%	5,154	5.9%	
Lounge Space	6,595	5.9%	7,949	9.1%	
Academic Related	1,616	1.5%	3,468	3.9%	
Student Organizations	9,312	8.4%	3,621	4.1%	
Administrative	6,449	5.8%	13,702	15.6%	
Mutlicultural Centers	2,447	2.2%	5,249	5.9%	
Special/Misc. Components	5,969	5.4%	0	0.0%	
TOTAL Assignable SF	111,141		87,818		
TOTAL Gross SF	183,382		145,154		





A proposed program was developed for the **Memorial Union** and for McCannel Hall. Both programs provide an accounting of assignable SF areas for the existing facility and for the proposed master plan.

MEMORIAL UNION PROGRAM	Existing Building	Proposed Plan
Food Service	21,161	21,432
Ballroom Facilities	12,650	17,921
Conference/Meeting Rooms	5,818	14,186
Bookstore / Spirit Shop	1,895	1,601
Additional Retail Services	3,423	5,512
Theater/Auditorium	2,608	0
Recreation/Entertainment	5,046	6,868
Lounge Space	8,641	13,985
Academic Related	2,698	2,172
Student Organizations	3,919	11,717
Administrative	15,712	16,804
Multicultural	6,298	8,528
Special/Misc/Unassigned Space	100	1,210
TOTAL ASSIGNABLE SF	89,069	121,936
TOTAL GROSS SF	145,154	193,362



	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 1: Food Service			
1.01 Meal Plan Dining/Catering	12,958	5,412	
Dining/Seating			
Main Kitchen		4,015	
Servery			
Food Service Support/Lockers/Misc.		1,397	
1.02 Retail Dining	7,710	11,854	
Dining/Seating		4,097	
Outlet A		558	
Outlet B		558	
Outlet C		556	
Outlet D		571	
Outlet E		571	
Outlet F		564	
Queuing Servery/Seating		4,379	
1.03 Cafe/Stomping Grounds	711	1,657	
Coffee/Snack Bar		549	
Seating		1,108	
1.04 Support		1,963	
Receiving/Loading Docks		1,963	
1.04 Community Kitchen		546	
Community Kitchen		546	
Total Group 1: Food Service	21,739	21,432	
	0.25	0.18	



	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 2: Ballroom Facilities			
2.01 Ballroom	12,623	17,921	
Ballroom	9,037	11,955	
Prefunction Lounge	2,414	2,835	
Banquet / Staging Kitchen	1,172	1,841	
Storage		1,290	
Total Group 2: Ballroom Facilities	12,623	17,921	
	0.15	0.15	
GROUP 3: Conference/Meeting Rooms			
3.01 Meeting Facilities	5,818	14,186	
Large Meeting / Multipurpose Room		5,188	
General Meeting Rooms		6,736	
Study Pods		1,170	
Pantry		585	
Storage		507	
Total Group 3: Conference/Meeting Rooms	5,818	14,186	
	0.07	0.12	
GROUP 4: Bookstore			
4.01 Spirit Shop	2,163	1,601	
Spirit Shop	2,163	1,601	
Table and Date	0.1/0	1 (01	
Total Group 4: Bookstore	2,163	1,601	
	0.02	0.01	



	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 5: Additional Retail Services			
5.01 Additional Retail Services	3,423	5,512	
University Federal Credit Union	1,230	1,275	
TIAA/CREF	125	275	
Mailing Services	554	642	
Convenience Store	993	1,100	
Athletic Ticket Office	521	543	
Future Retail		1,677	
7.10 7.11% 12.116	0.400	5.510	
Total Group 5: Additional Retail Services	3,423	5,512	
	0.04	0.05	
GROUP 6: Theater/Auditorium			
6.01 Lecture Auditorium / Theater	2,608	0	
Lecture Bowl	2,608	0	
New Auditorium / Theater		0	
Support / Storage / Misc.		0	
Total Group 6: Theater / Auditorium	2,608	0	
ional croop of model, meaning	0.03	0.00	
GROUP 7: Recreation / Entertainment			
7.01 Recreation / Entertainment	5,046	6,868	
Game Lounge	1,504	1,641	
E-Sports Lounge		927	
Loading Dock			
Multipurpose Program Venue	3,542	4,300	
Total Group 7: Recreation / Entertainment	5,046	6,868	
1	0.06	0.06	



MEMORIAL UNION PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 8: Lounge Space			
8.01 Lounge Spaces			
Lounge Areas	8,641	13,985	
	8,641	13,985	
Total Group 8: Lounge Space	8,641	13,985	
	0.10	0.11	
GROUP 9: Academic Related			
9.01 CNTR INSTR & Learning TECH	2,698	2,172	
General Computer Lab			
IT Lounge		1,144	
Collaborative Technology Zone (Maker Space)		1,028	
Total Group 9: Academic Related	2,698	2,172	
	0.03	0.02	



MEMORIAL UNION PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 10: Student Organizations			
10.01 Student Government	2,185	3,158	
Student Government	2,185	3,158	Includes 20% for circulation
10.02 Student Media	1,297	1,356	
Dakota Student Newspaper	1,046	1,081	Includes 20% for circulation
Student Amateur Radio Association (SARA)	251	275	Includes 20% for circulation
10.03 Student Organization	0	4,930	
Student Organizations		4,930	
10.04 Common Spaces / Shared Facilities	0	2,273	
Open Collaboration Area		1,273	
Storage		1,000	
Total Group 10: Student Organizations	3,482	11,717	
	0.04	0.10	



MEMORIAL UNION PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 11: Administration			
11.01 Administration	13,802	16,804	
Tech Support	1,824	1,890	Includes 20% for circulation
Financial Wellness	810	0	Includes 20% for circulation
University Police	505	523	Includes 20% for circulation
Service Center / Information Desk	196	612	Includes 20% for circulation
Building Manager		442	
Scheduling & Event Services	543	0	Includes 20% for circulation
Memorial Union Administration	1,020	2,500	Includes 20% for circulation
Student Involvement & Leadership	2,619	3,954	Includes 20% for circulation
One Stop Shop	1,446	0	Includes 20% for circulation
Diversity & Inclusion	587	916	Includes 20% for circulation
Dean of Students & OSRR	3,665	3,503	Includes 20% for circulation
Building Services	587	1,347	Includes 20% for circulation
General Storage		1,117	
Total Group 11: Administration	13,802	16,804	
	0.16	0.14	



		Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 12: Multicultural				
12.01 Multicultural Centers		5,249	8,528	
Pri	de Center	408	831	Includes 20% for circulation
Wome	n's Center	1,107	1,607	Includes 20% for circulation
Internation	nal Center	2,462	2,276	Includes 20% for circulation
Multicultural Programs	& Services	1,272	1,890	Includes 20% for circulation
Ever	nts Lounge	251	275	Share Event Lounge (Kitchen in Food Service)
Total Group 12: Multicultura	l Centers	5,249	8,528	
GROUP 13: Special / Misc. Comp	onents			
13.01 Art Display		0	0	
NEW Dispersed Gallery / Disp	olay Space			
13.02 Reflection Suite		0	598	
NEW Reflect	ion Space		499	
NEW Ablutic	n Stations		99	
13.03 UNASSIGNED		0	612	
Unassigi	ned Space		612	
Total Group 13: Special / Misc. Cor	nponents	0	1,210	
		0.00	0.01	
GRAND TOTALS				
Total Assignable SF		86,932	121,936	
Grossing Factor	(GSF/ASF)		1.59	
Total BLDG Gross SF		145,154	193,362	





A proposed program was developed for the Memorial Union and for **McCannel Hall**. Both programs provide an accounting of assignable SF areas for the existing facility and for the proposed master plan.

McCANNEL HALL PROGRAM	Existing Building	Proposed Plan
Student Health Services Admin+Lab+Pharmacy	9,156	9,307
Health & Wellness Promotions	1,858	0
Non-Traditional Students	810	875
Veterans Education Training	493	600
Disability Services	1,516	1,600
Testing Services	970	1,020
Student Success Center	1,638	1,692
Counseling Center	6,827	6,565
Interview Rooms	1,169	1,127
Career Services	5,814	5,903
Student Academic Services	415	450
Trio Programs	7,560	7,543
Lounge/Miscellaneous	0	3,499
TOTAL ASSIGNABLE SF	38,226	40,181
TOTAL GROSS SF	78,874	78,874



McCANNEL HALL PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 1: Food Service			
Total	0	0	
GROUP 2: Ballroom Facilities			
Total	0	0	Includes 20% for circulation
GROUP 3: Conference / Meeting Rooms			
Total	0	0	
GROUP 4: Bookstore			
Total	0	0	
GROUP 5: Additional Retail Services			
Total	0	0	
GROUP 6: Theater / Auditorium			
Total	0	0	
GROUP 7: Recreation / Entertainment			
Total	0	0	
GROUP 8: Lounge Space			
Lounges		675	
Total Group 8: Lounge Space	0	675	
GROUP 9: Academic Related			
Total	0	0	
GROUP 10: Student Organizations			
Total	0	0	





McCANNEL HALL PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GROUP 11: Administration			
11.01 Administration	25,596	31,849	
Student Health Services - Administration	1,372	1,650	Includes 20% for circulation
Non-Traditional Students	675	875	Includes 20% for circulation
Veterans Education Training	411	600	Includes 20% for circulation
Health & Wellness Promotions	1,548	0	Includes 20% for circulation
Testing Services	808	1,020	Includes 20% for circulation
Disability Services Students	1,263	1,600	Includes 20% for circulation
Student Success Center	1,365	1,692	Includes 20% for circulation
Counseling Center	5,689	6,565	Includes 20% for circulation
Interview Rooms	974	1,127	Includes 20% for circulation
Career Services	4,845	5,903	Includes 20% for circulation
Student Academic Services	346	450	Includes 20% for circulation
Trio Programs	6,300	7,543	Includes 20% for circulation
One Stop Shop		1,700	Includes 20% for circulation
Financial Wellness		682	Includes 20% for circulation (from Union)
Building Manager		442	Includes 20% for circulation (new)
Total Group 11: Administration	25,596	31,849	
GROUP 12: Multicultural Centers			
Total	0	0	
GROUP 13: Special / Misc. Components			
13.01 Student Health Center	6,258	7,657	
Student Health Services	3,995	4,757	
X-Ray Laboratory	1,269	1,600	
Pharmacy	994	1,300	
Total Group 13: Special / Misc. Components	6,258	7,657	



McCANNEL HALL PROGRAM

	Existing Memorial Union ASF	Proposed Memorial Union ASF	Comments
GRAND TOTALS			
Total Assignable SF	31,854	40,181	
Grossing Factor (GSF/ASF)	2.48	1.96	
Total McCannel Hall Gross SF	78,874	78,874	

Proposed Concept





Memorial Union / McCannel Hall Master Plan PROPOSED CONCEPT

As part of the long-range vision of the University, this project reaches well beyond the walls of McCannel Hall and the Memorial Union. The proposed site plan illustrates several strategic ideas that will have a multi-generational impact on the overall campus.

RE-ENVISIONING THE FRONT DOOR TO THE UNIVERSITY

As visitors travel to campus along University Avenue, the Memorial Union will become an important arrival point for the University of North Dakota. This study envisions a new north tower entrance to serve as the potential beacon of student life and the symbolic front door to the University.



CELEBRATING ARRIVAL

A new grand driveway is planned to link Centennial Drive with Cornell Street, providing a gracious drop-off / arrival sequence for the Memorial Union. The existing union parking lot will be replaced with expanded parking along the northern edge of the new main driveway.

SEGREGATING SERVICE VEHICLES FROM PEDESTRIANS

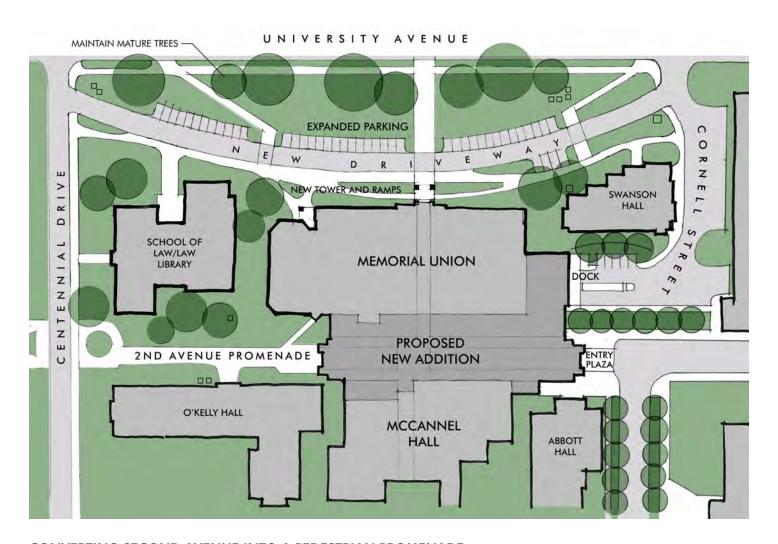
By creating a new delivery dock on the east side of the union, an existing safety issue can be resolved. Pedestrian entering the union from Second Avenue will no longer be conflicting with service/delivery vehicles. A coniferous landscape buffer is proposed around this new service area to screen it from Swanson Hall.

UNIVERSAL ACCESSIBILITY

The unsightly existing handicapped ramps will be eliminated. Site improvements will include regrading, new entry plazas, and landscaping with integrated pedestrian ramps to provide full ADA compliant accessibility at the east, north, and west sides of the proposed facility.



PROPOSED MASTER SITE PLAN



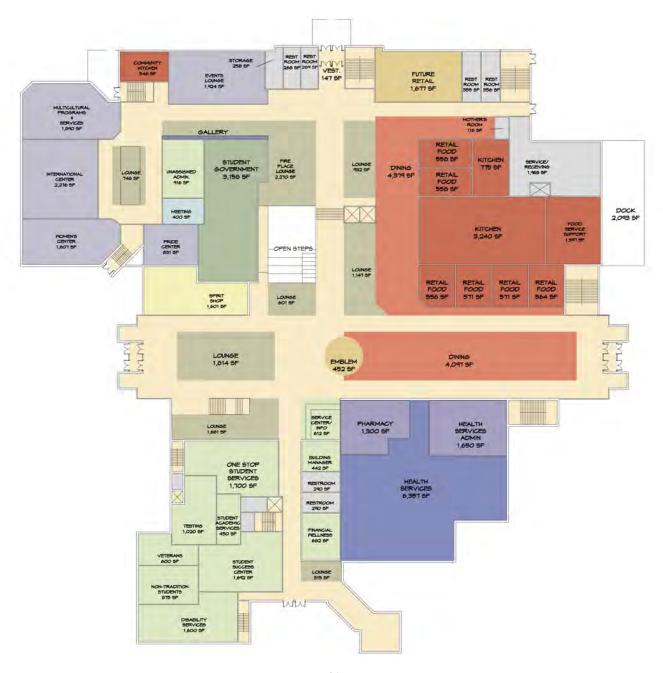
CONVERTING SECOND AVENUE INTO A PEDESTRIAN PROMENADE

By closing a portion of Second Avenue to vehicular traffic, this part of campus will become a vibrant pedestrian boulevard that links Columbia Road through the union to the primary green space of the campus. The new addition will also provide a dynamic north-south connection from the Memorial Union through McCannel Hall to the historic core of the campus, allowing these facilities to become a true crossroads of campus life.



PROPOSED FIRST FLOOR PLAN

New dining areas and retail venues will activate the proposed central public space that provides a unifying element, joining McCannel Hall and the Union. Other key features on this floor include a new information desk, spirit shop, expanded retail dining, multicultural programs, SGA offices, student services and the Health Center. Lounges and public spaces will have flexible furniture, integrated technology, and incorporate University art, imagery, and identity.



WTW Architects
July 2017



PROPOSED SECOND FLOOR PLAN

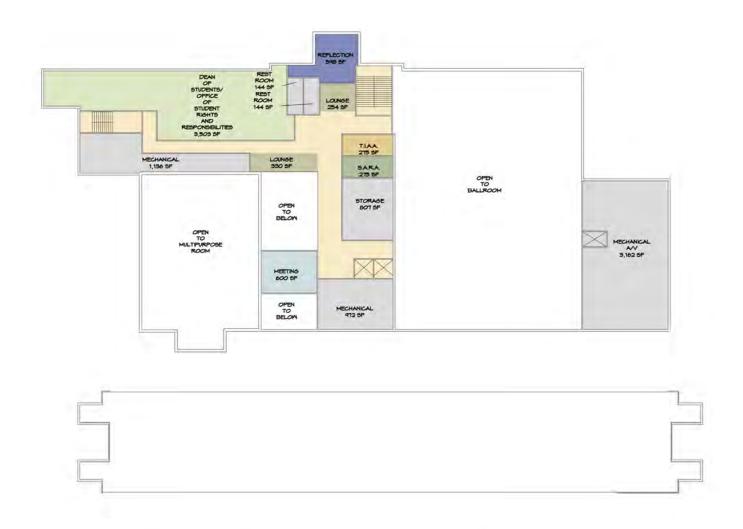
On this level, the existing ballroom is expanded to the north. A new support kitchen, additional storage, and pre-function lounge spaces will bring added flexibility and efficiency to ballroom events. The existing auditorium may potentially be converted into a larger multipurpose space. New meeting rooms and lounge spaces surround the atrium. Other important destinations on this level include the Counseling Center, Career Services, and Student Involvement & Leadership.





PROPOSED THIRD FLOOR PLAN

The third floor includes the Dean of Students offices, Trio Programs, quiet lounge and reflection space.

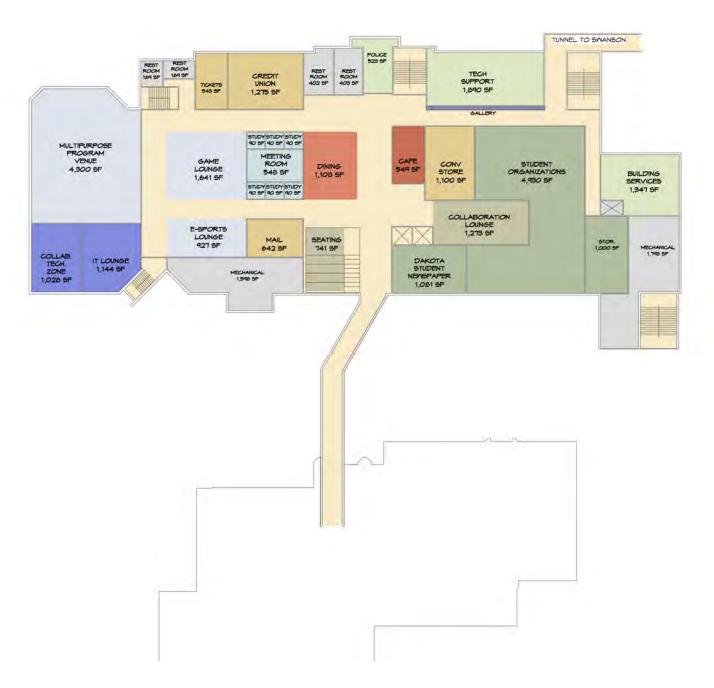






PROPOSED LOWER LEVEL

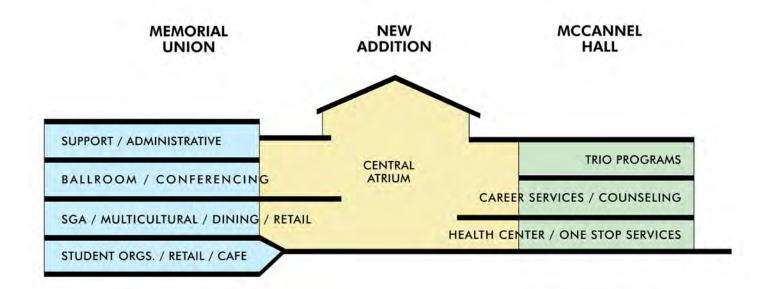
The café and terraced seating area is the central feature of this plan. Other key features include the gaming and E-Sports lounges, a new multipurpose program space, a collaboration lounge for student organizations, mail, and the expanded convenience store.





PROPOSED STACKING CONCEPT

The final concept proposes a dynamic multistory atrium to serve as the central public space linking McCannell Hall with the Memorial Union.





EXTERIOR VIEW

This perspective shows the entire complex from an aerial view. The new addition with its pitched roof provides a distinct architectural element that joins the many student services in McCanell Hall with the new amenities of the Memorial Union. This comprehensive project is envisioned as the vibrant new main street of student life and the daily crossroads for all members of the University community.





NORTH FACADE

The existing white concrete canopy will be replaced with a majestic new north tower. The new tower element, designed to relate to the campus' more traditional Gothic architecture, will serve as the primary entrance to the Memorial Union and front door to the University. Ramped walkways to either side will make this entrance fully handicapped accessible.





PROPOSED



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July 2017



SOUTH FACADE

Portions of the existing south façade will be removed to provide direct open connections with the proposed new atrium. Recycling bins and dumpsters will be relocated and replaced by the new pedestrian marketplace / main street of campus life.







PROPOSED

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July 2017



INTERIOR VIEW

In selected areas, the existing public spaces will be opened up to multiple levels. Natural light will make the building interior more fresh and visually appealing. This sense of architectural transparency will help to showcase and celebrate the many activities and programs of the UND Memorial Union.







PROPOSED

WTW Architects
July 2017



SECOND AVENUE RE-ENVISIONED

Second Avenue will be closed to vehicles and converted into a gracious pedestrian promenade.



Inside the proposed facility, Second Avenue will be transformed into a new dining/retail/marketplace of campus life.





DYNAMIC PUBLIC SPACES

The cascade stairway will provide a tiered public gathering/live performance space to visually connect the main public spaces with the lower floor. It will also serve as a giant light well, bringing natural day lighting into the lower level of the proposed facility.



A new spirit shop will bring the retail experience directly to student customers and visitors.





LOWER LEVEL

The new games area will complement the other dining/technology/entertainment features also planned on this level.



Financial Evaluation









The planning team collaborated with the University in developing a preliminary cost and financial evaluation of the project. To assist in this evaluation, the team retained the services of Jim Welch, the former business Manager / Union Director at the University of Nebraska Omaha. The team also collaborated with UND representatives from Design, Planning & Construction, the Office of Student Affairs, the Controller's Office, UND Finance and Operations, and Union Administration. As the planning process evolved so did the financial evaluation. Based on the final design concept, the following documents represent the refined version of this financial assessment. This documentation represents a basic starting point for the funding and implementation of the project.

Probable Cost Model 2.1

Based on typical SF costs for similar construction projects, a preliminary cost model was developed in November 2016. Cost/GSF numbers were developed in collaboration with the UND Design Planning & Construction office and benchmarked with historical cost data assembled by the planning team. Assuming a 2.5% annual increase for inflation, construction costs were projected ahead three years to a possible 2019 construction period.

Project Funding via a Student Fee

Based on the construction and project costs outlined in the Probable Cost Model, a projected funding model was developed. This projection was based on the potential increase of student fees to fund the construction of the project. Salary and operating expenses, utilities, as well as the annual cost of on-going general maintenance and repairs were excluded and will be funded separately.

Proforma Operating Budget

The planning team was requested to develop a proforma operating budget projected for a 25 year period. A copy of this proforma and the other financial documents listed above are included on the next several pages of this report.





Probable Cost Model 2.1

		Option 2.1	Remarks
	Cost/GSF	3/28/2017	
Site Work			
Initial Allowance		\$4,000,000	
- W 005			
Demolition GSF	¢05	11,792	
Probable Cost	\$25	\$294,800	
New Construction GSF		60,000	
Probable Cost	\$325	\$19,500,000	Adjusted GSF to accommodate north facade enhancements
Major Renovation GSF		136,195	
Probable Cost	\$200	\$27,239,000	
Trobable cost	Ψ200	Ψ27,207,000	
Moderate Renovation GSF		54,469	
Probable Cost	\$100	\$5,446,900	
Infrastructure (ISES Report)			
Probable cost not covered above		\$2,863,404	
North Facade Selective Enhancements		\$1,000,000	Added tower/entrance elements at north facade
Expanded Driveway & sitework		\$3,000,000	Alternative driveway geometry as requested by student leaders
			The state of the s
Contingency @ 10%		\$6,334,410	
Construction Costs			
Probable Construction Cost in 2016 dollars		\$69,678,514	
Escalation at 2.5% / year to 2019		\$5,365,246	
Probable Construction Cost in 2019 dollars		\$75,043,760	



Probable Cost Model 2.1

		Option 2.1	Remarks
Soft Costs			
Assumed at 30% times the construction cost		\$22,513,128	
Enhanced FFE and Technology Allowance		\$1,100,000	Additional allowance for FFE & IT as recommended by UND Facilities
	Cost/GSF	3/28/2017	
Total Project Cost			
Low Range in 2019 dollars		\$95,656,888	
High Range in 2019 dollar		\$103,589,732	
Total GSF Union + McCannel at completion			
Memorial Union		133,362	
New Expansion		60,000	
McCannel Hall		78,590	
TOTAL GSF		271,952	

Remarks

Hard construction costs are based on normal cost/gsf assumptions typical for projects similar in size and scope. Soft costs typically include professional fees, FFE, moving costs, additional contingencies, etc.

The operational costs of the completed facility (management/staff salaries, utilities, cleaning/maintenance, etc.) are NOT INCLUDED above.





Memorial Union / McCannel Hall Master Plan FINANCIAL EVALUATION

Project Funding via Student Fee

	Total Project Cost Estimate (High Range) in 2019 dollars	25 years 3.50% \$103,600,000
		Principal & Interest Annual Payment
	Annual Projected Payment	\$6,285,830
	Total over 25 years	\$157,145,752
	Current fee for Memorial Union per credit hour \$1.21	\$375,000
	Current fee for McCannel per credit hour \$1.25	\$387,500
	Increase required to fund new debt	\$5,523,330
	Fee increase	\$18.41
	Fee increase @ 12/hrs for new bond per semester	\$220.93
Tot	tal projected MU bond fee per credit hour (includes current MU fee, McCannel fee and the fee increase)	
		\$20.87
	Total projected MU fee for @ 12 hours per semester	\$250

OTHER FACTORS/CONSIDERATIONS

A separate fee allocation pays an estimated \$640,000 for salary and operating expenses of the MU.

Student fee allocation for operating above does not fund the annual cost for on-going general maintenance and repairs or utilities, only debt service.

The Facilities Management support costs for the MU on average is \$550,000 annually, funding any amount of this is not part of the calculations above.

The support costs of \$550,000 includes \$181,000 for utilities (FY16).

Increasing the required fee to generate an additional \$500,000 to cover costs for general support and maintenance is approximately \$20 per student per semester.

OTHER AUXILIARIES

Wellness Center receives approximately \$200,000 annually from its bond fee that is saved for future improvements, maintenance, and repairs.

Wellness Center pays annual utilities of approx. \$210,000 and tries to set aside operating funds annually for future repairs and maintenance costs.

The MIRA support unit allocations and participation fee are approximately \$235,000 annually for the Wellness Center.

for reference only

Wilkerson Complex
27,305,000
25 years
10/1/2014
\$1,337,049 to \$1,521,388

Memorial Union / McCannel Hall Master Plan FINANCIAL EVALUATION



Proforma Operation Budget for 25 Years - Memorial Union

	Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Student Fees	619,933	623,653	627395	631159	634946	638756	642588	646444	650322	654224	658150	862038	666071
MU Student Center	10,000	10,060	10120	10181	10242	10304	10365	10428	10490	10553	10616	10680	10744
Institutional Support	614,252	817,938	621645	625375	629127	632902	669989	640520	644363	648229	652118	656031	796659
Total Revenue	\$1,244,185	\$1,121,650	\$1,259,160	\$1,266,715	\$1,274,315	\$1,281,961	\$1,289,653	\$1,297,391	\$1,305,175	\$1,313,006	\$1,320,884	\$1,328,810	\$1,336,782
Expenses													
Staff Salaries	287,963	289,691	291429	293,177	294937	296706	298486	300277	302079	303891	305715	307549	309394
Student Salaries	80,000	80,480	80963	81,449	81937	82429	82924	83421	83922	84425	84932	85441	85954
Benefits	123,195	123934	124678	125,426	126178	126935	127697	128463	129234	130009	130790	131574	132364
Travel	9400	9456	9513	0256	9628	6896	9744	9802	9861	9920	6266	10039	10100
Supplies (IT Software/Other)	2700	5734	6929	2803	5838	5873	2908	5944	2626	6015	6051	8809	6124
Food & Clothing	3,000	3018	3036	3054	3073	3091	3110	3128	3147	3166	3185	3204	3223
Bldg/Grounds/Vehicle Supply	200	203	909	605	512	515	518	521	525	528	531	534	537
Miscellaneous Supplies	2,000	2030	2060	5091	5121	5152	5183	5214	5245	5277	5308	5340	5372
Office Supplies	006	506	911	916	922	927	933	938	944	950	955	196	296
Postage	200	201	202	204	205	206	207	209	210	211	212	214	215
Printing	4,000	4024	4048	4072	4097	4121	4146	4171	4196	4221	4247	4272	4298
IT Equipment	4,000	4024	4048	4072	4097	4121	4146	4171	4196	4221	4247	4272	4298
Other Equipment	2,000	5030	5060	5091	5121	5152	5183	5214	5245	5277	5308	5340	5372
Rentals/Leases-Equipment	000′9	9809	6072	6109	6145	6182	6216	6257	6294	6332	6370	6408	6447
Rentals/Lease-Bldg/Land	0	0	0	0	0	0	0	0	0	0	0	0	0
Repairs	4,000	4024	4048	4072	4097	4212	4146	4171	4196	4221	4247	4272	4298
IT - Communications	8,500	8551	8602	8654	8706	8758	8811	8863	8917	8970	9024	8/06	9133
Professional Development	6,500	6236	6578	6618	6657	6697	6738	6778	6819	0989	6901	6942	6984
Operating Fees & Services													
Professional Fees & Services	1,000	1006	1012	1018	1024	1030	1037	1043	1049	1055	1062	1068	1074
Miscellaneous Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchases for Resale	2,000	5030	5060	5091	5121	5152	5183	5214	5245	5277	5308	5340	5372
Custodial	310,171	312032	313904	315788	317682	319588	321506	323435	325376	327328	329292	331268	333255
Maintenance	106,013	106649	107289	107933	108580	109232	109887	110546	111210	111877	112548	113224	113903
Utilities	181,884	182975	184073	185178	186289	187406	188531	189662	190800	191945	193096	194255	195421
Total Union Expenses	\$1,157,926	\$1,164,874	\$1,171,863	\$1,178,894	\$1,185,967	\$1,193,083	\$1,200,242	\$1,207,443	\$1,214,688	\$1,221,976	\$1,229,308	\$1,236,684	\$1,244,104
Net Revenue over Expenses	\$86,259	\$86,777	\$87,297	\$87,821	\$88,348	\$88,878	\$89,411	\$89,948	\$90,487	\$91,030	\$91,577	\$92,126	\$92,679

WTW Architects July 2017

Memorial Union / McCannel Hall Master Plan FINANCIAL EVALUATION



Proforma Operation Budget for 25 Years - Memorial Union

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	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
Student Fees	670067	674088	678132	682201	686294	690412	694555	698722	702914	707132	711375	715643	719937
MU Student Center	10809	10874	10939	11004	11070	11137	11204	11271	11339	11407	11475	11544	11613
Institutional Support	663927	116299	816129	926529	900089	684085	061889	692319	696473	700652	704856	709085	713339
Total Revenue	\$1,344,803	\$1,352,872	\$1,360,989	\$1,369,155	\$1,377,370	\$1,385,634	\$1,393,948	\$1,402,312	\$1,410,726	\$1,419,190	\$1,427,705	\$1,436,271	\$1,444,889
Expenses													
Staff Salaries	311251	313118	314997	316887	318788	320701	322625	324561	326508	328467	330438	332421	334415
Student Salaries	86470	88698	87510	88035	88564	89095	89630	90167	80206	91253	91800	92351	92905
Benefits	133158	133957	134761	135569	136383	137201	138024	138852	139685	140523	141367	142215	143068
Travel	10160	10221	10282	10344	10406	10469	10531	10595	10658	10722	10787	10851	10916
Supplies (IT Software/Other)	1919	8619	6235	6273	6310	6348	9869	6424	6463	6502	6541	0859	6199
Food & Clothing	3243	3262	3282	3301	3321	3341	3361	3381	3402	3422	3443	3463	3484
Bldg/Grounds/Vehicle Supply	540	544	547	250	554	252	260	564	295	929	574	222	581
Miscellaneous Supplies	5404	5437	5469	5502	5535	2568	5602	5635	6995	5703	5738	5772	2807
Office Supplies	626	626	984	066	966	1002	1008	1014	1020	1027	1033	1039	1045
Postage	216	217	219	220	221	223	224	224	227	228	230	231	232
Printing	4323	4349	4376	4402	4428	4455	4481	4508	4535	4563	4590	4618	4645
IT Equipment	4323	4349	4376	4402	4428	4455	4481	4508	4535	4563	4590	4618	4645
Other Equipment	5404	5437	5469	5502	5535	2568	5602	5635	6995	5703	5738	5772	5807
Rentals/Leases-Equipment	6485	6524	6563	6099	6642	6682	6722	6763	6803	6844	9889	9269	8969
Rentals/Lease-Bldg/Land	0	0	0	0	0	0	0	0	0	0	0	0	0
Repairs	4323	4349	4376	4402	4428	4455	4481	4508	4535	4563	4590	4618	4645
IT - Communications	9187	9243	9298	9354	9410	9466	9523	9580	8696	9696	9754	9812	9871
Professional Development	7026	7068	7110	7153	7196	7239	7282	7326	7370	7414	7459	7504	7549
Operating Fees & Services													
Professional Fees & Services	1081	1087	1094	1100	1107	1114	1120	1127	1134	1141	1148	1154	1161
Miscellaneous Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchases for Resale	5404	5437	5469	5502	5535	5568	5602	5635	2669	5703	5738	5772	5807
Custodial	335255	337266	339290	341326	343374	345434	347506	349591	351689	353799	355922	358057	360206
Maintenance	114586	115274	115966	116661	117361	118065	118774	119486	120203	120925	121650	122380	123114
Utilities	196593	197773	198959	200153	201354	202652	203777	205000	206230	207467	208712	209965	211224
Total Union Expenses	\$1,251,568	\$1,259,078	\$1,266,632	\$1,274,232	\$1,281,877	\$1,289,569	\$1,297,306	\$1,305,090	\$1,312,920	\$1,320,798	\$1,328,723	\$1,336,695	\$1,344,715
Net Revenue over Expenses	\$93,235	\$93,794	\$94,357	\$94,923	\$95,493	\$96,068	\$96,642	\$97,222	\$97,805	\$98,392	\$98,982	\$99,576	\$100,174
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WTW Architects July 2017

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Appendix

Meeting Reports

#1: October 5, 2016 #2: December 1, 2016 #3: March 30, 2017

Potential Annual Projected Payment

Memorial Union Operation Budget: Existing (2016)





Report for Meeting 10/5/2016

WTW Project No. 71-5078 Page 1 of 2

Attending:	Representing:
Dr. Laurie Betting	UND Interim VP Student Affairs
Dr. Cara Halgren	UND Associate VP Student Affairs & Dean of Students
Leslie Bjore	UND Director of Facilities
Cheryl Grew-Gillen	UND Executive Director Memorial Union
Sharon Loiland	UND Controller
Aaron Flynn	UND Coordinator/Interim Facilities & Operations Memorial Union
Brandon Beyer	UND Student Body President
Blake Andert	UND Student Body Vice President
Paul Knell	WTW Senior Vice President

Meeting Location: Memorial Union Badlands Room

Meeting Purpose: The purpose of this meeting was to discuss the results of the October 5th and 6th meetings, and to determine a direction for the next steps in the process.

General Discussion

A. Summary of Meetings October 5th & 6th

Over the past two days, WTW conducted 11 meetings on campus plus a tour of the American Indian Center. Four preliminary design concepts were reviewed with various groups including Greek Life Presidents (17 attendees), SGA leaders (18 attendees), and Student Ambassadors (110 attendees).

- B. Funding Strategies / Potential Student Referendum
 - 1. A potential referendum for approval of student funding was discussed. A previous successful referendum at UND included a strategy to enlist 20 teams of paired students to present the proposed projects to various student groups on campus.
 - 2. It was agreed that the overall funding strategy should include the cost of constructing the project plus the cost of on-going maintenance and operations.
 - 3. The proposed facility should be planned for the long-term, i.e., the building should be designed as a 50-year facility.
 - 4. The timing of the referendum was also explored with April 2017 identified as the most optimal time for conducting the referendum.

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Report for Meeting 10/5/2016 WTW Project No. 71-5078 Page 2 of 2

Next Steps

- A. In lieu of developing and refining a single preferred design concept for the project, it was agreed that WTW should prepare three design concepts with a preliminary cost model for each. The scope of each to be generally as follows:
 - 1. Lower Cost Option: Basic Improvements
 - Deferred maintenance, infrastructure updates, and no expansion to the existing Memorial Union
 - 2. Moderate Cost Option: Full Renovation and New Connection/Addition
 - All basic improvements, deferred maintenance and infrastructure updates from item 1 above, plus a full renovation/reconfiguration of the Union with construction of a new link to McCannell Hall
 - 3. Higher Cost Option: New Facility and New Connection/Addition
 - All new Union plus a new link to McCannell Hall
- B. WTW will target early December for returning to campus to present the three concepts. After further refinement, it is anticipated that WTW will return again in February/March 2017 to present the refined versions. It is expected that all three concepts will represent a range of solutions and costs that will be presented to students for funding approval (by referendum) in April 2017.
- C. Mr. Beyer was requested to examine the legislative requirements for a student referendum. Specifically, if three concepts are on the ballot, will approval be required by majority or plurality? Should one concept be presented in lieu of three? Considering the desired outcome and the specific legislative requirements of the referendum, the goal is to determine the best strategy for achieving project approval.

We are proceeding in accordance with the information stated above. Please notify WTW, in writing, if there are any corrections or additions to this report.

Prepared by: WTW ARCHITECTS Paul Knell, FAIA, Senior Vice President 10/10/16



Report for Meeting 12/1/2016

WTW Project No. 71-5078 Page 1 of 2

Attending:	Representing:
Leslie Bjore	UND Director of Facilities
Cheryl Grew-Gillen	UND Executive Director Memorial Union
Sharon Loiland	UND Controller
Aaron Flynn	UND Coordinator/Interim Facilities & Operations Memorial Union
Brandon Beyer	UND Student Body President
Jim Welch	WTW Financial Consultant
Derek Eversmann	WTW Director of Planning

Meeting Location: Memorial Union Badlands Room

Meeting Purpose: The purpose of this meeting was to discuss the results of the November 30th meetings, and to determine a direction for the next steps in the process.

General Discussion

A. Summary of Meetings November 30th

WTW conducted eight meetings on campus plus a tour of the Chester Fritz Auditorium, the Burtness Theater, and the new Medical Center facility. Three preliminary design concepts were reviewed with various groups including SGA leaders (15 attendees), Student Ambassadors (100+ attendees), and an Open Forum.

B. Review of the Three Concept Options

WTW presented three design concepts with a preliminary cost model for each. The scope of each was generally as follows:

- 1. Lower Cost Option: Basic Improvements
 - Deferred maintenance, infrastructure updates, and no expansion to the existing Memorial Union. Probable Project Cost of \$41 million. This option was part of the exercise to create a starting benchmark for discussion. However, with no aesthetic or functional improvements to the existing facilities, this option was not popular among stakeholders.
- 2. Moderate Cost Option: Extensive Renovation and New Connection/Addition
 - All basic improvements, deferred maintenance and infrastructure updates from item 1 above, plus an extensive renovation/reconfiguration of the Union with construction of a new link to McCannel Hall. Probable Project Cost of \$97.6 million. This was the preferred option by many stakeholders.

NORTH DAKOTA.

Memorial Union / McCannel Hall Master Plan APPENDIX

Report for Meeting 12/1/2016 WTW Project No. 71-5078

Page 2 of 2

- 3. Higher Cost Option: New Facility and New Connection/Addition
 - All new Union plus a new link to McCannel Hall. Probable Project Cost of \$139.9 million. This was considered by many to be well beyond the affordable limit of the University.
- C. Review of Potential Design Aesthetics

Along with potential massing studies for each option, WTW Architects presented a review of the existing UND collegiate gothic building vernacular. This included photos of key architectural features from various buildings neighboring the Memorial Union and the UND core campus. WTW also presented photos from other campuses with a collegiate gothic design style to illustrate how other schools approached new construction projects ranging from traditional to transitional to interpretive. Design aesthetics for the UND Memorial Union will be further explored during the final phase of work.

Next Steps

- A. Determine a final program and development option to put before the students for a student fee referendum vote. (The University will likely not pursue an independent fee tolerance survey in advance of the referendum vote.)
- B. Develop operations and capital costs to be included within the overall estimated project costs.
- C. Develop final building plan graphics and renderings for use in the student fee referendum marketing campaign.
- D. After further refinement, it is anticipated that WTW will return again in February/March 2017 to present the refined versions of the final plan.
- E. The University will develop a strategy to explain the referendum process and market the preferred planning option to the student body, including student outreach, printed marketing materials, UND website page dedicated to the referendum, etc.
- F. It is expected that a single option will be presented to students for funding approval (by referendum) on April 13, 2017.
- G. The University will further explore the process for necessary approvals by the North Dakota University System and the North Dakota State Legislature.

We are proceeding in accordance with the information stated above. Please notify WTW, in writing, if there are any corrections or additions to this report.

Prepared by: WTW ARCHITECTS Paul Knell, FAIA, Senior Vice President 10/10/16



Report for Meeting 3/30/2017

WTW Project No. 71-5078 Page 1 of 2

Attending:	Representing:
Michael Pieper	UND Facilities
Dr. Cara Halgren	UND Associate VP Student Affairs & Dean of Students
Leslie Bjore	UND Director of Facilities
Cheryl Grew-Gillen	UND Executive Director Memorial Union
Cassie Gerhardt	UND Student Affairs
Connie Frazier	UND Housing & Dining
Brandon Beyer	UND Student Body President
Blake Andert	UND Student Body Vice President
Paul Knell	WTW Senior Vice President

Meeting Location: Memorial Union Badlands Room

Meeting Purpose: The purpose of this meeting was to discuss the results of the October 5th and 6th meetings, and to determine a direction for the next steps in the process.

General Discussion

A. Overview

This was the fourth visit by WTW in its Master Planning process for the Memorial Union and McCannel Hall. WTW conducted a series of meetings during this visit including presentations to the Steering Committee, SGA, Dining Services, and the Core Group as well as two Open Forums for the campus at large. Each meeting included a presentation of the refinement and synthesis of the Option 2 concept plus a digital animation of the proposed facility. Option 2 includes renovations to both the Memorial Union and McCannel Hall, the construction of a new infill-addition joining both facilities together, new architectural elements at the north facade entrances of the Union, and related site improvements.

B. Discussion

- 1. The final animation was well-received. Cassie commented that it was wonderful. Leslie noted that it well accomplished the University's original intent for this master planning study.
- 2. Connie Frazier noted that the new loading dock is very close to Swanson Hall and is potentially an undesirable feature for Swanson Hall residents. It was also noted that there is heavy daily pedestrian traffic from the parking garage along Second Avenue. WTW will restudy the dock area and possibly reduce it to three truck bays with additional landscape screening.

NORTH DAKOTA.

Memorial Union / McCannel Hall Master Plan APPENDIX

Report for Meeting 3/30/2017 WTW Project No. 71-5078 Page 2 of 2

- 3. Dr. Cara Langren noted that the final animation is a compelling illustration of something that the University simply must do. How could UND not do this when it needs to be a competitive institution? But the program must be in step with the University's long term vision; and we need to be planning for the next 20-30 years.
- 4. There was additional discussion about several other issues at UND currently affecting a potential student referendum to approve a student fee increase for funding the project. The timing of this referendum must be balanced against campus-wide budget cuts, a surplus of SF campus wide, and the State's resistance to increasing University expenditures. UND is in the process of cutting programs and services while also proposing three major facility projects as part of the President's 'Coulee to Columbia' initiative.
- 5. Cassie Gerhardt outlined a possible strategy for moving ahead:
 - a. Gain the support of the President first
 - b. Gain the support of the State / Board of Trustees next
 - c. Gain approval of the UND Foundation for project fundraising
 - d. Gain student approval for project funding
- 6. Student Government representatives asked for additional information regarding both construction costs and operation/maintenance costs.
- 7. With the goal of gettina a more detailed opinion of probable costs, Mike Pieper suggested the inclusion of a CM in the planning process. This will give the University a greater assurance of probable construction costs as the project moves forward.

Next Steps for WTW

- 1. Update the site plan to better address loading dock proximity to Swanson Hall
- 2. Adjust food service colors on the floor plans for the multicultural kitchen
- 3. Re-label Diversity and Inclusion as 'unassigned'
- 4. Forward updated plans, PowerPoint presentation, and animation to UND
- 5. Proceed with the final masterplan documentation and report
- 6. Discuss with Leslie any potential services related to CM pricing and coordination

We are proceeding in accordance with the information stated above. Please notify WTW, in writing, if there are any corrections or additions to this report.

Prepared by: WTW ARCHITECTS Paul Knell, FAIA, Senior Vice President Derek Eversmann, AICP LEED AP, Director of Planning 3/31/17



Potential Annual Projected Payment - Draft Estimate

	25 years 3.50% \$20,000,000	25 years 3.50% \$40,000,000	25 years 3.50% \$60,000,000	25 years 3.50% \$80,000,000	25 years 3.50% \$100,000,000	25 years 3.50% \$120,000,000
	Principal & Interest Annual Payment					
Annual Projected Payment	\$1,213,481	\$2,246,961	\$3,640,442	\$4,853,923	\$6,067,404	\$7,280,884
Total over 25 years	\$30,337,018	\$60,674,035	\$91,011,053	\$121,348,071	\$151,685,089	\$182,022,106
Current fee for Memorial Union per credit hour: \$1.21	\$375,000	\$375,000	\$375,000	\$375,000	\$375,000	\$375,000
Current fee for McCannel per credit hour: \$1.25	\$387,500	\$387,500	\$387,500	\$387,500	\$387,500	\$387,500
Increase required to fund new debt	\$450,981	\$1,664,461	\$2,877,942	\$4,091,423	\$5,304,904	\$6,518,384
Fee increase	\$1.50	\$5.55	\$9.59	\$13.64	\$17.68	\$21.73
Fee increase @ 12/hrs for new bond per semester	\$18.04	\$66.58	\$115.12	\$163.66	\$212.20	\$260.74
Total projected MU bond fee per credit hour (this includes current MU fee, McCannel fee, and the fee increase)	\$3.96	\$8.01	\$12.05	\$16.10	\$20.14	\$24.19
Total projected MU fee for 12 hours per semester	\$48	\$96	\$145	\$193	\$242	\$290

OTHER FACTORS/CONSIDERATIONS

A separate student fee allocation pays an estimated \$640,000 for salary and operating expenses of the MU.

The amount above does not fund an amount for on-going maintenance & repairs or utilities, only debt service.

The facilities management support costs for the MU on average is \$550,000 annually, funding any amount of this is not part of the calculations above.

The support costs of \$550,000 included \$181,000 for utilities.

Increasing the requested fee to generate an additional \$500,000 to cover cost for support and maintenance is approximately \$20 per student per semester.

OTHER AUXILIARIES

The Wellness Center receives approximately \$200,000 annually from its bond fee that is saved for future improvements, maintenance, and repairs.

The Wellness Center also pays annual utilities of approximately \$210,000 and tries to set aside operating funds annually for future repair and maintenance costs.

The MIRA support unit allocation & participation fee are approximately \$235,000 annually for the Wellness Center.

The Housing/Dining operations fund approximately \$2,000,000 annually for on-going maintenance and improvements.

Housing/Dining allocated support costs & participation fee for MIRA are \$9.6 million with this unit being expected to fund the utilities in this number of \$4 million.



Memorial Union Operating Budget Existing (2016)

Revenue	Projected
Student Fees allocated by Student Fee Advisory Committee	\$640,000
Revenue generated by Memorial Union Service Center	\$15,000
Total Revenue	\$655,000
Expenses	
Staff Salaries	\$310,000
Student Salaries	\$115,000
Benefits	\$160,000
Travel	\$9,400
Supplies	\$2,900
Food & Clothing	\$1,400
Building/Grounds/Vehicle Supply	\$500
Miscellaneous Supplies	\$8,000
Office Supplies	\$5,300
Postage	\$200
Printing	\$3,200
IT Equipment	\$10,200
Other Equipment	\$29,800
Utilities***	\$0
Rentals/Leases-Equipment	\$14,600
Rentals/Leases-Building/Land	\$0
Repairs	\$3,700
IT/Communications	\$10,000
Professional Development	\$8,200
Operating Fees & Services	\$10,100
Professional Fees & Services	\$7,800
Miscellaneous Expenses	\$0
Purchases for Resale	\$23,600
Total Expenses	\$733,900
Net gain/loss	-\$78,900

^{***}Utilities are paid by Facilities in the amount of \$181,000