



APPENDIX D

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SPACE
UTILIZATION



2015 Space Utilization and Master Plan Phase I



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1. Project Team(s)

1.1 Working Group

Craig Bernsten, Space Information Manager - Facilities Management
Laurie Betting, Associate Vice President for Health & Wellness
Les Bjore, Director of Facilities Management - Planning, Design, & Construction
Dave Chakraborty, Associate Vice President for Facilities Management
Jimmie Kennedy, Administrative Officer - Health & Wellness
Joshua Riedy, Vice Provost/Chief Strategy Officer
Lori Swinney, Directory - Center for Instructional & Learning Technologies
Larry Zitzow, Director of Facilities Management

Gary Hay, Principal - Hay Dobbs PA
Adam Aalgaard, Space Utilization Specialist - Hay Dobbs PA

1.2 Steering Committee

The Working Group and Steering Committee jointly developed communication strategies to share results and gather feedback. Open Forums, Senate meetings and the Facilities Management website were used to keep the campus community informed and gather feedback throughout the process.

Les Bjore, Director of Facilities Management - Planning, Design, & Construction
Emily Cherry, Associate Professor - Theatre Arts Department (Faculty Representative)*
Randy Eken, Associate Dean - School of Medicine & Health Sciences
Hesham El-Rewini, Dean - College of Engineering & Mines
Connie Frazier, Executive Director of Housing & Dining Services
Ryan Jockers, Business Intelligence/Data Analyst - Budget Office (Staff Representative)
Peter Johnson - Division of University & Public Affairs*
Cindy Juntunen, Interim Dean - College of Education & Human Development
Matt Kopp, Student Body President (Student Representative)
Grant McGimpsey, Vice President of Research & Economic Development
Kathryn Rand, Dean - College of Law
Joshua Riedy, Vice Provost/Chief Strategy Officer
Gayle Roux, Dean - College of Nursing & Professional Disciplines
Bruce Smith, Dean - John D. Odegard School of Aerospace Sciences
Debbie Storrs, Dean - College of Arts & Sciences
Anne Walker, Associate Dean for Teacher Education - College of Education & Human Development
Margaret Williams, Dean - College of Business & Public Administration

**Added to Steering Committee in December*

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2. Executive Summary



Merrifield Hall



View Across Campus Quad



O'Kelly Hall

The primary objective of the Space Utilization Study and Master Plan Phase I was to develop a better understanding of how space at the University of North Dakota is currently being used and to develop strategies that address current and future space needs. This study examined classroom and class lab utilization and was a critical component of the Master Plan Phase I process.

The base information for this study was provided by the Office of the Registrar, the Office of Institutional Research, and Facilities Management. Scheduling and course enrollment information was extracted from the UND PeopleSoft and AdAstra Systems. The facilities information provided was extracted from the UND FAMIS System. Current enrollment headcount, and historical enrollment data was provided by the Office of Institutional Research.

This study focused on 36 buildings on the University of North Dakota Grand Forks campus. Of the 36 buildings selected, 26 are classified as Type I Academic buildings, the remaining 10 are classified as Type II Academic Support buildings. Within the selected buildings, a total of 262 classroom and class lab spaces were studied. The rooms studied include general classrooms, designed to meet the teaching and learning needs of a broad range of academic programs, to highly specialized class laboratory spaces critical to academic program accreditation needs. Classrooms and class labs that are scheduled directly by a college or department, and supporting spaces, such as classroom and class lab storage, circulation and building support spaces, dining, and performance spaces, were not considered as part of this study. There are a number of current construction projects underway at the University of North Dakota. When completed, these projects will add approximately 474,000 square feet, more than 20 new classrooms, and over 65 new laboratory spaces to the campus inventory. None of these new rooms were taken into account during utilization calculations, as they are not currently in the scheduling system.

The 2013 Space Utilization Analysis and Planning study defined the core hours as 8:00 am to 4:00 pm from Monday - Friday. As part of the 2015 Space Utilization and Master Plan Phase I study, a similar study was conducted and the previously defined core hours were verified.

The space utilization study was conducted using Fall of 2015 course enrollment data. This study focused efforts across selected classroom (111, 112, 120, 130, 140, 160) and class lab space use codes (211, 212, 213, 220). An additional 114,000 square feet of existing research lab space (Space use code 250) was not included in the study.

During the course of the study, the North Dakota University System published guidelines for target room hourly and seat utilization. The NDUS guidelines for utilization are all regularized to 100% for comparing the 11 colleges and universities within the system. Classroom hourly utilization is 100% when the space is used 30 hours per week (75% of 40 hours), and classroom seat/station utilization is considered to be 100% when 80% of the available seats/stations in the classroom are occupied. Class lab hourly utilization is considered to be 100% when the room is used 20 hours per week (50% of 40 hours), and class lab seat/station

2. Executive Summary

utilization is considered to be 100% when 75% of the available seats/stations are occupied. In general, space utilization at the University of North Dakota has declined since the previous study, performed in 2013. See pages 14-15 for a summary of classroom and class lab space utilization.

Enrollment at UND has fallen from its peak in 2012 and is currently stabilizing at near 15,000 students. The decrease in enrollment is consistent with the decline in utilization. If enrollment at the University of North Dakota remains stable at its current value, utilization will continue to decline as current construction projects are completed. The university must develop a strategic plan to address the current and growing surplus of classroom space on campus. Knowledge about what types of space currently exist on campus is critical to planning for future development at UND.

Studies were conducted to analyze the type, condition and suitability of spaces on campus. In order to support a variety of teaching and learning methods, the university maintains several types of classrooms. These include, but are not limited to: flat floor classrooms, tiered and sloped lecture halls, small seminar rooms, specialized class labs, and active learning classrooms. Classrooms and class labs at UND contain a wide range of available technology and furniture configurations. The majority of classrooms have a strongly defined 'front' with a whiteboard or chalkboard, instructor's station, and a wide range of technology. In many classrooms on campus, technology and architectural finishes are in need of updating and renewal.

Office space is a critical component to the teaching and learning environment. As part of the study an analysis of the office space within the 36 selected buildings was also conducted. This study examined approximately 328,000 square feet with selected office space use codes (310, 311, 312, 313, 314, 317, 318, 320). In addition, the study considered an additional 42,000 square feet allocated to conference rooms (350). Office support space, such as lobbies, storage, etc, represent an additional 157,000 square feet that was not included in the scope of this study.

In addition to the space utilization study, a facilities condition assessment (FCA) was performed by the ISES Corporation. The assessment took place through the fall of 2015, and included UND campus buildings. The study found that the total deferred maintenance + 10 year renewal need for buildings considered on the UND Grand Forks campus is approximately \$507,000,000.

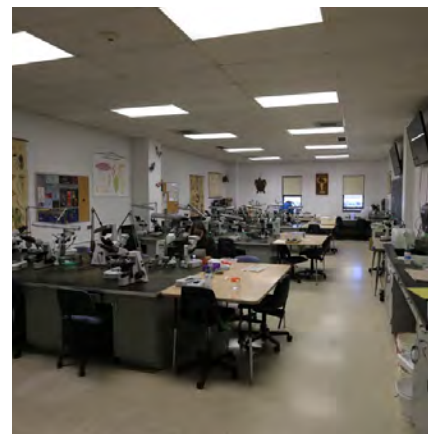
Understanding how the University of North Dakota is currently using space on campus is critical to the development of a strategic master plan to guide future campus projects. As a result of the study, it is apparent that UND currently has an adequate amount of space on campus and that future and current construction projects will create a surplus. The facilities on campus also have a large amount of deferred maintenance costs that need to be addressed. This plan begins the development of potential strategic initiatives to improve space utilization and reduce current and future deferred maintenance at UND.



Typical Classroom - Merrifield Hall



Classroom 312 - Merrifield Hall



Class lab 119 - Starcher Hall

3. Background

3.1 Campus Background

Founded by the Dakota Territorial Assembly in 1883, six years before statehood, UND was intended to be, and has remained, a university with a strong liberal arts foundation surrounded by a variety of professional and specialized programs.

UND is one of a select number of public universities in the nation with both accredited graduate schools of law and medicine.¹ It is admired for its spacious, beautiful campus and extensive resources. The University has earned an international reputation for its academic and research programs. UND is the state's most comprehensive intensive research university and the primary center for professional education and training. UND has a large economic impact on the state and region, totalling over \$1 billion a year.²

As December 2015, the UND campus is comprised of approximately 521 acres and 244 buildings totaling 6.8 million square feet. In the Fall 2015 semester, there were 14,951 students enrolled. There were 9,691 students (65%) taught in a traditional on campus classroom environment, 3,283 (22%) were enrolled fully in distance education courses, and the remaining 1,977 (13%) students enrolled in a combination of distance and traditional learning courses.

3.2 Project Background

The Space Utilization and Master Plan Phase 1 study was conducted as a component of the North Dakota University System statewide master plan process. In order to accommodate an accelerated schedule, the focus of the study was narrowed to 36 Type I Academic Buildings and Type II Academic Support Buildings on the University of North Dakota Grand Forks campus. Hourly and seat/station utilization values were calculated for 175 classrooms and 87 class labs located within the selected 36 buildings.



The Soaring Eagle



The English Coulee

1. "About UND." *Discover UND*. University of North Dakota, 11 Nov. 2015. Web. 30 Mar. 2016.
2. "Economic Impact." *Discover UND*. University of North Dakota, 31 Aug. 2015. Web. 30 Mar. 2016.

3. Background

3.3 Project Meetings

Working Group meetings were held approximately every 2 weeks. In addition to the Working Group meetings, regular meetings with the dean of each college were held. The following meetings and open forums were also scheduled with the Steering Committee, Student Senate, Staff Senate, University Senates, and the general campus community:

September 14th 2015 - Steering Committee

October 11th 2015 - Student Senate

October 12th 2015 - Steering Committee

October 14th 2015 - Staff Senate

October 22nd 2015 - Open Forums (11:00 am, 1:00 pm, 4:00 pm)

November 05 2015 - University Senate

November 09 2015 - Steering Committee

December 01 2015 - Steering Committee

December 11 2015 - Open Forum

December 15 2015 - Steering Committee

January 11 2016 - Steering Committee

January 13 2016 - Open Forum

4. Space Utilization and Analysis

Buildings included in the 2015 Space Utilization and Master Plan Phase I Study:

Type I Academic Buildings	
Building Name	Current Gross Sq Ft
O'Kelly	133,025
Gillette Hall	27,871
Babcock Hall	23,830
Armory	32,054
Gamble Hall	120,119
School of Medicine	280,202
Law Building	74,076
Merrifield Hall	94,138
Harrington Hall	62,895
Education Building	93,470
Abbot Hall	111,054
Witmer Hall	66,907
Montgomery Hall	36,626
Bryce Streibel Hall	26,933
John D. Odegard Hall	58,344
Robertson/Sayre Hall	21,763
Corwin/Larimore Hall	22,106
Starcher Hall	98,326
Thomas J. Clifford Hall	74,663
Leonard Hall	68,690
Upson 1	76,179
Hughes Fine Art Building	136,782
Upson 2	46,452
College of Nursing	61,796
Northern Plains Center	26,840
Thomas J. Ryan Hall	64,638
Total Type I:	1,939,779

Type II Academic Support Buildings	
Building Name	Current Gross Sq Ft
Twamley	76,706
Chandler	37,333
Carnegie	17,483
Gustafson	9,119
Hyslop	370,234
McCannel	77,932
Women's Center	3,367
Skalicky Tech Incubator	32,412
Cntr for Comm. Engagement	3,353
International Centre	7,959
Total Type II:	635,898

4.1 The Process

Space utilization at the University of North Dakota was analyzed to develop a better understanding of how efficiently classroom and class lab space is utilized on campus. This study was undertaken in pursuit of the following goals:

- Determine the current classroom and class lab utilization rate
- Evaluate space needs on campus

Explanation of Criteria

The utilization study is based on data extracted from AdAstra and Peoplesoft, provided by the office of the registrar, for Fall 2015 semester. The room space codes, square footages, and seat/station counts used in this study were extracted from the FAMIS, AdAstra, PeopleSoft software database and provided by the facilities department and the Office of the Registrar. Criteria for the 2015 Space Utilization Study has been developed with reference to the 2013 Space Utilization Analysis & Planning study, the 2014 School of Medicine & Health Sciences Repurposing study, and the North Dakota University System (NDUS) Master Planning Guidelines. In total, 36 UND classroom buildings were identified for the classroom and class lab utilization study, 26 of which are Type I Academic Buildings. The 26 Type I buildings (green) represent approximately 1,962,000 gross square feet, while the remaining 10 Type II Academic Support buildings (red) comprise approximately 636,000 gross square feet. Classrooms and class labs scheduled directly by a specific college or department, and spaces allocated for research and support are not included in this study.



For the purpose of the Space Utilization Study, utilization is defined as:

A measure of how often, and at what intensity, a facility, or space is used

When analyzing utilization, two types of frequency/intensity of use are calculated:

Room Hour Utilization: *Number of hours a room is scheduled for academic/credit course delivery*

Seat/Station Utilization: *Number of seats or stations used in a given room for academic/credit course delivery*

4. Space Utilization and Analysis

4.2 Findings

Previous utilization studies at the University of North Dakota outlined a set of benchmarks and guidelines. These guidelines have been examined and, in some cases, amended during the 2015 Space Utilization Study. Room Hour Utilization and Seat/Station Utilization target values have been updated to better align with recently published NDUS Guidelines:

- Classrooms should be used at minimum **30 hours** per week
- Classrooms should have a seat/station utilization in excess of **80%**
- Class Labs should be used at minimum **20 hours** per week
- Class Labs should have a seat/station utilization in excess of **75%**

The Core Hours (the time period during which the majority of course content is delivered) is critical for understanding the way in which classroom and class lab space is used. Although the North Dakota University system does not provide a defined Core Hour period, the 2013 Space Utilization Analysis & Planning study defined the Core Hour period as 8:00 am - 4:00 pm, Monday through Friday. When a similar study was conducted using Fall 2015 enrollment and scheduling data, it was found that over 90% of course content is still being delivered during that time period. Verification of the previous findings led to the continued use of 40 core hours per week in the preliminary utilization analysis.

Table 4.1.1 provides a more in-depth analysis of the comparison between student enrollment and class start time.

During the initial phase of the utilization study, the following criteria were used to evaluate classroom and class lab utilization performance:

- Data provided by the registrar for the Fall 2015 semester
- Only rooms within the selected 36 buildings are considered
- 175 classrooms with space use codes: 111, 112, 120, 130, 140, 160
- 87 class labs with space use codes: 211, 212, 213, 220
- Courses delivered online, or without room assignment are excluded
- Courses delivered off the UND Grand Forks Campus are excluded
- Core Hours are defined as 8:00am - 4:00pm Monday - Friday
- Available hours are defined as 6:00am - 10pm Monday - Saturday
- Maximum total utilization is 200% (available hours/core hours)
- NDUS Classroom Utilization of 100% (30hrs/wk) is Good*
- NDUS Class lab utilization of 100% (20 hrs/wk) is Good *
- NDUS Classroom seat/station utilization of 100% is Good*
- NDUS Class lab seat/station utilization of 100% is Good*

*See pages 14-15 for an explanation of NDUS Utilization calculation and terminology.

Classrooms and Class labs spaces included in the 2015 Space Utilization and Master Plan Phase I Study:

Classrooms	
Space Use Codes: 111, 112, 120, 130, 140, 160	
Building Name	Number of Rooms in Study
ABBOTT	5
BABCOCK	1
CHANDLER	2
CLIFFORD	3
COR/LARIM	5
EDUCATION	18
GAMBLE	21
GILLETTE	2
HARRINGTON	5
HUGHES	4
LAW BLDG	5
LEONARD	7
MERRIFIELD	28
MONTGOMERY	2
NURSING	10
ODEGARD	9
OKELLY	17
ROBT/SYRE	2
RYAN HALL	4
SCH OF MED	2
STARCHER	3
STREIBEL	3
UPSON II	4
WITMER	13
Total:	175

Class Labs	
Space Use Codes: 211, 212, 213, 220	
Building Name	Number of Rooms in Study
ABBOTT	9
BABCOCK	1
CHANDLER	1
CLIFFORD	3
COR/LARIM	1
GAMBLE	2
HARRINGTON	3
HUGHES	13
HYSLOP	8
LAW BLDG	1
LEONARD	3
NURSING	3
ODEGARD	1
OKELLY	2
ROBT/SYRE	1
RYAN HALL	2
SCH OF MED	8
STARCHER	12
STREIBEL	2
UND ARMORY	5
UPSON I	3
WITMER	3
Total:	87

4. Space Utilization and Analysis

Table 4.1.1 (below) shows the number of students enrolled at courses that begin between the hours of 6:00am and end before 10:00pm. This data provides an understanding of when primary course delivery hours are, and how efficiently courses are scheduled. Data from the table parallels the findings from the 2013 Space Utilization Analysis & Planning study that over 90% of course content is delivered in courses that begin between 8:00am and 4:00pm.

Student Enrollment by Course Begin Time for Fall 2015

Course Start	Day of Week						Total
	1) Mon	2) Tue	3) Wed	4) Thu	5) Fri	6) Sat	
5:50 AM	19		19	19			57
6:00 AM	61	27	61	61	27		237
6:15 AM		47					47
7:00 AM	39	27	39	27	39		171
7:30 AM		51		51			102
8:00 AM	1798	1852	1632	1751	1562		8595
8:30 AM	22		12				34
9:00 AM	3713	708	3770	614	3594	130	12529
9:30 AM	129	3851	129	3891	8		8008
10:00 AM	3494	611	3300	626	3140	124	11295
10:30 AM		17		17	1		35
11:00 AM	3959	4248	3832	4357	3352		19748
11:30 AM		85	36	85	33		239
12:00 PM	1939	427	2161	495	1711		6733
12:30 PM	289	3104	285	3056			6734
1:00 PM	3576	528	3343	748	2838		11033
1:30 PM		38		24			62
1:45 PM		10		10			20
2:00 PM	2407	3316	2481	3424	1414		13042
2:30 PM	15	2		8			25
3:00 PM	1273	356	1353	369	902		4253
3:15 PM		11		11			22
3:30 PM	138	1339	155	1273			2905
4:00 PM	440	304	476	420	193		1833
4:10 PM	115		115		115		345
4:15 PM			20				20
4:30 PM	65	120	55	67			307
5:00 PM	226	400	236	381	47	18	1308
5:30 PM	207	316	59	106	34		722
5:50 PM					13		13
6:00 PM	80	326	265	240	31		942
6:15 PM		9					9
6:30 PM	57	116	64	84			321
7:00 PM	887	463	452	104			1906
7:30 PM	2						2
Grand Total	24950	22709	24350	22319	19054	272	113654
CORE HOURS	22752	20503	22489	20759	18555	254	105312
8:00 AM-3:59 PM	20.0%	18.0%	19.8%	18.3%	16.3%	0.2%	92.7%
OTHER HOURS (Outside Core)	2198	2206	1861	1560	499	18	8342
	1.9%	1.9%	1.6%	1.4%	0.4%	0.0%	7.3%

Table 4.1.1
Information provided by Office of the Registrar

4. Space Utilization and Analysis

Utilization was calculated for each classroom and class lab within the selected 36 classroom buildings and includes a total of 262 rooms. Scheduling data extracted from AdAstra and PeopleSoft was provided by the Office of the Registrar for the rooms considered in the study. The scheduling data provided was used to calculate the total number of hours a room was used per week. Enrollment information contained in the data provided by the Office of the Registrar and seating counts provided by Facilities were used to calculate average seat/station utilization values. The resulting utilization data can be sorted and summarized in a number of different ways, providing an in-depth understanding of how space is used on the UND campus.

Note: The scheduling information provided by the office of the registrar does not include information for classroom and class lab spaces that are scheduled directly by a college or department. These rooms were excluded from this study.

The Utilization Analysis summary in Table 4.2.1, was generated using the average classroom and class lab totals for each space use code (111, 112, etc). In order to compare results and provide more useful diagnostic information to the university, utilization was calculated in the same manner as previous studies and uses the following formulas:

Hour Utilization:

Total hours scheduled per week ÷ 40 Core Hours per week

Seat/station Utilization:

Class enrollment ÷ Seats/stations Available

Target Utilization:

Classrooms:

Hour Utilization: 75% (30 hours of a 40 hour week)
Seat/Station Utilization: 80%

Class Labs:

Hour Utilization: 50% (20 hours of a 40 hour week)
Seat/Station Utilization: 75%

		Utilization Analysis	
Space Use Code	Space Use Description	Avg of: Hour Utilization	Seat/Station Utilization
111	General Classroom	53%	57%
112	Lecture Classroom	63%	49%
120	Seminar Classroom	29%	37%
130	Technology Enhanced	52%	64%
140	Distance Education Classroom	71%	55%
160	Computer Room	34%	65%
100 Series Average		53%	56%
211	Specialized Classroom	16%	46%
212	Class Laboratory	43%	75%
213	Computer Laboratory	35%	57%
220	Special Class Laboratory	25%	64%
200 Series Average		31%	64%

Table 4.2.1
Information provided by Office of the Registrar and FAMIS software

4. Space Utilization and Analysis

In early December of 2015, the North Dakota University System published a document defining terminology, calculation methods, and target values to be used for the calculation of utilization across the 11 colleges and universities within the system. The procedure is similar to that used in the preliminary utilization analysis, but the results have been regularized to a common target value. The Room Utilization is a weighted average, favoring rooms with a larger number of available seats/stations. It should be noted that when using NDUS calculation method, outlined below, the target for all utilization values is 100%.

The corresponding terminology and target values from the preliminary utilization analysis are provided in parenthesis:

Classrooms:

Schedule Capacity (Hour Utilization: 75%):
 $Total\ hours\ scheduled \div 30\ hours$

Occupancy Capacity (Seat/Station Utilization: 80%):
 $Class\ enrollment \div 80\% \text{ of seats/stations available}$

Class Labs:

Schedule Capacity (Hour Utilization: 50%):
 $Total\ hours\ scheduled \div 20\ hours$

Occupancy Capacity (Seat/station utilization: 75%):
 $Class\ enrollment \div 75\% \text{ of seats/stations available}$

Additional Calculations for classrooms and class labs:

Scheduled Seat Count Utilization:
 $Schedule\ capacity \times occupancy\ capacity \times seat\ count$

Room Utilization Percentage:
 $Scheduled\ Seat\ Count\ Utilization\ Total \div Total\ seat\ count$

Table 4.2.2 provides a comparison between the results of the preliminary utilization analysis (green) and the results from the NDUS utilization calculation method (orange):

Space Use Code	Space Use Description	Utilization Analysis		NDUS Capacity Analysis				
		Avg. of:	Hour Utilization	Seat/Station Utilization	Avg. of:	Schedule Capacity	Occupancy Capacity	Room Utilization
111	General Classroom		53%	57%		71%	71%	62%
112	Lecture Classroom		63%	49%		84%	61%	53%
120	Seminar Classroom		29%	37%		39%	47%	31%
130	Technology Enhanced		52%	64%		70%	80%	80%
140	Distance Education Classroom		71%	55%		95%	69%	89%
160	Computer Room		34%	65%		46%	81%	42%
	100 Series Average		53%	56%		70%	70%	61%
211	Specialized Classroom		16%	46%		33%	62%	24%
212	Class Laboratory		43%	75%		86%	100%	114%
213	Computer Laboratory		35%	57%		71%	76%	102%
220	Special Class Laboratory		25%	64%		49%	85%	60%
	200 Series Average		31%	64%		62%	85%	82%

Table 4.2.2

Information provided by Office of the Registrar and FAMIS software

4. Space Utilization and Analysis

It is important to note that classroom and class lab spaces on the UND campus are also used for events that fall outside of academic/credit course delivery. Uses in this category include, but are not limited to: ELL, testing, group meetings, and non credit seminars. The utilization percentages above are based solely on academic/credit course delivery. When considering the campus as a whole, the addition of event utilization has a minor impact on utilization. However, major impacts as a result of adding event utilization is seen over a small group of rooms, most notably Merrifield 121, O’Kelly 115, and O’Kelly 319. Table 4.2.3 shows the overall impact of incorporating the non-academic/credit course delivery events. See Appendix I for expanded event utilization summary.

Utilization Summary					
Space Use Code	Space Use Description	Avg of:	Util. %	Util. w/	
		Total	Total	Events	
				Diff.	
111	General Classroom		53%	57%	4%
112	Lecture Classroom		63%	69%	6%
120	Seminar Classroom		29%	38%	9%
130	Technology Enhanced		52%	58%	6%
140	Distance Education Classroom		71%	72%	1%
160	Computer Room		34%	36%	2%
211	Specialized Classroom		16%	16%	0%
212	Class Laboratory		43%	43%	0%
213	Computer Laboratory		35%	35%	0%
220	Special Class Laboratory		25%	25%	0%

Table 4.2.3

Information provided by Office of the Registrar and FAMIS software

Overall, the University of North Dakota needs to improve both room utilization and seat/station utilization across nearly every space use category. Improving utilization at UND becomes more critical when current campus projects are taken into consideration.

There are currently several projects that, once complete, will dramatically increase the amount of academic square footage on the University of North Dakota Grand Forks campus. Type I Academic projects that are currently underway include, but are not limited to:

- New School of Medicine and Health Sciences Building
- Robin Hall
- Collaborative Energy Complex

These projects represent roughly 474,000 square feet of additional academic space, an approximate total increase of 25% in Type I academic space. In addition to adding a large amount of square footage to the campus, these current construction projects add a large amount of new classroom space. The new School of Medicine building contains 14 new general purpose and lecture classrooms, and 59 new class lab spaces. Robin Hall adds an additional 6 classrooms and 9 class lab spaces to the campus inventory.

4. Space Utilization and Analysis

In addition to current construction projects, a number of ongoing studies could impact the amount of space on campus. When the current and future projects are complete and the additional space comes online, it will create an even greater abundance of classroom space on campus, and will push utilization values even lower.

New Inventory and On-Going studies Map

New Inventory Includes:

- New School of Medicine*
- High Performance Center*
- Robin Hall*
- Laird Core Library*
- CEC*
- Wilkerson Remodel/Addition*

On-going Studies Include:

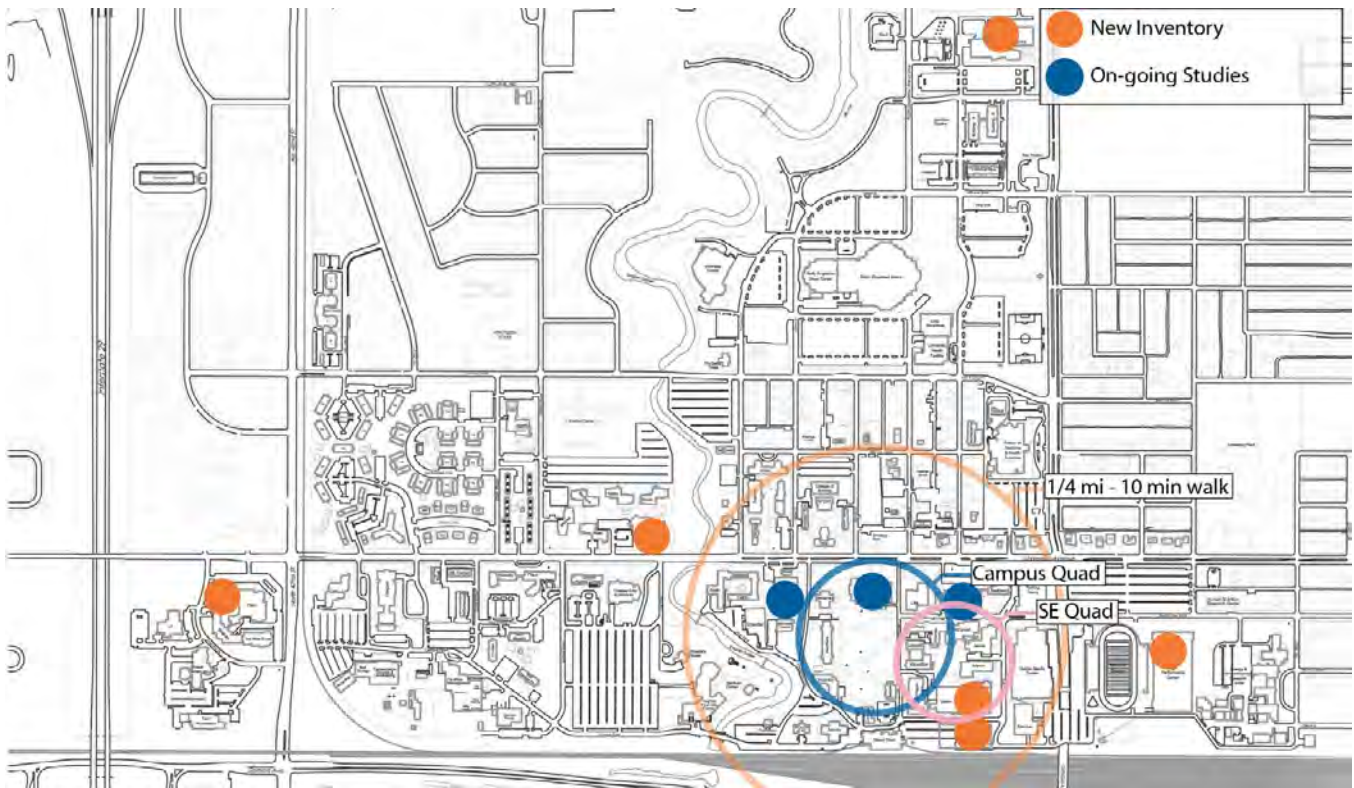
- Chester Fritz Library*
- College of Business and Public Administration*
- Memorial Union*

The average headcount enrollment growth per year at the University of North Dakota from 2005-2015 is roughly 1.5%. If this trend continues, the University of North Dakota could have an enrollment of roughly 16,350 students in 6 years, and 17,800 in 12 years.

A simple comparison between the current headcount enrollment and available Type I Academic space shows that there is roughly 130 square feet per student. To maintain the same square foot per student value, UND would need a total Type I Academic square footage of 2,125,000 square feet in 6 years and a total Type I Academic square footage of 2,314,000 square feet in 12 years.

Once the 474,000 square feet of Type I Academic buildings currently under construction are complete and added to the existing 1,962,000 current Type I Academic space, UND will have a total Type I Academic footprint of over 2,436,000 square feet.

Using the 12 year campus growth projection and keeping the total Type I Academic space to total seat count ratio and overall utilization constant, UND will have surplus space equal to roughly 120,000 square feet.



4. Space Utilization and Analysis

In addition to an examination into how often a space was used, a study of the size appropriateness of classroom space on the University of North Dakota was conducted. Course enrollment numbers were grouped and compared to room capacities that currently exist on campus to better understand how the class size aligns with classroom sizes available.

It was found that UND delivers the majority of course content to classes of 11 to 40 students. The results also showed that despite having a comparatively low number of class sessions, classes of 100 or more reached a large number of students.

It should be noted that this portion of the study does not take into account space requirements for embracing changing pedagogy and current shifts toward creating active learning environments.

Table 4.2.4 presents the full comparison between the total number of classes held in classrooms to the total number of available classrooms at UND. The number of sessions is defined as the total number of individual class meeting periods held over the course of a week.

Classroom Size & Class Size Comparison								
Class Enrollment	# of Sessions	Total Enrollment	% of Total Session	% of Total Enrollment		Room Seat/Station Count	# of Rooms	% of Total Rooms
1-10	434	2790	15%	3%		1-10	3	2%
11-20	604	9489	20%	10%		11-20	9	5%
21-30	890	22216	30%	23%		21-30	41	23%
31-40	508	17863	17%	18%		31-40	45	26%
41-50	207	9481	7%	10%		41-50	29	17%
51-60	79	4367	3%	5%		51-60	18	10%
61-70	43	2806	1%	3%		61-70	4	2%
71-80	33	2530	1%	3%		71-80	4	2%
81-90	29	2491	1%	3%		81-90	2	1%
91-100	22	2103	1%	2%		91-100	4	2%
101-110	17	1768	1%	2%		101-110	4	2%
111-120	10	1134	0%	1%		111-120		0%
121-130	16	2017	1%	2%		121-130	1	1%
131-140	16	2198	1%	2%		131-140		0%
141-150	12	1764	0%	2%		141-150		0%
151-160	4	614	0%	1%		151-160	2	1%
161-170	14	2313	0%	2%		161-170		0%
171-180	15	2646	1%	3%		171-180	1	1%
181-190	5	932	0%	1%		181-190	1	1%
191-200	16	3130	1%	3%		191-200		0%
201-210	2	402	0%	0%		201-210	2	1%
211-220	2	430	0%	0%		211-220	1	1%
221-230			0%	0%		221-230		0%
231-240	2	474	0%	0%		231-240		0%
241-250	4	976	0%	1%		241-250	1	1%
>251			0%	0%		>251	3	2%
Total	2984	96934	100%	100%		Total	175	100%

Table 4.2.4

Information provided by Office of the Registrar and FAMIS software



4. Space Utilization and Analysis

Re-sorting the data and expanding the comparison to include room hour and seat/station utilization values can provide insight into what classroom sizes are used most frequently, operate most efficiently, and serve the greatest number of students. Tables 4.2.5 and 4.2.6 (below) show the full analysis for both classrooms and class lab spaces. It is important to note that despite the small number of large classrooms available on campus, they still reach a very significant number of students.

Note: The Scheduled Enrollment per Week values in Tables 4.2.5 and 4.2.6 are based on the capacity of the room the class is held in, these values will not correspond directly with the total enrollment values in Table 4.2.4, which are based solely on class size, regardless of what room the class is held in.

Primary classrooms at the University of North Dakota are those that can accommodate class sizes of 31-60 students and 100 students or more.

Classroom Utilization by Seat/Station Capacity					
Room Seat/Station Capacity	Number of Rooms	Average of % Hour Utilization	Average of % Seat/Station Utilization	Scheduled Enrollment per Week	% of Total Scheduled Enrollment per Week
1-10	3	11%	93%	41	0%
11-20	9	35%	52%	832	1%
21-30	41	43%	57%	8124	8%
31-40	45	53%	58%	17828	18%
41-50	29	60%	55%	15488	16%
51-60	18	63%	57%	11694	12%
61-70	4	53%	51%	2284	2%
71-80	4	66%	47%	3095	3%
81-90	2	60%	44%	1377	1%
91-100	4	58%	45%	3126	3%
101-110	4	59%	50%	4546	5%
121-130	1	69%	47%	1505	2%
151-160	2	64%	51%	3413	4%
171-180	1	71%	46%	2193	2%
181-190	1	85%	75%	3549	4%
201-210	2	79%	46%	6603	7%
211-220	1	61%	48%	2815	3%
241-250	1	67%	70%	4376	5%
>251	3	32%	29%	4045	4%

Table 4.2.5
Information provided by Office of the Registrar and FAMIS software

Class Lab Utilization By Seat/Station Capacity					
Room Seat/Station Capacity	Number of Rooms	Average of % Hour Utilization	Average of % Seat/Station Utilization	Scheduled Enrollment per Week	% of Total Scheduled Enrollment per Week
1-10	3	8%	104%	47	0%
11-20	19	19%	61%	853	7%
21-30	37	37%	68%	4564	36%
31-40	12	39%	62%	2631	21%
41-50	8	21%	45%	1192	9%
51-60	2	44%	68%	764	6%
61-70	3	35%	67%	877	7%
71-80	1	50%	45%	642	5%
101-110	1	16%	10%	70	1%
111-120	1	79%	32%	983	8%

Table 4.2.6
Information provided by Office of the Registrar and FAMIS software

4. Space Utilization and Analysis

Recent shifts in pedagogy have a direct impact on the type and amount of space needed for delivering course content. It is critical that UND consider how students might learn in the future and provide space that is adequately flexible to support changes in teaching and learning methods. The Assignable Square Feet (ASF) per Seat/Station was computed for each of the classrooms on campus, a summary of this investigation is presented in Table 4.2.7

Recent studies have shown that to effectively accommodate active learning teaching methods, classrooms should be designed with 20-30 ASF per seat/station. Nearly 60% of classrooms at UND do not provide adequate ASF per seat/station to accommodate active learning pedagogy, if current room seating counts are retained.

Class labs were not included in this study, as they typically have specialized spatial requirements based on use.

Classroom and class lab ASF per seat/station is only one factor that can affect overall room utilization. Another contributing factor is the physical condition and technology levels present within a classroom. Some of the elements that contribute to a classroom or class lab physical environment include temperature, finishes, seating, lighting, and air quality. Many of the classrooms and class labs on the University of North Dakota Grand Forks campus have deficiency in one or more critical physical environment elements. The University of North Dakota has implemented initiatives to refresh, renovate, and increase technology levels in classrooms across the campus as funding is identified.

Office space is a critical component to the UND campus environment, comprising approximately 328,000 square feet within the 36 selected buildings. Office space provides critical support for the delivery of academic content, both directly and indirectly. As part of the Space Utilization and Master Plan Phase I study, the amount, type, and location of office space on the University of North Dakota Grand Forks campus was analyzed.

It was found that the University of North Dakota is using office space efficiently. Table 4.2.8 defines the office space use codes considered in this study. Table 4.2.9 (facing page) provides a summary of office space distribution throughout the 36 selected buildings. The North Dakota University System has provided the following office space guidelines:

Classroom Assignable Square Feet Available per Seat or Station		
ASF/Seat or Station	Number of Rooms	% of Total Classrooms
<10	10	6%
10-15	30	17%
15-20	61	35%
20-25	46	26%
25-30	13	7%
30-35	11	6%
>35	4	2%

Table 4.2.7

Information provided by UND Facilities FAMIS software

Office Space Use Code	
Space Use Code	Office Type
310	Executive
311	Administrative/Staff
312	Faculty
313	Adjunct Faculty
314	Graduate Student
317	Non-Academic
318	Emeritus Faculty
320	Other

Table 4.2.8

Information provided by UND Facilities FAMIS software

Office Space Standards			
SF	Description	Source:	Office Space Guidelines from NDUS
170	Upper Level Office Spaces		Private Office
140	Middle Management, Director, Associate		Private Office
120	Faculty		Private or Shared Office
100	Instructor, Lecturer, Supervisor		Shared or Open Office
80	Graduate Student (GRA,GTA, etc.)		Shared or Open Office
120	Graduate Student (dual occupancy)		Shared or Open Office

4. Space Utilization and Analysis



Twamley Hall houses primarily Administrative, Admissions, Registrar, Human Resources, Student Account Service, and Financial Aid Offices.



Faculty, Lecturer, and Graduate Student offices are distributed throughout a large number of buildings across the campus.

Total Offices & ASF (Space Codes: 310,311,312,313,314,317,318,320)			
Building	# of Rooms	Total ASF	Avg SF/Room
Abbott	36	6051	168
Babcock	15	3223	215
Carnegie	14	4011	287
Cntr for Comm. Engagement	5	747	149
Chandler	16	2920	183
Clifford	82	13481	164
Cor/Larim	32	4553	142
Education	98	12856	131
Gamble	101	14844	147
Gillette	45	7444	165
Gustafson	13	3011	232
Harrington	28	5575	199
Huges	56	10773	192
Hyslop	78	11905	153
Internation Centre	10	1713	171
Law	48	9389	196
Leonard	42	9459	225
McCannel	75	14601	195
Merrifield	73	14996	205
Montgomery	37	6818	184
Northern Plains Behavioral	25	4111	164
Nursing	57	7052	124
Odegard	39	8473	217
O'Kelly	96	18764	195
Robt/Syre	40	7016	175
Ryan	50	9710	194
SMHS	273	47879	175
Skalicky	33	8362	253
Starcher	38	5814	153
Streibel	23	3822	166
Twamley	100	25371	254
UND Armory	14	3207	229
Upson 1	20	2307	115
Upson 2	62	8972	145
Witmer	43	7744	180
Women's Center	5	1165	233
Total:	1822	328139	180

Table 4.2.9

In addition to analyzing where office space was located, a study was conducted to compare how efficiently each department uses allocated office space. A selective examination of offices controlled by each college was conducted. The results of this analysis can provide insight into what departments might benefit the most from a reallocation of office spaces. The results of this study are summarized in tables 4.2.10, 4.2.11, and 4.2.12 on page 22. An expanded analysis is available in Appendix II

4. Space Utilization and Analysis

Total ASF	Space Use Code								Dept/Col
Department/College	310	311	312	313	314	317	318	320	Total SF
A&S	443	8786	51187	1910	13263	689		652	76930
CNPD	187	6034	7807		1207				15235
CoBPA		3906	13567		2501	5708			25682
EHD	325	1805	14081		678			158	17047
JDO		15887	13700		4915	896			35398
SEM	511	5108	12129	758	7239	70		498	26313
MED	1210	23549	22179		2097		545	318	49898
GRAD		1994							1994
LAW		7605	1909			107			9621
SPACE CODE TOTAL SF:	2676	74674	136559	2668	31900	7470	545	1626	258118

Highlighted Cells Contain top 10% values for the full table

Table 4.2.10

Number of Offices	Space Use Code								# of Offices
Department/College	310	311	312	313	314	317	318	320	
A&S	2	46	296	10	58	5		3	420
CNPD	1	41	60		3				105
CoBPA		23	92		15	20			150
EHD	1	14	104		5			1	125
JDO		74	114		26	6			220
SEM	2	28	72	4	43	1		2	152
MED	4	132	221		8		4	3	372
GRAD		6							6
LAW		38	11			1			50
TOTAL # of Office:	10	402	970	14	158	33	4	9	1600

Highlighted Cells Contain top 10% values for the full table

Table 4.2.11

Average Office Size: ASF	Space Use Code								Avg SF by Dept/Col
Department/College	310	311	312	313	314	317	318	320	
A&S	222	191	173	191	229	138		217	194
CNPD	187	147	132		402				217
CoBPA		195	149		167	285			199
EHD	325	129	135		136			158	177
JDO		215	120		205	149			172
SEM	256	196	173	190	177	70		249	187
MED	303	178	103		262		136	106	181
GRAD		332							332
LAW		200	174			107			160
Avg SF by Space Use Code:	258	198	145	190	225	150	136	183	202

Highlighted Cells Contain top 10% values for each space code

Table 4.2.12

4. Space Utilization and Analysis

4.3 Enrollment

Student enrollment trends provide critical insight when analyzing current and future space needs. Enrollment information provided by the Office of Institutional Research indicates that enrollment has fallen from its peak in 2012 and is currently stabilizing at around 15,000 students. Table 4.3.1 illustrates the enrollment trend, Fall 2004 - Fall 2015.

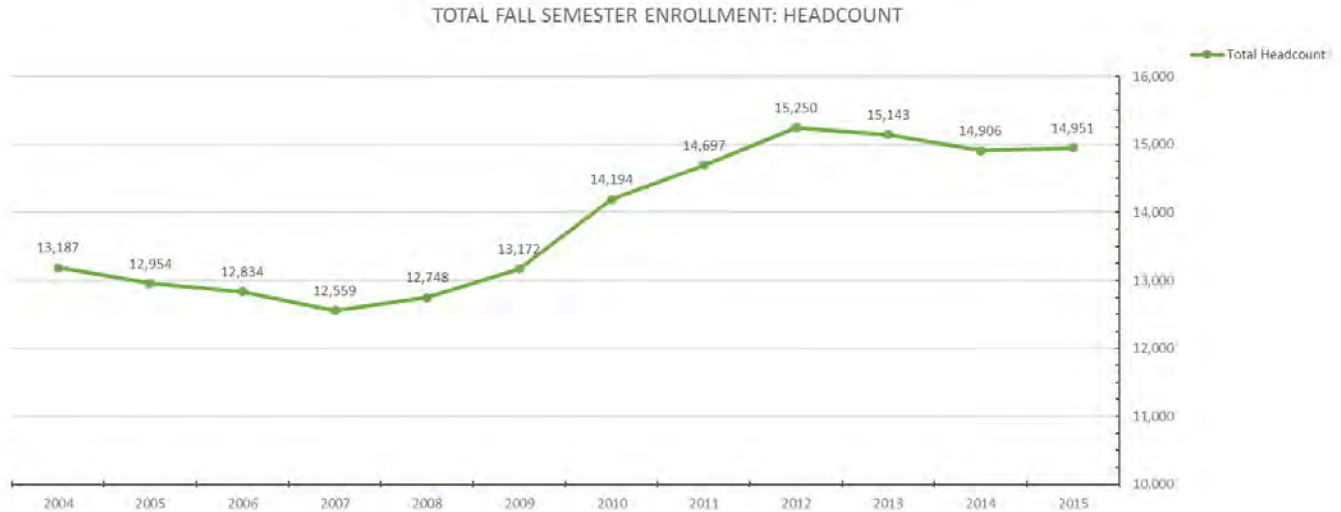


Table 4.3.1

Information provided by Office of Institutional Research

Analysis of student enrollment headcount by classification can provide critical insight when predicting future space needs. A five year enrollment history indicates a significant decline in the number of Freshman and Sophomore classifications, suggesting a similar drop may occur in the future for Junior and Senior classifications. Table 4.3.2 illustrates the enrollment trend by classification, Fall 2009 - Fall 2015.

UND Enrollment Data								
Headcount by Classification, Fall Semester								
Term	2009	2010	2011	2012	2013	2014	2015	
Freshman	2,863	3,033	3,074	3,301	2,866	2,774	2,654	
Sophomore	2,445	2,636	2,742	2,733	2,743	2,594	2,593	
Juniors	1,880	1,919	2,083	2,199	2,152	2,183	2,175	
Seniors	3,252	3,551	3,623	3,720	3,963	3,986	4,155	
Prof (Law & Med)	484	495	502	496	505	503	512	
Grad	2,248	2,560	2,673	2,801	2,914	2,866	2,862	
Total Headcount	13,172	14,194	14,697	15,250	15,143	14,906	14,951	

Table 4.3.2

Information provided by Office of Institutional Research

4. Space Utilization and Analysis

4.4 Outcomes

When compared to the 2013 Space Utilization and Analysis Study, conducted using Fall of 2012 Data, the University of North Dakota has seen a decline in both hourly and seat/station utilization. This decline is apparent in classroom and class lab space use codes. The decrease in utilization is in alignment with the decline in enrollment that UND has experienced from its peak in Fall 2012 until Fall 2015, and suggests that there is currently space available to repurpose on campus. Given that an additional 474,000 square feet of Type I academic space slated to come online in the near future it is vitally important that a strategy is developed for improving utilization.

Values from the utilization data presented in Table 4.2.2 on page 15 suggests that UND has room to improve overall space use efficiency and utilization. A complete utilization analysis, sorted high to low and by building and room number, is available in Appendix I.

Note: Utilization information in this section will reference the preliminary utilization analysis values (green in table 4.2.2) due to a more direct alignment with the 2013 Space Utilization and Master Plan document calculation methods.

- The current classroom utilization total (111, 112, 120, 130, 140, 160) of 53% suggests that UND must improve the efficiency of classroom utilization.
- The current class lab utilization total (211, 212, 213, 220) of 31% suggests that UND must improve the efficiency of class lab utilization.
- The lowest performing group of classrooms and class labs (20% or below) occupy a large amount of space (approximately 50,000 ASF) that may be repurposed for other uses.

There is an opportunity to increase overall classroom utilization by combining and reconfiguring undersized and underutilized classrooms into space that can support active learning teaching methods. The university should adopt a policy to provide flexible spaces that can support a variety of teaching methods.

Proper alignment of seat/station count and class enrollment headcount is critical to increasing the overall campus utilization. An additional study was performed at the request of the College of Arts & Sciences so they can better understand where their course content is delivered. This study provided the college with information that they can use in future classroom and class lab projects to ensure they have space that is appropriately sized and configured. Similar studies for each college could be undertaken to provide detailed information about space needs.



Tiered Floor Classroom with fixed seating



Classroom with movable tables and chairs



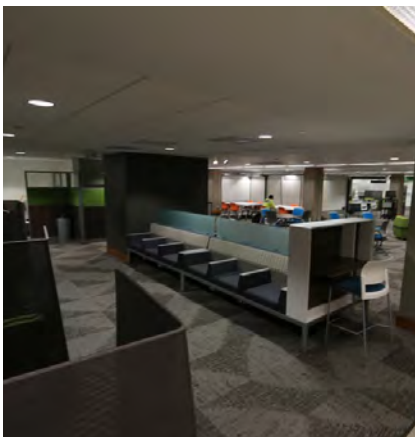
Active learning classroom

Classroom furniture, size and technology levels are varied across campus. Current inventory should be cataloged according to room size/layout, and types of technology and furniture available

4. Space Utilization and Analysis



Student Success Space - Gamble Hall



Student Success Space - Basement Memorial Union

Available student success spaces vary greatly across campus. The recently completed student success space in the basement of Memorial Union is an effective, well used space for student collaboration, private and group study, and social interaction. Spaces like the one pictured above in Gamble Hall, are awkward, leftover spaces and often do not provide necessary amenities.

Information from this report can provide a basis for determining what size and type of space is most used to deliver course content at the University of North Dakota. However, the university and each college need to work together to define what space is needed to most effectively deliver course content. Defining the spatial needs for classrooms and class labs across the academic community is an important step toward improving classroom utilization.

Space inventory at UND should be updated and cataloged based on the total number of seats available, the total assignable square footage available per station, and the types of technology available. Having an up-to-date and easily accessible catalogue of these spatial parameters can help faculty find and request the space that they need to deliver course content in the most effective manner.

In addition to increasing the amount of flexible classroom space on campus, there is an opportunity to convert some underutilized classroom space into additional student success space. Student success spaces could range from small spaces distributed throughout the campus, to larger blocks of space in a more centralized location. Having appropriate and adequate student success space on campus is critical to the overall effectiveness of course content delivery and student comprehension. University of North Dakota currently has a very small amount of available student success spaces when compared to peer institutions and should work with faculty and students to develop a strategy to implement additional student success space where it is most needed. These spaces provide a critical opportunity for private study, student-student collaboration, student-faculty collaboration, and general social interaction and gathering.

Beyond repurposing existing space, consideration should be given to taking space offline. This not only reduces the number of classrooms available, increasing utilization in the remaining, but helps to minimize operational and deferred maintenance costs. New construction projects should be carefully considered to ensure alignment with current campus space needs.

4. Space Utilization and Analysis

4.5 Recommendations

The following are recommendations to inform continuing discussions on how the University of North Dakota can improve space utilization.

- Update and simplify space coding to help scheduling personnel and professors easily find space with the correct attributes
- Maintain an accurate space inventory, seat counts, and technology levels
- Identify buildings to receive priority for improvement initiatives, in order to serve the most students
- Standardize and define technology needs and levels
- Develop transitional space to temporarily house program elements during restoration and remodeling
- Develop a space management department and space management policies to oversee and inform allocation and management of space on campus
- Develop a strategic plan to guide facilities improvements
- Identify underutilized spaces that are available to be repurposed or taken offline
- Continue conversations with faculty, staff, and students with regard to academic environments and space needs
- Ongoing assessment and reporting of impact of learning environments on academic performance

Current space management policies are minimal and largely ineffective. The following policies provide a starting point for discussion.

- Centralize scheduling of all general purpose classrooms and class labs
- Establish Standardized inventory of room types, size, configuration, and technology level
- Centralize planning and adopt a University Standard for refinishing, remodeling, and constructing classrooms
- Establish an inventory of collaboration and student support spaces
- Establish a defined set of room use protocols



5. Planning Strategies

5.1 Overview

It is imperative in the development of strategic guidelines to understand the challenges and pressures that are facing higher education institutions today. Ongoing shifts in pedagogy and technology mean that universities must be flexible and able to quickly adapt to follow current trends in teaching and learning. Identifiable pressures and challenges must be taken into consideration for future renovation and expansion projects.

The expectations and learning methods of students have changed significantly over the last few decades. Students are coming to higher education universities and colleges in greater numbers and with a significantly more diverse background. Most of the existing facilities at the University of North Dakota were not designed with the flexibility required to accommodate the changing learning needs of today's student population.

Construction is nearing completion on approximately 474,000 square feet of Type I Academic Space:

- 378,000 sf - New School of Medicine and Health Sciences
- 60,000 sf - Robin Hall
- 30,000 sf - CEC

The newly constructed space was not considered in the utilization analysis which looked at a selected group of 36 buildings, containing approximately 2,598,201 square feet:

- 1,962,303 sf - 26 Type I Academic buildings
- 635,898 sf - 10 Type II Academic Support buildings

Much of the new construction currently taking place will house relocated program elements from other buildings. The most notable being the new School of Medicine facility, which will house a large percentage of the program that exists within the current building.

Once the move is complete, (the moving process may begin as early as summer 2016) approximately 85% of the existing School of Medicine building will become available for repurposing. The remaining program elements retained for use by the School of Medicine total approximately 21,000 square feet and include 5,000 square feet of classroom space and 16,000 square feet of retained laboratory space.

It is important to consider the impact of this additional available square footage on the overall classroom and class lab utilization, as well as its impact in meeting current and future maintenance needs. In an increasingly constrictive financial environment, reducing excess square footage through repurposing and/or taking space offline is critical to managing maintenance and operational costs.

There is a need for the university to plan and design facilities that enable faculty members to enhance the instructional environment and improve academic outcomes. Additionally, the university must address



Existing School of Medicine



Hyslop

5. Planning Strategies

growing deferred maintenance needs with limited fiscal resources. Using space efficiently and appropriately is critical to achieving the goal of positively impacting educational outcomes for current and future students.

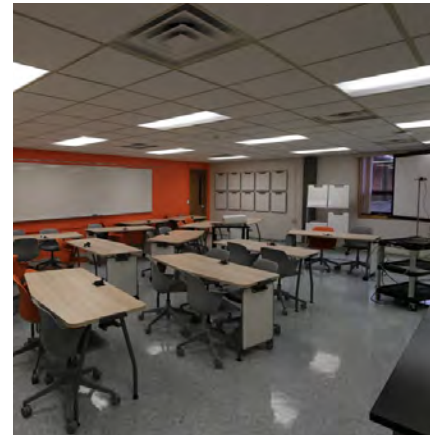
The University of North Dakota is taking a proactive approach through a thorough analysis of existing space and the development of a strategic plan to guide future development. A critical component of this proactive approach has been starting the conversations and getting students, faculty, and staff involved in the process. Throughout the master planning process at the University of North Dakota, a large amount of transparency has been maintained. Providing small group meetings and open forum presentations, allow the staff, faculty, students and the general public to become an instrumental part of the process. The success of the strategic plan in guiding the university toward reducing deferred maintenance and surplus square footage relies on continuing the conversations and taking action.

5.2 Assessment of Existing Facilities

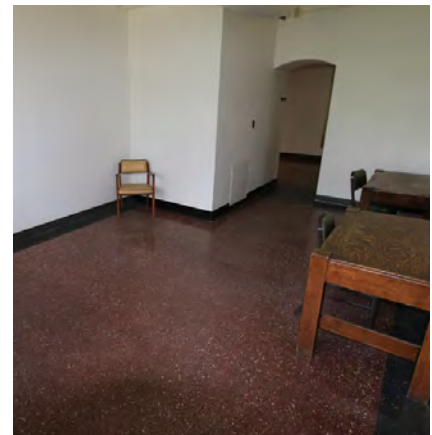
In order to effectively develop planning principles to address changes and modifications to the academic environment it is important to understand the existing conditions on campus. A facility condition analysis (FCA) was performed as a component of the master planning effort. The facility condition analysis was undertaken by ISES Corporation during the fall of 2015, and a report detailing the deferred maintenance needs of buildings on campus was provided in November of 2015. This report projected that the deferred maintenance + 10 year renewal needs of the buildings considered in the FCA report totals to around \$507,000,000. The University of North Dakota must implement both short and long term strategies to address current and reduce future deferred maintenance needs.

5.3 Moving Forward

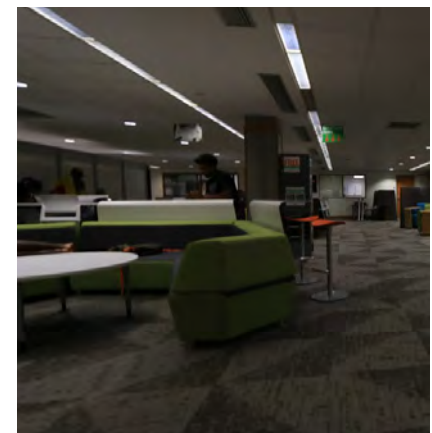
The space utilization analysis has revealed that the University of North Dakota is not using available classroom space efficiently. With 474,000 square feet of additional Type I Academic space about to come online, the current low utilization will be compounded. In addition to low utilization, many of the buildings and much of the existing infrastructure is dated and has substantial deferred maintenance need. In the future, additional operational and maintenance costs of newly constructed space will only be detrimental to the available funds to maintain the current building inventory. UND must work toward a reduction in surplus square footage and deferred maintenance through repurposing excess space. The university has initiated the development of master planning strategies to provide guidance for both long and short term projects.



New Flexible Classroom Space



Dated Study Area in Merrifield Hall



New Study Area in Memorial Union

5. Planning Strategies



Merrifield Hall



O'Kelly Hall

Merrifield and O'Kelly Halls contain a large number of the University of North Dakota's general use classroom space. The location, size, and spatial characteristics make them ideal candidates for investment and improvement.

In order to support the development of these long term planning principles, the university must also work in the short-term to alleviate immediate needs. The short-term plan must make effective use of limited resources while remaining primarily focused on developing exceptional teaching and learning environments. To guide the process, a study was conducted to see which spaces on campus impact the greatest number of students. It was found that over 30% of all classrooms on campus are contained in O'Kelly Hall and Merrifield Hall. Not only do O'Kelly Hall and Merrifield Hall contain a large percentage of the classroom space on campus, they also contain primarily general use classroom space, which is designed to meet the teaching and learning needs of a broad range of academic programs. The two buildings are also located within the Campus Core and are adjacent to the Campus Quad (Merrifield Hall) or the SE Quad (O'Kelly Hall).

The location, size, and spatial characteristics of these buildings make them ideal candidates for receiving investment and improvements in the short term. Enhancing the classroom space within these buildings supports the development of each long-term master plan strategy, despite their inherent differences. Due to the constrictive fiscal environment, either O'Kelly Hall or Merrifield Hall must be identified as the primary recipient of current and future investment.

Three long term master plan strategies (A, B, & C) have been developed in alignment with the planning principles. The three long term master plan strategies each present a distinctly different approach to accomplish these primary goals:

- Focus on students, faculty, and staff
- Create flexible space
- Enhance campus facilities to reflect the UND brand
- Improve classroom and class lab utilization
- Effectively use available resources
- Reduce deferred maintenance

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5. Planning Strategies

5.4 Potential Long-Term Strategies

Strategy A - Strengthen the Campus Core

The basic premise for Master Plan Strategy A is the relocation of primary academic facilities closer to the current academic core. In this two phase plan, current administrative functions in Twamley Hall would be relocated into vacant space in the former School of Medicine facility. Twamley Hall and other buildings within the immediate vicinity of the Campus Core, would be repurposed to accommodate the consolidation of a number of academic program elements. A large investment in the former School of Medicine, Twamley Hall, and other repurposed buildings would be needed to remodel/renovate space to house relocated program elements and reduce overall deferred maintenance backlogs. Space vacated as a result of the process would become available for repurposing or taken offline.

Pros:

Strengthens Campus Core
Space available for growth

Cons:

Additional move are needed

Possible buildings vacated and available for future repurposing (gray dots on map):

- 314 Cambridge
- 2912 University
- Armory
- Babcock
- Carnegie
- Center for Community Engagement
- Chandler
- Corwin/Larimore
- Dakota Hall
- Era Bell Thompson
- Gustafson
- International Center
- Montgomery
- Robertson/Sayre
- Strinden
- Women's Center

Possible buildings repurposed (green dots on map):

- Gillette Hall
- Hyslop
- O'Kelly Hall
- Twamley Hall
- School of Medicine

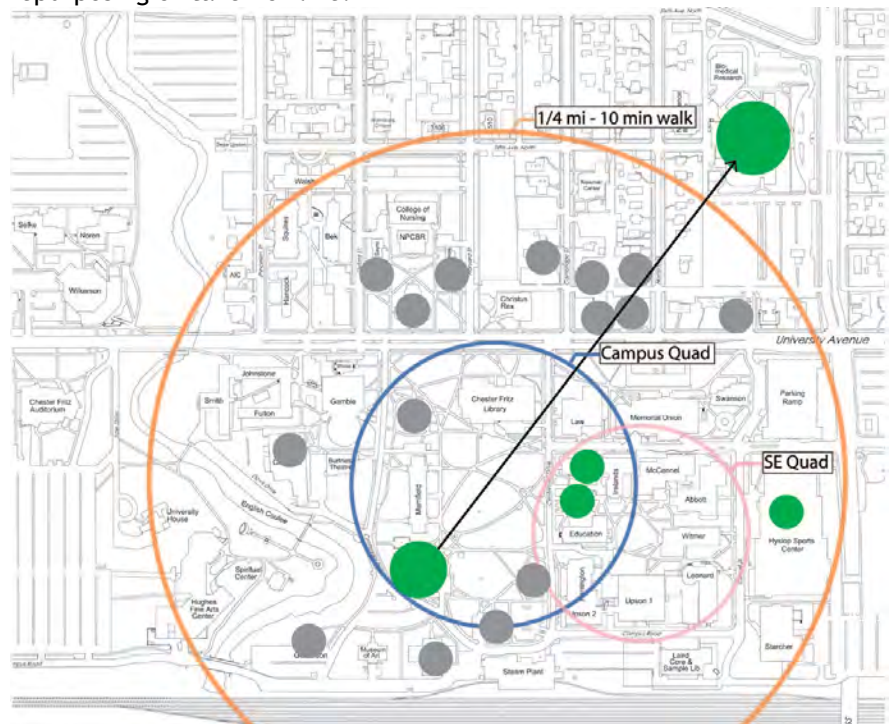


Diagram 5.4.1

Master Plan Strategy A - Major Relocations

Potential gross square footage (GSF) available to repurpose:

- 270K GSF

Potential deferred maintenance savings:

- \$31M

Potential annual operating/maintenance savings:

- \$1M

5. Planning Strategies

Strategy B - Focus on former School of Medicine

Master Plan Strategy B focuses on repurposing the former School of Medicine facility to potentially combine fragmented academic program elements. Significant investment in the former School of Medicine would be needed to provide repurposed space appropriate for relocated academic program elements, and reduce the overall deferred maintenance backlog. Existing lab space within the School of Medicine will remain. Space vacated as a result of the process would become available to be repurposed or taken offline.

Pros:

- Fewer moves needed
- Space available for growth
- Combines departments

Cons:

- Relocates program elements out of the campus core

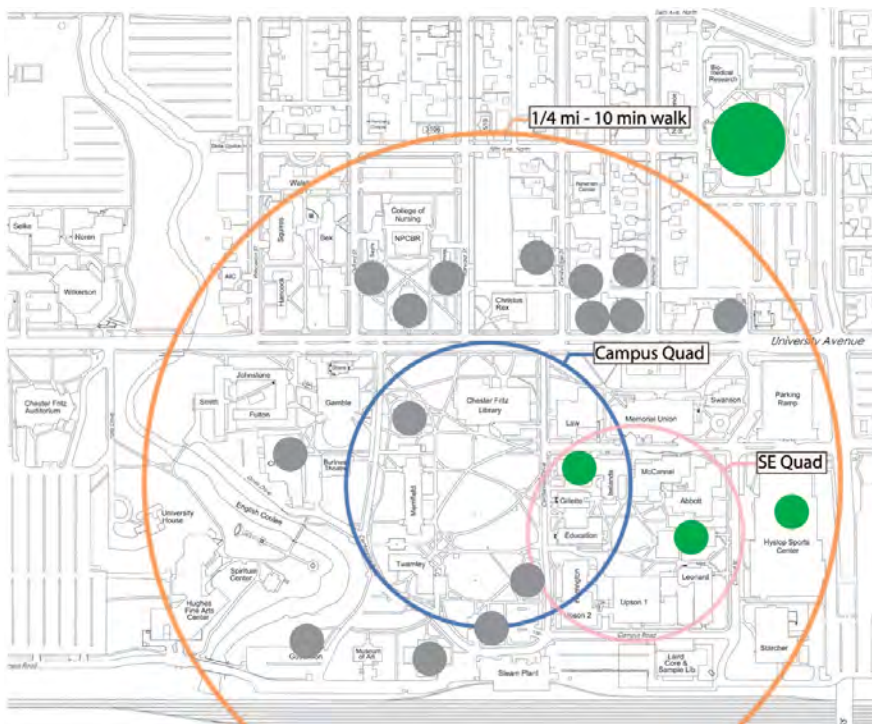


Diagram 5.4.2

Master Plan Strategy B - Major Relocations

Possible buildings vacated and available for future repurposing (gray dots on map)

- 314 Cambridge
- 2912 University
- Armory
- Babcock
- Carnegie
- Center for Community Engagement
- Chandler
- Corwin/Larimore
- Dakota Hall
- Era Bell Thompson
- Gustafson
- International Center
- Montgomery
- Robertson/Sayre
- Strinden
- Women's Center

Possible buildings repurposed (green dots on map)

- Hyslop
- O'Kelly Hall
- School of Medicine
- Witmer

Potential gross square footage (GSF) available to repurpose:

- 270K GSF

Potential deferred maintenance savings:

- \$31M

Potential annual operating/maintenance savings:

- \$1M

5. Planning Strategies

Strategy C - Connect Campus Quad and SE Quad

Pros:

Creates new facilities
Can accommodate contemporary teaching methods

Cons:

Program elements are temporarily relocated to School of Medicine

Master Plan Strategy C focuses on consolidating program elements within the campus core while making use of existing space. A primary element of this strategy is to use the former School of Medicine facility as a temporary home for program elements to facilitate construction and remodeling within existing buildings. This strategy also presents the potential opportunity to construct new space that will connect buildings around the campus core, and provide contemporary and flexible learning spaces. Space vacated as a result of the process would become available to be repurposed or taken offline.

Possible buildings vacated and available for future repurposing (gray dots on map)

- 314 Cambridge
- 2912 University
- Armory
- Center for Community Engagement
- Chandler
- Corwin/Larimore
- Dakota Hall
- Era Bell Thompson
- International Center
- Robertson/Sayre
- School of Medicine
- Strinden
- Women's Center

Possible buildings repurposed (green dots on map)

- Babcock Hall
- Carnegie Hall
- Hyslop
- Gillette
- Montgomery
- O'Kelly Hall

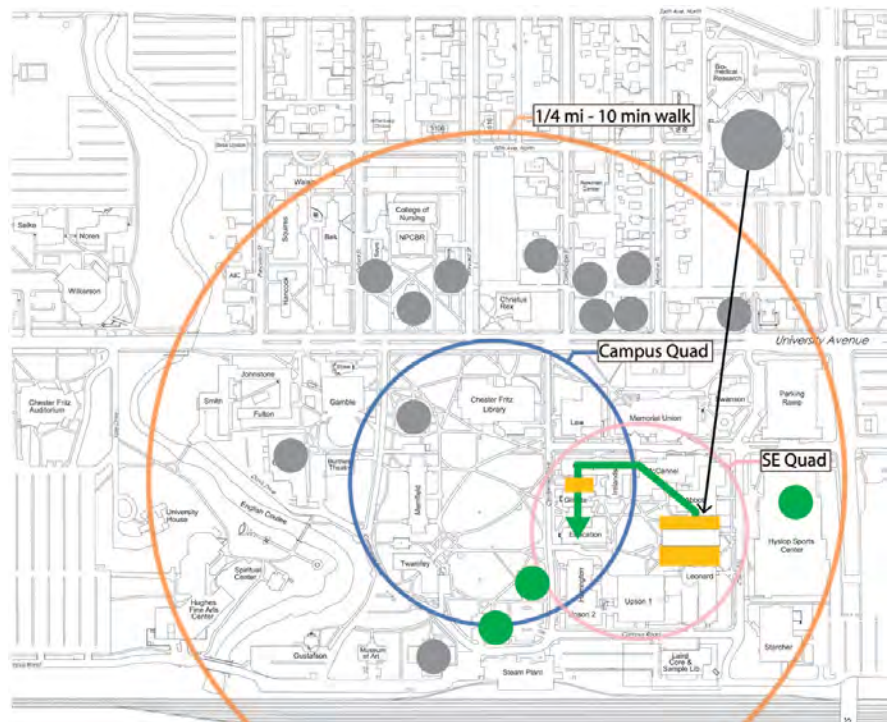


Diagram 5.4.3

Master Plan Strategy C - Major Relocations

Potential gross square footage (GSF) available to repurpose:

- **507K GSF**

Potential deferred maintenance savings:

- **\$58M**

Potential annual operating/maintenance savings:

- **\$2M**

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Section 1 - Classroom Utilization Sorted Low to High

Section 2 - Classroom Utilization Sorted by Building and Room

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Section 5 - Event Utilization Sorted by Total Change in Utilization

Section 6 - Event Utilization Sorted by Building and Room

Appendix II

Section 1 - Office Space Distribution

Appendix I - Space Utilization Data

Section 1: Classroom Utilization Sorted low to high



Utilization Summary 100 Series Low to High

				NDUS Utilization Analysis						NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization	
CLIFFORD	210	112	275	7%	0%	7%	10%	1%	9%	13%	9	1%	
UPSON II	164	111	23	7%	0%	7%	13%	1%	9%	16%	1	1%	
UPSON II	161	111	31	5%	0%	5%	19%	1%	6%	24%	1	2%	
CHANDLER	20	111	23	9%	0%	9%	13%	1%	11%	16%	1	2%	
MERRIFIELD	306A	130	35	6%	0%	6%	26%	1%	8%	32%	2	2%	
EDUCATION	347	120	14	0%	8%	8%	29%	2%	10%	36%	0	4%	
GAMBLE	130	140	40	0%	6%	6%	45%	3%	8%	56%	2	5%	
OKELLY	319	120	15	13%	6%	19%	16%	3%	25%	19%	2	5%	
COR/LARIM	210	120	8	6%	0%	6%	63%	4%	8%	78%	1	7%	
MERRIFIELD	121	111	24	11%	0%	11%	50%	6%	15%	63%	7	9%	
NURSING	201	130	60	13%	0%	13%	51%	7%	17%	63%	39	11%	
NURSING	214	111	26	10%	0%	10%	71%	7%	13%	89%	6	12%	
LAW BLDG	201	111	1	7%	0%	7%	100%	7%	9%	125%	0	12%	
LEONARD	110	111	45	17%	0%	17%	44%	7%	22%	56%	22	12%	
ABBOTT	115	111	32	25%	0%	25%	30%	7%	33%	38%	28	12%	
MERRIFIELD	214	111	35	20%	0%	20%	39%	8%	26%	49%	32	13%	
EDUCATION	103	120	14	6%	22%	28%	29%	8%	38%	36%	8	13%	
CLIFFORD	368	111	30	29%	0%	29%	28%	8%	39%	35%	49	14%	
EDUCATION	26	111	34	7%	11%	18%	50%	9%	24%	63%	20	15%	
GAMBLE	283	111	20	0%	30%	30%	31%	9%	40%	39%	12	15%	
COR/LARIM	140	120	22	28%	0%	28%	34%	9%	37%	43%	14	16%	
EDUCATION	11	120	15	28%	0%	28%	36%	10%	37%	44%	15	16%	
LEONARD	100	112	207	58%	0%	58%	18%	10%	77%	23%	714	17%	
STARCHER	137	160	35	18%	0%	18%	58%	11%	24%	72%	49	18%	
LEONARD	214	111	29	23%	0%	23%	47%	11%	31%	59%	52	18%	
EDUCATION	17	160	24	9%	4%	13%	82%	11%	18%	102%	13	18%	
CHANDLER	103	160	28	27%	0%	27%	42%	11%	35%	53%	52	19%	
MERRIFIELD	212	111	43	29%	0%	29%	39%	11%	38%	49%	88	19%	
OKELLY	116	160	29	19%	0%	19%	62%	11%	25%	78%	33	19%	
WITMER	209	111	30	29%	0%	29%	42%	12%	38%	53%	67	20%	
STARCHER	105	120	44	33%	3%	36%	35%	13%	48%	44%	110	21%	
MERRIFIELD	215	111	46	36%	0%	36%	37%	13%	47%	47%	142	22%	
NURSING	204	111	49	22%	7%	29%	46%	13%	38%	58%	108	22%	
EDUCATION	22	111	26	19%	5%	24%	58%	14%	32%	73%	36	23%	
STREIBEL	238	111	24	36%	0%	36%	40%	14%	47%	50%	79	24%	
MERRIFIELD	309	111	34	29%	0%	29%	52%	15%	39%	65%	102	25%	

Utilization Summary 100 Series Low to High

				NDUS Utilization Analysis						NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization	
BABCOCK	108	111	24	33%	0%	33%	48%	16%	44%	61%	70	26%	
SCH OF MED	B320B	160	38	50%	15%	65%	25%	16%	86%	31%	141	27%	
HUGHES	258	111	52	36%	11%	47%	34%	16%	62%	43%	222	27%	
SCH OF MED	1350	112	293	40%	6%	45%	36%	16%	60%	44%	1329	27%	
NURSING	216	111	25	28%	0%	28%	57%	16%	38%	71%	33	27%	
WITMER	114	112	95	9%	35%	44%	37%	16%	59%	46%	281	27%	
MERRIFIELD	303	111	42	46%	0%	46%	36%	17%	62%	45%	198	28%	
HARRINGTON	204	140	40	61%	0%	61%	28%	17%	81%	35%	224	28%	
OKELLY	201	111	63	38%	0%	38%	45%	17%	50%	56%	265	28%	
MONTGOMERY	316	111	22	26%	0%	26%	65%	17%	34%	82%	31	28%	
WITMER	102	111	42	47%	0%	47%	38%	18%	62%	47%	222	29%	
MERRIFIELD	311	111	29	32%	0%	32%	56%	18%	42%	70%	120	29%	
ROBT/SYRE	48	130	20	30%	0%	30%	60%	18%	40%	74%	71	30%	
NURSING	202	111	49	32%	7%	39%	46%	18%	52%	57%	265	30%	
RYAN HALL	132	111	33	14%	25%	39%	47%	18%	52%	58%	250	30%	
MERRIFIELD	217	160	24	13%	7%	20%	90%	18%	27%	113%	36	30%	
EDUCATION	7	112	325	38%	8%	45%	42%	19%	60%	53%	1650	32%	
OKELLY	19	111	54	28%	0%	28%	71%	19%	37%	89%	140	32%	
MERRIFIELD	305	111	41	43%	0%	43%	47%	20%	57%	58%	259	33%	
NURSING	210	111	79	50%	7%	57%	35%	20%	76%	44%	448	33%	
STREIBEL	108	111	70	40%	0%	40%	51%	20%	53%	63%	378	34%	
LEONARD	109	111	105	61%	0%	61%	34%	21%	81%	42%	792	34%	
NURSING	212	111	24	25%	7%	32%	64%	21%	43%	80%	66	34%	
ABBOTT	340	111	26	43%	0%	43%	49%	21%	57%	61%	73	35%	
MERRIFIELD	308	111	40	49%	0%	49%	44%	21%	65%	54%	284	35%	
LAW BLDG	335	111	21	44%	12%	56%	38%	21%	74%	48%	120	36%	
STARCHER	141	112	60	41%	7%	49%	44%	22%	65%	56%	388	36%	
GAMBLE	390	111	42	33%	0%	33%	65%	22%	44%	82%	181	36%	
LEONARD	112	111	36	32%	5%	37%	59%	22%	49%	74%	130	36%	
MERRIFIELD	210	111	33	40%	0%	40%	55%	22%	53%	68%	179	36%	
NURSING	207	111	10	19%	0%	19%	117%	22%	26%	146%	11	37%	
GAMBLE	325	111	31	31%	15%	46%	49%	23%	61%	61%	139	37%	
HUGHES	248	111	32	51%	0%	51%	45%	23%	68%	56%	242	38%	
CLIFFORD	264	111	25	61%	0%	61%	37%	23%	82%	47%	209	38%	
ABBOTT	138	112	84	63%	0%	63%	37%	23%	84%	46%	802	38%	
EDUCATION	9	111	28	27%	32%	58%	40%	23%	78%	50%	152	39%	

Appendix I - 1

Classroom (100 Series) Utilization Sorted Low to High

2015 Space Utilization Study & Master Plan Phase I

Utilization Summary 100 Series Low to High

				NDUS Utilization Analysis					NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
MIERRIFIELD	11	111	46	52%	0%	52%	47%	24%	69%	59%	370	40%
EDUCATION	104	120	15	17%	30%	46%	52%	24%	62%	65%	42	40%
WITMER	211	111	37	58%	0%	58%	42%	24%	77%	53%	347	41%
LEONARD	107	111	32	37%	0%	37%	68%	26%	50%	86%	149	42%
COR/LARIM	108	111	30	29%	0%	29%	87%	26%	39%	109%	166	43%
MIERRIFIELD	10	111	39	65%	0%	65%	40%	26%	86%	50%	367	43%
OKELLY	221	111	30	27%	13%	39%	66%	26%	52%	83%	155	43%
EDUCATION	113	112	110	44%	4%	48%	55%	26%	64%	69%	870	44%
GAMBLE	240	160	46	43%	0%	43%	61%	27%	58%	77%	325	44%
NURSING	102	112	70	42%	0%	42%	65%	27%	56%	81%	283	45%
OKELLY	228	120	30	53%	10%	63%	43%	27%	84%	54%	297	45%
COR/LARIM	103	111	31	32%	0%	32%	86%	27%	42%	107%	196	45%
GAMBLE	235	160	46	33%	0%	33%	83%	27%	43%	104%	208	45%
LEONARD	215	111	46	54%	0%	54%	51%	27%	71%	64%	417	45%
MIERRIFIELD	14	111	51	56%	9%	65%	43%	28%	86%	54%	615	46%
GAMBLE	145	111	55	35%	22%	57%	50%	28%	75%	62%	387	47%
GILLETTE	303	111	97	51%	0%	51%	56%	28%	68%	69%	915	47%
EDUCATION	115	111	44	40%	23%	62%	46%	29%	83%	57%	355	47%
COR/LARIM	302	130	93	42%	18%	60%	48%	29%	79%	60%	844	48%
OKELLY	334	111	160	53%	7%	61%	48%	29%	81%	60%	1696	48%
GAMBLE	280	111	52	53%	0%	53%	55%	29%	71%	68%	502	48%
WITMER	116	112	218	61%	0%	61%	48%	29%	81%	60%	2847	48%
LAW BLDG	203	111	85	45%	12%	57%	51%	29%	76%	64%	576	48%
HUGHES	164	111	41	40%	23%	63%	47%	30%	84%	59%	403	49%
MIERRIFIELD	19	111	36	49%	0%	49%	62%	30%	65%	77%	362	50%
OKELLY	119	111	35	51%	0%	51%	61%	31%	68%	76%	343	52%
STREIBEL	106	111	78	57%	0%	57%	54%	31%	76%	68%	846	52%
GAMBLE	3	112	110	49%	14%	63%	50%	31%	83%	62%	1141	52%
LAW BLDG	8	111	93	64%	14%	78%	40%	31%	105%	50%	1061	52%
GILLETTE	101	111	53	39%	17%	56%	56%	31%	74%	70%	386	52%
LAW BLDG	334	111	35	51%	4%	56%	56%	31%	74%	70%	348	52%
NURSING	108	112	71	49%	13%	62%	53%	33%	82%	66%	502	54%
MIERRIFIELD	300	112	176	65%	6%	71%	46%	33%	94%	58%	2583	54%
MIERRIFIELD	119	111	42	73%	0%	73%	45%	33%	98%	56%	662	54%
MIERRIFIELD	117	111	48	79%	0%	79%	41%	33%	106%	52%	760	55%
ODEGARD	114	112	127	62%	8%	69%	47%	33%	92%	59%	1735	55%

Utilization Summary 100 Series Low to High

				NDUS Utilization Analysis						NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization	
EDUCATION	112	111	34	27%	48%	75%	46%	34%	99%	57%	327	57%	
RYAN HALL	128	111	27	67%	0%	67%	51%	34%	89%	64%	214	57%	
RYAN HALL	124	111	30	67%	0%	67%	51%	34%	89%	64%	238	57%	
EDUCATION	114	111	32	27%	45%	71%	48%	34%	95%	60%	218	57%	
MERRIFIELD	304	111	24	33%	9%	42%	82%	35%	56%	103%	236	58%	
OKELLY	301	111	55	46%	15%	61%	57%	35%	81%	71%	604	58%	
HARRINGTON	108	130	30	66%	0%	66%	53%	35%	88%	67%	441	59%	
GAMBLE	355	111	37	46%	7%	53%	70%	37%	70%	87%	407	61%	
GAMBLE	7	111	151	68%	0%	68%	55%	37%	90%	68%	1950	62%	
WITMER	307	130	37	63%	0%	63%	60%	37%	83%	75%	712	62%	
UPSON II	263	111	30	63%	0%	63%	59%	37%	84%	74%	299	62%	
ODEGARD	102	111	56	67%	0%	67%	56%	37%	89%	70%	734	62%	
ROBT/SYRE	18	130	21	51%	6%	57%	66%	38%	76%	82%	289	63%	
OKELLY	157	111	28	48%	12%	59%	64%	38%	79%	80%	404	63%	
ODEGARD	356	111	38	64%	4%	69%	55%	38%	91%	69%	625	63%	
GAMBLE	372	160	37	53%	7%	60%	64%	38%	80%	80%	471	64%	
MERRIFIELD	113	111	39	66%	13%	79%	49%	39%	105%	61%	677	64%	
OKELLY	1	111	53	72%	3%	75%	52%	39%	100%	65%	1004	65%	
MERRIFIELD	312	111	31	71%	10%	80%	49%	40%	107%	62%	510	66%	
MERRIFIELD	216	160	26	33%	14%	47%	84%	40%	63%	105%	258	66%	
MERRIFIELD	313	111	30	56%	0%	56%	71%	40%	75%	89%	379	67%	
GAMBLE	5	112	108	60%	7%	66%	61%	40%	88%	76%	1737	67%	
ODEGARD	111	111	48	61%	0%	61%	66%	40%	81%	83%	644	67%	
EDUCATION	5	111	54	33%	32%	65%	63%	41%	87%	78%	589	68%	
EDUCATION	16	111	28	62%	22%	84%	49%	41%	111%	62%	270	69%	
HARRINGTON	324	112	72	83%	7%	90%	47%	42%	120%	58%	1861	70%	
HUGHES	227	112	52	77%	13%	89%	48%	42%	119%	60%	735	71%	
ODEGARD	106	111	63	69%	25%	94%	45%	43%	125%	57%	1386	71%	
MERRIFIELD	111	111	36	73%	0%	73%	60%	44%	98%	75%	767	73%	
EDUCATION	109	111	40	60%	13%	73%	61%	44%	97%	76%	501	74%	
MERRIFIELD	116	111	49	80%	13%	92%	49%	45%	123%	61%	1207	75%	
MONTGOMERY	201	111	50	58%	10%	67%	67%	45%	90%	84%	939	75%	
GAMBLE	1	112	242	67%	0%	67%	70%	46%	89%	87%	4845	77%	
WITMER	302	130	42	59%	0%	59%	80%	47%	78%	100%	847	78%	
WITMER	115	111	33	45%	0%	45%	105%	47%	60%	131%	518	79%	
EDUCATION	294	111	30	40%	19%	59%	81%	47%	78%	101%	403	79%	

Appendix I - 1

Classroom (100 Series) Utilization Sorted Low to High

2015 Space Utilization Study & Master Plan Phase I

Utilization Summary 100 Series Low to High

Building	Room Number	Space Use Code	Seat/Station Count	NDUS Utilization Analysis				NDUS Capacity Analysis				
				% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
HARRINGTON	217	140	48	74%	7%	81%	61%	49%	108%	77%	1225	82%
GAMBLE	270	112	56	73%	14%	87%	57%	50%	116%	71%	1339	82%
ODEGARD	366	111	30	62%	29%	90%	55%	50%	120%	69%	496	83%
ODEGARD	112	111	55	69%	11%	80%	63%	50%	107%	79%	1480	84%
WITMER	309	130	37	69%	0%	69%	73%	51%	92%	92%	936	84%
OKELLY	103	111	23	47%	0%	47%	109%	51%	62%	137%	351	85%
OKELLY	310	111	36	72%	12%	84%	61%	51%	112%	76%	831	85%
ODEGARD	103	111	44	77%	3%	80%	65%	52%	106%	81%	756	86%
WITMER	119	111	36	54%	0%	54%	97%	52%	71%	121%	681	86%
OKELLY	101	111	34	46%	22%	68%	76%	52%	91%	95%	585	86%
WITMER	303	130	36	61%	0%	61%	87%	53%	81%	109%	857	88%
RYAN HALL	130	111	30	37%	32%	69%	78%	54%	92%	98%	592	90%
MERRIFIELD	209	111	54	64%	9%	73%	74%	54%	97%	93%	1311	90%
GAMBLE	380	111	38	53%	12%	65%	84%	54%	86%	105%	722	91%
UPSON II	261	140	42	76%	22%	97%	57%	55%	130%	71%	1239	92%
GAMBLE	315	111	34	62%	22%	83%	66%	55%	111%	83%	721	92%
GAMBLE	340	111	51	66%	7%	73%	76%	56%	98%	95%	1228	93%
WITMER	305	130	37	63%	0%	63%	91%	57%	83%	114%	912	95%
ODEGARD	107	111	38	84%	15%	99%	57%	57%	132%	72%	757	95%
ABBOTT	201	111	36	82%	7%	89%	64%	57%	118%	80%	583	95%
OKELLY	31	111	12	52%	3%	55%	107%	59%	74%	133%	59	98%
EDUCATION	12	111	42	64%	33%	97%	62%	60%	129%	77%	884	100%
OKELLY	61	130	181	78%	6%	85%	75%	64%	113%	94%	4993	106%
GAMBLE	225	140	50	66%	21%	87%	73%	64%	117%	92%	1498	107%
HARRINGTON	218	140	48	88%	7%	95%	69%	65%	126%	86%	1822	108%
WITMER	117	111	35	67%	0%	67%	98%	65%	89%	123%	988	109%
OKELLY	32	111	29	130%	0%	130%	52%	68%	173%	66%	329	113%
ABBOTT	101	111	208	82%	19%	101%	74%	75%	135%	93%	9849	125%
GAMBLE	215	112	52	73%	29%	102%	77%	79%	135%	97%	2107	131%
MERRIFIELD	114	111	16	71%	0%	71%	113%	80%	95%	141%	577	133%
GAMBLE	335	112	46	87%	14%	101%	82%	83%	135%	103%	2104	139%

Appendix I - Space Utilization Data

Section 2: Classrooms Utilization Sorted by Building and Room



Utilization Summary: Abbott

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
ABBOTT	101	111	208	82%	19%	101%	74%	75%	135%	93%	9849	125%
ABBOTT	115	111	32	25%	0%	25%	30%	7%	33%	38%	28	12%
ABBOTT	138	112	84	63%	0%	63%	37%	23%	84%	46%	802	38%
ABBOTT	201	111	36	82%	7%	89%	64%	57%	118%	80%	583	95%
ABBOTT	340	111	26	43%	0%	43%	49%	21%	57%	61%	73	35%
Total	5		386			64%	51%	37%	85%	64%	11336	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization:	103%

Utilization Summary: Babcock

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
BABCOCK	108	111	24	33%	0%	33%	48%	16%	44%	61%	70	26%
Total	1		24			33%	48%	16%	44%	61%	70	26%

NOTE: *Scheduled Seat Count Utilization

Classroom Utilization: 26%

Utilization Summary: Chandler

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
CHANDLER	20	111	23	9%	0%	9%	13%	1%	11%	16%	1	2%
CHANDLER	103	160	28	27%	0%	27%	42%	11%	35%	53%	52	19%
Total	2		51			18%	28%	6%	23%	34%	53	
Classroom Utilization:											16%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Clifford

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
CLIFFORD	210	112	275	7%	0%	7%	10%	1%	9%	13%	9	1%
CLIFFORD	264	111	25	61%	0%	61%	37%	23%	82%	47%	209	38%
CLIFFORD	368	111	30	29%	0%	29%	28%	8%	39%	35%	49	14%
Total	3		330			32%	25%	11%	43%	32%	268	
Classroom Utilization:											15%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Corwin/Larimore

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
COR/LARIM	103	111	31	32%	0%	32%	86%	27%	42%	107%	196	45%
COR/LARIM	108	111	30	29%	0%	29%	87%	26%	39%	109%	166	43%
COR/LARIM	140	120	22	28%	0%	28%	34%	9%	37%	43%	14	16%
COR/LARIM	210	120	8	6%	0%	6%	63%	4%	8%	78%	1	7%
COR/LARIM	302	130	93	42%	18%	60%	48%	29%	79%	60%	844	48%
Total	5		184			31%	64%	19%	41%	80%	1220	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization: 45%	

Utilization Summary: Education

NDUS Utilization Analysis				NDUS Capacity Analysis							
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
EDUCATION	5	111	54	33%	32%	65%	63%	87%	78%	589	68%
EDUCATION	7	112	325	38%	8%	45%	42%	60%	53%	1650	32%
EDUCATION	9	111	28	27%	32%	58%	40%	78%	50%	152	39%
EDUCATION	11	120	15	28%	0%	28%	36%	37%	44%	15	16%
EDUCATION	12	111	42	64%	33%	97%	62%	129%	77%	884	100%
EDUCATION	16	111	28	62%	22%	84%	49%	111%	62%	270	69%
EDUCATION	17	160	24	9%	4%	13%	82%	18%	102%	13	18%
EDUCATION	22	111	26	19%	5%	24%	58%	32%	73%	36	23%
EDUCATION	26	111	34	7%	11%	18%	50%	24%	63%	20	15%
EDUCATION	103	120	14	6%	22%	28%	29%	38%	36%	8	13%
EDUCATION	104	120	15	17%	30%	46%	52%	62%	65%	42	40%
EDUCATION	109	111	40	60%	13%	73%	61%	97%	76%	501	74%
EDUCATION	112	111	34	27%	48%	75%	46%	99%	57%	327	57%
EDUCATION	113	112	110	44%	4%	48%	55%	64%	69%	870	44%
EDUCATION	114	111	32	27%	45%	71%	48%	95%	60%	218	57%
EDUCATION	115	111	44	40%	23%	62%	46%	83%	57%	355	47%
EDUCATION	294	111	30	40%	19%	59%	81%	78%	101%	403	79%
EDUCATION	347	120	14	0%	8%	8%	29%	10%	36%	0	4%
Total	18		909			50%	52%	67%	64%	6353	
NOTE: *Scheduled Seat Count Utilization											
Classroom Utilization: 48%											

Utilization Summary: Gamble

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
GAMBLE	1	112	242	67%	0%	67%	70%	46%	89%	87%	4845	77%
GAMBLE	3	112	110	49%	14%	63%	50%	31%	83%	62%	1141	52%
GAMBLE	5	112	108	60%	7%	66%	61%	40%	88%	76%	1737	67%
GAMBLE	7	111	151	68%	0%	68%	55%	37%	90%	68%	1950	62%
GAMBLE	130	140	40	0%	6%	6%	45%	3%	8%	56%	2	5%
GAMBLE	145	111	55	35%	22%	57%	50%	28%	75%	62%	387	47%
GAMBLE	215	112	52	73%	29%	102%	77%	79%	135%	97%	2107	131%
GAMBLE	225	140	50	66%	21%	87%	73%	64%	117%	92%	1498	107%
GAMBLE	235	160	46	33%	0%	33%	83%	27%	43%	104%	208	45%
GAMBLE	240	160	46	43%	0%	43%	61%	27%	58%	77%	325	44%
GAMBLE	270	112	56	73%	14%	87%	57%	50%	116%	71%	1339	82%
GAMBLE	280	111	52	53%	0%	53%	55%	29%	71%	68%	502	48%
GAMBLE	283	111	20	0%	30%	30%	31%	9%	40%	39%	12	15%
GAMBLE	315	111	34	62%	22%	83%	66%	55%	111%	83%	721	92%
GAMBLE	325	111	31	31%	15%	46%	49%	23%	61%	61%	139	37%
GAMBLE	335	112	46	87%	14%	101%	82%	83%	135%	103%	2104	139%
GAMBLE	340	111	51	66%	7%	73%	76%	56%	98%	95%	1228	93%
GAMBLE	355	111	37	46%	7%	53%	70%	37%	70%	87%	407	61%
GAMBLE	372	160	37	53%	7%	60%	64%	38%	80%	80%	471	64%
GAMBLE	380	111	38	53%	12%	65%	84%	54%	86%	105%	722	91%
GAMBLE	390	111	42	33%	0%	33%	65%	22%	44%	82%	181	36%
Total	21		1344			61%	63%	40%	81%	79%	22028	77%
NOTE: *Scheduled Seat Count Utilization												Classroom Utilization:

Utilization Summary: Gillette

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
GILLETTE	101	111	53	39%	17%	56%	56%	31%	74%	70%	386	52%
GILLETTE	303	111	97	51%	0%	51%	56%	28%	68%	69%	915	47%
Total	2		150			53%	56%	30%	71%	70%	1302	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization: 49%	

Utilization Summary: Harrington

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
HARRINGTON	108	130	30	66%	0%	66%	53%	35%	88%	67%	441	59%
HARRINGTON	204	140	40	61%	0%	61%	28%	17%	81%	35%	224	28%
HARRINGTON	217	140	48	74%	7%	81%	61%	49%	108%	77%	1225	82%
HARRINGTON	218	140	48	88%	7%	95%	69%	65%	126%	86%	1822	108%
HARRINGTON	324	112	72	83%	7%	90%	47%	42%	120%	58%	1861	70%
Total	5		238			78%	52%	42%	104%	64%	5573	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization: 75%		

Utilization Summary: Hughes

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
HUGHES	164	111	41	40%	23%	63%	47%	30%	84%	59%	403	49%
HUGHES	227	112	52	77%	13%	89%	48%	42%	119%	60%	735	71%
HUGHES	248	111	32	51%	0%	51%	45%	23%	68%	56%	242	38%
HUGHES	258	111	52	36%	11%	47%	34%	16%	62%	43%	222	27%
Total	4		177			62%	43%	28%	83%	54%	1602	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization: 48%	

Utilization Summary: Law

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
LAW BLDG	8	111	93	64%	14%	78%	40%	31%	105%	50%	1061	52%
LAW BLDG	201	111	1	7%	0%	7%	100%	7%	9%	125%	0	12%
LAW BLDG	203	111	85	45%	12%	57%	51%	29%	76%	64%	576	48%
LAW BLDG	334	111	35	51%	4%	56%	56%	31%	74%	70%	348	52%
LAW BLDG	335	111	21	44%	12%	56%	38%	21%	74%	48%	120	36%
Total	5		235			51%	57%	24%	68%	71%	2105	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization: 50%		

Utilization Summary: Leonard

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
LEONARD	100	112	207	58%	0%	58%	18%	10%	77%	23%	714	17%
LEONARD	107	111	32	37%	0%	37%	68%	26%	50%	86%	149	42%
LEONARD	109	111	105	61%	0%	61%	34%	21%	81%	42%	792	34%
LEONARD	110	111	45	17%	0%	17%	44%	7%	22%	56%	22	12%
LEONARD	112	111	36	32%	5%	37%	59%	22%	49%	74%	130	36%
LEONARD	214	111	29	23%	0%	23%	47%	11%	31%	59%	52	18%
LEONARD	215	111	46	54%	0%	54%	51%	27%	71%	64%	417	45%
Total	7		500			41%	46%	18%	54%	57%	2277	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization: 27%		

Utilization Summary: Merrifield

NDUS Utilization Analysis				NDUS Capacity Analysis								
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
MERRIFIELD	10	111	39	65%	0%	65%	40%	26%	86%	50%	367	43%
MERRIFIELD	11	111	46	52%	0%	52%	47%	24%	69%	59%	370	40%
MERRIFIELD	14	111	51	56%	9%	65%	43%	28%	86%	54%	615	46%
MERRIFIELD	19	111	36	49%	0%	49%	62%	30%	65%	77%	362	50%
MERRIFIELD	111	111	36	73%	0%	73%	60%	44%	98%	75%	767	73%
MERRIFIELD	113	111	39	66%	13%	79%	49%	39%	105%	61%	677	64%
MERRIFIELD	114	111	16	71%	0%	71%	113%	80%	95%	141%	577	133%
MERRIFIELD	116	111	49	80%	13%	92%	49%	45%	123%	61%	1207	75%
MERRIFIELD	117	111	48	79%	0%	79%	41%	33%	106%	52%	760	55%
MERRIFIELD	119	111	42	73%	0%	73%	45%	33%	98%	56%	662	54%
MERRIFIELD	121	111	24	11%	0%	11%	50%	6%	15%	63%	7	9%
MERRIFIELD	209	111	54	64%	9%	73%	74%	54%	97%	93%	1311	90%
MERRIFIELD	210	111	33	40%	0%	40%	55%	22%	53%	68%	179	36%
MERRIFIELD	212	111	43	29%	0%	29%	39%	11%	38%	49%	88	19%
MERRIFIELD	214	111	35	20%	0%	20%	39%	8%	26%	49%	32	13%
MERRIFIELD	215	111	46	36%	0%	36%	37%	13%	47%	47%	142	22%
MERRIFIELD	216	160	26	33%	14%	47%	84%	40%	63%	105%	258	66%
MERRIFIELD	217	160	24	13%	7%	20%	90%	18%	27%	113%	36	30%
MERRIFIELD	300	112	176	65%	6%	71%	46%	33%	94%	58%	2583	54%
MERRIFIELD	303	111	42	46%	0%	46%	36%	17%	62%	45%	198	28%
MERRIFIELD	304	111	24	33%	9%	42%	82%	35%	56%	103%	236	58%
MERRIFIELD	305	111	41	43%	0%	43%	47%	20%	57%	58%	259	33%
MERRIFIELD	308	111	40	49%	0%	49%	44%	21%	65%	54%	284	35%
MERRIFIELD	309	111	34	29%	0%	29%	52%	15%	39%	65%	102	25%
MERRIFIELD	311	111	29	32%	0%	32%	56%	18%	42%	70%	120	29%
MERRIFIELD	312	111	31	71%	10%	80%	49%	40%	107%	62%	510	66%
MERRIFIELD	313	111	30	56%	0%	56%	71%	40%	75%	89%	379	67%
MERRIFIELD	306A	130	35	6%	0%	6%	26%	1%	8%	32%	2	2%
Total	28		1169	51%		51%	54%	28%	68%	68%	13091	54%
										Classroom Utilization:		
										54%		

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Montgomery

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
MONTGOMERY	201	111	50	58%	10%	67%	67%	45%	90%	84%	939	75%
MONTGOMERY	316	111	22	26%	0%	26%	65%	17%	34%	82%	31	28%
Total	2		72			47%	66%	31%	62%	83%	970	
NOTE: *Scheduled Seat Count Utilization												Classroom Utilization: 71%

Utilization Summary: Nursing

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
NURSING	102	112	70	42%	0%	42%	65%	27%	56%	81%	283	45%
NURSING	108	112	71	49%	13%	62%	53%	33%	82%	66%	502	54%
NURSING	201	130	60	13%	0%	13%	51%	7%	17%	63%	39	11%
NURSING	202	111	49	32%	7%	39%	46%	18%	52%	57%	265	30%
NURSING	204	111	49	22%	7%	29%	46%	13%	38%	58%	108	22%
NURSING	207	111	10	19%	0%	19%	117%	22%	26%	146%	11	37%
NURSING	210	111	79	50%	7%	57%	35%	20%	76%	44%	448	33%
NURSING	212	111	24	25%	7%	32%	64%	21%	43%	80%	66	34%
NURSING	214	111	26	10%	0%	10%	71%	7%	13%	89%	6	12%
NURSING	216	111	25	28%	0%	28%	57%	16%	38%	71%	33	27%
Total	10		463			33%	60%	18%	44%	75%	1761	
Classroom Utilization:											35%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Odegard

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
OEGARD	102	111	56	67%	0%	67%	56%	37%	89%	70%	734	62%
OEGARD	103	111	44	77%	3%	80%	65%	52%	106%	81%	756	86%
OEGARD	106	111	63	69%	25%	94%	45%	43%	125%	57%	1386	71%
OEGARD	107	111	38	84%	15%	99%	57%	57%	132%	72%	757	95%
OEGARD	111	111	48	61%	0%	61%	66%	40%	81%	83%	644	67%
OEGARD	112	111	55	69%	11%	80%	63%	50%	107%	79%	1480	84%
OEGARD	114	112	127	62%	8%	69%	47%	33%	92%	59%	1735	55%
OEGARD	356	111	38	64%	4%	69%	55%	38%	91%	69%	625	63%
OEGARD	366	111	30	62%	29%	90%	55%	50%	120%	69%	496	83%
Total	9		499			79%	57%	44%	105%	71%	8613	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization: 70%	

Utilization Summary: O'Kelly

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
OKELLY	1	111	53	72%	3%	75%	52%	39%	100%	65%	1004	65%
OKELLY	19	111	54	28%	0%	28%	71%	19%	37%	89%	140	32%
OKELLY	31	111	12	52%	3%	55%	107%	59%	74%	133%	59	98%
OKELLY	32	111	29	130%	0%	130%	52%	68%	173%	66%	329	113%
OKELLY	61	130	181	78%	6%	85%	75%	64%	113%	94%	4993	106%
OKELLY	101	111	34	46%	22%	68%	76%	52%	91%	95%	585	86%
OKELLY	103	111	23	47%	0%	47%	109%	51%	62%	137%	351	85%
OKELLY	116	160	29	19%	0%	19%	62%	11%	25%	78%	33	19%
OKELLY	119	111	35	51%	0%	51%	61%	31%	68%	76%	343	52%
OKELLY	157	111	28	48%	12%	59%	64%	38%	79%	80%	404	63%
OKELLY	201	111	63	38%	0%	38%	45%	17%	50%	56%	265	28%
OKELLY	221	111	30	27%	13%	39%	66%	26%	52%	83%	155	43%
OKELLY	228	120	30	53%	10%	63%	43%	27%	84%	54%	297	45%
OKELLY	301	111	55	46%	15%	61%	57%	35%	81%	71%	604	58%
OKELLY	310	111	36	72%	12%	84%	61%	51%	112%	76%	831	85%
OKELLY	319	120	15	13%	6%	19%	16%	3%	25%	19%	2	5%
OKELLY	334	111	160	53%	7%	61%	48%	29%	81%	60%	1696	48%
Total	17		867			58%	63%	36%	77%	78%	12092	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization:		71%

Utilization Summary: Robertson/Sayre

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
ROBT/SYRE	18	130	21	51%	6%	57%	66%	38%	76%	82%	289	63%
ROBT/SYRE	4B	130	20	30%	0%	30%	60%	18%	40%	74%	71	30%
Total	2		41			43%	63%	28%	58%	78%	360	
NOTE: *Scheduled Seat Count Utilization												Classroom Utilization: 51%

Utilization Summary: Ryan

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
RYAN HALL	124	111	30	67%	0%	67%	51%	34%	89%	64%	238	57%
RYAN HALL	128	111	27	67%	0%	67%	51%	34%	89%	64%	214	57%
RYAN HALL	130	111	30	37%	32%	69%	78%	54%	92%	98%	592	90%
RYAN HALL	132	111	33	14%	25%	39%	47%	18%	52%	58%	250	30%
Total	4		120			60%	57%	35%	80%	71%	1294	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization: 57%		

Utilization Summary: School of Medicine

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
SCH OF MED	1350	112	293	40%	6%	45%	36%	16%	60%	44%	1329	27%
SCH OF MED	B320B	160	38	50%	15%	65%	25%	16%	86%	31%	141	27%
Total	2		331			55%	30%	16%	73%	38%	1470	
Classroom Utilization:											27%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Starcher

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
STARCHER	105	120	44	33%	3%	36%	35%	13%	48%	44%	110	21%
STARCHER	137	160	35	18%	0%	18%	58%	11%	24%	72%	49	18%
STARCHER	141	112	60	41%	7%	49%	44%	22%	65%	56%	388	36%
Total	3		139			34%	46%	15%	46%	57%	547	
Classroom Utilization:											29%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Streibel

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
STREIBEL	106	111	78	57%	0%	57%	54%	31%	76%	68%	846	52%
STREIBEL	108	111	70	40%	0%	40%	51%	20%	53%	63%	378	34%
STREIBEL	238	111	24	36%	0%	36%	40%	14%	47%	50%	79	24%
Total	3		172			44%	48%	22%	59%	60%	1303	
NOTE: *Scheduled Seat Count Utilization											Classroom Utilization: 42%	

Utilization Summary: Upson II

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
UPSON II	161	111	31	5%	0%	5%	19%	1%	6%	24%	1	2%
UPSON II	164	111	23	7%	0%	7%	13%	1%	9%	16%	1	1%
UPSON II	261	140	42	76%	22%	97%	57%	55%	130%	71%	1239	92%
UPSON II	263	111	30	63%	0%	63%	59%	37%	84%	74%	299	62%
Total	4		126			43%	37%	24%	57%	46%	1539	
NOTE: *Scheduled Seat Count Utilization										Classroom Utilization: 80%		

Utilization Summary: Witmer

NDUS Utilization Analysis				NDUS Capacity Analysis							
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU*	Average Classroom Utilization
WITMER	102	111	42	47%	0%	47%	38%	62%	47%	222	29%
WITMER	114	112	95	9%	35%	44%	37%	59%	46%	281	27%
WITMER	115	111	33	45%	0%	45%	105%	60%	131%	518	79%
WITMER	116	112	218	61%	0%	61%	48%	81%	60%	2847	48%
WITMER	117	111	35	67%	0%	67%	98%	89%	123%	988	109%
WITMER	119	111	36	54%	0%	54%	97%	71%	121%	681	86%
WITMER	209	111	30	29%	0%	29%	42%	38%	53%	67	20%
WITMER	211	111	37	58%	0%	58%	42%	77%	53%	347	41%
WITMER	302	130	42	59%	0%	59%	80%	78%	100%	847	78%
WITMER	303	130	36	61%	0%	61%	87%	81%	109%	857	88%
WITMER	305	130	37	63%	0%	63%	91%	83%	114%	912	95%
WITMER	307	130	37	63%	0%	63%	60%	83%	75%	712	62%
WITMER	309	130	37	69%	0%	69%	73%	92%	92%	936	84%
Total	13		715			55%	69%	73%	86%	10216	
NOTE: *Scheduled Seat Count Utilization							Classroom Utilization: 62%				

Appendix I - Space Utilization Data

Section 3: Class Lab Utilization Sorted low to high

Utilization Summary 200 Series Low to High

				NDUS Utilization Analysis						NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization	
CLIFFORD	366	211	18	0%	5%	5%	6%	0%	10%	7%	0.1	1%	
HYSLOP	321	220	15	0%	4%	4%	20%	1%	8%	27%	0.3	2%	
COR/LARIM	239	213	23	7%	0%	7%	13%	1%	13%	17%	1.0	2%	
NURSING	209	220	45	5%	0%	5%	24%	1%	10%	33%	1.4	3%	
ROBT/SYRE	8	211	22	3%	0%	3%	36%	1%	6%	48%	2.1	3%	
UND ARMORY	10	211	102	16%	0%	16%	10%	2%	32%	13%	29.3	4%	
UND ARMORY	106	211	17	10%	0%	10%	22%	2%	20%	29%	2.9	6%	
UND ARMORY	105	211	43	7%	0%	7%	33%	2%	13%	43%	4.8	6%	
ODEGARD	257	211	33	14%	0%	14%	21%	3%	27%	28%	15.1	8%	
STARCHER	135D	211	11	3%	10%	12%	24%	3%	25%	32%	2.6	8%	
BABCOCK	206	212	25	9%	0%	9%	36%	3%	19%	48%	6.6	9%	
SCH OF MED	1551	220	68	5%	0%	5%	76%	4%	10%	102%	6.9	10%	
HYSLOP	360	211	43	0%	5%	5%	79%	4%	10%	105%	4.5	11%	
OKELLY	355	211	27	7%	0%	7%	59%	4%	14%	79%	8.6	11%	
SCH OF MED	1550	211	63	5%	0%	5%	83%	4%	10%	110%	6.9	11%	
HARRINGTON	126	212	10	6%	0%	6%	70%	4%	13%	93%	1.2	12%	
UND ARMORY	101	211	17	8%	0%	8%	59%	4%	15%	78%	4.0	12%	
STARCHER	156	220	26	7%	3%	9%	53%	5%	19%	70%	13.5	13%	
GAMBLE	377	211	21	7%	0%	7%	95%	6%	13%	127%	6.9	16%	
STARCHER	143	220	33	0%	10%	10%	64%	6%	20%	85%	5.6	17%	
HYSLOP	301	220	21	13%	0%	13%	50%	7%	26%	67%	14.5	17%	
LEONARD	108	213	24	13%	0%	13%	54%	7%	25%	72%	13.2	18%	
CLIFFORD	364	211	14	18%	0%	18%	43%	8%	37%	57%	14.6	21%	
NURSING	105	220	26	15%	0%	15%	54%	8%	30%	72%	11.2	21%	
HUGHES	220	220	20	18%	0%	18%	46%	8%	36%	62%	35.4	22%	
UPSON I	112	220	15	15%	0%	15%	57%	9%	30%	75%	6.8	23%	
LAW BLDG	102	220	14	0%	9%	9%	96%	9%	18%	128%	6.4	23%	
STARCHER	225	220	48	22%	0%	22%	40%	9%	44%	53%	89.0	23%	
SCH OF MED	5510	211	49	13%	10%	23%	38%	9%	46%	51%	80.8	24%	
HUGHES	147	220	15	25%	0%	25%	37%	9%	50%	49%	14.6	24%	
LEONARD	201	212	30	19%	0%	19%	50%	10%	38%	67%	30.3	25%	
HYSLOP	317B	220	14	13%	0%	13%	75%	10%	26%	100%	14.5	26%	
STARCHER	148	220	30	16%	0%	16%	64%	10%	31%	85%	47.4	26%	
STREIBEL	107	211	30	27%	0%	27%	38%	10%	53%	50%	144.6	27%	
CLIFFORD	430	212	15	10%	0%	10%	103%	10%	20%	137%	8.0	27%	
LEONARD	211	220	13	22%	0%	22%	45%	10%	45%	60%	31.4	27%	
HUGHES	235	212	26	25%	0%	25%	40%	10%	50%	54%	27.9	27%	
SCH OF MED	B730	212	36	15%	0%	15%	69%	10%	30%	92%	29.9	28%	

Appendix I - 3

Class Lab (200 Series) Utilization Sorted Low to High
2015 Space Utilization Study & Master Plan Phase I

Utilization Summary 200 Series Low to High

				NDUS Utilization Analysis						NDUS Capacity Analysis			
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization	
ABBOTT	215	212	2	7%	0%	7%	150%	11%	15%	200%	0.6	29%	
STARCHER	235	220	56	27%	11%	37%	30%	11%	75%	39%	214.0	29%	
UND ARMORY	102	211	27	16%	0%	16%	75%	12%	31%	100%	50.3	31%	
RYAN HALL	134	211	33	0%	16%	16%	75%	12%	32%	100%	63.0	32%	
HYSLOP	318	212	41	33%	0%	33%	38%	12%	66%	50%	148.1	33%	
GAMBLE	9	211	40	24%	0%	24%	56%	13%	47%	75%	112.5	35%	
HUGHES	129	212	13	13%	0%	13%	108%	13%	25%	143%	9.3	36%	
HYSLOP	110	211	20	25%	0%	25%	54%	13%	50%	72%	64.5	36%	
STARCHER	329	220	28	29%	0%	29%	49%	14%	58%	65%	42.4	38%	
HARRINGTON	220	212	29	24%	5%	29%	49%	14%	59%	65%	66.1	38%	
STARCHER	119	212	31	29%	0%	29%	51%	14%	57%	67%	71.3	38%	
HYSLOP	172	212	43	36%	1%	38%	41%	15%	75%	54%	365.4	40%	
RYAN HALL	111	211	30	53%	30%	83%	20%	16%	166%	26%	314.8	44%	
UPSON I	221	220	27	23%	0%	23%	74%	17%	45%	99%	35.9	44%	
STARCHER	229	220	24	25%	0%	25%	73%	18%	49%	96%	56.7	47%	
HUGHES	107	220	26	25%	13%	38%	51%	19%	75%	68%	79.8	51%	
ABBOTT	314	212	17	20%	0%	20%	100%	20%	39%	133%	17.6	52%	
WITMER	104	212	23	10%	19%	29%	68%	20%	58%	91%	71.9	52%	
SCH OF MED	B732	212	24	20%	0%	20%	100%	20%	40%	133%	51.1	53%	
SCH OF MED	B734	212	24	20%	0%	20%	100%	20%	40%	133%	51.1	53%	
WITMER	112	212	25	24%	5%	29%	71%	20%	57%	94%	80.4	54%	
HUGHES	109	212	31	50%	0%	50%	41%	21%	100%	55%	135.7	55%	
STARCHER	121	213	42	33%	0%	33%	71%	23%	65%	95%	258.5	62%	
ABBOTT	218	212	21	29%	0%	29%	87%	25%	58%	116%	56.3	67%	
STARCHER	123	212	36	31%	5%	36%	73%	26%	73%	97%	253.6	70%	
STREIBEL	115	213	36	18%	40%	58%	47%	27%	116%	63%	421.2	73%	
HARRINGTON	222	212	15	24%	5%	29%	94%	28%	59%	126%	66.1	73%	
NURSING	107	220	28	44%	0%	44%	63%	28%	88%	84%	124.1	74%	
CHANDLER	108	220	23	47%	0%	47%	60%	28%	93%	80%	309.2	75%	
HUGHES	111	212	36	34%	21%	55%	52%	28%	109%	69%	269.6	75%	
OKELLY	125	212	24	54%	5%	59%	51%	30%	118%	67%	248.4	80%	
HUGHES	119	212	12	38%	0%	38%	83%	31%	75%	111%	59.9	83%	
HYSLOP	316	212	63	65%	30%	95%	41%	39%	190%	54%	1955.1	103%	
HUGHES	149	220	25	38%	25%	63%	70%	44%	125%	94%	292.6	117%	
SCH OF MED	B727	220	24	22%	0%	22%	217%	47%	44%	288%	90.3	125%	
ABBOTT	347	220	25	58%	7%	65%	76%	49%	131%	100%	295.1	131%	
SCH OF MED	B724	220	52	30%	20%	50%	105%	53%	100%	140%	728.8	140%	
ABBOTT	341	212	24	51%	7%	58%	92%	53%	116%	122%	271.5	141%	

Utilization Summary 200 Series Low to High

Building	Room Number	Space Use Code	Seat/Station Count	NDUS Utilization Analysis				NDUS Capacity Analysis				
				% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
ABBOTT	349	212	19	61%	7%	69%	79%	54%	137%	105%	383.7	144%
WITMER	110	212	25	52%	24%	76%	73%	55%	152%	97%	590.3	148%
UPSON I	222	213	32	60%	8%	68%	100%	68%	135%	133%	1036.0	180%
ABBOTT	204	212	24	66%	7%	73%	93%	68%	146%	124%	435.0	181%
HUGHES	113	212	22	76%	25%	101%	83%	83%	201%	110%	879.5	222%
STARCHER	125	212	37	65%	35%	100%	90%	90%	200%	120%	1779.5	240%
ABBOTT	131	212	25	80%	22%	102%	97%	98%	203%	128%	912.6	261%
ABBOTT	139	212	25	87%	22%	109%	97%	105%	218%	128%	1047.2	279%

Appendix I - Space Utilization Data

Section 4: Class Lab Utilization Sorted by Building and Room

Utilization Summary: Abbott

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
ABBOTT	131	212	25	80%	22%	102%	97%	98%	203%	128%	912.6	261%
ABBOTT	139	212	25	87%	22%	109%	97%	105%	218%	128%	1047.2	279%
ABBOTT	204	212	24	66%	7%	73%	93%	68%	146%	124%	435.0	181%
ABBOTT	215	212	2	7%	0%	7%	150%	11%	15%	200%	0.6	29%
ABBOTT	218	212	21	29%	0%	29%	87%	25%	58%	116%	56.3	67%
ABBOTT	314	212	17	20%	0%	20%	100%	20%	39%	133%	17.6	52%
ABBOTT	341	212	24	51%	7%	58%	92%	53%	116%	122%	271.5	141%
ABBOTT	347	220	25	58%	7%	65%	76%	49%	131%	100%	295.1	131%
ABBOTT	349	212	19	61%	7%	69%	79%	54%	137%	105%	383.7	144%
Total:	9		182		Average:	59%	97%	54%	118%	128%	3419.6	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 193%

Utilization Summary: Babcock

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
BABCOCK	206	212	25	9%	0%	9%	36%	3%	19%	48%	6.6	9%
Total:	1		25		Average:	9%	36%	3%	19%	48%	6.6	9%
NOTE: *Scheduled Seat Count Utilization												
Class Lab Utilization: 9%												

Utilization Summary: Chandler

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
CHANDLER	108	220	23	47%	0%	47%	60%	28%	93%	80%	309.2	75%
Total:	1		23		Average:	47%	60%	28%	93%	80%	309.2	75%
NOTE: *Scheduled Seat Count Utilization												
Class Lab Utilization: 75%												

Utilization Summary: Clifford

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
CLIFFORD	364	211	14	18%	0%	18%	43%	8%	37%	57%	14.6	21%
CLIFFORD	366	211	18	0%	5%	5%	6%	0%	10%	7%	0.1	1%
CLIFFORD	430	212	15	10%	0%	10%	103%	10%	20%	137%	8.0	27%
Total:	3		47		Average:	11%	51%	6%	22%	67%	22.7	
Class Lab Utilization:												19%

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Corwin/Larimore

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
COR/LARIM	239	213	23	7%	0%	7%	13%	1%	13%	17%	1.0	2%
Total:	1		23		Average:	7%	13%	1%	13%	17%	1.0	2%

NOTE: *Scheduled Seat Count Utilization

Class Lab Utilization: **2%**

Utilization Summary: Gamble

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
GAMBLE	9	211	40	24%	0%	24%	56%	13%	47%	75%	112.5	35%
GAMBLE	377	211	21	7%	0%	7%	95%	6%	13%	127%	6.9	16%
Total:			61	Average:		15%	76%	10%	30%	101%	119.4	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 33%

Utilization Summary: Harrington

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
HARRINGTON	126	212	10	6%	0%	6%	70%	4%	13%	93%	1.2	12%
HARRINGTON	220	212	29	24%	5%	29%	49%	14%	59%	65%	66.1	38%
HARRINGTON	222	212	15	24%	5%	29%	94%	28%	59%	126%	66.1	73%
Total:	3		54		Average:	22%	71%	15%	43%	95%	133.4	
Class Lab Utilization: 49%												

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Hughes

NDUS Utilization Analysis				NDUS Capacity Analysis								
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
HUGHES	107	220	26	25%	13%	38%	51%	19%	75%	68%	79.8	51%
HUGHES	109	212	31	50%	0%	50%	41%	21%	100%	55%	135.7	55%
HUGHES	111	212	36	34%	21%	55%	52%	28%	109%	69%	269.6	75%
HUGHES	113	212	22	76%	25%	101%	83%	83%	201%	110%	879.5	222%
HUGHES	119	212	12	38%	0%	38%	83%	31%	75%	111%	59.9	83%
HUGHES	128	221	115	60%	19%	79%	32%	25%	157%	42%	2052.6	66%
HUGHES	129	212	13	13%	0%	13%	108%	13%	25%	143%	9.3	36%
HUGHES	147	220	15	25%	0%	25%	37%	9%	50%	49%	14.6	24%
HUGHES	148	221	10	9%	0%	9%	93%	8%	18%	123%	8.9	22%
HUGHES	149	220	25	38%	25%	63%	70%	44%	125%	94%	292.6	117%
HUGHES	152	221	79	50%	0%	50%	45%	22%	99%	60%	845.3	59%
HUGHES	220	220	20	18%	0%	18%	46%	8%	36%	62%	35.4	22%
HUGHES	235	212	26	25%	0%	25%	40%	10%	50%	54%	27.9	27%
Total:	13		430		Average:	43%	60%	25%	86%	80%	4711.2	
Class Lab Utilization:											74%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Hyslop

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
HYSLOP	110	211	20	25%	0%	25%	54%	13%	50%	72%	64.5	36%
HYSLOP	172	212	43	36%	1%	38%	41%	15%	75%	54%	365.4	40%
HYSLOP	301	220	21	13%	0%	13%	50%	7%	26%	67%	14.5	17%
HYSLOP	316	212	63	65%	30%	95%	41%	39%	190%	54%	1955.1	103%
HYSLOP	318	212	41	33%	0%	33%	38%	12%	66%	50%	148.1	33%
HYSLOP	321	220	15	0%	4%	4%	20%	1%	8%	27%	0.3	2%
HYSLOP	360	211	43	0%	5%	5%	79%	4%	10%	105%	4.5	11%
HYSLOP	317B	220	14	13%	0%	13%	75%	10%	26%	100%	14.5	26%
Total:	8		260		Average:	28%	50%	13%	56%	66%	2566.9	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 71%

Utilization Summary: Law

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
LAW BLDG	102	220	14	0%	9%	9%	96%	9%	18%	128%	6.4	23%
Total:	1		14		Average:	9%	96%	9%	18%	128%	6.4	23%
NOTE: *Scheduled Seat Count Utilization												
Class Lab Utilization: 23%												

Utilization Summary: Leonard

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
LEONARD	108	213	24	13%	0%	13%	54%	7%	25%	72%	13.2	18%
LEONARD	201	212	30	19%	0%	19%	50%	10%	38%	67%	30.3	25%
LEONARD	211	220	13	22%	0%	22%	45%	10%	45%	60%	31.4	27%
Total:	3		67		Average:	18%	50%	9%	36%	66%	74.9	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 24%

Utilization Summary: Nursing

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
NURSING	105	220	26	15%	0%	15%	54%	8%	30%	72%	11.2	21%
NURSING	107	220	28	44%	0%	44%	63%	28%	88%	84%	124.1	74%
NURSING	209	220	45	5%	0%	5%	24%	1%	10%	33%	1.4	3%
Total:	3		99		Average:	21%	47%	12%	43%	63%	136.6	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 52%

Utilization Summary: Odegard

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
ODEGARD	257	211	33	14%	0%	14%	21%	3%	27%	28%	15.1	8%
Total:	1		33		Average:	14%	21%	3%	27%	28%	15.1	8%
NOTE: *Scheduled Seat Count Utilization												
Class Lab Utilization: 8%												

Utilization Summary: O'Kelly

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
O'KELLY	125	212	24	54%	5%	59%	51%	30%	118%	67%	248.4	80%
O'KELLY	355	211	27	7%	0%	7%	59%	4%	14%	79%	8.6	11%
Total:			2		Average:	33%	55%	17%	66%	73%	257.0	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 65%

Utilization Summary: Robertson/Sayre

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
ROBT/SYRE	8	211	22	3%	0%	3%	36%	1%	6%	48%	2.1	3%
Total:	1		22		Average:	3%	36%	1%	6%	48%	2.1	3%
NOTE: *Scheduled Seat Count Utilization Class Lab Utilization: 3%												

Utilization Summary: Ryan

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
RYAN HALL	111	211	30	53%	30%	83%	20%	16%	166%	26%	314.8	44%
RYAN HALL	134	211	33	0%	16%	16%	75%	12%	32%	100%	63.0	32%
Total:	2		63		Average:	49%	48%	14%	99%	63%	377.8	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 41%

Utilization Summary: School of Medicine

NDUS Utilization Analysis				NDUS Capacity Analysis								
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
SCH OF MED	1550	211	63	5%	0%	5%	83%	4%	10%	110%	6.9	11%
SCH OF MED	1551	220	68	5%	0%	5%	76%	4%	10%	102%	6.9	10%
SCH OF MED	5510	211	49	13%	10%	23%	38%	9%	46%	51%	80.8	24%
SCH OF MED	B724	220	52	30%	20%	50%	105%	53%	100%	140%	728.8	140%
SCH OF MED	B727	220	24	22%	0%	22%	217%	47%	44%	288%	90.3	125%
SCH OF MED	B730	212	36	15%	0%	15%	69%	10%	30%	92%	29.9	28%
SCH OF MED	B732	212	24	20%	0%	20%	100%	20%	40%	133%	51.1	53%
SCH OF MED	B734	212	24	20%	0%	20%	100%	20%	40%	133%	51.1	53%
Total:	8		340		Average:	20%	99%	21%	40%	131%	1045.8	
Class Lab Utilization:											77%	

NOTE: *Scheduled Seat Count Utilization

Utilization Summary: Starcher

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
STARCHER	119	212	31	29%	0%	29%	51%	14%	57%	67%	71.3	38%
STARCHER	121	213	42	33%	0%	33%	71%	23%	65%	95%	258.5	62%
STARCHER	123	212	36	31%	5%	36%	73%	26%	73%	97%	253.6	70%
STARCHER	125	212	37	65%	35%	100%	90%	90%	200%	120%	1779.5	240%
STARCHER	143	220	33	0%	10%	10%	64%	6%	20%	85%	5.6	17%
STARCHER	148	220	30	16%	0%	16%	64%	10%	31%	85%	47.4	26%
STARCHER	156	220	26	7%	3%	9%	53%	5%	19%	70%	13.5	13%
STARCHER	225	220	48	22%	0%	22%	40%	9%	44%	53%	89.0	23%
STARCHER	229	220	24	25%	0%	25%	73%	18%	49%	96%	56.7	47%
STARCHER	235	220	56	27%	11%	37%	30%	11%	75%	39%	214.0	29%
STARCHER	329	220	28	29%	0%	29%	49%	14%	58%	65%	42.4	38%
STARCHER	135D	211	11	3%	10%	12%	24%	3%	25%	32%	2.6	8%
Total:	12		402		Average:	30%	57%	19%	60%	75%	2834.1	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 83%

Utilization Summary: Streibel

			NDUS Utilization Analysis				NDUS Capacity Analysis					
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
STREIBEL	107	211	30	27%	0%	27%	38%	10%	53%	50%	144.6	27%
STREIBEL	115	213	36	18%	40%	58%	47%	27%	116%	63%	421.2	73%
Total:			2		Average:	42%	43%	19%	85%	57%	565.8	
<p>NOTE: *Scheduled Seat Count Utilization</p> <p style="text-align: right;">Class Lab Utilization: 51%</p>												

Utilization Summary: Armory

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
UND ARMORY	10	211	102	16%	0%	16%	10%	2%	32%	13%	29.3	4%
UND ARMORY	101	211	17	8%	0%	8%	59%	4%	15%	78%	4.0	12%
UND ARMORY	102	211	27	16%	0%	16%	75%	12%	31%	100%	50.3	31%
UND ARMORY	105	211	43	7%	0%	7%	33%	2%	13%	43%	4.8	6%
UND ARMORY	106	211	17	10%	0%	10%	22%	2%	20%	29%	2.9	6%
Total:	5		206		Average:	11%	40%	4%	22%	53%	91.3	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 9%

Utilization Summary: Upson I

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
UPSON I	112	220	15	15%	0%	15%	57%	9%	30%	75%	6.8	23%
UPSON I	221	220	27	23%	0%	23%	74%	17%	45%	99%	35.9	44%
UPSON I	222	213	32	60%	8%	68%	100%	68%	135%	133%	1036.0	180%
Total:	3		74		Average:	35%	77%	31%	70%	102%	1078.7	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 157%

Utilization Summary: Witmer

				NDUS Utilization Analysis				NDUS Capacity Analysis				
Building	Room Number	Space Use Code	Seat/Station Count	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Seat/Station Utilization	Average Utilization	Schedule Capacity	Occupancy Capacity	SSCU *	Average Class Lab Utilization
WITMER	104	212	23	10%	19%	29%	68%	20%	58%	91%	71.9	52%
WITMER	110	212	25	52%	24%	76%	73%	55%	152%	97%	590.3	148%
WITMER	112	212	25	24%	5%	29%	71%	20%	57%	94%	80.4	54%
Total:	3		73		Average:	44%	71%	32%	89%	94%	742.6	
NOTE: *Scheduled Seat Count Utilization												Class Lab Utilization: 108%

Appendix I - Space Utilization Data

Section 5: Events Utilization Sorted by total Change in Utilization



Utilization Summary: Event Utilization Sorted total Change in Utilization

Sorted by Change in Utilization %			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Difference in Utilization
MERRIFIELD	121	111	392	11%	0%	11%	93%	0%	93%	82.4%
OKELY	115	111	483	0%	0%	0%	80%	0%	80%	79.5%
OKELY	319	120	484	13%	6%	19%	84%	7%	91%	72.2%
UPSON II	161	111	447	5%	0%	5%	51%	0%	51%	46.5%
WITMER	209	111	611	29%	0%	29%	70%	0%	70%	41.5%
LEONARD	100	112	2200	58%	0%	58%	80%	12%	92%	34.7%
MERRIFIELD	214	111	588	20%	0%	20%	50%	0%	50%	30.7%
EDUCATION	7	112	2249	38%	8%	45%	39%	35%	75%	29.5%
UPSON II	164	111	449	7%	0%	7%	33%	0%	33%	26.3%
OKELY	221	111	570	27%	13%	39%	51%	13%	64%	24.5%
OKELY	19	111	916	28%	0%	28%	52%	0%	52%	24.4%
BABCOCK	108	111	603	33%	0%	33%	40%	14%	54%	21.3%
LEONARD	112	111	838	32%	5%	37%	53%	5%	58%	20.9%
WITMER	114	112	1313	9%	35%	44%	16%	46%	62%	17.7%
WITMER	115	111	589	45%	0%	45%	52%	10%	61%	16.2%
WITMER	119	111	586	54%	0%	54%	59%	10%	69%	15.4%
STARCHER	225	220	865	22%	0%	22%	34%	3%	37%	15.1%
WITMER	116	112	2890	61%	0%	61%	61%	13%	73%	12.7%
EDUCATION	113	112	2360	44%	4%	48%	51%	9%	59%	11.2%
MERRIFIELD	216	160	588	33%	14%	47%	43%	15%	58%	10.3%
WITMER	102	111	685	47%	0%	47%	47%	10%	57%	10.1%
WITMER	307	130	605	63%	0%	63%	63%	10%	72%	10.0%
MERRIFIELD	300	112	1650	65%	6%	71%	65%	15%	81%	9.8%
WITMER	309	130	611	69%	0%	69%	69%	10%	79%	9.7%
WITMER	117	111	579	67%	0%	67%	67%	10%	76%	9.5%
WITMER	305	130	605	63%	0%	63%	63%	10%	72%	9.5%
WITMER	302	130	696	59%	0%	59%	59%	10%	68%	9.5%
WITMER	303	130	606	61%	0%	61%	61%	10%	70%	9.5%
LEONARD	110	111	843	17%	0%	17%	26%	0%	26%	9.3%
OKELY	1	111	894	72%	3%	75%	79%	3%	82%	7.2%
OKELY	228	120	576	53%	10%	63%	60%	10%	70%	7.2%
LEONARD	107	111	847	37%	0%	37%	44%	0%	44%	6.8%
OKELY	201	111	882	38%	0%	38%	44%	0%	44%	6.7%
COR/LARIM	302	130	1388	42%	18%	60%	42%	24%	66%	6.7%
MERRIFIELD	312	111	633	71%	10%	80%	76%	10%	85%	5.3%
ABBOTT	138	112	983	63%	0%	63%	65%	3%	68%	5.3%

Utilization Summary: Event Utilization Sorted total Change in Utilization

Sorted by Change in Utilization %			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Difference in Utilization
HARRINGTON	324	112	1145	83%	7%	90%	84%	11%	95%	4.9%
STARCHER	123	212	983	31%	5%	36%	36%	5%	41%	4.8%
EDUCATION	5	111	1059	33%	32%	65%	37%	33%	70%	4.5%
UPSON I	218	213	726				4%	0%	4%	4.3%
OKELY	61	130	3594	78%	6%	85%	79%	10%	89%	4.1%
OKELY	301	111	611	46%	15%	61%	50%	15%	64%	3.3%
GILLETTE	101	111	709	39%	17%	56%	39%	20%	59%	3.0%
WITMER	211	111	779	58%	0%	58%	58%	3%	61%	3.0%
LEONARD	109	111	1682	61%	0%	61%	62%	2%	64%	2.9%
OKELY	103	111	563	47%	0%	47%	47%	3%	49%	2.9%
OKELY	334	111	1508	53%	7%	61%	54%	9%	63%	2.7%
EDUCATION	114	111	576	27%	45%	71%	27%	47%	74%	2.4%
GAMBLE	1	112	2916	67%	0%	67%	67%	2%	69%	2.4%
MERRIFIELD	313	111	688	56%	0%	56%	57%	2%	59%	2.4%
ABBOTT	101	111	1859	82%	19%	101%	82%	21%	103%	2.3%
MERRIFIELD	10	111	588	65%	0%	65%	65%	2%	67%	2.3%
HARRINGTON	108	130	609	66%	0%	66%	67%	2%	68%	2.2%
GAMBLE	5	112	1440	60%	7%	66%	60%	8%	68%	1.7%
GAMBLE	7	111	2914	68%	0%	68%	68%	1%	69%	1.7%
UPSON II	263	111	463	63%	0%	63%	65%	0%	65%	1.7%
GAMBLE	145	111	1162	35%	22%	57%	36%	22%	58%	1.6%
MONTGOMERY	201	111	840	58%	10%	67%	58%	11%	69%	1.1%
HARRINGTON	218	140	950	88%	7%	95%	88%	8%	96%	1.1%
UPSON II	261	140	1026	76%	22%	98%	77%	22%	99%	1.1%
MERRIFIELD	217	160	588	13%	7%	20%	14%	7%	21%	1.1%
NURSING	201	130	475	13%	0%	13%	14%	0%	14%	0.9%
MERRIFIELD	114	111	514	71%	0%	71%	72%	0%	72%	0.8%
HARRINGTON	204	140	646	61%	0%	61%	61%	1%	61%	0.8%
OKELY	101	111	881	46%	22%	68%	47%	22%	69%	0.8%
UPSON I	222	213	1153	60%	8%	68%	61%	8%	68%	0.7%
ABBOTT	201	111	773	82%	7%	89%	82%	8%	90%	0.6%
HARRINGTON	217	140	919	74%	7%	81%	74%	7%	81%	0.6%
MONTGOMERY	316	111	704	26%	0%	26%	26%	0%	26%	0.5%
MERRIFIELD	117	111	589	79%	0%	79%	80%	0%	80%	0.5%
EDUCATION	9	111	602	27%	32%	58%	27%	32%	59%	0.5%
MERRIFIELD	212	111	588	29%	0%	29%	29%	0%	29%	0.5%

Appendix I - 5

Events Utilization Sorted by Change in Utilization

Utilization Summary: Event Utilization Sorted total Change in Utilization

Sorted by Change in Utilization %			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	Difference in Utilization
OKELY	157	111	630	48%	12%	59%	48%	12%	60%	0.3%
EDUCATION	16	111	568	62%	22%	84%	62%	22%	84%	0.3%
MERRIFIELD	304	111	587	33%	9%	42%	33%	9%	43%	0.3%
EDUCATION	294	111	638	40%	19%	59%	40%	19%	59%	0.3%
MERRIFIELD	113	111	583	66%	13%	79%	66%	13%	79%	0.3%
MERRIFIELD	116	111	777	80%	13%	92%	80%	13%	92%	0.2%
OKELY	310	111	821	72%	12%	84%	72%	12%	84%	0.2%
EDUCATION	22	111	832	19%	5%	24%	19%	5%	24%	0.2%
EDUCATION	109	111	776	60%	13%	73%	60%	13%	73%	0.2%
STARCHER	105	120	524	33%	3%	36%	33%	3%	36%	0.2%
LEONARD	211	220	563	22%	0%	22%	22%	0%	22%	0.2%
LEONARD	214	111	918	23%	0%	23%	23%	0%	23%	0.2%
ABBOTT	115	111	752	25%	0%	25%	25%	0%	25%	0.0%
ABBOTT	204	212	988	66%	7%	73%	66%	7%	73%	0.0%
ABBOTT	218	212	898	29%	0%	29%	29%	0%	29%	0.0%
COR/LARIM	103	111	557	32%	0%	32%	32%	0%	32%	0.0%
COR/LARIM	108	111	565	29%	0%	29%	29%	0%	29%	0.0%
EDUCATION	103	120	335	6%	22%	28%	6%	22%	28%	0.0%
EDUCATION	112	111	619	27%	48%	75%	27%	48%	75%	0.0%
EDUCATION	115	111	732	40%	23%	62%	40%	23%	62%	0.0%
GAMBLE	9	211	987	24%	0%	24%	24%	0%	24%	0.0%
GAMBLE	225	140	900	66%	21%	88%	66%	21%	88%	0.0%
GILLETTE	303	111	1047	51%	0%	51%	51%	0%	51%	0.0%
HARRINGTON	222	212	421	24%	5%	29%	24%	5%	29%	0.0%
LEONARD	108	213	848	13%	0%	13%	13%	0%	13%	0.0%
LEONARD	201	212	921	19%	0%	19%	19%	0%	19%	0.0%
MERRIFIELD	19	111	588	49%	0%	49%	49%	0%	49%	0.0%
MERRIFIELD	119	111	589	73%	0%	73%	73%	0%	73%	0.0%
MERRIFIELD	209	111	688	64%	9%	73%	64%	9%	73%	0.0%
MERRIFIELD	303	111	588	46%	0%	46%	46%	0%	46%	0.0%
MERRIFIELD	305	111	588	43%	0%	43%	43%	0%	43%	0.0%
MERRIFIELD	309	111	588	29%	0%	29%	29%	0%	29%	0.0%
NURSING	102	112	1007	42%	0%	42%	42%	0%	42%	0.0%
NURSING	105	220	755	15%	0%	15%	15%	0%	15%	0.0%
NURSING	107	220	1341	44%	0%	44%	44%	0%	44%	0.0%
NURSING	108	112	1007	49%	13%	62%	49%	13%	62%	0.0%

Appendix I - 5

Events Utilization Sorted by Change in Utilization

Utilization Summary: Event Utilization Sorted total Change in Utilization

Sorted by Change in Utilization %			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours		% Utilization Total
NURSING	204	111	751	22%	7%	29%	22%	7%	29%	0.0%
NURSING	209	220	867	5%	0%	5%	5%	0%	5%	0.0%
NURSING	212	111	498	25%	7%	32%	25%	7%	32%	0.0%
NURSING	214	111	498	10%	0%	10%	10%	0%	10%	0.0%
NURSING	216	111	476	28%	0%	28%	28%	0%	28%	0.0%
OKELLY	116	160	1049	19%	0%	19%	19%	0%	19%	0.0%
OKELLY	119	111	622	51%	0%	51%	51%	0%	51%	0.0%
STARCHER	119	212	929	29%	0%	29%	29%	0%	29%	0.0%
STARCHER	121	213	865	33%	0%	33%	33%	0%	33%	0.0%
UPSON I	112	220	3130	15%	0%	15%	15%	0%	15%	0.0%
UPSON I	221	220	932	23%	0%	23%	23%	0%	23%	0.0%
WITMER	110	212	782	52%	24%	76%	52%	24%	76%	0.0%
WITMER	112	212	793	24%	5%	29%	24%	5%	29%	0.0%

Appendix I - Space Utilization Data

Section 6: Events Utilization Sorted by Building and Room

Utilization Summary: Event Utilization Sorted by Building and Room

Sorted by Building & Room			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	
ABBOTT	101	111	1859	82%	19%	101%	82%	21%	103%	2.3%
ABBOTT	115	111	752	25%	0%	25%	25%	0%	25%	0.0%
ABBOTT	138	112	983	63%	0%	63%	65%	3%	68%	5.3%
ABBOTT	201	111	773	82%	7%	89%	82%	8%	90%	0.6%
ABBOTT	204	212	988	66%	7%	73%	66%	7%	73%	0.0%
ABBOTT	218	212	898	29%	0%	29%	29%	0%	29%	0.0%
BABCOCK	108	111	603	33%	0%	33%	40%	14%	54%	21.3%
COR/LARIM	103	111	557	32%	0%	32%	32%	0%	32%	0.0%
COR/LARIM	108	111	565	29%	0%	29%	29%	0%	29%	0.0%
COR/LARIM	302	130	1388	42%	18%	60%	42%	24%	66%	6.7%
EDUCATION	5	111	1059	33%	32%	65%	37%	33%	70%	4.5%
EDUCATION	7	112	2249	38%	8%	45%	39%	35%	75%	29.5%
EDUCATION	9	111	602	27%	32%	58%	27%	32%	59%	0.5%
EDUCATION	16	111	568	62%	22%	84%	62%	22%	84%	0.3%
EDUCATION	22	111	832	19%	5%	24%	19%	5%	24%	0.2%
EDUCATION	103	120	335	6%	22%	28%	6%	22%	28%	0.0%
EDUCATION	109	111	776	60%	13%	73%	60%	13%	73%	0.2%
EDUCATION	112	111	619	27%	48%	75%	27%	48%	75%	0.0%
EDUCATION	113	112	2360	44%	4%	48%	51%	9%	59%	11.2%
EDUCATION	114	111	576	27%	45%	71%	27%	47%	74%	2.4%
EDUCATION	115	111	732	40%	23%	62%	40%	23%	62%	0.0%
EDUCATION	294	111	638	40%	19%	59%	40%	19%	59%	0.3%
GAMBLE	1	112	2916	67%	0%	67%	67%	2%	69%	2.4%
GAMBLE	5	112	1440	60%	7%	66%	60%	8%	68%	1.7%
GAMBLE	7	111	2914	68%	0%	68%	68%	1%	69%	1.7%
GAMBLE	9	211	987	24%	0%	24%	24%	0%	24%	0.0%
GAMBLE	145	111	1162	35%	22%	57%	36%	22%	58%	1.6%
GAMBLE	225	140	900	66%	21%	88%	66%	21%	88%	0.0%
GILLETTE	101	111	709	39%	17%	56%	39%	20%	59%	3.0%
GILLETTE	303	111	1047	51%	0%	51%	51%	0%	51%	0.0%
HARRINGTON	108	130	609	66%	0%	66%	67%	2%	68%	2.2%
HARRINGTON	204	140	646	61%	0%	61%	61%	1%	61%	0.8%
HARRINGTON	217	140	919	74%	7%	81%	74%	7%	81%	0.6%
HARRINGTON	218	140	950	88%	7%	95%	88%	8%	96%	1.1%
HARRINGTON	222	212	421	24%	5%	29%	24%	5%	29%	0.0%
HARRINGTON	324	112	1145	83%	7%	90%	84%	11%	95%	4.9%

Utilization Summary: Event Utilization Sorted by Building and Room

Sorted by Building & Room			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	
LEONARD	100	112	2200	58%	0%	58%	80%	12%	92%	34.7%
LEONARD	107	111	847	37%	0%	37%	44%	0%	44%	6.8%
LEONARD	108	213	848	13%	0%	13%	13%	0%	13%	0.0%
LEONARD	109	111	1682	61%	0%	61%	62%	2%	64%	2.9%
LEONARD	110	111	843	17%	0%	17%	26%	0%	26%	9.3%
LEONARD	112	111	838	32%	5%	37%	53%	5%	58%	20.9%
LEONARD	201	212	921	19%	0%	19%	19%	0%	19%	0.0%
LEONARD	211	220	563	22%	0%	22%	22%	0%	22%	0.2%
LEONARD	214	111	918	23%	0%	23%	23%	0%	23%	0.2%
MERRIFIELD	10	111	588	65%	0%	65%	65%	2%	67%	2.3%
MERRIFIELD	19	111	588	49%	0%	49%	49%	0%	49%	0.0%
MERRIFIELD	113	111	583	66%	13%	79%	66%	13%	79%	0.3%
MERRIFIELD	114	111	514	71%	0%	71%	72%	0%	72%	0.8%
MERRIFIELD	116	111	777	80%	13%	92%	80%	13%	92%	0.2%
MERRIFIELD	117	111	589	79%	0%	79%	80%	0%	80%	0.5%
MERRIFIELD	119	111	589	73%	0%	73%	73%	0%	73%	0.0%
MERRIFIELD	121	111	392	11%	0%	11%	93%	0%	93%	82.4%
MERRIFIELD	209	111	688	64%	9%	73%	64%	9%	73%	0.0%
MERRIFIELD	212	111	588	29%	0%	29%	29%	0%	29%	0.5%
MERRIFIELD	214	111	588	20%	0%	20%	50%	0%	50%	30.7%
MERRIFIELD	216	160	588	33%	14%	47%	43%	15%	58%	10.3%
MERRIFIELD	217	160	588	13%	7%	20%	14%	7%	21%	1.1%
MERRIFIELD	300	112	1650	65%	6%	71%	65%	15%	81%	9.8%
MERRIFIELD	303	111	588	46%	0%	46%	46%	0%	46%	0.0%
MERRIFIELD	304	111	587	33%	9%	42%	33%	9%	43%	0.3%
MERRIFIELD	305	111	588	43%	0%	43%	43%	0%	43%	0.0%
MERRIFIELD	309	111	588	29%	0%	29%	29%	0%	29%	0.0%
MERRIFIELD	312	111	633	71%	10%	80%	76%	10%	85%	5.3%
MERRIFIELD	313	111	688	56%	0%	56%	57%	2%	59%	2.4%
MONTGOMERY	201	111	840	58%	10%	67%	58%	11%	69%	1.1%
MONTGOMERY	316	111	704	26%	0%	26%	26%	0%	26%	0.5%
NURSING	102	112	1007	42%	0%	42%	42%	0%	42%	0.0%
NURSING	105	220	755	15%	0%	15%	15%	0%	15%	0.0%
NURSING	107	220	1341	44%	0%	44%	44%	0%	44%	0.0%
NURSING	108	112	1007	49%	13%	62%	49%	13%	62%	0.0%
NURSING	201	130	475	13%	0%	13%	14%	0%	14%	0.9%

Utilization Summary: Event Utilization Sorted by Building and Room

Sorted by Building & Room			Without Events Added			With Events Added			Difference in Utilization	
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	
NURSING	204	111	751	22%	7%	29%	22%	7%	29%	0.0%
NURSING	209	220	867	5%	0%	5%	5%	0%	5%	0.0%
NURSING	212	111	498	25%	7%	32%	25%	7%	32%	0.0%
NURSING	214	111	498	10%	0%	10%	10%	0%	10%	0.0%
NURSING	216	111	476	28%	0%	28%	28%	0%	28%	0.0%
OKELY	1	111	894	72%	3%	75%	79%	3%	82%	7.2%
OKELY	19	111	916	28%	0%	28%	52%	0%	52%	24.4%
OKELY	61	130	3594	78%	6%	85%	79%	10%	89%	4.1%
OKELY	101	111	881	46%	22%	68%	47%	22%	69%	0.8%
OKELY	103	111	563	47%	0%	47%	47%	3%	49%	2.9%
OKELY	115	111	483	0%	0%	0%	80%	0%	80%	79.5%
OKELY	116	160	1049	19%	0%	19%	19%	0%	19%	0.0%
OKELY	119	111	622	51%	0%	51%	51%	0%	51%	0.0%
OKELY	157	111	630	48%	12%	59%	48%	12%	60%	0.3%
OKELY	201	111	882	38%	0%	38%	44%	0%	44%	6.7%
OKELY	221	111	570	27%	13%	39%	51%	13%	64%	24.5%
OKELY	228	120	576	53%	10%	63%	60%	10%	70%	7.2%
OKELY	301	111	611	46%	15%	61%	50%	15%	64%	3.3%
OKELY	310	111	821	72%	12%	84%	72%	12%	84%	0.2%
OKELY	319	120	484	13%	6%	19%	84%	7%	91%	72.2%
OKELY	334	111	1508	53%	7%	61%	54%	9%	63%	2.7%
STARCHER	105	120	524	33%	3%	36%	33%	3%	36%	0.2%
STARCHER	119	212	929	29%	0%	29%	29%	0%	29%	0.0%
STARCHER	121	213	865	33%	0%	33%	33%	0%	33%	0.0%
STARCHER	123	212	983	31%	5%	36%	36%	5%	41%	4.8%
STARCHER	225	220	865	22%	0%	22%	34%	3%	37%	15.1%
UPSON I	112	220	3130	15%	0%	15%	15%	0%	15%	0.0%
UPSON I	218	213	726	0%	0%	0%	4%	0%	4%	4.3%
UPSON I	221	220	932	23%	0%	23%	23%	0%	23%	0.0%
UPSON I	222	213	1153	60%	8%	68%	61%	8%	68%	0.7%
UPSON II	161	111	447	5%	0%	5%	51%	0%	51%	46.5%
UPSON II	164	111	449	7%	0%	7%	33%	0%	33%	26.3%
UPSON II	261	140	1026	76%	22%	98%	77%	22%	99%	1.1%
UPSON II	263	111	463	63%	0%	63%	65%	0%	65%	1.7%
WITMER	102	111	685	47%	0%	47%	47%	10%	57%	10.1%
WITMER	110	212	782	52%	24%	76%	52%	24%	76%	0.0%

Appendix I - 6

Events Utilization Sorted by Building and Room

Utilization Summary: Event Utilization Sorted by Building and Room

Sorted by Building & Room			Without Events Added				With Events Added				Difference in Utilization
Building	ROOM	Space Use Code	ASF	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total	% Utilization Core Hours	% Utilization Other Hours	% Utilization Total		
WITMER	112	212	793	24%	5%	29%	24%	5%	29%	0.0%	
WITMER	114	112	1313	9%	35%	44%	16%	46%	62%	17.7%	
WITMER	115	111	589	45%	0%	45%	52%	10%	61%	16.2%	
WITMER	116	112	2890	61%	0%	61%	61%	13%	73%	12.7%	
WITMER	117	111	579	67%	0%	67%	67%	10%	76%	9.5%	
WITMER	119	111	586	54%	0%	54%	59%	10%	69%	15.4%	
WITMER	209	111	611	29%	0%	29%	70%	0%	70%	41.5%	
WITMER	211	111	779	58%	0%	58%	58%	3%	61%	3.0%	
WITMER	302	130	696	59%	0%	59%	59%	10%	68%	9.5%	
WITMER	303	130	606	61%	0%	61%	61%	10%	70%	9.5%	
WITMER	305	130	605	63%	0%	63%	63%	10%	72%	9.5%	
WITMER	307	130	605	63%	0%	63%	63%	10%	72%	10.0%	
WITMER	309	130	611	69%	0%	69%	69%	10%	79%	9.7%	

Appendix II - Office Space
Section 1: Office Space Distribution



Office & Office Support Spaces - Assignable Square Foot Summary

Occupying Description	Space Use Code: Office Spaces										Space Use Code: Office Support										Grand Total	
	310	311	312	313	314	317	318	320	315	316	319	325	330	331	332	333	335	350	355	358		Support Subtotal
	Office Subtotal										Office Support Subtotal											
College of Arts & Sciences	443	8,786	51,187	1,910	13,263	689	652	76,930	8,361	6,429	6,843		2,960	1,029	2,432	109	604	4,675	134	1,409	34,985	111,913
College of Business & Public Administration	3,906	13,567			2,501	5,708		25,682	2,999	1,934	5,672	326	337	582	201	381		2,790			15,222	40,904
College of Education	325	1,805	14,081		678		158	17,047	652	1,513	1,484		927		1,519	160	78	1,335			7,668	24,715
College of Engineering & Mines	511	5,108	12,129	758	7,239	70	498	26,313	2,129	1,705	3,006	1,043	1,493	380	273	280		3,160	44		13,513	39,826
College of Nursing & Professional Disciplines	187	6,034	7,807		1,207			15,235	1,206	1,676	1,532		1,112	572	470		151	3,281	1,310		11,310	26,545
John D. Oddegaard College of Aerospace		15,887	13,700		4,915	896		35,398	7,847	3,527	3,334	802	1,765	808	540	424	78	5,942	735	696	26,498	61,896
School of Law		7,605	1,909		2,097	107		9,621	303	401	2,087	541	307		777		743				5,169	14,790
School of Medicine & Health Sciences	1,210	23,549	22,179				545	49,898	4,396	5,347	3,745		1,773		1,756	161	93	7,351	80	662	25,364	75,262
Graduate School	1,994							1,994													0	1,994
Subtotal:	2,676	74,674	136,559	2,668	31,900	7,470	545	258,118	27,893	22,532	27,713	2,712	10,674	3,371	7,968	1,515	1,004	29,277	993	4,077	139,729	397,847
Academic Affairs	450	16,022	628	148	149	115		18,388	1,092	1,898	2,155	1,284	717	75	613	383	154	1,497			9,868	28,256
Circulation Facilities								0	53												53	53
Dean of Students		2,207						2,207	1,111	584	2,473		335		109			451			5,063	7,270
Enrollment Management		8,549					34	8,583	1,372	499	3,182		278	315	120			1,759	112	435	8,072	16,655
Facilities Management		1,197	166			201		1,564	609				194		138		82				1,023	2,587
Health & Wellness	254	3,061			455	2,414		6,184	1,550	553	982		375	463	236		122	1,365			5,646	11,830
Housing								0	362												362	362
Office of Extended Learning		1,277						1,277	1,486	87	2,494				87			288			4,442	5,719
Office of the Dean								0	440												440	440
President's Office	778	9,671				1,077		11,526	2,563	1,437	826		308	427	437	56	175	2,745			8,974	20,500
Registrar								0			517							382			899	899
Social Work		151						151													0	151
Vice President of Student Affairs		1,912			102			2,014	992	133			108					280			1,605	3,619
VP for Finance & Operations	442	10,761						11,203	1,239	3,264			515	326	60	162		1,659			7,225	18,428
VP for Research	283	3,515				95		3,893	1,000	10	1,762				61						2,883	6,726
VP for University & Public Affairs		3,031						3,031	334									2,126	237		2,697	5,728
Subtotal:	2,207	61,354	794	148	706	3,902	0	70,021	11,029	8,242	17,788	1,284	2,722	1,714	1,741	721	625	12,272	349	715	59,202	129,223
Grand Total:	4,883	136,028	137,353	2,816	32,606	11,372	545	328,139	36,922	30,774	45,501	3,996	13,396	5,085	9,709	2,236	1,629	41,549	1,343	4,792	198,931	527,070

Office & Office Support Spaces - Number of Rooms

Occupying Description	Space Use Code: Office Spaces										Office Subtotal	Space Use Code: Office Support										Support Subtotal	Grand Total
	310	311	312	313	314	317	318	320	315	316		319	325	330	331	332	333	335	350	355	358		
College of Arts & Sciences	2	46	296	10	58	5	3	420	25	57	21	10	7	12	1	14	17	3	3	170	590		
College of Business & Public Administration	23	92	104	5	15	20	1	150	12	20	17	1	4	4	5	4	10	5	1	78	228		
College of Education	1	15	104	5	5		1	126	6	23	5	4	4	14	2	2	5			61	187		
College of Engineering & Mines	2	28	72	4	43	1	2	152	11	19	7	3	5	4	6	3	10	2		70	222		
College of Nursing & Professional Disciplines	1	41	60	3	3			105	8	12	5	4	4	3	4	2	12			54	159		
John D. Odegard College of Aerospace	57	104			26	6		193	13	30	7	5	5	6	5	4	2	16	15	2	110	303	
School of Law	38	11				1		50	1	5	3	1	2		5		2			19	69		
School of Medicine & Health Sciences	4	122	147		8		4	288	86	54	9		17		16	1	3	20	3	2	211	499	
Graduate School	6							6												0	6		
Subtotal:	10	376	886	14	158	33	4	1,490	162	220	74	10	51	24	67	15	23	92	23	12	773	2,263	
Academic Affairs	2	78	4	1	1	1		89	14	42	2	3	5	1	5	2	3	4			81	170	
Circulation Facilities								0	1												1	1	
Dean of Students	14							14	3	3	2		2		2			2			14	28	
Enrollment Management	35							36	6	4	3		2	3	1		6	1	3		29	65	
Facilities Management	6	1				3		10	11				1		1						14	24	
Health & Wellness	1	22			5	11		39	4	5	3	3	2	3	3	4	5				29	68	
Housing								0	1												1	1	
Office of Extended Learning	8							8	2	1	2				1		1				7	15	
Office of the Dean								0	1												1	1	
President's Office	2	42				10		54	6	14	3	2	3	2	1	4	8				43	97	
Registrar					1			1	1		1						1				2	3	
Social Work	1							1													0	1	
Vice President of Student Affairs	10				1			11	14	1	1		1	1	2		2		2		20	31	
VP for Finance & Operations	2	36						38	8	4			2	3	1	2	5				25	63	
VP for Research	1	15				1		17	3	1	2				1						7	24	
VP for University & Public Affairs	12				5			17	5								2	2			9	21	
Subtotal:	8	279	5	1	8	26	0	330	41	108	23	3	17	13	16	6	14	34	3	5	283	613	
Grand Total:	18	655	891	15	166	59	4	1,820	203	328	97	13	68	37	83	21	37	126	26	17	1,056	2,876	

Office & Office Support Spaces - Average Assignable Square Feet per Room

Occupying Description	Space Use Code: Office Spaces										Space Use Code: Office Support										Support Average
	310	311	312	313	314	317	318	320	315	316	319	325	330	331	332	333	335	350	355	358	
College of Arts & Sciences	222	191	173	191	229	138	217	334	113	326		296	147	203	109	43	275	45	470	215	
College of Business & Public Administration	170	147	135	136	167	285		250	97	334	326	84	146	40	95		279			183	
College of Education	325	120	135	136	136	158	158	109	66	297		232	109	80	39	267				150	
College of Engineering & Mines	256	182	168	190	168	70	249	194	90	429	348	299	95	46	93		316	22		188	
College of Nursing & Professional Disciplines	187	147	130	402	402			151	140	306		278	191	118		76	273			207	
John D. Oddegard College of Aerospace	279	132		189	149			604	118	476	160	353	135	108	106	39	371	49	348	239	
School of Law	200	174		189	107			303	80	699	541	154	155				372			329	
School of Medicine & Health Sciences	303	193	151	262	262	136	106	51	99	416		104	110	161	31	368	27			170	
Graduate School	332																			332	
Average for Colleges:	258	202	151	190	222	150	183	249	100	410	344	225	143	111	107	46	315	36	369	205	
Academic Affairs	225	205	157	148	149	115	438	78	45	1,078	428	143	75	123	192	51	374			259	
Circulation Facilities								53												53	
Dean of Students	158							370	195	1,237		168		55		226				375	
Enrollment Management	244						34	229	125	1,061		139	105	120		293	112			259	
Facilities Management	200	166				67		55				194		138		82				131	
Health & Wellness	254	139				219		388	111	327		125	232	79		31	273			186	
Housing								362												362	
Office of Extended Learning								743	87	1,247				87		288				490	
Office of the Dean								440												440	
President's Office	389					108		427	103	275		154	142	219	56	44	343			196	
Registrar										517							382			450	
Social Work	151																			151	
Vice President of Student Affairs	191				102					71	133		108			46			140	100	
VP for Finance & Operations	221	299								155	816	258	109	60	81		332			259	
VP for Research	283					95		333	10	881				61						321	
VP for University & Public Affairs	253									67							1,063	119		416	
Average for Departments:	274	205	162	148	114	121	236	342	93	757	428	169	128	103	112	51	397	115	143	208	
36 Type I & II Building Average:	266	203	156	169	168	135	136	296	97	584	386	197	135	107	110	48	356	75	256	202	

